

# Bus Bike Route Cycle Scheme, Dublin 12

Appropriate Assessment  
Screening Report

December 2021

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## Contract

This report describes work commissioned by Joe Kelly of South Dublin County Council (SDCC), by a email dated 04/10/2021. Mark Desmond and Malin Lundberg of JBA Consulting carried out this work.

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## Abbreviations

AA	Appropriate Assessment
CIEEM	Chartered Institute of Ecology and Environmental Management
DoEHLG	Department of Environment, Heritage and Local Government
EC	European Communities
EPA	Environmental Protection Agency
EU	European Union
GIS	Geographical Information Systems
GSI	Geological Survey Ireland
INNS	Invasive Non-native Species
IROPI	Imperative Reasons of Over-riding Public Interest
NBDC	National Biodiversity Data Centre
NPWS	National Parks and Wildlife Service
OPR	Office of the Planning Regulator
QI	Qualifying Interest
RBMP	River Basin Management Plan
SAC	Special Area of Conservation
SDCC	South Dublin County Council
SPA	Special Protection Area
WFD	Water Framework Directive
WWTP	Waste Water Treatment Plant
ZoI	Zone of Influence

# 1 Introduction

## 1.1 Background

JBA Consulting Engineers and Scientists Ltd. (hereafter JBA) has been commissioned by SDCC to prepare an Appropriate Assessment Screening Report for a proposed cycle route along a number of roads within Dublin 12. The proposed cycle route, part of SDCC's Cycle South Dublin (2020) plan, will be constructed along Whitehall Road West, Greenhills Park and Local Estate Roads.

Screening for appropriate assessment is intended to be an initial examination which must be carried out by the Planning Authority or An Bord Pleanála as the competent authority. However, this screening is completed on behalf of the project proposer to show that likely significant effects have been considered in the project development and design, and where necessary progress with further assessment.

## 1.2 Legislative Context

Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora, known as the 'Habitats Directive' - provides legal protection for habitats and species of European importance. Article 2 of the Directive requires the maintenance or restoration of habitats and species of European Community interest, at a favourable conservation status. Articles 3 - 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 Natura 2000 sites. Natura 2000 sites 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 / EEC).

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans or projects affecting Natura 2000 sites. Article 6(3) establishes the requirement for Appropriate Assessment:

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

Article 6(4) deals with the steps that should be taken when it is determined, as a result of Appropriate Assessment, that a plan/project will adversely affect a European site. Issues dealing with alternative solutions, imperative reasons of overriding public interest and compensatory measures need to be addressed in this case.

Article 6(4) states:

*"If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the 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."*

*Where the site concerned hosts a priority natural habitat type and / or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest."*

The requirements of Articles 6(3) and 6(4) of the Habitats Directive have been transposed into Irish legislation by means of *inter alia* the European Communities (Birds and Natural Habitats) Regulations 2011-2015 (S.I. No. 477 / 2011) as amended.



### 1.3 Appropriate Assessment Process

Guidance on the Appropriate Assessment (AA) process was produced by the European Commission in 2002, which was subsequently developed into guidance specifically for Ireland by the Department of Environment, Heritage and Local Government (DEHLG, 2009). Office of the Planning Regulator (OPR) produced a Practice Note in 2021, PN01 - Appropriate Assessment Screening for Development Management (OPR, 2021). These guidance documents identify a staged approach to conducting an AA, as shown Figure 1-1 in overleaf.

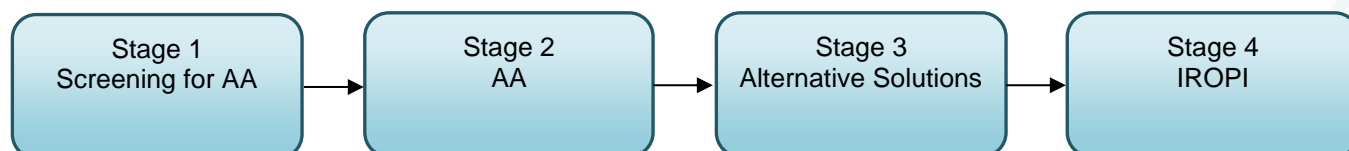


Figure 1-1: The Appropriate Assessment Process (DEHLG, 2009)

#### 1.3.1 Stage 1 - Screening for AA

The initial, screening stage of the Appropriate Assessment is to determine:

whether the proposed plan or project is directly connected with or necessary for the management of the European designated site for nature conservation

if it is likely to have a significant adverse effect on the European designated site, either individually or in combination with other plans or projects

For those sites where, potential adverse impacts are identified, either alone or in combination with other plans or projects, further assessment is necessary to determine if the proposals will have an adverse impact on the integrity of a European designated site, in view of the site's conservation objectives (i.e. the process proceeds to Stage 2).

#### 1.3.2 Stage 2 - AA

This stage requires a more in-depth evaluation of the plan or project, and the potential direct and indirect adverse impacts of them on the integrity and interest features of the European designated site(s), alone and in-combination with other plans and projects, taking into account the site's structure, function, conservation objectives, and best scientific knowledge in the field. Where required, mitigation or avoidance measures will be suggested.

The competent authority can only agree to the plan or project after having ascertained that it will not adversely affect the integrity of the site(s) concerned. If this cannot be determined then alternative solutions will need to be considered (i.e. the process proceeds to Stage 3).

#### 1.3.3 Stage 3 - Alternative Solutions

Where adverse impacts on the integrity of Natura 2000 sites are identified, and mitigation cannot be satisfactorily implemented, alternative ways of achieving the objectives of the plan or project that avoid adverse impacts need to be considered. If none can be found, the process proceeds to Stage 4.

#### 1.3.4 Stage 4 - IROPI

Where adverse impacts of a plan or project on the integrity of Natura 2000 sites are identified and no alternative solutions exist, the plan will only be allowed to progress if imperative reasons of overriding public interest can be demonstrated. In this case compensatory measures will be required.

The process only proceeds through each of the four stages for certain plans or projects. For example, for a plan or project, not connected with management of a site, but where no likely significant impacts are identified, the process stops at stage 1. Throughout the process, the precautionary principle must be applied, so that any uncertainties do not result in adverse impacts on a site.

This report is in support of a Stage 1 Screening for Appropriate Assessment.

### 1.3.5 Recent judgements of the Court of Justice of the European Union (CJEU) and how they are used in this assessment

The CJEU issued a ruling on the consideration of avoidance and reduction measures as a result of the case known as *People over Wind, Peter Sweetman v Coillte Teoranta* (Case C-323/17). This judgement stated that measures intended to reduce or avoid effects on a Natura 2000 site should only be considered within the framework of an Appropriate Assessment, and it is not permissible to take into account such measures at the screening stage. In practice, this means that any activities that are not integral to the project (i.e. the project could conceivably take place without them) and have the effect of avoiding or reducing an impact on a Natura 2000 site, cannot be considered at the screening stage.

The CJEU ruling in the case of *Grace & Sweetman* [2018] (C-164/17) clarified the difference between avoidance and reduction (mitigation) measures and compensation. Measures intended to compensate for the negative effects of a project cannot be taken into account in the assessment of the implications of a project, and instead are considered under Article 6(4). This means that any project where an effect on the integrity of a Natura 2000 site remains and can only be offset by compensation, would need to proceed under Article 6(4), demonstrating “imperative reasons of overriding public interest”.

The judgements referred to as the Dutch Nitrogen cases [2018] (C-293/17 and C-294/17) have important implications for projects that could potentially impact on sites that are exceeding critical thresholds for input of damaging ammonia (but could also reasonably apply where other nutrients are impacting Natura 2000 sites). The judgements state that the use of thresholds to exclude project impacts is acceptable in principle, and that strategic plans can be used as mitigation but only with consideration of the certainty (or otherwise) of the outcomes of those strategic plans. It clarifies that where the status of a habitat type is already unfavourable the possibility of authorising activities which increase the problem is necessarily limited.

The CJEU ruling in the case of *Holohan v An Bord Pleanala* (C-462/17) also clarified the importance in Appropriate Assessment of taking into account habitat types and species outside the boundary of the Natura 2000 site where implications of the impacts on those habitat and species may impact the conservation objectives of the Natura 2000 site. In this assessment functionally linked and supporting habitat for species outside of Natura 2000 sites are assessed where they could potentially impact the conservation objectives of any screened in Natura 2000 sites.

## 1.4 Methodology

The Screening for Appropriate Assessment has been prepared having regard to the Birds and Habitats Directives, the European Communities (Birds and Natural Habitats) Regulations 2011-15 as amended and relevant jurisprudence of the EU and Irish courts. The following documents have also been used to provide guidance for the assessment:

- DEHLG (2009 rev 2010) Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government (DEHLG, 2009).
- Office of the Planning Regulator (2021) OPR Practice Note PN01 - Appropriate Assessment Screening for Development Management (OPR 2021).
- European Communities (EC) (2018) Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg. European Commission (European Commission, 2000).
- EC (2002) Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg. European Commission (European Commission et al., 2002).
- EC (2007) 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. European Commission (European Commission, 2007).
- CIEEM (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland - Terrestrial, Freshwater and Coastal, Second Ed. (Chartered Institute of Ecology and Environmental Management, 2016)



#### 1.4.1 Desktop study

A desktop study was conducted of available published and unpublished information, along with a review of data available on the NPWS and National Biodiversity Data Centre (NBDC) web-based databases, in order to identify key habitats and species (including legally protected and species of conservation concern) that may be present within ecologically relevant distances from the project as explained below. A baseline habitat assessment was performed using satellite imagery of the site. The data sources below (accessed October 2021) were consulted for the desktop study:

- Aerial photography available from [www.osi.ie](http://www.osi.ie) and Esri World Imagery.
- River Basin Management Plans ([www.wfdireland.ie](http://www.wfdireland.ie))
- NBDC Biodiversity Maps ([maps.biodiversityireland.ie](http://maps.biodiversityireland.ie))
- Catchments ([www.catchments.ie](http://www.catchments.ie))
- Environmental Protection Agency Maps (<https://gis.epa.ie/EPAMaps>)
- Geological Survey Ireland website ([www.gsi.ie](http://www.gsi.ie))
- Geological Survey Ireland - Groundwater data viewer (<https://dcenr.maps.arcgis.com>)

#### 1.4.2 Ecological Site

To inform this AA Screening an ecological site survey was carried out by JBA Ecologist, Malin Lundberg on the 13th of October, 2021.

The ecological walkover survey was carried out in general accordance with the methods outlined in the following documents:

- Heritage Council (2011). Best Practice Guidance for Habitat Survey and Mapping (Smith et al. 2011).
- Fossitt, J. (2000). A Guide to Habitats in Ireland. The Heritage Council, Kilkenny (Fossitt 2000).
- Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes (NRA, 2009b).

Aerial photographs and site maps assisted the survey. Habitats have been named and described following Fossitt (2000). Nomenclature for higher plants principally follows that given in Webb's An Irish Flora (Parnell and Curtis, 2012)

#### 1.4.3 In-combination Assessment

The in-combination assessment followed the process for in-combination set out by the DTA Handbook (Tyldesley and Chapman, 2013). The in-combination impacts are considered only after the assessment of the project alone. If the result of this is that the project will have no effect at all on a European site then no in-combination assessment would be necessary. However, where there is no adverse effect on site integrity, but some adverse effect an assessment of this adverse effect in-combination with other plans or projects is carried out. Other plans or projects were searched for using the National Planning Application Database, EIA portal and Myplan.ie databases all accessed online. If no other plans or projects are identified then the assessment is complete. Where other plans or projects are identified then initially a review is made of its AA screening, or AA, and if the Competent Authority for the plan or project has made a final determination of no effect on the integrity of any European site, either alone or in-combination, this determination is used in this assessment. Where there is not a full AA, or the findings are unclear or out of date, the plan or project documentation is checked for credible evidence of real (not hypothetical) risk to a European site. Where these are identified then a detailed assessment is carried out. A summary of the approach is presented in Figure 1-2.

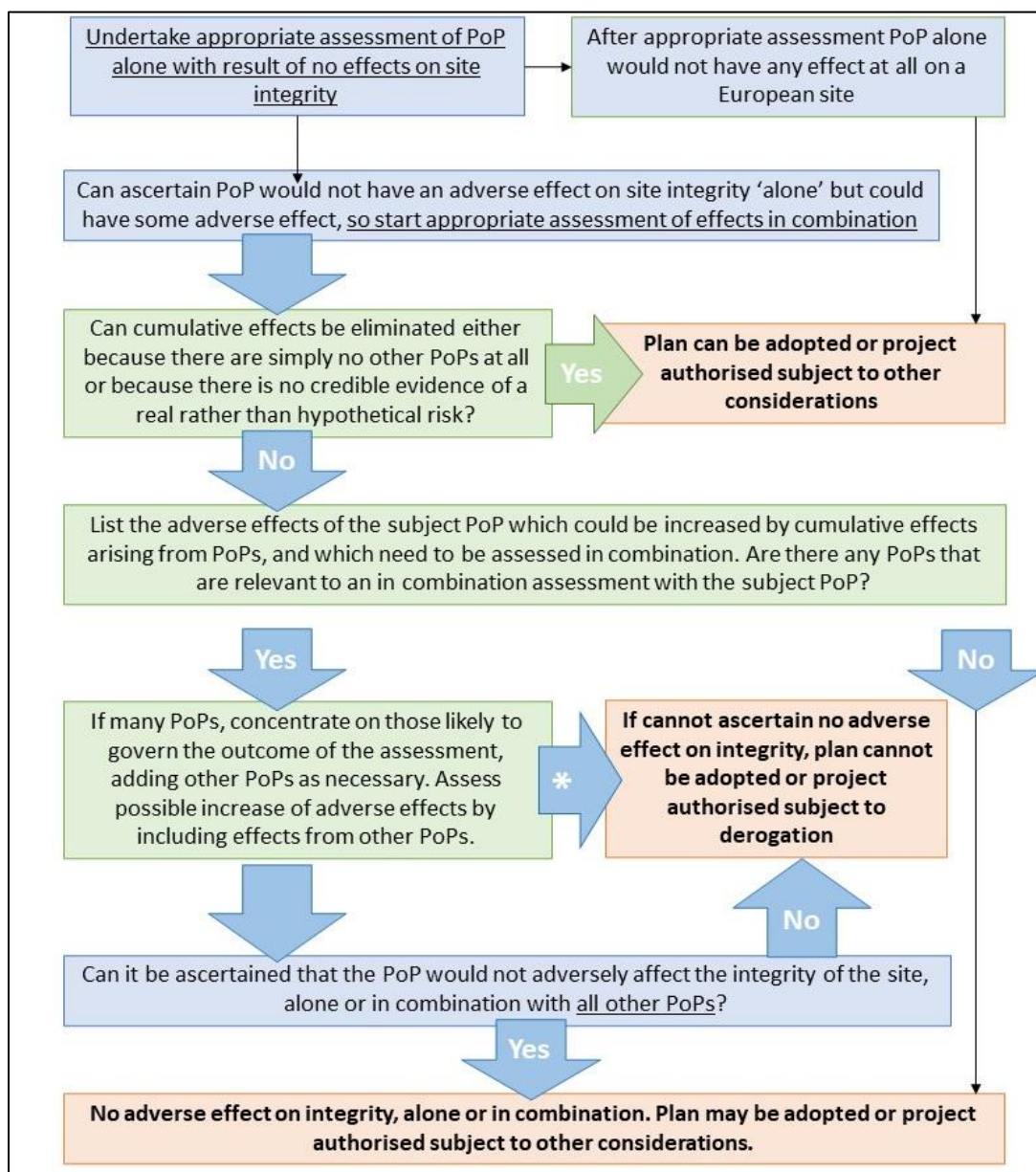


Figure 1-2: Flow diagram of process for in-combination assessment (modified from Chapman & Tyldesley, 2012)

Potential sources of cumulative impacts were identified based on the ecology of valued ecological features only for features where this is a residual or non-significant impact. Potential sources of cumulative impacts were sought within area where there is the potential for a significant impact on relevant Natura sites identified in Section 4.

## 1.5 Limitations and constraints

The screening assessment necessarily relies on some assumptions and it was inevitably subject to some limitations. These would not affect the conclusion, but the following points are recorded in order to ensure the basis of the assessment is clear:

- Information on the works and conditions on site are based on current knowledge at the time of writing. Changes to the site since this report was drafted cannot be accounted for. However, significant changes to the site are unlikely in the time between the site visit (September 2021) and likely determination date (2022).
- This assessment is based on the methodology for proposed works as described in this report. Where changes to methodology occur, an ecologist will need to be consulted to determine if the changes are likely to alter the ecological impacts and would therefore need reassessment.
- The site visit was only carried out within the proposed works site and not to any of the screened in SAC/SPA sites. The desk-based information available for these sites is sufficient to complete the assessment.
- A detailed site layout plan and description details of temporary works were not available when carrying out the assessment. However, it is considered that the information provided was sufficient to complete the assessment.



## 2 Project Description

### 2.1 The 'Project'

This proposed cycle route in Dublin 12 is not directly connected with or necessary to the management of any Natura 2000 site but may have potential adverse impacts upon the Natura 2000 sites identified in Section 4. Therefore, the proposed Project is subject to the requirements of the Appropriate Assessment process

### 2.2 Site location

The proposed cycle route will be constructed along existing roads, carriageways, access paths and greenways. The cycle route will be constructed along Whitehall Road West, Greenhills Park and Local Estate Roads. The proposed cycle route is shown below in Figure 2-1. The route will be situated among urban infrastructure and a section of Greenhills Park. The route will not cross any watercourses but will come within 100m of the River Poddle, at the end of Limekiln Ave. The proposed cycle route will be 3.6km long.



Figure 2-1: Site location

### 2.3 Proposed Project Summary

The proposed cycle route will run along an existing road and/or footpath. Construction phase of the projected is expected to take six months. The operation phase will be permanent. Works will involve the installation of bollards and line painting. There is a low possibility that works will include some excavation in some areas, but this will be limited to the topsoil.

The operation of the site will utilise the existing surface water drainage.

The detailed proposed site layout plan is not available at this time.

The proposed development is part of the Cycle South Dublin (2020) plan. Cycle South Dublin is an ambitious programme of work that reflects the increasing importance of making cycling a realistic and integral part of how people move around the County. It proposes a set of 41 projects that would deliver nearly 210km of new and improved cycle lanes over the next ten years.

The objectives of the Cycle South Dublin programme are to:

- Provide a comprehensive and connected cycle network across South Dublin;
- Make cycling a more achievable mode of transport for all adults and children; and
- Improve the cycling identity of the County.

## 2.4 Zone of Influence

The project will primarily affect the site only, but a wider area of influence is used for impacts relating to noise disturbance (500m), air pollution (5km), surface water (15km downstream).

# 3 Existing environment

## 3.1 Baseline conditions

An ecological walkover survey was carried out on the 29<sup>th</sup> and 30<sup>th</sup> September 2021. Descriptions of the habitats and species are provided in the sections below.

## 3.2 Habitats

The proposed cycle route follows existing paths and roadways, which are often lined with trees and a grassy verge. Areas of the route are bounded on either side by walls and/or hedgerow. Habitat beyond walls were not mapped as they are unlikely to be impacted by the works. The Limekiln Road is separated from the River Poddle by a small wall with metal fencing, and a grassy verge. Habitats recorded along the route are listed in Table 3-1 and are shown in habitat maps in Figure 3-1 and Figure 3-2.

Table 3-1: List of habitats recorded on site

Habitat	Code (Fossitt, 2000)
Buildings and Artificial Surfaces	BL3
Recolonising Bare Ground	ED3
Amenity Grassland	GA2
Dry Meadows and Grassy Verges	GS2
Scattered Trees and Parkland	WD1
Hedgerows	WL1
Treelines	WL2





Figure 3-1: Habitat map of the north-east section of the proposed cycle route.



Figure 3-2: Habitat map of the south-west section of the proposed cycle route



### 3.2.1 Buildings and Artificial Surfaces - BL3

The cycle route is proposed to be constructed along existing roads and pedestrian walkways, which make up the habitat buildings and artificial surfaces

### 3.2.2 Recolonising Bare Ground - ED3

This habitat was recorded along a strip of land between the concrete path and treeline adjacent to the Avondale terrace playing fields (Figure 3-3). Small patches of this habitat were also recorded along the proposed route where vegetation has started to recolonise artificial surfaces. Plant species included various grasses and Broad-Leaved Dock *Rumex obtusifolius*.



Figure 3-3: Recolonising bare ground (ED3) next to Avondale Terrace playing field.

### 3.2.3 Amenity Grassland - GA2

A number of playing fields and verges of short cut grass are found along the proposed cycle route.

### 3.2.4 Dry Meadows and Grassy Verges - GS2

A number of grassy verges are present along the route, which have been left unmanaged. Some playing fields in Greenhills Park have also been mown less frequently and have become dry meadows. Species include Cock's Foot *Dactylis glomerata*, False Oat-grass *Arrhenatherum elatius*, Ivy *Hedera helix*, Dandelion *Taraxacum vulgaria*, White clover *Trifolium repens*, Creeping Buttercup *Ranunculus repens*, and Dock *Rumex* spp.

### 3.2.5 Scattered Trees and Parkland

Scattered trees and parkland bound the Avondale terrace playing fields. The species present include Ash *Fraxinus excelsior*, Lime *Tilia x europaea*, Alder *Alnus glutinosa*, Birch *Betula pubescens*. Woodpigeon *Columba palumbus* and Goldfinch *Carduelis carduelis* were present in the trees.

### 3.2.6 Hedgerows - WL1

A number of hedgerows are found along the proposed cycle route (Figure 3-4). Species recorded includes native species such as Hawthorn *Crataegus monogyna*, Bramble *Rubus fruticosus* agg., Ash, Dog rose *Rosa canina* and Tutsan *Hypericum androsaemu*. Non-native ornamental species such as *Cotoneaster* spp. *Hypericum x hidcoteense* and *Thuja* spp. were found.



Figure 3-4: Hedgerow near Greenhills Park.

#### 3.2.7 Treelines - WL2

Trees line the length of various roads along the proposed cycle route road on both sides. These trees are spaced out and have grass beneath them with very little understory growth. Trees include Birch, Whitebeam *Sorbus aria*, Sycamore *Acer pseudoplatanus*, Beech *Fagus sylvatica* Ash, Cherry *Prunus avium* and Lime.

### 3.3 Protected Species

The survey did not record any protected fauna or floral species that are qualifying interests of a Natura 2000 site.

### 3.4 Water bodies in proximity of the site

The proposed route lies within the Water Framework Directive (WFD) Dodder\_SC\_010 sub-catchment (EPA, 2021). The route lies within the Poddle\_010 subbasin. The River Poddle runs 100m south of the route at the nearest point. The nearest Natura 2000 site is 12.7km downstream of this point along the River Poddle. This watercourse is shown in Figure 3-5. The Poddle\_010 has an unassigned ecological status for the WFD 2013-2018 reporting period (EPA, 2021) and is at risk of not reaching its WFD 2028 targets.



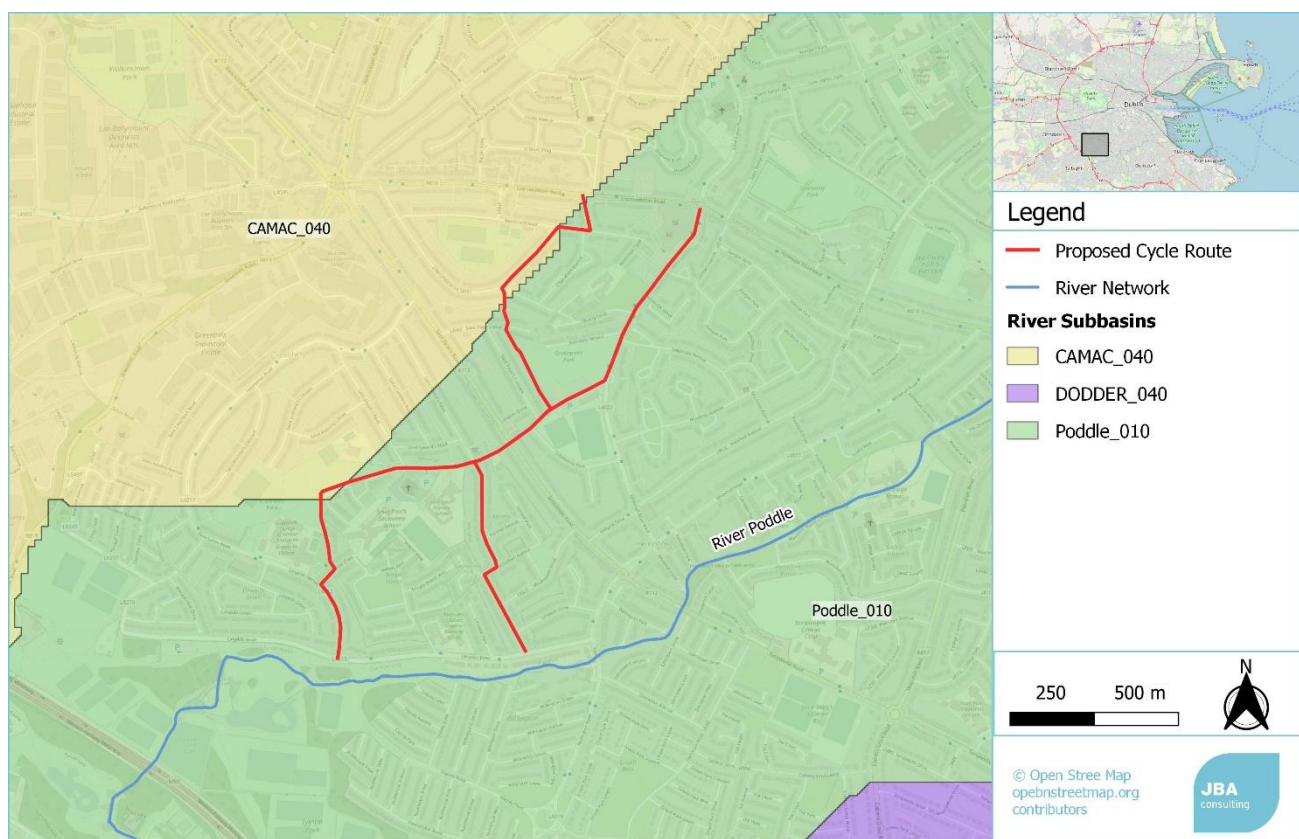


Figure 3-5: Surface water network in vicinity (EPA, 2021)

### 3.5 Groundwater

The groundwater body underlying the cycle route is the Dublin (IE\_EA\_G\_008) groundwater body, which is Good status and Under Review (EPA, 2021). Groundwater vulnerability, a measure of the likelihood of groundwater contamination occurring within the site varies between 'Moderate' to 'Extreme' across the proposed route (Figure 3-6), as classified by the Geological Survey Ireland (GSI, 2021).

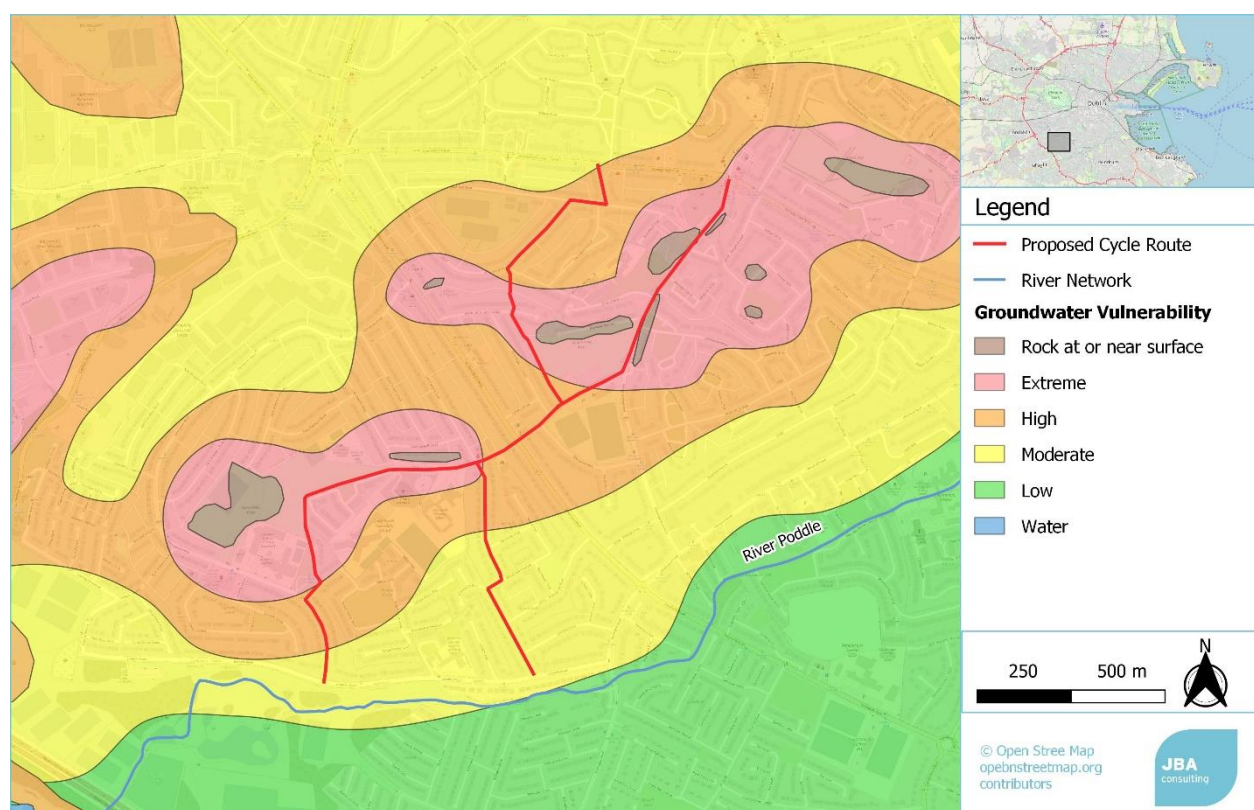


Figure 3-6: Groundwater vulnerability within proximity of the cycle route (GSI, 2021)



## 4 Natura 2000 sites

The DEHLG (2009) guidance identifies that Screening for Appropriate Assessment of a plan or project should consider the following Natura 2000 sites:

- Any Natura 2000 sites within or adjacent to the plan or project area.
- Any Natura 2000 sites within the likely zone of impact of the plan or project. This is dependent on the nature and scale of the plan, with 15km generally recommended for plans, but potentially much less for projects.
- Any Natura 2000 sites that are more than 15km from the plan or project area, but may potentially be impacted upon, for example, through a hydrological connection.

As the scale of proposed works are considered of 'Project' status, Natura 2000 sites within a 5km range of the proposed development were examined, and within a 15km range for those with a hydrological connection on the basis that there were no source-pathway-receptors identified outside these ranges. The Natura 2000 sites within the range are listed in Table 4-1 below and their locations are shown in Figure 4-1.

Table 4-1 Natura 2000 sites located within the 5km Zol, and extended 15km downstream of the proposed cycle route

Natura 2000 site	Site Code	Approximate direct distance from site (closest point)	Distance via nearest watercourse (approx.)
South Dublin Bay and River Tolka Estuary SPA	004024	7.2km	12.7km
South Dublin Bay SAC	000210	7.2km	16.6km
North Dublin Bay SAC	000206	10.2km	15.2km
North Bull Island SPA	004006	10.2km	15.2km

There are no sites designated under the EU Habitats Directive and EU Birds Directive, i.e. SACs and SPAs, located within the footprint of the proposed works. The site is only connected to Natura 2000 sites via a surface water connection. The nearest connected designated site is the South Dublin Bay and River Tolka Estuary SPA at 12.7 km downstream of the proposed route via the River Poddle. The other Natura 2000 sites, South Dublin Bay SAC, North Dublin Bay SAC and North Bull Island SPA are also within Dublin Bay. The proposed project is the construction of a cycle route and will only have a local impact.

The development will connect with the current drainage network will not impact on current surface water systems during the operational phase. The only impact pathway is present during construction.

Details of the Qualifying Interests and project-relevant threats /pressures and their impacts and sources in relation to the Natura 2000 sites with a hydrological connection that are listed above are given in Table 4-2

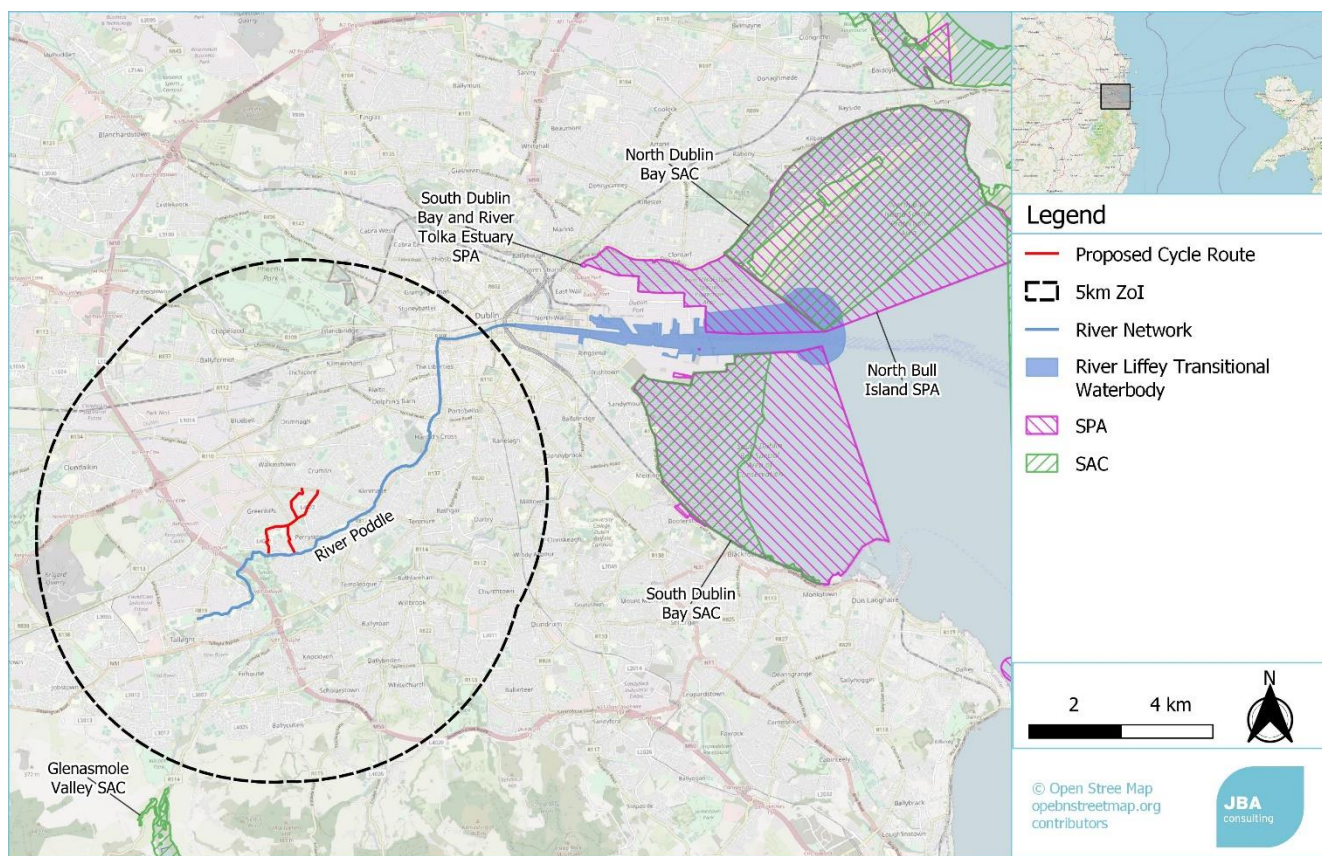


Figure 4 1: Natura 2000 sites within the 5km ZoI, and/or with a hydrological connection (EPA, 2021; NPWS, 2021)

Table 4-2 Natura 2000 sites, QIs and threats/pressures within the ZoI, and connected via a foul water drainage system

Site Name	Brief	Qualifying Interests	Project Relevant Threats / Pressures: Impact (Source)
South Dublin Bay and River Tolka Estuary SPA (004024)	The South Dublin Bay and River Tolka Estuary SPA includes the intertidal area between the River Liffey and Dun Laoghaire, and the estuary of the River Tolka to the north of the River Liffey, as well as Booterstown Marsh. A portion of the shallow marine waters of the bay is also included. The site is important for wintering waterfowl, being an integral part of the internationally important Dublin Bay complex. An internationally important population of Light-bellied Brent Goose <i>Branta bernicla hrota</i> occurs regularly and the site is of national importance for a further nine wintering bird species. Furthermore, the site supports a nationally important colony of breeding Common Tern <i>Sterna hirundo</i> and is an internationally important passage/staging site for three tern species. It is of note that four of the species that regularly occur at this site are listed on Annex I of the E.U. Birds Directive, i.e. Bar-tailed Godwit <i>Limosa lapponica</i> , Common Tern, Arctic Tern <i>Sterna paradisaea</i> and Roseate Tern <i>S. dougallii</i> . Sandymount Strand/Tolka Estuary is also a Ramsar Convention site. (NPWS, 2017a)	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>Calidris canutus</i> ) [A143] Sanderling ( <i>Calidris alba</i> ) [A144] Dunlin ( <i>Calidris 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] Common Tern ( <i>Sterna hirundo</i> ) [A193] Arctic Tern ( <i>Sterna paradisaea</i> ) [A194] Wetland and Waterbirds [A999] (NPWS, 2015a)	Roads, motorways Medium (outside)  Urbanised areas, human habitation High (outside)  Discharges High (inside)  (NPWS, 2017a)
South Dublin Bay SAC (000210)	This intertidal site extends from the South Wall at Dublin Port to the West Pier at Dun Laoghaire, a distance of c. 5 km. At their widest, the intertidal flats extend for almost 3 km. The seaward boundary is marked by the low tide mark, while the landward boundary is now almost entirely artificially embanked. Several permanent channels exist, the largest being Cockle Lake. A small sandy beach occurs at Merrion Gates, while some bedrock shore occurs near Dun Laoghaire. A number of small streams and drains flow into the site. The proximity of the site to Dublin City results in it being a very popular recreational area. It is also important for educational and research purposes. The site possesses a fine and fairly extensive example of intertidal flats. Sediment type is predominantly sand, with muddy sands in the more sheltered areas. A typical macro-invertebrate fauna exists. The bay has the largest stand of <i>Zostera</i> on the east coast and supports part of the	Tidal Mudflats and Sandflats [1140] Annual vegetation of drift lines [1210] Salicornia and other annuals colonising mud and sand [1310] Embryonic shifting dunes [2110]  (NPWS, 2013a)	Urbanised areas, human habitation High (outside)  Marine water pollution Medium (both)  Roads, motorways Low (outside)  Discharges Medium (both)  Accumulation of organic material High (inside)

	important wintering waterfowl populations of Dublin Bay. It regularly has an internationally important population of Light-bellied Brent Goose, plus nationally important numbers of at least a further 6 species, including Bar-tailed Godwit. The bay is a regular autumn roosting ground for significant numbers of <i>Sterna</i> terns, including Roseate Tern. (NPWS 2017b)		(NPWS, 2017a)
North Bull Island SPA (004006)	<p>The site covers all of the inner part of north Dublin Bay. The North Bull Island sand spit is a relatively recent depositional feature, formed as a result of improvements to Dublin Port during the 18th and 19th centuries. It is almost 5 km long and 1 km wide and runs parallel to the coast between Clontarf and Sutton. Part of the interior of the island has been converted to golf courses. The SPA is of international importance for waterfowl on the basis that it regularly supports in excess of 20,000 waterfowl. The site supports internationally important populations of three species, Light-bellied Brent Goose, Black-tailed Godwit <i>Limosa limosa</i> and Bar-tailed Godwit. The site is one of the most important in the country for Light-bellied Brent Goose. A further of 14 species have populations of national importance.</p> <p>North Bull Island is a Ramsar Convention site, and part of the North Bull Island SPA is a Statutory Nature Reserve and a Wildfowl Sanctuary.</p> <p>(NPWS, 2017c)</p>	<p>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>Calidris canutus</i>) [A143]  Sanderling (<i>Calidris alba</i>) [A144]  Dunlin (<i>Calidris 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]  Wetland and Waterbirds [A999]</p> <p>(NPWS, 2013b)</p>	<p>Roads, motorways Medium (outside)</p> <p>Continuous urbanisation Medium (outside)</p> <p>Discharges Medium (both)</p> <p>(NPWS, 2017c)</p>
North Dublin Bay SAC (000206)	<p>The North Bull Island sand spit is a relatively recent depositional feature, formed as a result of improvements to Dublin Port during the 18th and 19th centuries. It is almost 5km long and 1km wide and runs parallel to the coast between Clontarf and Sutton. The sediment which forms the island is predominantly glacial in origin and siliceous in nature. Between the island and the mainland there occurs two sheltered intertidal areas. The seaward side of the island has a fine sandy beach. A substantial area of shallow marine water is included in the site. Site possesses an excellent diversity of coastal habitats. The</p>	<p>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 maritima</i>) [1330]  Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]  Embryonic shifting dunes [2110]  Shifting dunes along the shoreline with <i>Ammophila arenaria</i></p>	<p>Urbanised areas, human habitation High (outside)</p> <p>Discharges High (inside)</p> <p>(NPWS, 2017d)</p>



	<p>North Bull Island dune system is one of the most important systems on the east coast and is one of the few in Ireland that is actively accreting. It possesses extensive and mostly good quality examples of embryonic, shifting marram and fixed dunes, as well as excellent examples of humid dune slacks. Both Atlantic and Mediterranean salt marshes are well represented, and a particularly good marsh zonation is shown. The salt marshes grade into mudflats and sandflats, some of which are dominated by annual <i>Salicornia</i> species.</p> <p>The site has five Red Data Book vascular plant species and four Red Data Book bryophyte species and is one of the most important sites for wintering waterfowl in Ireland. It is also an important site for some invertebrates of national importance.</p> <p>(NPWS, 2017d)</p>	<p>(white dunes) [2120]  Fixed coastal dunes with herbaceous vegetation (grey dunes)* [2130]  Humid dune slacks [2190]  <i>Petalophyllum ralfsii</i> (Petalwort) [1395]</p> <p>(NPWS, 2015b)</p>	
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\* = priority Annex I habitat

# = indirect threat via the increase in the local populace and recreational activities as a result of the development.



## 5 Other Relevant Plans and Projects

Potential sources of cumulative impacts were identified based on the ecology of valued ecological features. Potential sources of cumulative impacts were sought within an area where there is the potential for a significant impact on identified ecological features.

The following Plans and Projects were identified as potential sources of cumulative impacts:

- South Dublin County Council Development Plan 2016 - 2022
- Greater Dublin Drainage Strategy
- River Basin Management Plan for Ireland 2018-2021
- Planning Applications

### 5.1 Plans

#### 5.1.1 South Dublin County Council Development Plan 2016 - 2022

The SDCC Development Plan sets out an overall strategy for the proper planning and sustainable development of the County. The objectives include a target of increased population and continuing the consolidation of established urban areas, to support and facilitate economic activity and to promote the ease of movement by sustainable modes (walking, cycling and public transport). The Plan also aims to protect and enhance surface water quality, to support, improve and protect Natura 2000 sites, and to develop an integrated Green Infrastructure network to enhance biodiversity, provide accessible parks, open spaces and recreational facilities (SDCC, 2016a). The plan also states that work will be in conjunction with Irish Water to protect existing water and drainage infrastructure, to promote investments aiming to support environmental protection and facilitate the sustainable growth of the county (SDCC, 2016a).

A Screening for Appropriate Assessment was carried out on the plan. This concluded that there are no likely significant direct, indirect or secondary impacts of the project on any Natura 2000 sites (SDCC, 2016b), therefore the SDCC Development Plan is not anticipated to contribute to cumulative or in-combination effects.

#### 5.1.2 Greater Dublin Drainage Strategy

The Greater Dublin Drainage Strategy sets out the strategic planning for the development of waste water treatment in the Greater Dublin area in relation to the Ringsend Waste Water Treatment Plant (WWTP) Upgrade, Greater Dublin Drainage Project and associated wastewater network drainage projects (Irish Water, 2018). The Ringsend WWTP Upgrade includes plans to expand the WWTP to its ultimate capacity, together with associated network upgrades required. The Greater Dublin Drainage Project is planned to relieve both the Ringsend WWTP and network loading by construction of a new WWTP at Clonsaugh, an orbital sewer and provision of an outfall pipe discharging 1km north east of Ireland's Eye.

The Ringsend WWTP upgrade is in progress and carried out in stages, with an increased capacity of 400,000 PE by the first half of 2021 and the ultimate capacity of 2.4 million PE to be in operation by 2024 (Irish Water, 2021).

The Greater Dublin Drainage Project is strategically important to the Dublin Region in that it will provide capacity for residential and commercial growth (Irish Water, 2018).

#### 5.1.3 River Basin Management Plan for Ireland 2018-2021

The River Basin Management Plan (RBMP) for Ireland 2018-2021 sets out the actions that Ireland will take to improve water quality and achieve 'good' ecological status in water bodies (rivers, lakes, estuaries and coastal waters) by 2021 (DoHPLG, 2018a). Changes from previous River Basin Management Plans is that all River Basin Districts are merged as one national River Basin District. The Plan provides a more coordinated framework for improving the quality of our waters — to protect public health, the environment, water amenities and to sustain water-intensive industries, including agri-food and tourism, particularly in rural Ireland.

The first cycle of River Basin Management Plans included the Eastern River Basin District - River Basin Management Plan 2009 – 2015 (WFD, 2010). The plans summarised the waterbodies that may not meet the environmental objectives of the WFD by 2015 and identified which pressures are contributing to the environmental objectives not being achieved. The plans described the classification results and identified measures that can be introduced in order to safeguard waters and meet the environmental objectives of the WFD;

- Prevent deterioration of water body status.
- Restore good status to water bodies.
- Achieve protected areas objectives.
- Reduce chemical pollution of water bodies

The RMBP for Ireland (2018-2021) outlines the new approach that Ireland will take to protect our waters over the period to 2021. It builds on lessons learned from the first planning cycle in a number of areas:

- stronger and more effective delivery structures have been put in place to build the foundations and momentum for long-term improvements to water quality
- a new governance structure, which brings the policy, technical and implementation actors together with public and representative organisations. This will ensure the effective and coordinated delivery of measures.

The River Basin Management Plan for Ireland 2018-2021 is not anticipated to contribute to cumulative or in-combination effects.

Ireland's third River Basin Management Plan 2022-2027 is due to be published in December 2021. The 3rd cycle draft Catchment Reports were published in August 2021. The draft Catchment Reports provides a summary of the water quality assessment outcomes for respective catchment, including status and risk categories, significant threats and pressures, details on protected areas and a comparison cycle 2 and cycle 3. The draft Catchment Report for Liffey and Dublin Bay Catchment identifies an overall improvement of 5 waterbodies across the catchment since the cycle 2 assessment (Catchment Science & Management Unit, 2021). The significant pressure on the rivers Poddle is urban runoff. The transitional and coastal waterbodies meet the requirements for the habitats and species of the SACs, including the Dublin Bays SACs. Specific water supporting conditions have not been identified for the dependent bird species in the SPAs and so waterbodies associated with SPAs are not included in the assessment, though for Dublin Bay they overlap with the SACs.

## 5.2 Projects

### 5.2.1 Other Projects

Other projects dated back three years are included overleaf (Table 5-1), which are not retention applications, home extensions and/or internal alterations, have been granted planning permission in along the proposed cycle route.

Table 5-1: Projects granted planning permission since November 2018 in the vicinity of proposed site, which are not retention applications, change of use/internal modifications or single dwelling extensions.

Application Reference	Description of Works	Address	Decision	Decision Date
<b>SD19A/0207</b>	Single storey prefabricated building containing three classrooms of 79.8sq.m each; the new single storey prefabricated building is proposed to be located on the north corner of the site along with associated ground works.	Limekiln Road, Greenhills, Dublin 12	Grant Permission	21/08/19
<b>SD19A/0260</b>	Removal of existing shed; construction of a detached two storey, three bedroom dwelling with rooflights to front; reconfiguration and widening of existing vehicular access; new vehicular access to the new house and all associated site works.	1, Limekiln Avenue, Walkinstown, Dublin 12	Grant Permission	18/02/20
<b>SD20A/0209</b>	Demolition of the existing retail unit and sheds to the rear; construction of a two storey, semi-detached property consisting of a ground floor café unit to later fit out and a first floor three bedroom apartment unit with balcony and 2 rooflights to the rear and one associated parking space; creation of an automated gated vehicular access to the street and all associated landscaping works and site works.	3, Limekiln Lane, Walkinstown, Dublin 12	Grant Permission	26/04/21
<b>SD20A/0306</b>	Demolition of all existing buildings, structures and yards on site; Construction of a part-3 storey and part-4 storey apartment building to accommodate 15 apartments, comprising 11 1-bed and 4 2-bed units with associated terraces; Pedestrian access from Whitehall Road West and vehicular pedestrian access from the existing access roadway to the south; Vehicle parking, landscaping, roof garden, bicycle parking, refuse storage, boundary treatments and all associated site development works and services.	21 Whitehall Road West, Dublin 12.	Grant Permission	18/05/21
<b>SD20A/0189</b>	Permission for: (i) car wash; (ii) car wash plant room; (iii) all associated revisions to site layout including relocation of existing services and (iv) all associated site development works.	Circle K Service Station, St Peters Road, Walkinstown,	Grant Permission	21/07/21

		Dublin 12		
<b>SD21A/0135</b>	Demolition to the rear of Little John Centre; construction of a three to four storey development (on an overall site of 0.14ha) comprising 20 one bedroom Housing for Older People apartments (each with balcony/terrace); 1 vehicular access point via Cherry Grove; 8 car parking spaces; 20 bicycle parking spaces; bin storage; an ESB substation and all boundary treatment, site services, landscaping and site development.	The Little John Centre, 122 - 122A, Cromwellsfort Road, Dublin 12	Grant Permission	29/09/21

### 5.3 Summary

The SDCC Development Plan, Greater Dublin Drainage Strategy, RBMP (2018 -2021), and projects near the proposed project are considered in combination with the currently proposed project in the Screening Assessment section below.

## 6 Screening assessment

### 6.1 Introduction

This screening exercise will focus on assessing any likely adverse effects of the project on the conservation objectives of the Qualifying Interests of any of the Natura 2000 sites identified in Section 4 above.

This section identifies the potential impacts which may arise as result of the proposed project. It then goes on to identify how these impacts could potentially impact on the Natura 2000 sites. The significance of potential impacts is also assessed, with any potential in-combination effects also identified.

The Natura 2000 sites to be assessed, with minimum distances (via River Poddle) from the proposed project, are:

- |   |   |         |
|---|---|---------|
| • South Dublin Bay and River Tolka Estuary SPA [004024] | - | 12.7km  |
| • North Dublin Bay SAC [000206]                         | - | 15.2km  |
| • North Bull Island SPA [004006]                        | - | 15.2km. |
| • South Dublin Bay SAC [000210]                         | - | 16.6km  |

### 6.2 Assessment criteria

Potential adverse impacts that could cause a likely significant effect on the qualifying interests of the Natura 2000 sites, or the sites as a whole, during the construction and operational phases of the project, are considered using three main pathways; surface water, groundwater and land and air pathways. Surface water pathways can result in impacts where material entering the surface water drainage are carried in this water to sites that are connected downstream and can therefore impact surface water bodies themselves, and surface water dependent species and habitats that rely on them. Groundwater pathways can transmit impacts where there is contamination of water entering the groundwater body which is then discharged (sometimes over periods of several decades) and impacts groundwater dependent habitats and species that rely on them. Land pathways are related to physical disturbance of habitats or species and generally only occur over short physical distances. Air pathways relate to the transport of material, generally dust and atmospheric pollution, via air movements that are subsequently deposited on habitats and species in or connected to the Natura 2000 sites.

The proposed project is not anticipated to impact on the qualifying interests of any of the identified Natura 2000 sites due to the absence of pathways or distance between any potential source of impact and receiving environment in the case of the Natura 2000 sites. The rationale for excluding impacts via the main pathways is given in more detail in the following section.

#### 6.2.1 Surface water pathways

The proposed cycle route lies within the Dodder\_SC\_010 sub-catchment (EPA, 2021). The nearest watercourse is River Poddle which runs perpendicular to the proposed route, at the end of Limekiln Ave. The river is 100m away from the river at the nearest point. The cycle route will run along the existing road infrastructure. Any appropriate enhancement to surface water drainage will link into the existing infrastructure.

##### **During construction:**

Construction work may result in the release of pollutants in the form of hydrocarbons and sediment/silt run off. It is unlikely that any pollutants will enter the River Poddle across the majority of the proposed route. At the proposed routes' closest point to the river, a small concrete wall and grass verge separates the area where works will take place from the slope leading down into the River Poddle. Any pollutant is likely to be absorbed into this grass verge.

In the unlikely event that a pollutant were to enter the River Poddle, it would either settle or be significantly diluted over the 12.7km of watercourse before reaching nearest Natura 2000 sites within Dublin Bay.



### During operation:

The proposed cycle route will be along existing roads with surface drainage systems in place. Some sections along the proposed route will result in vegetation being replaced with hard surface. This will result in an increase in surface water runoff, however any impact on water quality will be negligible. Therefore, no significant impacts are anticipated on any of the Natura 2000 sites.

**In summary it is assessed that surface water impacts during construction and operation are not anticipated to have a significant impact on any of the Natura 2000 sites in Dublin Bay.**

Table 6-1 provides a summary of the screening rationale for the surface water pathway. Surface water pathways to Natura 2000 sites are seen in Figure 6-1.

Table 6-1: Surface water pathway screening summary for Natura 2000 sites

Natura 2000 sites	Screening outcome for Surface Water Pathway	Rationale
<ul style="list-style-type: none"> <li>South Dublin Bay and River Tolka Estuary SPA (004024)</li> <li>South Dublin Bay SAC (000210)</li> <li>North Bull Island SPA (004006)</li> <li>North Dublin Bay SAC (000206)</li> </ul>	No significant effect (Screened out)	<p>Distance / high level of dilution by larger freshwater system and transitional / coastal waters.</p> <p>Temporary nature of construction phase.</p> <p>Appropriate operational surface water drainage systems.</p>

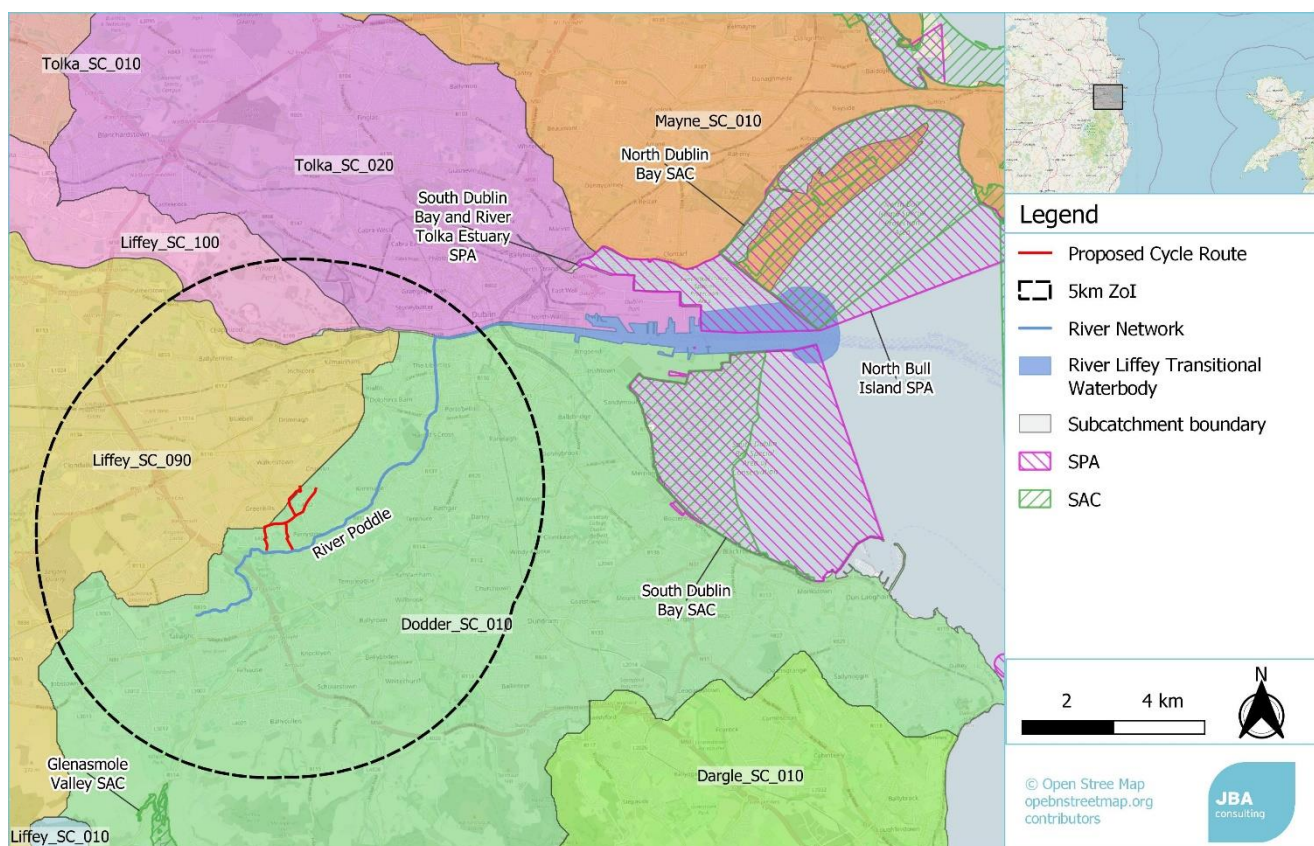


Figure 6-1: Site location and Natura 2000 sites, with surface water connectivity (EPA 2021; NPWS, 2021)

### 6.2.2 Groundwater pathways

The proposed route is located within Dublin (IE\_EA\_G\_008) and Kilcullen (IE\_EA\_G\_003) groundwater bodies (EPA 2021). The sub-soil permeability is generally low except for some areas that have an unassigned category (GSI, 2021). The aquifer vulnerability of the site is mostly 'High' to 'Extreme' (Figure 3-6) and the bedrock is Moderately Productive only in local zones (LI). North Dublin Bay SAC and South Dublin Bay SAC also have QIs which are groundwater dependent, namely Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) [1330] and Mediterranean salt meadows (*Juncetalia maritimi*) [1410]. These habitats are also associated with the QIs of North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA, as these are important habitats for many of the birds. However, excavation requirements are unlikely and if they were to occur they would be shallow and confined to the topsoil. In the highly unlikely case that a contaminant were to enter groundwater, it would discharge into the nearest watercourse (River Poddle) where it would be further diluted.

In the unlikely event that a pollutant was to enter the underlying aquifer, it would not travel far. In general, given the type of aquifer (LI) the lack of connection between the limited fissures results in relatively poor aquifer storage and flow paths that may only extend a few hundred metres, the listed Natura 2000 sites are outside of this distance. Therefore, given that the proposed route is located in an urban setting where the sub-soil permeability of the site and the surrounding area is generally low, and works are unlikely to excavate deep into the soil, negative impacts on the Natura 2000 sites are not anticipated.

During the operation phase, potential pollutants will enter the existing sewer system and will not be able to infiltrate the groundwater, therefore, adverse impacts to any Natura 2000 site are not anticipated during the operational phase.

Adverse impacts on any Natura 2000 sites are not expected via a groundwater pathway. Table 6-2 gives a summary of the screening rationale for the groundwater pathway.

Table 6-2: Ground water pathway screening summary for Natura 2000 sites

Natura 2000 sites	Screening outcome for Groundwater Pathway	Rationale
<ul style="list-style-type: none"> <li>South Dublin Bay and River Tolka Estuary SPA (004024)</li> <li>South Dublin Bay SAC (000210)</li> <li>North Bull Island SPA (004006)</li> <li>North Dublin Bay SAC (000206)</li> </ul>	No significant effect (Screened out)	<p>Generally low sub-soil permeability and low aquifer vulnerability.</p> <p>Excavation is unlikely, but if needed will be infrequent and shallow excavations.</p> <p>Groundwater would discharge to closest watercourse and be diluted.</p> <p>Appropriate operational surface water drainage systems.</p>



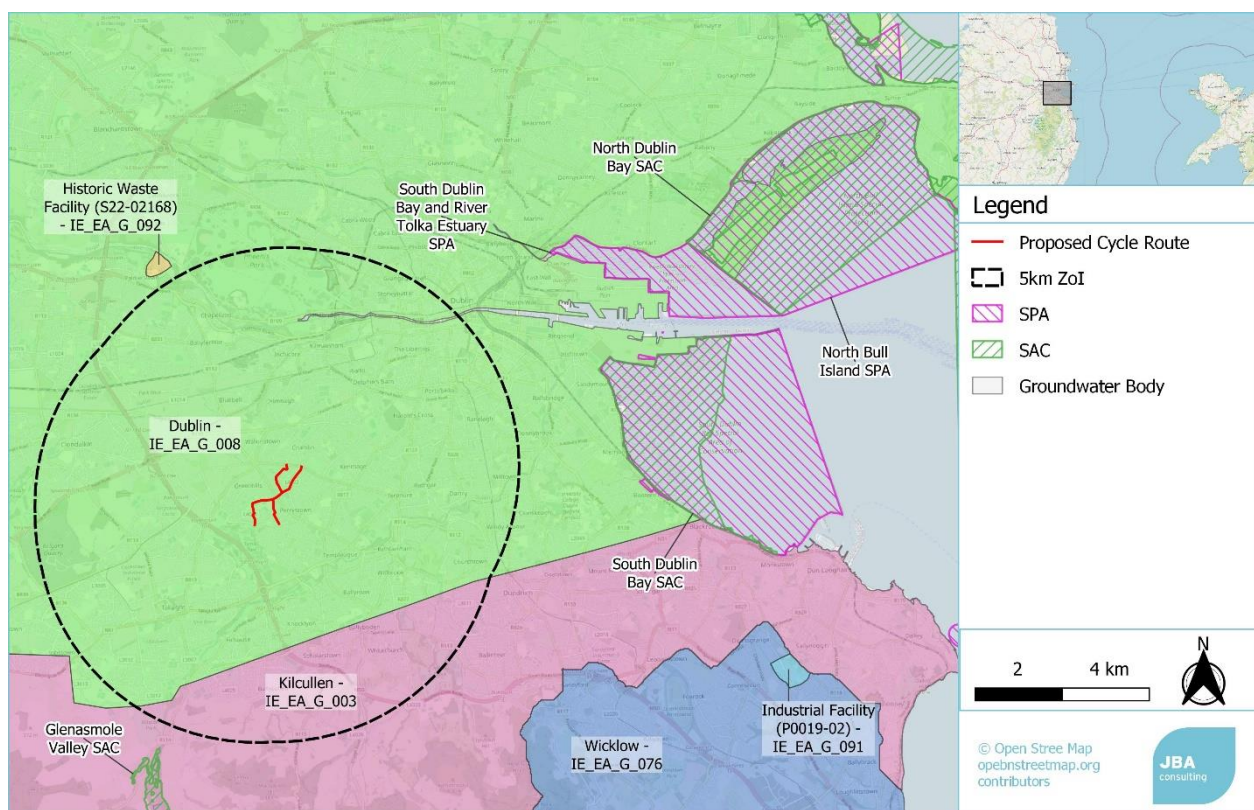


Figure 6-2: Site location and Natura 2000 sites, with groundwater connectivity (EPA 2021; NPWS, 2021)

### 6.2.3 Land and Air pathways

The loss or degradation of supporting habitats outside the identified Natura 2000 sites via land- and air-based impacts could have potential adverse impacts on a number of the QIs associated with these Natura 2000 sites.

#### Land (physical on-site and noise disturbance)

Direct physical impacts and indirect impacts, such as visual and noise impacts, do not have the potential to physically disturb habitats as well as the floral and faunal species within the Natura 2000 sites due to the distance from the proposed site to the Natura 2000 sites.

The proposed site is not considered to provide suitable ex-situ foraging habitat for any QIs of the Natura 2000 sites. The site is in an urban location consisting mainly of built-up features including roads, therefore, impacts via land pathways in terms of ex-situ supporting habitats are not anticipated to have a significant impact on any of the Natura 2000 sites.

#### Air Pollution

Regarding adverse air-based impacts, the release of dust and vehicle emissions can travel up to 10km but given the level of excavation required it is unlikely that emissions from this development will travel more than 5km at a significant concentration. This proposed cycle route is located approximately 5.6 km from the nearest Natura 2000 site, the Glenasmole Valley SAC, which is outside the projects ZoI. The closest of the listed Natura 2000 sites within Dublin Bay is 7.2 km away from the proposed cycle route therefore these sites will not be impacted by air-borne pollutants from the proposed cycle routes construction phase.

Table 6.3: Land and air pathway screening summary for Natura 2000 sites

Natura 2000 sites	Screening outcome for Land and Air Pathway	Rationale
<ul style="list-style-type: none"> <li>• South Dublin Bay and River Tolka Estuary SPA (004024)</li> <li>• South Dublin Bay SAC (000210)</li> <li>• North Bull Island SPA (004006)</li> <li>• North Dublin Bay SAC (000206)</li> </ul>	No significant effect (Screened out)	<p>Outside of the 5km Zol for air borne impacts.</p> <p>Existing habitats are predominantly urban which do not offer significant habitat potential for the QIs of the listed Natura 2000 sites.</p>

#### 6.2.4 Cumulative Impact

The plans and projects described in section 5 have been subject to Stage 1 Appropriate Assessment Screening, with some having been subject to Stage 2 Appropriate Assessment. The conclusion from these assessments is that the projects will have a negligible impact on the QIs/Species of Conservation Interests (SCI) of any Natura 2000 site, with the implementation of proposed mitigation measures for those projects that involved a Stage 2 Appropriate Assessment and Natura Impact Statement. As the proposed development is unlikely to affect the QIs/SCIs or conservation objectives of any European site, there is no potential for other plans or projects to act in combination with it to result in likely significant effects on European sites.

## 6.3 Summary

Due to the location of the proposed site, the nature of the construction works, associated underlying geology and its distance to the Natura 2000 sites within the Zol, impacts via surface water, groundwater (to surface water) and land and air pathways to the SACs or SPAs are not anticipated.

### 6.3.1 Description of likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the Natura 2000 sites

Project Elements	Comment			
Size and scale	The proposed cycle route will be constructed along existing roads, carriageways, access paths and greenways. The cycle route will be constructed along Whitehall Road West, Greenhills Park and Local Estate Roads. The route will be situated among urban infrastructure and a section of Greenhills Park. The proposed cycle route will be 3.6km long			
Land-take	There will be no direct land take from any of Natura 2000 sites.			
Distance (via watercourse and direct distance) from Natura 2000 site or key features of the site	Natura 2000 site name	Site code	Direct Distance	Distance via Watercourse
	South Dublin Bay and River Tolka Estuary SPA	004024	7.2km	12.7km
	South Dublin Bay SAC	000210	7.2km	16.6km
	North Dublin Bay SAC	000206	10.2km	15.2km
	North Bull Island SPA	004006	10.2km	15.2km
Resource requirements (water abstraction etc.)	There will be no water abstraction requirements.			
Emissions (disposal to land, water or air)	<p>Construction Phase:</p> <p>Low possibility of sediment and hydrocarbon pollution in water runoff during construction. Any runoff will settle and/or will be diluted within the 12.7km (minimum) of watercourse between the proposed cycle route the listed Natura 2000 sites in Dublin Bay.</p> <p>Low levels of air borne emissions unlikely to travel in significant concentrations for more than 5km from the site, the nearest listed Natura site is more than 7.1km away.</p> <p>In the absence of any mitigation, the emissions from the project would not result in a negative impact on the Natura 2000 sites.</p> <p>Operation phase:</p> <p>Where vegetated areas are removed there will be a negligible increase in water run off/ decrease in absorption, which will not impact on the listed Natura 2000 sites within Dublin Bay</p>			
Excavation requirements	It is likely that excavation is not required, but in the case that they were required they will be shallow, removing topsoil only.			
Transportation requirements	<p>Temporary Impacts: Levels of traffic to the site during the construction phase will increase traffic to the area but will be temporary in nature. All access to the site will be on pre-existing roads and transportation requirements will not affect Natura sites.</p> <p>Permanent Impacts:</p> <p>Given the size, scale and location of the proposed project, transportation requirements will not affect Natura 2000 sites.</p>			



Duration of construction, operation, decommissioning etc.	Construction will take 6 months. Operation will be permanent, and no decommissioning is anticipated.
Other	None

### 6.3.2 Description of likely changes to the Natura 2000 sites

Potential Impact	Comments
Reduction of habitat area	There will be no temporary or permanent reduction in habitat area for any of the Natura 2000 sites.
Disturbance to key species	There will be no disturbance to any QIs within any of the Natura 2000 sites.
Habitat or species fragmentation	There will be no temporary or permanent habitat or species fragmentation within any of the Natura 2000 sites.
Reduction in species density	There will be no temporary or permanent reduction in species density within any of the Natura 2000 sites, or any QIs of these sites.
Changes in key indicators of conservation value (water quality etc.)	There will be no temporary or permanent changes in key indicators of conservation value (surface water, groundwater and air quality).
Climate change	N/A

### 6.3.3 Description of likely impacts on the Natura 2000 sites as a whole

Potential Impact	Comments
Interference with the key relationships that define the structure of the site	Interference with the key relationships that define the structure of the sites are not anticipated
Interference with key relationships that define the function of the site	Interference with the key relationships that define the function of the sites are not anticipated

Provide indicators of significance as a result of the identification of effects set out above in terms of:

Potential Impact	Indicators
Loss (Estimated percentage of lost area of habitat)	No Natura 2000 sites will experience a direct loss in habitat area.
Fragmentation	Fragmentation of habitat and/or species is not anticipated.
Disruption & disturbance	Disruption and/ or disturbance is not anticipated.
Change to key elements of the site (e.g. water quality etc.)	Potential temporary changes to key elements (i.e. water quality) of the site are not anticipated.

### 6.3.4 Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts is unknown

Based upon best scientific judgement, no significant effects are expected from the elements mentioned above; and that no significant gaps in knowledge of the scale or magnitude of potential impacts from the proposed site exist.

## 6.4 Concluding Statement

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

Following this initial screening of a proposed cycle route along the Whitehall Road West, Greenhills Park and Local Estate Roads, Dublin 12, it can be concluded that the possibility of any significant impacts on the European Sites listed below, whether arising from the project itself or in combination with other plans and projects, can be excluded beyond a reasonable scientific doubt on the basis of the best scientific knowledge available.

- South Dublin Bay and River Tolka Estuary SPA [004024]
- North Dublin Bay SAC [000206]
- North Bull Island SPA [004006]
- South Dublin Bay SAC [000210]

If any changes occur in the design of these works, a new Screening for Appropriate Assessment is required

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