Clongriffin to City Centre Core Bus Corridor Scheme

March 2022

Natura Impact Statement

Main Report

BUS CONNECTS

SUSTAINABLE TRANSPORT FOR A BETTER CITY.

Table of Contents

List of Images:

List of Figures:

List of Appendices:

1 Introduction

1 This Natura Impact Statement (NIS) has been prepared by Scott Cawley Ltd, on behalf of the National Transport Authority in respect of the Clongriffin to City Centre Core Bus Corridor (hereinafter "the Proposed Scheme"). The Proposed Scheme aims to provide enhanced walking, cycling and bus infrastructure on this key access corridor in the Dublin region, which will enable and deliver efficient, safe, and integrated sustainable transport movement along the corridor.

2 This NIS has been prepared in accordance with the provisions of Part XAB of the Planning and Development Act 2000, as amended ("the 2000 Act") and in accordance with the requirements of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora ("the Habitats Directive").

3 It considers the implications of the Proposed Scheme, on its own and in combination with other plans or projects, for European sites[1] in view of the conservation objectives of those sites. It includes a scientific examination of evidence and data to identify and assess the implications of the Proposed Scheme for any European sites in view of the conservation objectives of those sites. The NIS considers whether the Proposed Scheme, by itself and in combination with other plans or projects, would adversely affect the integrity of any European sites. In reaching a conclusion in this regard consideration is given to any mitigation measures necessary to avoid or reduce any potential negative impacts.

4 This report has been prepared following an assessment, in view of best scientific knowledge of the potential for the Proposed Scheme to have significant effects, either individually or in combination with other plans or projects on European sites, set out in an Appropriate Assessment screening report.

5 Following an examination, analysis and evaluation of all relevant information and in view of best scientific knowledge, and applying the precautionary principle, that Appropriate Assessment screening report concluded that there is the possibility for significant effects on European sites to arise, either from the project alone or in combination with other plans and projects.

6 Accordingly, an Appropriate Assessment of the Proposed Scheme is required in this instance as, in the professional opinion of Scott Cawley Ltd., it cannot be excluded, in view of best scientific knowledge and on the basis of objective information, that the Proposed Scheme, either individually or in combination with other plans or projects, will have a significant effect on some European site(s) in view of their conservation objectives.

7 Thus, the purpose of this NIS is to provide an examination, analysis and evaluation of the potential impacts of the Proposed Scheme on European sites and to present findings and conclusions with respect to the Proposed Scheme in light of the best scientific knowledge in the field. This NIS will inform and assist the competent authority, An Bord Pleanála, in carrying out its Appropriate Assessment as to whether or not the Proposed Scheme will adversely affect the integrity of any European sites, either alone or in combination with other plans and projects, taking into account their conservation objectives.

8 The Proposed Scheme is neither connected with nor necessary to the management of any European sites.

9 It is the considered view of the authors of this NIS (Scott Cawley Ltd.) that, following the implementation of the mitigation measures proposed in Section 7, the Proposed Scheme will not, individually or in

[1] The Natura 2000 network of sites are defined under the Habitats Directive (Article 3) as a European ecological network of special areas of conservation, composed of sites hosting the natural habitat types listed in Annex I and species listed in Annex II, and special protection areas classified pursuant to the Birds Directive (2009/147/EC). The aim of the network is to aid the long-term survival of Europe's most valuable and threatened species and habitats. In Ireland, these sites are designated as *European sites* – as defined under the Section 177R of the planning and development act 2000 (as amended) as (a) a candidate site of Community importance, (b) a site of Community importance, (ba) a candidate special area of conservation, (c) a special area of conservation, ((d) a candidate special protection area, or (e) a special protection area. They are commonly referred to in Ireland as candidate Special Areas of Conservation (cSACs) and Special Protection Areas (SPAs).

combination with other plans or projects, have any adverse effect on the integrity of any European sites in view of their conservation objectives.

2 Legislative Context

10 Article 6(3) of the Habitats Directive states that:

> *'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.'*

11 For the purposes of this application for approval, which is made pursuant to the provisions of section 51 of the Roads Act 1993, as amended, the obligations under Article 6(3) are transposed into Irish law by Part XAB of the Planning and Development Act 2000, as amended ("the 2000 Act"). Subsection 177U(4) of the 2000 Act provides for screening for Appropriate Assessment as follows:

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

12 For the reasons set out in detail in the AA Screening Report included in the application documentation, a Stage Two Appropriate Assessment of the Proposed Scheme is required to be undertaken by the Board pursuant to Article 6(3) of the Habitats Directive and section 177V of the 2000 Act.

13 In the latter context, subsections 177T(1) and (2) provide that:

14 'A Natura impact statement means a statement, for the purposes of Article 6 of the Habitats Directive, of the implications *of a proposed development, on its own or in combination with other plans or projects, for one or more than one European site, in view of the conservation objectives of the site or sites'*

15 *… a Natura impact statement… shall include a report of a scientific examination of evidence and data, carried out by competent persons to identify and classify any implications for one or more than one European site in view of the conservation objectives of the site or sites*.

16 Consideration has been given in the preparation of this report, to the evolution in interpretation and application of provisions of EU Directives and Irish legislation arising from jurisprudence of the European and Irish courts, in respect of Article 6 of the Habitats Directive, in particular.

3 Description of the Proposed Scheme

17 The following sections provide information to facilitate the Appropriate Assessment of the Proposed Scheme to be undertaken by the competent authority.

18 A description of the Proposed Scheme and the receiving environment is provided to identify the potential ecological impacts. The environmental baseline conditions are discussed, as relevant to the assessment of ecological impacts where they may highlight potential pathways for impacts associated with the Proposed Scheme to affect the receiving ecological environment (e.g., geological, hydrogeological and hydrological data etc.).

19 The potential impacts are examined in order to define the potential zone of influence of the Proposed Scheme on the receiving environment. This then informs the assessment of whether the Proposed Scheme will result in significant effects on any European sites; i.e., affect the conservation objectives supporting the favourable conservation condition of the European site's QIs or SCIs.

3.1 Overview

20 The Clongriffin to City Centre Core Bus Corridor Scheme is routed along the R107 Malahide Road from Mayne River Avenue – R107 Malahide Road Junction to the junction with Marino Mart - Fairview and also routed for cyclists via the junction with Malahide Road-Brian Road along Carleton Road, St Aidan's Park, Haverty Road and Marglann Marino, all in the County of Dublin and within the Dublin City Council (DCC) administrative area. From here the scheme ties into a separate project, Clontarf to City Centre Cycle & Bus Priority Project currently being developed by DCC. The Clontarf to City Centre Cycle & Bus Priority Project will provide segregated cycling facilities and bus priority infrastructure along a 2.7km route that extends from Clontarf Road at the junction with Alfie Byrne Road, to Amiens Street at the junction with Talbot Street in the City Centre. The start of the scheme ties into a separate project being developed by DCC namely The Belmayne Main Street and Belmayne Avenue Scheme which provides bus and cycle linkages to Clongriffin Dart Station.

21 The Clontarf to City Centre Cycle & Bus Priority Project is expected to begin construction in 2022.

22 The Proposed Scheme includes an upgrade of the existing bus priority and cycle facilities associated with the Malahide Road Quality Bus Corridor (QBC), which has been in place since 1999. The scheme includes a substantial increase in the level of bus priority provided along the corridor, including the provision of additional lengths of bus lane, particularly in the outbound direction resulting in improved journey time reliability. To facilitate bus journey time reliability the existing roundabouts at Priorswood Road/ Blunden Drive and Ardlea Road/ Gracefield Road (R808) will be removed and replaced with traffic signal controlled junctions. Throughout the Proposed Scheme bus stops will be enhanced to improve the overall journey experience for bus passengers.

23 Throughout the Proposed Scheme, cycle facilities will be substantially improved with segregated cycle tracks provided along the links and protected junctions with enhanced signalling for cyclists provided at junctions. Where space for a segregated cycle track is not available on the main corridor an alternative cycle route via quite roads is proposed, such as via the junction with Malahide Road-Brian Road along Carleton Road, St Aidan's Park, Haverty Road and Marglann Marino.

24 Moreover, pedestrian facilities will be upgraded and additional signalised crossings are provided. In addition, landscape improvements will be made at key locations with higher quality materials, planting and street furniture provided to enhance the pedestrians experience, and example of this can be seen at the junction adjacent to Donnycarney Church.

25 See Figure 1 (at the end of the NIS) for Proposed Scheme Location Plan and Appendix I for the General Arrangement drawings in respect of the layout, surface water connections and Landscape design for the Proposed Scheme.

26 The main characteristics of the Construction Phase of the Proposed Scheme that have potential for ecological impact are:

- Site preparation and clearance;
- Removal of existing boundaries, pavements, lighting columns, bus stops, and signage;
- Protection and / or diversion of buried services;
- Road widening, pavement reconstruction, and kerb improvements;
- Reconfiguration of traffic lanes throughout;
- Installation of new bus stops and junction / roundabout modification;
- Property boundary reinstatement, signage replacement; relocation of and/or installation of lighting columns; and
- Landscaping and tree planting, and reinstatement of temporary land acquisitions.

3.2 Surface Water Drainage Infrastructure

27 The surface water drainage system for the Proposed Scheme will discharge to four main surface water receptors, the Santry_020, Mayne_010, North Bull Island transitional water body and the Tolka Estuary, before ultimately draining to Dublin Bay and Mayne Estuary. All drainage outfall discharges to surface waters represent point discharges. During operation there will be a net increase of 1,440m^2 in the impermeable area ultimately discharging to Dublin Bay and a net increase of 273m^2 in the impermeable area ultimately discharging to Baldoyle Bay. The drainage design principles ensure that all runoff from increases in impermeable areas will be attenuated and there will be no net increase in the surface water flow discharged to these receptors.

28 Proposed Surface Water Drainage Works is provided in Appendix II and Sustainable Urban Drainage Systems (SuDS) solutions are summarised in **Table 1**.

Table 1 Proposed SuDS and Impermeable Area Changes

Existing Catchment Reference	Waterbody	Approx. Surface Area (m^2)					SuDS Measures Proposed
		Existing Road Corridor Area (m^2)	Additional impermeable area (m^2)	Additional permeable area (m^2)	Net Change (%)	Percentage change (%)	
R01-01-01.3	Mayne_010	5,674	411	274	137	2.41	None required
R01-02	Mayne_010	16,250	1,090	954	136	0.84	Filter drains
R01-03	North Bull Island	34,808	4,749	3,343	1,406	4.04	Bioretention Systems
R01-04	Santry_020	44,363	1,809	2,306	-498	-1.12	None required
R01-05	Santry_020	37,408	2,680	2,338	343	0.92	Filter drains
R01-06	Tolka Estuary	28,617	885	574	311	1.09	Bioretention systems
R01-07	Tolka Estuary	59,540	19	141	-122	-0.20	Bioretention Systems

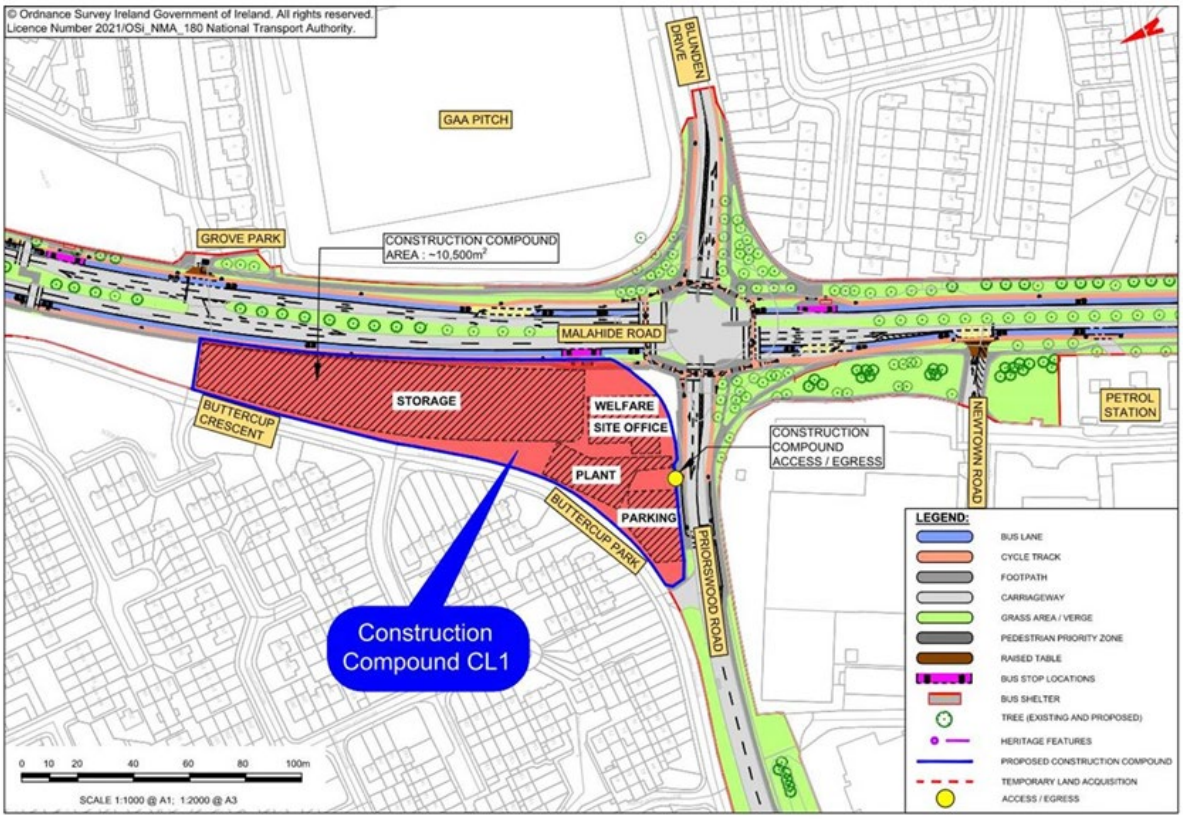
3.3 Construction Compound

29 The Construction Compound CL1 will be located at Buttercup Park adjacent to R107 Malahide Road for the duration of the Proposed Scheme's Construction Phase. This site consists of GA2 Habitat. The Construction Compound will be located at wintering birds survey site CBC0001WB002 and its location is shown in **Image 1**.

30 Construction Compound CL1 will be the Construction Compound servicing the Proposed Scheme. This Construction Compound will be used to store materials, plant and equipment, to manage the activities from and to provide welfare facilities for construction personnel. It is anticipated that crushing and re-use of certain materials, primarily concrete and excavated rock, may take place onsite during the Construction Phase of the Proposed Scheme.

31 The Construction Compound will be in place for the duration of the Construction Phase of the Proposed Scheme. The compound will be dismantled and the site returned to its existing condition on completion of the Construction Phase.

Image 1: Location, Extent and Layout of Construction Compound CL1.



3.4 Estimated Construction Phase Duration

3.1 The duration of the Construction Phase is estimated to be of the duration of 24 months. Operational Phase

32 The main characteristics of the Operational Phase of the Proposed Scheme that have potential for likely significant effects on European sites and their QI / SCI include:

- The presence and operation (traffic) of the road;
- The presence of additional lighting; and,
- Routine maintenance

4 Methodology

4.1 Scientific and Technical Competence Relied Upon

33 This NIS was co-authored by Laura Higgins and Kristie Watkin-Bourne and reviewed by Aebhín Cawley of Scott Cawley Ltd. The background and experience of the author and contributors to this report are set out below.

Laura Higgins

34 Laura Higgins is a Senior Ecologist with Scott Cawley Ltd., and has worked at the company since 2018. She holds a first class honours degree in Natural Sciences, with a specialisation in Zoology from Trinity College Dublin. Laura has worked on a wide range of residential, commercial, and infrastructural projects across Ireland, and her current role involves project management and survey management of complex projects.

She regularly carries out assessments and prepares reports including Ecological Impact Assessments, Environmental Impact Assessment Report chapters and Appropriate Assessment reports. Her ecological field survey experience includes habitat, invasive species, amphibian, bird, mammal and bat surveys.

Kristie Watkin-Bourne

35 Kristie Watkin-Bourne is a Senior Consultant Ecologist at Scott Cawley Ltd. She holds a first-class honours degree in Physical Geography from Swansea University, and a first-class master's degree in Applied Environmental Science from University College Dublin. She is a CIEEM Member (Qualifying) and is experienced in conducting a range of terrestrial and aquatic ecological surveys for habitat and site appraisals, species monitoring, and impact assessment. With five years consultancy experience, Kristie has a wide range of experience in Appropriate Assessment, Ecological Impact Assessment, Cumulative Impact Assessment, and Strategic Environmental Assessment of plans and projects within the Irish planning environment. Kristie has worked on behalf of public sector bodies including Irish Water, The National Transport Authority, and several County Councils in addition to private developers across infrastructure, renewable energy, and residential development projects.

Aebhín Cawley

36 Aebhín Cawley is Managing Director with Scott Cawley Ltd. She holds an honours degree in Zoology from Trinity College, Dublin and a postgraduate diploma in Physical Planning at Trinity. She is a Chartered Environmentalist (Cenv) with the Society for the Environment (Soc Env) and a Full Member of the CIEEM. Aebhin Cawley is an experienced ecological consultant with extensive experience in public and private sector projects including complex development types including infrastructure, renewable energy and ports. Aebhín has delivered lectures and training on Appropriate Assessment to a range of organisations and professional institutes and regularly provides Appropriate Assessment training to local authorities and other public sector organisations. She authored guidelines on Appropriate Assessment for the EPA and delivered training on its application to its inspectorate.

4.2 Guidance and Approach

37 This NIS has been prepared having regard to the following documents:

<u>European Commission Guidance</u>

- *Assessment of Plans and Projects in Relation to Affecting Natura 2000 sites: Methodological Guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC* (European Commission, 2021);
- *Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC* (European Commission, 2019);
- *Communication from the Commission on the Precautionary Principle* (European Commission 2000);
- *Nature and Biodiversity Cases – Ruling of the European Court of Justice* (European Commission 2006);
- *Interpretation Manual of European Union Habitats. Version EUR 28.* (European Commission, 2013); and
- *Article 6 of the Habitats Directive – Rulings of the European Court of Justice* (European Commission Final Draft September 2014).

<u>Irish Guidance</u>

- *Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities* (Department of Environment, Heritage and Local Government 2010 revision);
- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. *Circular NPW 1/10 & PSSP 2/10* (NPWS, 2010); and

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

38 In addition, regard has been had to guidance in characterising impacts, including determining magnitude and significance of impacts, as relevant in the application to Appropriate Assessment and European sites, including:

- *Guidelines for Ecological Impact Assessment in the UK and Ireland* (Chartered Institute of Ecology and Environmental Assessment, 2018).

4.3 Assessment Methodology

39 The Proposed Scheme was analysed and appraised to identify the potential impacts that could affect the ecological environment.

40 From this, the ecological Zone of Influence [ZoI] of the Proposed Scheme was defined. Based on the identified impacts, and their zone of influence, the European sites potentially at risk of any direct or indirect impacts were identified.

41 A source-pathway-receptor approach has been applied. In order for an impact to occur, there must be a risk enabled by having a source (e.g. water abstraction or construction works), a receptor (e.g. a European site or its Qualifying Interest(s) (QIs) or Special Conservation Interest(s) (SCIs) species), and a pathway between the source and the receptor (e.g. pathway by air for air borne pollution, or a pathway by a watercourse for mobilisation of pollution). For an impact to occur, all three elements must exist; the absence or removal of one of the elements means there is no possibility for the impact to occur.

42 The identification of source-pathway-receptor connection(s) between the Proposed Scheme and European sites essentially is the process of identifying which European sites are within the zone of influence of the Proposed Scheme, and therefore potentially at risk of significant effects. The zone of influence is defined as the area within which the Proposed Scheme could affect the receiving environment such that it could potentially have significant effects on the QI habitats or QI/SCI species of a European site, or on the achievement of their conservation objectives (as defined in CIEEM, 2018).

43 The identification of a source-pathway-receptor risk does not mean that significant effects will arise. Rather, the likelihood of significant effects will depend upon the characteristics of the source (e.g. extent and duration of construction works), the characteristics of the pathway (e.g. direction and strength of prevailing winds for air borne pollution) and the characteristics of the receptor (e.g. the sensitivities of the European site and its QIs/SCIs). However, identification of the risk does mean that there is a possibility of an effect on the environment occurring, with the significance of the effect depending upon the nature of and exposure to the risk and the characteristics of the receptor. Where there is any uncertainty, the precautionary principle has been applied.

44 This assessment has been undertaken in consideration of all potential impact sources and pathways connecting the Proposed Scheme to European sites, in view of the conservation objectives supporting the conservation condition of the sites' QIs/SCIs.

45 The conservation objectives relating to each European site and its QIs/SCIs are expressed generally for SACs as "to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the cSAC has been selected", and for SPAs "to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA".

46 Following on from this, and as defined in the Habitats Directive, favourable conservation status (or condition, at a site level) 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.

47 The favourable conservation status (or condition, at a site level) 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.

48 Where site-specific conservation objectives have been prepared for the individual European sites, these include a series of specific attributes and targets against which effects on conservation condition, or integrity, can be measured, i.e., an impact which affects the achievement of favourable conservation condition, as measured by the attributes and targets, is an impact on site integrity.

49 In the case of Irelands Eye SPA, Skerries Islands SPA, The Murrough SPA and Dalkey Islands SPA, site-specific conservation objectives are not available, or have not been published. Where that is the case, sample site specific attributes and targets for a given QI/SCI have been compiled, based on those from other relevant European sites, as a guide in assessing how the conservation condition of these sites could potentially be affected by the Proposed Scheme. In the case of some QIs/SCIs in certain European sites, the conservation objective is to restore rather than maintain conservation condition and this distinction is taken into account in the assessment; as is any legacy damage to European sites which has occurred since their designation, insofar as possible.

50 To the extent that the assessment carried out as part of the preparation the NIS has found that the Proposed Scheme has the potential to impact on European sites, avoidance and mitigation measures have been included as part of the Proposed Scheme to ensure that, in view of the European sites' conservation objectives, the Proposed Scheme will not adversely affect the integrity of the sites concerned.

4.4 Desktop Study

51 The desktop data sources used to inform the assessment presented in this report are as follows (accessed in October/November 2021):

- Online data available on European sites and on Natural Heritage Areas (NHAs) or proposed Natural Heritage Areas (pNHAs) from www.npws.ie[2], including conservation objectives documents;
- Online data records available on National Biodiversity Data Centre Database (NBDC Online Database 2021);
- Online data records made available via an NPWS data request (NPWS 2020);
- Information on the status of EU protected habitats and species in Ireland (National Parks & Wildlife Service, 2019a, 2019b and 2019c);
- Ordnance Survey Ireland (OSI) orthophotography for the Proposed Scheme study area available from www.osi.ie;

[2] The following SAC and SPA GIS boundary datasets are the most recently available at the time of writing: SAC_ITM_2021_10 and SPA_ITM_2021_10.

- Bus Connects drone imagery (surveyed 2020);
- Habitat and species GIS datasets provided by the NPWS, including Article 12 and Article 17 data[3];
- Records from the Botanical Society of Britain and Ireland (BSBI);
- Information contained within the Flora of County Dublin[4];
- Environmental information/data for the area available from the EPA website www.epa.ie;
- Information on the status of EU protected habitats and species in Ireland[5];
- Information on light-bellied brent goose inland feeding sites[6];
- The results of in person on-site ecological surveys undertaken as part of the Environmental Impact Assessment (EIA) studies for the Proposed Scheme (see Section 5 below for details); and
- Information on the location, nature and design of the Proposed Scheme.

4.5 Consultations

52 **Table 2** outlines the Appropriate Assessment issues raised during consultation.

[3] Article 17 of the EU Directive on the Conservation of habitats, Floras and Fauna (Habitats Directive) requires that all member states report to the European Commission every six years on the status and on the implementation of the measures taken under the Habitats Directive. In a similar manner, there is an obligation to report on the status and trends of bird species required under Article 12 of the Bird's Directive.

[4] Doogue, D., Nash, D., Parnell, J., Reynolds, S. & Wyse Jackson, P. (eds) (1998) *Flora of County Dublin.* The Dublin Naturalists' Field Club, Dublin

[5] NPWS (2019). The Status of EU Protected Habitats and Species in Ireland. Volume 1: Summary Overview. *Unpublished NPWS report*.

[6] Scott Cawley Ltd. (2017). Natura Impact Statement – Information for Stage 2 Appropriate Assessment for the Proposed Residential Development St. Paul's College, Sybill Hill, Raheny, Dublin 5.

Table 2 Appropriate Assessment Issues Raised During Consultation

Consultee	Phase / Date of Consultation	Issues Raised	Relevant Section of the NIS where the issues raised in consultation is addressed
Department of Housing, Local Government and Heritage (formerly Department of Culture, Heritage and the Gaeltacht	30/07/19 Ref. G Pre00165/2019	The Department recommend identification, description, and assessment of direct and indirect impacts of the Proposed Scheme on the following features: • Biodiversity in general and with specific attention to Natura 2000 sites. • Habitats and species protected under the Habitats Directive, such as Annex I habitats, Annex II species and their habitats, and Annex IV species and their breeding sites and resting places (wherever they occur), bird species protected under the Birds Directive, such as Annex I species and other regularly occurring migratory species, and their habitats (wherever they occur). • species and / or habitats listed in the Habitats Directive inside or outside of Natura 2000 sites be recorded. • Species protected under the Wildlife Act, including protected flora. • Important bird areas such as those identified by Birdwatch Ireland. • Features of the landscape which are of major importance as biodiversity corridors to wild flora or fauna, as referenced in Article 10 of the Habitats Directive.	Section 5.1 European sites, Section 3.6 Baseline, Section 7 Assessment of Effects on European sites
		Detailed bird surveys should be undertaken at all times of the year to establish areas of the Proposed Scheme used by birds should be included in the AA.	Section 3.6 Baseline, Section 7 Assessment of Effects on European Sites
		The Department requires that the Appropriate Assessment addresses the issue of invasive alien plant and animal species and include detailed methods to ensure accidental introduction or spreading does not occur. The Department recommended that an Invasive Species Action Plan should form part of the planning application.	Section 6.3 Habitat degradation as a result of introducing/spreading non-native invasive species. An ISMP has been drafted and can be found as an Appendix III to the NIS.
		Department recommended that the Cumulative impacts of the Proposed Scheme be considered, to include interaction between different and / or approved plans and projects in the same area as the Proposed Scheme.	Section 1 Introduction, 2 Legislative Context, 6.4 Disturbance and Displacement Impacts

Consultee	Phase / Date of Consultation	Issues Raised	Relevant Section of the NIS where the issues raised in consultation is addressed
		The Department recommended that the Proposed Scheme be subject to Appropriate Assessment in respect of potential to impact Natura 2000 sites either alone or in combination with other plans or projects, and must contain complete (contain no lacunae), precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the works proposed on the protected site concerned. To assess mitigations, the following tasks must be completed: • List each of the measures to be introduced (e.g., noise bunds, tree planting). • Explain how the measures will avoid the adverse impacts on the site. • Explain how the measures will reduce the adverse impacts on the site. Then, for each of the listed mitigation measures: • Provide evidence of how they will be secured and implemented and by whom. • Provide evidence of the degree of confidence in their likely success. • Provide a timescale, relative to the project or plan, when they will be implemented. Where residual impacts remain, further mitigation measures may be required: • Evidence should be provided of how mitigation measures will be monitored. • Monitoring should take place immediately down-stream of the Proposed Scheme. • The applicant should not use any proposed post construction monitoring as mitigation to supplement inadequate information in the assessment.	The Proposed Scheme has been subject to Screening for AA and the production of a Natura Impact statement, which accompanies the planning submission. Section 6 Potential Impacts, Zone of Influence and Identifying European Sites at Risk of Effects

4.6 Baseline Surveys

53 This section describes the methodologies followed for the ecological surveys undertaken to inform the assessment presented in this NIS.

4.6.1 *Habitats and Flora*

54 Habitat surveys were carried out by Scott Cawley between June and August 2018 along the Proposed Scheme alignment. Confirmatory surveys were subsequently undertaken on the Proposed Scheme in August 2020 to check and update the presence and extent of habitats found in the 2018 habitat surveys. Additional habitat surveys were carried out in March 2021 along new route sections added since 2018. All habitats located within or immediately adjacent to the Proposed Scheme footprint were surveyed and

mapped to level three of the Heritage Council's habitat codes, after Fossitt [7] and in accordance with *Best Practice Guidance for Habitat Survey and Mapping* [8]. The level of field data quality was also recorded. Plant species present that were either representative of a habitat or considered to be of conservation interest (i.e., those listed on the Flora Protection Order or listed in the 'threatened' category or higher on the Red List for vascular plants and bryophytes) were recorded, along with their relative abundances. Non-native invasive plant species listed on the Third Schedule of the 2011 Birds and Habitats Regulations were also recorded. Each habitat's extent was mapped onto an aerial photograph, with GPS points taken where a habitat's extent could not be clearly identified from the aerial photograph. Vascular plant nomenclature follows that of the *New Flora of the British Isles 4th Edition* [9].

55 A desk study was carried out to identify all hydrological crossing points within the footprint of the Proposed Scheme. No instream works are proposed and the desk study identified no sites where water bodies may be subject to significant disturbance as a consequence of the Proposed Scheme. As such, instream aquatic habitat surveys were not necessary.

4.6.2 *Fauna Surveys*

56 Ecological surveys relevant to the Proposed Scheme include habitat surveys, surveys for the presence or signs of terrestrial, mobile Annex II species (i.e., otter *Lutra lutra*), and surveys for Special Conservation Interest bird species. Fisheries surveys were not required for this assessment as the Proposed Scheme is not hydrologically connected to any European site designated for Annex II fish species or white-clawed crayfish. The nearest known European site designated for Salmon, River Lamprey and Brook Lamprey is the River Boyne and River Blackwater SAC, located approximately 34.7km north of the Proposed Scheme in the Boyne river catchment. The nearest known European site designated for white-clawed crayfish is the River Barrow and River Nore SAC, which is located approximately 51km south-west of the Proposed Scheme in the River Barrow catchment, River Nore catchment and River Ballyteigue-Bannow river catchment. There is no hydrological connectivity between the Proposed Scheme and these European sites.

4.6.3 *Otter*

57 The footprint of the Proposed Scheme and suitable lands e.g., greenfield sites immediately adjacent were surveyed for otter *Lutra lutra* activity as part of the multi-disciplinary walkover survey, undertaken between June and August 2018, and in August 2020 (See Figure 1 at the back of the report). The presence / absence of these species was surveyed through the detection of field signs such as tracks, markings, feeding signs, and droppings as well as by direct observation. In addition, the study area was surveyed for the presence of otter holts. Where present, any evidence of use was recorded.

58 A desk study was carried out to identify all hydrological crossing points within the footprint of the Proposed Scheme. No instream works are proposed and the desk study identified no site where water bodies may be subject to significant disturbance as a consequence of the Proposed Scheme. As such, separate otter suitability surveys were not necessary.

4.6.4 *Kingfisher*

59 A desk study was carried out to identify all hydrological crossing points within the footprint of the Proposed Scheme. No instream works are proposed and the desk study identified no sites where water bodies may

[7] Fossitt, J.A. (2000) *A Guide to Habitats in Ireland*. Heritage Council, Kilkenny.

[8] Smith, G.F., O'Donoghue, P., O'Hora, K. & Delaney, E. (2011) *Best Practice Guidance for Habitat Survey and Mapping. The Heritage Council Church Lane, Kilkenny, Ireland.*

[9] Stace, C. (2019) *New Flora of the British Isles. 4th Edition.* C&M Floristics

be subject to significant disturbance as a consequence of the Proposed Scheme. As such, kingfisher habitat suitability assessment surveys were not necessary.

4.6.5 *Other Birds*

60 The results of the desk-based study have informed the assessment of potential impacts on breeding bird species arising from the Proposed Scheme.

61 A desk study was carried out to identify any potential suitable inland feeding and / or roosting sites for winter birds located within or directly adjacent to the Proposed Scheme. This included a review of recent aerial photography and known inland feeding sites for the SCI bird species light-bellied brent goose (Scott Cawley Ltd., 2017).

62 The desk study identified three sites along or adjacent to the Proposed Scheme with potential for wintering birds that would be subject to direct habitat loss. This was located at lands opposite the Hilton Hotel at the junction of Malahide Road / R139 (Northern Cross) referred to as CBC0001WB001, Buttercup Park, immediately west of the Malahide Road, referred to as CBC0001WB002, and Maypark, immediately east of the Malahide Road, referred to as CBC0001WB003 (see Figure 2 at the back of the report).

63 A field survey was carried out to confirm the suitability or presence of wintering birds at CBC0001WB001. The survey found the lands to be unsuitable feeding and/or roosting sites for wintering birds, due to habitat conditions being dominated by scrub with mosaics of recolonising bare ground and subject to high levels of disturbance and dumping of household and construction waste. As such, it was not necessary to carry out further wintering bird surveys. The results of the desk-based study have informed the assessment of potential impacts on wintering bird species arising from the Proposed Scheme.

64 CBC0001WB002 and CBC0001WB003 are suitable for wintering birds and were surveyed twice a month, between the months November 2020 and March 2021. The results of the desk study and field surveys have informed the assessment of potential impacts on wintering bird species arising from the Proposed Scheme.

65 In general, the approach was a 'look-see' methodology (based on Gilbert *et al.* 1998). All birds present within a site were identified with reference to Collins Bird Guide (Svensson, 2009) to confirm identification (where necessary), and were recorded using the British Trust for Ornithology (BTO) species codes. The total flock size of birds present, their general location within the site and any activity exhibited were also recorded. Evidence of bird droppings were recorded at pre-defined transect lines. The length of the transect line varied per site. Transect lines were only completed at sites where no bird species were present, to avoid any potential disturbance.

5 Overview of the Receiving Environment

5.1 European Sites

66 The Proposed Scheme does not overlap with any European site. The nearest European Site to the Proposed Scheme is South Dublin Bay and Tolka Estuary SPA, located 0.5km east of the Proposed Scheme.

67 There are eight European Sites located in Dublin Bay which are hydrologically connected to the Proposed Scheme via the Santry_020, Wad River and existing pipes which discharge directly to the bay. These European Sites are: North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA, South Dublin Bay and River Tolka SPA, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC and Dalkey Island SPA.

68 The Proposed Scheme terminates at Mayne River Avenue, *c.* 300m south of the Mayne_010. The Proposed Scheme will be connected to the Mayne_010 via the existing surface water drainage network. There are two European sites located in the Mayne Estuary transitional waterbody that are downstream of the Proposed Scheme: Baldoyle Bay SAC and Baldoyle Bay SPA and have been included in the ZoI.

69 There are twelve SPAs designated for SCI species that are known to forage and / or roost at inland sites across Dublin City and / or utilise Dublin Bay. These are: Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA, Ireland's Eye SPA, Lambay Island SPA, Howth Head Coast SPA, Dalkey Islands SPA, Rockabill SPA, and The Murrough SPA.

70 In addition, Lambay Island SAC and Rockabill to Dalkey Island SAC are designated for mobile QI species known to utilise the Dublin Bay and the Mayne Estuary.

71 The European sites present in the vicinity of the Proposed Scheme are shown in Figure 4 at the back of the report and listed in **Table 3**, along with their qualifying interests and proximity to the Proposed Scheme.

Table 3 European sites in the vicinity of the Proposed Scheme

European Site Name [Code] and its Qualifying interest(s) / Special Conservation Interest(s) (*Priority Annex I Habitats)	**Location Relative to the Proposed Scheme Site (as the crow flies)**
Special Area of Conservation (SAC)	
North Dublin Bay SAC [000206] 1140 Mudflats and sandflats not covered by seawater at low tide 1210 Annual vegetation of drift lines 1310 *Salicornia* and other annuals colonising mud and sand 1330 Atlantic salt meadows *(Glauco-Puccinellietalia maritimae)* 1395 Petalwort *Petalophyllum ralfsii* 1410 Mediterranean salt meadows *(Juncetalia maritimi)* 2110 Embryonic shifting dunes 2120 Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) 2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)* 2190 Humid dune slacks *S.I. No. 524/2019 – European Union Habitats (North Dublin Bay Special Area of Conservation 000206) Regulations 2019* NPWS (2013) *Conservation Objectives: North Dublin Bay SAC 000206.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	approximately 2.7km south-east of the Proposed Scheme
South Dublin Bay SAC [000210] 1140 Mudflats and sandflats not covered by seawater at low tide 1210 Annual vegetation of drift lines 1310 *Salicornia* and other annuals colonising mud and sand 2110 Embryonic shifting dunes *S.I. No. 525/2019 – European Union Habitats (South Dublin Bay Special Area of Conservation 000210) Regulations 2019* NPWS (2013) *Conservation Objectives: South Dublin Bay SAC 000210.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	approximately 3.3km south-east of the Proposed Scheme

European Site Name [Code] and its Qualifying interest(s) / Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Scheme Site (as the crow flies)
Baldoyle Bay SAC [000199] 1140 Mudflats and sandflats not covered by seawater at low tide 1310 *Salicornia* and other annuals colonizing mud and sand 1330 Atlantic salt meadows *(Glauco-Puccinellietalia maritimae)* 1410 Mediterranean salt meadows *(Juncetalia maritimi)* *S.I. No. 472/2021 - European Union Habitats (Baldoyle Bay Special Area of Conservation 000199) Regulations 2021* NPWS (2012) *Conservation Objectives: Baldoyle Bay SAC 000199.* Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht	approximately 2.4km east of the Proposed Scheme
Malahide Estuary SAC [000205] 1140 Mudflats and sandflats not covered by seawater at low tide 1310 *Salicornia* and other annuals colonising mud and sand 1320 *Spartina* swards (Spartinion maritimae) 1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae) 1410 Mediterranean salt meadows (Juncetalia maritimi) 2120 Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) 2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)* *S.I. No. 91/2019 – European Union Habitats (Malahide Estuary Special Area Of Conservation 000205) Regulations 2019* NPWS (2013) *Conservation Objectives: Malahide Estuary SAC 000205.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	approximately 4.9km from the Proposed Scheme
Howth Head SAC [000202] 1230 Vegetated sea cliffs of the Atlantic and Baltic coasts 4030 European dry heaths *S.I. No. 524/2021 - European Union Habitats (Howth Head Special Area of Conservation 000202) Regulations 2021.* NPWS (2016) *Conservation Objectives: Howth Head SAC 000202.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.	approximately 6.4km from the Proposed Scheme
Rogerstown Estuary SAC [000208] 1130 Estuaries 1140 Mudflats and sandflats not covered by seawater at low tide 1310 Salicornia and other annuals colonising mud and sand 1330 Atlantic salt meadows *(Glauco-Puccinellietalia maritimae)* 1410 Mediterranean salt meadows *(Juncetalia maritimi)* 2120 Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) 2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)*	Approximately 10.2km from the Proposed Scheme

European Site Name [Code] and its Qualifying interest(s) / Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Scheme Site (as the crow flies)
S.I. No. 286/2018 – European Union Habitats (Rogerstown Estuary Special Area of Conservation 000208) Regulations 2018 NPWS (2013) *Conservation Objectives: Rogerstown Estuary SAC 000208*. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
Rockabill to Dalkey Island SAC [003000] 1170 Reefs 1351 Harbour porpoise *Phocoena phocaena* *S.I. No. 94/2019 – European Union Habitats (Rockabill To Dalkey Island Special Area Of Conservation 003000) Regulations 2019* NPWS (2013) *Conservation Objectives: Rockabill to Dalkey Island SAC 003000.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	Approximately 7.2km from the Proposed Scheme
Glenasmole Valley SAC [001209] 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) 6410 *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) 7220 Petrifying springs with tufa formation (Cratoneurion)* *S.I. No. 345/2021 – European Union Habitats (Glenasmole Valley Special Area of Conservation 001209) Regulations 2021* NPWS (2021) *Conservation objectives for Glenasmole Valley SAC 001209*. Generic Version 8.0. Department of Housing, Local Government and Heritage	approximately 14.8km from the Proposed Scheme
Ireland's Eye SAC [002193] 1220 Perennial vegetation of stony banks 1230 Vegetated sea cliffs of the Atlantic and Baltic coasts *S.I. No. 501/2017 – European Union Habitats (Ireland's Eye Special Area of Conservation 002193) Regulations 2017* NPWS (2017) *Conservation Objectives: Ireland's Eye SAC 002193.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.	Approximately 7.2km from the Proposed Scheme
Wicklow Mountains SAC [002122] 3110 Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) 3130 Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea 3160 Natural dystrophic lakes and ponds 4010 Northern Atlantic wet heaths with *Erica tetralix* 4030 European dry heaths 4060 Alpine and Boreal heaths 6130 Calaminarian grasslands of the Violetalia calaminariae 6230 Species-rich *Nardus* grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe)*	approximately 14.4km from the Proposed Scheme

European Site Name [Code] and its Qualifying interest(s) / Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Scheme Site (as the crow flies)
7130 Blanket bogs (* if active bog) 8110 Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) 8210 Calcareous rocky slopes with chasmophytic vegetation 8220 Siliceous rocky slopes with chasmophytic vegetation 91A0 Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles 1355 *Lutra lutra* (Otter) NPWS (2017) *Conservation Objectives: Wicklow Mountains SAC 002122.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.	
Lambay Island SAC [000204] 1170 Reefs 1230 Vegetated sea cliffs of the Atlantic and Baltic coasts 1364 Grey seal *Halichoerus grypus* 1365 Harbour seal *Phoca vitulina* *S.I. No. 294/2019 – European Union Habitats (Lambay Island Special Area Of Conservation 000204) Regulations 2019* NPWS (2013) *Conservation Objectives: Lambay Island SAC 000204. Version 1*. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	approximately 13.4km from the Proposed Scheme
Special Protection Area (SPA)	
North Bull Island SPA [004006] A046 Light-bellied Brent Goose *Branta bernicla hrota* A048 Shelduck *Tadorna tadorna* A052 Teal *Anas crecca* A054 Pintail *Anas acuta* A056 Shoveler *Anas clypeata* A130 Oystercatcher *Haematopus ostralegus* A140 Golden Plover *Pluvialis apricaria* A141 Grey Plover *Pluvialis squatarola* A143 Knot *Calidris canutus* A144 Sanderling *Calidris alba* A149 Dunlin *Calidris alpina* A156 Black-tailed Godwit *Limosa limosa* A157 Bar-tailed Godwit *Limosa lapponica* A160 Curlew *Numenius arquata* A162 Redshank *Tringa totanus* A169 Turnstone *Arenaria interpres* A179 Black-headed Gull *Chroicocephalus ridibundus* A999 Wetlands & Waterbirds	approximately 2.7km from the Proposed Scheme

European Site Name [Code] and its Qualifying interest(s) / Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Scheme Site (as the crow flies)
S.I. No. 211/2010 – European Communities (Conservation of Wild Birds (North Bull Island Special Protection Area 004006) Regulations 2010. NPWS (2015) *Conservation Objectives: North Bull Island SPA 004006.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
South Dublin Bay and River Tolka Estuary SPA [004024] A046 Light-bellied Brent Goose *Branta bernicla hrota* A130 Oystercatcher *Haematopus ostralegus* A137 Ringed Plover *Charadrius hiaticula* A141 Grey Plover *Pluvialis squatarola* A143 Knot *Calidris canutus* A144 Sanderling *Calidris alba* A149 Dunlin *Calidris alpina* A157 Bar-tailed Godwit *Limosa lapponica* A162 Redshank *Tringa totanus* A179 Black-headed Gull *Chroicocephalus ridibundus* A192 Roseate Tern *Sterna dougallii* A193 Common Tern *Sterna hirundo* A194 Arctic Tern *Sterna paradisaea* A999 Wetland and Waterbirds *S.I. No. 212/2010 – European Communities (Conservation of Wild Birds (South Dublin Bay and River Tolka Estuary Special Protection Area 004024) Regulations 2010.* NPWS (2015) *Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA 004024*. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	approximately 0.5km from the Proposed Scheme
Baldoyle Bay SPA [004016] A046 Light-bellied Brent Goose *Branta bernicla hrota* A048 Shelduck *Tadorna tadorna* A137 Ringed Plover *Charadrius hiaticula* A140 Golden Plover *Pluvialis apricaria* A141 Grey Plover *Pluvialis squatarola* A157 Bar-tailed Godwit *Limosa lapponica* A999 Wetland and Waterbirds *S.I. No. 275/2010 – European Communities (Conservation of Wild Birds (Baldoyle Bay Special Protection Area 004016) Regulations 2010.* NPWS (2013) *Conservation Objectives: Baldoyle Bay SPA 004016. Version 1.* National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	approximately 2.8km east of the Proposed Scheme

European Site Name [Code] and its Qualifying interest(s) / Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Scheme Site (as the crow flies)
Malahide Estuary SPA [004025] A005 Great Crested Grebe *Podiceps cristatus* A046 Light-bellied Brent Goose *Branta bernicla hrota* A048 Shelduck *Tadorna tadorna* A054 Pintail *Anas acuta* A067 Goldeneye *Bucephala clangula* A069 Red-breasted Merganser *Mergus serrator* A130 Oystercatcher *Haematopus ostralegus* A140 Golden Plover *Pluvialis apricaria* A141 Grey Plover *Pluvialis squatarola* A143 Knot *Calidris canutus* A149 Dunlin *Calidris alpina* A156 Black-tailed Godwit *Limosa limosa* A157 Bar-tailed Godwit *Limosa lapponica* A162 Redshank *Tringa totanus* A999 Wetland and Waterbirds *S.I. No. 285/2011 – European Communities (Conservation of Wild Birds (Malahide Estuary Special Protection Area 004025) Regulations 2011.* NPWS (2013) *Conservation Objectives: Malahide Estuary SPA 004025.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	approximately 5.5km from the Proposed Scheme
Wicklow Mountains SPA [004040] A098 Merlin *Falco columbarius* A103 Peregrine *Falco peregrinus* *S.I. No. 586/2012 – European Communities (Conservation of Wild Birds (Wicklow Mountains Special Protection Area 004040) Regulations 2012.* NPWS (2021) *Conservation objectives for Wicklow Mountains SPA [004040].* Generic Version 8.0. Department of Culture, Heritage and the Gaeltacht.	approximately 14.7km south-west of the Proposed Scheme
Ireland's Eye SPA [004117] A017 Cormorant *Phalacrocorax carbo* A184 Herring Gull *Larus argentatus* A188 Kittiwake *Rissa tridactyla* A199 Guillemot *Uria aalge* A200 Razorbill *Alca torda* *S.I. No. 240/2010 – European Communities (Conservation of Wild Birds (Ireland's Eye Special Protection Area 004117) Regulations 2010.* NPWS (2021) *Conservation objectives for Ireland's Eye SPA [004117].* Generic Version 8.0. Department of Culture, Heritage and the Gaeltacht.	approximately 7km north-east of the Proposed Scheme
Rogerstown Estuary SPA [004015] A043 Greylag Goose *Anser anser*	approximately 10.4km from the Proposed Scheme

European Site Name [Code] and its Qualifying interest(s) / Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Scheme Site (as the crow flies)
A046 Brent Goose *Branta bernicla hrota* A048 Shelduck *Tadorna tadorna* A056 Shoveler *Anas clypeata* A130 Oystercatcher *Haematopus ostralegus* A137 Ringed Plover *Charadrius hiaticula* A141 Grey Plover *Pluvialis squatarola* A143 Knot *Calidris canutus* A149 Dunlin *Calidris alpina* A156 Black-tailed Godwit *Limosa limosa* A162 Redshank *Tringa totanus* A999 Wetlands and Waterbirds *S.I. No. 271/2010 – European Communities (Conservation of Wild Birds (Rogerstown Estuary Special Protection Area 004015) Regulations 2010.* NPWS (2013) *Conservation Objectives: Rogerstown Estuary SPA 004015*. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
Howth Head Coast SPA [004113] A188 Kittiwake *Rissa tridactyla* *S.I. No. 185/2012 – European Communities (Conservation of Wild Birds (Howth Head Coast Special Protection Area 004113)) Regulations 2012.* NPWS (2021) *Conservation objectives for Howth Head Coast SPA [004113].* Generic Version 8.0. Department of Housing, Local Government and Heritage.	approximately 8.3km east of the Proposed Scheme
Dalkey Islands SPA [004172] A192 Roseate Tern *Sterna dougallii* A193 Common Tern *Sterna hirundo* A194 Arctic Tern *Sterna paradisaea* *S.I. No. 238/2010 – European Communities (Conservation of Wild Birds (Dalkey Islands Special Protection Area 004172)) Regulations 2010* NPWS (2021) *Conservation objectives for Dalkey Islands SPA [004172].* Generic Version 8.0. Department of Housing, Local Government and Heritage..	approximately 13.1km south-east of the Proposed Scheme
Lambay Island SPA [004069] A009 Fulmar *Fulmarus glacialis* A017 Cormorant *Phalacrocorax carbo* A018 Shag *Phalacrocorax aristotelis* A043 Greylag Goose *Anser anser* A183 Lesser Black-backed Gull *Larus fuscus* A184 Herring Gull *Larus argentatus* A188 Kittiwake *Rissa tridactyla* A199 Guillemot *Uria aalge* A200 Razorbill *Alca torda*	approximately 13.3km north-east of the Proposed Scheme

European Site Name [Code] and its Qualifying interest(s) / Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Scheme Site (as the crow flies)
A204 Puffin *Fratercula arctica* *S.I. No. 242/2010 – European Communities (Conservation of Wild Birds (Lambay Island Special Protection Area 004069)) Regulations 2010.* NPWS (2021) *Conservation objectives for Lambay Island SPA [004069].* Generic Version 8.0. Department of Housing, Local Government and Heritage..	
Skerries Islands SPA [004122] A017 Cormorant *Phalacrocorax carbo* A018 Shag *Phalacrocorax aristotelis* A046 Brent Goose *Branta bernicla hrota* A148 Purple Sandpiper *Calidris maritima* A169 Turnstone *Arenaria interpres* A184 Herring Gull *Larus argentatus* *S.I. No. 245/2010 – European Communities (Conservation of Wild Birds (Skerries Islands Special Protection Area 004122)) Regulations 2010.* NPWS (2021) *Conservation objectives for Skerries Islands SPA [004122].* Generic Version 8.0. Department of Housing, Local Government and Heritage.	approximately 19.2km north-east of the Proposed Scheme
Rockabill SPA [004014] A148 Purple Sandpiper *Calidris maritima* A192 Roseate Tern *Sterna dougallii* A193 Common Tern *Sterna hirundo* A194 Arctic Tern *Sterna paradisaea* *S.I. No. 94/2012 – European Communities (Conservation of Wild Birds (Rockabill Special Protection Area 004014) Regulations 2012.* NPWS (2013) Conservation Objectives: Rockabill SPA [004014]. Version 1. Department of Arts, Heritage and the Gaeltacht.	Approximately 19.7km north-east of the Proposed Scheme
The Murrough SPA [004186] A001 Red-throated Diver *Gavia stellata* A043 Greylag Goose *Anser anser* A046 Light-bellied Brent Goose *Branta bernicla hrota* A050 Wigeon *Anas penelope* A052 Teal *Anas crecca* A179 Black-headed Gull *Chroicocephalus ridibundus* A184 Herring Gull *Larus argentatus* A195 Little Tern *Sterna albifrons* A999 Wetlands and Waterbirds *S.I. No. 298/2011 – European Communities (Conservation of Wild Birds (The Murrough Special Protection Area 004186)) Regulations 2011.* NPWS (2021) *Conservation objectives for The Murrough SPA [004186].* Generic Version 8.0. Department of Housing, Local Government and Heritage.	approximately 31.4km south of the Proposed Scheme

5.1.1 *Habitats*

72 The Proposed Scheme is located in a highly urbanised environment. Habitats present in the footprint of the Proposed Scheme include the following:

- Flower beds and borders (BC4);
- Stone walls and other stonework (BL1);
- Buildings and artificial surfaces (BL3);
- Spoil and bare ground (ED2);
- Recolonising bare ground (ED3);
- Depositing / lowland rivers (FW2);
- Amenity Grassland (Improved) (GA2);
- Dry calcareous and neutral grassland (GS1);
- Residential;
- Scattered trees and parkland (WD5);
- Hedgerows (WL1);
- Treelines (WL2);
- Scrub (WS1); and
- Ornamental / non-native shrub (WS3).

5.1.2 *Flora and Fauna Species*

5.1.2.1 *Flora*

73 There were no areas of non-native invasive plant species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011 identified along or adjacent to the Proposed Scheme during field surveys. However, the desk study (Appendix IV) returned records of four species listed on the Third Schedule within 1km of the Proposed Scheme. These records include giant hogweed *Heracleum mantegazzianum* along the Santry_020 at Edenmore in 2009, Canadian waterweed *Elodea canadensis* along the Santry_020 at Cadburys in 2009, Japanese knotweed *Reynoutria japonica* at Philipsburgh Avenue Marino in 2018 and three-cornered garlic *Allium triquetrum* at Mount Temple in 2016. These species were not present within the footprint of the Proposed Scheme.

74 No records of any Annex II plant species were recorded within the footprint of the Proposed Scheme during field surveys.

5.1.2.2 *Otter*

75 The desk study found that otter are known to occur within 1km of the Proposed Scheme along the River Mayne and in the upper reaches of the Santry River [10] (Appendix IV).

[10] Macklin, R., Brazier, B. & Sleeman, P. (2019). *Dublin City otter survey. Report prepared by Triturus Environmental Ltd. for Dublin City Council as an action of the Dublin City Biodiversity Action Plan 2015- 2020.*

76 No signs of otter, an Annex II species, were recorded during surveys within the footprint of the Proposed Scheme.

77 The nearest European site for which this species is designated is the Wicklow Mountains SAC, which is located approximately 14.4km south of the Proposed Scheme. Otter territories are within the range of c. 7.5km for females and can reach up to 21 km for males via hydrological pathways (O' Neill *et al.*, 2009). The River Dodder and Liffey Estuary provide the key pathway to Wicklow Mountains SAC, whereas the Proposed Scheme will discharge into the Tolka Estuary. Wicklow Mountains SAC is located within a different sub-catchment (Dodder_SC_010) to the Proposed Scheme (Santry 10 Mayne_SC_010). As such, populations of otter within the footprint of the Proposed Scheme are not connected to the SAC population.

5.1.2.3 *Marine mammals*

78 The Proposed Scheme is hydrologically connected to Dublin Bay via direct pipes, the Santry_020, Wad River, Tolka Estuary, and North Bull Island and Mayne Estuary transitional water bodies via the Mayne_010. Harbour seal, grey seal, and harbour porpoise are known to be present in Dublin Bay and in the Mayne Estuary. Both seal species are listed on Annex II of the habitats directive and harbour porpoise are listed on Annex IV of the Habitats Directive. The nearest European site for which harbour seal and grey seal have been designated is Lambay Island SAC located approximately 12.2km from the Proposed Scheme. The nearest European site for which harbour porpoise has been designated is Rockabill to Dalkey Island SAC located approximately 5.5km from the Proposed Scheme.

5.1.2.1 *Kingfisher*

79 The desk study (see Appendix IV) found that kingfisher *Alcedo atthis*, an Annex I species, are known to occur within 1km of the Proposed Scheme and across the wider study area. In particular, a population of kingfisher are reported to be present along the Santry River[11].

80 Kingfisher were not recorded during multi-disciplinary surveys within the footprint of the Proposed Scheme.

81 The nearest European site for which this species is designated is River Boyne and River Blackwater SPA, which is located approximately 37.8km north of the Proposed Scheme. Kingfisher populations within close proximity to the Proposed Scheme are not SCI species.

5.1.2.2 *Other Birds*

82 The desk study returned records of three breeding and wintering SCI gull species within 300m of the Proposed Scheme which may use inland amenity grassland feeding sites including black-headed gull *Chroicocephalus ridibundus*, herring gull *Larus argentatus*, lesser black-backed gull *Larus fuscus* (see Appendix IV).

83 The desk study returned records of a total of 79 breeding bird species across the study area (i.e. Grid Squares O13, O23 and O24). Records included 10 species listed under Annex I of the Birds Directive and 39 SCI species. The desk study returned records of a total of 52 wintering bird species in the wider study area (i.e., Grid Squares O13 and O14). Records included four species listed under Annex I of the Birds Directive and 37 SCI species. The majority of wintering birds identified in the desk study are typically found in coastal, estuarine and intertidal habitats including the Tolka Estuary, North Bull Island transitional water body, Mayne Estuary and Dublin Bay. A desk-based review of lands within 300m of the Proposed Scheme returned records of eight SCI wintering bird species which may use inland amenity grassland feeding sites,

[11] DCC (2015) *Dublin City Biodiversity Action Plan 2015-2020.*

including light-bellied brent goose, lapwing, curlew, oystercatcher, black-tailed godwit, herring gull, black-headed gull and lesser-black-backed gull.

84 A total of nine wintering bird surveys were carried out for the Proposed Scheme at sites CBC0001WB002 and CBC0001WB003 between November 2020 and March 2021 on a fortnightly basis (see Figure 5 at the back of the report). Species identified included Black headed gull, herring gull, common gull, and light bellied brent geese. Wintering bird activity was low across all visits, with the exception of black-headed gull at Maypark (CBC0001WB003). **Table 4** provides a summary of the findings of the winter bird surveys with respect to those species which are of highest conservation concern and were recorded within winter bird survey sites.

Table 4 Wintering Birds of Conservation Concern Recorded at Sites CBC0001WB002 and CBC0001WB003 during the Wintering Bird Surveys

Common Name / Scientific Name / BTO Code	Site: Peak Count and Activity in the Study Area (Date)	Conservation Importance			Surveyor Observations outside of transect
		BoCCI (B – Breeding / W – Wintering)	Annex I	SCI	
Black-headed gull *Chroicocephalus ridibundus* (BH)	CBC0001WB002: three birds feeding on grassland along transect (28/01/2021) CBC0001WB003: 73 birds loafing on grassland next to transect (23/02/2021)	Amber (B/W)	-	✓	
Common gull *Larus canus* (CM)	CBC0001WB003: Six birds loafing on grassland of Maypark (23/02/2021)	Amber (B/W)	-	Not in ZoI	
Herring gull *Larus argentatus* (HG)	CBC0001WB002: 23 birds feeding on grass along transect (28/01/2021) CBC0001WB003: 13 birds feeding on grasslands within transect (01/12/20)	Amber (B/W)	-	✓	
Light-bellied brent goose *Branta bernicla* (BG)	Not recorded CBC0001WB002: Droppings noted (23/03/2021)	Amber (W)	-	✓	CBC0001WB002: +100 birds flying over grassland and transect (28/01/2021 & 23/02/21).

85 Site conditions at Buttercup Park (CBC0001WB002) and Maypark (CBC0001WB003) were characterised by well-maintained ground conditions managed through regular cutting, and high disturbance with regular vehicle and human presence. Light-bellied brent geese were not observed utilising CBC0001WB002, however were frequently observed flying over, to and from Dublin Bay.

86 Site conditions at Maypark (CBC0001WB003) were characterised by well-maintained ground conditions managed through regular cutting, and high disturbance with regular human presence. Light-bellied brent geese were not observed utilising CBC0001WB003, however two droppings were noted on one occasion. Light-bellied brent goose activity was observed on this site during the 2020/2021 survey period, two droppings were observed in the middle of the Gaelic pitch.

87 Wintering bird activity was low across all visits, with the exception of black-headed gull at Maypark (CBC0001WB003). **Table 5** compares peak counts identified across surveys to their national and international populations.

Table 5 Wintering Bird Species Recorded during Winter Bird Surveys in Comparison to the 1% of its International and National Populations

Common Name / Scientific Name / BTO Code	Associated European sites within the ZoI	1% of International Population	1% of National Population
Black-headed gull *Chroicocephalus ridibundus* (BH)	South Dublin Bay and River Tolka Estuary SPA; North Bull Island SPA; the Murrough SPA	31,000	n/a
Common gull *Larus canus* (CM)	-	16,400	n/a
Herring gull *Larus argentatus* (HG)	Ireland's Eye SPA; Lambay Island SPA; Skerries Islands SPA; The Murrough SPA	14,400	n/a
Light-bellied brent goose *Branta bernicla hrota* (BG)	South Dublin Bay and River Tolka Estuary SPA; North Bull Island SPA; Baldoyle Bay SPA; Malahide Estuary SPA; Rogerstown Estuary SPA; Skerries Islands SPA; The Murrough SPA	400	350

88 A review of a study into light-bellied brent goose inland feeding sites[12] has identified no known inland wintering bird feeding sites in the footprint of the Proposed Scheme. There are 11 known inland wintering bird feeding sites within approximately 300m of the Proposed Scheme i.e., the general construction works disturbance ZoI[13]. The known inland wintering bird feeding sites, along with their relative level of importance to the brent goose population (as assessed in 2017) and distances from the Proposed Scheme are as follows:

- Clontarf Golf Club (High Importance), adjacent to the Proposed Scheme;
- Marino/Ardscoil Ris (Major Importance), adjacent to the Proposed Scheme;
- Coolock/O'Toole's GAA (Major Importance), located approximately 14m from the Proposed Scheme;
- Coolock/Chanel College (Major Importance), located approximately 25m from the Proposed Scheme;
- Parnell Park (Moderate Importance), located approximately 89m from the Proposed Scheme;
- Ayrfield Park (High Importance), located approximately 117m from the Proposed Scheme;
- Fairview Park (Major Importance), located approximately 120m from the Proposed Scheme;
- Artane/St. David's College (Major Importance), located approximately 130m from the Proposed Scheme;

[12] *Major importance site 401+ geese; high importance site 51-400 geese; and moderate importance site 1-50 geese as defined by Benson's study in 2009.* Benson (2009) *Use of Inland Feeding Sites by Light-bellied Brent Geese in Dublin 2008-2009: A New Conservation Concern?* Irish Birds 8: 563-570.

[13] Cutts *et al*., (2009) and Wright *et al*., (2010).

- Coolock/Rathvale Drive (High Importance), located approximately 157m from the Proposed Scheme;
- Marino/Mount Temple School (Major Importance), located approximately 184m from the Proposed Scheme; and
- Donnycarney/St. Vincent's GAA (Major Importance), located approximately 299m from the Proposed Scheme.

5.1.3 *Hydrology*

89 The Proposed Scheme crosses two watercourses, the Santry_020, and the Wad River, both discharging into the Tolka Estuary, North Bull Island transitional water body, and Dublin Bay. Surface waters will also drain to Dublin Bay via existing drainage across the Proposed Scheme. Dublin Bay contains eight European sites: North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA, South Dublin Bay and River Tolka SPA, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC and Dalkey Island SPA. In the northern section, the Proposed Scheme terminates at Mayne River Avenue, approximately 300m south of the River Mayne. The Proposed Scheme is hydrologically connected to the Mayne_010 via existing surface water drainage and ultimately discharges into the Mayne Estuary containing Baldoyle Bay SAC and Baldoyle Bay SPA.

90 Details on the water quality of each watercourse, as sourced from the Environmental Protection Agency (EPA), and the distances from the proposed crossing point to downstream waterbodies are also provided in **Table 6** below.

Table 6 Water Quality of Watercourses/ Waterbodies in the vicinity of the Proposed Scheme

Watercourse	Location in relation to the Proposed Scheme	EPA Q-Values (Monitoring Station) and Water Framework Directive Water Quality Status / Risk Score	Name of and Distance to Downstream Waterbodies along with their associated Water Quality
Santry River (Santry_020)	One existing crossing point of the Santry River on the Malahide Road, south of Greencastle Road.	Q2-3 (Clonshaugh Road Bridge) Poor *'At risk'*	It flows for approximately 3km, from the crossing point at on the Malahide Road, until it reaches the North Bull Island transitional waterbody. (classified as "*Potentially Eutrophic*") near Watermill Road, which ultimately drains to Dublin Bay (classified as "*Unpolluted*").
Mayne River (Mayne_010)	Located approximately 300m north of the Proposed Scheme, where it flows under the Malahide Road at Belmayne.	Q2-3 (Hole in the Wall Road Bridge) Poor *'At risk'*	It flows for approximately 3km from its closest point at to the Proposed Scheme, until it reaches the Mayne Estuary transitional waterbody (classified as "*Eutrophic*") at the Coast Road, which ultimately drains to the Irish Sea Dublin coastal waterbody (classified as "*Unpolluted*").
Wad River	One existing crossing point at Malahide Road and Collins Road Junction	The Wad River is not a WFD assigned river, therefore has no risk status.	The Wad River is a culverted water body, for its entire length. It drains the area to the south of Dublin Airport and flows south and east before outfalling to the Tolka Estuary transitional water body at Clontarf. (classified as "*Potentially Eutrophic*") near Watermill Road, which ultimately drains to Dublin Bay (classified as "*Unpolluted*").
Tolka Estuary	Hydrologically connected to the Proposed Scheme via the Santry_020 and surface water drains	Q-value score N/A Moderate *'At Risk'*	Ultimately drains to Dublin Bay (classified as "*Unpolluted*").
North Bull Island	Hydrologically connected to the Proposed Scheme via the Santry_020, Wad River, and surface water drains	Q-value score N/A Unassigned Status	Ultimately drains to Dublin Bay (classified as "*Unpolluted*").
Mayne Estuary	Hydrologically connected to the Proposed Scheme via the Mayne_010	Q-value score N/A Unassigned Status	N/A
Dublin Bay	Hydrologically connected to the Proposed Scheme via the Santry_020, Wad River, Tolka Estuary and North Bull Island transitional water bodies.	Q-value score N/A Good *'Not at Risk'*	N/A

5.1.4 *Hydrogeology*

91 Geological Survey of Ireland (GSI) data indicates that the bedrock formation 1:500k in the Proposed Scheme is "*Dark-grey argillaceous & cherty limestone and shale (Calp)"* in the southern section (south of Chanel

Road in Artane) and *"Marine shelf & ramp facies; Argillaceous dark-grey bioclastic limestone, subsidiary shale"* in the northern section (north of Chanel Road in Artane).

92 The Proposed Scheme transverses one groundwater body. Environmental data sourced from the EPA for this groundwater body is presented below:

Dublin Groundwater body

- For the majority of this area, it is considered to be of "*Good*" Groundwater body WFD Status (2010-2015) and "*not at risk*" of failing the WFD groundwater quality objectives for the majority of its area; and
- The aquifers located within this groundwater body and where the Proposed Scheme transverses are classified as "*locally important aquifer – moderately productive only in local zones*" and *"poor aquifer – bedrock which is generally unproductive except for local zones".*

The vulnerability of the Dublin groundwater body to human activities ranges from "*High*", "*Moderate*" to "*Low*" within the footprint of the Proposed Scheme.

5.1.5 *Soils & Geology*

93 The 1:100,000 GSI bedrock geology map of the area indicates that the underlying bedrock along the Proposed Scheme comprises the Lucan Formation- (Calp) dark limestone and shale, the Tober Colleen formation- Calcareous shale, limestone conglomerate and the Malahide formation- Argillaceous bioclastic limestone, shale. The GSI Quaternary subsoils map[14] shows the footprint of the Proposed Scheme is predominantly underlain by made ground, deep and shallow well drained mineral (Mainly Basic) and poorly drained mineral (Mainly Basic) soils. Areas of alluvium are present along the River Mayne and the Santry River.

6 Potential Impacts, Zone of Influence and Identifying European Sites at Risk of Effects

94 Considering the baseline and receiving ecological environment and the nature and characteristics of the Proposed Scheme the following potential impacts have been identified:

- Habitat loss and fragmentation;
- Habitat degradation/effects on QI/SCI species as a result of hydrological impacts;
- Habitat degradation as a result of hydrogeological impacts;
- Habitat degradation as a result of introducing/spreading non-native invasive species;
- Habitat degradation as a result of air quality impacts; and
- Disturbance and displacement impacts.

6.1 Habitat loss and fragmentation

95 The Proposed Scheme does not overlap with any European sites and the nearest European sites with a direct hydrological connection to the Proposed Scheme are North Dublin Bay SAC and North Bull Island SPA which are both located approximately 3km downstream of the proposed crossing point of the Santry_020.

[14] GSI (2016a). Quaternary geology of Ireland – Sediments Map. [Online] Available from https://secure.dccae.gov.ie/arcgis/rest/services/Quaternary/QuaternarySediments16/MapServer

96 Special Conservation Interest (SCI) for which SPAs in the vicinity of the Proposed Scheme have been designated for, are known to utilise *ex situ* feeding sites in the Dublin area (i.e., Malahide Estuary SPA, Baldoyle Bay SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA and The Murrough SPA). A number of potential inland feeding sites within the footprint of the Proposed Scheme were surveyed to inform this assessment: these were located at lands opposite the Hilton Hotel at the junction of Malahide Road/ R135 (referred to as CBC0001WB001), Buttercup Park (referred to as CBC0001WB002), and Maypark (referred to as CBC0001WB003). Of these, Buttercup Park and Maypark were found to support SCI species. The Proposed Scheme will result in the temporary loss of 0.81ha of GA2 habitat suitable to support breeding gull and wintering bird species at the Proposed Buttercup Park compound (referred to as CBC0001WB002), a permanent loss of 0.02ha of suitable GA2 habitat at the proposed Maypark footpath, and a temporary loss of 0.7ha of suitable GA2 habitat at Maypark to facilitate boundary works.

97 In summary therefore, there is potential for impacts on SCI species associated with SPAs to occur as a result of habitat loss/ fragmentation.

The ZoI of this impact is potentially any habitat area within or traversed by the proposed development boundary that lies either within/ immediately adjacent to Dublin Bay or those potential ex-situ sites supporting SCI listed bird species of Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA and The Murrough SPA.

6.2 Habitat degradation/effects on QI/SCI species as a result of hydrological impacts

98 The Proposed Scheme is hydrologically connected to Dublin Bay and the Mayne Estuary via the Santry_020, Mayne_010, Wad River and existing pipes which drain to Dublin Bay and the Mayne Estuary. The release of contaminated surface water runoff and/or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a potential pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and/or leaks of containments into receiving waters. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge point and therefore impact the downstream environment, i.e., in Dublin Bay and the Mayne Estuary, including the following European sites: Baldoyle Bay SAC, North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Rockabill to Dalkey Island SAC, Baldoyle Bay SPA, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA and Dalkey Islands SPA. This reduction in water quality (either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within these European sites, which in turn would negatively affect the SCI bird species that rely upon these habitats as foraging and/or roosting habitat. It could also negatively affect the quantity and quality of prey available to SCI bird species. These potential impacts could occur to such a degree that the conservation objectives of Baldoyle Bay SAC, North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Rockabill to Dalkey Island SAC, Baldoyle Bay SPA, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA and Dalkey Islands SPA are undermined.

99 In a potential worst case scenario, in the absence of mitigation measures, the release of contaminated surface water runoff and/or an accidental spillage or pollution event into any surface water features during construction, or operation, also has the potential to affect mobile SCI bird species and QI mammal species that commute, forage and loaf in Dublin Bay i.e., birds associated with Skerries Islands SPA, Rockabill SPA and Lambay Island SPA, Baldoyle Bay SPA, Ireland's Eye SPA, North Dublin Bay SPA, South Dublin Bay and River Tolka Estuary SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Howth Head Coast SPA, Dalkey Islands SPA, The Murrough SPA and, marine mammals associated with Rockabill to Dalkey Island SAC and

Lambay Island SAC. This reduction in water quality (either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within downstream European sites, which in turn would negatively affect the SCI bird species that rely upon these habitats as foraging and/or roosting habitat. It could also negatively affect the quantity and quality of prey available to SCI and QI populations.

The ZoI of this impact is any wetland, coastal or marine habitat downstream of any watercourse crossings or drainage outfalls, and any aquatic/marine species therein and includes Baldoyle Bay SAC, North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Ireland's Eye SPA, North Dublin Bay SPA, South Dublin Bay and River Tolka Estuary SPA, Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Dalkey Islands SPA, The Murrough SPA, Rockabill to Dalkey Island SAC and Lambay Island SAC.

6.3 Habitat degradation as a result of hydrogeological impacts

100 Groundwater levels in groundwater dependant habitats may be impacted by the removal of a proportion of an aquifer or dewatering activities associated with excavations which can lead to a temporary change in groundwater levels and flow within the aquifer. Likewise, the mobilisation of contaminants into the aquifer either through accidental spillage or disturbance of contaminated ground during excavation may reduce the quality of the groundwater within the aquifer, also resulting in the degradation of groundwater dependent terrestrial ecosystem and any species that they may support.

101 The underlying aquifers are either Locally Important Bedrock Aquifer, Moderately Productive only in Local Zones or Poor Bedrock Aquifer, Moderately Productive only in Local Zones. These types of aquifers are associated with low permeability which decreases with depth. An upper shallow zone of higher permeability may exist in the top few meters and is associated with relatively short flow paths. Therefore any influence on the groundwater as a result of the proposed works will be localised a will not extend to any groundwater dependant habitats which are all located over 400m from any proposed work. The unmitigated hydrogeological ZoI of the Proposed Scheme does not extend to any groundwater dependent terrestrial ecosystems linked to European sites. This ZoI is determined by the professional judgement of the hydrogeology specialists.

102 In summary therefore the Proposed Scheme does not have the potential to result in habitat degradation of the qualifying/special conservation interest species of any European site as the result of hydrogeological impacts.

6.4 Habitat degradation as a result of introducing/spreading non-native invasive species

103 No non-native invasive plant species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011 were recorded within, or in close proximity to, the Proposed Scheme. However, there were records of invasive species in the vicinity of the Proposed Scheme returned from the desk study. Therefore, there is potential for invasive species to spread or be introduced, during construction and/or routine maintenance/management works, to terrestrial habitat areas in European sites downstream in Dublin Bay via the Santry _020 and / or Wad River (i.e., North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA). The introduction and/or spread of these invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat. This in turn could undermine the conservation objectives of these European sites.

104 It is not considered possible that invasive species could spread to European sites which are located a significant distance from the outfall locations of the Santry_020 and Wad River, or the potential outfall locations of the pipes that drain to Dublin Bay (i.e., Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Dalkey Islands SPA).

The ZoI of this impact is potentially any habitats crossed by, immediately adjacent to, or downstream of the Proposed Scheme or along any of the proposed construction routes are at risk from contaminated soil/material and includes European sites associated with Dublin Bay i.e. North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA

6.5 Habitat degradation as a result of air quality impacts

105 A reduction in air quality within the immediate vicinity of the construction works may occur as a consequence of dust deposition associated with these construction activities. This includes reduction in photosynthesis due to smothering from dust on the plants and chemical changes such as acidity to soils. Furthermore, emissions from car exhausts, and the deposition of particulate matter and heavy metals produced by engine, brake and tyre wear, can contribute to increased deposition of pollutants such as oxides of nitrogen (NOx, NOs), volatile organic compounds (VOCs), particulate matter (PM), heavy metals (HM) and ammonia (NH4) in the vicinity of a road carriageway. This can affect the ecosystems and vegetation present, influencing plant growth rates and species composition, diversity, and abundance.

106 The unmitigated ZoI for air quality effects arising from the Proposed Scheme has the potential to extend 50m from the Proposed Scheme boundary, and 500m from construction compounds during the construction phase, and up to 200m the Proposed Scheme boundary during the operational phase. There are no European sites present within these distances.

107 A change in AADT (Annual Average Daily Traffic) flows greater than 1,000 is predicted to occur on Clontarf Road where cars will be redirected onto the local road network once the Proposed Scheme is in operation. This lies adjacent to South Dublin Bay and River Tolka Estuary SPA. As such the Proposed Scheme has the potential to result in habitat degradation of the qualifying / special conservation interest species / habitats of South Dublin Bay and River Tolka Estuary SPA during the Operational Phase of the Proposed Scheme. South Dublin Bay SAC is outside of the air quality impact zone of influence.

The ZoI of this impact is 50m from the Proposed Scheme boundary and 500m from construction compounds during the construction phase for dust deposition and within 200m of the Proposed Scheme boundary during operation. The ZoI also extends 200m from roads where a change in AADT (Annual Average Daily Traffic) flows greater than 1,000 is predicted to occur as a result of the Proposed Scheme. There is one European site within this ZoI, namely South Dublin Bay and River Tolka Estuary SPA.

6.6 Disturbance and displacement impacts

108 A temporary and/or permanent increase in noise, vibration and/or human activity levels during the construction of the Proposed Scheme could result in the disturbance to and/or displacement of fauna species present within the vicinity of the Proposed Scheme. For mammal species such as otter, disturbance

effects would not be expected to extend beyond 150m[15]. For wintering birds, disturbance effects would not be expected to extend beyond a distance of approximately 300m[16], as noise levels associated with general construction activities would attenuate to close to background levels at that distance. There are no European sites within the disturbance ZoI of the Proposed Scheme.

109 Although no signs of otter were recorded during field surveys of the Proposed Scheme, the Santry_020 is known to support otter, an Annex II and IV mammal species. The nearest SAC to the Proposed Scheme site for which otter has been designated is Wicklow Mountains SAC which is located approximately 14.4km south. Research carried out by Ó Néill *et al.* (2008) on ranging behaviours of otter on river systems in Ireland found that female otter ranges averaged 7.5km while male otter home ranges varied between 7-19km. While the Proposed Scheme is within the potential home range of male otter, the Proposed Scheme is located in a different catchment to the Wicklow Mountains SAC, therefore, any otter present in the vicinity of the Proposed Scheme are not associated with the QI populations of any European site.

110 Although no signs of kingfisher were recorded during field surveys of the Proposed Scheme, kingfisher, an Annex I bird species, are known to be present along the Santry_020. Any kingfisher populations which are present in the vicinity of the Proposed Scheme are not considered to be associated with the SCI populations of any European site. Kingfisher territories can extend over approximately 3-5km of a river catchment[17]. The nearest SPA for which kingfisher has been designated is the River Boyne and Blackwater SPA which is located in a separate catchment approximately 37.8km away, therefore, any kingfisher present in the vicinity of the Proposed Scheme are not associated with an SPA population.

111 There are a number of SPAs which are designated for SCI species that are known to forage and/or roost at inland sites across Dublin, such as amenity grassland playing pitches (i.e., Malahide Estuary SPA, Baldoyle Bay SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA and The Murrough SPA). These species include light-bellied brent goose, curlew, oystercatcher, black-tailed godwit, blacked-headed gull, herring gull and lesser black-backed gull. Suitable inland foraging/roosting sites, which these bird species utilise, are located within the potential ZoI of the Proposed Scheme (See Section 3.2.3 above).

112 In summary therefore the Proposed Scheme has the potential to result in the disturbance/displacement of the qualifying/special conservation interest species of European sites.

The ZoI for disturbance associated with general construction activities for mammal species such as otter, is 150m, while for wintering birds, disturbance effects would not be expected to extend beyond a distance of approximately 300m. There are no European sites within the disturbance ZoI of the Proposed Scheme however SCI species are known to forage and/or roost within this ZoI.

[15] This is consistent with Transport Infrastructure Ireland (TII) guidance (Guidelines for the Treatment of Otters prior to the Construction of National Road Schemes) documents. This is a precautionary distance, and likely to be moderated by the screening effect provided by surrounding vegetation and buildings, with the actual ZoI of construction related disturbance likely to be much less in reality.

[16] Current understanding of construction related noise disturbance to wintering waterbirds is based on the research presented in Cutts *et al*. (2009) and Wright *et al*. (2010). In terms of construction noise, levels below 50dB would not be expected to result in any response from foraging or roosting birds. Noise levels between 50dB and 70dB would provoke a moderate effect/level of response from birds, i.e., birds becoming alert and some behavioural changes (e.g. reduced feeding activity), but birds would be expected to habituate to noise levels within this range. Noise levels above 70dB would likely result in birds moving out of the affected zone, or leaving the site altogether. At c. 300m, typical noise levels associated with construction activity (BS 5228) are generally below 60dB or, in most cases, are approaching the 50dB threshold.

[17] RSPB. *Kingfisher breeding, feeding and territory webpage.* Available from: https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/kingfisher/breeding-feeding-territory/

6.7 Summary

113 The potential impacts associated with the Proposed Scheme have the possibility to affect the receiving environment and, as a result, the conservation objectives supporting the qualifying interest/special conservation interests of the following European sites: North Dublin Bay SAC, South Dublin Bay SAC, Baldoyle Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA and Dalkey Islands SPA, Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Rockabill SPA, Ireland's Eye SPA, Lambay Island SPA and The Murrough SPA.

114 The potential impacts of the Proposed Scheme on the receiving environment, their zone of influence, and the European sites at risk of likely significant effects are summarised in **Table 7** below.

Table 7 Summary of the potential impacts of the Proposed Scheme on the receiving environment, their potential zone of influence, and the European sites within the zone of influence

Potential Direct, Indirect In Combination Effects and the ZoI of the Potential Effects	Are there any European sites within the ZoI of the Proposed Scheme?
Habitat loss No European sites are at risk of direct habitat loss impacts. There is potential for loss of *ex situ* inland feeding sites used by SCI bird species.	Yes There are European sites at risk of *ex-situ* habitat losses: Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA.
Habitat degradation/ effects on QI/SCI species as a result of hydrological impacts Habitats and species downstream of the Proposed Scheme and the associated surface water drainage discharge points, and downstream of offsite wastewater treatment plants.	Yes There are European sites at risk of hydrological effects associated with the Proposed Scheme: North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Dalkey Islands SPA and The Murrough SPA.
Habitat degradation as a result of hydrogeological impacts Groundwater-dependant habitats, and the species those habitats support, in the local area that lie downgradient of the Proposed Scheme.	No There are no European sites at risk of hydrogeological effects associated with the Proposed Scheme
Habitat degradation as a result of introducing/spreading non-native invasive species Habitat areas within, adjacent to, and potentially downstream of the Proposed Scheme.	Yes Although no non-native invasive species were recorded during field surveys, there are records of non-native invasive species present within or adjacent to the Proposed Scheme and, therefore, a risk associated with the Proposed Scheme to downstream European sites from the

Potential Direct, Indirect In Combination Effects and the ZoI of the Potential Effects	Are there any European sites within the ZoI of the Proposed Scheme?
	spread/introduction of non-native invasive species to: North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA
Air quality impacts Potentially up to 200m from the Proposed Scheme boundary. Indirect impact via a significant change in AADT (Annual Average Daily Traffic) flows is predicted to occur on Clontarf Road where cars will be redirected once the Proposed Scheme is in operation.	Yes Although no European sites lie within 200m of the Proposed Scheme, South Dublin Bay and River Tolka Estuary SPA will be adjacent to Clontarf Road at risk of increased traffic flows.
Disturbance and displacement impacts Potentially up to several hundred metres from the Proposed Scheme, dependent upon the predicted levels of noise, vibration and visual disturbance associated with the Proposed Scheme, taking into account the sensitivity of the qualifying interest species to disturbance effects	Yes There are no European sites within the potential zone of influence of disturbance effects associated with the construction or operation of the Proposed Scheme. However, there are *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA.

7 Assessment of Potential Effects on European Sites

115 This section of the NIS assesses the direct and indirect impacts of the Proposed Scheme on the European sites which fall within its zone of influence. For each of these European sites, the assessment below sets out the relevant ecological baseline information, the analysis of the potential impacts, the qualifying interests/special conservation interests at risk of these potential impacts, in view of the sites' conservation objectives, and the mitigation measures (if required) to avoid/reduce the effects of any potential impacts.

116 European sites have been grouped in the sub-sections below where the impact pathways, European sites' sensitivities, and potential effects are identical.

117 The assessment of the Proposed Scheme in combination with any other plans or projects on European sites is presented in Section 8.

7.1 North Dublin Bay SAC [000206] & South Dublin Bay SAC [000210]

7.1.1 *Ecological Baseline Description for North Dublin Bay SAC & South Dublin Bay SAC*

North Dublin Bay SAC

118 The Natura 2000 Standard Data Form (NPWS, 2018a) lists the SAC as having an excellent diversity of coastal habitats. The dune system is one of the most important systems on the east coast, one of few in Ireland that is actively accreting. Saltmarsh habitat is well represented at the site with particularly good zonation evident. Of note is the occurrence of Petalwort, a QI, its only known location away from the western

seaboard. Threats to the site include pollution from Dublin Port, commercial bait digging, recreational activities and water abstraction by golf clubs.

South Dublin Bay SAC

119 According to the Natura 2000 standard data form for South Dublin Bay SAC (NPWS, 2018b), the European site possesses a fine and fairly extensive example of intertidal flats, mudflats and sandflats not covered by seawater at low tide [1140]. Sediment type is predominantly sand, with muddy sands in the more sheltered areas and a typical macro-invertebrate fauna exists. The largest stand of *Zostera* on the east coast is located at Merrion Gates. The site supports internationally important numbers of wintering waterfowl, including light-bellied brent geese which feed on *Zostera*. South Dublin Bay SAC also supports small areas of annual vegetation of drift lines [1210], *Salicornia* and other annuals colonising mud and sand [1310] and embryonic shifting dunes [2110]. Given Dublin Bay's proximity to a major population centre, recreational activities and disturbance on land and at sea is an existing pressure on habitats within the European site. Additional pressures and threats include reclamation of land, industrial or commercial areas e.g. Dublin Port, bait digging, marine water pollution, discharges and disposal of wastes, and accumulation of organic materials.

7.1.2 *Qualifying Interests and Conservation Objectives of North Dublin Bay SAC & South Dublin Bay SAC*

120 The qualifying interests of North Dublin Bay SAC and South Dublin Bay SAC, and the overall conservation objectives, are listed below in **Table 8**.

Table 8 Qualifying Interests and Conservation Objectives of North Dublin Bay SAC & South Dublin Bay SAC

Qualifying Interest(s)	Conservation Objective(s)
North Dublin Bay SAC [000206] 1140 Mudflats and sandflats not covered by seawater at low tide 1210 Annual vegetation of drift lines 1310 *Salicornia* and other annuals colonising mud and sand 1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae) 1395 Petalwort *Petalophyllum ralfsii* 1410 Mediterranean salt meadows (Juncetalia maritimi) 2110 Embryonic shifting dunes 2120 Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) 2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)* 2190 Humid dune slacks *S.I. No. 524/2019 – European Union Habitats (North Dublin Bay Special Area of Conservation 000206) Regulations 2019* NPWS (2013) *Conservation Objectives: North Dublin Bay SAC 000206.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	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
South Dublin Bay SAC [000210] 1140 Mudflats and sandflats not covered by seawater at low tide 1210 Annual vegetation of drift lines	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

Qualifying Interest(s)	Conservation Objective(s)
1310 *Salicornia* and other annuals colonising mud and sand 2110 Embryonic shifting dunes *S.I. No. 525/2019 – European Union Habitats (South Dublin Bay Special Area of Conservation 000210) Regulations 2019* NPWS (2013) *Conservation Objectives: South Dublin Bay SAC 000210.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	

121 In conjunction with considering the generic conservation objective for these SACs "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", the site specific conservation objectives document for North Dublin Bay SAC and South Dublin Bay SAC also informed this assessment.

122 The site specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the qualifying interests within the European site. Affecting the conservation condition of the qualifying interests/special conservation interests would constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the qualifying interests of North Dublin Bay SAC and South Dublin Bay SAC are presented in Section 7.1.3.3.

7.1.3 *Examination and Analysis of Potential Direct and Indirect Impacts*

123 The direct and/or indirect impacts by which the Proposed Scheme could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the qualifying interests of North Dublin Bay SAC and South Dublin Bay SAC, are:

- Habitat degradation/effects on QI/SCI species as a result of hydrological impacts; and
- Habitat degradation as a result of introducing/spreading non-native invasive species.

7.1.3.1 Habitat degradation/effects on QI/SCI species as a result of hydrological impacts

124 The release of contaminated surface water runoff and/or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and/or leaks of contaminants into receiving waters. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme is hydrologically connected to Dublin Bay via the Santry_020 and existing surface water pipes which drain directly to Dublin Bay. Therefore, there is potential for the Proposed Scheme to result in significant effects which could have implications for the conservation objectives of North Dublin Bay SAC and South Dublin Bay SAC as a result of hydrological impacts.

7.1.3.2 Habitat degradation as a result of introducing/spreading non-native invasive species

125 No non-native invasive plant species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011 were recorded within, or in close proximity to, the Proposed Scheme. However, there were records of invasive species in the vicinity of the Proposed Scheme returned from the desk study. During construction and/or routine maintenance/management work, these species could potentially spread or be introduced to terrestrial habitats located within downstream European sites via surface water features. The introduction and/or spread of these invasive species to downstream European

sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat. This in turn could undermine the conservation objectives of these European sites. The Proposed Scheme is hydrologically connected to Dublin Bay via the Santry_020, the Wad River, and existing pipes which drain to Dublin Bay. Therefore, there is potential for the Proposed Scheme to result in significant effects which could have implications for the conservation objectives of North Dublin Bay SAC and South Dublin Bay SAC as a result of invasive species spread.

7.1.3.3 Summary

126 **Table 9** below presents a summary of the potential impacts and effects of the Proposed Scheme on the qualifying interests and conservation objectives of North Dublin Bay SAC and South Dublin Bay SAC.

Table 9 Potential Impacts/Effects on the Conservation Objectives of North Dublin Bay SAC and South Dublin Bay SAC

Conservation Objectives Attribute/Measure/Target	**Potential Impacts Requiring Mitigation?**	**Are mitigation measures required?**
North Dublin Bay SAC		
Mudflats and sandflats not covered by water at low tide [1140] To maintain the favourable conservation condition of the habitat in the SAC, which is defined as follows:		
Habitat area / Hectares / The permanent habitat area is stable or increasing, subject to natural processes	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could affect the quality of the intertidal habitats and the fauna communities they support. The introduction and/or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment. See the relevant mitigation measures described in Section 7.1.4 to prevent the introduction and/or spread of invasive species.
Community extent / Hectares / Maintain the extent of the *Mytilus edulis*-dominated community, subject to natural processes		
Community structure: *Mytilus edulis* density / Individuals/m^2 / Conserve the high quality of the *Mytilus edulis* dominated community, subject to natural processes		
Community distribution / Hectares / Conserve the following community types in a natural condition: Fine sand to sandy mud with *Pygospio elegans* and *Crangon crangon* community complex; Fine sand with *Spio martinensis* community complex		

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Annual Vegetation of drift lines [1210] To restore the favourable conservation condition of the habitat in the SAC, which is defined as follows:		
Habitat area / Hectares / Area increasing, subject to natural processes, including erosion and succession	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could affect the quality of the intertidal habitats and the fauna communities they support. The introduction and/or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.	See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment. See the relevant mitigation measures described in Section 7.1.4 to prevent the introduction and/or spread of invasive species.
Habitat distribution / Occurrence / No decline, or change in habitat distribution, subject to natural processes		
Physical structure: functionality and sediment supply / Presence/ absence of physical barriers / Maintain the natural circulation of sediment and organic matter, without any physical obstructions		
Vegetation structure: zonation / Occurrence / Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession		
Vegetation composition: typical species and sub-communities / Percentage cover at a representative number of monitoring stops / Maintain the presence of species-poor communities with typical species: sea rocket (*Cakile maritima*), sea sandwort (*Honckenya peploides*), prickly saltwort (*Salsola kali*) and oraches (*Atriplex* spp.)		
Vegetation composition: negative indicator species / Percentage cover / Negative indicator species (including non-natives) to represent less than 5% cover		
***Salicornia* and other annuals colonising mud and sand [1310]** To restore the favourable conservation condition of the habitat in the SAC, which is defined as follows:		

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Habitat area / Hectares / Area stable or increasing, subject to natural processes, including erosion and succession	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could affect the quality of the intertidal habitats and the fauna communities they support. The introduction and/or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.	See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment. See the relevant mitigation measures described in Section 7.1.4 to prevent the introduction and/or spread of invasive species.
Habitat distribution / Occurrence / No decline, or change in habitat distribution, subject to natural processes		
Physical structure: sediment supply / Presence/ absence of physical barriers Maintain, or where necessary restore, natural circulation of sediments and organic matter, without any physical obstructions		
Physical structure: creeks and pans / Occurrence / Maintain creek and pan structure, subject to natural processes, including erosion and succession		
Physical structure: flooding regime / Hectares flooded; frequency / Maintain natural tidal regime		
Vegetation structure: zonation / Occurrence / Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession		
Vegetation structure: vegetation height / Centimetres / Maintain structural variation within sward		
Vegetation structure: vegetation cover / Percentage cover at a representative number of monitoring stops / Maintain more than 90% of area outside creeks vegetated		
Vegetation composition: typical species and subcommunities / Percentage cover / Maintain the presence of species-poor communities listed in SMP (McCorry and Ryle, 2009)		
Vegetation structure: negative indicator species – *Spartina anglica* / Hectares / No significant expansion of common cordgrass (*Spartina anglica*), with an annual spread of less than 1%		

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Atlantic salt meadows (Glauco-Puccinellietalia maritimae*)* [1330] To maintain the favourable conservation condition of the habitat in the SAC, which is defined as follows:		
Habitat area / Hectares / Area stable or increasing, subject to natural processes, including erosion and succession	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could affect the quality of the intertidal habitats and the fauna communities they support. The introduction and/or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment. See the relevant mitigation measures described in Section 7.1.4 to prevent the introduction and/or spread of invasive species.
Habitat distribution / Occurrence / No decline, or change in habitat distribution, subject to natural processes		
Physical structure: sediment supplyPresence/ absence of physical barriers / Maintain natural circulation of sediments and organic matter, without any physical obstructions		
Physical structure: creeks and pans / Occurrence / Maintain creek and pan structure, subject to natural processes, including erosion and succession		
Physical structure: flooding regime / Hectares flooded; frequency / Maintain natural tidal regime		
Vegetation structure: zonation / Occurrence / Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession		
Vegetation structure: vegetation height / Centimetres / Maintain structural variation within sward		
Vegetation structure: vegetation cover / Percentage cover at a representative number of monitoring stops / Maintain more than 90% of area outside creeks vegetated		
Vegetation composition: typical species and sub-communities / Percentage cover at a representative number of monitoring stops / Maintain the presence of species-poor communities listed in SMP (McCorry and Ryle, 2009)		

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Vegetation structure: negative indicator species – *Spartina anglica* / Hectares / No significant expansion of common cordgrass (*Spartina anglica*), with an annual spread of less than 1%		
Mediterranean salt meadows (Juncetalia maritimi) [1410] To maintain the favourable conservation condition of the habitat in the SAC, which is defined as follows:		
Habitat area / Hectares / Area stable or increasing, subject to natural processes, including erosion and succession	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could affect the quality of the intertidal habitats and the fauna communities they support. The introduction and/or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment. See the relevant mitigation measures described in Section 7.1.4 to prevent the introduction and/or spread of invasive species.
Habitat distribution / Occurrence / No decline, or change in habitat distribution, subject to natural processes		
Physical structure: sediment supply / Presence/ absence of physical barriers / Maintain natural circulation of sediments and organic matter, without any physical obstructions		
Physical structure: creeks and pans / Occurrence / Maintain creek and pan structure, subject to natural processes, including erosion and succession		
Physical structure: flooding regime / Hectares flooded; frequency / Maintain natural tidal regime		
Vegetation structure: zonation / Occurrence / Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession		
Vegetation structure: vegetation height / Centimetres / Maintain structural variation within sward		
Vegetation structure: vegetation cover / Percentage cover at a representative number of monitoring stops / Maintain more than 90% of area outside creeks vegetated		

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Vegetation composition: typical species and sub-communities / Percentage cover at a representative number of monitoring stops / Maintain the presence of species-poor communities listed in SMP (McCorry and Ryle, 2009)	abundance and the physical structural integrity of the habitat.	
Vegetation structure: negative indicator species – *Spartina anglica* / Hectares / No significant expansion of common cordgrass (*Spartina anglica*), with an annual spread of less than 1%		
Embryonic shifting dunes [2110] To restore the favourable conservation condition of the habitat in the SAC, which is defined as follows:		
Habitat area / Hectares / Area stable or increasing, subject to natural processes, including erosion and succession.	Yes Terrestrial habitats above the high tide line are not at risk of effects from water pollution in Dublin Bay. The introduction and/or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.	Yes See the relevant mitigation measures described in Section 7.1.4 to prevent the introduction and/or spread of invasive species.
Habitat distribution / Occurrence / No decline, or change in habitat distribution, subject to natural processes.		
Physical structure: functionality sediment supply / Presence/ absence of physical barriers / Maintain natural circulation of sediments and organic matter, without any physical obstructions		
Vegetation structure: zonation / Occurrence / Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession		
Vegetation composition: plant health of foredune grasses / Percentage cover / More than 95% of sand couch (*Elytrigia juncea*) and/or lyme-grass (*Leymus arenarius*) should be healthy (i.e., green plant parts above ground and flowering heads present)		
Vegetation composition: typical species and sub-communities / Percentage cover at a representative number of monitoring stops / Maintain the presence of species-poor communities with typical species: sand couch (*Elytrigia juncea*) and/or lyme-grass (*Leymus arenarius*)		

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Vegetation composition: negative indicator species / Percentage cover / Negative indicator species (including non-native species) to represent less than 5% cover		
Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120] To restore the favourable conservation condition of the habitat in the SAC, which is defined as follows:		
Habitat area / Hectares / Area stable or increasing, subject to natural processes, including erosion and succession	Yes Terrestrial habitats above the high tide line are not at risk of effects from water pollution in Dublin Bay. The introduction and/or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.	Yes See the mitigation measures described in Section 7.1.4 to prevent the introduction and/or spread of invasive species.
Habitat distribution / Occurrence / No decline, or change in habitat distribution, subject to natural processes		
Physical structure: functionality sediment supply / Presence/ absence of physical barriers / Maintain natural circulation of sediments and organic matter, without any physical obstructions		
Vegetation structure: zonation / Occurrence / Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession		
Vegetation composition: plant health of dune grasses / Percentage cover / 95% of marram grass (*Ammophila arenaria*) and/or lyme-grass (*Leymus arenarius*) should be healthy (i.e., green plant parts above ground and flowering heads present)		
Vegetation composition: typical species and sub-communities / Percentage cover at a representative number of monitoring stops / Maintain the presence of species-poor communities dominated by marram grass (*Ammophila arenaria*) and/or lymegrass (*Leymus arenarius*)		
Vegetation composition: negative indicator species / Percentage cover / Negative indicator species (including non-native species) to represent less than 5% cover		

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]* To restore the favourable conservation condition of the habitat in the SAC, which is defined as follows:		
Habitat area / Hectares / Area stable or increasing, subject to natural processes, including erosion and succession	Yes Terrestrial habitats above the high tide line are not at risk of effects from water pollution in Dublin Bay. The introduction and/or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.	Yes See the relevant mitigation measures described in Section 7.1.4 to prevent the introduction and/or spread of invasive species.
Habitat distribution / Occurrence / No decline, or change in habitat distribution, subject to natural processes		
Physical structure: functionality sediment supply / Presence/ absence of physical barriers / Maintain natural circulation of sediments and organic matter, without any physical obstructions		
Vegetation structure: zonation / Occurrence / Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession		
Vegetation structure: bare ground / Percentage cover / Bare ground should not exceed 10% of fixed dune habitat, subject to natural processes		
Vegetation structure: sward height / Centimetres / Maintain structural variation in the sward		
Vegetation composition: typical species and sub-communities / Percentage cover at a representative number of monitoring stops / Maintain range of sub-communities with typical species listed in Delaney *et al*. (2013)		
Vegetation composition: negative indicator species (including *Hippophae rhamnoides*) / Percentage cover / Negative indicator species (including non-native species) to represent less than 5% cover		
Vegetation composition: scrub/trees / Percentage cover / No more than 5% cover or under control		

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Humid dune slacks [2190] To restore the favourable conservation condition of the habitat in the SAC, which is defined as follows:		
Habitat area / Hectares / Area increasing, subject to natural processes, including erosion and succession	Yes Terrestrial habitats above the high tide line are not at risk of effects from water pollution in Dublin Bay. The introduction and/or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.	Yes See the relevant mitigation measures described in Section 7.1.4 to prevent the introduction and/or spread of invasive species.
Habitat distribution / Occurrence / No decline, or change in habitat distribution, subject to natural processes		
Physical structure: functionality sediment supply / Presence/ absence of physical barriers / Maintain natural circulation of sediments and organic matter, without any physical obstructions		
Physical structure: hydrological and flooding regime / Water table levels; groundwater fluctuations (metres) / Maintain natural hydrological regime		
Vegetation structure: zonation / Occurrence / Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession		
Vegetation structure: bare ground / Percentage cover / Bare ground should not exceed 5% of dune slack habitat, with the exception of pioneer slacks which can have up to 20% bare ground		
Vegetation structure: vegetation height / Centimetres / Maintain structural variation within the sward		
Vegetation composition: typical species and sub-communities / Percentage cover at a representative number of monitoring stops / Maintain range of sub-communities with typical species listed in Delaney *et al*. (2013)		
Vegetation composition: cover of Salix repens / Percentage cover; centimetres / Maintain less than 40% cover of creeping willow (*Salix repens*)		

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Vegetation composition: negative indicator species / Percentage cover / Negative indicator species (including non-native species) to represent less than 5% cover		
Vegetation composition: scrub/trees / Percentage cover / No more than 5% cover or under control		
Petalwort *Petalophyllum ralfsii* [1395] To maintain the favourable conservation condition of the species in the SAC, which is defined as follows:		
Distribution of populations / Number and geographical spread of populations / No decline	Yes As a terrestrial flora species of damp calcareous dune slacks, found above the high tide line, it is not at risk of effects from water pollution in Dublin Bay. The introduction and/or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.	Yes See the relevant mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of invasive species.
Population size / Number of individuals / No decline		
Area of suitable habitat / Hectares / No decline		
Hydrological conditions: soil moisture / Occurrence / Maintain hydrological conditions so that substrate is kept moist and damp throughout the year, but not subject to prolonged inundation by flooding in winter		
Vegetation structure: height and cover / Centimetres and percentage / Maintain open, low vegetation with a high percentage of bryophytes (small acrocarps and liverwort turf) and bare ground		
South Dublin Bay SAC		

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Mudflats and sandflats not covered by water at low tide [1140] To maintain the favourable conservation condition of the habitat in the SAC, which is defined as follows:		
Habitat area / Hectares / The permanent habitat area is stable or increasing, subject to natural processes	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either along or cumulatively with other pollution sources, could potentially affect the quality (vegetation structure and composition) and area/distribution of intertidal/coastal habitats. The introduction and/or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment. See the relevant mitigation measures described in Section 7.1.4 to prevent the introduction and/or spread of invasive species.
Community extent / Hectares / Maintain the extent of the *Zostera* dominated community, subject to natural processes		
Community structure: *Mytilus edulis* density / Individuals/m^2 / Conserve the high quality of the *Zostera* dominated community, subject to natural processes		
Community distribution / Hectares / Conserve the following community type in a natural condition: Fine sands with *Angulus tenuis* community complex		
Annual Vegetation of drift lines [1210] To restore the favourable conservation condition of the habitat in the SAC, which is defined as follows:		

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Habitat area / Hectares / Area increasing, subject to natural processes, including erosion and succession	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either along or cumulatively with other pollution sources, could potentially affect the quality (vegetation structure and composition) and area/distribution of intertidal/coastal habitats. The introduction and/or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment. See the relevant mitigation measures described in Section 7.1.4 to prevent the introduction and/or spread of invasive species.
Habitat distribution / Occurrence / No decline, or change in habitat distribution, subject to natural processes		
Physical structure: functionality and sediment supply / Presence/ absence of physical barriers / Maintain the natural circulation of sediment and organic matter, without any physical obstructions		
Vegetation structure: zonation / Occurrence / Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession		
Vegetation composition: typical species and sub-communities / Percentage cover at a representative number of monitoring stops / Maintain the presence of species-poor communities with typical species: sea rocket (*Cakile maritima*), sea sandwort (*Honckenya peploides*), prickly saltwort (*Salsola kali*) and oraches (*Atriplex* spp.)		
Vegetation composition: negative indicator species / Percentage cover / Negative indicator species (including non-natives) to represent less than 5% cover		
***Salicornia* and other annuals colonising mud and sand [1310]** To restore the favourable conservation condition of the habitat in the SAC, which is defined as follows:		
Habitat area / Hectares / Area stable or increasing, subject to natural processes, including erosion and succession	Yes	Yes

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Habitat distribution / Occurrence / No decline, or change in habitat distribution, subject to natural processes	An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either along or cumulatively with other pollution sources, could potentially affect the quality (vegetation structure and composition) and area/distribution of intertidal/coastal habitats. The introduction and/or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.	See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment. See the relevant mitigation measures described in Section 7.1.4 to prevent the introduction and/or spread of invasive species.
Physical structure: sediment supply / Presence/ absence of physical barriers. Maintain, or where necessary restore, natural circulation of sediments and organic matter, without any physical obstructions		
Physical structure: creeks and pans / Occurrence / Maintain creek and pan structure, subject to natural processes, including erosion and succession		
Physical structure: flooding regime / Hectares flooded; frequency / Maintain natural tidal regime		
Vegetation structure: zonation / Occurrence / Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession		
Vegetation structure: vegetation height / Centimetres / Maintain structural variation within sward		
Vegetation structure: vegetation cover / Percentage cover at a representative number of monitoring stops / Maintain more than 90% of area outside creeks vegetated		
Vegetation composition: typical species and subcommunities / Percentage cover / Maintain the presence of species-poor communities listed in SMP (McCorry and Ryle, 2009)		
Vegetation structure: negative indicator species – *Spartina anglica* / Hectares / No significant expansion of common cordgrass (*Spartina anglica*), with an annual spread of less than 1%		
Embryonic shifting dunes [2110] To restore the favourable conservation condition of the habitat in the SAC, which is defined as follows:		

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Habitat area / Hectares / Area stable or increasing, subject to natural processes, including erosion and succession.	Yes Terrestrial habitats above the high tide line are not at risk of effects from water pollution in Dublin Bay. The introduction and/or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.	Yes See the relevant mitigation measures described in Section 7.1.4 to prevent the introduction and/or spread of invasive species.
Habitat distribution / Occurrence / No decline, or change in habitat distribution, subject to natural processes.		
Physical structure: functionality sediment supply / Presence/ absence of physical barriers / Maintain natural circulation of sediments and organic matter, without any physical obstructions		
Vegetation structure: zonation / Occurrence / Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession		
Vegetation composition: plant health of foredune grasses / Percentage cover / More than 95% of sand couch (*Elytrigia juncea*) and/or lyme-grass (*Leymus arenarius*) should be healthy (i.e., green plant parts above ground and flowering heads present)		
Vegetation composition: typical species and sub-communities / Percentage cover at a representative number of monitoring stops / Maintain the presence of species-poor communities with typical species: sand couch (*Elytrigia juncea*) and/or lyme-grass (*Leymus arenarius*)		
Vegetation composition: negative indicator species / Percentage cover / Negative indicator species (including non-native species) to represent less than 5% cover		

7.1.4 *Mitigation Measures*

127 This section presents the mitigation measures that will be implemented during construction and operation to avoid or reduce the potential impacts of the Proposed Scheme on North Dublin Bay SAC and South Dublin Bay SAC. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment. Mitigation measures and associated Management Plans are included within the Construction Environmental Management Plan (CEMP) provided in Appendix III, all of which shall, at a minimum, be implemented during the construction phase of the Proposed Scheme.

128 The CEMP summarises the overall environmental management strategy that will be adopted and implemented during the construction phase of the proposed road development. The purpose of the CEMP is to demonstrate how the proposed construction works can be delivered in a logical, sensible and safe sequence with the incorporation of specific environmental control measures relevant to construction works of this nature. The CEMP sets out the mechanism by which environmental protection is to be achieved during the construction phase of the proposed road development. The CEMP has been prepared in accordance with the following industry best practice guidance:

- TII's Guidelines for the Creation, Implementation and Maintenance of an Environmental Operating Plan (TII 2007); and
- Construction Industry Research and Information Association (CIRIA) in the UK, Environmental Good Practice on Site Guide, 4th Edition (CIRIA 2015).

129 The CEMP has been prepared in conjunction with the Environmental Impact Assessment (EIA) Report and Natura Impact Statement (NIS), with input from members of the BusConnects Infrastructure team. The CEMP supports the information already provided in the EIA Report and the NIS and must be read in conjunction with the information already provided in the NIS. The details relevant to European Sites are already provided in the NIS.

130 The information included in the CEMP is presented under the following topics:

- Proposed Scheme Details;
- Planning Consent;
- Contact Sheets;
- Roles and Responsibilities;
- Communication;
- Environmental Awareness Training;
- Compliance and Review;
- Environmental Commitments;
- Site Specific Method Statements/Management Plans;
    - Construction Traffic Management Plan;
    - Invasive Species Management Plan (ISMP);
    - Surface Water Management Plan (SWMP);
    - Construction and Demolition Resource and Waste Management Plan; and
    - Environmental Incident Response Plan.

131 The CEMP has been prepared and is included as Appendix III of this NIS. The CEMP will be updated by the NTA prior to the commencement of the construction phase, so as to include any additional measures required pursuant to conditions attached to any decision to grant approval The CEMP has regard to the guidance contained in the TII Guidelines for the Creation, Implementation and Maintenance of an Environmental Operating Plan, and the handbook published by Construction Industry Research and

Information Association (CIRIA) in the UK, Environmental Good Practice on Site Guide, 4th Edition (CIRIA 2015).

132 A number of sub-plans have also been prepared as part of the CEMP, including a SWMP and a ISMP, as outlined above. For the avoidance of doubt, all of the measures set out in the CEMP and the sub-plans appended to this EIAR will be implemented in full by the appointed contractor to the satisfaction of the NTA.

7.1.4.1 Measures to Protect Surface Water Quality

133 This section presents the mitigation measures that will be implemented during construction and operation to avoid the potential impacts of the Proposed Scheme on downstream European sites. All of the mitigation measures will be implemented in full. They are in accordance with best practice, and tried and tested, effective control measures to protect the receiving environment.

134 A CEMP, including an ISMP, have been submitted with the application documentation to An Bord Pleanála (see Appendix III of this NIS).

135 These measures have been developed in consideration of the following standard best international practice including but not limited to:

- Construction Industry Research and Information Association (CIRIA) (2005) *Environmental Good Practice on Site (C692);*
- CIRIA, (2001) *Control of Water Pollution from Construction Sites, Guidance for Consultants and Contractors (C532);*
- CIRIA, (2000) *Environmental Handbook for Building and Civil Engineering Projects (C512);*
- CIRIA, (2007) *The SUDS Manual (C697);*
- CIRIA C648: *Control of water pollution from linear construction projects: Technical guidance;*
- CIRIA (2006) *Control of water pollution from linear construction projects: Site guide (C648);*
- IFI (2016) *Guidelines on Protection of Fisheries During Construction Works in and Adjacent to Waters;*
- *UK Pollution Prevention Guidelines (PPG)* UK Environment Agency, 2004; and
- BPGCS005, *Oil Storage Guidelines.*

Measures to Protect Surface Water Quality during Construction

136 The following specific mitigation measures, all of which are set out in the CEMP, shall be implemented to mitigate against the release of hydrocarbons, polluting chemicals, sediment/silt and contaminated waters control:

- Specific measures to prevent the release of sediment over baseline conditions in the downstream receiving water environment, during the construction work. These measures include, but are not limited to, the use of silt fences, silt curtains, settlement lagoons and filter materials.
- Provision of exclusion zones and barriers (*e.g.* silt fences) between earthworks, stockpiles and temporary surfaces to prevent sediment washing into the existing drainage systems and hence the downstream receiving water environment.
- Provision of temporary construction surface drainage and sediment control measures to be in place before earthworks commence.
- Weather conditions will be taken into account when planning construction activities to minimise risk of run-off from the site.

- Prevailing weather and environmental conditions will be taken into account prior to the pouring of cementitious materials for the works adjacent to any surface water drainage features, or drainage features connected to same. Pumped concrete will be monitored to ensure no accidental discharge. Mixer washings and excess concrete will not be discharged to existing surface water drainage systems. Concrete washout areas will be located remote from any surface water drainage features, to avoid accidental discharge to watercourses. Concrete trucks will not be washed out on site.
- Any fuels or chemicals (including hydrocarbons or any polluting chemicals) will be stored in a designated, secure bunded area(s) within the construction compound to prevent any seepage of potential pollutants into the local surface water network. These designated areas will be clearly sign-posted and all personnel on site will be made aware of their locations and associated risks.
- All mobile fuel bowsers shall carry a spill kit and operatives must have spill response training. All fuel containing equipment such as portable generators shall be placed on drip trays. All fuels and chemicals required to be stored on-site will be clearly marked. Care and attention will be taken during refuelling and maintenance operations. Particular attention will be paid to gradient and ground conditions, which could increase risk of discharge to waters.
- A register of all hazardous substances, which will either be used on site or expected to be present (in the form of soil and/or groundwater contamination) will be established and maintained. This register will be available at all times and shall include as a minimum:
    - Valid Safety Data Sheets;
    - Health & Safety, Environmental controls to be implemented when storing, handling, using and in the event of spillage of materials;
    - Emergency response procedures/precautions for each material; and
    - The Personal Protective Equipment (PPE) required when using the material.
- Implementation of response measures to potential pollution incidents:
    - An Environmental Incident Response Plan has been included within section 5.6 of the CEMP and will be finalised prior to works commencing and will be communicated, resourced and implemented for the duration of the works. The EIRP describes the procedures, lines of authority and processes that will be followed to ensure that incident response efforts are prompt, efficient, and suitable for particular circumstances. The EIRP details the procedures to be undertaken in the event of the release of any sediment into a watercourse, serious spillage of chemical, fuel or other hazardous wastes (e.g. concrete), non-compliance incident with any permit or license, or other such risks that could lead to a pollution incident, including flood risks.
    - Emergency procedures/precautions and spillage kits will be available and construction staff will be trained and experienced in emergency procedures in the event of accidental fuel spillages. Details of these are included in Section 5.6 of the CEMP, in Appendix III of this NIS.
- All trucks will have a built-on tarpaulin that will cover excavated material as it is being hauled off-site and wheel wash facilities will be provided at all site egress points.
- In the unlikely event that groundwater is encountered during the proposed works and temporary pumping at a very localised location is required:
    - An appropriate dewatering system and groundwater management system specific to the site conditions will be designed and maintained. These will include measures to minimise any surface water inflow into the excavation.

    - Qualitative and quantitative monitoring will be adopted to ensure that the water is of sufficient quality to discharge. The use of silt traps will be adopted if the monitoring indicates the requirement for same with no silt or contaminated water permitted to discharge to the receiving water environment.
- Water supplies shall be recycled for use in the wheel wash. All waters shall be drained through appropriate filter material prior to discharge from the construction sites.
- The removal of any made ground material, which may be contaminated, from the construction site and transportation to an appropriate licenced facility shall be carried out in accordance with the Waste Management Act, best practice and guidelines for same.
- A discovery procedure for contaminated material will be prepared and adopted by the appointed contractor prior to excavation works commencing on site. These documents will detail how potentially contaminated material will be dealt with during the excavation phase.
- Implementation of measures to minimise waste and ensure correct handling, storage and disposal of waste (most notably wet concrete, pile arisings and asphalt).
- All of the above measures implemented on site will be monitored throughout the duration of construction to ensure that they are working effectively, to implement maintenance measures if required/applicable and to address any potential issues that may arise.

Measures to Protect Surface Water Quality during Operation

137 Mitigation for the operational phase has been built into the design of the Proposed Scheme. During operation there will be a net increase of 1,440m^2 in the impermeable area ultimately discharging to Dublin Bay and a net increase of 273m^2 in the impermeable area ultimately discharging to the Mayne Estuary. This increase in impermeable area will be being managed for the Proposed Scheme through a combination of bioretention areas and filtration drains. SuDS solutions are summarised in **Table 1**. Where no new paved areas are proposed, the existing drainage network will be retained and utilised (See Appendix II for Proposed Surface Water Drainage Works).

138 These measures will ensure that there is no increase in existing runoff rates from newly paved areas and appropriate treatment to ensure runoff quality.

139 The range of measures including SuDS systems installed during the Construction Phase will reduce both the volume and rate of surface waters discharging into the existing surface water drainage network, as well as improving the environmental quality of any such discharges during the Operational Phase of the Proposed Scheme.

140 These standard drainage design controls have been proven through widespread use in developments across the country. The proposed SuDs drainage system incorporated into the design of the site are common drainage systems that are used in most development types. They are proposed and designed in accordance with the Greater Dublin Strategic Drainage Study (GDSDS, 2005). Once the Proposed Scheme is in operation, the Local Authority will be required to implement a maintenance and inspection regime (and / or emergency repairs if necessary). No additional mitigation is required.

7.1.4.2 Measures to Prevent the Spread of Invasive Species to Downstream European Sites

Confirmatory Pre-construction survey

141 During the period between the pre-application non-native invasive species and commencement of construction, it is possible that newly established Third Schedule non-native invasive species may have become established within the footprint of the Proposed Scheme. Accordingly, a confirmatory pre-construction invasive species survey shall be undertaken by a suitably qualified specialist to corroborate the absence or extent of all Third Schedule invasive species within the footprint of the Proposed Scheme.

Where an infestation is confirmed/identified within the project corridor, this will require the preparation of an Invasive Species Management Plan by a suitably qualified specialist.

Non-native Invasive Species Management Plan (ISMP)

142 Where a pre-construction invasive species re-survey has confirmed the presence of previously identified Third Schedule non-native invasive species, or identifies newly established non-native invasive species within the footprint of the Proposed Scheme, the ISMP produced will provide a detailed description of the infestations (*e.g.* approximate area of the respective colonies (m^2), where feasible; approximate total number of stems, pattern of growth and information on other vegetation present), and where necessary, include calculations of volumes of infested soils to be excavated.

143 The ISMP for the Proposed Scheme will be implemented, including the detailed control measures contained within it, as advised by a suitably qualified specialist, in accordance with the Transport Infrastructure Ireland's (2020) *The Management of Invasive Alien Plant Species on National Roads - Technical Guidance)* (2020a) and *The Management of Invasive Alien Plant Species on National Roads – Standard (2020b)* , and other species-specific guidance documents including those listed in the non-native ISMP, as necessary.

144 All control measures specified in the Proposed Scheme ISMP shall be implemented by a suitably qualified and licenced specialist. The site will be monitored after control measures have been implemented and monitoring will take place again in the subsequent years following treatment. Any re-growth, will be subsequently treated as detailed in the Proposed Scheme ISMP. The ISMP is contained within Appendix III to the NIS.

7.1.5 *Residual Impacts*

145 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme will not have any adverse effect on the conservation objectives, or the favourable conservation condition, of the qualifying interest habitats of North Dublin Bay SAC and South Dublin Bay SAC, and there are, therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of North Dublin Bay SAC and South Dublin Bay SAC. As is confirmed by the Water Framework Directive Assessment for the Proposed Scheme (refer to Appendix V), the proposed Scheme will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and it can be concluded that thel Proposed Scheme complies with all requirements of the WFD.

7.1.6 *Conclusion of Assessment for North Dublin Bay SAC and South Dublin Bay SAC*

146 Following an examination, analysis and evaluation, in light of best scientific knowledge, of all relevant information in respect of the qualifying interests/special conservation interests of North Dublin Bay SAC and South Dublin Bay SAC, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the qualifying interests/special conservation interests, it is concluded that the Proposed Scheme will not adversely affect (either directly or indirectly) the integrity of North Dublin Bay SAC and South Dublin Bay SAC.

7.2 Howth Head SAC [000202], Rockabill to Dalkey Island SAC [003000], Lambay Island SAC [000204]

7.2.1 *Ecological Baseline Description for Howth Head SAC*

147 According to the Natura 2000 Standard Data Form (NPWS, 2018c). This SAC is a rocky headland situated on the northern side of Dublin Bay. This SAC has been designated for the Annex I habitats: [1230] Vegetated Sea Cliffs and [4030] Dry Heath. The flora within this SAC is very diverse, there are records of several Red data book species and species of very restricted Irish distribution. The dry heath and sea cliff vegetation is extensive and well developed. Major threats to the site include walking, horse-riding and non-motorised vehicles, burning vegetation and mining and quarrying.

7.2.2 *Ecological Baseline Description for Rockabill to Dalkey Island SAC*

148 As set out in the Natura 2000 Standard Data Form (NPWS, 2019), this SAC is a marine site that is a rectangle shaped area extending from Rockabill south to Dalkey Island in south Dublin. The SAC has been selected for the Annex I habitat: [1170] Reefs. The only species listed as a qualifying interest for the Rockabill to Dalkey Island SAC is the Harbour porpoise *Phocoena phocoena* [1351]. Surveys of the site estimated that there are 211 ±47 Harbour porpoises in the northern part of the site and 138 ±33 in the southern part (Berrow *et al*., 2010). Calves and juveniles have been recorded across the SAC, which suggests the site has value in the reproductive cycle of the species.

7.2.3 *Ecological Baseline Description for Lambay Island SAC*

149 In the Natura 2000 Standard Data Form (NPWS, 2019), this SAC is stated to be Ireland's largest east coast island, lying 4km off Dublin. The island is surrounded by steep cliffs on the north, east and south sides which hold internationally important populations of seabirds. Most of the western third of the island is intensively farmed, while the rest is a mixture of less intensively grazed land, rock outcrops, scrub and bracken. Lambay Island is surrounded by intertidal and subtidal reef habitat. This site provides year-round haul-out habitat for the Annex II seal species grey seal *Halichoerus grypus* and harbour seal *Phoca vitulina*, and includes regionally significant breeding and moulting sites.

7.2.4 *Qualifying Interests and Conservation Objectives of Howth Head SAC, Rockabill to Dalkey Island SAC, and Lambay Island SAC*

150 The qualifying interests of Howth Head SAC, Rockabill to Dalkey Island SAC, and Lambay Island SAC, and the overall conservation objectives, are listed below in **Table 9**.

Table 9 Qualifying Interests and Conservation Objectives of Howth Head SAC, Rockabill to Dalkey Island SAC, and Lambay Island SAC

Qualifying Interest(s)	Conservation Objective(s)
Howth Head SAC [000202] 1230 Vegetated sea cliffs of the Atlantic and Baltic coasts 4030 European dry heaths *S.I. No. 524/2021 - European Union Habitats (Howth Head Special Area of Conservation 000202) Regulations 2021* NPWS (2016) *Conservation Objectives: Howth Head SAC 000202.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.	To maintain the favourable conservation condition of the Annex I habitats for which the SAC has been selected
Rockabill to Dalkey Island SAC [003000] 1170 Reefs	To maintain the favourable conservation condition of the Annex I habitat(s) and/or

Qualifying Interest(s)	Conservation Objective(s)
1351 Harbour porpoise *Phocoena phocaena* *S.I. No. 94/2019 – European Union Habitats (Rockabill To Dalkey Island Special Area Of Conservation 003000) Regulations 2019* NPWS (2013) *Conservation Objectives: Rockabill to Dalkey Island SAC 003000.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	the Annex II species for which the SAC has been selected
Lambay Island SAC [000204] 1170 Reefs 1230 Vegetated sea cliffs of the Atlantic and Baltic coasts 1364 Grey seal *Halichoerus grypus* 1365 Harbour seal *Phoca vitulina* *S.I. No. 294/2019 – European Union Habitats (Lambay Island Special Area Of Conservation 000204) Regulations 2019* NPWS (2013) *Conservation Objectives: Lambay Island SAC 000204.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	To maintain the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected

151 In conjunction with considering the generic conservation objective for these SACs "To maintain the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected", the site specific conservation objectives documents for Howth Head SAC, Rockabill to Dalkey Island SAC, and Lambay Island SAC also informed this assessment.

152 The site specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the qualifying interests within the European site. Affecting the conservation condition of the qualifying interests/special conservation interests would constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the qualifying interests of Howth Head SAC, Rockabill to Dalkey Island SAC, and Lambay Island SAC are presented in Section 7.2.6.2.

7.2.5 *Examination and Analysis of Potential Direct and Indirect Impacts*

153 The direct and/or indirect impacts by which the Proposed Scheme could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the qualifying interests of Howth Head SAC, Rockabill to Dalkey Island SAC, and Lambay Island SAC are:

- Habitat degradation as a result of hydrological impacts.

7.2.5.1 Habitat degradation as a result of hydrological impacts

154 The release of contaminated surface water runoff and/or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and/or leaks of containments. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme is hydrologically connected to the Santry_020, the Wad River, and existing pipes, which drain to Dublin Bay. Therefore, there is potential (albeit very unlikely) for the Proposed Scheme to result in significant effects which could have implications for the conservation objectives of Howth Head SAC, Rockabill to Dalkey Island SAC, and Lambay Island SAC as a result of hydrological impacts.

7.2.5.2 Summary

155 **Table 10** below presents a summary of the potential impacts of the Proposed Scheme on the qualifying interests of Howth Head SAC, Rockabill to Dalkey Island SAC, and Lambay Island SAC, and how these impacts relate to affecting the site's conservation objectives.

Table 10 Potential Impacts/Effects on the Conservation Objectives of Howth Head SAC, Rockabill to Dalkey Island SAC, and Lambay Island SAC

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Howth Head SAC		
Vegetated sea cliffs of the Atlantic and Baltic coasts To maintain the favourable conservation condition of Vegetated sea cliffs of the Atlantic and Baltic coasts in Howth Head SAC, which is defined as follows:		
Habitat length/ Kilometres/ Area stable, subject to natural processes, including erosion	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either along or cumulatively with other pollution sources, could potentially affect the quality (vegetation structure and composition) and area/distribution of intertidal/coastal habitats.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.
Habitat distribution/ Occurrence/ No decline, subject to natural processes		
Physical structure: functionality and hydrological regime/ Occurrence of artificial barriers/ No alteration to natural function of geomorphological and hydrological processes, including groundwater quality, due to artificial structures		
Vegetation structure: zonation/ Occurrence/ Maintain range of sea cliff habitat zonations including transitional zones, subject to natural processes including erosion and succession		
Vegetation structure: vegetation height/ Centimetres/ Maintain structural variation within sward		
Vegetation composition: typical species and sub-communities/ Percentage cover at a representative number of monitoring stops/ Maintain range of sub-communities with typical species listed in the Irish Sea Cliff Survey (Barron *et al.*, 2011)		
Vegetation composition: negative indicator species/ Percentage/Negative indicator species (including non-natives) to represent less than 5% cover		
Vegetation composition: bracken and woody species/ Percentage/ Cover of bracken (*Pteridium aquilinum*) on grassland and/or heath less than 10%. Cover of woody species on grassland and/or heath less than 20%		

European Dry Heaths To maintain the favourable conservation condition of European dry heaths in Howth Head SAC, which is defined as follows:		
Habitat area/ Hectares/ Area stable or increasing, subject to natural processes	No Terrestrial habitats above the high tide line are not at risk of effects from water pollution in Dublin Bay.	No
Habitat distribution/ Occurrence/ No decline, subject to natural processes		
Ecosystem function: soil nutrients/ Soil pH and appropriate nutrient levels at a representative number of monitoring stops/ Maintain soil nutrient status within natural range		
Community diversity/ Abundance of variety of vegetation communities/ Maintain variety of vegetation communities, subject to natural processes		
Vegetation composition: lichens and bryophytes/ Number of species at a representative number of 2m x 2m monitoring stops/ Number of bryophyte or non-crustose lichen species present at each monitoring stop is at least three, excluding *Campylopus* and *Polytrichum* mosses		
Vegetation composition: number of positive indicator species/ Number of species at a representative number of 2m x 2m monitoring stops/ Number of positive indicator species present at each monitoring stop is at least two		
Vegetation composition: cover of positive indicator species/ Percentage cover at a representative number of 2m x 2m monitoring stops/ Cover of positive indicator species at least 50% for siliceous dry heath and 50- 75% for calcareous dry heath		
Vegetation composition: dwarf shrub composition/ Percentage cover at a representative number of 2m x 2m monitoring stops/ Proportion of dwarf shrub cover composed collectively of bog-myrtle (*Myrica gale*), creeping willow (*Salix repens*) and western gorse (*Ulex gallii*) is less than 50%		
Vegetation composition: negative indicator species/ Percentage cover at a representative number of 2m x 2m monitoring stops/ Total cover of negative indicator species less than 1%		

Vegetation composition: non-native species/ Percentage cover at, and in local vicinity of, a representative number of 2m x 2m monitoring stops/ Cover of non-native species less than 1%		
Vegetation composition: native trees and shrubs/ Percentage cover in local vicinity of a representative number of monitoring stops/ Cover of scattered native trees and shrubs less than 20%		
Rockabill to Dalkey Island SAC		
Reefs [1170] To maintain the favourable conservation condition of the habitat in the SAC, which is defined as follows:		
Habitat area / Hectares / The permanent habitat area is stable or increasing, subject to natural processes	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either along or cumulatively with other pollution sources, could potentially affect the quality (vegetation structure and composition) and area/distribution of intertidal/coastal habitats.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.
Habitat distribution/ Occurrence/ Distribution is stable or increasing, subject to natural processes		
Community structure/ Biological composition/ Conserve the following community types in a natural condition: Intertidal reef community complex; and Subtidal reef community complex		
Harbour porpoise *Phocoena phocoena* [1351] To maintain the favourable conservation condition of Harbour porpoise in Rockabill to Dalkey Island SAC, which is defined as follows:		
Access to suitable habitat/ Number of artificial barriers/ Species range within the site should not be restricted by artificial barriers to site use	Yes	Yes

Disturbance/ Level of impact/ Human activities should occur at levels that do not adversely affect the harbour porpoise community at the site	An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either along or cumulatively with other pollution sources, could potentially affect the quality of the intertidal/marine habitats which support harbour porpoise and fish prey species.	See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.

Lambay Island SAC		
Reefs [1170] To maintain the favourable conservation condition of the habitat in the SAC, which is defined as follows:		
Habitat area / Hectares / The permanent habitat area is stable or increasing, subject to natural processes	No There is no potential for impacts to occur on any habitats associated with the Lambay Island SAC as it is located a significant distance from the Proposed Scheme, and on the far side of the Howth peninsula.	No
Habitat distribution/ Occurrence/ Distribution is stable or increasing, subject to natural processes		
Community structure/ Biological composition/ Conserve the following community types in a natural condition: Intertidal reef community complex; *Laminaria*-dominated community complex		
Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] To maintain the favourable conservation condition of Vegetated sea cliffs of the Atlantic and Baltic coasts in Lambay Island SAC, which is defined as follows:		
Habitat length Kilometres Area stable, subject to natural processes, including erosion	No There is no potential for impacts to occur on any habitats associated with the Lambay Island SAC as it is located a significant distance from the Proposed Scheme, and on the far side of the Howth peninsula.	No
Habitat distribution/ Occurrence/ No decline, subject to natural processes		
Physical structure: functionality and hydrological regime/ Occurrence of artificial barriers/ No alteration to natural functioning of geomorphological and hydrological processes due to artificial structures		
Vegetation structure: zonation/ Occurrence/ Maintain range of sea cliff habitat zonations including transitional zones, subject to natural processes including erosion and succession		
Vegetation structure: vegetation height/ Centimetres/ Maintain structural variation within sward		
Vegetation composition: typical species and subcommunities/ Percentage cover at a representative sample of monitoring stops/ Maintain range of subcommunities with typical species listed in the Irish Sea Cliff Survey		

Vegetation composition: negative indicator species/ Percentage/ Negative indicator species (including non-natives) to represent less than 5% cover		
Vegetation composition: bracken and woody species/ Percentage Cover of bracken (*Pteridium aquilinum*) on grassland and/or heath less than 10%/ Cover of woody species on grassland and/or heath less than 20%		
Grey Seal *Halichoerus grypus* [1364] To maintain the favourable conservation condition of Grey Seal in Lambay Island SAC, which is defined as follows:		
Access to suitable habitat/ Number of artificial barriers/ Species range within the site should not be restricted by artificial barriers to site use	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality of the intertidal/marine habitats which support grey seal.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.
Breeding behaviour/ Breeding sites /The breeding sites should be maintained in a natural condition		
Moulting behaviour/ Moult haul-out sites/ The moult haul-out sites should be maintained in a natural condition		
Resting behaviour/ Resting haul-out sites/ The resting haul-out sites should be maintained in a natural condition		
Disturbance/ Level of impact/ Human activities should occur at levels that do not adversely affect the grey seal population at the site		
Harbour Seal *Phoca vitulina* [1365] To maintain the favourable conservation condition of Harbour Seal in Lambay Island SAC, which is defined as follows:		
Access to suitable habitat /Number of artificial barriers Species range within the site should not be restricted by artificial barriers to site use	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality of the intertidal/marine habitats which support harbour seal.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.

7.2.6 *Mitigation Measures*

156 This section presents the mitigation measures that will be implemented during construction and operation to avoid or reduce the potential impacts of the Proposed Scheme on Howth Head SAC, Rockabill to Dalkey Island SAC, and Lambay Island SAC. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment.

Measures to Protect Surface Water Quality during Construction

The mitigation measures presented above in Section 7.1.4 will protect surface water quality during construction of the Proposed Scheme.

Measures to Protect Surface Water Quality during Operation

The mitigation measures presented above in Section 7.1.4 will protect surface water quality during operation of the Proposed Scheme.

7.2.7 *Residual Impacts*

157 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme will not have any adverse effect on the conservation objectives, or the favourable conservation condition, of the qualifying interest habitats of Howth Head SAC, Rockabill to Dalkey Island SAC, and Lambay Island SAC, and there are therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of Howth Head SAC, Rockabill to Dalkey Island SAC, and Lambay Island SAC. As is confirmed by the Water Framework Directive Assessment for the Proposed Scheme (refer to Appendix V), the proposed Scheme will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and it can be concluded that the Proposed Scheme complies with all requirements of the WFD.

7.2.8 *Conclusion of Assessment for Howth Head SAC, Rockabill to Dalkey Island SAC, and Lambay Island SAC*

158 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the qualifying interests/special conservation interests of Howth Head SAC, Rockabill to Dalkey Island SAC and Lambay Island SAC, the potential impacts and mitigation measures and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the qualifying interests/special conservation interests it is concluded that the Proposed Scheme will not adversely affect (either directly or indirectly) the integrity of Howth Head SAC, Rockabill to Dalkey Island SAC, and Lambay Island SAC.

7.3 Baldoyle Bay SAC [000199]

7.3.1 *Ecological Baseline Description for Baldoyle Bay SAC*

159 According to the Natura 2000 Standard Data Form (NPWS, 2018d). This SAC comprises a relatively small estuarine and bay system in North County Dublin. It receives the flow of the Mayne and Sluice rivers, both of which drain an agricultural/suburban catchment. Habitats present in this SAC include sand dunes, muds and muddy sands with a high organic content, brackish marshes, salt marshes and sandy beaches. This SAC has been designated for a range of coastal habitats. It has a good diversity of sediment types and supports *Zostera* sp., two Red Data Book species and is of importance to wintering waterfowl.

7.3.2 *Qualifying Interests and Conservation Objectives of Baldoyle Bay SAC*

160 The qualifying interests of Baldoyle Bay SAC, and the overall conservation objectives, are listed below in **Table 11**.

Table 11 Qualifying Interests and Conservation Objectives of Howth Head SAC and Rockabill to Dalkey Island SAC

Qualifying Interest(s)	Conservation Objective(s)
Baldoyle Bay SAC [000199] 1140 Mudflats and sandflats not covered by seawater at low tide 1310 *Salicornia* and other annuals colonizing mud and sand 1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae) 1410 Mediterranean salt meadows (Juncetalia maritimi) *S.I. No. 472/2021 - European Union Habitats (Baldoyle Bay Special Area of Conservation 000199) Regulations 2021* NPWS (2012) *Conservation Objectives: Baldoyle Bay SAC 000199.* Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht	To maintain the favourable conservation condition of the Annex I habitats for which the SAC has been selected

161 In conjunction with considering the generic conservation objective for this SAC "To maintain the favourable conservation condition of the Annex I habitat(s) for which the SAC has been selected", the site specific conservation objectives documents for Baldoyle Bay SAC also informed this assessment.

162 The site specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the qualifying interests within the European site. Affecting the conservation condition of the qualifying interests/special conservation interests would constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the qualifying interests of Baldoyle Bay SAC are presented in Section 7.3.3.2.

7.3.3 *Examination and Analysis of Potential Direct and Indirect Impacts*

163 The direct and/or indirect impacts by which the Proposed Scheme could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the qualifying interests of Baldoyle Bay SAC, are:

- Habitat degradation as a result of hydrological impacts.

7.3.3.1 Habitat degradation as a result of hydrological impacts

164 The release of contaminated surface water runoff and/or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving

waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and/or leaks of containments. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme is hydrologically connected to the Mayne_010 via existing drainage, which ultimately drain to the Mayne Estuary. Therefore, there is potential (albeit very unlikely) for the Proposed Scheme to result in significant effects which could have implications for the conservation objectives of Baldoyle Bay SAC as a result of hydrological impacts.

7.3.3.2 Summary

165 **Table 12** below presents a summary of the potential impacts of the Proposed Scheme on the qualifying interests of Baldoyle Bay SAC, and how these impacts relate to affecting the site's conservation objectives.

Table 12 Potential Impacts/Effects on the Conservation Objectives of Baldoyle Bay SAC

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Baldoyle Bay SAC		
Mudflats and sandflats not covered by water at low tide [1140] To maintain the favourable conservation condition of the habitat in the SAC, which is defined as follows:		
Habitat area / Hectares / The permanent habitat area is stable or increasing, subject to natural processes	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either along or cumulatively with other pollution sources, could potentially affect the quality (vegetation structure and composition) and area/distribution of intertidal/coastal habitats.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.
Community distribution / Hectares / Conserve the following community types in a natural condition: Fine sand dominated by *Angulus tenuis* community complex; and Estuarine sandy mud with *Pygospio elegans* and *Tubificoides benedii* community complex		
***Salicornia* and other annuals colonising mud and sand [1310]** To restore the favourable conservation condition of the habitat in the SAC, which is defined as follows:		
Habitat area / Hectares / Area stable or increasing, subject to natural processes, including erosion and succession	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either along or cumulatively with other pollution sources, could potentially affect the	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.
Habitat distribution / Occurrence / No decline, or change in habitat distribution, subject to natural processes		
Physical structure: sediment supply / Presence/ absence of physical barriers/ Maintain natural circulation of sediments and organic matter, without any physical obstructions		

Physical structure: creeks and pans / Occurrence / Maintain creek and pan structure, subject to natural processes, including erosion and succession	quality (vegetation structure and composition) and area/distribution of intertidal/coastal habitats.	
Physical structure: flooding regime / Hectares flooded; frequency / Maintain natural tidal regime		
Vegetation structure: zonation / Occurrence / Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession		
Vegetation structure: height / Centimetres / Maintain structural variation within sward		
Vegetation structure: vegetation cover / Percentage cover at a representative sample of monitoring stops / Maintain more than 90% of area outside creeks vegetated		
Vegetation composition: typical species and subcommunities / Percentage cover / Maintain the presence of species-poor communities listed in SMP (McCorry and Ryle, 2009)		
Vegetation structure: negative indicator species – *Spartina anglica* / Hectares / No significant expansion of common cordgrass (*Spartina anglica*), with an annual spread of less than 1%		
Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] To maintain the favourable conservation condition of the habitat in the SAC, which is defined as follows:		
Habitat area / Hectares / Area stable or increasing, subject to natural processes, including erosion and succession	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either along or cumulatively with other pollution sources, could potentially affect the	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.
Habitat distribution / Occurrence / No decline, or change in habitat distribution, subject to natural processes		
Physical structure: sediment supply/Presence/ absence of physical barriers / Maintain natural circulation of sediments and organic matter, without any physical obstructions		

Physical structure: creeks and pans / Occurrence / Maintain/restore creek and pan structure to develop, subject to natural processes, including erosion and succession	quality (vegetation structure and composition) and area/distribution of intertidal/coastal habitats.	
Physical structure: flooding regime / Hectares flooded; frequency / Maintain natural tidal regime		
Vegetation structure: zonation / Occurrence / Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession		
Vegetation structure: vegetation height / Centimetres / Maintain structural variation within sward		
Vegetation structure: vegetation cover / Percentage cover at a representative sample of monitoring stops / Maintain more than 90% of area outside of the creeks vegetated		
Vegetation composition: typical species and sub-communities / Percentage cover at a representative number of monitoring stops / Maintain the presence of species-poor communities listed in SMP (McCorry and Ryle, 2009)		
Vegetation structure: negative indicator species – *Spartina anglica* / Hectares / No significant expansion of common cordgrass (*Spartina anglica*), with an annual spread of less than 1%		
Mediterranean salt meadows (Juncetalia maritimi) [1410] To maintain the favourable conservation condition of the habitat in the SAC, which is defined as follows:		
Habitat area / Hectares / Area stable or increasing, subject to natural processes, including erosion and succession	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either along or cumulatively with other pollution sources, could potentially affect the	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.
Habitat distribution / Occurrence / No decline, or change in habitat distribution, subject to natural processes		
Physical structure: sediment supply / Presence/ absence of physical barriers / Maintain natural circulation of sediments and organic matter, without any physical obstructions		

Physical structure: creeks and pans / Occurrence / Maintain creek and pan structure, subject to natural processes, including erosion and succession	quality (vegetation structure and composition) and area/distribution of intertidal/coastal habitats.	
Physical structure: flooding regime / Hectares flooded; frequency / Maintain natural tidal regime		
Vegetation structure: zonation / Occurrence / Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession		
Vegetation structure: vegetation height / Centimetres / Maintain structural variation within sward		
Vegetation structure: vegetation cover / Percentage cover at a representative sample of monitoring stops / Maintain more than 90% of area outside creeks vegetated		
Vegetation composition: typical species / Percentage cover / Maintain range of sub- communities with typical species listed in the Saltmarsh Monitoring Project (McCorry and Ryle, 2009)		
Vegetation structure: negative indicator species – *Spartina anglica* / Hectares / No significant expansion of common cordgrass (*Spartina anglica*), with an annual spread of less than 1%		

7.3.4 *Mitigation Measures*

166 This section presents the mitigation measures that will be implemented during construction and operation to avoid or reduce the potential impacts of the Proposed Scheme on Baldoyle Bay SAC. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment.

Measures to Protect Surface Water Quality during Construction

The mitigation measures presented above in Section 7.1.4 will protect surface water quality during construction of the Proposed Scheme.

Measures to Protect Surface Water Quality during Operation

The mitigation measures presented above in Section 7.1.4 will protect surface water quality during operation of the Proposed Scheme.

7.3.5 *Residual Impacts*

167 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme will not have any adverse effect on the conservation objectives, or the favourable conservation condition, of the qualifying interest habitats of Baldoyle Bay SAC, and there are therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of Baldoyle Bay SAC. As is confirmed by the Water Framework Directive Assessment for the Proposed Scheme (refer to Appendix V), the proposed Scheme will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and it can be concluded that the Proposed Scheme complies with all requirements of the WFD.

7.3.6 *Conclusion of Assessment for Baldoyle Bay SAC*

168 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the qualifying interests/special conservation interests of North Dublin Bay and Baldoyle Bay SAC, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the qualifying interests/special conservation interests it is concluded that the Proposed Scheme will not adversely affect (either directly or indirectly) the integrity of North Dublin Bay and Baldoyle Bay SAC.

7.4 Howth Head Coast SPA [004113],Dalkey Islands SPA [004172] and Rockabill SPA [004014]

7.4.1 *Ecological Baseline Description for Howth Head Coast SPA*

169 The Natura 2000 Standard Data Form (NPWS, 2018e) lists the SPA as a rocky headland on the northern side of Dublin Bay. The site comprises approximately 3km of sea cliff, varying between 60m and 90m in height. Howth Head SPA is of importance to breeding seabirds. This SPA is designated for its population of breeding kittiwake *Rissa tridactyla*. There are also nationally important populations of breeding razorbill *Alca torda* and black guillemot *Cepphus grylle*, and a regionally important population of common guillemot *Uria aalge*. The cliffs also support a breeding pair of peregrine falcon *Falco peregrinus*, a species listed on Annex I of the E.U. Birds Directive. Threats to the site include walking, horse-riding and non-motorised vehicles as well as fire and fire suppression.

7.4.2 *Ecological Baseline Description for Dalkey Islands SPA*

170 The Natura 2000 Standard Data Form (NPWS, 2018f) lists the site as an important site for both breeding and staging terns. This SPA is designated for breeding terns and there is a well-established colony of common tern *Sterna hirundo* and smaller numbers of Arctic tern *Sterna paradisaea* and roseate tern *Sterna dougallii*. The site along with other parts of south Dublin Bay are used by the three tern species as a major post-breeding/pre-migration autumn roost area. The site also has breeding great black-backed gull *Larus marinus*, shelduck *Tadorna tadorna* and oystercatcher *Haematopus ostralegus*. The site is known to be frequented in winter by significant numbers of turnstone *Arenaria interpres* and purple sandpiper *Calidris maritima.* Threats to the site include urbanisation and human habitation, human intrusions and disturbances, and agriculture.

7.4.3 *Ecological Baseline Description for Rockabill SPA*

171 The Natura 2000 Standard Data Form (NPWS, 2018) lists the site as an internationally tern colony. It supports the largest population of roseate tern *Sterna dougallii* in north-west Europe and the largest colony of *Sterna hirundo* in the country, as well as a significant colony of Arctic tern *Sterna paradisaea.* With management for the benefit of terns, numbers of all three species have been steadily increasing since 1989. Rockabill also supports a nationally important population of black guillemot *Cepphus grylle* and a small colony of kittiwake *Rissa tridactyla*.

7.4.4 *Qualifying Interests and Conservation Objectives of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA*

172 The qualifying interests of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA, and the overall conservation objective, are listed below in **Table 13**.

Table 13 Qualifying Interests and Conservation Objectives of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA

Qualifying Interest(s)	Conservation Objective(s)
Howth Head Coast SPA [004113] A188 Kittiwake *Rissa tridactyla* *S.I. No. 185/2012 – European Communities (Conservation of Wild Birds (Howth Head Coast Special Protection Area 004113)) Regulations 2012.* NPWS (2021) *Conservation objectives for Howth Head Coast SPA [004113].* Generic Version 8.0. Department of Housing, Local Government and Heritage.	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.

Qualifying Interest(s)	Conservation Objective(s)
Dalkey Islands SPA [004172] A192 Roseate Tern *Sterna dougallii* A193 Common Tern *Sterna hirundo* A194 Arctic Tern *Sterna paradisaea* *S.I. No. 238/2010 – European Communities (Conservation of Wild Birds (Dalkey Islands Special Protection Area 004172)) Regulations 2010* NPWS (2021) *Conservation objectives for Dalkey Islands SPA [004172].* Generic Version 8.0. Department of Housing, Local Government and Heritage.	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.
Rockabill SPA [004014] A148 Purple Sandpiper *Calidris maritima* A192 Roseate Tern *Sterna dougallii* A193 Common Tern *Sterna hirundo* A194 Arctic Tern *Sterna paradisaea* *S.I. No. 94/2012 – European Communities (Conservation of Wild Birds (Rockabill Special Protection Area 004014)) Regulations 2012.* NPWS (2013) *Conservation Objectives: Rockabill SPA 004014.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.

173 In conjunction with considering the generic conservation objective for these SPAs "To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA", the site specific conservation objectives document for Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA also informed this assessment.

174 The site specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the qualifying interests within the European site. Affecting the conservation condition of the qualifying interests/special conservation interests would constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the qualifying interests of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA are presented in Section 7.4.5.2.

7.4.5 *Examination and Analysis of Potential Direct and Indirect Impacts*

175 The direct and/or indirect impacts by which the Proposed Scheme could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the qualifying interests of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA, are:

- Habitat degradation/effects on QI/SCI species as a result of hydrological impacts.

7.4.5.1 Habitat degradation/effects on QI/SCI species as a result of hydrological impacts

176 The release of contaminated surface water runoff and/or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and/or leaks of containments. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The

Proposed Scheme is hydrologically connected to Dublin Bay via the Santry_020, the Wad River and existing pipes which drain to Dublin Bay.

177 Therefore, (albeit unlikely) this reduction in water quality (either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within these European sites, which in turn could negatively affect the SCI bird species that rely upon these habitats as foraging and/or roosting habitat. It could also negatively affect the quantity and quality of prey available to SCI bird species. These potential impacts could occur to such a degree that they result in significant effects which could have implications for the conservation objectives of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA.

7.4.5.2 Summary

178 **Table 14** below presents a summary of the potential impacts of the Proposed Scheme on the qualifying interests of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA, and how these impacts relate to affecting the site's conservation objectives.

Table 14 Potential Impacts/Effects on the Conservation Objectives of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Howth Head Coast SPA		
Kittiwake [A188] There is no site specific conservation objectives document available for this SPA. Therefore, the attributes, measures and targets below have been developed based on the specific conservation objectives available for kittiwake in the Saltee Islands SPA [004002] (NPWS, 2011)		
Breeding population abundance: apparently occupied nests (AONs)/ Number/ No significant decline	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quantity and quality of prey fish species and the quality the of intertidal/coastal habitats that support the special conservation interest bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.
Productivity rate/ Mean number/ No significant decline		
Distribution: breeding colonies/ Number; location; area (hectares)/ No significant decline		
Prey biomass available/ Kilogrammes/ No significant decline		
Barriers to connectivity/ Number; location; shape; area (hectares)/ No significant increase		
Disturbance at the breeding site/ Level of impact/ No significant increase		
Dalkey Islands SPA		
Roseate Tern (*Sterna dougallii*) [A192] There is no site specific conservation objectives document available for this SPA. Therefore, the attributes, measures and targets below have been developed based on the specific conservation objectives available for roseate tern in the South Dublin Bay and River Tolka Estuary SPA [004024].		

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Passage population: individuals / Number / No significant decline	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either along or cumulatively with other pollution sources, could potentially affect the quantity and quality of prey fish species and the quality and suitability of roosting sites within the SPA.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.
Distribution: roosting areas / Number; location; area (hectares) / No significant decline		
Prey biomass available / Kilogrammes / No significant decline		
Barriers to connectivity / Number; location; shape; area (hectares) / No significant increase		
Disturbance at roosting site / Level of impact / Human activities should occur at levels that do not adversely affect the numbers of roseate tern among the post-breeding aggregation of terns		
Common Tern (*Sterna hirundo*) [A193] There is no site specific conservation objectives document available for this SPA. Therefore, the attributes, measures and targets below have been developed based on the specific conservation objectives available for common tern in the South Dublin Bay and River Tolka Estuary SPA [004024].		
Breeding population abundance: apparently occupied nests (AONs) / Number / No significant decline	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either along or cumulatively with other pollution sources, could potentially affect the quantity and quality of prey fish species and the quality and suitability of nesting and roosting sites within the SPA.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.
Productivity rate: fledged young per breeding pair / Mean number / No significant decline		
Passage population: individuals / Number / No significant decline		
Distribution: breeding colonies / Number; location; area (Hectares) / No significant decline		
Distribution: roosting areas / Number; location; area (Hectares) / No significant decline		
Prey biomass available / Kilogrammes / No significant decline		
Barriers to connectivity / Number; location; shape; area (hectares) / No significant increase		

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Disturbance at breeding site / Level of impact / Human activities should occur at levels that do not adversely affect the breeding common tern population		
Disturbance at roosting site / Level of impact / Human activities should occur at levels that do not adversely affect the numbers of common tern among the post-breeding aggregation of terns		
Arctic Tern (*Sterna paradisaea*) [A194] There is no site specific conservation objectives document available for this SPA. Therefore, the attributes, measures and targets below have been developed based on the specific conservation objectives available for arctic tern in the South Dublin Bay and River Tolka Estuary SPA [004024].		
Passage population / Number of individuals / No significant decline	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either along or cumulatively with other pollution sources, could potentially affect the quantity and quality of prey fish species and the quality and suitability of roosting sites within the SPA.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.
Distribution: roosting areas / Number; location; area (hectares) / No significant decline		
Prey biomass available / Kilogrammes / No significant decline		
Barriers to connectivity / Number; location; shape; area (hectares) / No significant increase		
Disturbance at roosting site / Level of impact / Human activities should occur at levels that do not adversely affect the numbers of Arctic tern among the post-breeding aggregation of terns		
Rockabill SPA		
Purple Sandpiper (*Calidris maritima*) [A148] To maintain the favourable conservation condition of Purple Sandpiper in Rockabill SPA, which is defined as follows:		
Population trend/ Percentage change/ Long term population trend stable or increasing	No	No

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Distribution/ Range, timing and intensity of use of areas/ No significant decrease in the range, timing or intensity of use of areas by purple sandpiper other than that occurring from natural patterns of variation	There is no potential for impacts to occur on this SCI species as it is located a significant distance from the Proposed Scheme, and on the far side of the Howth peninsula.	
Roseate Tern (*Sterna dougallii*) [A192] To maintain the favourable conservation condition of Roseate Tern in Rockabill SPA, which is defined as follows:		
Breeding population abundance: apparently occupied nests (AONs) Number: No significant decline	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect this SCI species through direct contact with pollutants and/or a decline in the quantity and quality of prey fish species.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.
Productivity rate: fledged young per breeding pair/ Mean number/ No significant decline		
Distribution: breeding colonies/ Number; location; area (hectares)/ No significant decline		
Prey biomass available/ Kilogrammes/ No significant decline		
Barriers to connectivity/ Number; location; shape; area (hectares)/ No significant increase		
Disturbance at breeding site/ Level of impact/ Human activities should occur at levels that do not adversely affect the breeding roseate tern population		
Common Tern (*Sterna hirundo*) [A193] To maintain the favourable conservation condition of Common Tern in Rockabill SPA, which is defined as follows:		
Breeding population abundance: apparently occupied nests (AONs)/ Number/ No significant decline	Yes An accidental pollution event during construction or operation could affect surface water downstream in	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.
Productivity rate: fledged young per breeding pair/ Mean number/ No significant decline		

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Distribution: breeding colonies/ Number; location; area (Hectares)/ No significant decline	Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect this SCI species through direct contact with pollutants and/or a decline in the quantity and quality of prey fish species.	
Prey biomass available/ Kilogrammes/ No significant decline		
Barriers to connectivity/ Number; location; shape; area (hectares)/ No significant increase		
Disturbance at breeding site/ Level of impact/ Human activities should occur at levels that do not adversely affect the breeding common tern population		
Arctic Tern (*Sterna paradisaea*) [A194] To maintain the favourable conservation condition of Arctic Tern in Rockabill SPA, which is defined as follows:		
Breeding population abundance: apparently occupied nests (AONs)/ Number/ No significant decline	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect this SCI species through direct contact with pollutants and/or a decline in the quantity and quality of prey fish species.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.
Productivity rate: fledged young per breeding pair/ Mean number/ No significant decline		
Distribution: breeding colonies/ Number; location; area (Hectares)/ No significant decline		
Prey biomass available/ Kilogrammes/ No significant decline		
Barriers to connectivity/ Number; location; shape; area (hectares)/ No significant increase		
Disturbance at breeding site/ Level of impact/ Human activities should occur at levels that do not adversely affect the breeding common tern population		

7.4.6 *Mitigation Measures*

179 This section presents the mitigation measures that will be implemented during construction and operation to avoid or reduce the potential impacts of the Proposed Scheme on Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment.

Measures to Protect Surface Water Quality during Construction

180 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during construction of the Proposed Scheme.

Measures to Protect Surface Water Quality during Operation

181 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during operation of the Proposed Scheme.

7.4.7 *Residual Impacts*

182 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme will not have any adverse effect on conservation objectives, or the favourable conservation condition, of the qualifying interests/special conservation interests of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA, and there are therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA. As is confirmed by the Water Framework Directive Assessment for the Proposed Scheme (refer to Appendix V), the proposed Scheme will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and it can be concluded that the Proposed Scheme complies with all requirements of the WFD.

7.4.8 *Conclusion of Assessment for Howth Head Coast SPA, Dalkey Islands SPA, and Rockabill SPA*

Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the qualifying interests/special conservation interests of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the qualifying interests/special conservation interests, it is concluded that the Proposed Scheme will not adversely affect (either directly or indirectly) the integrity of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA.

7.5 North Bull Island SPA [004006]

7.5.1 *Ecological Baseline Description for North Bull Island SPA*

The Natura 2000 Standard Data Form (NPWS,2018g) lists the SPA as one of the top ten sites in the country for wintering waterfowl. It provides important feeding and roosting habitat for bird species listed as Special Conservation Interests for the site and supports internationally important populations of light-bellied brent goose and bar-tailed godwit. The quality of the estuarine habitats in the SPA are considered to be very good, part of which are designated as North Dublin Bay SAC. There are no serious imminent threats to the wintering birds. Threats to the site include oil pollution from Dublin Port along with localised commercial bait digging, disturbance from activities such as sailing, walkers and dogs.

7.5.2 *Qualifying Interests and Conservation Objectives of North Bull Island SPA*

183 The qualifying interests of North Bull Island SPA, and the overall conservation objective, are listed below in **Table 15**.

Table 15 Qualifying Interests and Conservation Objectives of North Bull Island SPA

Qualifying Interest(s)	Conservation Objective(s)
North Bull Island SPA [004006] A046 Light-bellied Brent Goose *Branta bernicla hrota* A048 Shelduck *Tadorna tadorna* A052 Teal *Anas crecca* A054 Pintail *Anas acuta* A056 Shoveler *Anas clypeata* A130 Oystercatcher *Haematopus ostralegus* A140 Golden Plover *Pluvialis apricaria* A141 Grey Plover *Pluvialis squatarola* A143 Knot *Calidris canutus* A144 Sanderling *Calidris alba* A149 Dunlin *Calidris aplina* A156 Black-tailed Godwit *Limosa limosa* A157 Bar-tailed Godwit *Limosa lapponica* A160 Curlew *Numenius arquata* A162 Redshank *Tringa ctotanus* A169 Turnstone *Arenaria interpres* A179 Black-headed Gull *Chroicocephalus ridibundus* A999 Wetlands & Waterbirds *S.I. No. 211/2010 – European Communities (Conservation of Wild Birds (North Bull Island Special Protection Area 004006)) Regulations 2010.* NPWS (2015) *Conservation Objectives: North Bull Island SPA 004006.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA

184 In conjunction with considering the generic conservation objective for this SPA "To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA", the site specific conservation objectives document for North Bull Island SPA also informed this assessment.

185 The site specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the qualifying interests within the European site. Affecting the conservation condition of the qualifying interests/special conservation interests would constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the qualifying interests of North Bull Island SPA are presented in Section 7.5.3.5.

7.5.3 *Examination and Analysis of Potential Direct and Indirect Impacts*

186 The direct and/or indirect impacts by which the Proposed Scheme could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the qualifying interests of North Bull Island SPA, are:

- Habitat loss and fragmentation;
- Habitat degradation/effects on QI/SCI species as a result of hydrological impacts;
- Habitat degradation as a result of introducing/spreading non-native invasive species; and
- Disturbance and displacement impacts.

7.5.3.1 Habitat loss and fragmentation

187 The North Bull Island SPA is designated for wintering SCI species that are known to forage and/or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include light-bellied brent goose, golden plover oystercatcher, curlew, black-headed gull and black-tailed godwit. There are two no. areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme, namely Buttercup Park, referred to as CBC0001WB002, and Maypark, referred to as CBC0001WB003.

188 The Proposed Scheme will result in the temporary loss of 0.81ha of GA2 habitat suitable to support breeding gull and wintering bird species at the Proposed Buttercup Park compound (referred to as CBC0001WB002), a permanent loss of 0.02ha of suitable GA2 habitat at the proposed Maypark footpath, and a temporary loss of 0.7ha of suitable GA2 habitat at Maypark to facilitate boundary works (referred to as CBC0001WB003).

189 There is no potential for impacts to occur on inland feeding SCI populations associated with North Bull Island SPA, in light of their conservation objectives, as a consequence of habitat loss/fragmentation from inland feeding/roosting sites due to increased levels of disturbance due to the following reasons:

- Relatively low frequency of occurrence of these SCI bird species on lands located within the footprint of the Proposed Scheme, suggesting that these species do not regularly use or rely upon these lands as foraging and/or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- Relatively low peak flocks recorded on lands located within the footprint of the Proposed Scheme, especially when compared to 1% of both their international flyway and national populations (See **Table 5**), suggesting that these sites are not significantly important to the overall SPA population of each respective SCI bird species, and are likely to use other suitable sites available in the wider area on a similar or more regular basis ;
- The availability of large areas of suitable foraging and/or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches such as those discussed in Section 7.5.3.4. It is very likely that these SCI bird species currently utilise these and other suitability lands in the wider area to a similar and/or greater intensity during the 24 months in which the Buttercup Park compound will be in use; and

- The existing pedestrian footpath at Maypark will be realigned to facilitate the proposed cycleway resulting in permanent habitat loss. This habitat loss is not considered significant as it is removing a minor section at the edge of the site.

7.5.3.2 Habitat degradation/effects on QI/SCI species as a result of hydrological impacts

190 The release of contaminated surface water runoff and/or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and/or leaks of containments. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme is hydrologically connected to Dublin Bay via the Santry_020, the Wad River, and existing pipes which drain to Dublin Bay. Therefore, there is potential for the Proposed Scheme to result in significant effects which could have implications for the conservation objectives of North Bull Island SPA as a result of hydrological impacts.

7.5.3.3 Habitat degradation as a result of introducing/spreading non-native invasive species

191 No non-native invasive plant species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011 were recorded within, or in close proximity to, the Proposed Scheme. However, there were records of invasive species in the vicinity of the Proposed Scheme returned from the desk study. During construction and/or routine maintenance/management work, these species could potentially spread or be introduced to terrestrial habitats located within downstream European sites via surface water features. The introduction and/or spread of these invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat. This in turn could undermine the conservation objectives of these European sites. The Proposed Scheme is hydrologically connected to Dublin Bay via the Santry_020, Wad River, and existing pipes which discharge to the bay. Therefore, there is potential for the Proposed Scheme to result in significant effects which could have implications for the conservation objectives of North Bull Island SPA as a result of invasive species spread.

7.5.3.4 Disturbance and displacement impacts

192 A temporary and/or permanent increase in noise, vibration and/or human activity levels during the construction and/or operation of the Proposed Scheme could result in the disturbance to and/or displacement of SCI bird species present within footprint and/or the vicinity of the Proposed Scheme. Such disturbance effects during the Construction Phase would not be expected to extend beyond a distance of approximately 300m, as noise levels associated with general construction activities would attenuate to close to background levels at that distance and beyond. The Operational Phase is not predicted to result in significant changes to existing noise levels due to the urban locality of the Proposed Scheme as an existing transport route. **Table 16** provides the indicative construction noise calculation associated with different construction activities of the Proposed Scheme at varying distances.

Table 16 Indicative Construction Noise Calculations at Varying Distances

Activity	Predicted CNL at Stated Distance from Edge of Works (dB $L_{Aeq,12hr}$ or $L_{Aeq,4hr}$)								
(dB)	10m	15m	20m	30m	50m	75m	100m	150m	250m
General Road works	79	76	73	69	65	61	59	55	51
Road Widening and Utility Diversion	84	81	78	74	70	66	64	60	56
Quiet street treatment	80	77	74	70	66	62	60	56	52
Urban realm & landscaping	79	76	73	69	65	61	59	55	51
Site compounds	78	75	72	68	64	60	58	54	50
Boundary wall construction	80	77	74	70	66	62	60	56	49

193 The North Bull Island SPA is designated for wintering SCI species that are known to forage and/or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include light-bellied brent goose, oystercatcher, curlew, black-tailed godwit and black-headed gull. There are areas of suitable foraging, and/or roosting habitat for these species within the footprint of and adjacent to the Proposed Scheme (i.e., within the disturbance ZoI), including the following sites, which have been returned from the desk study (Scott Cawley, 2017):

- Clontarf Golf Club (High Importance), adjacent to the Proposed Scheme;
- Marino/Ardscoil Ris (Major Importance), adjacent to the Proposed Scheme;
- Coolock/O'Toole's GAA (Major Importance), located approximately 14m from the Proposed Scheme;
- Coolock/Chanel College (Major Importance), located approximately 25m from the Proposed Scheme;
- Parnell Park (Moderate Importance), located approximately 89m from the Proposed Scheme;
- Ayrfield Park (High Importance), located approximately 117m from the Proposed Scheme;
- Fairview Park (Major Importance), located approximately 120m from the Proposed Scheme;
- Artane/St. David's College (Major Importance), located approximately 130m from the Proposed Scheme;
- Coolock/Rathvale Drive (High Importance), located approximately 157m from the Proposed Scheme;
- Marino/Mount Temple School (Major Importance), located approximately 184m from the Proposed Scheme; and
- Donnycarney/St. Vincent's GAA (Major Importance), located approximately 299m from the Proposed Scheme.

194 As records of SCI bird species associated with the North Bull Island SPA have been returned from the desk study in the vicinity of the Proposed Scheme (i.e., light-bellied brent goose, oystercatcher, curlew, black-tailed godwit and black-headed gull), it is likely that these species currently utilise these and other suitable lands in the wider area. However, no significant effects will occur on any SCI bird species population of North Bull Island SPA, in light of their conservation objectives, as a consequence of the disturbance and/or displacement from inland feeding/roosting sites due to increased levels of disturbance due to the following reasons:

- Relatively low frequency of occurrence of these SCI bird species on lands located within the footprint of the proposed Project, suggesting that these species do not regularly use or rely upon these lands as foraging and/or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- Relatively low peak flocks recorded on lands located within the footprint of the proposed Project, especially when compared to 1% of both their international flyway and national populations (See **Table 5**), suggesting that these sites are not significantly important to the overall SPA population of each respective SCI bird species, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- The availability of large areas of suitable foraging and/or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches such as St. Anne's Park, the Red Arches and Seagrange Park, the Baldoyle Bird Quiet Zone and agricultural lands to the north of the Proposed Scheme; and
- Impacts associated with increased levels of disturbance will likely result in the temporary displacement of these SCI species to other suitable available lands in the locality, for a maximum of 24 months during construction works. Following the completion of construction, disturbance levels will likely return to baseline conditions and as a result these lands will become available again as foraging and/or roosting habitat for these SCI species.

7.5.3.5 Summary

195 **Table 17** below presents a summary of the potential impacts of the Proposed Scheme on the qualifying interests of North Bull Island SPA, and how these impacts relate to affecting the site's conservation objectives.

Table 17 Potential Impacts/Effects on the Conservation Objectives of North Bull Island SPA

Conservation Objectives Attribute/Measure/Target	**Potential Impacts Requiring Mitigation?**	**Are mitigation measures required?**
North Bull Island SPA		
Light-bellied Brent Goose (*Branta bernicla hrota*) [A046], Shelduck (*Tadorna tadorna*) [A048], Teal (*Anas crecca*) [A052], Pintail (*Anas acuta*) [A054], Shoveler (*Anas clypeata*) [A056], Oystercatcher (*Haematopus ostralegus*) [A130], Golden Plover (*Pluvialis apricaria*) [A140], Grey Plover (*Pluvialis squatarola*) [A141], Knot (*Calidris canutus*) [A143], Sanderling (*Calidris alba*) [A144], Dunlin (*Calidris alpina*) [A149], Black-tailed Godwit (*Limosa limosa*) [A156], Bar-tailed Godwit (*Limosa lapponica*) [A157], Curlew (*Numenius arquata*) [A160], Redshank (*Tringa totanus*) [A162], Turnstone (*Arenaria interpres*) [A169], Black-headed Gull (*Chroicocephalus ridibundus*) [A179] To restore the favourable conservation condition of the special conservation interests of the SPA, which is defined as follows:		
Population trend / Percentage change / Long term population trend stable or increasing	Yes	Yes

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Distribution / Range, timing and intensity of use of areas / No significant decrease in the range, timing and intensity of use of areas by all of the above named species, other than that occurring from natural patterns of variation	An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal/coastal habitats that support the special conservation interest bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations. The introduction and/or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. This in turn could affect the use of habitat areas by birds and have long-term effects on the SPA populations.	See the relevant mitigation measures described in Section 7.1.4.1 to protect water quality in the receiving environment. See the mitigation measures described in Section 7.1.4.2 to prevent the introduction and/or spread of invasive species.
Wetlands [A999] To maintain the favourable conservation condition of wetland habitats within the SPA, which is defined as follows:		

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Habitat area / Hectares / The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 1,713ha, other than that occurring from natural patterns of variation	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal/coastal habitats that support the special conservation interest bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations. The introduction and/or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. This in turn could affect the use of habitat areas by birds and have long-term effects on the SPA populations.	Yes See the relevant mitigation measures described in Section 7.1.4.1 to protect water quality in the receiving environment. See the mitigation measures described in Section 7.1.4.2 to prevent the introduction and/or spread of invasive species.

7.5.4 *Mitigation Measures*

196 This section presents the mitigation measures that will be implemented during construction and operation to avoid or reduce the potential impacts of the Proposed Scheme on North Bull Island SPA. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment.

Measures to Protect Surface Water Quality during Construction

197 The mitigation measures presented above in Section 7.1.4.1 will protect surface water quality during construction of the Proposed Scheme.

Measures to Protect Surface Water Quality during Operation

198 The mitigation measures presented above in Section 7.1.4.1 will protect surface water quality during operation of the Proposed Scheme.

Measures to Prevent the Spread of Invasive Species to Downstream European Sites

The mitigation measures presented above in Section 7.1.4.2 will prevent the spread of invasive species to downstream European sites.

7.5.5 *Residual Impacts*

199 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme will not have any adverse effect on the conservation objectives, or the favourable conservation condition, of the qualifying interests/special conservation interests of North Bull Island SPA, and there are therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of North Bull Island SPA. As is confirmed by the Water Framework Directive Assessment for the Proposed Scheme (refer to Appendix V), the proposed Scheme will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and it can be concluded that the Proposed Scheme complies with all requirements of the WFD.

7.5.6 *Conclusion of Assessment for North Bull Island SPA*

200 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the qualifying interests/special conservation interests of North Bull Island SPA, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the qualifying interests/special conservation interests, it is concluded that the Proposed Scheme will not adversely affect (either directly or indirectly) the integrity of North Bull Island SPA.

7.6 South Dublin Bay and River Tolka Estuary SPA [004024]

7.6.1 *Ecological Baseline Description for South Dublin Bay and River Tolka Estuary SPA*

201 The Natura 2000 Standard Data Form (NPWS, 2018h) states that the SPA possesses extensive intertidal flats, part of which are designated as South Dublin Bay SAC, and which supports wintering waterfowl as part of the wider Dublin Bay population. The site also supports an internationally important population of light-bellied brent geese, feeding on the stands of *Zostera*. It hosts nationally important numbers of six species, is an important site for wintering gulls and is an autumn roosting site for a significant number of terns. The main threat to the site is land reclamation, with other threats including oil pollution from Dublin Port, commercial bait digging and disturbance by walkers and dogs.

7.6.2 *Qualifying Interests and Conservation Objectives of South Dublin Bay and River Tolka Estuary SPA*

202 The qualifying interests of South Dublin Bay and River Tolka Estuary SPA, and the overall conservation objective, are listed below in **Table 18**.

Table 18 Qualifying Interests and Conservation Objectives of South Dublin Bay and River Tolka Estuary SPA

Qualifying Interest(s)	Conservation Objective(s)
South Dublin Bay and River Tolka Estuary SPA [004024] A046 Light-bellied Brent Goose *Branta bernicla hrota* A130 Oystercatcher *Haematopus ostralegus* A137 Ringed Plover *Charadrius hiaticula* A141 Grey Plover *Pluvialis squatarola* A143 Knot *Calidris canutus* A144 Sanderling *Calidris alba* A149 Dunlin *Calidris alpina* A157 Bar-tailed Godwit *Limosa lapponica* A162 Redshank *Tringa totanus* A179 Black-headed Gull *Chroicocephalus ridibundus* A192 Roseate Tern *Sterna dougallii* A193 Common Tern *Sterna hirundo* A194 Arctic Tern *Sterna paradisaea* A999 Wetland and Waterbirds *S.I. No. 212/2010 – European Communities (Conservation of Wild Birds (South Dublin Bay and River Tolka Estuary Special Protection Area 004024)) Regulations 2010.* NPWS (2015) *Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA 004024*. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA

203 In conjunction with considering the generic conservation objective for this SPA "To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA", the site specific conservation objectives document for South Dublin Bay and River Tolka Estuary SPA also informed this assessment.

204 The site specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the qualifying interests within the European site. Affecting the conservation condition of the qualifying interests/special conservation interests would constitute an

adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the qualifying interests of South Dublin Bay and River Tolka Estuary SPA are presented in Section 7.6.3.5.

7.6.3 *Examination and Analysis of Potential Direct and Indirect Impacts*

205 The direct and/or indirect impacts by which the Proposed Scheme could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the qualifying interests of South Dublin Bay and River Tolka Estuary SPA, are:

- Habitat loss and fragmentation;
- Habitat degradation/effects on QI/SCI species as a result of hydrological impacts;
- Habitat degradation as a result of introducing/spreading non-native invasive species;
- Habitat degradation as a result of air quality impacts; and
- Disturbance and displacement impacts.

7.6.3.1 Habitat loss and fragmentation

206 South Dublin Bay and River Tolka Estuary SPA is designated for wintering SCI species that are known to forage and/or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include light-bellied brent goose, golden plover oystercatcher, black-headed gull and black-tailed godwit. There are two no. areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme, namely Buttercup Park, referred to as CBC0001WB002, and Maypark, referred to as CBC0001WB003.The Proposed Scheme will result in the temporary loss of 0.81ha of GA2 habitat suitable to support breeding gull and wintering bird species at the Proposed Buttercup Park compound (referred to as CBC0001WB002), a permanent loss of 0.02ha of suitable GA2 habitat at the proposed Maypark footpath, and a temporary loss of 0.7ha of suitable GA2 habitat at Maypark to facilitate boundary works (referred to as CBC0001WB003).

207 There is no potential for impacts to occur on inland feeding SCI populations associated with South Dublin Bay and Tolka Estuary SPA, in light of their conservation objectives, as a consequence of habitat loss/fragmentation from inland feeding/roosting sites due to increased levels of disturbance due to the following reasons:

- Relatively low frequency of occurrence of these SCI bird species on lands located within the footprint of the Proposed Scheme, suggesting that these species do not regularly use or rely upon these lands as foraging and/or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis. Moreover, populations of light-bellied brent geese were only sighted flying over the sites, rather than utilising as a feeding resource;
- Relatively low peak flocks recorded on lands located within the footprint of the Proposed Scheme, especially when compared to 1% of both their international flyway and national populations and the mean peak flock of each respective SCI species recorded in the nearest SPA (See **Table 5**), suggesting that these sites are not significantly important to the overall SPA population of each respective SCI bird species, and are likely to use other suitable sites available in the wider area on a similar or more regular basis. Moreover, populations of light-bellied brent geese were only sighted flying over the sites, rather than utilising as a feeding resource; and
- The availability of large areas of suitable foraging and/or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and

sports pitches such as those discussed in Section 7.5.3.4. It is very likely that these SCI bird species currently utilise these and other suitability lands in the wider area to a similar and/or greater intensity during the 24 months in which the Buttercup Park compound will be in use.

- The existing pedestrian footpath at Maypark will be extended to facilitate the proposed cycleway resulting in permanent habitat loss. This habitat loss is not predicted to be significant as it is removing a minor section at the edge of the site.

7.6.3.2 Habitat degradation/effects on QI/SCI species as a result of hydrological impacts

208 The release of contaminated surface water runoff and/or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and/or leaks of contaminants into receiving waters. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme is hydrologically connected to Dublin Bay via the Santry_020 and existing pipes which drain to Dublin Bay.

209 Therefore, (albeit unlikely) this reduction in water quality (either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within these European sites, which in turn would negatively affect the SCI bird species that rely upon these habitats as foraging and/or roosting habitat. It could also negatively affect the quantity and quality of prey available to SCI bird species. These potential impacts could occur to such a degree that they result in significant effects which could have implications for the conservation objectives of South Dublin Bay and River Tolka Estuary SPA.

7.6.3.3 Habitat degradation as a result of introducing/spreading non-native invasive species

210 No non-native invasive plant species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011 were recorded within, or in close proximity to, the Proposed Scheme. However, there were records of invasive species in the vicinity of the Proposed Scheme returned from the desk study. During construction and/or routine maintenance/management work, these species could potentially spread or be introduced to terrestrial habitats located within downstream European sites via surface water features. The introduction and/or spread of these invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat. This in turn could undermine the conservation objectives of these European sites. The Proposed Scheme is hydrologically connected to Dublin Bay via the Santry_020, Wad river, and existing pipes which drain to Dublin Bay. Therefore, there is potential for the Proposed Scheme to result in significant effects which could have implications for the conservation objectives of South Dublin Bay and River Tolka Estuary SPA as a result of invasive species spread.

7.6.3.4 Habitat degradation as a result of air quality impacts

211 A temporary reduction in air quality within the immediate vicinity of the construction works may occur as a consequence of dust deposition associated with these construction activities. This includes reduction in photosynthesis due to smothering from dust on the plants and chemical changes such as acidity to soils. Furthermore, emissions from car exhausts, and the deposition of particulate matter and heavy metals produced by engine, brake and tyre wear, can contribute to increased deposition of pollutants such as oxides of nitrogen ($NO + NO_2$), volatile organic compounds (VOCs), particulate matter (PM), heavy metals (HM) and ammonia (NH4) in the vicinity of a road carriageway. This can affect the ecosystems and vegetation present, influencing plant growth rates and species composition, diversity, and abundance.

212 The nature of air quality impacts from roads and their interaction / effects on ecology are set out in the TII guidance document Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes (National Roads Authority, 2011) and three UK reports: The Ecological Effects of Diffuse Air Pollution from Road Transport (Bignal *et al.,* 2004), The Ecological Effects of Air Pollution from Road Transport: An Updated Review (Natural England, 2016), and Advice on Ecological Assessment of Air Quality Impacts (CIEEM 2021). Further guidance can also be found in the IAQM document A Guide To The Assessment Of Air Quality Impacts On Designated Nature Conservation Sites (IAQM 2020) and in the DMRB guidance LA105 Air Quality (UKHA 2019), both of which describe NO_X emissions as the most likely source of significant impacts from road traffic. Pollutants such as PM, CO_2, CO, SO_2, ammonia and volatile organic compounds are not considered in this guidance and have been scoped out of detailed assessment (refer to Appendix VI for the Air Quality Assessment and methodology at the back of the report).

213 An assessment of the impact of the Proposed Scheme has been undertaken using the approach outlined in the IAQM guidance document A Guide to the Assessment of Air Quality Impacts on Designated Nature Conservation Sites (Version 1.1) (IAQM 2020). Vehicle-derived air emissions were modelled during the Operational Phase of the Proposed Scheme at Clontarf Road which runs parallel to the SPA (refer to Appendix VI for full details). The mean worst-case predicted annual average NO_x (total Nitrogen Oxide (NO) and Nitrogen Dioxide (NO_2) concentrations within 200m of roads impacted by the Proposed Scheme exceed the 30µg/m^3 limit value (see **Table 19**). In all cases where exceedances occur, the modelled future baseline environment is already in excess of this value and reduces below this critical level at 150m from Clontarf Road. During the Operational Phase of the Proposed Scheme (the Do Something Scenario), NO_x is modelled to reduce below the critical level at 160m from Clontarf Road, therefore resulting in additional territory within the SPA being subject to NO_x above the 30µg/m^3 limit value as a result of the Proposed Scheme.

214 However, the contribution of the Operational Phase of the Proposed Scheme to the NO_2 dry deposition rate was modelled at Clontarf Road (see **Table 20**) and Nitrogen deposition levels have been compared to the lower and higher critical loads[18] for terrestrial habitats. All sites are below the lower critical load of inland and surface water habitats of 5-10 Kg(N)/ha/yr (National Road Authority, 2011). It is not predicted therefore that there would be any harmful effects on vegetation within the SPA from NO and NO_2 and as a result there would not be any reduction in habitat area of the SCI wetland habitat nor any resulting change in the use of the wetland habitat as a resource for SCI species.

215 Amenity grassland habitats adjacent to the SPA, have the potential to be used by wintering birds as *ex-situ* sites. As a worst case scenario, the annual average NO_x concentrations here will increase by 4% due to the Operational Phase of the Proposed Scheme (see **Table 20**), however NO_2 deposition will remain below the critical loads of inland and surface water habitats of 5-10 Kg(N)/ha/yr (National Road Authority, 2011).

216 It is not predicted therefore that there will be any reduction in the permanent area occupied by the wetland habitat as specified by the conservation objectives for South Dublin Bay and River Tolka Estuary SPA, nor any change on how SCI birds utilise the SPA.

[18] Critical loads being defined as an estimate of an exposure to a given pollutant below which significant harmful effects on specified sensitive elements of the environment do not occur according to present knowledge (Nilsson & Grennfelt, 1988)

Table 19 Significance of Impacts at Key Ecological Receptors (NO_X Annual Mean Concentration In 2028)

		Annual Mean NO_X In 2028 At Closest Point Within Ecological Site To Road					
Receptor	**Receptor Location (ITM)**	**Do Minimum (mg/m^3)**	**Distance from road beyond which concentration is below critical level ($30mg/m^3$) (m)**	**Do Something (mg/m^3)**	**Distance from road beyond which concentration is below critical level ($30mg/m^3$) (m)**	**Impact (DS – DM) (mg/m^3)**	**Change as a percentage of critical level ($30mg/m^3$) (%)**
South Dublin Bay and River Tolka Estuary SPA (Clontarf Road)	718639, 736161	56.3	150m	57.5	160m	1.2	4%

Table 20 Significance of Impacts at Key Ecological Receptors (NO_2 Deposition In 2028)

		Annual Mean NO_2 In 2028 At Closest Point Within Ecological Site To Road							
Receptor	**Receptor Location (ITM)**	**Lower critical load for most sensitive feature (kgN/ha/yr)**	**Do Minimum (kgN/ha/yr)**	**Distance from road beyond which deposition is below critical load (m)**	**Do Something (kgN/ha/yr)**	**Distance from road beyond which deposition is below critical load (m)**	**Change relative to lower critical load (%)**	**Distance from road beyond which the change is <1% (m)**	**Change in deposition kgN/ha/yr**
South Dublin Bay and River Tolka Estuary SPA (Clontarf Road)	718639, 736161	5	3.4	0m	3.5	0m	0.0	10m	0.1

7.6.3.5 Disturbance and displacement impacts

217 A temporary and/or permanent increase in noise, vibration and/or human activity levels during the construction and/or operation of the Proposed Scheme could result in the disturbance to and/or displacement of SCI bird species present within footprint and/or the vicinity of the Proposed Scheme. Such disturbance effects during the Construction Phase would not be expected to extend beyond a distance of approximately 300m, as noise levels associated with general construction activities would attenuate to close to background levels at that distance and beyond. The Operational Phase will not result in significant changes to existing noise levels due to the urban locality of the Proposed Scheme as an existing transport route. **Table 16** in Section 7.5.3.4 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.

218 The South Dublin Bay and River Tolka Estuary SPA is designated for wintering SCI species that are known to forage and/or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include light-bellied brent goose, oystercatcher and black-headed gull. There are areas of suitable foraging, and/or roosting habitat for these species within the footprint of and adjacent to the Proposed Scheme (i.e., within the disturbance ZoI), including the following sites, which have been returned from the desk study (Scott Cawley, 2017):

- Clontarf Golf Club (High Importance), adjacent to the Proposed Scheme;
- Marino/Ardscoil Ris (Major Importance), adjacent to the Proposed Scheme;

- Coolock/O'Toole's GAA (Major Importance), located approximately 14m from the Proposed Scheme;
- Coolock/Chanel College (Major Importance), located approximately 25m from the Proposed Scheme;
- Parnell Park (Moderate Importance), located approximately 89m from the Proposed Scheme;
- Ayrfield Park (High Importance), located approximately 117m from the Proposed Scheme;
- Fairview Park (Major Importance), located approximately 120m from the Proposed Scheme;
- Artane/St. David's College (Major Importance), located approximately 130m from the Proposed Scheme;
- Coolock/Rathvale Drive (High Importance), located approximately 157m from the Proposed Scheme;
- Marino/Mount Temple School (Major Importance), located approximately 184m from the Proposed Scheme; and
- Donnycarney/St. Vincent's GAA (Major Importance), located approximately 299m from the Proposed Scheme.

219 As records of SCI bird species associated with the South Dublin Bay and River Tolka Estuary SPA have been returned from the desk study in the vicinity of the Proposed Scheme (i.e., light-bellied brent goose, oystercatcher and black-headed gull), it is very likely that these species currently utilise these and other suitable lands in the wider area. However, no significant effects will occur on any SCI bird species population of The South Dublin Bay and River Tolka Estuary SPA, in light of their conservation objectives, as a consequence of the disturbance and/or displacement from inland feeding/roosting sites due to increased levels of disturbance due to the following reasons:

- Relatively low frequency of occurrence of these SCI bird species on lands located within the footprint of the proposed Project, suggesting that these species do not regularly use or rely upon these lands as foraging and/or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- Relatively low peak flocks recorded on lands located within the footprint of the proposed Project, especially when compared to 1% of both their international flyway and national populations (as provided in, suggesting that these sites are not significantly important to the overall SPA population of each respective SCI bird species, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- The availability of large areas of suitable foraging and/or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches such as St. Anne's Park, the Red Arches and Seagrange Park, the Baldoyle Bird Quiet Zone and agricultural lands to the north of the Proposed Scheme; and
- Impacts associated with increased levels of disturbance will likely result in the temporary displacement of these SCI species to other suitable available lands in the locality, for a maximum of 24 months during construction works. Following the completion of construction, disturbance levels will likely return to baseline conditions and as a result these lands will become available again as foraging and/or roosting habitat for these SCI species.

7.6.3.6 Summary

220 **Table 21** below presents a summary of the potential impacts of the Proposed Scheme on the qualifying interests of South Dublin Bay and River Tolka Estuary SPA, and how these impacts relate to affecting the site's conservation objectives.

Table 21 Potential Impacts/Effects on the Conservation Objectives of South Dublin Bay and River Tolka Estuary SPA

Conservation Objectives Attribute/Measure/Target	**Potential Impacts Requiring Mitigation?**	**Are mitigation measures required?**
South Dublin Bay and River Tolka Estuary SPA		
Light-bellied Brent Goose (*Branta bernicla hrota*) [A046], Oystercatcher (*Haematopus ostralegus*) [A130], Ringed Plover (*Charadrius hiaticula*) [A137], Knot (*Calidris canutus*) [A143], Sanderling (*Calidris alba*) [A144], Dunlin (*Calidris alpina*) [A149], Bar-tailed Godwit (*Limosa lapponica*) [A157], Redshank (*Tringa totanus*) [A162], Black-headed Gull (*Chroicocephalus ridibundus*) [A179] **Note: Grey Plover (*Pluvialis squatarola*) [A141] is proposed for removal from the list of SCI's for the site so no site specific conservation objective is included for the species** To maintain the favourable conservation condition of the special conservation interests of the SPA, which is defined as follows:		
Population trend / Percentage change / Long term population trend stable or increasing	Yes	Yes

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Distribution / Range, timing and intensity of use of areas / No significant decrease in the range, timing and intensity of use of areas by all of the above named species, other than that occurring from natural patterns of variation	An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal/coastal habitats that support the special conservation interest bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations. The introduction and/or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. This in turn could affect the use of habitat areas by birds and have long-term effects on the SPA populations.	The mitigation measures described in Section 7.1.4.1 to protect water quality in the receiving environment. The mitigation measures described in Section 7.1.4.2 will prevent the introduction and/or spread of invasive species.
Roseate Tern (*Sterna dougallii*) [A192] To maintain the favourable conservation condition of the special conservation interests of the SPA, which is defined as follows:		
Passage population: individuals / Number / No significant decline	Yes	Yes

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Distribution: roosting areas / Number; location; area (hectares) / No significant decline	An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal/coastal habitats that support the special conservation interest bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations. The introduction and/or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. This in turn could affect the use of habitat areas by birds and have long-term effects on the SPA populations.	The mitigation measures described in Section 7.1.4.1 to protect water quality in the receiving environment. The mitigation measures described in Section 7.1.4.2 will prevent the introduction and/or spread of invasive species.
Prey biomass available / Kilogrammes / No significant decline		
Barriers to connectivity / Number; location; shape; area (hectares) / No significant increase		
Disturbance at roosting site / Level of impact / Human activities should occur at levels that do not adversely affect the numbers of roseate tern among the post-breeding aggregation of terns		
Common Tern (*Sterna hirundo*) [A193] To maintain the favourable conservation condition of the special conservation interests of the SPA, which is defined as follows:		
Breeding population abundance: apparently occupied nests (AONs) / Number / No significant decline	Yes	Yes

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Productivity rate: fledged young per breeding pair / Mean number / No significant decline	An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal/coastal habitats that support the special conservation interest bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations. The introduction and/or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. This in turn could affect the use of habitat areas by birds and have long-term effects on the SPA populations.	The mitigation measures described in Section 7.1.4.1 to protect water quality in the receiving environment. The mitigation measures described in Section 7.1.4.2 will prevent the introduction and/or spread of invasive species.
Passage population: individuals / Number / No significant decline		
Distribution: breeding colonies / Number; location; area (Hectares) / No significant decline		
Distribution: roosting areas / Number; location; area (Hectares) / No significant decline		
Prey biomass available / Kilogrammes / No significant decline		
Barriers to connectivity / Number; location; shape; area (hectares) / No significant increase		
Disturbance at breeding site / Level of impact / Human activities should occur at levels that do not adversely affect the breeding common tern population		
Disturbance at roosting site / Level of impact / Human activities should occur at levels that do not adversely affect the numbers of common tern among the post-breeding aggregation of terns		
Arctic Tern (*Sterna paradisaea*) [A194] To maintain the favourable conservation condition of the special conservation interests of the SPA, which is defined as follows:		
Passage population / Number of individuals / No significant decline	Yes	Yes

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Distribution: roosting areas / Number; location; area (hectares) / No significant decline	An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal/coastal habitats that support the special conservation interest bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations. The introduction and/or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. This in turn could affect the use of habitat areas by birds and have long-term effects on the SPA populations.	The mitigation measures described in Section 7.1.4.1 to protect water quality in the receiving environment. The mitigation measures described in Section 7.1.4.2 will prevent the introduction and/or spread of invasive species.
Prey biomass available / Kilogrammes / No significant decline		
Barriers to connectivity / Number; location; shape; area (hectares) / No significant increase		
Disturbance at roosting site / Level of impact / Human activities should occur at levels that do not adversely affect the numbers of Arctic tern among the post-breeding aggregation of terns		

Wetlands [A999] To maintain the favourable conservation condition of wetland habitats within the SPA, which is defined as follows:		
Habitat area / Hectares / The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 2,192ha, other than that occurring from natural patterns of variation	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal/coastal habitats that support the special conservation interest bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations. The introduction and/or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. This in turn could affect the use of habitat areas by birds and have long-term effects on the SPA populations.	Yes The mitigation measures described in Section 7.1.4.1 to protect water quality in the receiving environment. The mitigation measures described in Section 7.1.4.2 will prevent the introduction and/or spread of invasive species.

7.6.4 *Mitigation Measures*

221 This section presents the mitigation measures that will be implemented during construction and operation to avoid or reduce the potential impacts of the Proposed Scheme on South Dublin Bay and River Tolka Estuary SPA. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment.

Measures to Protect Surface Water Quality during Construction

222 The mitigation measures presented above in Section 7.1.4.1 will protect surface water quality during construction of the Proposed Scheme.

Measures to Protect Surface Water Quality during Operation

223 The mitigation measures presented above in Section 7.1.4.1 will protect surface water quality during operation of the Proposed Scheme.

Measures to Prevent the Spread of Invasive Species to Downstream European Sites

224 The mitigation measures presented above in Section 7.1.4.2 will prevent the spread of invasive species to downstream European sites.

7.6.5 *Residual Impacts*

225 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme will not have any adverse effect on the conservation objectives, or the favourable conservation condition, of the qualifying interests/special conservation interests of South Dublin Bay and River Tolka Estuary SPA, and there are therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of South Dublin Bay and River Tolka Estuary SPA. As is confirmed by the Water Framework Directive Assessment for the Proposed Scheme (refer to Appendix V), the proposed Scheme will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and it can be concluded that the Proposed Scheme complies with all requirements of the WFD.

7.6.6 *Conclusion of Assessment for South Dublin Bay and River Tolka Estuary SPA*

226 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the qualifying interests/special conservation interests of South Dublin Bay and River Tolka Estuary SPA, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the qualifying interests/special conservation interests, it is concluded that the Proposed Scheme will not adversely affect (either directly or indirectly) the integrity of South Dublin Bay and River Tolka Estuary SPA.

7.7 Ireland's Eye SPA [004117]

7.7.1 *Ecological Baseline Description for Ireland's Eye SPA*

227 According to the Natura 2000 Standard Data Form (NPWS, 2018m), this SPA is a small uninhabited island located approximately 1.5km north of Howth Head. The main habitat on the island is a mix of dry grassland and bracken. There are impressive cliff formations along the northern and eastern sides of the island. This SPA has a large seabird colony, with 11 species breeding regularly. It is designated for breeding populations of cormorant, herring gull, kittiwake, guillemot and razorbill. Major threats to the site include walking, horse-riding and non-motorised vehicles and leisure fishing.

7.7.2 *Qualifying Interests and Conservation Objectives of Ireland's Eye SPA*

228 The qualifying interests of Ireland's Eye SPA, and the overall conservation objectives, are listed below in **Table 22**.

Table 22 Qualifying Interests and Conservation Objectives of Ireland's Eye SPA

Qualifying Interest(s)	Conservation Objective(s)
Ireland's Eye SPA [004117] A017 Cormorant *Phalacrocorax carbo* A184 Herring Gull *Larus argentatus* A188 Kittiwake *Rissa tridactyla* A199 Guillemot *Uria aalge* A200 Razorbill *Alca torda* *S.I. No. 240/2010 – European Communities (Conservation of Wild Birds (Ireland's Eye Special Protection Area 004117) Regulations 2010.* NPWS (2021) *Conservation objectives for Ireland's Eye SPA [004117].* Generic Version 8.0. Department of Housing, Local Government and Heritage.	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA

229 In conjunction with considering the generic conservation objective for this SPA "To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA", site specific conservation objectives documents for Ireland's Eye SPA have been compiled from other relevant European sites (identified in **Table 23**) to inform this assessment.

230 The site specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the qualifying interests within the European site. Affecting the conservation condition of the qualifying interests/special conservation interests would constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the qualifying interests of Ireland's Eye SPA are presented in Section 7.7.3.4.

7.7.3 *Examination and Analysis of Potential Direct and Indirect Impacts*

231 The direct and/or indirect impacts by which the Proposed Scheme could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the qualifying interests of Ireland's Eye SPA, are:

- Habitat loss and fragmentation;
- Habitat degradation/effects on QI/SCI species as a result of hydrological impacts; and
- Disturbance and displacement impacts.

7.7.3.1 Habitat loss and fragmentation

232 Irelands Eye SPA is designated for wintering SCI species that are known to forage and/or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include herring gull. There are two no. areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme, namely Buttercup Park, referred to as CBC0001WB002, and Maypark, referred to as CBC0001WB003.

233 The Proposed Scheme will result in the temporary loss of 0.81ha of GA2 habitat suitable to support breeding gull and wintering bird species at the Proposed Buttercup Park compound (referred to as CBC0001WB002), a permanent loss of 0.02ha of suitable GA2 habitat at the proposed Maypark footpath, and a temporary loss of 0.7ha of suitable GA2 habitat at Maypark to facilitate boundary works (referred to as CBC0001WB003).

234 There is no potential for impacts to occur on inland feeding SCI populations associated with Ireland's Eye SPA, in light of their conservation objectives, as a consequence of habitat loss/fragmentation from inland feeding/roosting sites due to increased levels of disturbance due to the following reasons:

- Relatively low frequency of occurrence of these SCI bird species on lands located within the footprint of the Proposed Scheme, suggesting that these species do not regularly use or rely upon these lands as foraging and/or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis. Moreover, populations of light-bellied brent geese were only sighted flying over the sites, rather than utilising as a feeding resource;
- Relatively low peak flocks recorded on lands located within the footprint of the Proposed Scheme, especially when compared to 1% of both their international flyway and national populations and the mean peak flock of each respective SCI species recorded in the nearest SPA (See **Table 5**), suggesting that these sites are not significantly important to the overall SPA population of each respective SCI bird species, and are likely to use other suitable sites available in the wider area on a similar or more regular basis. Moreover, populations of light-bellied brent geese were only sighted flying over the sites, rather than utilising as a feeding resource;
- The availability of large areas of suitable foraging and/or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches such as those discussed in Section 7.5.3.4. It is very likely that these SCI bird species currently utilise these and other suitability lands in the wider area to a similar and/or greater intensity during the 24 months in which the Buttercup Park compound will be in use; and
- The existing pedestrian footpath at Maypark will be extended to facilitate the proposed cycleway resulting in permanent habitat loss. This habitat loss is not predicted to be significant as it is removing a minor section at the edge of the site.

7.7.3.2 Habitat degradation/effects on QI/SCI species as a result of hydrological impacts

235 The release of contaminated surface water runoff and/or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and/or leaks of contaminants into receiving waters. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme is hydrologically connected to the Santry_020 and Wad river which flow into Dublin Bay approximately 4.2km from Ireland's Eye SPA.

236 Therefore, (albeit unlikely) this reduction in water quality (either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within Dublin Bay. As a worst case scenario there is potential to affect mobile SCI bird species that commute, forage and loaf in Dublin Bay. It could also negatively affect the quantity and quality of prey available to SCI bird species. These potential impacts could occur to such a degree that they result in significant effects which could have implications for the conservation objectives of Ireland's Eye SPA.

7.7.3.3 Disturbance and displacement impacts

237 A temporary and/or permanent increases in noise, vibration and/or human activity levels during the construction and/or operation of the Proposed Scheme could result in the disturbance to and/or displacement of SCI bird species present within footprint and/or the vicinity of the Proposed Scheme. Such disturbance effects during the Construction Phase would not be expected to extend beyond a distance of approximately 300m, as noise levels associated with general construction activities would attenuate to close to background levels at that distance and beyond. The Operational Phase is not anticipated to result in significant changes to existing noise levels due to the urban locality of the Proposed Scheme as an existing transport route. **Table 16** in Section 7.5.3.4 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.

238 Ireland's Eye SPA is designated for breeding SCI herring gull that are known to forage and/or roost at inland sites across Dublin, such as amenity grassland playing pitches. There are several areas of suitable foraging and/or roosting habitat available for these SCI herring gull within the footprint of and adjacent to the Proposed Scheme (i.e., within the disturbance ZoI), including the following sites, which have been returned from the desk study (Scott Cawley, 2017):

- Clontarf Golf Club (High Importance), adjacent to the Proposed Scheme;
- Marino/Ardscoil Ris (Major Importance), adjacent to the Proposed Scheme;
- Coolock/O'Toole's GAA (Major Importance), located approximately 14m from the Proposed Scheme;
- Coolock/Chanel College (Major Importance), located approximately 25m from the Proposed Scheme;
- Parnell Park (Moderate Importance), located approximately 89m from the Proposed Scheme;
- Ayrfield Park (High Importance), located approximately 117m from the Proposed Scheme;
- Fairview Park (Major Importance), located approximately 120m from the Proposed Scheme;
- Artane/St. David's College (Major Importance), located approximately 130m from the Proposed Scheme;
- Coolock/Rathvale Drive (High Importance), located approximately 157m from the Proposed Scheme;
- Marino/Mount Temple School (Major Importance), located approximately 184m from the Proposed Scheme; and
- Donnycarney/St. Vincent's GAA (Major Importance), located approximately 299m from the Proposed Scheme.

239 As records of herring gull have been returned from the desk study in the vicinity of the Proposed Scheme, it is considered to be possible that this species currently utilise these and other suitable lands in the wider area. However, there is no potential for impacts to occur on any SCI bird species population of Ireland's Eye SPA, in light of their conservation objectives, as a consequence of the disturbance and/or displacement from inland feeding/roosting sites due to increased levels of disturbance due to the following reasons:

- Relatively low frequency of occurrence of these SCI bird species on lands located within the footprint of the proposed Project, suggesting that these species do not regularly use or rely upon these lands as foraging and/or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- Relatively low peak flocks recorded on lands located within the footprint of the proposed Project, especially when compared to 1% of both their international flyway and national populations and the mean peak flock of each respective SCI species recorded in the nearest SPA, suggesting that these sites are not significantly important to the overall SPA population of each respective SCI bird species, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- The availability of large areas of suitable foraging and/or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to Ireland's Eye SPA. These include marine habitats surrounding the islands, golf clubs, agricultural lands and public parks/ sports pitches in the North County Dublin area; and
- Impacts associated with increased levels of disturbance will likely result in the temporary displacement of these SCI species to other suitable available lands in the locality, for a maximum of 24 months during construction works. Following the completion of construction, disturbance levels will likely return to baseline conditions and as a result these lands will become available again as foraging and/or roosting habitat for these SCI species.

7.7.3.4 Summary

240 **Table 23** below presents a summary of the potential impacts of the Proposed Scheme on the qualifying interests of Ireland's Eye SPA, and how these impacts relate to affecting the site's conservation objectives.

Table 23 Potential Impacts/Effects on the Conservation Objectives of Ireland's Eye SPA

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Ireland's Eye SPA		
Cormorant [A017], Herring Gull [A184], Kittiwake [A188], Guillemot [A199], Razorbill [A200] There is no site specific conservation objectives document available for this SPA. Therefore, the attributes, measures and targets below have been developed based on the specific conservation objectives available for Rogerstown Estuary SPA [004015]		
Population trend / Percentage change / Long term population trend stable or increasing	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal/coastal habitats that support the special conservation interest bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.
Distribution / Range, timing and intensity of use of areas / No significant decrease in the range, timing and intensity of use of areas by all of the above named species, other than that occurring from natural patterns of variation		

7.7.4 *Mitigation Measures*

241 This section presents the mitigation measures that will be implemented during construction and operation to avoid or reduce the potential impacts of the Proposed Scheme on Ireland's Eye SPA. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment.

Measures to Protect Surface Water Quality during Construction

242 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during construction of the Proposed Scheme.

Measures to Protect Surface Water Quality during Operation

243 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during operation of the Proposed Scheme.

7.7.5 *Residual Impacts*

244 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme will not have any adverse effect on the conservation objectives, or the favourable conservation condition, of the qualifying interests/special conservation interests of Ireland's Eye SPA, and there are therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of Ireland's Eye SPA. As is confirmed by the Water Framework Directive Assessment for the Proposed Scheme (refer to Appendix V), the proposed Scheme will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and it can be concluded that the Proposed Scheme complies with all requirements of the WFD.

7.7.6 *Conclusion of Assessment for Ireland's Eye SPA*

245 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the qualifying interests/special conservation interests of North Dublin Bay and Ireland's Eye SPA, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the qualifying interests/special conservation interests, it is concluded that the Proposed Scheme will not adversely affect (either directly or indirectly) the integrity of North Dublin Bay and Irelands Eye SPA.

7.8 Malahide Estuary SPA [004025]

7.8.1 *Ecological Baseline Description for Malahide Estuary SPA*

246 Malahide Estuary SPA comprises the estuary of the River Broadmeadow. According to the Natura 2000 Standard Data Form for the site (NPWS, 2018i), the estuary comprises, saltmarsh habitats and extensive intertidal flats. This site is of high importance for wintering waterfowl and supports a particularly good diversity of species. It provides both feeding and roosting areas for a range of wintering waterfowl. It supports an internationally important population of light-bellied brent geese and nationally important populations of a further 12 species. The site is also an important and regular site for a range of autumn passage migrants.

247 The qualifying interests of Malahide Estuary SPA, and the overall conservation objective, are listed below in **Table 24**.

Table 24 Qualifying Interests and Conservation Objectives of Malahide Estuary SPA

Qualifying Interest(s)	Conservation Objective(s)
Malahide Estuary SPA [004025] A005 Great Crested Grebe *Podiceps cristatus* A046 Light-bellied Brent Goose *Branta bernicla hrota* A048 Shelduck *Tadorna tadorna* A054 Pintail *Anas acuta* A067 Goldeneye *Bucephala clangula* A069 Red-breasted Merganser *Mergus serrator* A130 Oystercatcher *Haematopus ostralegus* A140 Golden Plover *Pluvialis apricaria* A141 Grey Plover *Pluvialis squatarola* A143 Knot *Calidris canutus* A149 Dunlin *Calidris alpina* A156 Black-tailed Godwit *Limosa limosa* A157 Bar-tailed Godwit *Limosa lapponica* A162 Redshank *Tringa totanus* A999 Wetland and Waterbirds *S.I. No. 285/2011 – European Communities (Conservation of Wild Birds (Malahide Estuary Special Protection Area 004025)) Regulations 2011.* NPWS (2013) *Conservation Objectives: Malahide Estuary SPA 004025.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA

248 In conjunction with considering the generic conservation objective for this SPA "To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA", the site specific conservation objectives document for Malahide Estuary SPA also informed this assessment.

249 The site specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the qualifying interests/special conservation interests within the European site. Affecting the conservation condition of the qualifying interests/special conservation interests would constitute an adverse effect on the integrity of a European site. The specific

attributes and targets used to define the conservation objectives of the qualifying interests of Malahide Estuary SPA are presented in Section 7.8.2.4.

7.8.2 *Examination and Analysis of Potential Direct and Indirect Impacts*

250 The direct and/or indirect impacts by which the Proposed Scheme could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the qualifying interests of Malahide Estuary SPA, are:

- Habitat loss and fragmentation;
- Habitat degradation/effects on QI/SCI species as a result of hydrological impacts; and
- Disturbance and displacement impacts.

7.8.2.1 Habitat loss and fragmentation

251 Malahide Estuary SPA is designated for wintering SCI species that are known to forage and/or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include light-bellied brent goose, golden plover oystercatcher, black-headed gull and black-tailed godwit. There are two no. areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme, namely Buttercup Park, referred to as CBC0001WB002, and Maypark, referred to as CBC0001WB003.

252 The Proposed Scheme will result in the temporary loss of 0.81ha of GA2 habitat suitable to support breeding gull and wintering bird species at the Proposed Buttercup Park compound (referred to as CBC0001WB002), a permanent loss of 0.02ha of suitable GA2 habitat at the proposed Maypark footpath, and a temporary loss of 0.7ha of suitable GA2 habitat at Maypark to facilitate boundary works (referred to as CBC0001WB003).

253 There is no potential for impacts to occur on inland feeding SCI populations associated with Malahide Estuary SPA, in light of their conservation objectives, as a consequence of habitat loss/fragmentation from inland feeding/roosting sites due to increased levels of disturbance due to the following reasons:

- Relatively low frequency of occurrence of these SCI bird species on lands located within the footprint of the Proposed Scheme, suggesting that these species do not regularly use or rely upon these lands as foraging and/or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis. Moreover, populations of light-bellied brent geese were only sighted flying over the sites, rather than utilising as a feeding resource;
- Relatively low peak flocks recorded on lands located within the footprint of the Proposed Scheme, especially when compared to 1% of both their international flyway and national populations and the mean peak flock of each respective SCI species recorded in the nearest SPA (See **Table 5**), suggesting that these sites are not significantly important to the overall SPA population of each respective SCI bird species, and are likely to use other suitable sites available in the wider area on a similar or more regular basis, Moreover, populations of light-bellied brent geese were only sighted flying over the sites, rather than utilising as a feeding resource;
- The availability of large areas of suitable foraging and/or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches such as those discussed in Section 7.5.3.4. It is very likely that these SCI bird species currently utilise these and other suitability lands in the wider area to a similar and/or greater intensity during the 24 months in which the Buttercup Park compound will be in use; and

- The existing pedestrian footpath at Maypark will be extended to facilitate the proposed cycleway resulting in permanent habitat loss. This habitat loss is not predicted to be significant as it is removing a minor section at the edge of the site.

7.8.2.2 Habitat degradation/effects on QI/SCI species as a result of hydrological impacts

254 The release of contaminated surface water runoff and/or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and/or leaks of contaminants into receiving waters. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme is hydrologically connected to Dublin Bay via the Santry _020, Wad River, and existing pipes which drain to Dublin Bay.

255 Therefore, (albeit unlikely) this reduction in water quality (either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within Dublin Bay. As a worst case scenario there is potential to affect mobile SCI bird species that commute, forage and loaf in Dublin Bay It could also negatively affect the quantity and quality of prey available to SCI bird species. These potential impacts could occur to such a degree that they result in significant effects which could have implications for the conservation objectives of Malahide Estuary SPA.

7.8.2.3 Disturbance and displacement impacts

256 A temporary and/or permanent increases in noise, vibration and/or human activity levels during the construction and/or operation of the Proposed Scheme could result in the disturbance to and/or displacement of SCI bird species present within footprint and/or the vicinity of the Proposed Scheme. Such disturbance effects during the Construction Phase would not be expected to extend beyond a distance of approximately 300m, as noise levels associated with general construction activities would attenuate to close to background levels at that distance and beyond. The Operational Phase is not predicted to result in significant changes to existing noise levels due to the urban locality of the Proposed Scheme as an existing transport route. **Table 16** in Section 7.5.3.4 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.

257 Malahide Estuary SPA is designated for wintering SCI species that are known to forage and/or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include light-bellied brent goose, oystercatcher, golden plover, and black-tailed godwit. There are areas of suitable foraging, and/or roosting habitat for these species within the footprint of and adjacent to the Proposed Scheme (i.e., within the disturbance ZoI), including the following sites, which have been returned from the desk study

- Clontarf Golf Club (High Importance), adjacent to the Proposed Scheme;
- Marino/Ardscoil Ris (Major Importance), adjacent to the Proposed Scheme;
- Coolock/O'Toole's GAA (Major Importance), located approximately 14m from the Proposed Scheme;
- Coolock/Chanel College (Major Importance), located approximately 25m from the Proposed Scheme;
- Parnell Park (Moderate Importance), located approximately 89m from the Proposed Scheme;
- Ayrfield Park (High Importance), located approximately 117m from the Proposed Scheme;
- Fairview Park (Major Importance), located approximately 120m from the Proposed Scheme;
- Artane/St. David's College (Major Importance), located approximately 130m from the Proposed Scheme;

- Coolock/Rathvale Drive (High Importance), located approximately 157m from the Proposed Scheme;
- Marino/Mount Temple School (Major Importance), located approximately 184m from the Proposed Scheme; and
- Donnycarney/St. Vincent's GAA (Major Importance), located approximately 299m from the Proposed Scheme.

258 As records of light-bellied brent goose, oystercatcher and black-tailed godwit have been returned from the desk study in the vicinity of the Proposed Scheme, it is considered to be possible that SCI bird species associated with the Malahide Estuary SPA currently utilise these and other suitable lands in the wider area. However, no significant effects will occur on any SCI bird species population of Malahide Estuary SPA, in light of their conservation objectives, as a consequence of the disturbance and/or displacement from inland feeding/roosting sites due to increased levels of disturbance due to the following reasons:

- Relatively low frequency of occurrence of these SCI bird species on lands located within the footprint of the proposed Project, suggesting that these species do not regularly use or rely upon these lands as foraging and/or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- Relatively low peak flocks recorded on lands located within the footprint of the proposed Project, especially when compared to 1% of both their international flyway and national populations and the mean peak flock of each respective SCI species recorded in the nearest SPA, suggesting that these sites are not significantly important to the overall SPA population of each respective SCI bird species, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- The availability of large areas of suitable foraging and/or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to Malahide Estuary SPA. These include other similar public amenity grassland parks and sports pitches such as such as St. Anne's Park and Malahide Castle as well as golf clubs and agricultural lands in the vicinity of Malahide Estuary; and
- Impacts associated with increased levels of disturbance will likely result in the temporary displacement of these SCI species to other suitable available lands in the locality, for a maximum of 24 months during construction works. Following the completion of construction, disturbance levels will likely return to baseline conditions and as a result these lands will become available again as foraging and/or roosting habitat for these SCI species.

7.8.2.4 Summary

259 **Table 25** below presents a summary of the potential impacts of the Proposed Scheme on the qualifying interests of Malahide Estuary SPA, and how these impacts relate to affecting the site's conservation objectives.

Table 25 Potential Impacts/Effects on the Conservation Objectives of Malahide Estuary SPA

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Malahide Estuary SPA		
Great Crested Grebe (*Podiceps cristatus*) [A005], Light-bellied Brent Goose (*Branta bernicla hrota*) [A046], Shelduck (*Tadorna tadorna*) [A048], Pintail (*Anas acuta*) [A054], Goldeneye (*Bucephala clangula*) [A067], Red-breasted Merganser (*Mergus serrator*) [A069], Oystercatcher (*Haematopus ostralegus*) [A130], Golden Plover (*Pluvialis apricaria*) [A140], Grey Plover (*Pluvialis squatarola*) [A141], Knot (*Calidris canutus*) [A143], Dunlin (*Calidris alpina*) [A149], Black-tailed Godwit (*Limosa limosa*) [A156], Bar-tailed Godwit (*Limosa lapponica*) [A157], Redshank (*Tringa totanus*) [A162] To restore the favourable conservation condition of the special conservation interests of the SPA, which is defined as follows:		
Population trend / Percentage change / Long term population trend stable or increasing	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal/coastal habitats that support the special conservation interest bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.
Distribution / Range, timing and intensity of use of areas / No significant decrease in the range, timing and intensity of use of areas by all of the above named species, other than that occurring from natural patterns of variation		
Wetlands [A999] To maintain the favourable conservation condition of wetland habitats within the SPA, which is defined as follows:		

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Habitat area / Hectares / The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 765ha, other than that occurring from natural patterns of variation	No	No

7.8.3 *Mitigation Measures*

260 This section presents the mitigation measures that will be implemented during construction and operation to avoid or reduce the potential impacts of the Proposed Scheme on Malahide Estuary SPA. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment.

Measures to Protect Surface Water Quality during Construction

261 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during construction of the Proposed Scheme.

Measures to Protect Surface Water Quality during Operation

262 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during operation of the Proposed Scheme.

7.8.4 *Residual Impacts*

263 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme will not have any adverse effect on the conservation objectives, or the favourable conservation condition, of the qualifying interests/special conservation interests of Malahide Estuary SPA, and there are therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of Malahide Estuary SPA. As is confirmed by the Water Framework Directive Assessment for the Proposed Scheme (refer to Appendix V), the proposed Scheme will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and it can be concluded that the Proposed Scheme complies with all requirements of the WFD.

7.8.5 *Conclusion of Assessment for Malahide Estuary SPA*

264 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the qualifying interests/special conservation interests of North Dublin Bay and Malahide Estuary SPA, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the qualifying interests/special conservation interests, it is concluded that the Proposed Scheme will not adversely affect (either directly or indirectly) the integrity of the Malahide Estuary SPA.

7.9 Baldoyle Bay SPA [004016]

7.9.1 *Ecological Baseline Description for Baldoyle Bay SPA*

265 The Natura 2000 Standard Data Form (NPWS, 2018j) lists the SPA as an estuarine and bay system with habitats of variable but generally good quality. It has extensive mud and sand flats, often with a high organic content and salt marsh habitat. It has good salt marsh fringes where birds roost. The site supports wintering waterfowl, most notably an internationally important population of light-bellied brent goose. It also supports nationally important populations of shelduck, pintail, ringed plover, golden plover, grey plover and bar-tailed godwit. At high tide, the shallow waters attract species such as great-crested grebe and red-breasted merganser. Threats to the site include hunting, eutrophication, bait-digging and human habitation/ urbanisation.

7.9.2 *Qualifying Interests and Conservation Objectives of Baldoyle Bay SPA*

266 The qualifying interests of Baldoyle Bay SPA, and the overall conservation objective, are listed below in **Table 26**.

Table 26 Qualifying Interests and Conservation Objectives of Baldoyle Bay SPA

Qualifying Interest(s)	Conservation Objective(s)
Baldoyle Bay SPA [004016] A046 Light-bellied Brent Goose *Branta bernicla hrota* A048 Shelduck *Tadorna tadorna* A137 Ringed Plover *Charadrius hiaticula* A140 Golden Plover *Pluvialis apricaria* A141 Grey Plover *Pluvialis squatarola* A157 Bar-tailed Godwit *Limosa lapponica* A999 Wetland and Waterbirds *S.I. No. 275/2010 – European Communities (Conservation of Wild Birds (Baldoyle Bay Special Protection Area 004016)) Regulations 2010.* NPWS (2013) *Conservation Objectives: Baldoyle Bay SPA 004016. Version 1.* National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA

267 In conjunction with considering the generic conservation objective for this SPA "To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA", the site specific conservation objectives document for Baldoyle Bay SPA also informed this assessment.

268 The site specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the qualifying interests/special conservation interests within the European site. Affecting the conservation condition of the qualifying interests/special conservation interests would constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the qualifying interests of Baldoyle Bay SPA are presented in Section 7.9.3.4.

7.9.3 *Examination and Analysis of Potential Direct and Indirect Impacts*

269 The direct and/or indirect impacts by which the Proposed Scheme could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the qualifying interests of Baldoyle Bay SPA, are:

- Habitat loss and fragmentation
- Habitat degradation/effects on QI/SCI species as a result of hydrological impacts
- Disturbance and displacement impacts

7.9.3.1 Habitat loss and fragmentation

270 Baldoyle Bay SPA is designated for wintering SCI species that are known to forage and/or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include light-bellied brent goose, and golden plover. There are two no. areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme, namely Buttercup Park, referred to as CBC0001WB002, and Maypark, referred to as CBC0001WB003.

271 The Proposed Scheme will result in the temporary loss of 0.81ha of GA2 habitat suitable to support breeding gull and wintering bird species at the Proposed Buttercup Park compound (referred to as CBC0001WB002), a permanent loss of 0.02ha of suitable GA2 habitat at the proposed Maypark footpath, and a temporary loss of 0.7ha of suitable GA2 habitat at Maypark to facilitate boundary works (referred to as CBC0001WB003).

272 There is no potential for impacts to occur on inland feeding SCI populations associated with Baldoyle Bay SPA, in light of their conservation objectives, as a consequence of habitat loss/fragmentation from inland feeding/roosting sites due to increased levels of disturbance due to the following reasons:

- Relatively low frequency of occurrence of these SCI bird species on lands located within the footprint of the Proposed Scheme, suggesting that these species do not regularly use or rely upon these lands as foraging and/or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis. Moreover, populations of light-bellied brent geese were only sighted flying over the sites, rather than utilising as a feeding resource;
- Relatively low peak flocks recorded on lands located within the footprint of the Proposed Scheme, especially when compared to 1% of both their international flyway and national populations and the mean peak flock of each respective SCI species recorded in the nearest SPA (See **Table 5**), suggesting that these sites are not significantly important to the overall SPA population of each respective SCI bird species, and are likely to use other suitable sites available in the wider area on a similar or more regular basis, Moreover, populations of light-bellied brent geese were only sighted flying over the sites, rather than utilising as a feeding resource;
- The availability of large areas of suitable foraging and/or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches such as those discussed in Section 7.5.3.4. It is very likely that these SCI bird species currently utilise these and other suitability lands in the wider area to a similar and/or greater intensity during the 24 months in which the Buttercup Park compound will be in use; and
- The existing pedestrian footpath at Maypark will be extended to facilitate the proposed cycleway resulting in permanent habitat loss. This habitat loss is not predicted to be significant as it is removing a minor section at the edge of the site.

7.9.3.2 Habitat degradation/effects on QI/SCI species as a result of hydrological impacts

273 The release of contaminated surface water runoff and/or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and/or leaks of contaminants into receiving waters. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme is hydrologically connected to Dublin Bay via the Santry_020, Wad river and existing pipes which drain to Dublin Bay.

274 Therefore, (albeit unlikely) this reduction in water quality (either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within Dublin Bay. As a worst case scenario there is potential to affect mobile SCI bird species that commute, forage and loaf in Dublin Bay. It could also negatively affect the quantity and quality of prey available to SCI bird species. These potential impacts could occur to such a degree that they result in significant effects which could have implications for the conservation objectives of Baldoyle Bay SPA.

7.9.3.3 Disturbance and displacement impacts

275 A temporary and/or permanent increases in noise, vibration and/or human activity levels during the construction and/or operation of the Proposed Scheme could result in the disturbance to and/or displacement of SCI bird species present within footprint and/or the vicinity of the Proposed Scheme. Such disturbance effects would not be expected to extend beyond a distance of approximately 300m, as noise levels associated with general construction activities would attenuate to close to background levels at that distance and beyond. The Operational Phase is not anticipated to result in significant changes to existing noise levels due to the urban locality of the Proposed Scheme as an existing transport route. **Table 16** in Section 7.5.3.4 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.

276 Baldoyle Bay SPA is designated for a wintering SCI species that are known to forage and/or roost at inland sites across Dublin, such as amenity grassland playing pitches e.g. light-bellied brent goose and golden plover. There are areas of suitable foraging, and/or roosting habitat for these species within the footprint of and adjacent to the Proposed Scheme (i.e., within the disturbance ZoI), including the following sites, which have been returned from the desk study (Scott Cawley, 2017):

- Clontarf Golf Club (High Importance), adjacent to the Proposed Scheme;
- Marino/Ardscoil Ris (Major Importance), adjacent to the Proposed Scheme;
- Coolock/O'Toole's GAA (Major Importance), located approximately 14m from the Proposed Scheme;
- Coolock/Chanel College (Major Importance), located approximately 25m from the Proposed Scheme;
- Parnell Park (Moderate Importance), located approximately 89m from the Proposed Scheme;
- Ayrfield Park (High Importance), located approximately 117m from the Proposed Scheme;
- Fairview Park (Major Importance), located approximately 120m from the Proposed Scheme;
- Artane/St. David's College (Major Importance), located approximately 130m from the Proposed Scheme;
- Coolock/Rathvale Drive (High Importance), located approximately 157m from the Proposed Scheme;

- Marino/Mount Temple School (Major Importance), located approximately 184m from the Proposed Scheme; and
- Donnycarney/St. Vincent's GAA (Major Importance), located approximately 299m from the Proposed Scheme.

277 As records of light-bellied brent goose have been returned from the desk study in the vicinity of the Proposed Scheme, it is considered to be possible that light-bellied brent goose associated with the Baldoyle Bay SPA currently utilise these and other suitable lands in the wider area. However, no significant effects will occur on any SCI bird species population of Baldoyle Bay, in light of their conservation objectives, as a consequence of the disturbance and/or displacement from inland feeding/roosting sites due to increased levels of disturbance due to the following reasons:

- Relatively low frequency of occurrence of these SCI bird species on lands located within the footprint of the proposed Project, suggesting that these species do not regularly use or rely upon these lands as foraging and/or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- Relatively low peak flocks recorded on lands located within the footprint of the Proposed Scheme, especially when compared to 1% of both their international flyway and national populations and the mean peak flock of each respective SCI species recorded in the nearest SPA, suggesting that these sites are not significantly important to the overall SPA population of each respective SCI bird species, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- The availability of large areas of suitable foraging and/or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to Baldoyle Bay SPA. These include other similar public amenity grassland parks and sports pitches such as St. Anne's Park, Red Arches, Seagrange Park, the Baldoyle Bird Quiet Zone as well as golf clubs and agricultural lands in the vicinity of Baldoyle Estuary; and
- Impacts associated with increased levels of disturbance will likely result in the temporary displacement of these SCI species to other suitable available lands in the locality, for a maximum of 24 months during construction works. Following the completion of construction, disturbance levels will likely return to baseline conditions and as a result these lands will become available again as foraging and/or roosting habitat for these SCI species.

7.9.3.4 Summary

278 **Table 27** below presents a summary of the potential impacts of the Proposed Scheme on the qualifying interests of Baldoyle Bay SPA, and how these impacts relate to affecting the site's conservation objectives.

Table 27 Potential Impacts/Effects on the Conservation Objectives of Baldoyle Bay SPA

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Baldoyle Bay SPA		
Light-bellied Brent Goose (*Branta bernicla hrota*) [A046], Shelduck (*Tadorna tadorna*) [A048], Ringed Plover (*Charadrius hiaticula)* [A137], Golden Plover (*Pluvialis apricaria*) [A140], Grey Plover (*Pluvialis squatarola*) [A141], Bar-tailed Godwit (*Limosa lapponica*) [A157] To restore the favourable conservation condition of the special conservation interests of the SPA, which is defined as follows:		
Population trend / Percentage change / Long term population trend stable or increasing	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal/coastal habitats that support the special conservation interest bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.
Distribution / Range, timing and intensity of use of areas / No significant decrease in the range, timing and intensity of use of areas by all of the above named species, other than that occurring from natural patterns of variation		
Wetlands [A999] To maintain the favourable conservation condition of wetland habitats within the SPA, which is defined as follows:		

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Habitat area / Hectares / The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 263ha, other than that occurring from natural patterns of variation	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal/coastal habitats that support the special conservation interest bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.

7.9.4 *Mitigation Measures*

279 This section presents the mitigation measures that will be implemented during construction and operation to avoid or reduce the potential impacts of the Proposed Scheme on Baldoyle Bay SPA. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment.

Measures to Protect Surface Water Quality during Construction

280 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during construction of the Proposed Scheme.

Measures to Protect Surface Water Quality during Operation

281 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during operation of the Proposed Scheme.

7.9.5 *Residual Impacts*

282 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme will not have any adverse effect on the conservation objectives, or the favourable conservation condition, of the qualifying interests/special conservation interests of Baldoyle Bay SPA, and there are therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of Baldoyle Bay SPA. As is confirmed by the Water Framework Directive Assessment for the Proposed Scheme (refer to Appendix V), the proposed Scheme will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and it can be concluded that the Proposed Scheme complies with all requirements of the WFD.

7.9.6 *Conclusion of Assessment for Baldoyle Bay SPA*

283 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the qualifying interests/special conservation interests of North Dublin Bay and Baldoyle Bay SPA, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the qualifying interests/special conservation interests, it is concluded that the Proposed Scheme will not adversely affect (either directly or indirectly) the integrity of North Dublin Bay and Baldoyle Bay SPA.

7.10 Rogerstown Estuary SPA [004015]

7.10.1 *Ecological Baseline Description for Rogerstown Estuary SPA*

284 The Natura Standard Data Form (NPWS, 2018k) lists Rogerstown Estuary SPA as a relatively small estuarine system in north County Dublin. It has salt marsh and sand dune habitat as well as agricultural fields which have ornithological and botanical interest. It has extensive sand and mud flats and supports wintering waterfowl. It supports an internationally important population of light-bellied brent goose and nationally important populations of a further 15 species. It is an important and regular site for a range of autumn passage migrants. Little tern has bred in Rogerstown Estuary in the past and there are populations of three Red Data Book plant species present. The main threats to the site include disposal of household/recreational facility waste, invasive species, disposal of industrial waste, fertilisation and landfill, land reclamation and drying out.

7.10.2 *Qualifying Interests and Conservation Objectives of Rogerstown Estuary SPA*

285 The qualifying interests of Rogerstown Estuary SPA, and the overall conservation objective, are listed below in **Table 28**.

Table 28 Qualifying Interests and Conservation Objectives of Rogerstown Estuary SPA

Qualifying Interest(s)	Conservation Objective(s)
Rogerstown Estuary SPA [004015] A043 Greylag Goose *Anser anser* A046 Brent Goose *Branta bernicla hrota* A048 Shelduck *Tadorna tadorna* A056 Shoveler *Anas clypeata* A130 Oystercatcher *Haematopus ostralegus* A137 Ringed Plover *Charadrius hiaticula* A141 Grey Plover *Pluvialis squatarola* A143 Knot *Calidris canutus* A149 Dunlin *Calidris alpina* A156 Black-tailed Godwit *Limosa limosa* A162 Redshank *Tringa totanus* A999 Wetlands *S.I. No. 271/2010 – European Communities (Conservation of Wild Birds (Rogerstown Estuary Special Protection Area 004015)) Regulations 2010.* NPWS (2013) *Conservation Objectives: Rogerstown Estuary SPA 004015*. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA

286 In conjunction with considering the generic conservation objective for this SPA "To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA", the site specific conservation objectives document for Rogerstown Estuary SPA also informed this assessment.

287 The site specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the qualifying interests within the European site. Affecting the conservation condition of the qualifying interests/special conservation interests would constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the

conservation objectives of the qualifying interests of Rogerstown Estuary SPA are presented in Section 7.10.3.4.

7.10.3 *Examination and Analysis of Potential Direct and Indirect Impacts*

288 The direct and/or indirect impacts by which the Proposed Scheme could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the qualifying interests of Rogerstown Estuary SPA, are:

- Habitat loss and fragmentation;
- Habitat degradation/effects on QI/SCI species as a result of hydrological impacts; and
- Disturbance and displacement impacts.

7.10.3.1 Habitat loss and fragmentation

289 Malahide Estuary SPA is designated for wintering SCI species that are known to forage and/or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include light-bellied brent goose, golden plover oystercatcher, and black-tailed godwit. There are two no. areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme, namely Buttercup Park, referred to as CBC0001WB002, and Maypark, referred to as CBC0001WB003.

290 The Proposed Scheme will result in the temporary loss of 0.81ha of GA2 habitat suitable to support breeding gull and wintering bird species at the Proposed Buttercup Park compound (referred to as CBC0001WB002), a permanent loss of 0.02ha of suitable GA2 habitat at the proposed Maypark footpath, and a temporary loss of 0.7ha of suitable GA2 habitat at Maypark to facilitate boundary works (referred to as CBC0001WB003).

291 There is no potential for impacts to occur on inland feeding SCI populations associated with Rogerstown Estuary SPA, in light of their conservation objectives, as a consequence of habitat loss/fragmentation from inland feeding/roosting sites due to increased levels of disturbance due to the following reasons:

- Relatively low frequency of occurrence of these SCI bird species on lands located within the footprint of the Proposed Scheme, suggesting that these species do not regularly use or rely upon these lands as foraging and/or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis. Moreover, populations of light-bellied brent geese were only sighted flying over the sites, rather than utilising as a feeding resource;
- Relatively low peak flocks recorded on lands located within the footprint of the Proposed Scheme, especially when compared to 1% of both their international flyway and national populations and the mean peak flock of each respective SCI species recorded in the nearest SPA (See **Table 5**), suggesting that these sites are not significantly important to the overall SPA population of each respective SCI bird species, and are likely to use other suitable sites available in the wider area on a similar or more regular basis, Moreover, populations of light-bellied brent geese were only sighted flying over the sites, rather than utilising as a feeding resource; and,
- The availability of large areas of suitable foraging and/or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches such as those discussed in Section 7.5.3.4. It is very likely that these SCI bird species currently utilise these and other suitability lands in the wider area to a similar and/or greater intensity during the 24 months in which the Buttercup Park compound will be in use.

- The existing pedestrian footpath at Maypark will be extended to facilitate the proposed cycleway resulting in permanent habitat loss. This habitat loss is not predicted to be significant as it is removing a minor section at the edge of the site.

7.10.3.2 Habitat degradation/effects on QI/SCI species as a result of hydrological impacts

292 The release of contaminated surface water runoff and/or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and/or leaks of contaminants into receiving waters. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme is hydrologically connected to Dublin Bay via the Santry_020, Wad River, and existing pipes which drain directly to Dublin Bay.

293 Therefore, (albeit unlikely) this reduction in water quality (either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within Dublin Bay. As a worst case scenario there is potential to affect mobile SCI bird species that commute, forage and loaf in Dublin Bay. It could also negatively affect the quantity and quality of prey available to SCI bird species. These potential impacts could occur to such a degree that they result in significant effects which could have implications for the conservation objectives of Rogerstown Estuary SPA.

7.10.3.3 Disturbance and displacement impacts

294 A temporary and/or permanent increases in noise, vibration and/or human activity levels during the construction and/or operation of the Proposed Scheme could result in the disturbance to and/or displacement of SCI bird species present within footprint and/or the vicinity of the Proposed Scheme. Such disturbance effects would not be expected to extend beyond a distance of approximately 300m, as noise levels associated with general construction activities would attenuate to close to background levels at that distance and beyond. The Operational Phase is not predicted to result in significant changes to existing noise levels due to the urban locality of the Proposed Scheme as an existing transport route. **Table 16** in Section 7.5.3.4 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.

295 Rogerstown Estuary SPA is designated for wintering SCI species that are known to forage and/or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include light-bellied brent goose, oystercatcher and black-tailed godwit. There are areas of suitable foraging, and/or roosting habitat for these species within the footprint of and adjacent to the Proposed Scheme (i.e., within the disturbance ZoI), including the following sites, which have been returned from the desk study

- Clontarf Golf Club (High Importance), adjacent to the Proposed Scheme;
- Marino/Ardscoil Ris (Major Importance), adjacent to the Proposed Scheme;
- Coolock/O'Toole's GAA (Major Importance), located approximately 14m from the Proposed Scheme;
- Coolock/Chanel College (Major Importance), located approximately 25m from the Proposed Scheme;
- Parnell Park (Moderate Importance), located approximately 89m from the Proposed Scheme;
- Ayrfield Park (High Importance), located approximately 117m from the Proposed Scheme;
- Fairview Park (Major Importance), located approximately 120m from the Proposed Scheme;
- Artane/St. David's College (Major Importance), located approximately 130m from the Proposed Scheme;

- Coolock/Rathvale Drive (High Importance), located approximately 157m from the Proposed Scheme;
- Marino/Mount Temple School (Major Importance), located approximately 184m from the Proposed Scheme; and
- Donnycarney/St. Vincent's GAA (Major Importance), located approximately 299m from the Proposed Scheme.

296 As records of SCI bird species associated with Rogerstown Estuary SPA have been returned from the desk study in the vicinity of the Proposed Scheme (i.e., light-bellied brent goose, oystercatcher and black-tailed godwit), it is considered to be possible that SCI species associated with Rogerstown Estuary SPA currently utilise these and other suitable lands in the wider area. However, there is no potential for impacts to occur on any SCI bird species population of Rogerstown Estuary, in light of their conservation objectives, as a consequence of the disturbance and/or displacement from inland feeding/roosting sites due to increased levels of disturbance due to the following reasons:

- Relatively low frequency of occurrence of these SCI bird species on lands located within the footprint of the proposed Project, suggesting that these species do not regularly use or rely upon these lands as foraging and/or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- Relatively low peak flocks recorded on lands located within the footprint of the Proposed Scheme, especially when compared to 1% of both their international flyway and national populations and the mean peak flock of each respective SCI species recorded in the nearest SPA, suggesting that these sites are not significantly important to the overall SPA population of each respective SCI bird species, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- The availability of large areas of suitable foraging and/or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to Rogerstown Estuary SPA. These include other similar public amenity grassland parks and sports pitches as well as golf courses and agricultural land in the vicinity of Rogerstown Estuary; and
- Impacts associated with increased levels of disturbance will likely result in the temporary displacement of these SCI species to other suitable available lands in the locality, for a maximum of 24 months during construction works. Following the completion of construction, disturbance levels will likely return to baseline conditions and as a result these lands will become available again as foraging and/or roosting habitat for these SCI species.

7.10.3.4 Summary

297 **Table 29** below presents a summary of the potential impacts of the Proposed Scheme on the qualifying interests of Rogerstown Estuary SPA, and how these impacts relate to affecting the site's conservation objectives.

Table 29 Potential Impacts/Effects on the Conservation Objectives of Rogerstown Estuary SPA

Conservation Objectives Attribute/Measure/Target	**Potential Impacts Requiring Mitigation?**	**Are mitigation measures required?**
Rogerstown Estuary SPA		
Greylag Goose [A043], Light-bellied Brent Goose (*Branta bernicla hrota*) [A046], Shelduck (*Tadorna tadorna*) [A048], Shoveler (*Anas clypeata*) [A056], Oystercatcher (*Haematopus ostralegus*) [A130], Ringed Plover (*Charadrius hiaticula*) [A137], Grey Plover (*Pluvialis squatarola*) [A141], Knot (*Calidris canutus*) [A143], Dunlin (*Calidris alpina*) [A149], Black-tailed Godwit (*Limosa limosa*) [A156] and Redshank (*Tringa tetanus*) [A162] To restore the favourable conservation condition of the special conservation interests of the SPA, which is defined as follows:		
Population trend / Percentage change / Long term population trend stable or increasing	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal/coastal habitats that support the special conservation interest bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.
Distribution / Range, timing and intensity of use of areas / No significant decrease in the range, timing and intensity of use of areas by all of the above named species, other than that occurring from natural patterns of variation		
Wetlands [A999] To maintain the favourable conservation condition of wetland habitats within the SPA, which is defined as follows:		

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Habitat area / Hectares / The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 646ha, other than that occurring from natural patterns of variation	No	No

7.10.4 *Mitigation Measures*

298 This section presents the mitigation measures that will be implemented during construction and operation to avoid or reduce the potential impacts of the Proposed Scheme on Rogerstown Estuary SPA. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment.

Measures to Protect Surface Water Quality during Construction

299 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during construction of the Proposed Scheme.

Measures to Protect Surface Water Quality during Operation

300 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during operation of the Proposed Scheme.

7.10.5 *Residual Impacts*

301 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme will not have any adverse effect on the conservation objectives, or the favourable conservation condition, of the qualifying interests/special conservation interests of Rogerstown Estuary SPA, and there are therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of Rogerstown Estuary SPA. As is confirmed by the Water Framework Directive Assessment for the Proposed Scheme (refer to Appendix V), the proposed Scheme will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and it can be concluded that the Proposed Scheme complies with all requirements of the WFD.

7.10.6 *Conclusion of Assessment for Rogerstown Estuary SPA*

302 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the qualifying interests/special conservation interests of North Dublin Bay and Rogerstown Estuary SPA, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the qualifying interests/special conservation interests, it is concluded that the Proposed Scheme will not adversely affect (either directly or indirectly) the integrity of North Dublin Bay and Rogerstown Estuary SPA.

7.11 Skerries Islands SPA [004122]

7.11.1 *Ecological Baseline Description for Skerries Islands SPA*

303 The Natura Standard Data Form (NPWS, 2018l) lists Skerries Islands SPA as a group of three small, uninhabited islands between approximately 0.5 and 1.5km off the north Dublin coastline. Habitats on the islands include low cliffs, rocky shores, sandflats and a shingle bar. Vegetation of the islands is dominated by rank grasses and brambles. The site has nationally important breeding colonies of cormorant, shag, herring gull and greater black-backed gull. In winter, the site is visited by a good diversity of waterfowl. It supports an internationally important population of light-bellied brent goose and nationally important populations of cormorant, purple sandpiper and turnstone.

7.11.2 *Qualifying Interests and Conservation Objectives of Skerries Islands SPA*

304 The qualifying interests of Skerries Islands SPA, and the overall conservation objective, are listed below in **Table 30**.

Table 30 Qualifying Interests and Conservation Objectives of Skerries Islands SPA

Qualifying Interest(s)	Conservation Objective(s)
Skerries Islands SPA [004122] A017 Cormorant *Phalacrocorax carbo* A018 Shag *Phalacrocorax aristotelis* A046 Brent Goose *Branta bernicla hrota* A148 Purple Sandpiper *Calidris maritima* A169 Turnstone *Arenaria interpres* A184 Herring Gull *Larus argentatus* *S.I. No. 245/2010 – European Communities (Conservation of Wild Birds (Skerries Islands Special Protection Area 004122)) Regulations 2010.* NPWS (2021) *Conservation objectives for Skerries Islands SPA [004122].* Generic Version 8.0. Department of Housing, Local Government and Heritage	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA

305 In conjunction with considering the generic conservation objective for this SPA "To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA", site specific conservation objectives documents have been compiled from other relevant European sites (see **Table 31**) to inform this assessment.

306 The site specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the qualifying interests/special conservation interests within the European site. Affecting the conservation condition of the qualifying interests/special conservation interests would constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the qualifying interests of Skerries Islands SPA are presented in Section 7.11.3.3.

7.11.3 *Examination and Analysis of Potential Direct and Indirect Impacts*

307 The direct and/or indirect impacts by which the Proposed Scheme could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the qualifying interests of Skerries Islands SPA, are:

- Habitat loss and fragmentation;
- Habitat Degradation/effects on QI/SCI species as a result of hydrological impacts; and
- Disturbance and displacement impacts.

7.11.3.1 Habitat loss and fragmentation

308 Skerries Islands SPA is designated for wintering SCI species that are known to forage and/or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include light-bellied brent goose, and herring gull. There are two no. areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme, namely Buttercup Park, referred to as CBC0001WB002, and Maypark, referred to as CBC0001WB003.

309 The Proposed Scheme will result in the temporary loss of 0.81ha of GA2 habitat suitable to support breeding gull and wintering bird species at the Proposed Buttercup Park compound (referred to as CBC0001WB002), a permanent loss of 0.02ha of suitable GA2 habitat at the proposed Maypark footpath, and a temporary loss of 0.7ha of suitable GA2 habitat at Maypark to facilitate boundary works (referred to as CBC0001WB003).

310 There is no potential for impacts to occur on inland feeding SCI populations associated with Skerries Islands SPA, in light of their conservation objectives, as a consequence of habitat loss/fragmentation from inland feeding/roosting sites due to increased levels of disturbance due to the following reasons:

- Relatively low frequency of occurrence of these SCI bird species on lands located within the footprint of the Proposed Scheme, suggesting that these species do not regularly use or rely upon these lands as foraging and/or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis. Moreover, populations of light-bellied brent geese were only sighted flying over the sites, rather than utilising as a feeding resource;
- Relatively low peak flocks recorded on lands located within the footprint of the Proposed Scheme, especially when compared to 1% of both their international flyway and national populations and the mean peak flock of each respective SCI species recorded in the nearest SPA (See **Table 5**), suggesting that these sites are not significantly important to the overall SPA population of each respective SCI bird species, and are likely to use other suitable sites available in the wider area on a similar or more regular basis, Moreover, populations of light-bellied brent geese were only sighted flying over the sites, rather than utilising as a feeding resource;
- The availability of large areas of suitable foraging and/or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches such as those discussed in Section 7.5.3.4. It is very likely that these SCI bird species currently utilise these and other suitability lands in the wider area to a similar and/or greater intensity during the 24 months in which the Buttercup Park compound will be in use; and
- The existing pedestrian footpath at Maypark will be extended to facilitate the proposed cycleway resulting in permanent habitat loss. This habitat loss is not predicted to be significant as it is removing a minor section at the edge of the site.

7.11.3.2 Habitat degradation/effects on QI/SCI species as a result of hydrological impacts

311 The release of contaminated surface water runoff and/or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and/or leaks of contaminants into receiving waters. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme is hydrologically connected to Dublin Bay via the Santry_020, Wad River, and existing pipes which drain directly to Dublin Bay.

312 Therefore, (albeit unlikely) this reduction in water quality (either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within Dublin Bay. As a worst case scenario there is potential to affect mobile SCI bird species that commute, forage and loaf in Dublin Bay. It could also negatively affect the quantity and quality of prey available to SCI bird species. These potential impacts could occur to such a degree that they result in significant effects which could have implications for the conservation objectives of Skerries Islands SPA.

7.11.3.3 Disturbance and displacement impacts

313 A temporary and/or permanent increases in noise, vibration and/or human activity levels during the construction and/or operation of the Proposed Scheme could result in the disturbance to and/or displacement of SCI bird species present within footprint and/or the vicinity of the Proposed Scheme. Such disturbance effects would not be expected to extend beyond a distance of approximately 300m, as noise levels associated with general construction activities would attenuate to close to background levels at that distance and beyond. The Operational Phase is not anticipated to result in significant changes to existing noise levels due to the urban locality of the Proposed Scheme as an existing transport route. **Table 16** in Section 7.5.3.4 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.

314 Skerries Islands SPA is designated for wintering SCI species that are known to forage and/or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include light-bellied brent goose and herring gull. There are areas of suitable foraging, and/or roosting habitat for these species within the footprint of and adjacent to the Proposed Scheme (i.e., within the disturbance ZoI), including the following sites, which have been returned from the desk study:

- Clontarf Golf Club (High Importance), adjacent to the Proposed Scheme;
- Marino/Ardscoil Ris (Major Importance), adjacent to the Proposed Scheme;
- Coolock/O'Toole's GAA (Major Importance), located approximately 14m from the Proposed Scheme;
- Coolock/Chanel College (Major Importance), located approximately 25m from the Proposed Scheme;
- Parnell Park (Moderate Importance), located approximately 89m from the Proposed Scheme;
- Ayrfield Park (High Importance), located approximately 117m from the Proposed Scheme;
- Fairview Park (Major Importance), located approximately 120m from the Proposed Scheme;
- Artane/St. David's College (Major Importance), located approximately 130m from the Proposed Scheme;
- Coolock/Rathvale Drive (High Importance), located approximately 157m from the Proposed Scheme;

- Marino/Mount Temple School (Major Importance), located approximately 184m from the Proposed Scheme; and
- Donnycarney/St. Vincent's GAA (Major Importance), located approximately 299m from the Proposed Scheme.

315 As records of SCI bird species associated with Skerries Islands SPA have been returned from the desk study in the vicinity of the Proposed Scheme (i.e., light-bellied brent goose and herring gull), it is considered to be possible that SCI species associated with Skerries Islands SPA currently utilise these and other suitable lands in the wider area. However, there is no potential for impacts to occur on any SCI bird species population of Skerries Islands SPA, in light of their conservation objectives, as a consequence of the disturbance and/or displacement from inland feeding/roosting sites due to increased levels of disturbance due to the following reasons:

- Relatively low frequency of occurrence of these SCI bird species on lands located within the footprint of the proposed Project, suggesting that these species do not regularly use or rely upon these lands as foraging and/or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- Relatively low peak flocks recorded on lands located within the footprint of the Proposed Scheme, especially when compared to 1% of both their international flyway and national populations and the mean peak flock of each respective SCI species recorded in the nearest SPA, suggesting that these sites are not significantly important to the overall SPA population of each respective SCI bird species, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- The availability of large areas of suitable foraging and/or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to Skerries Islands SPA, including similar parkland, golf courses and extensive areas of agricultural land; and
- Impacts associated with increased levels of disturbance will likely result in the temporary displacement of these SCI species to other suitable available lands in the locality, for a maximum of 24 months during construction works. Following the completion of construction, disturbance levels will likely return to baseline conditions and as a result these lands will become available again as foraging and/or roosting habitat for these SCI species.

7.11.3.4 Summary

316 **Table 31** below presents a summary of the potential impacts of the Proposed Scheme on the qualifying interests of Skerries Islands SPA, and how these impacts relate to affecting the site's conservation objectives.

Table 31 Potential Impacts/Effects on the Conservation Objectives of Skerries Islands SPA

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Skerries Islands SPA		
Cormorant (*Phalacrocorax* carbo) [A017], Shag *Phalacrocorax* aristotelis) [A018], Light-bellied Brent Goose (*Branta bernicla hrota*) [A046], Purple Sandpiper (*Calidris maritima*) [A148], Turnstone (*Arenaria interpres*) [A169] and Herring Gull (*Larus argentatus*) [A184] There is no site specific conservation objectives document available for this SPA. Therefore, the attributes, measures and targets below have been developed based on the specific conservation objectives available for Rogerstown Estuary SPA [004015]		
Population trend / Percentage change / Long term population trend stable or increasing	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal/coastal habitats that support the special conservation interest bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.	Yes The mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.
Distribution / Range, timing and intensity of use of areas / No significant decrease in the range, timing and intensity of use of areas by all of the above named species, other than that occurring from natural patterns of variation		

7.11.4 *Mitigation Measures*

317 This section presents the mitigation measures that will be implemented during construction and operation to avoid or reduce the potential impacts of the Proposed Scheme on Skerries Islands SPA. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment.

Measures to Protect Surface Water Quality during Construction

318 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during construction of the Proposed Scheme.

Measures to Protect Surface Water Quality during Operation

319 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during operation of the Proposed Scheme.

7.11.5 *Residual Impacts*

320 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme will not have any adverse effect on the conservation objectives, or the favourable conservation condition, of the qualifying interests/special conservation interests of Skerries Islands SPA, and there are therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of Skerries Islands SPA. As is confirmed by the Water Framework Directive Assessment for the Proposed Scheme (refer to Appendix V), the proposed Scheme will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and it can be concluded that the Proposed Scheme complies with all requirements of the WFD.

7.11.6 *Conclusion of Assessment for Skerries Islands SPA*

321 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the qualifying interests/special conservation interests of North Dublin Bay and Skerries Islands SPA, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the qualifying interests/special conservation interests, it is concluded that the Proposed Scheme will not adversely affect (either directly or indirectly) the integrity of North Dublin Bay and Skerries Islands SPA.

7.12 Lambay Island SPA [004069]

7.12.1 *Ecological Baseline Description for Lambay Island SPA*

322 According to the Natura 2000 Standard Data Form (NPWS, 2018n), this SPA is an island located approximately 4km off the north Dublin coastline. Habitats present on the island include rocky shorelines, low tide sandflats and fertile grassland. The northern, eastern and southern shorelines consist of steep cliffs. The predominant land use of the island is cattle grazing. This SPA has one of the most important seabird colonies in Ireland, with 12 species breeding regularly. It has been designated for breeding populations of fulmar, cormorant, shag, greylag goose, lesser black-backed gull, herring gull, kittiwake, guillemot, razorbill and puffin.

7.12.2 *Qualifying Interests and Conservation Objectives of Lambay Island SPA*

323 The qualifying interests of Lambay Island SPA, and the overall conservation objectives, are listed below in **Table 32**.

Table 32 Qualifying Interests and Conservation Objectives of Lambay Island SPA

Qualifying Interest(s)	Conservation Objective(s)
Lambay Island SPA [004069] A009 Fulmar *Fulmarus glacialis* A017 Cormorant *Phalacrocorax carbo* A018 Shag *Phalacrocorax aristotelis* A043 Greylag Goose *Anser anser* A183 Lesser Black-backed Gull *Larus fuscus* A184 Herring Gull *Larus argentatus* A188 Kittiwake *Rissa tridactyla* A199 Guillemot *Uria aalge* A200 Razorbill *Alca torda* A204 Puffin *Fratercula arctica* *S.I. No. 242/2010 – European Communities (Conservation of Wild Birds (Lambay Island Special Protection Area 004069)) Regulations 2010.* NPWS (2021) *Conservation objectives for Lambay Island SPA [004069].* Generic Version 8.0. Department of Housing, Local Government and Heritage	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA

324 In conjunction with considering the generic conservation objective for this SPA "To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA", the site specific conservation objectives documents for Ireland's Eye SPA and Lambay Island SPA also informed this assessment.

325 The site specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the qualifying interests/special conservation interests within the European site. Affecting the conservation condition of the qualifying interests/special conservation interests would constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the qualifying interests of Lambay Island SPA are presented in Section 7.12.3.4.

7.12.3 *Examination and Analysis of Potential Direct and Indirect Impacts*

326 The direct and/or indirect impacts by which the Proposed Scheme could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the qualifying interests of Lambay Island SPA, are:

- Habitat loss and fragmentation;
- Habitat degradation/effects on QI/SCI species as a result of hydrological impacts; and
- Disturbance and displacement impacts.

7.12.3.1 Habitat loss and fragmentation

327 Lambay Island SPA is designated for wintering SCI species that are known to forage and/or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include lesser black-backed gull, and herring gull. There are two no. areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme, namely Buttercup Park, referred to as CBC0001WB002, and Maypark, referred to as CBC0001WB003.

328 The Proposed Scheme will result in the temporary loss of 0.81ha of GA2 habitat suitable to support breeding gull and wintering bird species at the Proposed Buttercup Park compound (referred to as CBC0001WB002), a permanent loss of 0.02ha of suitable GA2 habitat at the proposed Maypark footpath, and a temporary loss of 0.7ha of suitable GA2 habitat at Maypark to facilitate boundary works (referred to as CBC0001WB003).

329 There is no potential for impacts to occur on inland feeding SCI populations associated with Lambay Island SPA, in light of their conservation objectives, as a consequence of habitat loss/fragmentation from inland feeding/roosting sites due to increased levels of disturbance due to the following reasons:

- Relatively low frequency of occurrence of these SCI bird species on lands located within the footprint of the Proposed Scheme, suggesting that these species do not regularly use or rely upon these lands as foraging and/or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- Relatively low peak flocks recorded on lands located within the footprint of the Proposed Scheme, especially when compared to 1% of both their international flyway and national populations and the mean peak flock of each respective SCI species recorded in the nearest SPA (See **Table 5**), suggesting that these sites are not significantly important to the overall SPA population of each respective SCI bird species, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- The availability of large areas of suitable foraging and/or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches such as those discussed in Section 7.5.3.4. It is very likely that these SCI bird species currently utilise these and other suitability lands in the wider area to a similar and/or greater intensity during the 24 months in which the Buttercup Park compound will be in use; and
- The existing pedestrian footpath at Maypark will be extended to facilitate the proposed cycleway resulting in permanent habitat loss. This habitat loss is not predicted to be significant as it is removing a minor section at the edge of the site.

7.12.3.2 Habitat degradation/effects on QI/SCI species as a result of hydrological impacts

330 The release of contaminated surface water runoff and/or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving

waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and/or leaks of contaminants (*e.g.* fuel, oils, lubricants, paints, bituminous coatings, preservatives, weed killer, lime and concrete) into receiving waters. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme is hydrologically connected to Dublin Bay via the Santry_020, Wad River, and existing pipes which drain directly to Dublin Bay.

331 Therefore, (albeit unlikely) this reduction in water quality (either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within Dublin Bay. As a worst case scenario there is potential to affect mobile SCI bird species that commute, forage and loaf in Dublin Bay. It could also negatively affect the quantity and quality of prey available to SCI bird species. These potential impacts could occur to such a degree that they result in significant effects which could have implications for the conservation objectives of Lambay Island SPA.

7.12.3.3 Disturbance and displacement impacts

332 A temporary and/or permanent increases in noise, vibration and/or human activity levels during the construction and/or operation of the Proposed Scheme could result in the disturbance to and/or displacement of SCI bird species present within footprint and/or the vicinity of the Proposed Scheme. Such disturbance effects would not be expected to extend beyond a distance of approximately 300m, as noise levels associated with general construction activities would attenuate to close to background levels at that distance and beyond. The Operational Phase is not predicted to result in significant changes to existing noise levels due to the urban locality of the Proposed Scheme as an existing transport route. **Table 16** in Section 7.5.3.4 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.

333 Ireland's Eye SPA and Lambay Island SPA are designated for breeding SCI gull species that are known to forage and/or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species including herring gull, lesser black-backed gull. There are several areas of suitable foraging and/or roosting habitat available for these SCI bird species within the footprint of and adjacent to the Proposed Scheme (i.e., within the disturbance ZoI), including the following sites, which have been returned from the desk study (Scott Cawley, 2017):

- Clontarf Golf Club (High Importance), adjacent to the Proposed Scheme;
- Marino/Ardscoil Ris (Major Importance), adjacent to the Proposed Scheme;
- Coolock/O'Toole's GAA (Major Importance), located approximately 14m from the Proposed Scheme;
- Coolock/Chanel College (Major Importance), located approximately 25m from the Proposed Scheme;
- Parnell Park (Moderate Importance), located approximately 89m from the Proposed Scheme;
- Ayrfield Park (High Importance), located approximately 117m from the Proposed Scheme;
- Fairview Park (Major Importance), located approximately 120m from the Proposed Scheme;
- Artane/St. David's College (Major Importance), located approximately 130m from the Proposed Scheme;
- Coolock/Rathvale Drive (High Importance), located approximately 157m from the Proposed Scheme;
- Marino/Mount Temple School (Major Importance), located approximately 184m from the Proposed Scheme; and

- Donnycarney/St. Vincent's GAA (Major Importance), located approximately 299m from the Proposed Scheme.

334 As records of SCI bird species associated with Lambay Island SPA have been returned from the desk study in the vicinity of the Proposed Scheme (i.e., herring gull, and lesser black-backed gull), it is considered to be possible that these species currently utilise these and other suitable lands in the wider area. However, there is no potential for impacts to occur on any SCI bird species population of Lambay Island SPA, in light of their conservation objectives, as a consequence of the disturbance and/or displacement from inland feeding/roosting sites due to increased levels of disturbance due to the following reasons:

- Relatively low frequency of occurrence of these SCI bird species on lands located within the footprint of the proposed Project, suggesting that these species do not regularly use or rely upon these lands as foraging and/or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- Relatively low peak flocks recorded on lands located within the footprint of the Proposed Scheme, especially when compared to 1% of both their international flyway and national populations and the mean peak flock of each respective SCI species recorded in the nearest SPA, suggesting that these sites are not significantly important to the overall SPA population of each respective SCI bird species, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- The availability of large areas of suitable foraging and/or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to Lambay Island SPA. These include marine habitats surrounding the islands, golf clubs, agricultural lands and public parks/ sports pitches in the North County Dublin area; and
- Impacts associated with increased levels of disturbance will likely result in the temporary displacement of these SCI species to other suitable available lands in the locality, for a maximum of 24 months during construction works. Following the completion of construction, disturbance levels will likely return to baseline conditions and as a result these lands will become available again as foraging and/or roosting habitat for these SCI species.

7.12.3.4 Summary

335 **Table 33** below presents a summary of the potential impacts of the Proposed Scheme on the qualifying interests of Lambay Island SPA, and how these impacts relate to affecting the site's conservation objectives.

Table 33 Potential Impacts/Effects on the Conservation Objectives of Lambay Island SPA.

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Lambay Island SPA		
Fulmar [A009], Cormorant [A017], Shag [A018], Greylag Goose [A043], Lesser Black-backed Gull [A183], Herring Gull [A184], Kittiwake [A188], Guillemot [A199], Razorbill [A200], Puffin [A204]		
Population trend / Percentage change / Long term population trend stable or increasing	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal/coastal habitats that support the special conservation interest bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.
Distribution / Range, timing and intensity of use of areas / No significant decrease in the range, timing and intensity of use of areas by all of the above named species, other than that occurring from natural patterns of variation		

7.12.4 *Mitigation Measures*

336 This section presents the mitigation measures that will be implemented during construction and operation to avoid or reduce the potential impacts of the Proposed Scheme on Lambay Island SPA. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment.

Measures to Protect Surface Water Quality during Construction

337 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during construction of the Proposed Scheme.

Measures to Protect Surface Water Quality during Operation

338 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during operation of the Proposed Scheme.

7.12.5 *Residual Impacts*

339 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme will not have any adverse effect on the conservation objectives, or the favourable conservation condition, of the qualifying interests/special conservation interests of Lambay Island SPA, and there are therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of Lambay Island SPA. As is confirmed by the Water Framework Directive Assessment for the Proposed Scheme (refer to Appendix V), the proposed Scheme will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and it can be concluded that the Proposed Scheme complies with all requirements of the WFD.

7.12.6 *Conclusion of Assessment for Lambay Island SPA*

340 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the qualifying interests/special conservation interests of North Dublin Bay and Lambay Islands SPA, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the qualifying interests/special conservation interests, it is concluded that the Proposed Scheme will not adversely affect (either directly or indirectly) the integrity of North Dublin Bay and Lambay Island SPA.

7.13 The Murrough SPA [004186]

7.13.1 *Ecological Baseline Description for The Murrough SPA*

341 According to the Natura 2000 Standard Data Form (NPWS, 2018o), this SPA comprises a coastal wetland complex stretching for 13km from Kilcoole train station southwards towards Wicklow town. The site extends between the 200metre low water mark inland up to 1km in places. In terms of habitat diversity it includes the coastal water, a shingle shore with some sand and cobble. The SPA is bisected by the Dublin Rosslare railway line which runs along the upper part of the shingle beach. Much of the low-lying land behind the railway is manged for agriculture including reclaimed wetland, although a number of wet and brackish marshes remain including Broad Lough at its southern end and the manged wetland complex associated with Kilcoole reserve. This extensive coastal wetland complex is considered oh high importance owing to the numbers and variety of waterfowl species that it holds in winter and on passage. Its shingle beach also supports the country largest breeding colony of Little Tern. The main threats listed for the site include: the presence of Railway lines, Fertilisation of agricultural lands and the presence of walkers, horse riders and non-motorised vehicles.

7.13.2 *Qualifying Interests and Conservation Objectives for The Murrough SPA*

342 The special conservation interests of The Murrough SPA and the overall conservation objectives are listed below in **Table 34**.

Table 34 Qualifying Interests and Conservation Objectives of The Murrough SPA

Special Conservation Interests	Conservation Objective(s)
The Murrough SPA [004186] A001 Red-throated Diver *Gavia stellata* A043 Greylag Goose *Anser anser* A046 Light Bellied Brent Goose *Branta bernicla hrota* A050 Wigeon *Anas penelope* A052 Teal *Anas crecca* A179 Black-headed Gull *Chroicocephalus ridibundus* A162 Herring Gull *Larus argentatus* A195 Little Tern *Sterna albifrons* A999 Wetlands *S.I. No. 298/2011 – European Communities (Conservation of Wild Birds (The Murrough Special Protection Area 004186)) Regulations 2011.* NPWS (2021) *Conservation Objectives for the Murrough SPA [004186]. Generic Version 8.0.* Department of Housing, Local Government and Heritage	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA. To maintain or restore to favourable conservation condition of the wetland habitat at The Murrough SPA as a resource for the regularly occurring migratory waterbirds that utilise it.

343 In conjunction with considering the generic conservation objective for this SPA "To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.", site-specific conservation objectives documents have been compiled from other relevant European sites (identified in **Table 35**) to inform this assessment.

344 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the Special Conservation Interest within the European site. Affecting the conservation condition of the SCI would constitute an adverse effect on the integrity of a

European site. The specific attributes and targets used to define the conservation objectives of the SCI's in respect of The Murrough SPA are presented in Section 7.13.3.4.

7.13.3 *Examination and Analysis of Potential Direct and Indirect Impacts*

345 The direct and/or indirect impacts by which the Proposed Scheme could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the SCI for The Murrough SPA are:

- Habitat loss and fragmentation;
- Habitat degradation/effects on QI/SCI species as a result of hydrological impacts; and
- Disturbance and displacement impacts.

7.13.3.1 Habitat loss and fragmentation

346 The Murrough SPA is designated for wintering SCI species that are known to forage and/or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include light-bellied brent goose, black-headed gull, and herring gull. There are two no. areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme, namely Buttercup Park, referred to as CBC0001WB002, and Maypark, referred to as CBC0001WB003.

347 The Proposed Scheme will result in the temporary loss of 0.81ha of GA2 habitat suitable to support breeding gull and wintering bird species at the Proposed Buttercup Park compound (referred to as CBC0001WB002), a permanent loss of 0.02ha of suitable GA2 habitat at the proposed Maypark footpath, and a temporary loss of 0.7ha of suitable GA2 habitat at Maypark to facilitate boundary works (referred to as CBC0001WB003).

348 There is no potential for impacts to occur on inland feeding SCI populations associated with The Murrough SPA, in light of their conservation objectives, as a consequence of habitat loss/fragmentation from inland feeding/roosting sites due to increased levels of disturbance due to the following reasons:

- Relatively low frequency of occurrence of these SCI bird species on lands located within the footprint of the Proposed Scheme, suggesting that these species do not regularly use or rely upon these lands as foraging and/or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis. Moreover, populations of light-bellied brent geese were only sighted flying over the sites, rather than utilising as a feeding resource;
- Relatively low peak flocks recorded on lands located within the footprint of the Proposed Scheme, especially when compared to 1% of both their international flyway and national populations and the mean peak flock of each respective SCI species recorded in the nearest SPA (See **Table 5**), suggesting that these sites are not significantly important to the overall SPA population of each respective SCI bird species, and are likely to use other suitable sites available in the wider area on a similar or more regular basis, Moreover, populations of light-bellied brent geese were only sighted flying over the sites, rather than utilising as a feeding resource;
- The availability of large areas of suitable foraging and/or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches such as those discussed in Section 7.5.3.4. It is very likely that these SCI bird species currently utilise these and other suitability lands in the wider area to a similar and/or greater intensity during the 24 months in which the Buttercup Park compound will be in use; and
- The existing pedestrian footpath at Maypark will be extended to facilitate the proposed cycleway resulting in permanent habitat loss. This habitat loss is not predicted to be significant as it is removing a minor section at the edge of the site.

349 Although the temporary removal of amenity grassland habitat to facilitate construction compounds will not have a long-term effect on SCI populations, mitigation measures are proposed to ensure that this habitat is restored post-construction at Buttercup Park (CBC0001WB002).

7.13.3.2 Habitat degradation/effects on QI/SCI species as a result of hydrological impacts

350 The release of contaminated surface water runoff and/or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and/or leaks of contaminants into receiving waters. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme is hydrologically connected to Dublin Bay via the Santry_020, Wad river, and existing pipes which drain to Dublin Bay.

351 Therefore, (albeit unlikely) this reduction in water quality (either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within Dublin Bay. As a worst case scenario there is potential to affect mobile SCI bird species that commute, forage and loaf in Dublin Bay. It could also negatively affect the quantity and quality of prey available to SCI bird species. These potential impacts could occur to such a degree that they result in significant effects which could have implications for the conservation objectives of The Murrough SPA.

7.13.3.3 Disturbance and displacement impacts

352 A temporary and/or permanent increases in noise, vibration and/or human activity levels during the construction and/or operation of the Proposed Scheme could result in the disturbance to and/or displacement of SCI bird species present within footprint and/or the vicinity of the Proposed Scheme. Such disturbance effects would not be expected to extend beyond a distance of approximately 300m, as noise levels associated with general construction activities would attenuate to close to background levels at that distance and beyond. The Operational Phase is not predicted to result in significant changes to existing noise levels due to the urban locality of the Proposed Scheme as an existing transport route. **Table 16** in Section 7.5.3.4 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.

353 The Murrough SPA is designated for wintering SCI species that are known to forage and/or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include light-bellied brent goose, black-headed gull and herring gull. There are areas of suitable foraging, and/or roosting habitat for these species within the footprint of and adjacent to the Proposed Scheme (i.e., within the disturbance ZoI), including the following sites, which have been returned from the desk study

- Clontarf Golf Club (High Importance), adjacent to the Proposed Scheme;
- Marino/Ardscoil Ris (Major Importance), adjacent to the Proposed Scheme;
- Coolock/O'Toole's GAA (Major Importance), located approximately 14m from the Proposed Scheme;
- Coolock/Chanel College (Major Importance), located approximately 25m from the Proposed Scheme;
- Parnell Park (Moderate Importance), located approximately 89m from the Proposed Scheme;
- Ayrfield Park (High Importance), located approximately 117m from the Proposed Scheme;
- Fairview Park (Major Importance), located approximately 120m from the Proposed Scheme;
- Artane/St. David's College (Major Importance), located approximately 130m from the Proposed Scheme;

- Coolock/Rathvale Drive (High Importance), located approximately 157m from the Proposed Scheme;
- Marino/Mount Temple School (Major Importance), located approximately 184m from the Proposed Scheme; and
- Donnycarney/St. Vincent's GAA (Major Importance), located approximately 299m from the Proposed Scheme.

354 As records of SCI bird species associated with The Murrough SPA have been returned from the desk study in the vicinity of the Proposed Scheme (i.e., light-bellied brent goose, black-headed gull and herring gull,), it is considered to be possible that SCI species associated with The Murrough SPA currently utilise these and other suitable lands in the wider area. However, there is no potential for impacts to occur on any SCI bird species population of The Murrough SPA, in light of their conservation objectives, as a consequence of the disturbance and/or displacement from inland feeding/roosting sites due to increased levels of disturbance due to the following reasons:

- Relatively low frequency of occurrence of these SCI bird species on lands located within the footprint of the proposed Project, suggesting that these species do not regularly use or rely upon these lands as foraging and/or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- Relatively low peak flocks recorded on lands located within the footprint of the Proposed Scheme, especially when compared to 1% of both their international flyway and national populations and the mean peak flock of each respective SCI species recorded in the nearest SPA, suggesting that these sites are not significantly important to the overall SPA population of each respective SCI bird species, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- The availability of large areas of suitable foraging and/or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to The Murrough SPA. These include other similar public amenity grassland parks and sports pitches in Co. Dublin as well as extensive areas of agricultural land and golf courses in Co. Wicklow; and
- Impacts associated with increased levels of disturbance will likely result in the temporary displacement of these SCI species to other suitable available lands in the locality, for a maximum of 24 months during construction works. Following the completion of construction, disturbance levels will likely return to baseline conditions and as a result these lands will become available again as foraging and/or roosting habitat for these SCI species.

7.13.3.4 Summary

355 **Table 35** below presents a summary of the potential impacts of the Proposed Scheme on the qualifying interests of The Murrough SPA, and how these impacts relate to affecting the site's conservation objectives.

Table 35 Potential Impacts/Effects on the Conservation Objectives of The Murrough SPA

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
The Murrough SPA		
Red-throated Diver [A001] There is no site-specific conservation objectives document available for this SPA. Therefore, the attributes, measures and targets below have been developed based on the specific conservation objectives available for red-throated diver in The Raven SPA [004019] (NPWS, 2012a)		
Population trend / % change / Long term population trend stable or increasing	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal/coastal habitats that support the special conservation interest bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.
Distribution / Number and range of areas used by waterbirds / There should be no significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation		
Greylag Goose [A043] There is no site-specific conservation objectives document available for this SPA. Therefore, the attributes, measures and targets below have been developed based on the specific conservation objectives available for Greylag Goose in Rogerstown Estuary SPA [004015] (NPWS, 2013)		
Population trend / Percentage change / Long term population trend stable or increasing	Yes	Yes

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Distribution / Range, timing and intensity of use of areas / No significant decrease in the range, timing and intensity of use of areas by all of the above-named species, other than that occurring from natural patterns of variation	An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal/coastal habitats that support the special conservation interest bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.	See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.
Light-Bellied Brent Goose [A046] There is no site-specific conservation objectives document available for this SPA. Therefore, the attributes, measures and targets below have been developed based on the specific conservation objectives available for Light-bellied Brent Goose in South Dublin Bay and River Tolka Estuary SPA [004024] (NPWS, 2015)		
Population trend / Percentage change / Long term population trend stable or increasing	Yes	Yes

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Distribution / Range, timing and intensity of use of areas / No significant decrease in the range, timing and intensity of use of areas by all of the above-named species, other than that occurring from natural patterns of variation	An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal/coastal habitats that support the special conservation interest bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.	See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.
Wigeon [A050] There is no site-specific conservation objectives document available for this SPA. Therefore, the attributes, measures and targets below have been developed based on the specific conservation objectives available for Wigeon in Wexford Harbour and Slobs SPA [004076] (NPWS, 2012b)		
Population trend / Percentage change / Long term population trend stable or increasing	Yes	Yes

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Distribution / Range, timing and intensity of use of areas / No significant decrease in the range, timing and intensity of use of areas by all of the above-named species, other than that occurring from natural patterns of variation	An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal/coastal habitats that support the special conservation interest bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.	See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.
Teal [A052] There is no site-specific conservation objectives document available for this SPA. Therefore, the attributes, measures and targets below have been developed based on the specific conservation objectives available for Teal in North Bull Island SPA [004006] (NPWS, 2015)		
Population trend / Percentage change / Long term population trend stable or increasing	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal/coastal habitats that support the special conservation interest bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.
Distribution / Range, timing and intensity of use of areas / No significant decrease in the range, timing and intensity of use of areas by all of the above-named species, other than that occurring from natural patterns of variation		

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Black-Headed Gull [179]		
There is no site-specific conservation objectives document available for this SPA. Therefore, the attributes, measures and targets below have been developed based on the specific conservation objectives available for Black-headed Gull in South Dublin Bay and River Tolka Estuary SPA [004024] (NPWS, 2015)		
Population trend / Percentage change / Long term population trend stable or increasing	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal/coastal habitats that support the special conservation interest bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations. Although the temporary removal of amenity grassland habitat to facilitate construction compounds will not have a long-term effect on SCI populations, mitigation measures are proposed to ensure that this habitat is restored post-construction at Maypark (CBC0001WB003).	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.
Distribution / Range, timing and intensity of use of areas / No significant decrease in the range, timing and intensity of use of areas by all of the above-named species, other than that occurring from natural patterns of variation		

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Herring Gull [184] There is no site-specific conservation objectives document available for this SPA. Therefore, the attributes, measures and targets below have been developed based on the specific conservation objectives available for Herring Gull in River Nanny Estuary and Shore SPA [004158] (NPWS, 2012c)		
Population trend / Percentage change / Long term population trend stable or increasing	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal/coastal habitats that support the special conservation interest bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations. Although the temporary removal of amenity grassland habitat to facilitate construction compounds will not have a long-term effect on SCI populations, mitigation measures are proposed to ensure that this habitat is restored post-construction at Buttercup Park (CBC0001WB002).	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.
Distribution / Range, timing and intensity of use of areas / No significant decrease in the range, timing and intensity of use of areas by all of the above-named species, other than that occurring from natural patterns of variation		

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?
Little Tern [195] There is no site-specific conservation objectives document available for this SPA. Therefore, the attributes, measures and targets below have been developed based on the specific conservation objectives available for Little Tern in Boyne Estuary SPA [004080] (NPWS, 2013b)		
Breeding population abundance: apparently occupied nests (AONs) / Number / No significant decline	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal/coastal habitats that support the special conservation interest bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.
Productivity rate: fledged young per breeding pair / Mean number / No significant decline		
Distribution: breeding colonies / Number; location; area (ha) / No significant decline		
Prey biomass available / Kg's / No significant decline		
Barriers to connectivity / Number; location; shape; area (ha) / No significant decline		
Disturbance at the breeding site / Level of impact / Human activities should occur at levels that do not adversely affect the breeding little tern population		

7.13.4 *Mitigation Measures*

356 This section presents the mitigation measures that will be implemented during construction and operation to avoid or reduce the potential impacts of the Proposed Scheme on The Murrough SPA. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment.

Measures to Protect Surface Water Quality during Construction

357 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during construction of the Proposed Scheme.

Measures to Protect Surface Water Quality during Operation

358 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during operation of the Proposed Scheme.

7.13.5 *Residual Impacts*

359 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme will not have any adverse effect on the conservation objectives, or the favourable conservation condition, of the qualifying interests/special conservation interests The Murrough SPA, and there are therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of The Murrough SPA. As is confirmed by the Water Framework Directive Assessment for the Proposed Scheme (refer to Appendix V), the proposed Scheme will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and it can be concluded that the Proposed Scheme complies with all requirements of the WFD.

7.13.6 *Conclusion of Assessment for The Murrough SPA*

360 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the qualifying interests/special conservation interests of North Dublin Bay and The Murrough SPA, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the qualifying interests/special conservation interests, it is concluded that the Proposed Scheme will adversely affect (either directly or indirectly) the integrity of The Murrough SPA.

8 Summary of Mitigation Measures and Residual Impacts

8.1 Summary of Mitigation Measures

361 This section summarises the mitigation measures that will be implemented during the construction and operation to avoid or reduce the potential impacts of the Proposed Scheme on the European sites as already set out throughout Section 7. A matrix of mitigation measures is provided in **Table 36**, identifying the specific mitigation measures required for each relevant European site.

362 All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment. Mitigation measures and associated Management Plans are included within the Construction Environmental Management Plan (CEMP) provided in Appendix III, all of which shall, at a minimum, be implemented during the Construction Phase of the Proposed Scheme.

Table 36 Matrix of Mitigation Measures and Residual Impacts

European site	Potential Impacts												Any adverse effect on the integrity of European sies (post mitigation)
	Construction						Operation						
	Habitat Loss and Fragmentation	Hydrology	Hydro-geology	Invasive Species	Air Quality	Disturbance / Displacement	Habitat Loss and Fragmentation	Hydrology	Hydro-geology	Invasive Species	Air Quality	Disturbance / Displacement	
North Dublin Bay SAC	X	✓ Section 7.1.4.1 Section 5.4 in CEMP	X	✓ Section 7.1.4.2 Section 5.3 in CEMP	X	X	X	✓ Section 7.1.4.1 Section 5.4 in CEMP	X	✓ Section 7.1.4.2 Section 5.3 in CEMP	X	X	No
South Dublin Bay SAC	X	✓ Section 7.1.4.1 Section 5.4 in CEMP	X	✓ Section 7.1.4.2 Section 5.3 in CEMP	X	X	X	✓ Section 7.1.4.1 Section 5.4 in CEMP	X	✓ Section 7.1.4.2 Section 5.3 in CEMP	X	X	No
Howth Head SAC	X	✓ Section 7.2.6 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.2.6 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	No
Rockabill to Dalkey Island SAC	X	✓ Section 7.2.6 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.2.6 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	No

European site	Potential Impacts												Any adverse effect on the integrity of European sies (post mitigation)
	Construction						Operation						
	Habitat Loss and Fragmentation	Hydrology	Hydro-geology	Invasive Species	Air Quality	Disturbance / Displacement	Habitat Loss and Fragmentation	Hydrology	Hydro-geology	Invasive Species	Air Quality	Disturbance / Displacement	
Baldoyle Bay SAC	X	✓ Section 7.2.6 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.2.6 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	No
Howth Head Coast SPA	X	✓ Section 7.4.6 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.4.6 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	No
Dalkey Islands SPA	X	✓ Section 7.4.6 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.4.6 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	No
Rockabill SPA	X	✓ Section 7.4.6 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.4.6 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	No

European site	Potential Impacts												Any adverse effect on the integrity of European sies (post mitigation)
	Construction						Operation						
	Habitat Loss and Fragmentation	Hydrology	Hydro-geology	Invasive Species	Air Quality	Disturbance / Displacement	Habitat Loss and Fragmentation	Hydrology	Hydro-geology	Invasive Species	Air Quality	Disturbance / Displacement	
North Bull Island SPA	X	✓ Section 7.5.4 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.5.4 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	No
South Dublin Bay and River Tolka Estuary SPA	X	✓ Section 7.5.4 / 7.1.4.1 Section 5.4 in CEMP	X	✓ Section 7.1.4.2 Section 5.3 in CEMP	X	X	X	✓ Section 7.5.4 / 7.1.4.1 Section 5.4 in CEMP	X	✓ Section 7.1.4.2 Section 5.3 in CEMP	X	X	No
Islands Eye SPA	X	✓ Section 7.7.4 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.7.4 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	No
Malahide Estuary SPA	X	✓ Section 7.8.3 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.8.3 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	No

European site	Potential Impacts												Any adverse effect on the integrity of European sies (post mitigation)
	Construction						Operation						
	Habitat Loss and Fragmentation	Hydrology	Hydro-geology	Invasive Species	Air Quality	Disturbance / Displacement	Habitat Loss and Fragmentation	Hydrology	Hydro-geology	Invasive Species	Air Quality	Disturbance / Displacement	
Baldoyle Bay SPA	X	✓ Section 7.9.4 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.9.4 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	No
Rogerstown Estuary SPA	X	✓ Section 7.10.4 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.10.4 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	No
Skerries Islands SPA	X	✓ Section 7.11.4 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.11.4 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	No
Lambay Island SPA	X	✓ Section 7.12.4 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.12.4 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	No

European site	Potential Impacts												Any adverse effect on the integrity of European sies (post mitigation)
	Construction						Operation						
	Habitat Loss and Fragmentation	Hydrology	Hydro-geology	Invasive Species	Air Quality	Disturbance / Displacement	Habitat Loss and Fragmentation	Hydrology	Hydro-geology	Invasive Species	Air Quality	Disturbance / Displacement	
The Murrough SPA	X	✓ Section 7.13.4 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.13.4 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	No

8.2 Summary of Residual Impacts

363 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme will not have any adverse effect on the conservation objectives, or the favourable conservation condition, of the qualifying interest habitats and species and / or SCI species of the European sites assessed in Section 7. There are, therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of such European sites. As is confirmed by the Water Framework Directive Assessment for the Proposed Scheme (refer to Appendix V), the proposed Scheme will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and it can be concluded that the Proposed Scheme complies with all requirements of the WFD. A matrix identifying those aspects which will be subject to mitigation measures and the residual impacts post mitigation is provided in **Table 36** for the relevant European sites.

9 In Combination Assessment

364 This section of the NIS presents the assessment carried out to examine whether any other plans or projects have the potential to act in combination with the Proposed Scheme to have a significant effect on any of the European sites including those within its zone of influence (ZoI).

365 There are 18 European sites within the ZoI of the Proposed Scheme, these are:

- North Dublin Bay SAC;
- South Dublin Bay SAC;
- Baldoyle Bay SAC;
- Howth Head SAC;
- Rockabill to Dalkey Island SAC;
- Lambay Island SAC;
- Howth Head Coast SPA;
- Dalkey Islands SPA;
- Rockabill SPA;
- North Bull Island SPA;
- South Dublin Bay and River Tolka Estuary SPA;
- Ireland's Eye SPA;
- Malahide Estuary SPA;
- Baldoyle Bay SPA;
- Rogerstown Estuary SPA;
- Skerries Islands SPA;
- Lambay Island SPA; and
- The Murrough SPA.

366 All other European sites fall beyond the ZoI of the Proposed Scheme. Therefore, there is no potential for any other plans or projects to act in combination with the Proposed Scheme to adversely affect the integrity

of any other European sites. The protective policies and objectives from the land use plans referred to in this section are included in Section 9.2.

9.1 Analysis of Potential In Combination Effects

367 The in-combination assessment involved first identifying those plans and projects which have the potential to impact on those European sites within the ZoI of the Proposed Scheme.

368 Those plans or projects with the potential to impact upon these European sites are any national, regional and local land use plans or any existing or proposed projects that could potentially affect the ecological environment within the ZoI of the Proposed Scheme.

369 The potential cumulative impacts on those European sites within the ZoI of the Proposed Scheme from the Proposed Scheme in combination with the plans and projects listed in **Table 37** were identified and assessed. This assessment is presented below in **Table 38** and **Table 39**.

Table 37 Land Use Plans and Programmes Considered for the In-Combination Assessment

National Plans
National Energy & Climate Plan 2021-2030
National Spatial Strategy for Ireland 2002-2020;
Project Ireland 2040 – Building Ireland's Future[19]
National Transport Authority Integrated Implementation Plan 2019-2024
Smarter Travel a Sustainable Transport Future 2009-2020
National Biodiversity Action Plan 2017-2021
River Basin Management Plan 2018-2021
National Air Pollution Control Programme (NAPCP) Draft 2019
National Marine Planning Framework 2018
Water Services Strategic Plan 2015
Regional Plans
Regional Planning Guidelines for the Greater Dublin Area Vol I & II 2010-2022;
Regional Spatial & Economic Strategy for the Eastern and Midland Region 2019-2031
Greater Dublin Area Cycle Network Plan 2013
Eastern Catchment Flood Risk Assessment and Management (CFRAM) study 2011-2016
County/Local Plans
Fingal Development Plan 2017-2023
Fingal Biodiversity Action Plan 2010-2015
Fingal County Council Climate Action Plan 2019-2024 • Donabate Local Area Plan 2016 • Rivermeade Local Area Plan 2018 • Barnhill Local Area Plan 2019 • Kinsaley Local Area Plan 2019 • Dublin Airport Local Area Plan 2020
Dublin City Development Plan 2016-2022

[19] Together the National Development Plan and the National Framework are referred to as Project Ireland 2040: Building Ireland's Future

Dublin City Biodiversity Action Plan 2015-2020

Dublin City Council Climate Action Plan 2019-2024

- Clongriffin-Belmayne Local Area Plan 2012-2018
- George's Quay Local Area Plan 2012-2022
- Ballymun Local Area Plan 2017
- The Liberties Local Area Plan 2009-2020
- Naas Road Local Area Plan 2013-2023
- Park West- Cherry Orchard Local Area Plan 2019

South Dublin County Council Development Plan 2016-2022

Biodiversity Action Plan for South Dublin County (2020-2026)- Draft for public consultation

South Dublin County Council Climate Change Action Plan 2019-2024

- Tallaght Town Centre Local Area Plan 2020
- Liffey Valley Town Centre Local Area Plan 2008

Dún Laoghaire- Rathdown Development Plan 2016-2022; Dún Laoghaire- Rathdown Development Plan (2022-2028)- Draft for public consultation

Dún Laoghaire- Rathdown Biodiversity Plan 2009-2013; Dún Laoghaire- Rathdown Biodiversity Plan (current draft under review)

Dún Laoghaire-Rathdown County Council Climate Change Action Plan 2019-2024

- Deansgrange Local Area Plan 2010-2020
- Stillorgan Local Area Plan 2018-2024
- Blackrock Local Area Plan 2015-2021
- Woodbrook-Shanganagh Local Area Plan 2017-2024

Wicklow County Development Plan 2016-2022

Wicklow Biodiversity Plan 2010-2015

Wicklow County Council Climate Change Adaptation Strategy 2019

- Bray Municipal District Local Area Plan 2018-2024
- Bray & Environs Transport Study 2019
- Bray Town Development Plan 2011-2017

Projects

- Southern Port Access Route (SPAR)
- Widening of the M7 between Junction 9 (Naas North) and Junction 11 (M7/M9) to provide an additional lane in each direction
- Enhancements of the N2/M2 national route inclusive of a bypass of Slane, to provide for additional capacity on the non-motorway sections of this route, and to address safety issues in Slane village associated with, in particular, heavy goods vehicles
- N3 Castaheany Interchange Upgrade: refer to "Details" link
- Reconfiguration of the N7 from its junction with the M50 to Naas, to rationalise junctions and accesses in order to provide a higher level of service for strategic traffic travelling on the mainline
- N3–N4: Barnhill to Leixlip Interchange
- Reconfiguration of the N4 from its junction with the M50 to Leixlip to rationalise accesses and to provide additional capacity at the Quarryvale junction
- Clonburris SDZ roads development: refer to "Details" link
- DART+ Programme West
- Porterstown Distributor Link Road
- Widening of the N3 between Junction 1 (M50) and Junction 4 (Clonee), plus related junction and necessary changes to the existing national road network
- Lucan LUAS
- DART+ Programme South West
- Junction upgrades and other capacity improvements on the M1 motorway, including additional lanes south of Drogheda, where required

- Finglas LUAS (Green Line extension Broombridge to Finglas)
- DART+ Tunnel Element (Kildare Line to Northern Line)
- Potential Metro South alignment: SW option
- LUAS Cross City incorporating LUAS Green Line Capacity Enhancement - Phase 1
- Oldtown-Mooretown Western Distributor Link Road
- Potential Metro South alignment: Charlemont to Sandyford
- Poolbeg LUAS
- Leopardstown Link Road Phase 2
- Development of a road link connecting from the southern end of the Dublin Port Tunnel to the South Port area, which will serve the South Port and adjoining development areas
- Poolbeg SDZ roads development: refer to “Details” link
- Glenamuck District Distributor Road
- DART+ Programme Coastal North
- Widening of the M50 to three lanes in each direction between Junction 14 (Sandyford) and Junction 17 (M11) plus related junction and other changes
- Cherrywood SDZ roads development: refer to “Details” link
- DART+ Programme Coastal South
- R126 Donabate Relief Road: R132 to Portrane Demesne
- Extension of LUAS Green Line to Bray
- Capacity enhancement and reconfiguration of the M11/N11 from Junction 4 (M50) to Junction 14 (Ashford) inclusive of ancillary and associated road schemes, to provide additional lanes and upgraded junctions, plus service roads and linkages to cater for lo
- MetroLink
- Greater Dublin Drainage (GDD)
- Cycling: Greater Dublin Area Cycle Network Plan (excluding Radial Core Bus Corridor elements)
- Dublin Array - offshore windfarm
- Air insulated switchgear 110kV transmission substation. Platin, Duleek
- Construction of a new distributor road and junction to the southwest of Kells town centre. Kells
- Dublin Mountain Visitors Centre and all associated works. Killakee and Jamestown.
- FCC/12/0001 Broadmeadow Way. Greenway between Malahide Demesne and Newbridge Demesne to be known as 'Broadmeadow Way'. Malahide.
- Alternations to a permitted double circuit 110kV electricity transmission line development between substations. Darndale / Belcamp
- 110kV onsite electrical substation with associated electrical plant, electrical equipment, welfare facilities and waste water holding tank and security fencing. 110kV overhead line grid connection cabling, upgrade of existing tracks and provision of new site access roads with all associated site development and ancillary works. Timahoe East
- 15-year permission for development at Oil Berth 3 and Oil Berth 4, Eastern Oil Jetty and at Berths 50A, 50N, 50S, 51, 51A, 49, 52, 53 and associated terminal yards to provide for various elements including new Ro-Ro jetty and consolidation of passenger terminal buildings. Dublin Port.
- A residential development with ancillary commercial uses (retail unit, café and créche) partically comprising a "Build to Rent" scheme on circa 9.69 hectares. The townlands of Shanganagh, Cork Little and Shankill, Co. Dublin.
- The proposed development for Brexit Infrastructure will consist of - Installation of porta-cabin structures. Resurfacing and amalgamation of existing yards. Parking for heavy good vehicles, cars and bicycles. Gates, signage and all ancillary site works. Dublin Port.
- Provision of a double circuit 220kV transmission line and a 220kV gas insulated switchgear (GIS) substation along with associated and ancillary works. Townlands of Cruiserath, Goddamendy and Bay, Co. Dublin.
- Construction of a 2 storey 110kV Gas Insulated Switchgear (GIS) substation, underground cable and all associated and ancillary site works. Former Clyde House, IDA Blanchardstown Business and Technology Park, Snugborough Road, Blanchardstown, Dublin 15

- Flood alleviation works along and adjacent to the River Poddle extending from the upper reaches of the river. Tymon North, Tallaght to Merchant's Quay, Dublin.
- Aviation fuel pipeline. Location: Inlet Station: Team CV, Bond Drive, Dublin Port, Dublin 1 to Dublin Airport, Co. Dublin
- Park development project at the Racecourse Park
- 2 no. 110kV transmission lines and a 110kV Gas Insulated Switchgear (GIS) substation
- Swords to City Centre Core Bus Corridor Scheme
- Ballymun / Finglas to City Centre Core Bus Corridor Scheme
- Blanchardstown to City Centre Core Bus Corridor Scheme
- Lucan to City Centre Core Bus Corridor Scheme
- Liffey Valley to City Centre Core Bus Corridor Scheme
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
- Templeogue / Rathfarnham to City Centre Core Bus Corridor Scheme
- Kimmage to City Centre Core Bus Corridor Scheme
- Bray to City Centre Core Bus Corridor Scheme
- Belfield / Blackrock to City Centre Core Bus Corridor Scheme
- Ringsend to City Centre Core Bus Corridor Scheme
- A range of Strategic Housing Developments
- A range of Irish Water Projects

Table 38 In-Combination Assessment of Plans and Programmes

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
National Energy & Climate Plan 2021-2030 **This National Energy and Climate Plan builds on previous national strategies and sets out in detail objectives regarding the five energy dimensions together with planned policies and measures to ensure that these objectives are achieved. It aims as a fundamental national objective to pursue a trajectory of emissions reduction which is in line with reaching net zero in Ireland by 2050.** **In relation to transport the plan aims to:** • **make growth less transport intensive through better planning, remote and home-working and modal shift to public transport** • **Increase the renewable biofuel content of motor fuels** • **Set targets for the conversion of public transport fleets to zero carbon alternatives.**	No potential impact pathways to European sites. There are no specific spatial references in this policy document and therefore, no specific link (in terms of potential impact pathways) between it and European sites within the Zone of Influence (ZoI) of the proposed scheme.	No in combination impact Key to considering the on-going evolution of national climate policy included are the obligations of the State under EU law (e.g. the EU Habitats Directive), and the promotion of sustainable development. Considering that, this policy position poses no identifiable risk of resulting in adverse effects on the integrity of any European sites.
National Development Plan Ireland 2021-2030 **As part of Project Ireland 2040 the National Development Plan sets out the Government's over-arching investment strategy and budget for the period 2021-2030. The plan that aims to balance demand for public investment across all sectors and regions of Ireland with a major focus on the delivery of infrastructure projects.**	There is the potential that developments implemented under the National Development Plan could affect European sites within the ZoI of the Proposed Scheme. The potential impact pathways cannot be defined based on the level of detail included in the plan. However, future developments implemented through the National Development Plan have the potential to lie either within those European sites, or be situated in a location where they may be within the ZoI of those European sites.	No in combination impact. Any projects required to achieve the objectives of the National Development Plan must comply with the requirements and obligations of EU and Irish planning and environmental law, including those of the relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites within the ZoI of the Proposed Scheme, the overarching land use plans are Fingal CDP (2017-2023), Dublin City CDP (2016-2023), South Dublin CDP (2016-2022), Dún Laoghaire-Rathdown CDP (2016-2022; 2022-2028 draft for public consultation), and Wicklow CDP (2016-2022). All of these land use plans contain objectives and policies to ensure the protection of European sites from any projects proposed within the plan area. These are presented in Section 9.2.

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
		This assessment has identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below). Considering the environmental protection policies included within those land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the National Development Plan poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.
Project Ireland 2040 – National Planning Framework **The National Planning Framework is a high-level strategic plan to guide future growth and development in Ireland. The NPF makes reference to delivering projects in Dublin; here Dublin refers to the Greater Dublin Area (GDA). This area includes Dublin City and the following surrounding lands and counties: Dun Laoghaire/Rathdown, Fingal, Kildare, Meath, South Dublin and Wicklow. Projects such as the DART expansion programme, Bus Connects Scheme, and investment at Dublin Port, amongst others are referenced. Key objectives of the plan include:** • **Managing sustainable growth of cities, towns and villages** • **Providing accessibility between key urban centres** **Enhance public transport in a sustainable manner**	There is the potential that developments implemented under Project Ireland 2040 could affect European sites within the ZoI of the Proposed Scheme. The potential impact pathways cannot be defined based on the level of detail included in the plan. However, future developments implemented through Project Ireland 2040 have the potential to lie either within those European sites, or be situated in a location where they may be within the ZoI of those European sites.	No in combination impact. Any projects required to achieve the objectives of Project Ireland 2040 Plan must comply with the requirements and obligations of EU and Irish planning and environmental law, including those of the relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites within the ZoI of the Proposed Scheme, the overarching land use plans are Fingal CDP (2017-2023), Dublin City CDP (2016-2023), South Dublin CDP (2016-2022), Dún Laoghaire-Rathdown CDP (2016-2022; 2022-2028 draft for public consultation), and Wicklow CDP (2016-2022). All of these land use plans contain objectives and policies to ensure the protection of European sites from any projects proposed within the plan area. These are presented in Section 9.2. This assessment has identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below).

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
		Considering the environmental protection policies included within those land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, Project Ireland 2040 poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.
National Transport Authority Integrated Implementation Plan 2019-2024 **An Infrastructure investment programme forms the core of this plan. There are four key investment areas: bus, light rail, heavy rail, and integration measures and sustainable transport. The NTA Integrated Implementation Plan refers to the delivery of projects in Dublin, such as the DART expansion program and GDA Cycle Network Plan, amongst others.**	There is the potential that developments implemented under this plan could affect European sites within the ZoI of the Proposed Scheme. The potential impact pathways cannot be defined based on the level of detail included in the plan. However, future developments implemented through this plan have the potential to lie either within those European sites, or be situated in a location where they may be within the ZoI of those European sites.	No in combination impact. Any projects required to achieve the objectives of this plan must comply with the requirements and obligations of EU and Irish planning and environmental law, including those of the relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites within the ZoI of the Proposed Scheme, the overarching land use plans are Fingal CDP (2017-2023), Dublin City CDP (2016-2023), South Dublin CDP (2016-2022), Dún Laoghaire-Rathdown CDP (2016-2022; 2022-2028 draft for public consultation), and Wicklow CDP (2016-2022). All of these land use plans contain objectives and policies to ensure the protection of European sites from any projects proposed within the plan area. These are presented in Section 9.2. This assessment has identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below). Considering the environmental protection policies included within those land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this plan poses no identifiable risk of resulting in adverse

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
		effects on the integrity of any European sites in combination with the Proposed Scheme.
Smarter Travel a Sustainable Transport Future 2009-2020 **Smarter Travel is a government policy document outlining a strategy related to sustainable transport. It sets out actions to reduce overall travel demand, to maximise the efficiency of the transport network, to reduce reliance on fossil fuels, to reduce transport emissions, and to improve accessibility to transport.**	There is the potential that developments implemented under Smarter Travel could affect European sites within the ZoI of the Proposed Scheme. Smarter Travel does not propose or support any specific development proposals in identified locations and the potential impact pathways cannot be defined. However, future developments implemented through Smarter Travel have the potential to lie either within those European sites, or be situated in a location where they may be within the ZoI of those European sites.	No in combination impact. Any projects required to achieve the objectives of smarter travel must comply with the requirements and obligations of EU and Irish planning and environmental law, including those of the relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites within the ZoI of the Proposed Scheme, the overarching land use plans are Fingal CDP (2017-2023), Dublin City CDP (2016-2023), South Dublin CDP (2016-2022), Dún Laoghaire-Rathdown CDP (2016-2022; 2022-2028 draft for public consultation), and Wicklow CDP (2016-2022). All of these land use plans contain objectives and policies to ensure the protection of European sites from any projects proposed within the plan area. These are presented in Section 9.2. This assessment has identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below). Considering the environmental protection policies included within those land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, Smarter Travel poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.
National Biodiversity Action Plan 2017-2021	The purpose of this action plan is to halt the loss of biodiversity and the degradation of ecosystems therefore, it will contribute towards maintaining or restoring the conservation condition of the European sites	No in combination impact

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
The National Biodiversity Action Plan sets out 119 targeted actions, underpinned by seven strategic objectives aimed at ensuring that Irelands' biodiversity and ecosystems are conserved and restored, delivering benefits essential for all sectors of society and that Ireland contributes to efforts to halt the loss of biodiversity and the degradation of ecosystems in the EU and globally. The strategic objectives lay out a clear framework for Ireland's national approach to biodiversity.	within their ZoI. Consequently, there are no potential impact pathways by which it could adversely affect the integrity of any European sites	As the National Biodiversity Action Plan aims to halt biodiversity loss, no likely significant in-combination effects are predicted.
River Basin Management Plan 2018-2021 **The River Basin Management Plan outlines the measures the State and other sectors will take to improve water quality in Ireland's groundwater, rivers, lakes, estuarine and coastal waters.**	The purpose of this plan is to improve water quality in Ireland's groundwater, rivers, lakes, estuarine and coastal waters therefore, it will contribute towards maintaining or restoring the conservation condition of the European sites within their ZoI. Consequently, there are no potential impact pathways by which it could adversely affect the integrity of any European sites.	No in combination impact No potential for in combination impacts with the proposed scheme as such a plan is intended to improve the quality of the ecological environment within its ZoI.
National Air Pollution Control Programme (NAPCP) Draft 2019 **The National Air Pollution Control Programme (Article 6 of Directive (EU) 2016/2284 – 'the NEC Directive') is the main governance instrument by which EU Member States must ensure that the emission reduction commitments for 2020-2029 and 2030 onwards are met.**	The purpose of this programme is to reduce emissions and improve air quality in Ireland therefore, it will contribute towards maintaining or restoring the conservation condition of the European sites within its ZoI. Consequently, there are no potential impact pathways by which it could adversely affect the integrity of any European sites.	No in combination impact No potential for in combination impacts with the proposed scheme as such a plan is intended to improve the quality of the ecological environment within its ZoI.
National Marine Planning Framework 2018 **This framework is the first formal step towards the preparation of a marine spatial plan for Ireland which will contribute to the effective management of marine activities e.g. fishing, shipping, leisure, aquaculture and renewable energy, and a more sustainable use of our marine resources.**	There is the potential that developments implemented under the National Marine Planning Framework could affect European sites within the ZoI of the Proposed Scheme. The National Marine Planning Framework does not propose or support any specific development proposals in identified locations and the potential impact pathways cannot be defined. However, future developments implemented through the National Marine Planning Framework have the potential to lie either within those European sites, or be situated in a location where they may be within the ZoI of those European sites.	No in combination impact. Any projects required to achieve the objectives of the National Marine Planning Framework must comply with the requirements and obligations of EU and Irish planning and environmental law, including those of any relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites within the ZoI of the Proposed Scheme, the overarching land use plans are Fingal CDP (2017-2023), Dublin City CDP (2016-2023), South Dublin CDP (2016-

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
		2022), Dún Laoghaire-Rathdown CDP (2016-2022; 2022-2028 draft for public consultation), and Wicklow CDP (2016-2022). All of these land use plans contain objectives and policies to ensure the protection of European sites from any projects proposed within the plan area. These are presented in Section 9.2. This assessment has identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below). Considering the environmental protection policies included within those land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the National Marine Planning Framework poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.
Water Services Strategic Plan 2015 **Water Services Strategic Plan (WSSP) sets out strategic objectives for the delivery of water services over the next 25 years up to 2040. Its six strategic objectives include: meeting customer expectations; ensuring a safe and reliable water supply; providing effective management of wastewater; protecting and enhancing the environment; supporting social and economic growth; and investing in our future.**	There is the potential that developments implemented under the Water Services Strategic Plan could affect European sites within the ZoI of the Proposed Scheme. The Water Services Strategic Plan does not propose or support any specific development proposals in identified locations and the potential impact pathways cannot be defined. However, future developments implemented through the Water Services Strategic Plan have the potential to lie either within those European sites, or be situated in a location where they may be within the ZoI of those European sites.	No in combination impact. Any projects required to achieve the objectives of the Water Services Strategic Plan must comply with the requirements and obligations of EU and Irish planning and environmental law, including those of the relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites within the ZoI of the Proposed Scheme, the overarching land use plans are Fingal CDP (2017-2023), Dublin City CDP (2016-2023), South Dublin CDP (2016-2022), Dún Laoghaire-Rathdown CDP (2016-2022; 2022-2028 draft for public consultation), and Wicklow CDP (2016-2022). All of these land use plans contain objectives and policies to ensure the protection of European sites from any projects

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
		proposed within the plan area. These are presented in Section 9.2. This assessment has identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below). Considering the environmental protection policies included within those land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, Water Services Strategic Plan poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.
Regional Spatial & Economic Strategy for the Eastern and Midland Region 2019-2031 **A RSES is a strategic plan which identifies regional assets, opportunities and pressures and provides appropriate policy responses in the form of Regional Policy Objectives. One of its main aims is to provide a framework to better manage spatial planning and economic development throughout the Region.**	There is the potential that developments implemented under the Regional Spatial & Economic Strategy for the Eastern and Midland Region could affect European sites within the ZoI of the Proposed Scheme. The Regional Spatial & Economic Strategy for the Eastern and Midland Region does not propose or support any specific development proposals in identified locations and the potential impact pathways cannot be defined. However, future developments implemented through the Regional Spatial & Economic Strategy for the Eastern and Midland Region have the potential to lie either within those European sites, or be situated in a location where they may be within the ZoI of those European sites.	No in combination impact. Any projects required to achieve the objectives of the Regional Spatial & Economic Strategy for the Eastern and Midland Region will be implemented locally by the relevant local authority and must comply with the requirements and obligations of EU and Irish planning and environmental law, including those of the relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites within the ZoI of the Proposed Scheme, the overarching land use plans are Fingal CDP (2017-2023), Dublin City CDP (2016-2023), South Dublin CDP (2016-2022), Dún Laoghaire-Rathdown CDP (2016-2022; 2022-2028 draft for public consultation), and Wicklow CDP (2016-2022). All of these land use plans contain objectives and policies to ensure the protection of European sites from any projects proposed within the plan area. These are presented in Section 9.2.

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
		This assessment has identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below). Considering the environmental protection policies included within those land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the Regional Spatial & Economic Strategy for the Eastern and Midland Region poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.
Greater Dublin Area Cycle Network Plan 2013 **The Greater Dublin Area Cycle Network Plan sets out the goals to promote and provide cycling infrastructure across the Greater Dublin Area, and the actions to achieve these goals.**	The Proposed Scheme lies partly within the functional area of the Dublin City Development Plan 2016-2022 and many of the objectives and policies of the Greater Dublin Area Cycle Network Plan 2013, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North	No in combination impact. The Greater Dublin Area Cycle Network Plan 2013has undergone AA and therefore, subject to the mitigation proposed in the NIR being incorporated, there would be no adverse effects on any European sites as a result of implementation of the plan**.** The Greater Dublin Area Cycle Network Plan 2013contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. These are presented in Section 9.2. Considering the protective environmental policies contained within the Greater Dublin Area Cycle Network Plan 2013, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites. Any projects required to achieve the objectives of the Greater Dublin Area Cycle Network Plan 2013 will be implemented

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); Habitat degradation as a result of air quality impacts (for example South Dublin Bay and River Tolka Estuary SPA will be adjacent to Clontarf Road at risk of increased traffic flows); and, Disturbance and displacement impacts (for example ex-situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	locally by the relevant local authority and must comply with the requirements and obligations of EU and Irish planning and environmental law, including those of the relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites within the ZoI of the Proposed Scheme, the overarching land use plans are Fingal CDP (2017-2023), Dublin City CDP (2016-2023), South Dublin CDP (2016-2022), Dún Laoghaire-Rathdown CDP (2016-2022; 2022-2028 draft for public consultation), and Wicklow CDP (2016-2022). All of these land use plans contain objectives and policies to ensure the protection of European sites from any projects proposed within the plan area. These are presented in Section 9.2. This assessment has identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below). Considering the environmental protection policies included within those land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the Greater Dublin Area Cycle Network Plan 2013 poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.
Eastern Catchment Flood Risk Assessment and Management (CFRAM) study 2011-2016 **This study includes the following main elements within the Eastern catchment:** **1. Flood Risk Assessments** **2. Flood Risk Mapping**	There is the potential that developments implemented under the Eastern Catchment Flood Risk Assessment and Management (CFRAM) study 2011-2016 could affect European sites within the ZoI of the Proposed Scheme. Given the nature of the study, future developments implemented through CFRAM have the potential to lie either within those European sites or be	No in combination impact. Any projects required to achieve the objectives of CFRAM must comply with the requirements and obligations of EU and Irish planning and environmental law, including those of any relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites within the ZoI of the

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
3. Flood Risk Management Plans	situated in a location where they may be within the ZoI of those European sites.	Proposed Scheme, the overarching land use plans are Fingal CDP (2017-2023), Dublin City CDP (2016-2023), South Dublin CDP (2016-2022), Dún Laoghaire-Rathdown CDP (2016-2022; 2022-2028 draft for public consultation), and Wicklow CDP (2016-2022).All of these land use plans contain objectives and policies to ensure the protection of European sites from any projects proposed within the plan area. These are presented in Section 9.2. This assessment has identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below). Considering the environmental protection policies included within those land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, CFRAM poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.
Fingal Development Plan 2017-2023 **The Fingal CDP makes reference to residential development, zoning and infrastructure targets / obligations.**	The Proposed Scheme lies within the functional area of the Dublin City Development Plan 2016-2022, however many of the objectives and policies of the Fingal Development Plan 2017-2023, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites	No in combination impact. The Fingal Development Plan 2017-2023 was subject to AA screening, and AA, prior to its adoption and therefore, subject to any mitigation identified as being required, there will be no adverse effects on any European sites as a result of implementation of the plan**.** The Fingal Development Plan 2017-2023 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. These are presented in Section 9.2. Considering the protective environmental policies contained within the Fingal Development Plan 2017-2023, and that alone

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); Disturbance and displacement impacts (for example ex-situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA.	the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.
Fingal Biodiversity Action Plan 2010-2015 **The purpose of this action plan is to halt the loss of biodiversity and the degradation of ecosystems.**	No, there are no potential impact pathways to European sites. This plan will contribute towards maintaining or restoring the conservation condition of the European sites within their ZoI. Consequently, there are no potential impact pathways by which it could adversely affect the integrity of any European sites.	No in combination impact No potential for in combination impacts with the proposed scheme as such a plan is intended to improve the quality of the ecological environment within its ZoI.

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
Fingal County Council Climate Action Plan 2019-2024 **The purpose of this action plan is to improve the council's energy efficiency, reduce their greenhouse emissions and create a climate resilient Dublin.**	No, there are no potential impact pathways to European sites. This plan will contribute towards improving the climate change resilience of the European sites within their ZoI. Consequently, there are no potential impact pathways by which it could adversely affect the integrity of any European sites.	No in combination impact No potential for in combination impacts with the proposed scheme as such a plan is intended to improve the quality of the environment within its ZoI.
Donabate Local Area Plan 2016 **The LAP makes reference to phased housing development targets / obligations.**	The Proposed Scheme lies with the functional area of the Dublin City Development Plan 2016-2022 and some of the objectives and policies of the Donabate Local Area Plan 2016, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA);	No in combination impact. The Donabate Local Area Plan 2016 was subject to AA screening, and AA, prior to its adoption and therefore, subject to any mitigation identified as being required, there will be no adverse effects on any European sites as a result of implementation of the plan**.** The Donabate Local Area Plan 2016 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering the protective environmental policies contained within the Donabate Local Area Plan 2016, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example ex-situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA.	
Rivermeade Local Area Plan 2018 **The LAP makes reference to 11 development area targets / obligations and the creation of a link road to connect Rivermeade to Swords.**	The Proposed Scheme lies within the functional area of the Dublin City Development Plan 2016-2022 and some of the objectives and policies of the Rivermeade Local Area Plan 2018, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka	No in combination impact. The Rivermeade Local Area Plan 2018 was subject to AA screening prior to its adoption. The AA screening confirmed that the plan did not have the potential to result in likely significant effects on European sites, therefore an NIS was not required. Therefore there will be no adverse effects on any European sites as a result of implementation of the plan**.** The Rivermeade Local Area Plan 2018 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering the protective environmental policies contained within the Rivermeade Local Area Plan 2018, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species(for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example ex-situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA)	
Barnhill Local Area Plan 2019 **The LAP makes reference to residential development targets / obligations.**	The Proposed Scheme lies within the functional area of the Dublin City Development Plan 2016-2022, however some of the objectives and policies of the Barnhill Local Area Plan 2019, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in	No in combination impact. The Barnhill Local Area Plan 2019 was subject to AA screening prior to its adoption. The AA screening confirmed that the plan did not have the potential to result in likely significant effects on European sites, therefore an NIS was not required. Therefore, there will be no adverse effects on any European sites as a result of implementation of the plan. The Barnhill Local Area Plan 2019 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering the protective environmental policies contained within the Barnhill Local Area Plan 2019, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species(for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example ex-situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA.	
Kinsaley Local Area Plan 2019 **The LAP makes reference to commercial and residential development targets / obligations.**	The Proposed Scheme lies within the functional area of the Dublin City Development Plan 2016-2022 and some of the objectives and policies of the Kinsaley Local Area Plan 2019, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin	No in combination impact. The Kinsaley Local Area Plan 2019 was subject to AA screeningprior to its adoption. The AA screening confirmed that the plan did not have the potential to result in likely significant effects on European sites, therefore an NIS was not required. Therefore, there will be no adverse effects on any European sites as a result of implementation of the plan**.** The Kinsaley Local Area Plan 2019 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering the protective environmental policies contained within the Kinsaley Local Area Plan 2019, and that alone the

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example ex-situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA.	Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.
Dublin Airport Local Area Plan 2020 **The LAP makes reference to airside and landside infrastructure targets / obligations.**	The Proposed Scheme lies within the functional area of the Dublin City Development Plan 2016-2022 and some of the objectives and policies of the Dublin Airport Local Area Plan 2020, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in	No in combination impact. The Dublin Airport Local Area Plan 2020 was subject to AA screening prior to its adoption. The AA screening confirmed that the plan did not have the potential to result in likely significant effects on European sites, therefore an NIS was not required. Therefore, there will be no adverse effects on any European sites as a result of implementation of the plan. The Dublin Airport Local Area Plan 2020 contains objectives and policies to ensure the protection of European sites,

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	some way, but themselves will not affect the conservation objectives of European sites Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example ex-situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA.	including surface water quality, from any projects proposed within the plan area. Considering the protective environmental policies contained within the Dublin Airport Local Area Plan 2020, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.
Dublin City Development Plan 2016-2022 **The Dublin City CDP makes reference to improvement of the public transport network and facilities for pedestrians and cyclists**	The Proposed Scheme lies within the functional area of the Dublin City Development Plan 2016-2022 and many of the objectives and policies therein, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.	No in combination impact. The Dublin City Development Plan 2016 - 2022 was subject to AA screening, and AA, prior to its adoption and therefore, subject to any mitigation identified as being required, there

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
and targets / obligations to create strategic development and regeneration areas.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species(for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); Habitat degradation as a result of air quality impacts (for example South Dublin Bay and River Tolka Estuary SPA will be adjacent to Clontarf Road at risk of increased traffic flows); and, Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA,	will be no adverse effects on any European sites as a result of implementation of the plan**.** The Dublin City Development Plan 2016-2022 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering the protective environmental policies contained within the Dublin City Development Plan 2016-2022, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA.	
Dublin City Biodiversity Action Plan 2015-2020 **The purpose of this action plan is to halt the loss of biodiversity and the degradation of ecosystems.**	No, there are no potential impact pathways to European sites. This plan will contribute towards maintaining or restoring the conservation condition of the European sites within their ZoI. Consequently, there are no potential impact pathways by which it could adversely affect the integrity of any European sites.	No in combination impact No potential for in combination impacts with the proposed scheme as such a plan is intended to improve the quality of the ecological environment within its ZoI.
Dublin City Council Climate Action Plan 2019-2024 **The purpose of this action plan is to improve the council's energy efficiency, reduce their greenhouse emissions and create a climate resilient Dublin.**	This plan will contribute towards improving the climate change resilience of the European sites within their ZoI. While by and large the majority of the measures proposed in the plan will have a positive or supportive function for European sites, some of the proposals, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay	No in combination impact The plan is intended to improve the quality of the environment within its ZoI. Any projects required to achieve the objectives of plan will be implemented by the relevant local or other consenting authorities and must comply with the statutory planning or other legislative requirements, including those of any relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites within the ZoI of the Proposed Scheme, the overarching land use plans are Fingal CDP (2017-2023), Dublin City CDP (2016-2023), South Dublin CDP (2016-2022), Dún Laoghaire-Rathdown CDP (2016-2022; 2022-2028 draft for public consultation), and Wicklow CDP (2016-2022). All of these land use plans contain objectives and policies to ensure the protection of European sites from any projects proposed within the plan area. These are presented in Section 9.2. This assessment has identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below).

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species(for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA.	Considering the environmental protection policies included within those land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, CFRAM poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.
Clongriffin-Belmayne Local Area Plan 2012-2018 **The LAP makes reference to commercial and residential development targets / obligations, and targets associated with interconnecting walking, cycling and public transport routes.**	The Proposed Scheme lies within the functional area of the Dublin City Development Plan 2016-2022 and some of the objectives and policies of the Clongriffin-Belmayne Local Area Plan 2012-2018, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation	No in combination impact. The Clongriffin-Belmayne Local Area Plan 2012-2018 was subject to AA screening, and AA, prior to its adoption and therefore, there will be no adverse effects on any European sites as a result of implementation of the plan. The Clongriffin-Belmayne Local Area Plan 2012-2018 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering the protective environmental policies contained within the Clongriffin-Belmayne Local Area Plan 2012-2018, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species(for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	
George's Quay Local Area Plan 2012-2022 **The LAP makes reference to mixed use development targets / obligations, and targets associated with the improvement of pedestrian and cycling infrastructure.**	The Proposed Scheme lies within the functional area of the Dublin City Development Plan 2016-2022 and some of the objectives and policies of the George's Quay Local Area Plan 2012-2022, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North	No in combination impact. The George's Quay Local Area Plan 2012-2022 was subject to AA screening prior to its adoption. The AA screening confirmed that the plan did not have the potential to result in likely significant effects on European sites, therefore an NIS was not required. Therefore, there will be no adverse effects on any European sites as a result of implementation of the plan**.** The George's Quay Local Area Plan 2012-2022 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering the protective environmental policies contained within the George's Quay Local Area Plan 2012-2022, and that alone the Proposed Scheme will not adversely affect the

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species(for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA);	integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.
Ballymun Local Area Plan 2017 **The LAP makes reference to residential development targets / obligations, and targets associated with the development of M50 lands and construction of outstanding road infrastructure e.g. Metro North.**	The Proposed Scheme lies within the functional area of the Dublin City Development Plan 2016-2022 and some of the objectives and policies of the Ballymun Local Area Plan 2017, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka	No in combination impact. The Ballymun Local Area Plan 2017 was subject to AA screening prior to its adoption. The AA screening confirmed that the plan did not have the potential to result in likely significant effects on European sites, therefore an NIS was not required. Therefore, , there will be no adverse effects on any European sites as a result of implementation of the plan**.** The Ballymun Local Area Plan 2017 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering the protective environmental policies contained within the Ballymun Local Area Plan 2017, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species(for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA.	
The Liberties Local Area Plan 2009-2020 **This LAP makes reference to increasing local authority housing, installing new infrastructure, and targets/obligations associated with creating new routes for pedestrians and cyclists.**	The Proposed Scheme lies within the functional area of the Dublin City Development Plan 2016-2022 and some of the objectives and policies of the Liberties Local Area Plan 2009-2020, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay	No in combination impact. The liberties Local Area Plan 2009-2020 lies within the administrative boundaries of Dublin City Council, therefore, any plans or projects arising from the LAP will also be required to abide by the protective environmental policies contained within the Dublin City Development Plan 2016-2022 and will be subject to any mitigation identified in the NIS undertaken for the DCC plan. Any future projects arising from the LAP will also be subject to project specific AA planning requirements. The Dublin City Development Plan 2016-2022contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering the protective environmental policies contained within the Dublin City Development Plan 2016-2022, in the AA the plan was subject to, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites,

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); and Habitat degradation as a result of introducing/spreading non-native invasive species(for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.
Naas Road Local Area Plan 2013-2023 **This LAP makes reference to the creation of four strategic development regeneration areas and targets / obligations associated making improvements to pedestrian, cycling and public transport infrastructure.**	The Proposed Scheme lies within the functional area of the Dublin City Development Plan 2016-2022 and some of the objectives and policies of the Naas Road Local Area Plan 2013-2023, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); and Habitat degradation as a result of introducing/spreading non-native invasive species(for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	No in combination impact. The Naas Road Local Area Plan 2013-2023 was subject to AA screening prior to its adoption thereby finding the plan did not have the potential to result in likely significant effects on European sites, and that an NIS was not required. Therefore, there will be no adverse effects on any European sites as a result of implementation of the plan**.** The Naas Road Local Area Plan 2013-2023 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering the protective environmental policies contained within the Naas Road Local Area Plan 2013-2023, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
Park West- Cherry Orchard Local Area Plan 2019 **This LAP makes reference to residential and mixed-use development targets / obligations, and targets associated with the improvement of infrastructure connecting pedestrians, cycling and public transport.**	The Proposed Scheme lies within the functional area of the Dublin City Development Plan 2016-2022 and some of the objectives and policies of the Park West- Cherry Orchard Local Area Plan 2019, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Dalkey Islands SPA and The Murrough SPA); and Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	No in combination impact. The Park West- Cherry Orchard Local Area Plan 2019 was subject to AA screening prior to its adoption. The AA screening confirmed that the plan did not have the potential to result in likely significant effects on European sites, therefore an NIS was not required. Therefore, there will be no adverse effects on any European sites as a result of implementation of the plan. The Park West- Cherry Orchard Local Area Plan 2019 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering the protective environmental policies contained within the Park West- Cherry Orchard Local Area Plan 2019, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.
South Dublin County Council Development Plan 2016-2022 **The South Dublin CDP makes reference to commercial and residential development (including Adamstown and Clonburris SDZs), and infrastructure targets / obligations aimed at increasing connectivity between pedestrian and cycle routes and public transport.**	The Proposed Scheme lies within the functional area of the Dublin City Development Plan 2016-2022, however some of the objectives and policies of the South Dublin County Council Development Plan 2016-2022, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.	No in combination impact. The South Dublin County Council Development Plan 2016-2022 was subject to AA screening, and AA, prior to its adoption and therefore, subject to any mitigation identified as being required, there will be no adverse effects on any European sites as a result of implementation of the plan.

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA.	The South Dublin County Council Development Plan 2016-2022 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering the protective environmental policies contained within the South Dublin County Council Development Plan 2016-2022, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
Biodiversity Action Plan for South Dublin County (2020-2026)- Draft for public consultation **The purpose of this action plan is to halt the loss of biodiversity and the degradation of ecosystems.**	No, there are no potential impact pathways to European sites. This plan will contribute towards maintaining or restoring the conservation condition of the European sites within their ZoI. Consequently, there are no potential impact pathways by which it could adversely affect the integrity of any European sites.	No in combination impact No potential for in combination impacts with the proposed scheme as such a plan is intended to improve the quality of the ecological environment within its ZoI.
South Dublin County Council Climate Change Action Plan 2019-2024 **The purpose of this action plan is to improve the council's energy efficiency, reduce their greenhouse emissions and create a climate resilient Dublin.**	No, there are no potential impact pathways to European sites. This plan will contribute towards improving the climate change resilience. There are no potential impact pathways by which it could adversely affect the integrity of any European sites within the ZoI of the Proposed Scheme.	No in combination impact No potential for in combination impacts with the proposed scheme as such a plan is intended to improve the quality of the environment within its ZoI.
Tallaght Town Centre Local Area Plan 2020 **This LAP makes reference to residential and mixed-use development targets / obligations, and targets associated with the improvement of infrastructure connecting pedestrians, cycling and public transport.**	The Proposed Scheme lies within the functional area of the Dublin City Development Plan 2016-2022, however some of the objectives and policies of the Tallaght Town Centre Local Area Plan 2020, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in	No in combination impact. The Tallaght Town Centre Local Area Plan 2020 was subject to AA screening, and AA, prior to its adoption and therefore, subject to any mitigation identified, there will be no adverse effects on any European sites as a result of implementation of the plan. The Tallaght Town Centre Local Area Plan 2020 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering the protective environmental policies contained within the Tallaght Town Centre Local Area Plan 2020, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	
Liffey Valley Town Centre Local Area Plan 2008 **This LAP makes reference to commercial and residential development targets / obligations, and targets to provide an integrated public transport network, and secure pedestrian and cycle networks.**	The Proposed Scheme lies within the functional area of the Dublin City Development Plan 2016-2022, however some of the objectives and policies of the Liffey Valley Town Centre Local Area Plan 2008, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin	No in combination impact. The Liffey Valley Town Centre Local Area Plan 2008 lies within the administrative boundaries of South Dublin County Council, therefore, any plans or projects arising from the LAP will also be required to abide by the protective environmental policies contained within the South Dublin County Development Plan 2016-2022 and will be subject to any mitigation identified in the NIS undertaken for the SDCC plan. Any future projects arising from the LAP will also be subject to project specific AA requirements. The South Dublin County Development Plan 2016-2022 contains objectives and policies to ensure the protection of

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); Habitat degradation as a result of air quality impacts (for example South Dublin Bay and River Tolka Estuary SPA will be adjacent to Clontarf Road at risk of increased traffic flows); and, Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	European sites, including surface water quality, from any projects proposed within the plan area. Considering the protective environmental policies contained within the South Dublin County Development Plan 2016-2022, the AA that the plan was subject to, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.
Dún Laoghaire- Rathdown Development Plan 2016-2022; Dún Laoghaire- Rathdown Development Plan (2022-2028)- Draft for public consultation **The Dún Laoghaire- Rathdown CDP makes reference to commercial and residential development (including Cherrywood**	The Proposed Scheme lies within the functional area of the Dublin City Development Plan 2016-2022, however some of the objectives and policies of the Dún Laoghaire- Rathdown Development Plan 2016-2022, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in	No in combination impact. The Dún Laoghaire- Rathdown Development Plan 2016-2022 was subject to AA screening, and AA, prior to its adoption and therefore, subject to any mitigation identified, there will be no adverse effects on any European sites as a result of implementation of the plan**.**

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
SDZ) targets / obligations, and targets associated with providing suitable community infrastructure.	combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	The Dún Laoghaire- Rathdown Development Plan 2016-2022 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering the protective environmental policies contained within the Dún Laoghaire- Rathdown Development Plan 2016-2022, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.
Dún Laoghaire- Rathdown Biodiversity Plan 2009-2013; Dún Laoghaire- Rathdown Biodiversity Plan (current draft under review)	No, there are no potential impact pathways to European sites. This plan will contribute towards maintaining or restoring the conservation condition of the European sites within their ZoI. Consequently, there are no	No in combination impact

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
The purpose of this action plan is to halt the loss of biodiversity and the degradation of ecosystems.	potential impact pathways by which it could adversely affect the integrity of any European sites.	No potential for in combination impacts with the proposed scheme as such a plan is intended to improve the quality of the ecological environment within its ZoI.
Dún Laoghaire-Rathdown County Council Climate Change Action Plan 2019-2024 **The purpose of this action plan is to improve the council's energy efficiency, reduce their greenhouse emissions and create a climate resilient Dublin.**	No, there are no potential impact pathways to European sites. This plan will contribute towards improving the climate change resilience. There are no potential impact pathways by which it could adversely affect the integrity of any European sites within the ZoI of the Proposed Scheme.	No in combination impact No potential for in combination impacts with the proposed scheme as such a plan is intended to improve the quality of the environment within its ZoI.
Deansgrange Local Area Plan 2010-2020 **This LAP makes reference to residential and mixed-use development targets / obligations, and targets associated with the improvement of infrastructure connecting pedestrians, cycling and public transport.**	The Proposed Scheme lies within the functional area of the Dublin City Development Plan 2016-2022, however some of the objectives and policies of the Deansgrange Local Area Plan 2010-2020, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North	No in combination impact. The Deansgrange Local Area Plan 2010-2020 lies within the administrative boundaries of Dún Laoghaire Rathdown, therefore, any plans or projects arising from the LAP will also require to abide by the protective environmental policies contained within the Dún Laoghaire Rathdown Development Plan 2016-2022 and will be subject to any mitigation identified in the NIS undertaken for the DLCC plan. Any future projects arising from the LAP will also be subject to project specific AA requirements. The Dún Laoghaire Rathdown Development Plan 2016-2022contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering the protective environmental policies contained within the Dún Laoghaire Rathdown Development Plan 2016-2022, the AA that the plan was subject, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA.	with the Proposed Scheme to adversely affect the integrity of any European sites.
Stillorgan Local Area Plan 2018-2024 **This LAP makes reference to the redevelopment of five key sites, commercial and residential development targets / obligations, and targets associated with the improvement of infrastructure connecting pedestrians, cycling and public transport.**	The Proposed Scheme lies within the functional area of the Dublin City Development Plan 2016-2022, however some of the objectives and policies of the Stillorgan Local Area Plan 2018-2024, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin	No in combination impact. The Stillorgan Local Area Plan 2018-2024 was subject to AA screening prior to its adoption. The AA screening confirmed that the plan did not have the potential to result in likely significant effects on European sites, therefore an NIS was not required. Therefore, there will be no adverse effects on any European sites as a result of implementation of the plan**.** The Stillorgan Local Area Plan 2018-2024 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering the protective environmental policies contained within the Stillorgan Local Area Plan 2018-2024, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example ex-situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA.	combination with the Proposed Scheme to adversely affect the integrity of any European sites.
Blackrock Local Area Plan 2015-2021 **This LAP makes reference to redevelopment of Frascati and Blackrock shopping centres, residential development targets / obligations, and targets associated with the improvement of infrastructure connecting pedestrians, cycling and public transport.**	The Proposed Scheme lies within the functional area of the Dublin City Development Plan 2016-2022, however some of the objectives and policies of the Blackrock Local Area Plan 2015-2021, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in	No in combination impact. The Blackrock Local Area Plan 2015-2021 was subject to AA screening prior to its adoption. The AA screening confirmed that the plan did not have the potential to result in likely significant effects on European sites, therefore an NIS was not required. Therefore, there will be no adverse effects on any European sites as a result of implementation of the plan**.** The Blackrock Local Area Plan 2015-2021 contains objectives and policies to ensure the protection of European sites,

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	some way, but themselves will not affect the conservation objectives of European sites including: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA.	including surface water quality, from any projects proposed within the plan area. Considering the protective environmental policies contained within the Blackrock Local Area Plan 2015-2021, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.
Woodbrook-Shanganagh Local Area Plan 2017-2024 **This LAP makes reference to residential development targets / obligations, and targets associated with the improvement of**	The Proposed Scheme lies within the functional area of the Dublin City Development Plan 2016-2022, however some of the objectives and policies of the Woodbrook-Shanganagh Local Area Plan 2017-2024, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.	No in combination impact. The Woodbrook-Shanganagh Local Area Plan 2017-2024 was subject to AA screening prior to its adoption. The AA screening confirmed that the plan did not have the potential to result in likely significant effects on European sites, therefore an NIS

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
infrastructure connecting pedestrians, cycling and public transport.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example ex-situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA.	was not required. Therefore, there will be no adverse effects on any European sites as a result of implementation of the plan**.** The Woodbrook-Shanganagh Local Area Plan 2017-2024 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering the protective environmental policies contained within the Woodbrook-Shanganagh Local Area Plan 2017-2024, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
Wicklow County Development Plan 2016-2022 **The Wicklow CDP makes reference to commercial and residential development targets / obligations, and targets associated with facilitating an extension of the LUAS and rail services, and facilitating the development of cycleways and walkways throughout the county.**	The Proposed Scheme lies within the functional area of the Dublin City Development Plan 2016-2022, however some of the objectives and policies of the Wicklow County Development Plan 2016-2022, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	No in combination impact. The Wicklow County Development Plan 2016-2022 was subject to AA screening, and AA, prior to its adoption and therefore, subject to any mitigation identified, there will be no adverse effects on any European sites as a result of implementation of the plan**.** The Wicklow County Development Plan 2016-2022 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering the protective environmental policies contained within the Wicklow County Development Plan 2016-2022, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.
Wicklow Biodiversity Plan 2010-2015 **The purpose of this action plan is to halt the loss of biodiversity and the degradation of ecosystems.**	No, there are no potential impact pathways to European sites. This plan will contribute towards maintaining or restoring the conservation condition of the European sites within their ZoI. Consequently, there are no potential impact pathways by which it could adversely affect the integrity of any European sites.	No in combination impact No potential for in combination impacts with the proposed scheme as such a plan is intended to improve the quality of the ecological environment within its ZoI.
Wicklow County Council Climate Change Adaptation Strategy 2019	No, there are no potential impact pathways to European sites.	No in combination impact

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
The purpose of this action plan is to improve the council's energy efficiency, reduce their greenhouse emissions and create a climate resilient Wicklow.	This plan will contribute towards improving the climate change resilience. There are no potential impact pathways by which it could adversely affect the integrity of any European sites within the ZoI of the Proposed Scheme.	No potential for in combination impacts with the proposed scheme as such a plan is intended to improve the quality of the environment within its ZoI.
Bray Municipal District Local Area Plan 2018-2024 **This LAP makes reference to commercial and residential development targets / obligations, including the two key development areas of Fassaroe and the former Bray Golf Club, and targets associated with improving roads and transport infrastructure, and providing pedestrian, cycling and public transport routes.**	The Proposed Scheme lies within the functional area of the Dublin City Development Plan 2016-2022, however some of the objectives and policies of the Bray Municipal District Local Area Plan 2018-2024, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	No in combination impact. The Bray Municipal District Local Area Plan 2018-2024 was subject to AA screening, and iAA, prior to its adoption and therefore, subject to any mitigation identified, there will be no adverse effects on any European sites as a result of implementation of the plan**.** The Bray Municipal District Local Area Plan 2018-2024 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering the protective environmental policies contained within the Bray Municipal District Local Area Plan 2018-2024, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.
Bray Town Development Plan 2011-2017 **This LAP makes reference to redevelopment of residential and industrial areas, and mixed-use development targets / obligations. It also mentions targets to provide an integrated**	The Proposed Scheme lies within the functional area of the Dublin City Development Plan 2016-2022, however some of the objectives and policies of the Bray Town Development Plan 2011-2017, have the potential to act in	No in combination impact. The Bray Town Development Plan 2011-2017 lies within the administrative boundaries of Wicklow City Council therefore, , any plans or projects arising from the LAP will also be required

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
network for walking, cycling and public transport, and facilitation of a LUAS connection to Bray.	combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	to abide by the protective environmental policies contained within the Wicklow County Development Plan 2016-2022 and will be subject to any mitigation identified in the NIS undertaken for the WCC plan. Any future projects arising from the LAP will also be subject to project specific AA requirements. The Wicklow County Development Plan 2016-2022contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering the protective environmental policies contained within the Wicklow County Development Plan 2016-2022, the AA that the plan was subject to, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.

Table 39 In-Combination Assessment of Major Projects

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
MP01	Widening of the M7 between Junction 9 (Naas North) and Junction 11 (M7/M9) to provide an additional lane in each direction	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. As these works are completed and there is no physical overlap between the Proposed Scheme and this project, there is limited potential for in-combination effects to arise. The main potential for in-combination effects is habitat degradation/effects on QI/SCI species as a result of hydrological impacts; for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA.	No in-combination effect. The proposed M7 widening works were subject to consent, which was required to comply with requirements of the EIA and Habitats Directive as relevant. In granting consent it was necessary to determine that the project would not adversely affect any European sites, including arising from any impacts on water quality. Considering that alone, neither the Proposed Scheme nor the M7 widening works, will adversely affect the integrity of any European sites, the lack of any overlap either physically or in terms of the time of construction works, and the range of mitigation measures included in the Proposed Scheme to avoid significant impacts on water quality which is the only pathway with potential for in combination effects, the two projects will not generate any in combination effects which could adversely affect the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right nor in combination with other projects, including the proposed M7 widening works and has included mitigation in that regard to prevent any such adverse effects.
MP02	Enhancements of the N2/M2 national route inclusive of a bypass of Slane, to provide for additional capacity on the non-motorway sections of this route, and to address safety issues in Slane village associated with in particular, heavy goods vehicles	There is no physical overlap between the Proposed Scheme and this project and there are no potential impact pathways by which this project could adversely affect the integrity of any European sites within the ZoI of the Proposed Scheme.	No in-combination effect.
MP03	N3 Castaheany Interchange Upgrade	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those	No in-combination effect.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. There is no physical overlap between the Proposed Scheme and this project and the only potential for in-combination effects could be as a result of: Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); and Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	The proposed N3 Castaheaney Interchange Upgrade project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant development Plan. This land use plan contains objectives and policies to ensure the protection of European sites. The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the proposed project, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the N3 Castaheany Interchange Upgrade project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed N3 Castaheany Interchange Upgrade and has included mitigation in that regard to prevent any such adverse effects.
MP04	Reconfiguration of the N7 from its junction with the M50 to Naas, to rationalise junctions and accesses in order to provide a higher level of service for strategic traffic travelling on the mainline	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.	No in-combination effect. The proposed Reconfiguration of the N7 from its junction with the M50 to Naas project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant Development Plan. This land use plan contains objectives and policies to ensure the protection of European sites.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		There is no physical overlap between the Proposed Scheme and this project and the only potential for in-combination effects could be as a result of: Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); and Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the proposed project, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed Reconfiguration of the N7 from its junction with the M50 to Naas, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Reconfiguration of the N7 from its junction with the M50 to Naas and has included mitigation in that regard to prevent any such adverse effects.
MP05	N3–N4: Barnhill to Leixlip Interchange	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting	No in-combination effect. The proposed N3-N4 Barnhill to Leixlip Interchange project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed reconfiguration works will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); and Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	In granting permission for the reconfiguration works it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and proposed N3-N4 Barnhill to Leixlip Interchange project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed N30N4 Barnhill to Leixlip Interchange and has included mitigation in that regard to prevent any such adverse effects.
MP06	Reconfiguration of the N4 from its junction with the M50 to Leixlip to rationalise accesses and to provide additional capacity at the Quarryvale junction	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC,	No in-combination effect. The proposed Reconfiguration of the N4 from its junction with the M50 to Leixlip project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed reconfiguration works will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the reconfiguration works it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	Considering the lack of physical overlap between the Proposed Scheme and the Reconfiguration of the N4 from its junction with the M50 to Leixlip, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Reconfiguration of the N4 from its junction with the M50 to Leixlip and has included mitigation in that regard to prevent any such adverse effects.
MP07	Clonburris SDZ roads development	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. There is no physical overlap between the Proposed Scheme and this project and the only potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting	No in-combination effect. The proposed Clonburris SDZ roads development project must comply with all applicable planning and environmental approval requirements , and be in accordance with the objectives and policies of the relevant Development Plan. This land use plan contains objectives and policies to ensure the protection of European sites. The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the proposed project, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed Clonburris SDZ roads development, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA.	Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Clonburris SDZ roads development and has included mitigation in that regard to prevent any such adverse effects.
MP08	DART+ Programme West	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle	No in-combination effect. The proposed DART + Programme West project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA.	The proposed DART+ Programme West will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the DART+ Programme West it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the DART+ Programme West and has included mitigation in that regard to prevent any such adverse effects.
MP09	Porterstown Distributor Link Road	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving	No in-combination effect. The proposed Porterstown Distributor Link Road project must comply with all applicable planning and environmental approval

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA.	requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed link road will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the link road it will be necessary to demonstrate that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed Porterstown Distributor Link Road, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Porterstown Distributor Link Road and has included mitigation in that regard to prevent any such adverse effects.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
MP10	Widening of the N3 between Junction 1 (M50) and Junction 4 (Clonee), plus related junction and necessary changes to the existing national road network	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); and Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	No in-combination effect. The proposed N3 widening project between Junction 1 (M50) and Junction 4 (Clonee) must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed N3 widening will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the N3 widening it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed N3 widening project between Junction 1 (M50) and Junction 4 (Clonee), the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the widening of the N3 between Junction 1 (M50) and Junction 4 (Clonee) and has included mitigation in that regard to prevent any such adverse effects.
MP11	Lucan LUAS	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those	No in-combination effect.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); and Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	The proposed Lucan LUAS project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed Lucan LUAS will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the Lucan LUAS, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed Lucan LUAS project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Lucan LUAS project and has included mitigation in that regard to prevent any such adverse effects.
MP12	DART+ Programme South West	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of:	No in-combination effect. The proposed DART+ Programme South West project must comply with statutory licencing and planning requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and, Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	The proposed DART+ Programme South West must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant development Plan. This land use plan contains objectives and policies to ensure the protection of European sites. The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the DART+ Programme South West it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed DART+ Programme South West project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the DART+ Programme South West and has included mitigation in that regard to prevent any such adverse effects.
MP13	Junction upgrades and other capacity improvements on the M1 motorway, including	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those	No in-combination effect.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
	additional lanes south of Drogheda, where required	effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island	The proposed M1 motorway upgrades project must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites and surface water quality from any projects proposed within the plan area. The proposed M1 motorway upgrades will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the M1 motorway upgrades it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed M1 motorway upgrades project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Junction upgrades and other capacity improvements on the M1 motorway and has included mitigation in that regard to prevent any such adverse effects.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	
MP14	Finglas LUAS (Green Line extension Broombridge to Finglas)	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and	No in-combination effect. The proposed Finglas LUAS (Green Line extension Broombridge to Finglas) project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed Finglas LUAS extension will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the Finglas LUAS extension project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed Finglas LUAS project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Finglas LUAS extension and has included mitigation in that regard to prevent any such adverse effects.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	
MP15	DART+ Tunnel Element (Kildare Line to Northern Line)	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); and Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	No in-combination effect. The proposed DART+ Tunnel element (Kildare Line to Northern Line) project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed DART+ Tunnel element will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the DART+ Tunnel element (Kildare Line to Northern Line) project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and proposed DART+ Tunnel element (Kildare Line to Northern Line) project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed DART+ Tunnel Element (Kildare Line

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
			to Northern Line) project and has included mitigation in that regard to prevent any such adverse effects.
MP16	Potential Metro South alignment: SW option	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC,	No in-combination effect. The proposed Metro South alignment SW option must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed Metro South alignment will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the Metro South alignment it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the potential Metro South alignment: SW option , the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Potential Metro South alignment: SW option and has included mitigation in that regard to prevent any such adverse effects.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	
MP17	LUAS Cross City incorporating LUAS Green Line Capacity Enhancement - Phase 1	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. As these works are completed and there is no physical overlap between the Proposed Scheme and this project, there is limited potential for in-combination effects to arise. The main potential for in-combination effects is habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA).	No in-combination effect. The proposed LUAS ss City incorporating LUAS Green Line Capacity Enhancement - Phase 1 enhancements works were subject to consent, which was required to comply with requirements of the EIA and Habitats Directive as relevant. In granting consent it was necessary to determine that the project would not adversely affect any European sites, including arising from any impacts on water quality. Considering that alone, neither the Proposed Scheme nor the LUAS enhancements works, will adversely affect the integrity of any European sites, the lack of any overlap either physically or in terms of the time of construction works, and the range of mitigation measures included in the Proposed Scheme to avoid significant impacts on water quality which is the only pathway with potential for in combination effects, the two projects will not generate any in combination effects which could adversely affect the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the LUAS Cross City incorporating LUAS Green Line Capacity Enhancement - Phase 1 project and has included mitigation in that regard to prevent any such adverse effects
MP18	Oldtown-Mooretown Western Distributor Link Road	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving	No in-combination effect. The proposed Oldtown-Mooretown Western Distributor Link Road project must comply with all planning and environmental approval requirements, and be in accordance with the objectives and policies

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA.	of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites . The proposed link road will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the link road it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed Oldtown-Mooretown Western Distributor Link Road, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Oldtown-Mooretown Western Distributor Link Road and has included mitigation in that regard to prevent any such adverse effects.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
MP19	Potential Metro South alignment: Charlemont to Sandyford	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the	No in-combination effect. The proposed Metro South alignment - Charlemont to Sandyford project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed Metro South alignment will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the Metro South alignment it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed Metro South alignment - Charlemont to Sandyford project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Metro South alignment: Charlemont to Sandyford and has included mitigation in that regard to prevent any such adverse effects

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	
MP20	Poolbeg LUAS	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); and Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	No in-combination effect. The proposed Poolbeg LUAS project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed LUAS will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the LUAS it will be necessary to demonstrate that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Poolbeg LUAS and has included mitigation in that regard to prevent any such adverse effects.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
MP21	Leopardstown Link Road Phase 2	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); and Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	No in-combination effect. The proposed link road project must comply with all planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed link road will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the link road it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed Leopardstown Link Road Phase 2 project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Leopardstown Link Road Phase 2and has included mitigation in that regard to prevent any such adverse effects.
MP22	Development of a road link connecting from the southern end of the Dublin Port Tunnel to the South Port area, which will serve the South Port and adjoining development areas	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving	No in-combination effect. The proposed development of a road link connecting the southern end of the Dublin Port Tunnel to the South Port area, project must

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Habitat degradation as a result of air quality impacts (for example South Dublin Bay and River Tolka Estuary SPA will be adjacent to Clontarf Road at risk of increased traffic flows).	comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed link road will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the link road it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed development of a road link connecting from the southern end of the Dublin Port Tunnel to the South Port area, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the development of a road link connecting the southern end of the Dublin Port Tunnel to the South Port area and has included mitigation in that regard to prevent any such adverse effects.
MP23	Poolbeg SDZ roads development	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving	No in-combination effect. The proposed Poolbeg SDZ roads development project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); Disturbance and displacement impacts (for example ex-situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed SDZ roads development will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the SDZ roads development it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed Poolbeg SDZ roads development project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Poolbeg SDZ roads development project and has included mitigation in that regard to prevent any such adverse effects.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
MP24	Glenamuck District Distributor Road	There is no physical overlap between the Proposed Scheme and this project and there are no potential impact pathways by which this project could adversely affect the integrity of any European sites within the ZoI of the Proposed Scheme.	No in-combination effect.
MP25	DART+ Programme Coastal North	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to	No in-combination effect. The proposed DART+ Programme Coastal North project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed DART+ Programme Coastal North will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for DART+ Programme Coastal North it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the DART+ Programme Coastal North and has included mitigation in that regard to prevent any such adverse effects.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	
MP26	Widening of the M50 to three lanes in each direction between Junction 14 (Sandyford) and Junction 17 (M11) plus related junction and other changes	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); and Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC,	No in-combination effect. The proposed Widening of the M50 to three lanes in each direction between Junction 14 (Sandyford) and Junction 17 (M11) project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed M50 widening will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the M50 widening it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed widening of the M50 to three lanes in each direction between Junction 14 (Sandyford) and Junction 17 (M11), the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the widening of the M50 to three lanes in each direction between Junction 14 (Sandyford) and Junction 17 (M11) and has included mitigation in that regard to prevent any such adverse effects.
MP27	Cherrywood SDZ roads development	There is no physical overlap between the Proposed Scheme and this project and there are no potential impact pathways by which this project could adversely affect the integrity of any European sites within the ZoI of the Proposed Scheme.	No in-combination effect.
MP28	DART+ Programme Coastal South	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast	No in-combination effect. The proposed DART+ Programme Coastal South project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed DART+ Programme Coastal South will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for DART+ Programme Coastal South it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the DART+ Programme Coastal South project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA.	Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed DART+ Programme Coastal South and has included mitigation in that regard to prevent any such adverse effects.
MP29	R126 Donabate Relief Road: R132 to Portrane Demesne	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA);	No in-combination effect. The proposed relief road project must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed relief road will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the relief road it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA.	Considering the lack of physical overlap between the Proposed Scheme and the R126 Donabate Relief Road: R132 to Portrane Demesne project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the R126 Donabate Relief Road: R132 to Portrane Demesne and has included mitigation in that regard to prevent any such adverse effects.
MP30	Extension of LUAS Green Line to Bray	There is no physical overlap between the Proposed Scheme and this project and there are no potential impact pathways by which this project could adversely affect the integrity of any European sites within the ZoI of the Proposed Scheme.	No in-combination effect.
MP31	Capacity enhancement and reconfiguration of the M11/N11 from Junction 4 (M50) to Junction 14 (Ashford) inclusive of ancillary and associated road schemes, to provide additional	There is no physical overlap between the Proposed Scheme and this project and there are no potential impact pathways by which this project could adversely affect the integrity of any European sites within the ZoI of the Proposed Scheme.	No in-combination effect.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
	lanes and upgraded junctions, plus service roads and linkages to cater for lo		
MP32	MetroLink	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and	No in-combination effect. The proposed Metrolink project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed MetroLink will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for MetroLink it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the MetroLink project and has included mitigation in that regard to prevent any such adverse effects.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA.	
MP33	Greater Dublin Drainage (GDD)	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The only potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands	No in-combination effect. The proposed Greater Dublin Drainage project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant Development Plan. This land use plan contains objectives and policies to ensure the protection of European sites. The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the proposed project it will be necessary to demonstrate that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed Greater Dublin Drainage project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA.	projects, including the proposed Greater Dublin Drainage Project and has included mitigation in that regard to prevent any such adverse effects.
MP34	Cycling: Greater Dublin Area Cycle Network Plan (excluding Radial Core Bus Corridor elements)	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South	No in-combination effect. Proposals arising out of the cycle network plan must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. Proposals arising out of the cycle network plan will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for proposals arising out of the cycle network plan it will be necessary to determine that they will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Greater Dublin Area Cycle Network Plan elements and has included mitigation in that regard to prevent any such adverse effects.
MP35	Dublin Array - offshore windfarm	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC,	No in-combination effect. The proposed Dublin Array - offshore windfarm project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed Dublin Array - offshore windfarm project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the Dublin Array - offshore windfarm project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); and Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed Dublin Array - offshore windfarm project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Dublin Array - offshore windfarm and has included mitigation in that regard to prevent any such adverse effects.
MP36	Southern Port Access Route (SPAR): proposed 1.6km (SPAR) includes an opening bridge across the Liffey east of the existing Tom Clarke Bridge. It will be a private road which will take HGV traffic destined to/from the port off the local public road network. It will also allow access for other HGV traffic such as to the Covanta Waste-to-Energy plant. The SPAR will include an active travel corridor open to the public.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting	No in-combination effect. The proposed Southern Port Access Route (SPAR) project must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed SPAR will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for SPAR it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed SPAR project, the environmental

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		the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Southern Port Access Route (SPAR and has included mitigation in that regard to prevent any such adverse effects.
303678	Air insulated switchgear 110kV transmission substation. Platin, Duleek	There is no physical overlap between the Proposed Scheme and this project and there are no potential impact pathways by which this project could adversely affect the integrity of any European sites within the ZoI of the Proposed Scheme either via habitat fragmentation or habitat degradation impacts (either hydrological, invasive species, air quality or disturbance/displacement to SCI species).	No in-combination effect.

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304799	Construction of a new distributor road and junction to the southwest of Kells town centre. Kells	There is no physical overlap between the Proposed Scheme and this project and there are no potential impact pathways by which this project could adversely affect the integrity of any European sites within the ZoI of the Proposed Scheme either via habitat fragmentation or habitat degradation impacts (either hydrological, invasive species, air quality or disturbance/displacement to SCI species).	No in-combination effect.
JA0040	Dublin Mountain Visitors Centre and all associated works. Killakee and Jamestown	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	No in-combination effect. The proposed Dublin Mountain Visitors Centre project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the Dublin Mountain Visitors Centre it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed Dublin Mountain Visitors Centre project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Dublin Mountain Visitors Centre

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			and has included mitigation in that regard to prevent any such adverse effects.
304624	FCC/12/0001 Broadmeadow Way. Greenway between Malahide Demesne and Newbridge Demesne to be known as 'Broadmeadow Way'. Malahide	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC,	No in-combination effect. The proposed Broadmeadow Way Greenway must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed project has been subject to planning consent, including preparation of an EIAR and Natura Impact Statement. In granting permission for the project it was necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the consented Broadmeadow Way Greenway project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the consented Broadmeadow Way Greenway and has included mitigation in that regard to prevent any such adverse effects.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	
307073	Alterations to a permitted double circuit 110kV electricity transmission line development between substations. Darndale / Belcamp	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); and Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC,	No in-combination effect. The proposed alterations to a permitted double circuit 110kV electricity transmission line development between substations must comply with all applicable planning and environmental approval requirement, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the proposed project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed alterations to a permitted double circuit 110kV electricity transmission line development between substations project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed alterations to a permitted double circuit 110kV electricity transmission line development between substations and has included mitigation in that regard to prevent any such adverse effects.
303249	110kV onsite electrical substation with associated electrical plant, electrical equipment, welfare facilities and wastewater holding tank and security fencing. 110kV overhead line grid connection cabling, upgrade of existing tracks and provision of new site access roads with all associated site development and ancillary works. Timahoe East.	There is no physical overlap between the Proposed Scheme and this project and there are no potential impact pathways by which this project could adversely affect the integrity of any European sites within the ZoI of the Proposed Scheme either via habitat fragmentation or habitat degradation impacts (either hydrological, invasive species, air quality or disturbance/displacement to SCI species).	No in-combination effect.
304888	15-year permission for development at Oil Berth 3 and Oil Berth 4, Eastern Oil Jetty and at Berths 50A, 50N, 50S, 51, 51A, 49, 52, 53 and associated terminal yards to provide for various elements including new Ro-Ro jetty and consolidation of passenger terminal buildings. Dublin Port.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC,	No in-combination effect. The proposed project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the proposed project it will be necessary to demonstrate that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Habitat degradation as a result of air quality impacts (for example South Dublin Bay and River Tolka Estuary SPA will be adjacent to Clontarf Road at risk of increased traffic flows).	Considering the lack of physical overlap between the Proposed Scheme and this project at Dublin Port, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed developments around Dublin Port and has included mitigation in that regard to prevent any such adverse effects.
306583	A residential development with ancillary commercial uses (retail unit, café and créche) partially comprising a "Build to Rent" scheme on circa 9.69 hectares. The townlands of Shanganagh, Cork Little and Shankill, Co. Dublin.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA.	No in-combination effect. The proposed project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the proposed project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed residential in named townlands around Shankill project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
			integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed residential development in named townlands around Shankill and has included mitigation in that regard to prevent any such adverse effects.
307352	The proposed development for Brexit Infrastructure will consist of - Installation of porta-cabin structures. Resurfacing and amalgamation of existing yards. Parking for heavy good vehicles, cars and bicycles. Gates, signage and all ancillary site works. Dublin Port.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Dalkey Islands SPA and The Murrough SPA); and Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC,	No in-combination effect. The proposed project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the proposed project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed development for Brexit Infrastructure at Dublin Port, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed development for Brexit Infrastructure at Dublin Port and has included mitigation in that regard to prevent any such adverse effects.
306834	Provision of a double circuit 220kV transmission line and a 220kV gas insulated switchgear (GIS) substation along with associated and ancillary works. Townlands of Cruiserath, Goddamendy and Bay, Co. Dublin.	There is no physical overlap between the Proposed Scheme and this project and there are no potential impact pathways by which this project could adversely affect the integrity of any European sites within the ZoI of the Proposed Scheme either via habitat fragmentation or habitat degradation impacts (either hydrological, invasive species, air quality or disturbance/displacement to SCI species).	No in-combination effect.
307296	Construction of a 2 storey 110kV Gas Insulated Switchgear (GIS) substation, underground cable and all associated and ancillary site works. Former Clyde House, IDA Blanchardstown Business and Technology Park, Snugborough Road, Blanchardstown, Dublin 15	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Dalkey Islands SPA and The Murrough SPA); and	No in-combination effect. The proposed project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the proposed project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed 110kV Gas Insulated Switchgear (GIS) substation and underground cable project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed 110kV Gas Insulated Switchgear (GIS) substation and underground cable and has included mitigation in that regard to prevent any such adverse effects.
306725	Flood alleviation works along and adjacent to the River Poddle extending from the upper reaches of the river. Tymon North, Tallaght to Merchant's Quay, Dublin.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide	No in-combination effect. The proposed River Poddle flood alleviation works must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the proposed project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed River Poddle flood alleviation works, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed River Poddle flood alleviation works

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	and has included mitigation in that regard to prevent any such adverse effects.
245738 (DCC ref: 2552/15)	Aviation Fuel Pipeline. Location: Inlet Station: Bond Drive, Dublin Port, Dublin 1 to Dublin Airport, Co. Dublin	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast	No in-combination effect. The proposed Aviation Fuel Pipeline project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed SID will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the proposed project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); Habitat degradation as a result of air quality impacts (for example South Dublin Bay and River Tolka Estuary SPA will be adjacent to Clontarf Road at risk of increased traffic flows); and, Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Aviation Fuel Pipeline and has included mitigation in that regard to prevent any such adverse effects.
311315	Park development project at the Racecourse Park	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island	No in-combination effect. The proposed Park Development project at Racecourse Park must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	In granting permission for the proposed project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed Park Development project at Racecourse Park, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Park development project at Racepark Course and has included mitigation in that regard to prevent any such adverse effects.
309146, 309773	2 no. 110kV transmission lines and a 110kV Gas Insulated Switchgear (GIS) substation	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.	No in-combination effect. The proposed project to install 2 no. 110kV transmission lines and a 110kV Gas Insulated Switchgear (GIS) substation must comply with all applicable planning and environmental approval requirements , and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		The potential for in-combination effects could be as a result of: Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); and Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	use plans contain objectives and policies to ensure the protection of European sites. The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the proposed project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed project to install 2 no. 110kV transmission lines and a 110kV Gas Insulated Switchgear (GIS) substation , the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the development of 2 no. 110kV transmission lines and a 110kV Gas Insulated Switchgear (GIS) substation and has included mitigation in that regard to prevent any such adverse effects.
-	Swords to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of:	No in-combination effect. The proposed Swords to City Centre Core Bus Corridor Scheme project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Swords to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
-	Ballymun / Finglas to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the	No in-combination effect. The proposed Ballymun / Finglas to City Centre Core Bus Corridor Scheme project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the Ballymun / Finglas to City Centre Core Bus Corridor Scheme , the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Ballymun / Finglas to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	
-	Blanchardstown to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); and Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	No in-combination effect. The proposed Blanchardstown to City Centre Core Bus Corridor Scheme project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the Blanchardstown to City Centre Core Bus Corridor Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Blanchardstown to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
-	Lucan to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Dalkey Islands SPA and The Murrough SPA); and Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	No in-combination effect. The proposed Lucan to City Centre Core Bus Corridor Scheme project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the Lucan to City Centre Core Bus Corridor Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Lucan to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
-	Liffey Valley to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	No in-combination effect. The proposed Liffey Valley to City Centre Core Bus Corridor Scheme project must comply with all applicable planning and environmental requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the Liffey Valley to City Centre Core Bus Corridor Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Liffey Valley to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
-	Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the	No in-combination effect. The proposed Bus Corridor Scheme project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	
-	Templeogue / Rathfarnham to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC,	No in-combination effect. The proposed Templeogue / Rathfarnham to City Centre Core Bus Corridor Scheme project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the Templeogue / Rathfarnham to City Centre Core Bus Corridor Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Templeogue / Rathfarnham to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	
-	Kimmage to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Dalkey Islands SPA and The Murrough SPA); and Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC,	No in-combination effect. The proposed Kimmage to City Centre Core Bus Corridor Scheme project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites . The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the Kimmage to City Centre Core Bus Corridor Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Kimmage to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.
-	Bray to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to	No in-combination effect. The proposed Bray to City Centre Core Bus Corridor Scheme must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the Bray to City Centre Core Bus Corridor Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Bray to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	
-	Belfield / Blackrock to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide	No in-combination effect. The proposed Belfield / Blackrock to City Centre Core Bus Corridor Scheme must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the Belfield / Blackrock to City Centre Core Bus Corridor Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Belfield / Blackrock to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.
-	Ringsend to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast	No in-combination effect. The proposed Ringsend to City Centre Core Bus Corridor Scheme must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Ringsend to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.
	SHDs (*Impact dependent on proximity to Proposed Scheme*)	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA);	No in-combination effect. Proposed SHD projects must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. Proposed SHD projects will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for proposed SHD projects it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed SHD Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed SHD schemes and has included mitigation in that regard to prevent any such adverse effects.
	Irish Water Projects (*Impact dependent on proximity to Proposed Scheme*) Larger scale Irish Water infrastructure projects are described separately under major projects	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: Habitat fragmentation (for example European sites at risk of *ex-situ* habitat losses; Malahide Estuary SPA, Baldoyle	No in-combination effect. Proposed Irish Water projects must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect Will the project act in combination with the Proposed Scheme to adversely affect the integrity of European sites?
		Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and Disturbance and displacement impacts (for example *ex-situ* inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	Proposed Irish Water projects will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for proposed Irish Water projects it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including Irish Water Projects and has included mitigation in that regard to prevent any such adverse effects.

9.2 Plan Level Environmental Protection Policies and Objectives

370 This section lists the overarching plan level environmental protection policies from the following plans Fingal County Development Plan 2017 – 2023, Dublin City Development Plan 2016 – 2022, South Dublin County Council Development Plan 2016 – 2022, Wicklow County Development Pan 2016 – 2022 and Dun Laoghaire-Rathdown County Development Plan 2016 – 2022.

371 The Proposed Scheme is compliant with all of the plan level biodiversity protection policies and objectives described above, including those within the Fingal County Development Plan 2017 – 2023, the Dublin City Development Plan 2016 – 2022, the South Dublin County Council Development Plan 2016 – 2022, the Wicklow County Development Pan 2016 – 2022 and the Dun Laoghaire-Rathdown County Development Plan 2016 – 2022. Furthermore the Proposed Scheme will not prevent the achievement of any of these plan level biodiversity protection policies and objectives across the identified potential impact pathways.

Fingal County Development Plan 2017 – 2023

Objective NH15: Strictly protect areas designated or proposed to be designated as Natura 2000 sites (i.e. Special Areas of Conservation (SACs) and Special Protection Areas (SPAs); also known as European sites) including any areas that may be proposed for designation or designated during the period of this Plan.

Objective NH16: Protect the ecological integrity of proposed Natural Heritage Areas (pNHAs), Natural Heritage Areas (NHAs), Statutory Nature Reserves, Refuges for Fauna, and Habitat Directive Annex I sites.

Objective NH17: Ensure that development does not have a significant adverse impact on proposed Natural Heritage Areas (pNHAs), Natural Heritage Areas (NHAs), Statutory Nature Reserves, Refuges for Fauna, Habitat Directive Annex I sites and Annex II species contained therein, and on rare and threatened species including those protected by law and their habitats.

Dublin City Development Plan 2016 - 2022

GI2: That any plan/project, either individually or in combination with other plans or projects that has the potential to give rise to significant effect on the integrity of any European site(s), shall be subject to an appropriate assessment in accordance with Article 6(3) and 6(4) of the EU Habitats Directives.

GI23: To protect flora, fauna and habitats, which have been identified by Articles 10 and 12 of Habitats Directive, Birds Directive, Wildlife Acts 1976–2012, the Flora (Protection) Order 2015 S.I No. 356 of 2015, European Communities (Birds and Natural Habitats) Regulations 2011 to 2015.

GI24: To conserve and manage all Natural Heritage Areas, Special Areas of Conservation and Special Protection Areas designated, or proposed to be designated, by the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

South Dublin County Council Development Plan 2016 - 2022

Heritage, Conservation and Landscapes (HCL) Policy 12 Natura 2000 Sites: It is the policy of the Council to support the conservation and improvement of Natura 2000 Sites and to protect the Natura 2000 network from any plans and projects that are likely to have a significant effect on the coherence or integrity of a Natura 2000 Site.

- HCL12 Objective 1: To prevent development that would adversely affect the integrity of any Natura 2000 site located within and immediately adjacent to the County and promote favourable conservation status of habitats and protected species including those listed under the Birds Directive, the Wildlife Acts and the Habitats Directive.
- HCL12 Objective 2: To ensure that projects that give rise to significant direct, indirect or secondary impacts on Natura 2000 sites, either individually or in combination with other plans or projects, will not be permitted unless the following is robustly demonstrated in accordance with Article 6(4) of the Habitats Directive and S.177AA of the Planning and Development Act (2000 – 2010) or any superseding legislation: 1. There are no less damaging alternative solutions available; and 2. There

are imperative reasons of overriding public interest (as defined in the Habitats Directive) requiring the project to proceed; and 3. Adequate compensatory measures have been identified that can be put in place.

Heritage, Conservation And Landscapes (HCL) Policy 13 Natural Heritage Areas: It is the policy of the Council to protect the ecological, visual, recreational, environmental and amenity value of the County's proposed Natural Heritage Areas and associated habitats.

- HCL13 Objective 1: To ensure that any proposal for development within or adjacent to a proposed Natural Heritage Area (pNHA) is designed and sited to minimise its impact on the biodiversity, ecological, geological and landscape value of the pNHA particularly plant and animal species listed under the Wildlife Acts and the Habitats and Birds Directive including their habitats.
- HCL13 Objective 2: To restrict development within a proposed Natural Heritage Area to development that is directly related to the area's amenity potential subject to the protection and enhancement of natural heritage and visual amenities including biodiversity and landscapes.

Wicklow County Development Plan 2016 - 2022

NH2: No projects giving rise to significant cumulative, direct, indirect or secondary impacts on Natura 2000 sites arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this plan (either individually or in combination with other plans or projects).

NH3: To contribute, as appropriate, towards the protection of designated ecological sites including candidate Special Areas of Conservation (cSACs) and Special Protection Areas (SPAs); Wildlife Sites (including proposed Natural Heritage Areas); Salmonid Waters; Flora Protection Order sites; Wildfowl Sanctuaries (see S.I. 192 of 1979); Freshwater Pearl Mussel catchments; and Tree Preservation Orders (TPOs). To contribute towards compliance with relevant EU Environmental Directives and applicable National Legislation, Policies, Plans and Guidelines, including the following and any updated/superseding documents:

- EU Directives, including the Habitats Directive (92/43/EEC, as amended)[7] , the Birds Directive (2009/147/EC)[8] , the Environmental Liability Directive (2004/35/EC)[9] , the Environmental Impact Assessment Directive (85/337/EEC, as amended), the Water Framework Directive (2000/60/EC) and the Strategic Environmental Assessment Directive (2001/42/EC).
- National legislation, including the Wildlife Act 197610, the European Communities (Environmental Impact Assessment) Regulations 1989 (SI No. 349 of 1989) (as amended), the Wildlife (Amendment) Act 2000, the European Union (Water Policy) Regulations 2003 (as amended), the Planning and Development Act 2000 (as amended), the European Communities (Birds and Natural Habitats) Regulations 2011 (SI No. 477 of 2011) and the European Communities (Environmental Liability) Regulations 200811.
- National policy guidelines (including any clarifying Circulars or superseding versions of same), including the Landscape and Landscape Assessment Draft Guidelines 2000, the Environmental Impact Assessment Sub-Threshold Development Guidelines 2003, Strategic Environmental Assessment Guidelines 2004 and the Appropriate Assessment Guidance 2010.
- Catchment and water resource management Plans, including Eastern and South Eastern River Basin Management Plan 2009-2015 (including any superseding versions of same). Biodiversity Plans and guidelines, including Actions for Biodiversity 2011-2016: Ireland's 2nd National Biodiversity Plan (including any superseding version of same).
- • Ireland's Environment 2014 (EPA, 2014, including any superseding versions of same), and to make provision where appropriate to address the report's goals and challenges.

NH4: All projects and plans arising from this plan (including any associated improvement works or associated infrastructure) will be screened for the need to undertake Appropriate Assessment under Article 6 of the Habitats Directive. A plan or project will only be authorised after the competent authority has ascertained, based on scientific evidence, Screening for Appropriate Assessment, and a Stage 2 Appropriate Assessment where necessary, that:

- The Plan or project will not give rise to significant adverse direct, indirect or secondary effects on the integrity of any European site (either individually or in combination with other plans or projects); or
- The Plan or project will have significant adverse effects on the integrity of any European site (that does not host a priority natural habitat type and / or a priority species) but there are no alternative solutions, and the plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000; or
- The Plan or project will have a significant adverse effect on the integrity of any European site (that hosts a natural habitat type and/or a priority species) but there are no alternative solutions and the plan or project must nevertheless be carried out for imperative reasons for overriding public interest, restricted to reasons of human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000.

NH5: To maintain the conservation value of all proposed and future Natural Heritage Areas (NHAs) and to protect other designated ecological sites in Wicklow.

NH6: Ensure ecological impact assessment is carried out for any proposed development likely to have a significant impact on proposed Natural Heritage Areas (pNHAs), Natural Heritage Areas (NHAs), Statutory Nature Reserves, Refuges for Fauna, Annex I habitats, or rare and threatened species including those species protected by law and their habitats. Ensure appropriate avoidance and mitigation measures are incorporated into development proposals as part of any ecological impact assessment.

Dun Laoghaire-Rathdown County Development Plan 2016 - 2022

Policy LHB19: Protection of Natural Heritage and the Environment. It is Council policy to protect and conserve the environment including, in particular, the natural heritage of the County and to conserve and manage Nationally and Internationally important and EU designated sites - such as Special Protection Areas, candidate Special Areas of Conservation, proposed Natural Heritage Areas and Ramsar sites - as well as non-designated areas of high nature conservation value which serve as 'Stepping Stones' for the purposes of Article 10 of the Habitats Directive.

Policy LHB20: Habitats Directive* It is Council policy to ensure the protection of natural heritage and biodiversity, including European sites that form part of the Natura 2000 network, in accordance with relevant EU Environmental Directives and applicable National Legislation, Policies, Plans and Guidelines.

Policy LHB22: Designated Sites* It is Council policy to protect and preserve areas designated as proposed Natural Heritage Areas, candidate Special Areas of Conservation, and Special Protection Areas. It is Council policy to promote the maintenance and as appropriate, delivery of 'favourable' conservation status of habitats and species within these areas.

9.3 Conclusion of In Combination Assessment

372 The Proposed Scheme will not affect the integrity of any European sites including those within its ZoI. It will not result in the loss or fragmentation of any QI habitats, or habitats supporting populations of QI/SCI species, in (or associated with) any European sites, nor will it degrade any such habitats or affect QI/SCI species as a result of hydrological or hydrogeological impacts (quality or quantity), air quality impacts or introducing/spreading non-native invasive plant species.

373 The in-combination assessment has concluded that there is no potential for adverse effects on the integrity of any European sites including those within its ZoI, to arise as a consequence of the Proposed Scheme in-combination with any other plans or projects, as in consideration of the mitigation measures detailed in Section 7 of this report, no adverse effects on European site integrity will arise from the implementation of the Proposed Scheme.

374 The implementation of, and adherence to, the policies and objectives set out in Section 9.2 will ensure the protection of European sites across all identified potential impact pathways, and will include the requirement for any future project to undergo Screening for Appropriate Assessment and/or Appropriate Assessment, as appropriate.

375 As the Proposed Scheme will not affect the integrity of European sites within the ZoI of the Proposed Scheme, and given the protection afforded to European sites under the overarching land use plans, it has been concluded that there will be no adverse effects on the integrity of any European sites to arise as a consequence of the Proposed Scheme acting in-combination with any other plans or projects.

376 **Table 38** and **Table** present the results of a pairwise assessment of the Proposed Scheme in-combination with all of those projects and plans. This assessment found that there will be no adverse effects on the integrity of any European sites as a consequence of the Proposed Scheme acting in-combination with each of these plans and projects.

377 Furthermore for the same reasons, there will be no adverse effects on the integrity of any European sites as a consequence of the Proposed Scheme acting in-combination with any, some or indeed all taken together, of these plans or projects.

378 Therefore, the Proposed Scheme will not adversely affect the integrity of any European sites, either alone or in-combination with any other plans or projects. No additional mitigation measures are necessary or required following this update assessment.

10 NIS Conclusion

379 This NIS has examined and analysed, in light of the best scientific knowledge, with respect to those European sites within the zone of influence of the Proposed Scheme, the potential impact sources and pathways, the manner in which these could potentially impact on the European sites' qualifying interest habitats and species and special conservation interest species and whether the predicted impacts would adversely affect the integrity of North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Rockabill to Dalkey Island SAC, Baldoyle Bay SAC, Howth Head Coast SPA, Dalkey Islands SPA, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA or The Murrough SPA. The possibility of significant effects on any other European site can be excluded.

380 Avoidance, design requirements and mitigation measures are set out within this NIS (and its appendices) and the effective implementation of these mitigation measures will ensure that any impacts on the conservation objectives of European sites will be avoided during the construction and operation of the Proposed Scheme such that there will be no adverse effects on any European sites.

381 It has been objectively concluded by Scott Cawley Ltd., following an examination, analysis and evaluation of the relevant information, including in particular the nature of the predicted impacts from the Proposed

Scheme and the effective implementation of the mitigation measures proposed, that the Proposed Scheme will not adversely affect (either directly or indirectly) the integrity of any European site, either alone or in combination with other plans or projects and there is no reasonable scientific doubt in relation to this conclusion.

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Clongriffin to City Centre Core Bus Corridor Scheme

March 2022

Natura Impact Statement

Figures and Appendices

BUS CONNECTS

SUSTAINABLE TRANSPORT FOR A BETTER CITY.