

Appropriate Assessment Screening Report

for the proposed
**Donnybrook Road to Clonskeagh
Road Rapid Deployment Scheme**
in accordance with the requirements of
Article 6(3) of the EU Habitats Directive

for: The National Transport Authority Cycling Design Office

on behalf of: Dublin City Council

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1. Introduction

1.1. Background

CAAS has been appointed by the National Transportation Authority's Cycling Design Office (CDO), on behalf of Dublin City Council and Dún Laoghaire Rathdown County Council to prepare this Appropriate Assessment Screening Report (AASR) for the proposed the Donnybrook Road to Clonskeagh Road Rapid Deployment Scheme, County Dublin (the proposed scheme). This Appropriate Assessment (AA) Screening Report has been prepared to assess whether or not a Natura Impact Statement (NIS) is required for the proposed scheme. Appropriate Assessment (AA) is a procedure carried out in accordance with the requirements of Article 6(3) of Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (as amended) (hereafter referred to as the "Habitats Directive").

1.2. Report Structure

This report sets out the legislative context for the assessment process with reference to relevant guidelines and highlight the experience and qualifications of the author (See Appendix IV for author qualifications). It then details the proposed scheme and the works associated with this which are then interrogated to identify any possible effects which may be ecologically relevant for European sites. Following this, the metrics for the assessment of 'significance' of these effects are explained and applied to each of the European sites with ecological connectivity to the proposed scheme area. This assessment is undertaken in view of the conservation objectives and known sensitivities of the qualifying interests and special conservation interests for each European site. Other plans and projects are then considered to identify any likely in combination effects which may result in any likelihood of potential significant effects to European sites.

1.3. Legislative Context

The Habitats Directive provides legal protection for habitats and species of European importance. The overall aim of the Habitats Directive is to maintain or restore the "favourable conservation status" of habitats and species of European Community Interest. These habitats and species are listed in the Habitats and Birds Directives (Habitats Directive as above and Directive 2009/147/EC on the conservation of wild birds) with Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) designated to afford protection to the most vulnerable among them. These two designations are collectively known and referred to as European sites. Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect such sites. Article 6(3) establishes the requirement for AA. These requirements are implemented in the Republic of Ireland by the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) and the Planning and Development Act 2000 (as amended).

Article 6(3) of the Habitats Directive States:

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

will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public’.

The AA process relates to the protection of species listed in Annex I and Annex II of the Habitats Directive which form the Natura 2000 network (Article 3(1)). Species breeding and resting places of species listed in Annex IV of the Habitats Directive are nationally protected in Ireland as per Articles 15 and 16 of the Habitats Directive. The actual species listed in Annex IV do not form part of the Natura 2000 network as they are not mentioned in Article 3(1) of the Directive which defines the Natura 2000 network.

Article 3(1) of the Habitats Directive States:

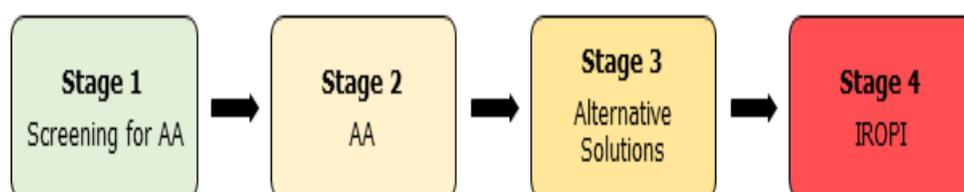
‘A coherent European ecological network of special areas of conservation shall be set up under the title Natura 2000. This network, composed of sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II, shall enable the natural habitat types and the species’ habitats concerned to be maintained or, where appropriate, restored at a favourable conservation status in their natural range’.

AA is an assessment of the likely significant effects arising from a plan or project, either individually or in combination with other plans or projects, to assess if the plan or project will adversely affect any European site concerned including implications in view of the European site’s conservation objectives. These sites consist of SACs and SPAs and provide for the protection and long-term survival of Europe’s most valuable and threatened species and habitats. Where a formal consent process applies, the AA process is concluded by the relevant competent authority making a determination in accordance with article 6(3) of the Habitats Directive.

1.4. Overview of the Habitats Directive and Appropriate Assessment Process

The Habitats Directive itself promotes a hierarchy of avoidance, mitigation and compensatory measures. This approach aims to avoid any effects on European sites by identifying possible effects early in the plan or project making process and avoiding such effects. Second, the approach involves the application of mitigation measures, if necessary, during the AA process to the point where no adverse impacts on the site(s) remain. If potential significant effects on European sites remain, and no further practicable mitigation is possible, the approach requires the consideration of alternative solutions. If no alternative solutions are identified and the plan or project is required for imperative reasons of overriding public interest, then compensation measures are required for any remaining adverse effects.

There are four main stages in the AA process:



Stage One: Screening

The process that identifies the likely impacts upon a European site of a project or plan,

either alone or in combination with other projects or plans and considers whether these impacts are likely to be significant.

Stage Two: Appropriate Assessment

The consideration of the impact on the integrity of the European site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse effects mitigation measures are required to avoid or minimise potential effects. The details of these mitigation measures are then assessed in the context of the ecological integrity of the plan/project characteristics to ensure no significant adverse effects on European sites. If this assessment process shows there are no residual significant effects, then the process may end at this stage, stage two, of the AA process which are formalised in Natura Impact Statements (NIS) reports which support the overall AA process. However, if the likelihood of significant impacts remains, then the process must proceed to Stage Three.

Stage Three: Assessment of Alternative Solutions

The process that examines alternative ways of achieving the objectives of the project or plan that avoids adverse impacts on the integrity of the European site.

Stage Four: Assessment where no alternative solutions exist and where adverse impacts remain

An assessment of compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.

1.5. Approach

This AA Screening Report is based on best scientific knowledge and has utilised ecological expertise. In addition, a detailed online review of published scientific literature and 'grey' literature was conducted. This included a detailed review of the National Parks and Wildlife Website including mapping and available reports for relevant sites and in particular sensitive qualifying interests/special conservation interests described and their conservation objectives. The EPA Envision map viewer (www.epa.ie) and available reports were also reviewed, as was the NPWS (2019) publication "The Status of Protected EU Habitats and Species in Ireland".

The ecological desktop study that has been completed for the AA screening of the proposed scheme, comprised the following elements:

- Identification of European sites within 15km¹ of the subject lands;
- Identification of pathways for effects from the site to European sites greater than 15km from the subject lands (if relevant²);
- Review of the NPWS site synopses and conservation objectives for European sites within 15km and for which potential pathways from the proposed site have been identified; and
- Examination of available information on protected species.

¹ While the actual zone of influence is likely to be much smaller, the default 15km zone extent has been applied on a precautionary basis further detail on this is identified in section 3.2

² this is not relevant where no hydrological connectivity or other significant ecological pathways occur

Source-Pathway Receptor Model

Ecological impact assessment of potential effects on European sites is conducted following a standard source-pathway-receptor model, where, in order for an effect to be established, all three elements of this mechanism must be in place. The absence or removal of one of the elements of the mechanism is sufficient to conclude that a potential effect is not of any relevance or significance.

- Source(s) – e.g., pollutant run-off from proposed scheme;
- Pathway(s) – e.g., groundwater connecting to nearby qualifying wetland habitats; and,
- Receptor(s) – qualifying aquatic habitats and species of European sites.

In the context of this report, a receptor is an ecological feature that is known to be utilised by the qualifying interests or special conservation interests of a European site. A source is any identifiable element of the proposed scheme that is known to interact with ecological processes. A pathway is any connection or link between the source and the receptor³.

This report provides information on whether any likelihood of direct, indirect and cumulative potential significant effects could arise from the proposed scheme.

Guidance

The AA screening has been prepared taking into account legislation including the aforementioned legislation and guidance including the following:

- *Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities, Department of the Environment, Heritage and Local Government, 2009;*
- *Commission Notice: Managing Natura 2000 sites - The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC", European Commission 2018;*
- *Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, European Commission Notice, Journal of the European Union, 2021;*
- *Practice Note PN01: Appropriate Assessment Screening for Development Management, Office of the Planning Regulator, 2021.*

³ qualifying interest or special conservation interests of the European site in question and the known sensitivities of these key ecological receptors

2. Description of Proposed Scheme

2.1. Receiving Environment Overview

The proposed scheme site is located between Donnybrook Rd and Clonskeagh Rd along the River Dodder. The proposed scheme is within a highly urbanised area and thus is surrounded by a variety of commercial structures, residential structures and small areas of amenity grassland along length of the proposed scheme. In a wider landscape context, the site is situated in a highly urban area due to the proposed scheme's location within Dublin City (Figure 2.1). The River Dodder (Figure 2.2) flows east along the proposed scheme into Dublin Bay via the River Liffey approximately 7.8km away from the proposed site. The closest designated European site to the proposed scheme is South Dublin Bay SAC (000210) and South Dublin Bay and River Tolka Estuary SPA (004024) at 1.70m in distance. As mentioned above, the proposed scheme lies within an intensive urban area and as a result, there are few areas of ecological value surrounding the site or along the proposed scheme itself, other than the River Dodder itself.

2.2. The Proposed Scheme

The proposed scheme begins at Donnybrook Road and continues for approximately 800m through to Clonskeagh Road. The proposed rapid deployment scheme's purpose is the upgrade of existing cycling, pedestrian and traffic calming infrastructure (as detailed below, and illustrated in Figure 2.3 and Figure 2.4), in order to improve the usage of the proposed scheme area for less congested and more sustainable modes of transport. The proposed scheme will not change the current status of the proposed scheme area, i.e., as a public transport scheme area in a highly urbanised area, and it will still be operated and maintained as such during the operational phase. Details of the proposed scheme are provided below:

- The scheme commences at the northern extent of Beaver Row. One way cycle lanes are proposed either side of the road, with the existing straight ahead / left traffic lane removed to facilitate the 1-way cycle track on the east side
- The existing kerblines and footpaths remain in place
- The one-way cycle lanes continue to Beech Hill Avenue before joining into pedestrian priority zones. Movement from the west side cycle lane is facilitated by a proposed toucan crossing
- A 4m pedestrian priority area continues along the west side of Beaver Row to Beech Hill Road. This is facilitated by a build-out from the existing kerblines and requires the existing two-way traffic arrangement to be reduced to a one way (northbound)
- Existing parking and kerblines on the west side are retained
- The existing cross section along Beaver Row necessitates the reduction of the 4m pedestrian priority area to a minimum of 3.5m across a 50m length
- At Beech Hill Road the 4m pedestrian priority area continues to the junction at Clonskeagh Road. This is reduced to 3.5m along a 50m section to facilitate retention of the two-way carriageway to Smurfit Kappa entrance
- Some areas of hatching, bollards and kerb buildouts are proposed to control traffic movements in and out of David Lloyd Fitness and Smurfit Kappa
- The carriageway is realigned via road markings between Beech Hill Office Campus and Smurfit Kappa to accommodate the pedestrian priority area on the east

- A proposed toucan crossing is proposed to facilitate movement from the Beech Hill Campus to the pedestrian priority area
- The carriageway layout to / from Clonskeagh Road is maintained with some minor narrowing on the east side and reconfiguration of the existing road markings
- A toucan crossing is proposed across Clonskeagh bridge with pedestrian priority zones either side of the bridge to facilitate pedestrian and cycle movements into the parks
- All boundaries along the scheme are retained
- Approx. 4 no trees and small grass verge areas are removed to facilitate the pedestrian priority zone

The scheme extent is approximately 1.22 hectares (ha).

The scheme proposals are illustrated in Figures 1 to 5.



Figure 2.1. Location of the proposed scheme

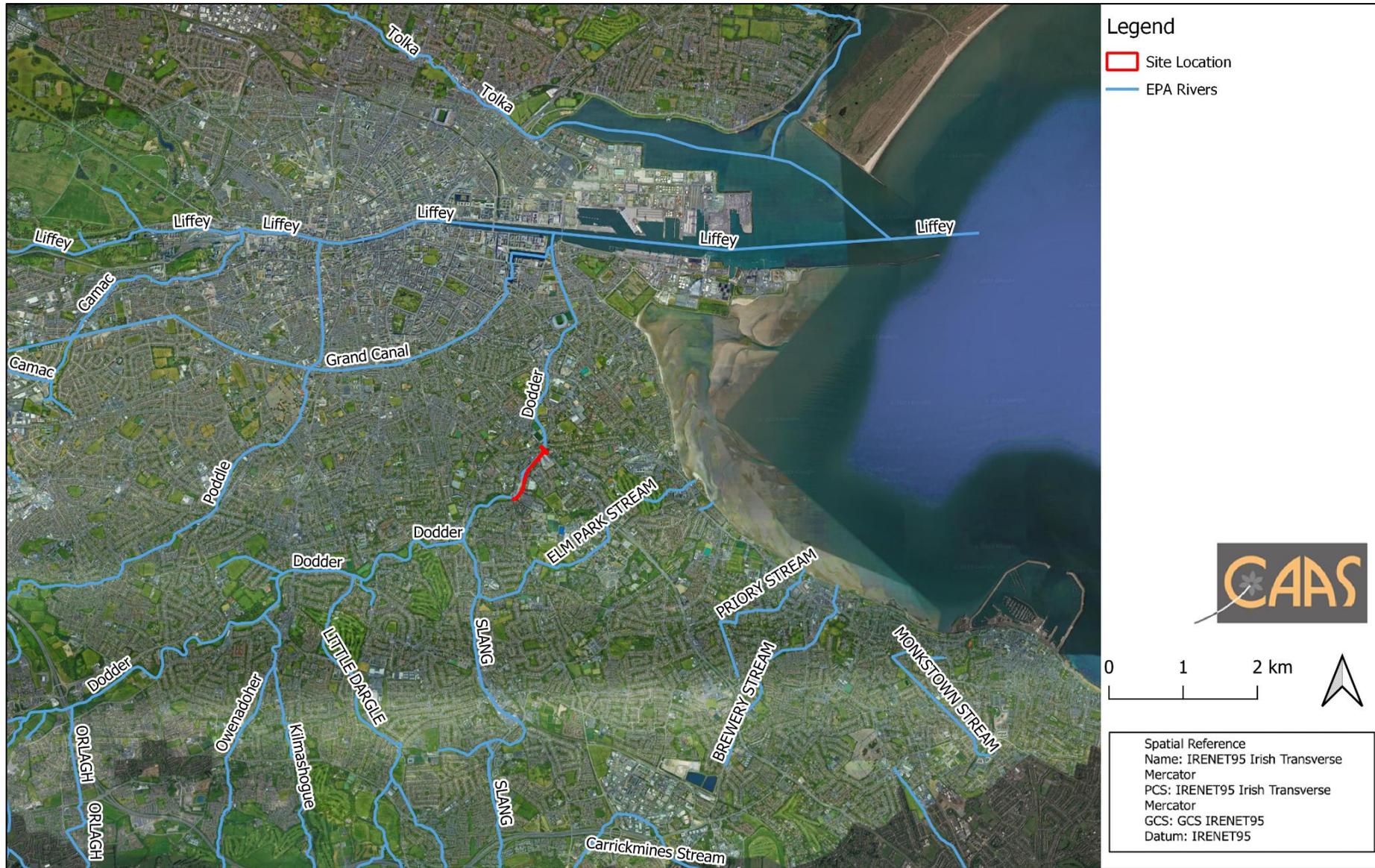


Figure 2.2. Location of EPA rivers with regard to the proposed scheme

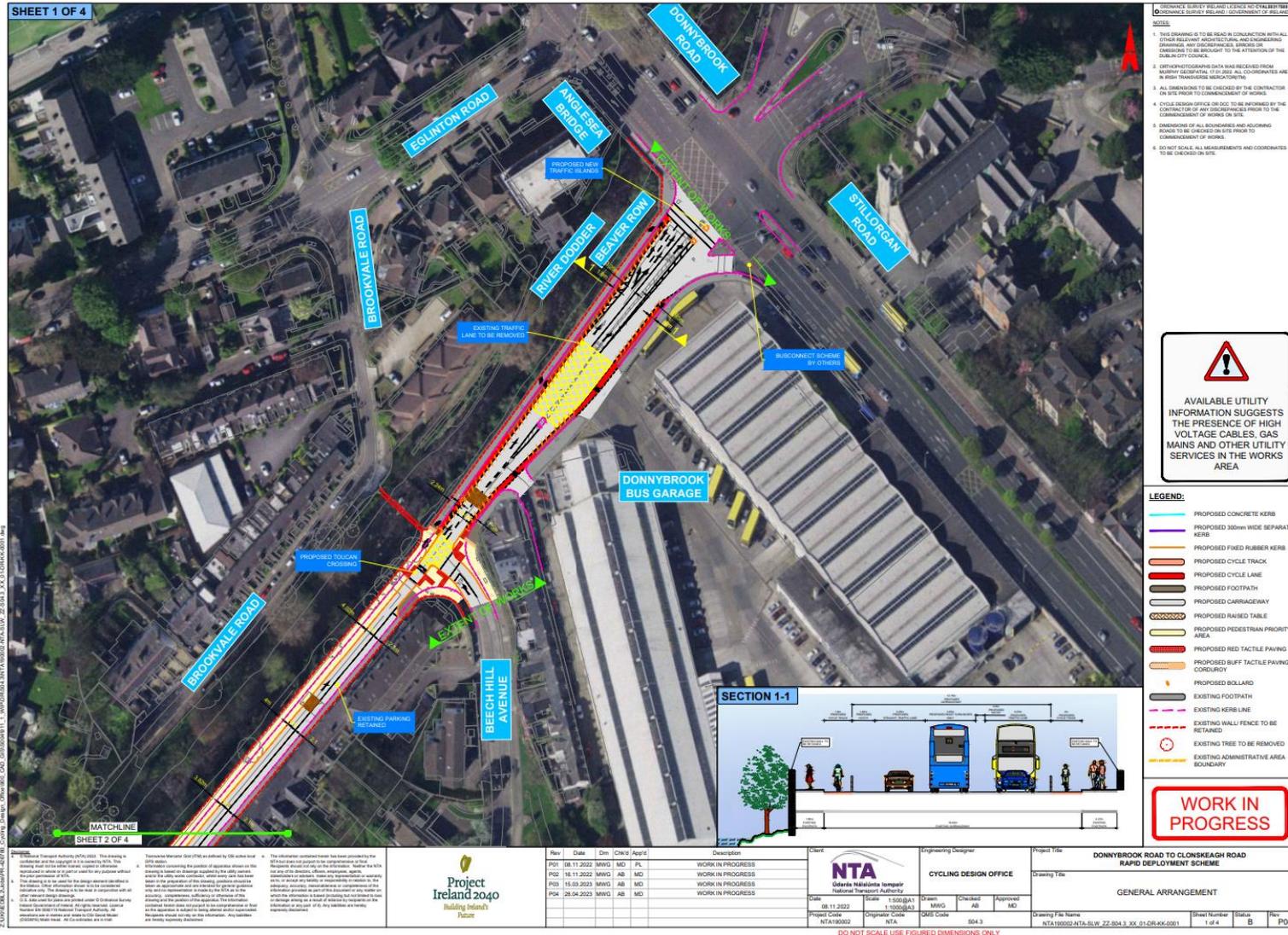


Figure 2.3. Map of the proposed scheme – Part 1 of 4

Source: Cycling Design Office. Full scaled version of the drawing is available separately

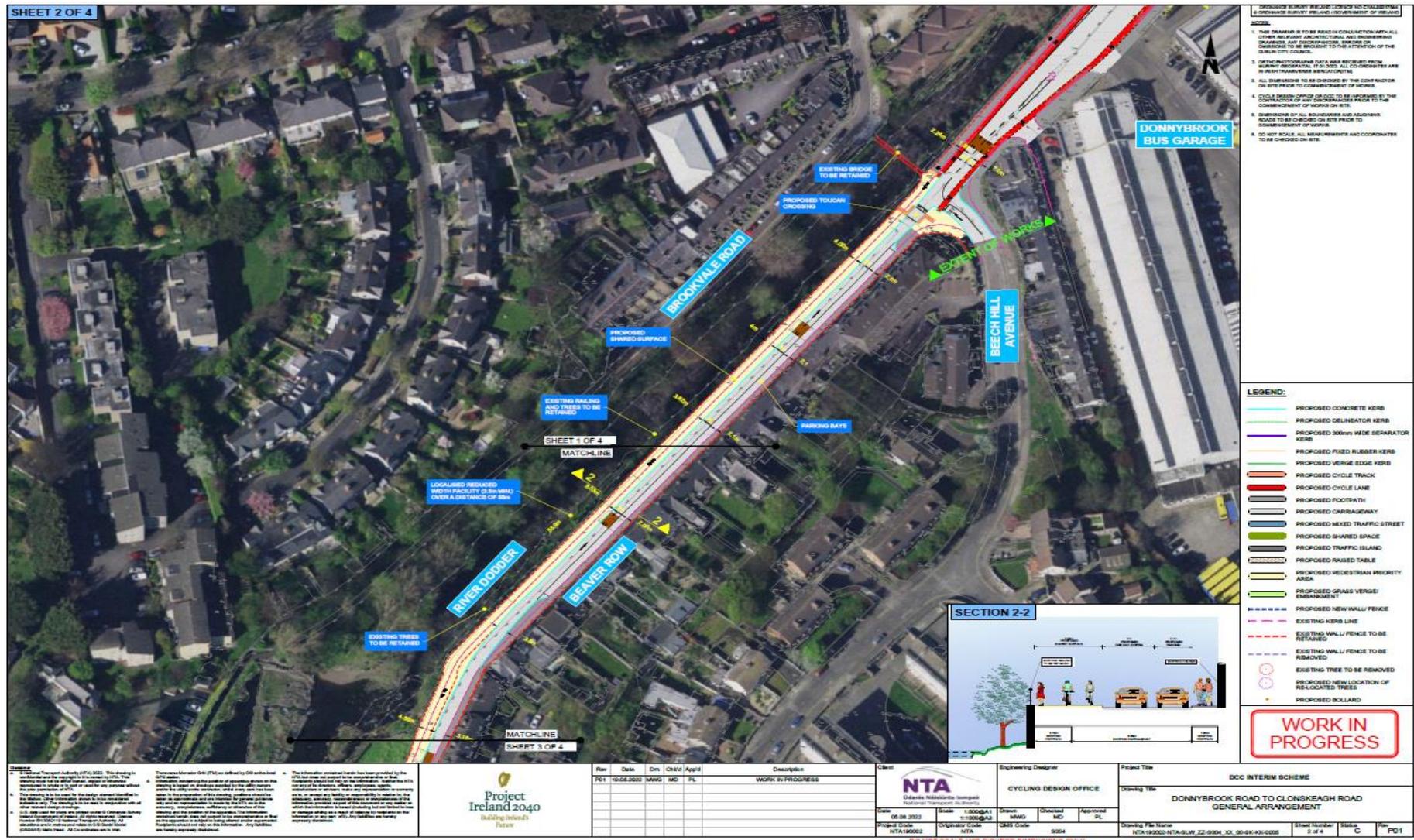


Figure 2.4. Map of the proposed scheme – Part 2 of 4

Source: Cycling Design Office. Full scaled version of the drawing is available separately



Figure 2.5. Map of the proposed scheme – Part 3 of 4

Source: Cycling Design Office. Full scaled version of the drawing is available separately

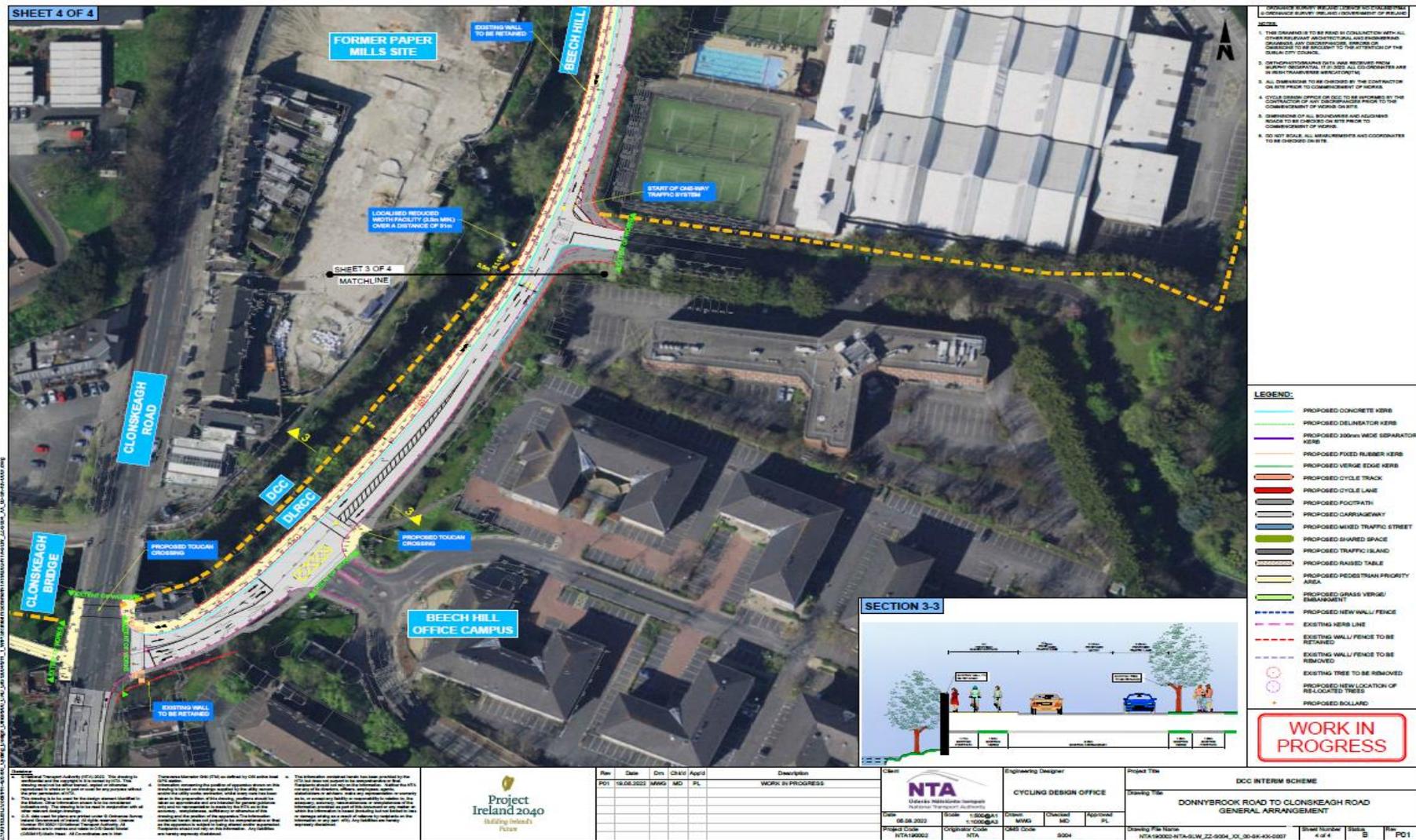


Figure 2.6. Map of the proposed scheme – Part 4 of 4
Source: Cycling Design Office. Full scaled version of the drawing is available separately

3. Screening for Appropriate Assessment

3.1. Introduction

This stage of the process identifies any likely significant effects on European sites from the project, either alone or in combination with other projects or plans. A series of questions are asked in order to determine:

- Whether a plan or project can be excluded from AA requirements because it is directly connected with or necessary to the management of a European site.
- Whether the project will have a potentially significant effect on a European site, either alone or in combination with other projects or plans, in view of the site's conservation objectives or if residual uncertainty exists regarding potential impacts.

An important element of the AA process is the identification of the "Conservation Objectives", "Qualifying Interests" (QIs) and/ or "Special Conservation Interests" (SCIs) of European sites requiring assessment. QIs are the habitat features and species listed in Annexes I and II of the Habitats Directive for which each European site has been designated and afforded protection. SCIs are wetland habitats and bird species listed within Annexes I and II of the Birds Directive. It is also vital that the threats to the ecological / environmental conditions that are required to support QIs and SCIs are considered as part of the assessment.

Site-Specific Conservation Objectives (SSCOs) have been designed to define favourable conservation status for a particular habitat or species at that site. According to the European Commission interpretation document 'Managing Natura 2000 sites: The provisions of Article 6 of the Habitats Directive 92/43/EEC', paragraph 4.6(3):

"The integrity of a site involves its ecological functions. The decision as to whether it is adversely affected should focus on and be limited to the site's conservation objectives."

Favourable conservation status of a habitat is achieved when:

- Its natural range, and area it covers within that range, are stable or increasing;
- The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future; and
- The conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when:

- Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

3.2. Identification of relevant European sites

This section of the screening process describes the European sites which exist within the Zone of Influence (ZOI) of the site. An assessment of the sources of effects (see Section 3.3 below) identified

that effects from the proposed scheme are likely to be localised – in the absence of hydrological pathways. The Environment, Heritage and Local Government (2009) Guidance on AA recommends a 15km zone to be considered.

There are two key considerations when identifying ecological pathways - the first is the distance from which potential sources for effects can radiate known as the zone of influence (ZOI) and the second is the potential for sensitive receptors (QIs/SCIs) to interact with the ZOI which is a further pathway consideration zone (PCZ). It is understood that sites designated for vagile species are known to utilise isolated resources across the landscape could intersect with the localised zone of influence; however, beyond 15km potential effects to such species at this scale are not identified to be significant due to the broad home range available to these species and the availability of alternate resources.

Therefore, a radius of 2km has been adopted as the ZOI and a 15km radius was adopted as the PCZ for this AA - however, further considerations were given to hydrological pathways from the proposed scheme which extended beyond the 15km limit.

European sites that have been identified to have ecological connectivity pathways for potential effects from the proposed scheme area are listed in

In order to determine the potential effects of the proposal, information on the qualifying features, known vulnerabilities and threats to site integrity pertaining to any potentially affected European sites has been reviewed. Background information on threats to individual sites and vulnerability of habitats and species that was used during this assessment included the following:

- Ireland's Article 17 Report to the European Commission "*Status of EU Protected Habitats and Species in Ireland*" (NPWS, 2019);
- Ireland's Article 12 Report to the European Commission "*Bird species' status and trends reporting format for the period 2008-2012-*" (NPWS, 2012)
- Site Synopses⁴; and
- NATURA 2000 Standard Data Forms⁴.

The assessment considers the SSCOs of each of the sites within the ZOI. Since the conservation objectives for the European sites focus on maintaining the favourable conservation condition of the QIs/SCIs of each site, the screening process has concentrated on assessing the potential effects of the proposed scheme against the QIs/SCIs of each site. The conservation objectives for each site have been taken into account throughout the assessment process.

⁴ NPWS (2019); NPWS Database of protected site data and associated documents for each European site; available at <https://www.npws.ie/protected-sites>: last accessed 26th October 2022

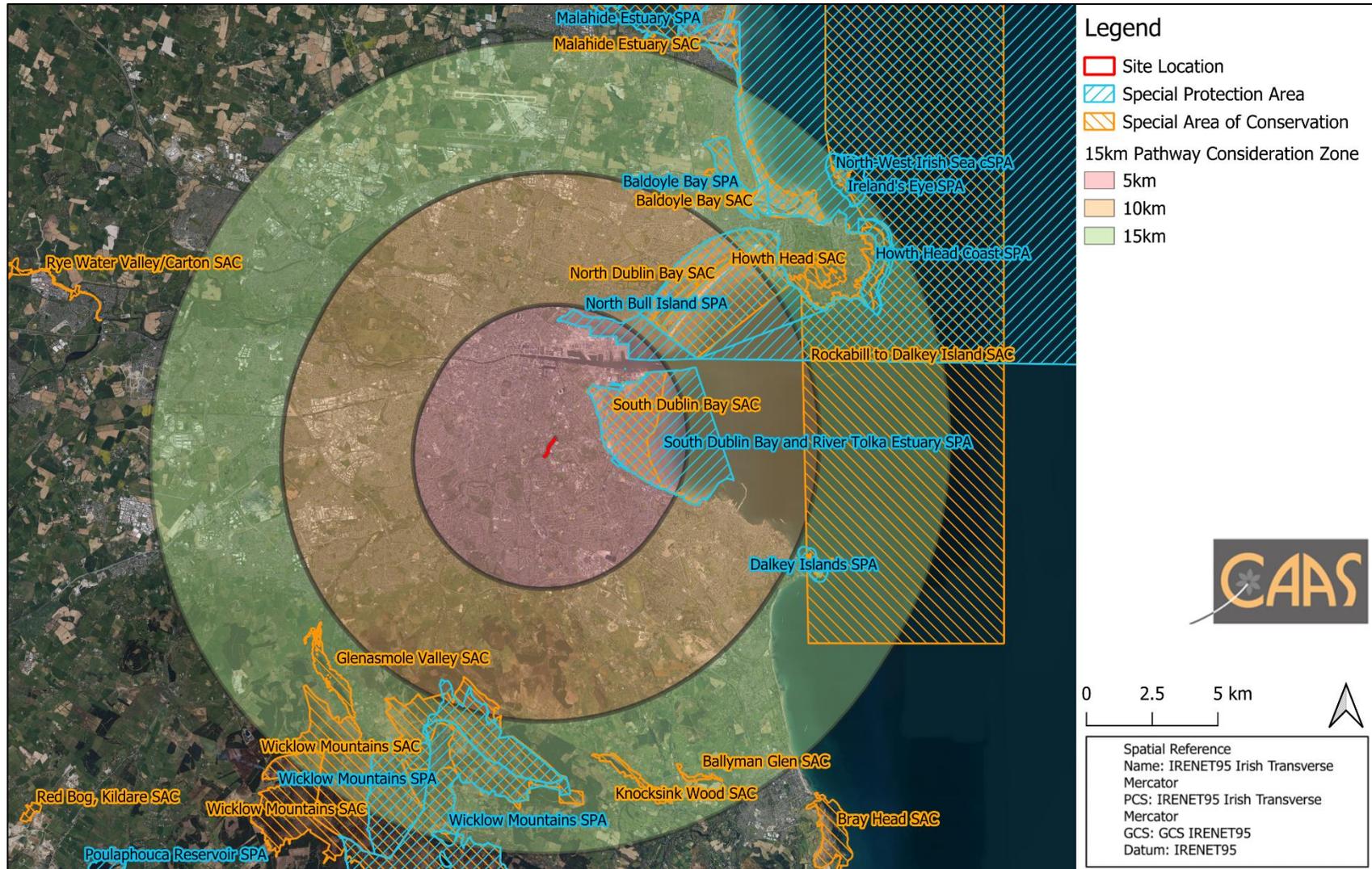


Figure 3.1 European sites within 15km of the proposed scheme boundary⁵

⁵ Source: NPWS (datasets downloaded 20th June 2023)

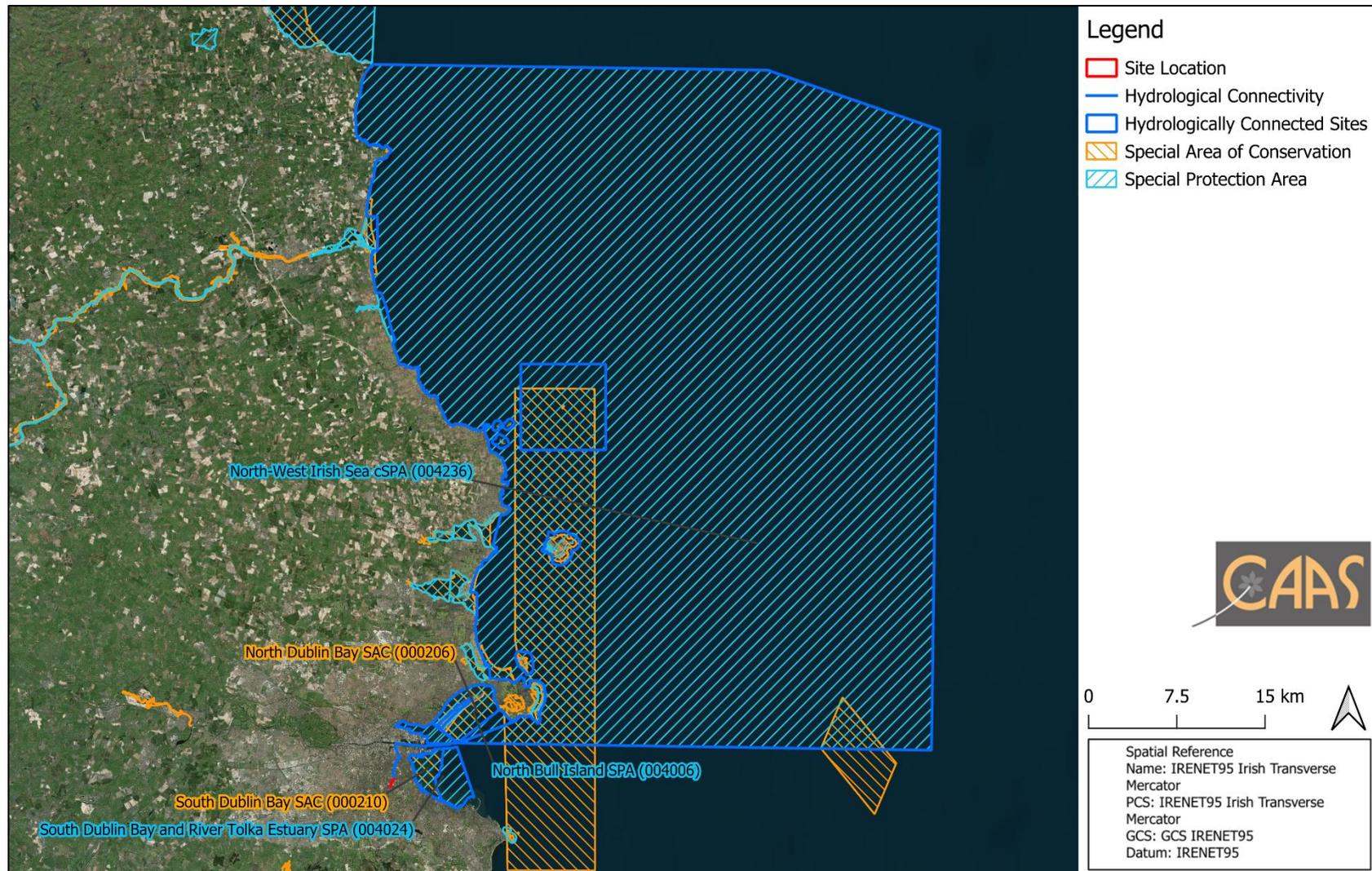


Figure 3.2 Hydrological connectivity to European sites beyond 15km of the proposed scheme boundary⁶

⁶ Source: NPWS Protected Sites and EPA River Routes (datasets downloaded 20th June 2023)

3.3. Assessment criteria

3.3.1. Is the development necessary to the management of European sites?

Under the Habitats Directive, projects that are directly connected with or necessary to the management of a European site do not require AA. For this exception to apply, management is required to be interpreted narrowly as nature conservation management in the sense of Article 6(1) of the Habitats Directive. This refers to specific measures to address the ecological requirements of annexed habitats and species (and their habitats) present on a site(s). The relationship should be shown to be direct and not a by-product of the project, even if this might result in positive or beneficial effects for a site(s).

The primary purpose of the proposed scheme is not the nature conservation management of the sites, but to implement a rapid deployment scheme, the purpose of which is the upgrade of existing cycling, pedestrian and traffic calming infrastructure, at Donnybrook Rd and Clonskeagh Rd in Dublin City, and all associated site works. Therefore, the proposed scheme would not be considered by the Habitats Directive to be directly connected with or necessary to the management of European designated sites.

3.3.2. Elements of the proposed scheme with potential to give rise to effects

This screening assessment process identifies whether the changes brought about by the proposal are likely to cause any direct, indirect or secondary effects (either alone or in combination with other plans or projects) on the European sites. During this assessment a number of factors have been taken into account including the sites' conservation objectives and known threats. The overall aim of the assessment is to predict the consequences that can be reasonably foreseen by implementation of the proposed scheme.

There will be no direct interaction with the River Dodder as a result of the proposed scheme's construction phase. However, there is potential for disturbance effects through construction and increased dust and construction surface run off during the construction phase.

Regarding the operational phase, the proposed scheme aims to improve the usage of the proposed scheme area for less congested and more sustainable modes of transport such as walking and cycling. As a result, there is expected to be a moderate increase in pedestrian and cyclist traffic in the area throughout the operational phase⁷. However, any effects from the operational phase of the proposed scheme are expected to be negligible as nature of the usage will be unchanged. In addition, the proposed scheme is not likely to increase the number of road users overall, but rather encourage vehicular users to choose cycling or walking by improving infrastructure to enable safer journey by such means within the city. In the operational phase, no drainage system alterations will have occurred as a result of the proposed scheme, and there will be no change to hard surface area as a result of the proposed scheme, therefore surface water runoff and storm water drainage will present no potential effects during the operational phase.

Therefore, for the purposes of this assessment the proposed scheme is identified as having potential

⁷ Research shows that the development of new cycling infrastructure or the upgrade of existing infrastructure is likely to lead to an increase of 8% to 14%⁷ in the level of cycling participation. *Point Bridge Local Area Model (LAM) Report, 2022, Aecom*

to cause only construction phase effects at a local scale.

The construction phase elements of the proposed scheme with potential to introduce sources for effects to ecological processes are identified below:

- Disturbance effects through noise;
- Dust; and
- Surface water run-off from the construction phase elements of the proposed scheme.

The construction phase will be small-scale and temporary. The construction phase potential effects identified are considered in the context of European sites identified in Table 3.1 below, their sensitivities and conservation objectives.

3.3.3. Identification of potential effects and screening of sites

This section documents the final stage of the screening process. It has used the information collected on the sensitivity of each European site and describes any potential effects on European sites resulting from the proposed scheme. This assumes the absence of any controls, conditions, or mitigation measures. In determining the potential for effects, a number of factors have been taken into account. Firstly, the sensitivity and reported threats to European sites. Secondly, the individual elements of the proposed scheme and the potential effects they may cause on the sites were considered. The elements of the proposed scheme with potential to affect European sites are presented in Table 3.1.

Sites are screened out based on one or a combination of the following criteria:

- where it can be shown that there are no significant pathways such as hydrological links between activities of the proposed scheme and a site;
- where a site is located at such a distance from proposed scheme area that effects are not foreseen; and
- where known threats or vulnerabilities of a site cannot be linked to potential impacts that may arise from the proposed scheme.

3.4. Characterising potential significant effects

This section of the report explains the metrics used when assessing if the potential effects (previously identified) will have significant implications for European sites. The following parameters are described when characterising impacts (following guidance from the Chartered Institute of Ecology and Environmental Management, Environmental Protection Agency and National Roads Authority):

- **Direct and Indirect Impacts** - An impact can be caused either as a direct or as an indirect consequence of a Plan/Project.
- **Magnitude** - Magnitude measures the size of an impact, which is described as high, medium, low, very low or negligible.
- **Extent** - The area over that the impact occurs – this should be predicted in a quantified manner.
- **Duration** - The time that the effect is expected to last prior to recovery or replacement of the resource or feature.
 - Temporary: Up to 1 Year;

- Short Term: The effects would take 1-7 years to be mitigated;
- Medium Term: The effects would take 7-15 years to be mitigated;
- Long Term: The effects would take 15-60 years to be mitigated; and
- Permanent: The effects would take 6000 years to be mitigated.
- **Likelihood** – The probability of the effect occurring taking into account all available information.
 - Certain/Near Certain: >95% chance of occurring as predicted;
 - Probable: 50-95% chance as occurring as predicted;
 - Unlikely: 5-50% chance as occurring as predicted; and
 - Extremely Unlikely: <5% chance as occurring as predicted.

The Chartered Institute of Ecology and Environmental Management (CIEEM) guidelines for ecological impact assessment (2016) define: an ecologically significant impact as an impact (negative or positive) on the integrity of a defined site or ecosystem and/or the conservation status of habitats or species within a given geographic area; and the integrity of a site as the coherence of its ecological structure and function, across its whole area, which enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified.

The Habitats Directive requires the focus of the assessment at this stage to be on the integrity of the site as indicated by its Conservation Objectives. It is an aim of NPWS to draw up conservation management plans for all areas designated for nature conservation. These plans will, among other things, set clear objectives for the conservation of the features of interest within a site.

SSCOs have been prepared for a number of European sites. These detailed SSCOs aim to define favourable conservation condition for the qualifying habitats and species at that site by setting targets for appropriate attributes which define the character habitat. The maintenance of the favourable condition for these habitats and species at the site level will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Favourable conservation status of a species can be described as being achieved when: *‘population data on the species concerned indicate that it is maintaining itself, and the natural range of the species is neither being reduced or likely to be reduced for the foreseeable future, and there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.’*

Favourable conservation status of a habitat can be described as being achieved when: *‘its natural range, and area it covers within that range, is stable or increasing, and the ecological factors that are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and the conservation status of its typical species is favourable’.*

A Generic Conservation Objective for a SAC is provided below:

- To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.

A Generic Conservation Objective for a SPA is provided below:

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.

3.4.1. Types of potential Effects

EC guidance⁸ outlines the types of effects that may affect European sites. These include effects from the following activities:

- Land take
- Resource requirements (drinking water abstraction etc.)
- Emissions (disposal to land, water or air)
- Excavation requirements (removal of soil and vegetation)
- Transportation requirements
- Duration of construction, operation, decommissioning

The 2001 European Commission AA guidance outlines the following potential changes that may occur at a designated site, which may result in effects on the integrity and function of that site:

- Reduction of habitat area
- Disturbance to key species
- Habitat or species fragmentation
- Reduction in species density
- Changes in key indicators of conservation value (water quality etc.)
- Climate change

The elements detailed above were considered with specific reference to each of the European sites identified in Table 3.1 but are also considered in a broader sense below.

Loss/reduction of habitat area

There are no European sites present within the proposed scheme boundary and the closest European site is 1.7 km from the proposed scheme area. There were no Annex I habitats or supporting habitat for Annex II species identified on site. Therefore, there will be no effects posed regarding loss of reduction of habitat area of any European sites as a result of the proposed scheme.

Habitat or species fragmentation

The proposed scheme area is comprised of a majority of artificial hard surfaces, with a small number of intensively managed areas of amenity grassland patches and treelines along the proposed scheme. It is anticipated that only minimal vegetation will be removed to facilitate the implementation of the scheme. There may be a minor loss of amenity grassland patches, consisting of kerb side area, and four trees. These minor patches of grass and four trees are not sufficient to support any significant degree of SCI foraging habitat. Considering the site context, and the minor area of vegetation potentially removed to facilitate the scheme, this is considered to be negligible, with no potential to significantly affect ex-situ foraging of SCI species.

⁸ Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, European Commission Environment DG, 2001

The area has been considered at a landscape scale with respect to connectivity and ecological corridors between European sites, and there are no functional pathways to European sites that will be interrupted by the proposed scheme.

No drainage system alterations will take place along the proposed area as a result of the proposed scheme, there will be no interaction with the River Dodder during the construction phase, and there will be no change to hard surface area as a result of the proposed scheme, therefore surface water runoff and storm water drainage will present no potential effects in the operational phase of the proposed scheme.

Regarding the construction phase, given the minor and localised nature of the proposed scheme works, the absence of any changes to drainage along the proposed scheme area, the implementation of best practice construction measures along the proposed scheme area, and the dilution factor involved for a small scale project – it is not foreseen that there is any potential for significant effects introduced regarding hydrological interactions as a result of the construction phase of the proposed scheme. In addition, there are no Annex I habitats or supporting habitat for Annex II species within the proposed scheme area. Therefore, there will be no effects posed to European sites in this regard.

Disturbance to key species

None of the species and/or habitats identified in Table 3.1. were recorded on site. The nearest European site is 1.7 km from the proposed scheme area. However, due to the small scale of the proposed scheme and the highly urbanised, heavily trafficked and developed nature of the proposed scheme area, disturbance effects due to noise or lighting etc. during the construction phase are not present as the SCI species in the nearby SPAs would already exhibit a degree of habituation to such effects.

The habitats present within the scheme area are not identified to be sufficient or capable of supporting ex-situ foraging for the SCI species of the SPAs identified; therefore, no effects are identified in this regard. The operational phase will be in keeping with the current level of noise, urban activity and use, with a slight decrease in vehicular use predicted due to the nature of the proposed scheme.

Any potential for effects from the operational phase of the proposed scheme due to changes in numbers of visitors to European sites are negligible, because the proposed scheme is not likely or intended to significantly increase the number of road users overall, but rather to encourage vehicular users to choose cycling or walking by improving infrastructure to enable safer journey by such means within the city.

Therefore, there are no potential sources for significant effects regarding disturbance to key species as a result of the proposed scheme.

Reduction in species density

There are no ecological corridors, apart from the River Dodder, between the proposed scheme area and any European site. There will be no interaction with the River Dodder as part of the proposed scheme works, and there is no potential for significant effects through construction run off or dust

due to the small scale, localised nature of the proposed scheme and dilution factor involved.

There are no habitats identified on site of any ecological significance for European sites. In addition, there is no supporting habitat and/or substantial connectivity between the proposed scheme area and any European site. Therefore, there will be no reduction in species density of any of the QI or SCI species as a result of the proposed scheme.

Changes of indicators of conservation value

The proposed scheme area is 1.7 km from the closest European site. However, the proposed scheme is small and localised in scale, and the construction phase is temporary, and localised, and small in scale, with negligible potential for effects identified in this regard to European sites.

Indirect hydrological pathways to European designated sites have been identified for the construction phase via surface water drainage, and the River Dodder (which connects to Dublin Bay via the River Liffey). However, given the minor and localised nature of the proposed scheme works, the absence of any changes to drainage along the proposed scheme area, the implementation of best practice construction measures along the proposed route, and the dilution factor for a small-scale project, there is no potential for significant effects identified with regard to water quality during the construction phase. The proposed scheme will involve construction related dust and noise effects; however, the construction phase is localised and small in scale, and is in keeping with the highly urbanised nature of the proposed scheme area.

Regarding the operational phase, there are no potential sources for significant hydrological effects identified as there will be no changes to surface or storm water drainage along the proposed scheme area as a result of the proposed scheme. Similarly, there will be no change to hard surface area as a result of the proposed scheme, therefore surface and storm water runoff over hard surface present no potential for effects as a result of the proposed scheme.

Therefore, there are no sources for effects with pathways that will affect any conservation indicators related to European sites.

Climate change

The proposed scheme is not likely to cause any increase in greenhouse gas emissions during the operational phase. It is possible there will be a decrease in local emissions. The construction phase works are likely to cause increased localised temporary emissions; however, given the small scale of the proposed scheme and timescales involved, these are determined to be negligible. Such minor effects upon greenhouse gas emissions will not affect changes projected to arise from climate change to the degree that it would affect the QIs or SCIs of the European sites considered in this assessment.

Table 3.1 Screening assessment of the potential effects arising from the proposed scheme

Site Code	Site Name	Distance (km)	Qualifying Feature	Potential Effects	Potential for likely Significant Effects	Potential for likely In-Combination Effects
000210	South Dublin Bay SAC	1.70	Salicornia and other annuals colonising mud and sand [1310], Annual vegetation of drift lines [1210], Mudflats and sandflats not covered by seawater at low tide [1140], Embryonic shifting dunes [2110]	<p>There are no Annex I habitats or supporting habitats for Annex II species within the proposed scheme area.</p> <p>The SAC is sensitive to hydrological interactions, habitat disturbance, and direct land use management. This site is 1.70km from the proposed scheme. There are no sources for effect for direct land use management of the SAC as this scheme area is outside of the European site. There is an indirect hydrological pathway between the proposed scheme and the SAC through urban drainage, and the River Dodder and River Liffey.</p> <p>Regarding the construction phase, and considering the QIs of this SAC; given the distances involved, the localised and small scale of the proposed scheme, in combination with dilution effects through the indirect hydrological pathways, there is no potential for significant effect to this SAC as a result of the construction phase.</p> <p>Regarding the operational phase, and considering the QIs of this SAC; given there are no changes in drainage or hard surface area, and that the purpose of not to increase overall road use, but to convert vehicular road users to cycling or walking, there are no sources with pathways regarding habitat disturbance for significant effects foreseen in the operational phase of the proposed scheme to European sites.</p> <p>Therefore, no further assessment is required.</p>	No	No
004024	South Dublin Bay and River Tolka Estuary SPA	1.70	Roseate Tern (<i>Sterna dougallii</i>) [A192], Ringed Plover (<i>Charadrius hiaticula</i>) [A137], Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179], Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A674], Grey Plover (<i>Pluvialis squatarola</i>) [A141], Oystercatcher (<i>Haematopus ostralegus</i>)	<p>There are no Annex I habitats or supporting habitats for Annex II species within the proposed scheme area.</p> <p>The SPA is sensitive to hydrological interactions, direct land use management and disturbance effects. This site is 1.70km from the proposed scheme. There are no sources for effect for direct land use management of the SPA as this site is outside of the project boundary. There is an indirect hydrological pathway between the proposed scheme and the SPA through urban drainage, and the River Dodder and the River Liffey.</p> <p>SCI species are sensitive to disturbance effects; in general distances beyond 2 km are seen</p>	No	No

Site Code	Site Name	Distance (km)	Qualifying Feature	Potential Effects	Potential for likely Significant Effects	Potential for likely In-Combination Effects
			[A130], Redshank (<i>Tringa totanus</i>) [A162], Sanderling (<i>Calidris alba</i>) [A144], Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157], Common tern (<i>Sterna hirundo</i>) [A193], Wetland and Waterbirds [A999], Knot (<i>Calidris canutus</i>) [A143], Dunlin (<i>Calidris alpina</i>) [A149], Arctic tern (<i>Sterna paradisaea</i>) [A194]	<p>to be sufficient to preclude such effects^{9,10}. These distances can vary due to factors such as species and/or time of year^{11,12}. Given the distance between the proposed scheme area and the SPA there are a pathway for disturbance effects identified in this regard. However, given that the SCI species in the identified SPA already exhibit a high degree of habituation to urban noise disturbance due to the SPAs close proximity to a highly industrialised area, and the small-scale nature of the construction phase of the proposed scheme, no potential effects have been identified in regard to noise disturbance effects.</p> <p>These SCI species are highly vagile and therefore may utilise ex-situ ecological resources which may have interactions with the proposed scheme; however, the local landscape characteristics and the availability of resources ensure that the local scale interactions with ex-situ resources are not likely to have significant effects on the SPA in this regard.</p> <p>Regarding the construction phase, and considering the SCIs of this SPA; given the distances involved, the localised and small scale of the proposed scheme, in combination with dilution effects through the indirect hydrological pathways, there is no potential for significant effect to this SPA as a result of any hydrological interactions with the construction phase.</p> <p>Regarding the operational phase, and considering the SCIs of this SPA; there are no changes in drainage or hard surface area as a result of the proposed scheme. Considering a potential increase in visitors, the purpose of the proposed scheme is not to increase overall road use, but to convert vehicular road users to cycling or walking, and improve the safety and current infrastructure for road users. Therefore, there are no sources with pathways for significant effects foreseen to this European site with regard to hydrological quality and visitor impacts in the operational phase of the proposed scheme.</p> <p>Therefore, no further assessment is required.</p>		
004006	North Bull Island SPA	5.65	Curlew (<i>Numenius arquata</i>) [A160], Black-	There are no Annex I habitats or supporting habitats for Annex II species within the proposed scheme area.	No	No

⁹ Ruddock, M. and Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

¹⁰ Bright, J.A., Langston, R. and Anthony, S., 2009. Mapped and written guidance in relation to birds and onshore wind energy development in England. Sandy: RSPB.

¹¹ Bötsch, Y., Tablado, Z. and Jenni, L., 2017. Experimental evidence of human recreational disturbance effects on bird-territory establishment. Proceedings of the Royal Society B: Biological Sciences, 284(1858), p.20170846.

¹² Goss-Custard, J.D., Hoppe, C.H., Hood, M.J. and Stillman, R.A., 2020. Disturbance does not have a significant impact on waders in an estuary close to conurbations: importance of overlap between birds and people in time and space. Ibis, 162(3), pp.845-862.

Site Code	Site Name	Distance (km)	Qualifying Feature	Potential Effects	Potential for likely Significant Effects	Potential for likely In-Combination Effects
			tailed Godwit (<i>Limosa limosa</i>) [A156], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Wetland and Waterbirds [A999], Pintail (<i>Anas acuta</i>) [A054], Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157], Redshank (<i>Tringa totanus</i>) [A162], Dunlin (<i>Calidris alpina</i>) [A149], Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179], Teal (<i>Anas crecca</i>) [A052], Turnstone (<i>Arenaria interpres</i>) [A169], Sanderling (<i>Calidris alba</i>) [A144], Oystercatcher (<i>Haematopus ostralegus</i>) [A130], Shelduck (<i>Tadorna tadorna</i>) [A048], Shoveler (<i>Anas clypeata</i>) [A056], Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A674], Grey Plover (<i>Pluvialis squatarola</i>) [A141], Knot (<i>Calidris</i>	<p>The SPA is sensitive to hydrological interactions, direct land use management and disturbance effects. This site is 5.65km from the proposed scheme. There are no sources for effect for direct land use management of the SPA as this site is outside of the project boundary. There is an indirect hydrological pathway between the proposed scheme and the SPA via the River Dodder and River Liffey.</p> <p>SCI species are sensitive to disturbance effects; in general distances beyond 2 km are seen to be sufficient to preclude such effects^{13,14}. These distances can vary due to factors such as species and/or time of year^{15,16}. Given the distance between the proposed scheme area and the SPA no pathways for potential effects have been identified in regard to noise disturbance effects.</p> <p>These SCI species are highly vagile and therefore may utilise ex-situ ecological resources which may have interactions with the proposed scheme; however, the local landscape characteristics and the availability of resources ensure that the local scale interactions with ex-situ resources are not likely to have significant effects on the SPA in this regard.</p> <p>Regarding the construction phase, and considering the SCIs of this SPA; given the distances involved, the localised and small scale of the proposed scheme, in combination with dilution effects through the indirect hydrological pathways, there is no potential for significant effect to this SPA as a result of any hydrological interactions with the construction phase.</p> <p>Regarding the operational phase, and considering the SCIs of this SPA; there are no changes in drainage or hard surface area as a result of the proposed scheme. Considering a potential increase in visitors, the purpose of the proposed scheme is not to increase overall road use, but to convert vehicular road users to cycling or walking, and improve the safety and current infrastructure for road users. Therefore, there are no sources with pathways for significant effects foreseen to this European site with regard to hydrological quality and visitor impacts in the operational phase of the proposed scheme.</p>		

¹³ Ruddock, M. and Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

¹⁴ Bright, J.A., Langston, R. and Anthony, S., 2009. Mapped and written guidance in relation to birds and onshore wind energy development in England. Sandy: RSPB.

¹⁵ Bötsch, Y., Tablado, Z. and Jenni, L., 2017. Experimental evidence of human recreational disturbance effects on bird-territory establishment. Proceedings of the Royal Society B: Biological Sciences, 284(1858), p.20170846.

¹⁶ Goss-Custard, J.D., Hoppe, C.H., Hood, M.J. and Stillman, R.A., 2020. Disturbance does not have a significant impact on waders in an estuary close to conurbations: importance of overlap between birds and people in time and space. Ibis, 162(3), pp.845-862.

Site Code	Site Name	Distance (km)	Qualifying Feature	Potential Effects	Potential for likely Significant Effects	Potential for likely In-Combination Effects
			<i>canutus</i>) [A143]	Therefore, no further assessment is required.		
000206	North Dublin Bay SAC	5.66	Shifting dunes along the shoreline with <i>Ammophila arenaria</i> - white dunes [2120], Mudflats and sandflats not covered by seawater at low tide [1140], Petalwort (<i>Petalophyllum ralfsii</i>) [1395], Embryonic shifting dunes [2110], Fixed coastal dunes with herbaceous vegetation - grey dunes [2130], <i>Salicornia</i> and other annuals colonising mud and sand [1310], Atlantic salt meadows (<i>Glaucopuccinellietalia maritima</i>) [1330], Annual vegetation of drift lines [1210], Humid dune slacks [2190], Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]	<p>There are no Annex I habitats or supporting habitats for Annex II species within the proposed scheme area.</p> <p>The SAC is sensitive to direct land use management, habitat disturbance and hydrological interactions. This site is 5.66km from the proposed scheme. There are no sources for effect for direct land use management of the SAC as this site is outside of the project boundary. There is an indirect hydrological pathway between the proposed scheme and the SAC through urban drainage, and the River Dodder and River Liffey.</p> <p>Regarding the construction phase, and considering the QIs of this SAC; given the distances involved, the localised and small scale of the proposed scheme, in combination with dilution effects through the indirect hydrological pathways, there is no potential for significant effect to this SAC as a result of the construction phase.</p> <p>Regarding the operational phase, and considering the QIs of this SAC; given there are no changes in drainage or hard surface area, and that the purpose of not to increase overall road use, but to convert vehicular road users to cycling or walking, there are no sources with pathways regarding habitat disturbance for significant effects foreseen in the operational phase of the proposed scheme to European sites.</p> <p>Therefore, no further assessment is required.</p>	No	No
004236	North-West Irish Sea cSPA ¹⁷	6.20	Common Tern (<i>Sterna hirundo</i>) [A193], Common Scoter (<i>Melanitta nigra</i>) [A065], Razorbill (<i>Alca</i>	<p>There are no Annex I habitats or supporting habitats for Annex II species within the proposed scheme area.</p> <p>The SPA is sensitive to hydrological interactions, direct land use management and</p>	No	No

¹⁷ The Regulation 15 notification, issued on 13th of July 2023, by the NPWS, began the first stage in the designation process for this candidate SPA. Supporting information regarding this cSPA, including the site's Conservation Objectives and threats and pressures, have yet to be published by the NPWS at the time of compiling this report. Therefore, the assessment was conducted using the best, most recent information available for this cSPA provided by the NPWS.

Site Code	Site Name	Distance (km)	Qualifying Feature	Potential Effects	Potential for likely Significant Effects	Potential for likely In-Combination Effects
			<p><i>torda</i>) [A200], Arctic Tern (<i>Sterna paradisaea</i>) [A194], Great Northern Diver (<i>Gavia immer</i>) [A003], Puffin (<i>Fratercula arctica</i>) [A204], Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179], Red-throated Diver (<i>Gavia stellata</i>) [A001], Little Tern (<i>Sterna albifrons</i>) [A195], Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183], Herring Gull (<i>Larus argentatus</i>) [A184], Great Black-backed Gull (<i>Larus marinus</i>) [A187], Guillemot (<i>Uria aalge</i>) [A199], Roseate Tern (<i>Sterna dougallii</i>) [A192], Kittiwake (<i>Rissa tridactyla</i>) [A188], Fulmar (<i>Fulmarus glacialis</i>) [A009], Shag (<i>Phalacrocorax aristotelis</i>) [A018], Common Gull (<i>Larus</i></p>	<p>disturbance effects. This site is 6.20km from the proposed scheme. There are no sources for effect for direct land use management of the SPA as this site is outside of the project boundary. There is an indirect hydrological pathway between the proposed scheme and the SPA via the River Dodder and River Liffey.</p> <p>SCI species are sensitive to disturbance effects; in general distances beyond 2 km are seen to be sufficient to preclude such effects^{18,19}. These distances can vary due to factors such as species and/or time of year^{20,21}. Given the distance between the proposed scheme area and the SPA no pathways for potential effects have been identified in regard to noise disturbance effects.</p> <p>These SCI species are highly vagile and therefore may utilise ex-situ ecological resources which may have interactions with the proposed scheme; however, the local landscape characteristics and the availability of resources ensure that the local scale interactions with ex-situ resources are not likely to have significant effects on the SPA in this regard.</p> <p>Regarding the construction phase, and considering the SCIs of this SPA; given the distances involved, the localised and small scale of the proposed scheme, in combination with dilution effects through the indirect hydrological pathways, there is no potential for significant effect to this SPA as a result of any hydrological interactions with the construction phase.</p> <p>Regarding the operational phase, and considering the SCIs of this SPA; there are no changes in drainage or hard surface area as a result of the proposed scheme. Considering a potential increase in visitors, the purpose of the proposed scheme is not to increase overall road use, but to convert vehicular road users to cycling or walking, and improve the safety and current infrastructure for road users. Therefore, there are no sources with pathways for significant effects foreseen to this European site with regard to hydrological quality and visitor impacts in the operational phase of the proposed scheme.</p> <p>Therefore, no further assessment is required.</p>		

¹⁸ Ruddock, M. and Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

¹⁹ Bright, J.A., Langston, R. and Anthony, S., 2009. Mapped and written guidance in relation to birds and onshore wind energy development in England. Sa ndy: RSPB.

²⁰ Bötsch, Y., Tablado, Z. and Jenni, L., 2017. Experimental evidence of human recreational disturbance effects on bird-territory establishment. Proceedings of the Royal Society B: Biological Sciences, 284(1858), p.20170846.

²¹ Goss-Custard, J.D., Hoppe, C.H., Hood, M.J. and Stillman, R.A., 2020. Disturbance does not have a significant impact on waders in an estuary close to conurbations: importance of overlap between birds and people in time and space. Ibis, 162(3), pp.845-862.

Site Code	Site Name	Distance (km)	Qualifying Feature	Potential Effects	Potential for likely Significant Effects	Potential for likely In-Combination Effects
			<i>canus</i>) [A182], Little Gull (<i>Larus minutus</i>) [A177], Manx Shearwater (<i>Puffinus puffinus</i>) [A013], Cormorant (<i>Phalacrocorax carbo</i>) [A017]			
002122	Wicklow Mountains SAC	8.85	Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) [3110], Species-rich Nardus grasslands, on siliceous substrates in mountain areas - and submountain areas in Continental Europe [6230], Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>) [8110], Blanket bogs * if active bog [7130], Calaminarian grasslands of the <i>Violetalia calaminariae</i> [6130], European dry heaths [4030], Alpine and Boreal heaths [4060], Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010], Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the	<p>There are no Annex I habitats or supporting habitats for Annex II species within the proposed scheme area.</p> <p>The SAC is sensitive to habitat disturbance effects, direct land use management activities and hydrological interactions. This site is 8.85km from the proposed scheme. There are no sources for effect for direct land use management effects to SAC as this site is outside of the project boundary. There are also no hydrological pathways between the proposed scheme and the SAC.</p> <p>Regarding the operational phase, and considering the QIs of this SAC; the purpose of not to increase overall road use, but to convert vehicular road users to cycling or walking, there are no sources with pathways regarding habitat disturbance for significant effects foreseen in the operational phase of the proposed scheme to European sites.</p> <p>Therefore, no further assessment is required.</p>	No	No

Site Code	Site Name	Distance (km)	Qualifying Feature	Potential Effects	Potential for likely Significant Effects	Potential for likely In-Combination Effects
			British Isles [91A0], Siliceous rocky slopes with chasmophytic vegetation [8220], Otter (<i>Lutra lutra</i>) [1355], Natural dystrophic lakes and ponds [3160], Calcareous rocky slopes with chasmophytic vegetation [8210]			
004040	Wicklow Mountains SPA	9.13	Peregrine falcon (<i>Falco peregrinus</i>) [A103], Merlin (<i>Falco columbarius</i>) [A098]	<p>There are no Annex I habitats or supporting habitats for Annex II species within the proposed scheme area.</p> <p>The SPA is sensitive to disturbance effects and direct land use management activities. This site is 9.13km from the proposed scheme. There are no sources for effect for direct land use management of the SPA as this site is outside of the project boundary.</p> <p>SCI species are sensitive to disturbance effects; in general distances beyond 2 km are seen to be sufficient to preclude such effects^{22,23}. These distances can vary due to factors such as species and/or time of year^{24,25}. Given the distance between the proposed scheme area and the SPA there are no pathways for noise disturbance effects identified in this regard.</p> <p>These SCI species are highly vagile and therefore may utilise ex-situ ecological resources which may have interactions with the proposed scheme; however, the local landscape characteristics and the availability of alternate resources ensure the local scale interactions with ex-situ resources are not likely to have significant effects on the SPA in this regard.</p> <p>Regarding the construction phase, and considering the SCIs of this SPA; given the distances involved, the localised and small scale of the proposed scheme, there is no potential for significant effect to this SPA as a result of any hydrological interactions with the</p>	No	No

²² Ruddock, M. and Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

²³ Bright, J.A., Langston, R. and Anthony, S., 2009. Mapped and written guidance in relation to birds and onshore wind energy development in England. Sandy: RSPB.

²⁴ Bötsch, Y., Tablado, Z. and Jenni, L., 2017. Experimental evidence of human recreational disturbance effects on bird-territory establishment. Proceedings of the Royal Society B: Biological Sciences, 284(1858), p.20170846.

²⁵ Goss-Custard, J.D., Hoppe, C.H., Hood, M.J. and Stillman, R.A., 2020. Disturbance does not have a significant impact on waders in an estuary close to conurbations: importance of overlap between birds and people in time and space. Ibis, 162(3), pp.845-862.

Site Code	Site Name	Distance (km)	Qualifying Feature	Potential Effects	Potential for likely Significant Effects	Potential for likely In-Combination Effects
				<p>construction phase.</p> <p>Regarding the operational phase, and considering the SCIs of this SPA; there are no changes in drainage or hard surface area as a result of the proposed scheme. Considering a potential increase in visitors, the purpose of the proposed scheme is not to increase overall road use, but to convert vehicular road users to cycling or walking, and improve the safety and current infrastructure for road users. Therefore, there are no sources with pathways for significant effects foreseen to this European site with regard to hydrological quality and visitor impacts in the operational phase of the proposed scheme.</p> <p>Therefore, no further assessment is required.</p>		
003000	Rockabill to Dalkey Island SAC	9.42	Reefs [1170], Harbour porpoise (<i>Phocoena phocoena</i>) [1351]	<p>There are no Annex I habitats or supporting habitats for Annex II species within the proposed scheme area.</p> <p>The SAC is sensitive to hydrological interactions, habitat disturbance and direct land use management. The site is 9.42km from the proposed scheme. There are no sources for effect for direct land use management of the SAC as this site is outside of the project boundary. There is an indirect hydrological pathway between the proposed scheme and the SAC through the marine environment.</p> <p>Regarding the construction phase, and considering the QIs of this SAC; given the distances involved, the localised and small scale of the proposed scheme, in combination with dilution effects through the indirect hydrological pathways, there is no potential for significant effect to this SAC as a result of the construction phase,</p> <p>Regarding the operational phase, and considering the QIs of this SAC; given there are no changes in drainage or hard surface area as a result of the proposed scheme, and that there is no direct link for visitors between this European site and the proposed scheme area, there are no sources with pathways for significant effects foreseen to European sites regarding habitat disturbance or hydrological interactions in the operational phase of the proposed scheme.</p> <p>Therefore, no further assessment is required.</p>	No	No
004172	Dalkey Islands SPA	10.11	Roseate tern (<i>Sterna dougallii</i>) [A192], Common tern (<i>Sterna</i>	<p>There are no Annex I habitats or supporting habitats for Annex II species within the proposed scheme area</p> <p>The SPA is sensitive to hydrological interactions, disturbance effects and direct land use</p>	No	No

Site Code	Site Name	Distance (km)	Qualifying Feature	Potential Effects	Potential for likely Significant Effects	Potential for likely In-Combination Effects
			<i>hirundo</i>) [A193], Arctic tern (<i>Sterna paradisaea</i>) [A194]	<p>management activities. This site is 10.11km from the proposed scheme. There are no sources for effect for direct land use management of the SPA as this site is outside of the project boundary. There is an indirect hydrological pathway between the proposed scheme and the SPA through the marine environment.</p> <p>SCI species are sensitive to disturbance effects; in general distances beyond 2 km are seen to be sufficient to preclude such effects^{26,27}. These distances can vary due to factors such as species and/or time of year^{28,29}. Given the distance between the proposed scheme area and the SPA there are no pathways for noise disturbance effects identified in this regard.</p> <p>These SCI species are highly vagile and therefore may utilise ex-situ ecological resources which may have interactions with the proposed scheme; however, the local landscape characteristics and the availability of alternate resources ensure the local scale interactions with ex-situ resources are not likely to have significant effects on the SPA in this regard.</p> <p>Regarding the construction phase, and considering the SCIs of this SPA; given the distances involved, the localised and small scale of the proposed scheme, in combination with dilution effects through the indirect hydrological pathways, there is no potential for significant effect to this SPA as a result of any hydrological interactions with the construction phase.</p> <p>Regarding the operational phase, and considering the SCIs of this SPA; there are no changes in drainage or hard surface area as a result of the proposed scheme. Considering a potential increase in visitors, the purpose of the proposed scheme is not to increase overall road use, but to convert vehicular road users to cycling or walking, and improve the safety and current infrastructure for road users. Therefore, there are no sources with pathways for significant effects foreseen to this European site with regard to hydrological quality and visitor impacts in the operational phase of the proposed scheme.</p> <p>Therefore, no further assessment is required.</p>		

²⁶ Ruddock, M. and Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

²⁷ Bright, J.A., Langston, R. and Anthony, S., 2009. Mapped and written guidance in relation to birds and onshore wind energy development in England. Sandy: RSPB.

²⁸ Bötsch, Y., Tablado, Z. and Jenni, L., 2017. Experimental evidence of human recreational disturbance effects on bird-territory establishment. Proceedings of the Royal Society B: Biological Sciences, 284(1858), p.20170846.

²⁹ Goss-Custard, J.D., Hoppe, C.H., Hood, M.J. and Stillman, R.A., 2020. Disturbance does not have a significant impact on waders in an estuary close to conurbations: importance of overlap between birds and people in time and space. Ibis, 162(3), pp.845-862.

Site Code	Site Name	Distance (km)	Qualifying Feature	Potential Effects	Potential for likely Significant Effects	Potential for likely In-Combination Effects
001209	Glenasmole Valley SAC	10.52	Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) * important orchid sites [6210], Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [6410], Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220]	<p>There are no Annex I habitats or supporting habitats for Annex II species within the proposed scheme area.</p> <p>The SAC is sensitive to habitat disturbance, direct land use management activities, groundwater and surface water interactions. This site is 10.52km from the proposed scheme. There are no sources for effect for direct land use management of the SAC as this site is outside of the project boundary and there are no sources for effect for groundwater interactions due to the nature and scale of the proposed scheme and the lack of any substantial groundwater connectivity. There are also no surface hydrological pathways between the proposed scheme and the SAC.</p> <p>Regarding the operational phase, and considering the QIs of this SAC; the purpose of not to increase overall road use, but to convert vehicular road users to cycling or walking, there are no sources with pathways regarding habitat disturbance for significant effects foreseen in the operational phase of the proposed scheme to European sites.</p> <p>Therefore, no further assessment is required.</p>	No	No
000202	Howth Head SAC	10.58	European dry heaths [4030], Vegetated sea cliffs of the Atlantic and Baltic Coasts [1230]	<p>There are no Annex I habitats or supporting habitats for Annex II species within the proposed scheme area.</p> <p>The SAC is sensitive to direct land use management activities, habitat disturbance and hydrological interactions. This site is 10.58km from the proposed scheme. There are no sources for effect for direct land use management of the SAC as this site is outside of the project boundary. There is an indirect hydrological pathway between the proposed scheme and the SAC through the marine environment.</p> <p>Regarding the construction phase, and considering the QIs of this SAC; given the distances involved, the localised and small scale of the proposed scheme, in combination with dilution effects through the indirect hydrological pathways, there is no potential for significant effect to this SAC as a result of the construction phase,</p> <p>Regarding the operational phase, and considering the QIs of this SAC; given there are no changes in drainage or hard surface area, and that the purpose of not to increase overall road use, but to convert vehicular road users to cycling or walking, there are no sources with pathways regarding habitat disturbance for significant effects foreseen in the operational phase of the proposed scheme to European sites.</p>	No	No

Site Code	Site Name	Distance (km)	Qualifying Feature	Potential Effects	Potential for likely Significant Effects	Potential for likely In-Combination Effects
				Therefore, no further assessment is required.		
000199	Baldoyle Bay SAC	11.09	Mudflats and sandflats not covered by seawater at low tide [1140], Salicornia and other annuals colonising mud and sand [1310], Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410], Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>) [1330]	<p>There are no Annex I habitats or supporting habitats for Annex II species within the proposed scheme area.</p> <p>The SAC is sensitive to hydrological interactions, habitat disturbance and direct land use management activities. This site is 11.09km from the proposed scheme. There are no sources for effect for direct land use management of the SAC as this site is outside of the project boundary. There is an indirect hydrological pathway between the proposed scheme and the SAC through the marine environment.</p> <p>Regarding the construction phase, and considering the QIs of this SAC; given the distances involved, the localised and small scale of the proposed scheme, in combination with dilution effects through the indirect hydrological pathways, there is no potential for significant effect to this SAC as a result of the construction phase.</p> <p>Regarding the operational phase, and considering the QIs of this SAC; given there are no changes in drainage or hard surface area, and that the purpose of not to increase overall road use, but to convert vehicular road users to cycling or walking, there are no sources with pathways regarding habitat disturbance for significant effects foreseen in the operational phase of the proposed scheme to European sites.</p> <p>Therefore, no further assessment is required.</p>	No	No
004016	Baldoyle Bay SPA	11.09	Ringed Plover (<i>Charadrius hiaticula</i>) [A137], Wetland and Waterbirds [A999], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A674], Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157],	<p>There are no Annex I habitats or supporting habitats for Annex II species within the proposed scheme area.</p> <p>The SPA is sensitive to hydrological interactions, disturbance effects and direct land use management activities. This site is 11.09km from the proposed scheme. There are no sources for effect for direct land use management of the SPA as this site is outside of the project boundary. There is an indirect hydrological pathway between the proposed scheme and the SPA through the marine environment.</p> <p>SCI species are sensitive to disturbance effects; in general distances beyond 2 km are seen to be sufficient to preclude such effects^{30,31}. These distances can vary due to factors such as</p>	No	No

³⁰ Ruddock, M. and Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

³¹ Bright, J.A., Langston, R. and Anthony, S., 2009. Mapped and written guidance in relation to birds and on shore wind energy development in England. Sandy: RSPB.

Site Code	Site Name	Distance (km)	Qualifying Feature	Potential Effects	Potential for likely Significant Effects	Potential for likely In-Combination Effects
			Shelduck (<i>Tadorna tadorna</i>) [A048], Grey Plover (<i>Pluvialis squatarola</i>) [A141]	<p>species and/or time of year^{32,33}. Given the distance between the proposed scheme area and the SPA there are no pathways for noise disturbance effects identified in this regard.</p> <p>These SCI species are highly vagile and therefore may utilise ex-situ ecological resources which may have interactions with the proposed scheme; however, the local landscape characteristics and the availability of alternate resources ensure the local scale interactions with ex-situ resources are not likely to have significant effects on the SPA in this regard.</p> <p>Regarding the construction phase, and considering the SCIs of this SPA; given the distances involved, the localised and small scale of the proposed scheme, in combination with dilution effects through the indirect hydrological pathways, there is no potential for significant effect to this SPA as a result of any hydrological interactions with the construction phase.</p> <p>Regarding the operational phase, and considering the SCIs of this SPA; there are no changes in drainage or hard surface area as a result of the proposed scheme. Considering a potential increase in visitors, the purpose of the proposed scheme is not to increase overall road use, but to convert vehicular road users to cycling or walking, and improve the safety and current infrastructure for road users. Therefore, there are no sources with pathways for significant effects foreseen to this European site with regard to hydrological quality and visitor impacts in the operational phase of the proposed scheme.</p> <p>Therefore, no further assessment is required.</p>		
000725	Knocksink Wood SAC	11.36	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0], Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220], Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> ,	<p>There are no Annex I habitats or supporting habitats for Annex II species within the proposed scheme area</p> <p>The SAC is sensitive to habitat disturbance, groundwater interactions, surface water interactions, and direct land use management activities.</p> <p>This site is 11.36km from the proposed scheme. There are no sources for effect for direct land use management or disturbance effects of the SAC as this site is outside of the project boundary and there are no sources for effect for groundwater interactions due to the nature and scale of the proposed scheme and the lack of any substantial groundwater</p>	No	No

³² Bötsch, Y., Tablado, Z. and Jenni, L., 2017. Experimental evidence of human recreational disturbance effects on bird-territory establishment. Proceedings of the Royal Society B: Biological Sciences, 284(1858), p.20170846.

³³ Goss-Custard, J.D., Hoppe, C.H., Hood, M.J. and Stillman, R.A., 2020. Disturbance does not have a significant impact on waders in an estuary close to conurbations: importance of overlap between birds and people in time and space. Ibis, 162(3), pp.845-862.

Site Code	Site Name	Distance (km)	Qualifying Feature	Potential Effects	Potential for likely Significant Effects	Potential for likely In-Combination Effects
			<i>Alnion incanae, Salicion albae</i> [91E0]	<p>connectivity. There are also no surface hydrological pathways between the proposed scheme and the SAC.</p> <p>Regarding the operational phase, and considering the QIs of this SAC; the purpose of not to increase overall road use, but to convert vehicular road users to cycling or walking, there are no sources with pathways regarding habitat disturbance for significant effects foreseen in the operational phase of the proposed scheme to European sites.</p> <p>Therefore, no further assessment is required.</p>		
000713	Ballyman Glen SAC	12.64	Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220], Alkaline fens [7230]	<p>There are no Annex I habitats or supporting habitats for Annex II species within the proposed scheme area.</p> <p>The SAC is sensitive to habitat disturbance, hydrological interactions, groundwater interactions and direct land use management activities. This site is 12.64km from the proposed scheme. There are no sources for effect for direct land use management of the SAC as this site is outside of the project boundary and there are no sources for effect for groundwater interactions due to the nature and scale of the proposed scheme and the lack of any substantial groundwater connectivity. There are also no surface hydrological pathways between the proposed scheme and the SAC.</p> <p>Regarding the construction phase, and considering the QIs of this SAC; given the distances involved, the localised and small scale of the proposed scheme, in combination with dilution effects through the indirect hydrological pathways, there is no potential for significant effect to this SAC as a result of the construction phase,</p> <p>Regarding the operational phase, and considering the QIs of this SAC; given there are no changes in drainage or hard surface area as a result of the proposed scheme, and that there is no direct link for visitors between this European site and the proposed scheme area, there are no sources with pathways for significant effects foreseen to European sites regarding habitat disturbance or hydrological interactions in the operational phase of the proposed scheme.</p> <p>Therefore, no further assessment is required.</p>	No	No
004113	Howth Head Coast SPA	12.80	Kittiwake (<i>Rissa tridactyla</i>) [A188]	<p>There are no Annex I habitats or supporting habitats for Annex II species within the proposed scheme area.</p> <p>The SPA is sensitive to hydrological interactions, disturbance effects and direct land use</p>	No	No

Site Code	Site Name	Distance (km)	Qualifying Feature	Potential Effects	Potential for likely Significant Effects	Potential for likely In-Combination Effects
				<p>management activities. This site is 12.80km from the proposed scheme. There are no sources for effect for direct land use management of the SPA as this site is outside of the project boundary. There is an indirect hydrological pathway between the proposed scheme and the SPA through the marine environment.</p> <p>SCI species are sensitive to disturbance effects; in general distances beyond 2 km are seen to be sufficient to preclude such effects^{34,35}. These distances can vary due to factors such as species and/or time of year^{36,37}. Given the distance between the proposed scheme area and the SPA there are no pathways for noise disturbance effects identified in this regard.</p> <p>These SCI species are highly vagile and therefore may utilise ex-situ ecological resources which may have interactions with the proposed scheme; however, the local landscape characteristics and the availability of alternate resources ensure the local scale interactions with ex-situ resources are not likely to have significant effects on the SPA in this regard.</p> <p>Regarding the construction phase, and considering the SCIs of this SPA; given the distances involved, the localised and small scale of the proposed scheme, in combination with dilution effects through the indirect hydrological pathways, there is no potential for significant effect to this SPA as a result of any hydrological interactions with the construction phase.</p> <p>Regarding the operational phase, and considering the SCIs of this SPA; there are no changes in drainage or hard surface area as a result of the proposed scheme. Considering a potential increase in visitors, the purpose of the proposed scheme is not to increase overall road use, but to convert vehicular road users to cycling or walking, and improve the safety and current infrastructure for road users. Therefore, there are no sources with pathways for significant effects foreseen to this European site with regard to hydrological quality and visitor impacts in the operational phase of the proposed scheme.</p> <p>Therefore, no further assessment is required.</p>		

³⁴ Ruddock, M. and Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

³⁵ Bright, J.A., Langston, R. and Anthony, S., 2009. Mapped and written guidance in relation to birds and onshore wind energy development in England. Sandy: RSPB.

³⁶ Bötsch, Y., Tablado, Z. and Jenni, L., 2017. Experimental evidence of human recreational disturbance effects on bird-territory establishment. *Proceedings of the Royal Society B: Biological Sciences*, 284(1858), p.20170846.

³⁷ Goss-Custard, J.D., Hoppe, C.H., Hood, M.J. and Stillman, R.A., 2020. Disturbance does not have a significant impact on waders in an estuary close to conurbations: importance of overlap between birds and people in time and space. *Ibis*, 162(3), pp.845-862.

Site Code	Site Name	Distance (km)	Qualifying Feature	Potential Effects	Potential for likely Significant Effects	Potential for likely In-Combination Effects
004117	Ireland's Eye SPA	14.20	Guillemot (<i>Uria aalge</i>) [A199], Kittiwake (<i>Rissa tridactyla</i>) [A188], Cormorant (<i>Phalacrocorax carbo</i>) [A017], Razorbill (<i>Alca torda</i>) [A200], Herring Gull (<i>Larus argentatus</i>) [A184]	<p>There are no Annex I habitats or supporting habitats for Annex II species within the proposed scheme area</p> <p>The SPA is sensitive to hydrological interactions, disturbance effects and direct land use management activities. This site is 14.20km from the proposed scheme. There are no sources for effect for direct land use management of the SPA as this site is outside of the project boundary. There is an indirect hydrological pathway between the proposed scheme and the SPA through the marine environment.</p> <p>SCI species are sensitive to disturbance effects; in general distances beyond 2 km are seen to be sufficient to preclude such effects^{38,39}. These distances can vary due to factors such as species and/or time of year^{40,41}. Given the distance between the proposed scheme area and the SPA there are no pathways for noise disturbance effects identified in this regard.</p> <p>These SCI species are highly vagile and therefore may utilise ex-situ ecological resources which may have interactions with the proposed scheme; however, the local landscape characteristics and the availability of alternate resources ensure the local scale interactions with ex-situ resources are not likely to have significant effects on the SPA in this regard.</p> <p>Regarding the construction phase, and considering the SCIs of this SPA; given the distances involved, the localised and small scale of the proposed scheme, in combination with significant dilution effects through the indirect hydrological pathways, there is no potential for significant effect to this SAC as a result of the construction phase.</p> <p>Regarding the operational phase, and considering the SCIs of this SPA; given there are no changes in drainage or hard surface area as a result of the proposed scheme, and that there is no direct link for visitors between this European site and the proposed scheme area, there are no sources with pathways for significant effects foreseen in the operational phase of the proposed scheme to European sites.</p> <p>Therefore, no further assessment is required.</p>	No	No

³⁸ Ruddock, M. and Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

³⁹ Bright, J.A., Langston, R. and Anthony, S., 2009. Mapped and written guidance in relation to birds and onshore wind energy development in England. Sandy: RSPB.

⁴⁰ Bötsch, Y., Tablado, Z. and Jenni, L., 2017. Experimental evidence of human recreational disturbance effects on bird-territory establishment. Proceedings of the Royal Society B: Biological Sciences, 284(1858), p.20170846.

⁴¹ Goss-Custard, J.D., Hoppe, C.H., Hood, M.J. and Stillman, R.A., 2020. Disturbance does not have a significant impact on waders in an estuary close to conurbations: importance of overlap between birds and people in time and space. Ibis, 162(3), pp.845-862.

Site Code	Site Name	Distance (km)	Qualifying Feature	Potential Effects	Potential for likely Significant Effects	Potential for likely In-Combination Effects
002193	Ireland's Eye SAC	14.40	Perennial vegetation of stony banks [1220], Vegetated sea cliffs of the Atlantic and Baltic Coasts [1230]	<p>There are no Annex I habitats or supporting habitats for Annex II species within the proposed scheme area.</p> <p>The SAC is sensitive to habitat disturbance, hydrological interactions and direct land use management activities. This site is 14.40km from the proposed scheme. There are no sources for effect for direct land use management of the SAC as this site is outside of the project boundary. There is an indirect hydrological pathway between the proposed scheme and the SAC through the marine environment.</p> <p>Regarding the construction phase, and considering the QIs of this SAC; given the distances involved, the localised and small scale of the proposed scheme, in combination with dilution effects through the indirect hydrological pathways, there is no potential for significant effect to this SAC as a result of the construction phase,</p> <p>Regarding the operational phase, and considering the QIs of this SAC; given there are no changes in drainage or hard surface area as a result of the proposed scheme, and that there is no direct link for visitors between this European site and the proposed scheme area, there are no sources with pathways for significant effects foreseen to European sites regarding habitat disturbance or hydrological interactions in the operational phase of the proposed scheme.</p> <p>Therefore, no further assessment is required.</p>	No	No
000205	Malahide Estuary SAC	14.63	Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330], Fixed coastal dunes with herbaceous vegetation - grey dunes [2130], Salicornia and other annuals colonising mud and sand [1310], Shifting dunes along the shoreline with <i>Ammophila arenaria</i> - white dunes [2120], Mediterranean salt meadows (<i>Juncetalia</i>	<p>There are no Annex I habitats or supporting habitats for Annex II species within the proposed scheme area.</p> <p>The SAC is sensitive to habitat disturbance, direct land use management activities and hydrological interactions. This site is 14.63km from the proposed scheme. There are no sources for effect for direct land use management of the SAC as this site is outside of the project boundary. There is an indirect hydrological pathway between the proposed scheme and the SAC through the marine environment.</p> <p>Regarding the construction phase, and considering the QIs of this SAC; given the distances involved, the localised and small scale of the proposed scheme, in combination with dilution effects through the indirect hydrological pathways, there is no potential for significant effect to this SAC as a result of the construction phase,</p> <p>Regarding the operational phase, and considering the QIs of this SAC; given there are no</p>	No	No

Site Code	Site Name	Distance (km)	Qualifying Feature	Potential Effects	Potential for likely Significant Effects	Potential for likely In-Combination Effects
			<i>maritimi</i> [1410], Mudflats and sandflats not covered by seawater at low tide [1140]	changes in drainage or hard surface area, and that the purpose of not to increase overall road use, but to convert vehicular road users to cycling or walking, there are no sources with pathways regarding habitat disturbance for significant effects foreseen in the operational phase of the proposed scheme to European sites. Therefore, no further assessment is required.		

3.5. Other plans and projects

Article 6(3) of the Habitats Directive requires an assessment of a plan or project to consider other plans or projects that might, in combination with the plan or project, have the potential to have significant effects to European sites.

Section 3.2 - receiving environment overview - identifies the overall characteristics of the area with respect to existing condition and general land use. For consideration of in combination effects with respect to emerging or recent developments a search of the Dept of Housing, Local Government and Heritage planning database was undertaken to identify relevant plans and programmes which relate to the Proposed scheme. All developments in the receiving area were considered. The search area was defined using criteria which take account of the characteristics of the Proposed scheme and the associated sources (identified above). These criteria included:

- Having direct or indirect connectivity to a European site;
- Being in close proximity to a European site;
- Being of a substantial scale relative to the conditions and/or current works taking place in the surrounding landscape;
- Having disperse emissions or far-reaching sources for effects;
- Having sources for effects to ecological connectivity.

These factors have been considered in the context of characteristics of the Proposed scheme and on this basis a search radius of 500m was selected to be used to search for projects within the receiving environment. The sources for effects from the Proposed scheme have been considered in combination with the potential sources for effects from the receiving environment for potential additive or interactive effects to the receiving environment.

Plans of relevance within the receiving environment or in-combination with effects arising from the proposed scheme:

- Dublin City Development Plan 2022-2028
- Dún Laoghaire-Rathdown County Development Plan 2022-2028
- Greater Dublin Area Transport Strategy 2022-2024

The above plans have undergone Appropriate Assessment to ensure no significant adverse effects to European sites, before being adopted and implemented⁴². In-combination effects assessments have been undertaken for the Greater Dublin Area Transport Strategy 2022-2024 (approved in January 2023) and the Greater Dublin Area Cycle Network Plan 2021 (which is part of the Greater Dublin Area Transport Strategy 2022-2024) as part of the AA processes for both plans⁴³. Both have assessed for potential in-combination effects of the schemes with other plans, and provided relevant mitigation where required.

The proposed scheme will connect with some of the other cycle routes proposed in the near future

⁴² Note that some are still at the Draft stage, but have undergone the AA process and are awaiting final adoption at the time of this assessment.

⁴³ The 2013 Plan underwent Appropriate Assessment, subsequently upon updates to the Plan in 2021, it falls under the Greater Dublin Area Transport Plan's Appropriate Assessment.

under the above plans, which may connect to or run adjacent to European sites. However, any potential in-combination effects from an increase in footfall/visitors to European sites in the operational phase of this proposed scheme are predicted to be negligible due to the nature of the intended usage combined current usage and status of the proposed scheme area – i.e., the proposed scheme is not likely to increase the number of road users overall, but rather encourage current vehicular road users to convert cycling or walking by improving infrastructure to enable safer journey by such means within the city. Therefore, it is not foreseen that the proposed scheme will have any significant in-combination effects with the above plans.

Considering the above, and that the proposed scheme is small in scale with a temporary construction phase and the operational phase is consistent with the above plans, with no potential for significant effects, it is not foreseen that the proposed upgrade scheme will have any significant in-combination effects with the above plans.

Projects considered for possible in-combination effects from the proposed scheme:

To identify projects for consideration for the in-combination effects section, the Dept of Housing, Local Government and Heritage planning database was used⁴⁴. A review of all planning applications within the identified zone was conducted focusing on all application within the past 5 years⁴⁵.

As the proposed site being located in Dublin City, which is a highly urban area, there are a large number other proposed schemes in the vicinity including works which are at planning stage or underway on various sites. The database search found that the vast majority of projects within the area are relating to the altering of existing structures, small private home extensions, change of use, along more medium scale developments. Table 3.2 provides a list of the five largest proposed schemes within 200 m of the proposed scheme. All construction and infrastructure work resulting from these projects in the local area are small to large in scale, with Appropriate Assessments carried out for each where required.

In addition to this, other relevant planning applications which may not go through the County Council planning system were also examined. 12 National Transport Authority (NTA) “Core Bus Corridor” schemes are in various stages of either pre-application or consent stage (with An Bord Pleanála), as are the proposed Active Travel schemes. A map showing these travel schemes is available [at](#) the Dublin City Council website⁴⁶. The proposed scheme will be complementary to these other active travel schemes and will tie in to the wider network, thus supporting a fully connected Active Travel Network in the area and thereby contributing to the objectives of the Greater Dublin Area Transport Strategy as well as to the policies and objectives set out in the Dublin City Development Plan 2022-2028.

Some of these schemes have potential to interact with the subject scheme. In particular, the Belfield/Blackrock to Merrion Core Bus Corridor Scheme, which has been submitted to An Bord Pleanála by

⁴⁴ <https://data-housinggovie.opendata.arcgis.com/datasets/planning-application-sites-2010-onwards>; 22nd November 2022

⁴⁵ Planning applications have a standard lifespan of 5 years as per Section 40 (3)(b) of the Planning & Development Act 2000, as amended; therefore, these are viewed to be the ‘live’ applications, all other projects are considered as part of the site other than refused and withdrawn applications, as these would not have any in-combination effects

⁴⁶ Accessed at: <https://www.dublincity.ie/residential/transportation/active-travel/about-active-travel/interactive-maps-gis>

the NTA for approval, and has gone through the Screening Appropriate Assessment process⁴⁷, which has found that a Natura Impact Statement is required for the application.

Information regarding the AA processes for all of the other Core Bus Corridor Schemes is also available on the NTA website⁴⁸. As each Core Bus Corridor project is/will be subject to applicable AA processes to ensure that the schemes will not cause significant effects on any Natura 2000 sites, there will be no potential for likely in-combination effects as a result of interactions with any effects arising from the proposed scheme.

Other cycle routes, as identified in the 2021 Greater Dublin Area Cycle Network⁴⁹, are also (at the time of preparation of this report) being progressed and/or are at pre-consent or consent stage. This Network includes four other proposed Rapid Deployment Schemes, along the Dodder Greenway route, namely:

- Fitzwilliam Quay to Londonbridge Road;
- Beatty's Avenue to Herbert Park;
- Clonskeagh Road to Patricks Doyle Road; and,
- Orwell Road to Dodder Road Lower.

The Active Travel Network includes the Dodder Greenway route along which the subject proposal lies. The Network has been incorporated into the NTA Greater Dublin Area Transport Strategy 2022-2042 (approved in January 2023). All projects and routes in the Network and Strategy are subject to applicable requirements of the Habitats Directive legislation and screening process therein; ensuring that likelihood of significant in-combination effects of all proposed cycle routes have been duly assessed in full compliance with the requirements of the Habitats Directive at project level.

Due to the scale and nature of the proposed scheme, there is no likelihood for potential significant effects identified as a result of the implementation of the proposed Donnybrook Road to Clonskeagh Road Rapid Deployment Scheme. On this basis, i.e., of no potential for significant effects resulting from the scheme/project to which this assessment relates, assessment guidance given in CIEEM, 2018 indicates that there is no need to consider cumulative effects. However, taking a precautionary approach, relevant plans and projects have nonetheless been reviewed and assessed in-combination with the proposed scheme.

The proposed scheme is localised, with a small scale, temporary construction phase, and no operational phase effects. None of the projects identified herein introduce any likelihood for potential significant effects to European sites. Therefore, given the nature and scale of the proposed scheme, and the lack of any potential for significant effects as assessed here, there are no in combination effects with the below projects or above plans that have been identified to have likely potential significant effects on any European site

⁴⁷ AA Screening report and determination available at: <https://busconnects.ie/12-core-bus-corridor-statutory-applications/belfield-blackrock-to-city-centre-core-bus-corridor-scheme/>

⁴⁸ Available at: <https://busconnects.ie/initiatives/core-bus-corridors/>

⁴⁹ Available at: <https://www.nationaltransport.ie/wp-content/uploads/2023/01/2022-GDA-Cycle-Network.pdf>

Table 3.2 Local planning applications⁵⁰ within the receiving environment of the proposed scheme⁵¹

Project Code	Status	Overview	Grant Date	Project Area (sq m)	Characteristics of the potential interactions between the projects; sources and pathways	Is there a risk of likely in-combination effects	Are significant in-combination effects likely
3886/21	Grant Permission	<p>Permission for development of an Integrated Care Facility on the existing Healthcare Campus at Clonskeagh Hospital, Clonskeagh Road, Dublin 6. The development will consist of:</p> <ol style="list-style-type: none"> 1. The construction of a 402 sq metre single storey modular type building, ramps, hard standings and associated works. 2. The reconfiguration of existing parking and provision of 4 additional parking spaces to serve the facility. 3. All associated drainage, site development and landscaping works. 	2022/03/04	56,153	<p>This is a medium-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment.</p> <p>Considering the above, in combination with the lack of any potential for effects to European sites arising from the proposed scheme, and the lack of any significant connection to a European site, it is not considered that there will be any potential in-combination significant effects to the ecological functioning of any European sites.</p> <p>This project will also be subject to EIA and AA assessments as required.</p>	No	No
2367/21	Grant Retention Permission	<p>RETENTION: Permission for retention of the single storey storage annexe / extension of 90 sq. meters total area connected to the existing healthcare facility.</p>	2021/06/21	56,153	<p>This is a medium-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment.</p> <p>Considering the above, in combination with the lack of any potential for effects to European sites arising from the proposed scheme, and the lack of any significant connection to a European site, it is not considered that there will be any potential in-combination significant effects to the ecological functioning of any European sites.</p> <p>This project will also be subject to EIA and AA assessments as required.</p>	No	No

⁵⁰ The majority of surrounding developments within Dublin city are minor projects with no risk of in-combination effects. Therefore, a summary list of provided here of the five largest proposed schemes within the below stated parameters

⁵¹ Data accessed 21st July 2023. Parameters used: planning application from within the last 5 years, within a radius of 200 m (generated via GIS) around the proposed scheme boundary

Project Code	Status	Overview	Grant Date	Project Area (sq m)	Characteristics of the potential interactions between the projects; sources and pathways	Is there a risk of likely in-combination effects	Are significant in-combination effects likely
3162/19	Grant Permission	The development will consist of the erection of 3 no internally illuminated, aluminium fret cut facia "Energia Park" stadium branding signs comprising: 1 no. stadium branding sign (6m length x 1.2m height) fronting onto Donnybrook Road elevation, affixed to the existing steel frame over the eastern turnstile entrance, adjacent to the Old Wesley Rugby Football Club Pavillion; 1 no. gable-end sign (6m length x 3.4m height) to be installed on the north-western gable end of the Donnybrook Road Stand and 1 no. gable-end sign (6m length x 3.4m height) to be installed on the south-eastern gable end of the Donnybrook Road Stand, within the Stadium ground.	2020/03/03	39,892	<p>This is a medium-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment.</p> <p>Considering the above, in combination with the lack of any potential for effects to European sites arising from the proposed scheme, and the lack of any significant connection to a European site, it is not considered that there will be any potential in-combination significant effects to the ecological functioning of any European sites.</p> <p>This project will also be subject to EIA and AA assessments as required.</p>	No	No
4094/18	Grant Retention Permission	RETENTION: Leinster Branch IRFU intends to apply for retention planning permission for development on this site at Energia Park (Leinster Branch IRFU Rugby Grounds also known as Donnybrook Stadium), Donnybrook Road, Dublin 4. Retention permission is sought for the erection of stadium branding signage fronting onto Donnybrook Road. The development consists of 2 no. printed vinyl 'Energia Park' signs applied inside of existing glazing on the south-western elevation of the site and 1 no. (internally illuminated) aluminium fret cut facia 'Energia' Park sign installed to the existing steel frame over the Bective Pavilion entrance to the stadium, on the north-western elevation to Donnybrook Road. (The existing flag poles at this location do not form part of this application).	2019/01/17	39,892	<p>This is a medium-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment.</p> <p>Considering the above, in combination with the lack of any potential for effects to European sites arising from the proposed scheme, and the lack of any significant connection to a European site, it is not considered that there will be any potential in-combination significant effects to the ecological functioning of any European sites.</p> <p>This project will also be subject to EIA and AA assessments as required.</p>	No	No

Project Code	Status	Overview	Grant Date	Project Area (sq m)	Characteristics of the potential interactions between the projects; sources and pathways	Is there a risk of likely in-combination effects	Are significant in-combination effects likely
D19A/0001	Grant Permission	Permission for an 8 lane, 400m IAAF synthetic athletics track with ancillary surface sport facilities for athletics and a grass infield area suitable for athletics and multiple field sports with line markings as required, track training lighting (up to 18m high), drainage improvement and installation of drainage connections, conduit to allow for electronic timing and scoring to the infield, containment fencing (up to 2.4m high) and associated hard and soft landscaping. Permission is also sought for all associated site development works, services provision, access, open space and boundary treatment works. Temporary planning permission for a period of 5 years is also sought for the relocation of the existing displaced 255 space temporary car parking spaces (currently on the site of the proposed track) with provision of the same number of spaces within the vicinity of the athletics track. This application is close to several Protected Structures.	2019/07/31	36,100	<p>This is a medium-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment.</p> <p>Considering the above, in combination with the lack of any potential for effects to European sites arising from the proposed scheme, and the lack of any significant connection to a European site, it is not considered that there will be any potential in-combination significant effects to the ecological functioning of any European sites.</p> <p>This project will also be subject to EIA and AA assessments as required.</p>	No	No

4. Conclusion

This Appropriate Assessment Screening Report has considered potential effects which may arise during the construction and operational phases as a result of the implementation of the proposed Donnybrook Road to Clonskeagh Road Rapid Deployment Scheme. Through an assessment of the potential sources and potential pathways for significant effects; an evaluation of the project characteristics; taking account of the processes involved and the distance of separation from European sites, it has been evaluated by this report, which intends to inform the competent authority on the Appropriate Assessment process, that there is no likelihood of potential significant effects occurring to the Qualifying Interests, Special Conservation Interests or the Conservation Objectives of any designated European site as a result of the implementation of the proposed scheme.

This AA Screening Report has considered potential effects which may arise during the construction and operational phases as a result of the implementation of the scheme. Through an assessment of the potential sources and potential pathways for significant effects; an evaluation of the project characteristics; taking account of the processes involved and the distance of separation from European sites, it has been evaluated that there are no likely significant effects on the qualifying interests, special conservation interests or the conservation objectives of any designated European site as a result of the implementation of the proposed scheme.

Given its small, localised scale, and its nature in the context of the local environment and other plans and projects; the proposed scheme will not lead to any significant effects in-combination with effects arising from any other plans or projects.

It is concluded by this AA Screening Report that the proposed scheme is not foreseen to have any likelihood of significant effects on any European sites, alone or in combination with other plans or projects – and therefore any potential for significant effects on any European site as a result of the proposed scheme can be ruled out. This conclusion is made in view of the conservation objectives of the habitats or species for which these sites have been designated. Consequently, this report informs the competent authority undertaking the Appropriate Assessment process that the proposed scheme does not need to be subject to Stage Two Appropriate Assessment and a Natura Impact Statement is not required.

Appendix I Background information on European sites⁵²

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
000199	Baldoyle Bay SAC	Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330], Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410], Mudflats and sandflats not covered by seawater at low tide [1140], Salicornia and other annuals colonising mud and sand [1310]	F03.01, G01.01.02, F02.03.01, I01, G01.02, G02.01, K02.03, E01, E03, J02.01.02, X, D01.02, K03.06	Hunting, non-motorized nautical sports, bait digging or collection, invasive non-native species, walking, horse-riding and non-motorised vehicles, golf course, eutrophication (natural), urbanised areas, human habitation, discharges, reclamation of land from sea, estuary or marsh, no threats or pressures, roads, motorways, antagonism with domestic animals
000202	Howth Head SAC	European dry heaths [4030], Vegetated sea cliffs of the Atlantic and Baltic Coasts [1230]	C01, E01, G05.04, G01.02, D01.01, A04.03, X, I01, C01.01.01, J01.01	Mining and quarrying, urbanised areas, human habitation, vandalism, walking, horse-riding and non-motorised vehicles, paths, tracks, cycling tracks, abandonment of pastoral systems lack of grazing, no threats or pressures, invasive non-native species, sand and gravel quarries, burning down
000205	Malahide Estuary SAC	Fixed coastal dunes with herbaceous vegetation - grey dunes [2130], Salicornia and other annuals colonising mud and sand [1310], Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410], Shifting dunes along the shoreline with <i>Ammophila arenaria</i> - white dunes [2120], Mudflats and sandflats not covered by seawater at low tide [1140], Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330]	I01, X, F03.01, E01, D01.02, A08, G01.03, D01.05, G02.01, G01.02, G01.01, J02.01.02	Invasive non-native species, no threats or pressures, hunting, urbanised areas, human habitation, roads, motorways, fertilisation, motorised vehicles, bridge, viaduct, golf course, walking, horse-riding and non-motorised vehicles, nautical sports, reclamation of land from sea, estuary or marsh
000206	North Dublin Bay SAC	Embryonic shifting dunes [2110], Mudflats and sandflats not covered by seawater at low tide [1140], Petalwort (<i>Petalophyllum ralfsii</i>) [1395], Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330], Annual vegetation of drift lines [1210], Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410], Shifting dunes along the shoreline with <i>Ammophila arenaria</i> - white dunes [2120], Salicornia and other annuals colonising mud and sand [1310], Fixed coastal dunes with herbaceous vegetation - grey dunes [2130], Humid dune slacks [2190]	A04, J01.01, G05.05, F02.03.01, H01.09, K03.06, E03, G01.01, E02, E01, G02.01, G01.02, F02.03, H01.03, I01	Grazing, burning down, intensive maintenance of public parks or cleaning of beaches, bait digging or collection, diffuse pollution to surface waters due to other sources not listed, antagonism with domestic animals, discharges, nautical sports, industrial or commercial areas, urbanised areas, human habitation, golf course, walking, horse-riding and non-motorised vehicles, leisure fishing, other point source pollution to surface water, invasive non-native species
000210	South Dublin Bay	Salicornia and other annuals colonising mud and sand [1310], Embryonic shifting dunes [2110], Mudflats and sandflats not	H03, D01.01, J02.01.02, K02.02, D01.02, K02,	Marine water pollution, paths, tracks, cycling tracks, reclamation of land from sea, estuary or marsh, accumulation of organic material, roads, motorways, biocenotic evolution,

⁵² That have functional connectivity (ecological pathways) to the proposed scheme area including their Qualifying Interests, known threats and pressures

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
	SAC	covered by seawater at low tide [1140], Annual vegetation of drift lines [1210]	M01, E03, G01.02, G01.01.02, E02, F02.03.01, E01, G01.01	succession, changes in abiotic conditions, discharges, walking, horse-riding and non-motorised vehicles, non-motorized nautical sports, industrial or commercial areas, bait digging or collection, urbanised areas, human habitation, nautical sports
000713	Ballyman Glen SAC	Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220], Alkaline fens [7230]	A01, A04, D01.02, H02.01, A10.01, E01.02, A08, H01.03, B01, C01.01, E03.01, E01.01	Cultivation, grazing, roads, motorways, groundwater pollution by leakages from contaminated sites, removal of hedges and copses or scrub, discontinuous urbanisation, fertilisation, other point source pollution to surface water, forest planting on open ground, sand and gravel extraction, disposal of household or recreational facility waste, continuous urbanisation
000725	Knocksink Wood SAC	Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) [91E0], Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0], Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220]	G05.06, B02.03, E01.02, I01, A04, D01.02, D01.01, G05.04, G05.07, B01, D05, G02.08, G01.02, G03, B01.02, E03.01	Tree surgery, felling for public safety, removal of roadside trees, removal of forest undergrowth, discontinuous urbanisation, invasive non-native species, grazing, roads, motorways, paths, tracks, cycling tracks, vandalism, missing or wrongly directed conservation measures, forest planting on open ground, improved access to site, camping and caravans, walking, horse-riding and non-motorised vehicles, interpretative centres, artificial planting on open ground (non-native trees), disposal of household or recreational facility waste
001209	Glenasmole Valley SAC	<i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [6410], Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) * important orchid sites [6210], Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220]	A03, A04.02.03, A03.03, A04, A04.02.02, H02.07, E01.02, B02.01.02, F02.03, B01.01, D01, B01.02, A08, B02.02, I01, H01.08, J02, C01.03, H01.05, D01.03, A04.02.01	Mowing or cutting of grassland, non-intensive horse grazing, abandonment or lack of mowing, grazing, non-intensive sheep grazing, diffuse groundwater pollution due to non-sewered population, discontinuous urbanisation, forest replanting (non-native trees), leisure fishing, forest planting on open ground (native trees), roads, paths and railroads, artificial planting on open ground (non-native trees), fertilisation, forestry clearance, invasive non-native species, diffuse pollution to surface waters due to household sewage and waste waters, human induced changes in hydraulic conditions, peat extraction, diffuse pollution to surface waters due to agricultural and forestry activities, car parks and parking areas, non-intensive cattle grazing
002122	Wicklow Mountains SAC	Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) [3110], Alpine and Boreal heaths [4060], Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0], Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>) [8110], Natural dystrophic lakes and ponds [3160], Otter (<i>Lutra lutra</i>) [1355], Siliceous rocky slopes with chasmophytic vegetation [8220], Species-rich <i>Nardus</i> grasslands, on siliceous substrates in mountain areas - and submountain areas in	G01.02, J01.01, B02.05, G01, G04.01, K01.01, F03, G05.04, A04, G01.03.02, K04.05, B06, G01.04, A05.02, I01, E01, G05.06, F04.02, G05.09, G05.07, C01.03, L05, E03.01, G05.01, D01.01,	Walking, horse-riding and non-motorised vehicles, burning down, non-intensive timber production (leaving dead wood or old trees untouched), outdoor sports and leisure activities, recreational activities, military manoeuvres, erosion, hunting and collection of wild animals (terrestrial), vandalism, grazing, off-road motorized driving, damage by herbivores (including game species), grazing in forests or woodland, mountaineering, rock climbing, speleology, stock feeding, invasive non-native species, urbanised areas, human habitation, tree surgery, felling for public safety, removal of roadside trees, collection (fungi, lichen, berries etc.), fences, fencing, missing or wrongly directed conservation measures, peat extraction, collapse of terrain, landslide, disposal of household or

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
		Continental Europe [6230], Calcareous rocky slopes with chasmophytic vegetation [8210], Blanket bogs * if active bog [7130], Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010], European dry heaths [4030], Calaminarian grasslands of the <i>Violetalia calaminariae</i> [6130]	F03.02.02, G02.09	recreational facility waste, trampling, overuse, paths, tracks, cycling tracks, taking from nest (e.g., falcons), wildlife watching
002193	Ireland's Eye SAC	Perennial vegetation of stony banks [1220], Vegetated sea cliffs of the Atlantic and Baltic Coasts [1230]	A04.03, G01.02, G01.01, J01, G05.01, X, G02.09	Abandonment of pastoral systems lack of grazing, walking, horse-riding and non-motorised vehicles, nautical sports, fire and fire suppression, trampling, overuse, no threats or pressures, wildlife watching
003000	Rockabill to Dalkey Island SAC	Harbour porpoise (<i>Phocoena phocoena</i>) [1351], Reefs [1170]	E03, J02.11, D03.02, X, D02, J02.02, F02.02, H06.01	Discharges, siltation rate changes, dumping, depositing of dredged deposits, shipping lanes, no threats or pressures, utility and service lines, removal of sediments (mud...), professional active fishing, noise nuisance, noise pollution
004006	North Bull Island SPA	Curlew (<i>Numenius arquata</i>) [A160], Knot (<i>Calidris canutus</i>) [A143], Dunlin (<i>Calidris alpina</i>) [A149], Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157], Black-tailed Godwit (<i>Limosa limosa</i>) [A156], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Grey Plover (<i>Pluvialis squatarola</i>) [A141], Turnstone (<i>Arenaria interpres</i>) [A169], Wetland and Waterbirds [A999], Shoveler (<i>Anas clypeata</i>) [A056], Teal (<i>Anas crecca</i>) [A052], Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179], Sanderling (<i>Calidris alba</i>) [A144], Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A674], Oystercatcher (<i>Haematopus ostralegus</i>) [A130], Pintail (<i>Anas acuta</i>) [A054], Redshank (<i>Tringa totanus</i>) [A162], Shelduck (<i>Tadorna tadorna</i>) [A048]	D01.05, D03.02, D01.02, E01.04, E01.01, G01.01, G02.01, E02, E03, G03, F02.03.01, G01.02	Bridge, viaduct, shipping lanes, roads, motorways, other patterns of habitation, continuous urbanisation, nautical sports, golf course, industrial or commercial areas, discharges, interpretative centres, bait digging or collection, walking, horse-riding and non-motorised vehicles
004016	Baldoye Bay SPA	Shelduck (<i>Tadorna tadorna</i>) [A048], Ringed Plover (<i>Charadrius hiaticula</i>) [A137], Wetland and Waterbirds [A999], Grey Plover (<i>Pluvialis squatarola</i>) [A141], Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157], Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A674], Golden Plover (<i>Pluvialis apricaria</i>) [A140]	D01.02, G02.01, F02.03.01, F03.01, E01, A08, K02.03, G01.02, J02.01.02, I01	Roads, motorways, golf course, bait digging or collection, hunting, urbanised areas, human habitation, fertilisation, eutrophication (natural), walking, horse-riding and non-motorised vehicles, reclamation of land from sea, estuary or marsh, invasive non-native species
004024	South Dublin Bay and Tolka Estuary SPA	Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A674], Oystercatcher (<i>Haematopus ostralegus</i>) [A130], Redshank (<i>Tringa totanus</i>) [A162], Ringed Plover (<i>Charadrius hiaticula</i>) [A137], Roseate Tern (<i>Sterna dougallii</i>) [A192], Sanderling	F02.03, K02.03, G01.02, D01.02, E02, F02.03.01, G01.01, E01, E03, J02.01.02	Leisure fishing, eutrophication (natural), walking, horse-riding and non-motorised vehicles, roads, motorways, industrial or commercial areas, bait digging or collection, nautical sports, urbanised areas, human habitation, discharges, reclamation of land from sea, estuary or marsh

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
		<i>(Calidris alba)</i> [A144], Wetland and Waterbirds [A999], Grey Plover (<i>Pluvialis squatarola</i>) [A141], Dunlin (<i>Calidris alpina</i>) [A149], Knot (<i>Calidris canutus</i>) [A143], Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157], Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179], Common tern (<i>Sterna hirundo</i>) [A193], Arctic tern (<i>Sterna paradisaea</i>) [A194]		
004040	Wicklow Mountains SPA	Peregrine falcon (<i>Falco peregrinus</i>) [A103], Merlin (<i>Falco columbarius</i>) [A098]	A04, G01.02, G03, D01.01, C01.03, B	Grazing, walking, horse-riding and non-motorised vehicles, interpretative centres, paths, tracks, cycling tracks, peat extraction, silviculture, forestry
004113	Howth Head Coast SPA	Kittiwake (<i>Rissa tridactyla</i>) [A188]	G01.02, J01	Walking, horse-riding and non-motorised vehicles, fire and fire suppression
004117	Ireland's Eye SPA	Cormorant (<i>Phalacrocorax carbo</i>) [A017], Guillemot (<i>Uria aalge</i>) [A199], Herring Gull (<i>Larus argentatus</i>) [A184], Kittiwake (<i>Rissa tridactyla</i>) [A188], Razorbill (<i>Alca torda</i>) [A200]	F02.03, G01.02	Leisure fishing, walking, horse-riding and non-motorised vehicles
004172	Dalkey Islands SPA	Arctic tern (<i>Sterna paradisaea</i>) [A194], Roseate tern (<i>Sterna dougallii</i>) [A192], Common tern (<i>Sterna hirundo</i>) [A193]	G01.02, A04, G01.01, E01	Walking, horse-riding and non-motorised vehicles, grazing, nautical sports, urbanised areas, human habitation
004236	North-West Irish Sea cSPA	Great Northern Diver (<i>Gavia immer</i>) [A003], Cormorant (<i>Phalacrocorax carbo</i>) [A017], Manx Shearwater (<i>Puffinus puffinus</i>) [A013], Red-throated Diver (<i>Gavia stellata</i>) [A001], Roseate Tern (<i>Sterna dougallii</i>) [A192], Common Tern (<i>Sterna hirundo</i>) [A193], Little Gull (<i>Larus minutus</i>) [A177], Kittiwake (<i>Rissa tridactyla</i>) [A188], Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179], Herring Gull (<i>Larus argentatus</i>) [A184], Arctic Tern (<i>Sterna paradisaea</i>) [A194], Shag (<i>Phalacrocorax aristotelis</i>) [A018], Great Black-backed Gull (<i>Larus marinus</i>) [A187], Common Scoter (<i>Melanitta nigra</i>) [A065], Puffin (<i>Fratercula arctica</i>) [A204], Fulmar (<i>Fulmarus glacialis</i>) [A009], Little Tern (<i>Sterna albifrons</i>) [A195], Razorbill (<i>Alca torda</i>) [A200], Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183], Common Gull (<i>Larus canus</i>) [A182], Guillemot (<i>Uria aalge</i>)	N/A	N/A

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
		[A199]		

Appendix II Further information on the Qualifying Interests of SACs that have undergone assessment⁵³

EU Code	Qualifying Interests	Article 17 Report Summary - Threats and Pressures	Threats and Pressures Codes	Known Threats and Pressures	Sensitivity of Qualifying Interests
[1140]	Mudflats and sandflats not covered by seawater at low tide	Pressures on mudflats and sandflats are partly caused by pollution from agricultural, forestry and wastewater sources, as well as impacts associated with marine aquaculture, particularly the Pacific oyster (<i>Magallana gigas</i>).	A28, F20, G16	Agricultural activities generating marine pollution, residential or recreational activities and structures generating marine pollution (excl. marine macro- and micro- particular pollution, marine aquaculture generating marine pollution)	Surface and marine water dependent. Moderately sensitive to hydrological change. Moderate sensitivity to pollution. Changes to salinity and tidal regime. Coastal development.
[1170]	Reefs	The main pressures on reefs come from fishing methods that damage the seafloor.	G01, G03	Marine fishing and shellfish harvesting (professional, recreational) causing reduction of species/prey populations and disturbance of species, marine fish and shellfish harvesting (professional, recreational) activities causing physical loss and disturbance of seafloor habitats	Sensitive to disturbance and pollution.
[1210]	Annual vegetation of drift lines	Most of the pressures on drift lines are associated with activities such as recreation and coastal defences, which can interfere with sediment dynamics.	C01, F01, F06, F07, F08	Extraction of minerals (e.g., rock, metal ores, gravel, sand, shell), conversion from other land uses to housing, settlement or recreational areas (excluding drainage and modification of coastline, estuary and coastal conditions), development and maintenance of beach areas for tourism and recreation incl. beach nourishment and beach cleaning, sports, tourism and leisure activities, modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defence or coast protection works and infrastructures)	Overgrazing and erosion. Changes in management.
[1220]	Perennial vegetation of stony banks	The main pressures on this habitat are associated with coastal defences (which can interfere with sediment dynamics), recreation and shingle removal.	C01, E01, F07, F08, F09, I02	Extraction of minerals (e.g., rock, metal ores, gravel, sand, shell), roads, paths, railroads and related infrastructure (e.g., bridges, viaducts, tunnels), sports, tourism and leisure activities, modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defence or coast protection works and infrastructures), deposition and treatment of waste/garbage from household/recreational facilities, other invasive alien	Marine water dependent. Low sensitivity to hydrological changes. Coastal development, trampling from recreational activity and gravel removal.

⁵³ Including known treats and pressures and sensitivities of qualifying interests

EU Code	Qualifying Interests	Article 17 Report Summary - Threats and Pressures	Threats and Pressures Codes	Known Threats and Pressures	Sensitivity of Qualifying Interests
				species (other than species of union concern)	
[1230]	Vegetated sea cliffs of the Atlantic and Baltic coasts	A number of significant pressures were identified, including trampling by walkers, invasive non-native species, gravel extraction, and sea-level and wave exposure changes due to climate change.	C01, E01, F07, F08, I02, N03, N04	Extraction of minerals (e.g., rock, metal ores, gravel, sand, shell), roads, paths, railroads and related infrastructure (e.g., bridges, viaducts, tunnels), sports, tourism and leisure activities, modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defence or coast protection works and infrastructures), other invasive alien species (other than species of union concern), increases or changes in precipitation due to climate change, sea-level and wave exposure changes due to climate change	Land use activities such as tourism and/or agricultural practices. Direct alteration to the habitat or effects such as burning or drainage.
[1310]	Salicornia and other annuals colonising mud and sand	Pressures on Salicornia mud are caused by alien species and overgrazing by livestock	A09, I02	Intensive grazing or overgrazing by livestock, other invasive alien species (other than species of union concern)	Marine water dependent. Medium sensitivity to hydrological change. Changes in salinity and tidal regime. Infilling, reclamation, invasive species.
[1330]	Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>)	The main pressures on Atlantic salt meadows are from agriculture, including ecologically unstable grazing regimes and land reclamation, and the invasive non-native species common cord-grass (<i>Spartina anglica</i>).	A09, A33, A36, F07, F08, I02	Intensive grazing or overgrazing by livestock, modification of hydrological flow or physical alternation of water bodies for agriculture (excluding development and operation of dams), agriculture activities not referred to above, sports, tourism and leisure activities, modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defence or coast protection works and infrastructures), other invasive alien species (other than species of union concern)	Marine and groundwater dependent. Medium sensitivity to hydrological change. Changes in salinity and tidal regime. Overgrazing, erosion and accretion.
[1351]	Harbour Porpoise (<i>Phocoena phocoena</i>)	Pressures acting on this species in Irish waters mainly involve commercial vessel-based activities such as impacts arising from geophysical seismic exploration or from local/regional prey removal by fisheries.	C09, G01	Geotechnical surveying, marine fishing and shellfish harvesting (professional, recreational) causing reduction of species/prey populations and disturbance of species	Sensitive to disturbance, prey availability and pollution.
[1355]	Otter (<i>Lutra lutra</i>)	There are no pressures facing this species	Xxp, Xxt	No pressures, no threats	Surface and marine water

EU Code	Qualifying Interests	Article 17 Report Summary - Threats and Pressures	Threats and Pressures Codes	Known Threats and Pressures	Sensitivity of Qualifying Interests
					dependent. Moderately sensitive to hydrological change. Sensitivity to pollution.
[1395]	Petalwort (<i>Petalophyllum ralfsii</i>)	There are no pressures facing this species.	Xxp, Xxt	No pressures, no threats	None identified.
[1410]	Mediterranean salt meadows (<i>Juncetalia maritimi</i>)	Most of the pressures on Mediterranean salt meadows are associated with agriculture, including overgrazing, undergrazing and land reclamation.	A09, A10, A33, A36	Intensive grazing or overgrazing by livestock, extensive grazing or under grazing by livestock, modification of hydrological flow or physical alternation of water bodies for agriculture (excluding development and operation of dams), agriculture activities not referred to above	Marine and groundwater dependent. Medium sensitivity to hydrological change. Changes in salinity and tidal regime. Coastal development and reclamation.
[2110]	Embryonic shifting dunes	The majority of pressures on this habitat are associated with recreation and coastal defences, which can interfere with sediment dynamics.	C01, E03, F01, F06, F07, F08, L01, L02	Extraction of minerals (e.g., rock, metal ores, gravel, sand, shell), shipping lanes, ferry lanes and anchorage infrastructure (e.g., canalisation, dredging), conversion from other land uses to housing, settlement or recreational areas (excluding drainage and modification of coastline, estuary and coastal conditions), development and maintenance of beach areas for tourism and recreation incl. beach nourishment and beach cleaning, sports, tourism and leisure activities, modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defence or coast protection works and infrastructures), abiotic natural processes (e.g., erosion, silting up, drying out, submersion, salinization), natural succession resulting in species composition change (other than by direct changes of agricultural or forestry practices)	Overgrazing, and erosion. Changes in management.
[2120]	Shifting dunes along the shoreline with white dunes (<i>Ammophila arenaria</i>)	Most of the pressures on marram dunes are caused by the interference on sediment dynamics due to recreation and coastal defences.	E01, E03, F01, F06, F07, F08, I02, L01	Roads, paths, railroads and related infrastructure (e.g., bridges, viaducts, tunnels), shipping lanes, ferry lanes and anchorage infrastructure (e.g., canalisation, dredging), conversion from other land uses to housing, settlement or recreational areas (excluding drainage and modification of coastline, estuary and coastal conditions), development and maintenance of beach areas for tourism and recreation incl. beach nourishment and beach cleaning, sports, tourism and leisure activities, modification of coastline,	Overgrazing, and erosion. Changes in management.

EU Code	Qualifying Interests	Article 17 Report Summary - Threats and Pressures	Threats and Pressures Codes	Known Threats and Pressures	Sensitivity of Qualifying Interests
				estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defence or coast protection works and infrastructures), other invasive alien species (other than species of union concern), abiotic natural processes (e.g., erosion, silting up, drying out, submersion, salinization)	
[2130]	Fixed coastal dunes with herbaceous vegetation (grey dunes)	Pressures on fixed dunes are associated with recreation and ecologically unsuitable grazing practices.	A02, A09, A10, F07, F08, I02, L02	Conversion from one type of agricultural land use to another (excluding drainage and burning), intensive grazing or overgrazing by livestock, extensive grazing or under grazing by livestock, sports, tourism and leisure activities, modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defence or coast protection works and infrastructures), other invasive alien species (other than species of union concern), natural succession resulting in species composition change (other than by direct changes of agricultural or forestry practices)	Overgrazing, and erosion. Changes in management.
[2190]	Humid dune slacks	Pressures on the habitat come from a number of sources. Including agricultural fertilisers, sports and leisure activities (e.g., walking, off-road driving and golf courses) and drainage. Succession to scrub is also a problem, particularly where it is linked to desiccation of the slack.	A19, A31, F07, I02, L02	Application of natural fertilisers on agricultural land, drainage for use as agricultural land, sports, tourism and leisure activities, other invasive alien species (other than species of union concern), natural succession resulting in species composition change (other than by direct changes of agricultural or forestry practices)	Overgrazing, and erosion. Changes in management. Sensitive to hydrological change.
[3110]	Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>)	This habitat is under significant pressure from eutrophication, and from drainage and other damage to peatland. Damage to peatland can result in hydrological changes in lakes, increased organic matter, water colour and turbidity, changes in sediment characteristics, acidification and enrichment.	A26, A31, B23, B27, C05, F12	Agricultural activities generating diffuse pollution to surface or ground waters, drainage for use as agricultural land, forestry activities generating pollution to surface or ground waters, modification of hydrological conditions, or physical alteration of water bodies and drainage for forestry (including dams), peat extraction, discharge of urban waste water (excluding storm overflows and/or urban run-offs) generating pollution to surface or ground water	Surface dependant. Highly sensitive to hydrological changes. Highly sensitive to pollution.
[3160]	Natural dystrophic lakes and ponds	The pressures on this habitat are associated with pollution from agricultural and forestry activities and	A26, A31, B23, B27, C05, D08	Agricultural activities generating diffuse pollution to surface or ground waters, drainage for use as agricultural land, forestry activities generating pollution to surface or ground waters, modification of hydrological conditions, or physical	Surface and groundwater dependant. Highly sensitive to hydrological

EU Code	Qualifying Interests	Article 17 Report Summary - Threats and Pressures	Threats and Pressures Codes	Known Threats and Pressures	Sensitivity of Qualifying Interests
		also from drainage.		alteration of water bodies and drainage for forestry (including dams), peat extraction, energy production and transmission activities generating pollution to surface or ground waters	changes. Highly sensitive to pollution
[4010]	Northern Atlantic wet heaths with <i>Erica tetralix</i>	Overgrazing, burning, wind farm development and erosion are the main pressures associated with this habitat, along with nitrogen deposition from agricultural activities that generate air pollution.	A09, A11, A27, B01, D01, L01, N01, N02	Intensive grazing or overgrazing by livestock, burning for agriculture, agricultural activities generating air pollution, conversion to forest from other land uses, or afforestation (excluding drainage), wind, wave and tidal power, including infrastructure, abiotic natural processes (e.g., erosion, silting up, drying out, submersion, salinization), temperature changes (e.g., rise of temperature & extremes) due to climate change	Surface and groundwater dependent. Highly sensitive to hydrological changes. Inappropriate management.
[4030]	European dry heaths	A number of significant pressures were recorded for this habitat in the current reporting period, particularly overgrazing by sheep and burning for agriculture with afforestation and wind farms also being recognised as pressures.	A09, A11, B01, D01, N01, N02	Intensive grazing or overgrazing by livestock, burning for agriculture, conversion to forest from other land uses, or afforestation (excluding drainage), wind, wave and tidal power, including infrastructure, temperature changes (e.g., rise of temperature & extremes) due to climate change	Moderately sensitive to hydrological change. Changes in management. Changes in nutrient status.
[4060]	Alpine and Boreal heaths	Overgrazing by livestock, tourism (hill walking) and agricultural activities that cause air pollution are considered significant pressures for this habitat.	A09, A27, F07, N01, N02	Intensive grazing or overgrazing by livestock, agricultural activities generating air pollution, sports, tourism and leisure activities, temperature changes (e.g., rise of temperature & extremes) due to climate change	Changes in management. Changes in nutrient or base status. Moderately sensitive to hydrological change.
[6130]	Calaminarian grasslands of the Murawy galmanowa (<i>Violetalia calaminariae</i>)	Pressures on this habitat are associated with abiotic natural processes (leaching of metals) and succession, as well as impacts from recreational activities (walking/hiking).	F07, L01, L02	Sports, tourism and leisure activities, abiotic natural processes (e.g., erosion, silting up, drying out, submersion, salinization), natural succession resulting in species composition change (other than by direct changes of agricultural or forestry practices)	Changes in management such as grazing regime. Changes in nutrient or base status. Changes to vegetation composition. Introduction of alien species.
[6210]	Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>)	The significant pressures related to this habitat are mainly associated with agricultural intensification causing loss of species-rich communities, or abandonment of farmland resulting in	A02, A09, A10, C01, I02, I04	Conversion from one type of agricultural land use to another (excluding drainage and burning), intensive grazing or overgrazing by livestock, extensive grazing or under grazing by livestock, extraction of minerals (e.g., rock, metal ores, gravel, sand, shell), other invasive alien species (other than species of union concern), problematic native species	Changes in management such as grazing regime. Changes in nutrient or base status. Changes to vegetation composition.

EU Code	Qualifying Interests	Article 17 Report Summary - Threats and Pressures	Threats and Pressures Codes	Known Threats and Pressures	Sensitivity of Qualifying Interests
	<i>* important orchid sites)</i>	succession to scrub.			Introduction of alien species.
[6230]	Species-rich <i>Nardus</i> grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe)	The main pressures on this habitat are due to bracken encroachment and succession.	I04, L02	Problematic native species, natural succession resulting in species composition change (other than by direct changes of agricultural or forestry practices)	Changes in management such as grazing regime. Changes in nutrient or base status. Changes to vegetation composition. Introduction of alien species.
[6410]	<i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)	The main pressures on the habitat are associated with agricultural intensification (e.g., land drainage, fertiliser application), under-grazing and forestry.	A02, A06, A10, A14, A31, B01	Conversion from one type of agricultural land use to another (excluding drainage and burning), abandonment of grassland management (e.g., cessation of grazing or of mowing), extensive grazing or under grazing by livestock, livestock farming (without grazing), drainage for use as agricultural land, conversion to forest from other land uses, or afforestation (excluding drainage)	Changes in management such as grazing regime. Changes in nutrient or base status. Changes to vegetation composition. Introduction of alien species.
[7130]	Blanket bogs (* if active bog)	The main pressures on blanket bogs are overgrazing, burning, afforestation, peat extraction, and agricultural activities causing nitrogen deposition. Erosion, drainage and wind farm construction are also pressures relating to this habitat.	A09, A11, A27, B01, C05, D01, K02, L01, N01, N02	Intensive grazing or overgrazing by livestock, burning for agriculture, agricultural activities generating air pollution, conversion to forest from other land uses, or afforestation (excluding drainage), peat extraction, wind, wave and tidal power, including infrastructure, drainage, abiotic natural processes (e.g., erosion, silting up, drying out, submersion, salinization), temperature changes (e.g., rise of temperature & extremes) due to climate change	Surface water interactions. Drainage and land use management are the key things.
[7220]	Petrifying springs with tufa formation (Cratoneurion)	Pressures related to this habitat are associated with drainage, pollution to ground and surface waters, recreational activities, infrastructure, overgrazing and abandonment of grassland management.	A06, A10, E01, F07, H08, J01, K02, K04, L02	Abandonment of grassland management (e.g., cessation of grazing or of mowing), extensive grazing or undergrazing by livestock, roads, paths, railroads and related infrastructure (e.g., bridges, viaducts, tunnels), sports, tourism and leisure activities, other human intrusions and disturbance not mentioned above (dumping, accidental and deliberate disturbance of bat roosts (e.g., caving)), mixed source pollution to surface and ground waters (limnic and terrestrial), drainage, modification of hydrological flow, natural succession resulting in species composition change (other than by direct changes of agricultural or forestry practices)	Surface and groundwater dependant. Highly sensitive to hydrological changes. Highly sensitive to pollution.
[7230]	Alkaline fens	The main pressures facing this habitat	A06, A09, A26,	Abandonment of grassland management (e.g., cessation of grazing or of	Surface and groundwater

EU Code	Qualifying Interests	Article 17 Report Summary - Threats and Pressures	Threats and Pressures Codes	Known Threats and Pressures	Sensitivity of Qualifying Interests
		are land abandonment (and associated succession), overgrazing, drainage and pollution.	J01, K01, K02, K04, L02, N02, N03	mowing), intensive grazing or overgrazing by livestock, agricultural activities generating diffuse pollution to surface or ground waters, mixed source pollution to surface and ground waters (limnic and terrestrial), abstraction from groundwater, surface water or mixed water, drainage, modification of hydrological flow, natural succession resulting in species composition change (other than by direct changes of agricultural or forestry practices), temperature changes (e.g., rise of temperature & extremes) due to climate change, increases or changes in precipitation due to climate change	dependent. Highly sensitive to hydrological changes. Inappropriate management.
[8110]	Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>)	The main pressures on siliceous scree come from overgrazing, under-grazing and succession.	A09, A10, L02	Intensive grazing or overgrazing by livestock, extensive grazing or under grazing by livestock, natural succession resulting in species composition change (other than by direct changes of agricultural or forestry practices)	Erosion, overgrazing and recreation.
[8210]	Calcareous rocky slopes with chasmophytic vegetation	The majority of pressures related to this habitat are associated with overgrazing and the non-native invasive species New Zealand willowherb (<i>Epilobium brunnescens</i>).	A09, A27, I02	Intensive grazing or overgrazing by livestock, agricultural activities generating air pollution, other invasive alien species (other than species of union concern)	Erosion, overgrazing and recreation.
[8220]	Siliceous rocky slopes with chasmophytic vegetation	Pressure on this habitat is associated with the non-native invasive species New Zealand willowherb (<i>Epilobium brunnescens</i>).	I02	Other invasive alien species (other than species of union concern)	Erosion, overgrazing and recreation.
[91A0]	Old sessile oak woods with Ilex and Blechnum in the British Isles	The significant pressure facing this habitat are associated with invasive non-native species such as <i>Rhododendron ponticum</i> , cherry laurel (<i>Prunus laurocerasus</i>) and beech (<i>Fagus sylvatica</i>) and overgrazing by deer.	A09, B09, I02, I04, M07	Intensive grazing or overgrazing by livestock, clear-cutting, removal of all trees, other invasive alien species (other than species of union concern), problematic native species, storm, cyclone	Changes in management. Changes in nutrient or base status. Introduction of alien species.

Appendix III Further information on the Special Conservation Interests of SPAs that have undergone assessment⁵⁴

Species Code	Common Name	Scientific Name	Threats and Pressures Codes	Known Threats and Pressures
A003	Common Loon	<i>Gavia immer</i>	C03, F02, G01, H03	Renewable abiotic energy use, fishing and harvesting aquatic resources, outdoor sports and leisure activities, recreational activities, marine water pollution
A009	Northern Fulmar	<i>Fulmarus glacialis</i>	C03, F02	Renewable abiotic energy use, fishing and harvesting aquatic resources
A013	Manx Shearwater	<i>Puffinus puffinus</i>	C03, H03, I01	Renewable abiotic energy use, marine water pollution, invasive non-native species
A017	Cormorant	<i>Phalacrocorax carbo carbo</i>	C03, F02, F03, G01, H03	Renewable abiotic energy use, fishing and harvesting aquatic resources, hunting and collection of wild animals (terrestrial), outdoor sports and leisure activities, recreational activities, marine water pollution
A018	Shag	<i>Phalacrocorax aristotelis</i>	C03, H03	Renewable abiotic energy use, marine water pollution
A048	Common Shelduck	<i>Tadorna tadorna</i>	F01, F02, G01, H03, M01	Marine and freshwater aquaculture, fishing and harvesting aquatic resources, outdoor sports and leisure activities, recreational activities, marine water pollution, changes in abiotic conditions
A054	Northern Pintail	<i>Anas acuta</i>	C03, F01, F03, G01, H01, H03, H07, J02	Renewable abiotic energy use, marine and freshwater aquaculture, hunting and collection of wild animals (terrestrial), outdoor sports and leisure activities, recreational activities, pollution to surface waters (limnic & terrestrial, marine & brackish), marine water pollution, other forms of pollution, human induced changes in hydraulic conditions
A056	Northern Shoveler	<i>Anas clypeata</i>	C03, F03, G01, H01, H03, H07	Renewable abiotic energy use, hunting and collection of wild animals (terrestrial), outdoor sports and leisure activities, recreational activities, pollution to surface waters (limnic & terrestrial, marine & brackish), marine water pollution, other forms of pollution
A098	Merlin	<i>Falco columbarius</i>	A02, B01, B02, C03, M02	Modification of cultivation practices, forest planting on open ground, forest and plantation management & use, renewable abiotic energy use, changes in biotic conditions
A130	Eurasian	<i>Haematopus</i>	C03, F01, F02, G01,	Renewable abiotic energy use, marine and freshwater aquaculture, fishing and harvesting aquatic resources, outdoor sports and leisure activities, recreational activities, marine water pollution, human induced changes in

⁵⁴ Including known treats and pressures of SCIs

Species Code	Common Name	Scientific Name	Threats and Pressures Codes	Known Threats and Pressures
	Oystercatcher	<i>ostralegus</i>	H03, J02	hydraulic conditions
A137	Common Ringed Plover	<i>Charadrius hiaticula</i>	C03, F01, F02, G01, H03, J02, J03, M01	Renewable abiotic energy use, marine and freshwater aquaculture, fishing and harvesting aquatic resources, outdoor sports and leisure activities, recreational activities, marine water pollution, human induced changes in hydraulic conditions, other ecosystem modifications, changes in abiotic conditions
A140	European Golden Plover	<i>Pluvialis apricaria</i>	A02, A04, B01, C01, C03, F01, G01, H03, J01, K03, M02	Modification of cultivation practices, grazing, forest planting on open ground, mining and quarrying, renewable abiotic energy use, marine and freshwater aquaculture, outdoor sports and leisure activities, recreational activities, marine water pollution, fire and fire suppression, interspecific faunal relations, changes in biotic conditions
A141	Grey Plover	<i>Pluvialis squatarola</i>	C03, F01, F02, G01, H03, J02, J03, M01	Renewable abiotic energy use, marine and freshwater aquaculture, fishing and harvesting aquatic resources, outdoor sports and leisure activities, recreational activities, marine water pollution, human induced changes in hydraulic conditions, other ecosystem modifications, changes in abiotic conditions
A143	Red Knot	<i>Calidris canutus</i>	C03, F01, F02, G01, H03, J02, J03, M01	Renewable abiotic energy use, marine and freshwater aquaculture, fishing and harvesting aquatic resources, outdoor sports and leisure activities, recreational activities, marine water pollution, human induced changes in hydraulic conditions, other ecosystem modifications, changes in abiotic conditions
A144	Sanderling	<i>Calidris alba</i>	C03, F01, G01, H03, M01	Renewable abiotic energy use, marine and freshwater aquaculture, outdoor sports and leisure activities, recreational activities, marine water pollution, changes in abiotic conditions
A149	Dunlin	<i>Calidris alpina</i>	C03, F01, F02, G01, H03, J02, J03, M01	Renewable abiotic energy use, marine and freshwater aquaculture, fishing and harvesting aquatic resources, outdoor sports and leisure activities, recreational activities, marine water pollution, human induced changes in hydraulic conditions, other ecosystem modifications, changes in abiotic conditions
A157	Bar-Tailed Godwit	<i>Limosa lapponica</i>	C03, F01, F02, G01, H03, J02, J03, M01	Renewable abiotic energy use, marine and freshwater aquaculture, fishing and harvesting aquatic resources, outdoor sports and leisure activities, recreational activities, marine water pollution, human induced changes in hydraulic conditions, other ecosystem modifications, changes in abiotic conditions
A162	Common Redhank	<i>Tringa totanus</i>	C03, F01, F02, G01, H03, J02, J03, M01	Renewable abiotic energy use, marine and freshwater aquaculture, fishing and harvesting aquatic resources, outdoor sports and leisure activities, recreational activities, marine water pollution, human induced changes in hydraulic conditions, other ecosystem modifications, changes in abiotic conditions
A169	Ruddy Turnstone	<i>Arenaria interpres</i>	C03, F01, G01, H03, J03, M01	Renewable abiotic energy use, marine and freshwater aquaculture, outdoor sports and leisure activities, recreational activities, marine water pollution, other ecosystem modifications, changes in abiotic conditions
A177	Little Gull	<i>Larus minutus</i>	Xxp/Xxt	No threats and pressures identified by the npws

Species Code	Common Name	Scientific Name	Threats and Pressures Codes	Known Threats and Pressures
A179	Black-Headed Gull	<i>Larus ridibundus</i>	A04, C03, F02, H03, J03, M01	Grazing, renewable abiotic energy use, fishing and harvesting aquatic resources, marine water pollution, other ecosystem modifications, changes in abiotic conditions
A182	Common Gull	<i>Larus canus</i>	A04, C03, F02, H03, J03, M01	Grazing, renewable abiotic energy use, fishing and harvesting aquatic resources, marine water pollution, other ecosystem modifications, changes in abiotic conditions
A183	Lesser Black-Backed Gull	<i>Larus fuscus</i>	C03, F02, H03, J03	Renewable abiotic energy use, fishing and harvesting aquatic resources, marine water pollution, other ecosystem modifications
A184	European Herring Gull	<i>Larus argentatus</i>	C03, F02, H03, J03	Renewable abiotic energy use, fishing and harvesting aquatic resources, marine water pollution, other ecosystem modifications
A187	Great Black-Backed Gull	<i>Larus marinus</i>	Xxp/Xxt	No threats and pressures identified by the npws
A188	Black-Legged Kittiwake	<i>Rissa tridactyla</i>	C03, F02, H03	Renewable abiotic energy use, fishing and harvesting aquatic resources, marine water pollution
A192	Roseate Tern	<i>Sterna dougallii dougallii</i>	C03, D01, G01, I01	Renewable abiotic energy use, roads, paths and railroads, outdoor sports and leisure activities, recreational activities, invasive non-native species
A193	Common Tern	<i>Sterna hirundo</i>	C03, D01, D03, G01, I01	Renewable abiotic energy use, roads, paths and railroads, shipping lanes, ports, marine constructions, outdoor sports and leisure activities, recreational activities, invasive non-native species
A194	Arctic Tern	<i>Sterna paradisaea</i>	C03, D01, G01, I01, M01	Renewable abiotic energy use, roads, paths and railroads, outdoor sports and leisure activities, recreational activities, invasive non-native species, changes in abiotic conditions
A200	Razorbill	<i>Alca torda</i>	C03, H03	Renewable abiotic energy use, marine water pollution
A204	Atlantic Puffin	<i>Fratercula arctica</i>	C03, H03, I01	Renewable abiotic energy use, marine water pollution, invasive non-native species
A674	Light-Bellied Brent Goose	<i>Branta bernicla hrota</i>	A02, A11, C03, D02, F01, G01, G05, H03, H07, I01, J03	Modification of cultivation practices, agriculture activities not referred to above, renewable abiotic energy use, utility and service lines, marine and freshwater aquaculture, outdoor sports and leisure activities, recreational activities, other human intrusions and disturbances, marine water pollution, other forms of pollution, invasive non-native species, other ecosystem modifications

Appendix IV Conservation Objectives⁵⁵

NPWS (2012) Conservation Objectives for Baldoyle Bay SAC [IE0000199] Version 1.
NPWS (2016) Conservation Objectives for Howth Head SAC [IE0000202] Version 1.
NPWS (2013) Conservation Objectives for Malahide Estuary SAC [IE0000205] Version 1.
NPWS (2013) Conservation Objectives for North Dublin Bay SAC [IE0000206] Version 1.
NPWS (2013) Conservation Objectives for South Dublin Bay SAC [IE0000210] Version 1.
NPWS (2019) Conservation Objectives for Ballyman Glen SAC [IE0000713] Version 1.
NPWS (2021) Conservation Objectives for Knocksink Wood SAC [IE0000725] Version 1.
NPWS (2021) Conservation Objectives for Glenasmole Valley SAC [IE0001209] Version 1.
NPWS (2017) Conservation Objectives for Wicklow Mountains SAC [IE0002122] Version 1.
NPWS (2017) Conservation Objectives for Ireland's Eye SAC [IE0002193] Version 1.
NPWS (2013) Conservation Objectives for Rockabill to Dalkey Island SAC [IE0003000] Version 1.
NPWS (2015) Conservation Objectives for North Bull Island SPA [IE0004006] Version 1.
NPWS (2013) Conservation Objectives for Baldoyle Bay SPA [IE0004016] Version 1.
NPWS (2015) Conservation Objectives for South Dublin Bay and River Tolka Estuary SPA [IE0004024] Version 1.
NPWS (2022) First Order Site-specific Conservation Objectives for Wicklow Mountains SPA [IE0004040] Version 1.
NPWS (2022) First Order Site-specific Conservation Objectives for Howth Head Coast SPA [IE0004113] Version 1.
NPWS (2022) First Order Site-specific Conservation Objectives for Ireland's Eye SPA [IE0004117] Version 1.
NPWS (2022) First Order Site-specific Conservation Objectives for Dalkey Islands SPA [IE0004172] Version 1.

⁵⁵ NPWS/Department of Culture, Heritage and the Gaeltacht

Appendix V Contributor Details

Author - Callum O'Regan is an ecologist who holds a B.Sc. degree in Zoology from University College Cork and obtained a Master's degree in Conservation Behaviour from Galway-Mayo Institute of Technology in 2021. Callum has skills in data management and analysis, report writing and mapping. Callum has also worked on the fieldwork for and preparation of a number of reports including Ecological Impact Assessments (EclAs) and Appropriate Assessment Screenings for private and public projects of various sizes and complexities.

Supervisor - Karen Dylan Shevlin is an ecologist with over 9 years' experience working in multiple capacities in ecology in Irish and international research institutions and organisations, and holds a MSc degree in Biodiversity and Conservation from Trinity College Dublin (2013). Karen has significant skills in leading ecological surveys of bats, birds, insects, habitats and mammals and data analysis, mapping and compiling reports. Karen has worked on producing AA screenings, NISs, and EIARs for a range of public and private projects ranging from smaller facilities upgrades projects to major wind turbine sites. Karen is also a specialist in ecological theory and the impacts/effects that altering natural dynamics may have on the surrounding environment. This combination of skills and knowledge provides the backbone of the assessment process, and ensure that all of the baseline and detailed data gathered in the field is interpreted in a manner that is grounded in best scientific knowledge.

Reviewer - Paul Fingleton has an MSc in Rural and Regional Resources Planning (with specialisation in EIA) from the University of Aberdeen. Paul is a member of the International Association for Impact Assessment as well as the Institute of Environmental Management and Assessment. He has over twenty-five years' experience working in the area of Environmental Assessment. Over this period, he has been involved in a diverse range of projects including contributions to, and co-ordination of, numerous complex EIARs and EIA screening reports. He has also contributed to and supervised the preparation of numerous AAs and AA screenings.

Paul is the lead author of the current EPA Guidelines and accompanying Advice Notes on EIARs. He has been involved in all previous editions of these statutory guidelines. He also provides a range of other EIA related consultancy services to the EPA. Paul is regularly engaged by various planning authorities and other consent authorities to provide specialised EIA advice.