Tallaght/Clondalkin to City Centre Core Bus Corridor Scheme

April 2023

Natura Impact Statement

BUS CONNECTS

SUSTAINABLE TRANSPORT FOR A BETTER CITY.

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Main Report

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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 Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme (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 A Screening for Appropriate Assessment was undertaken and a determination was prepared by the NTA (both published on the NTA website). The AA Screening concluded that "there is the possibility for significant effects on the following European sites; North Dublin Bay SAC; South Dublin Bay SAC; Rockabill to Dalkey Island SAC; Lambay Island SAC; Wicklow Mountains 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, in the absence of mitigation, either arising from the project alone or in combination with other plans and projects, as a result of habitat loss / fragmentation, hydrological impacts, non-native invasive species, and disturbance and displacement impacts for named European sites".

6 Since the publication of the AA Screening, there have been minor design updates to the Proposed Scheme (Section 3). However, the conclusions of the AA Screening and determination remain unchanged. This NIS assesses the final Proposed Scheme design.

7 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.

8 Accordingly, a Stage two 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

[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* – defined under the Planning and Development Acts and / or Birds and Natural Habitats Regulations as (a) a candidate site of Community importance, (b) a site of Community importance, (c) a candidate special area of conservation, (d) a special area of conservation, (e) a candidate special protection area, or (f) a special protection area. They are commonly referred to in Ireland as Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

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.

9 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.

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

11 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 7.1.4 and 7.3.4, the Proposed Scheme will not, individually or in 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

12 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.'*

13 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.'*

14 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.

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

16 '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'*

"… 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".

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 sites' Qualifying Interests (QIs) or Special Conservation Interests (SCIs).

3.1 Overview

20 The Proposed Scheme consists of two sections that amalgamate the former Greenhills to City Centre CBC (Tallaght to City Centre) and Clondalkin to Drimnagh CBC (Clondalkin to Drimnagh) preferred route Core Bus Corridors. The entire Proposed Scheme measures approximately 15.5km along the CBC corridor with an additional offline cycling corridor of 3.9km.

21 The first section, the Tallaght to City Centre section, begins at the junction of Blessington Road/ Cookstown Way and is routed along Belgard Square West, Belgard Square North, Belgard Square East, Blessington Road to the junction of R819 Greenhills Road and Bancroft Park. From here the Proposed Scheme is routed along the R819 Greenhills Road to Walkinstown Roundabout via new transport link roads; in the green area to the east of Birchview Avenue/Treepark Road; in the green area to the south of Ballymount Avenue, and in the green area to the east of Calmount Road. From Walkinstown Roundabout the main Core Bus Corridor is routed along the R819 Walkinstown Road to the junction with R110 Long Mile Road and Drimnagh Road. The shared spine with the Clondalkin section commences at this junction and the Proposed Scheme is routed along the R110 to the junction of Dean Street and R137 Patrick Street via Drimnagh Road, Crumlin Road, Dolphins Barn, Cork Street, St Lukes Avenue and Dean Street. From here the Proposed Scheme is routed along the R137 via Patrick Street to the junction at Winetavern Street and Christchurch Place where the Proposed Scheme terminates within the City Centre. An offline cycle facility is proposed to facilitate cycling between Walkinstown Roundabout and Parnell Road (Grand Canal) where end to end cycle facilities are not feasible along the main corridor and provides a more direct route towards the city centre. This offline section of the Proposed Scheme is routed via Bunting Road, Kildare Road and Clogher Road.

22 The second section, the Clondalkin to Drimnagh section, begins at the junction of the New Nangor Road and Woodford Walk and is routed along the R134 New Nangor Road, R810 Naas Road, R112 Walkinstown Avenue and the R110 Long mile Road to the junction of Walkinstown Road and Drimnagh Road where it is routed towards the city centre along the shared spine section (Tallaght to City Centre) as described above.

23 The Proposed Scheme includes an upgrade of the existing bus priority and cycle facilities. 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 resulting in improved journey time reliability. Throughout the Proposed Scheme bus stops will be enhanced to improve the overall journey experience for bus passengers and 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.

24 Moreover, pedestrian facilities will be upgraded and additional signalised crossings will be provided. In addition, urban realm works will be undertaken at key locations with higher-quality materials, planting, and street furniture provided to enhance the pedestrians' experience.

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

- Site preparation and clearance;
- Construction Compound Development;
- Removal of existing boundaries, pavements, lighting columns, bus stops, and signage;
- Protection and/or diversion of buried services;
- Road construction for new link roads and dedicated bus route;
- Road widening, pavement reconstruction, and kerb improvements;
- Reconfiguration of traffic lanes throughout;
- Reconfiguration of connections to existing drainage infrastructure and connection of new drainage infrastructure into the existing surface water drainage network;
- Installation of new bus stops and junction / roundabout modification;
- Provision of new structures (bridges, retaining walls etc (e.g. R819 Greenhills Road Pedestrian and Cycle bridges over the M50; R134 New Nangor Road / R810 Naas Road / R110 Long Mile Road junction Pedestrian and Cycle Bridge; retaining walls at Calmount Road Extension and extension of River Camac culvert and new headwall at R134 Nangor Road and L5568 Oak Road intersection);
- Temporary and permanent land take at a number of key areas including;
    i. Temporary land take to facilitate the installation of Construction Compounds at the following locations:
        1. Construction Compound TC1 located in an area of amenity grassland at the western end of Old Blessington Road, adjacent to the junction with the N81 Tallaght bypass;
        2. Construction Compound TC2 located in an area of amenity grassland along R819 Greenhills Road, immediately south of the junction of Bancroft Park and R819 Greenhills Road;
        3. Construction Compound TC3 located in in an area of amenity grassland / scrub along R819 Greenhills Road, between Birchview Avenue and R819 Greenhills Road;
        4. Construction Compound TC4 located in an area of amenity grassland along R819 Greenhills Road, between Treepark Road and R819 Greenhills Road;
        5. Construction Compound TC5 located in an area of unmanaged grassland along R819 Greenhills Road, to the north of Tymon Lane, south-east of the M50 Motorway;
        6. Construction Compound TC6 located in an area of amenity grassland along R819 Greenhills Road, outside Tallaght Truck Dismantlers, north-east of the M50 Motorway;
        7. Construction Compound TC7 located in green space along R819 Greenhills Road, between Ballymount Avenue and R819 Greenhills Road;
        8. Construction Compound TC8 located in an area of amenity grassland at Bunting Park, along Bunting Road;
        9. Construction Compound TC9 located in an area of green space along R110 Crumlin Road, immediately west of the junction of Rafter's Road and the R110 Crumlin Road;
        10. Construction Compound TC10 located in an area of green space along R110 Crumlin Road, immediately east of the junction of Rutland Avenue and the R110 Crumlin Road;

11. Construction Compound TC11 located in an area of hardstanding at Dean Street / R137 Patrick Street;
12. Construction Compound TC12 in an area of scrub and unmanaged grassland between R134 New Nangor Road and Killeen Road; and
13. Construction Compound TC13 located in an area of hardstanding along R110 Long Mile Road, south of the New Nangor Road / Naas Road / Long Mile Road junction.

ii. Temporary land-take at the following locations to facilitate the construction of retaining walls:
    1. Temporary loss of scrub and hardstanding habitats at Calmount Road / R819 Greenhills Road to facilitate construction of retaining wall RW01;
    2. Temporary loss of scrub and hardstanding at Calmount Road / R189 Greenhills Road to facilitate construction of retaining wall RW02;
    3. Temporary loss of hardstanding at R110 Long Mile Road / Slievebloom Park to facilitate construction of retaining wall RW03;
    4. Temporary loss of hardstanding at R810 Naas Road / R134 New Nangor Road junction to facilitate construction of retaining wall RW04; and
    5. Temporary loss of hardstanding at R810 Naas Road / R134 New Nangor Road junction to facilitate construction of retaining wall RW05.

iii. Permanent land take at the following locations:
    1. Car park and amenity grassland at Belgard Square West between Belgard Square South and Old Blessington Road to facilitate the construction of Tallaght Bus Interchange;
    2. Amenity grassland between R819 Greenhills Road and Tymonville Crescent to facilitate the provision of SuDS features;
    3. Amenity grassland areas and treelines between Birchview Avenue / Treepark Road and Parkview west of R819 Greenhills Road to facilitate new bus only route works and provision of cycling and pedestrian infrastructure;
    4. Scrub, spoil and bare ground, dry meadows and grassy verges, hedgerows and amenity grassland habitat between R819 Greenhills Road and Ballymount Avenue to accommodate the extension of Ballymount Avenue and the new junction between the two roads;
    5. A range of managed habitats to accommodate section of cycle lane only in both directions along Greenhills Road between Ballymount Avenue and Calmount Avenue and between Calmount Avenue and Calmount Road;
    6. Street planting (treelines) along Calmount Road to facilitate the provision of cycling infrastructure;
    7. Scrub habitat west of R819 Greenhills Road to facilitate new Calmount Avenue link road and roundabout connection to R819 Greenhills Road; and
    8. Scrub habitat east of Calmount Road to facilitate extension of Calmount Road and new junction between Calmount Road and R819 Greenhills Road.

- 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

26 The surface water drainage system for the Proposed Scheme will discharge to three surface water receptors during construction: Camac_040, Poddle_010, Dodder_040 as well as existing combined sewers which ultimately discharge to the Liffey Estuary Lower via Ringsend WwTP. During construction overland flows may discharge to the following additional waterbodies: Liffey Estuary Upper and Grand Canal. All operational drainage outfall discharges to surface waters represent point discharges. For the Proposed Scheme, there will be a net increase of 59,368m^2 in the impermeable area ultimately discharging to Dublin 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.

27 The proposed drainage design includes the relocation and addition of drainage gullies as necessary. Attenuation will be in the form of oversized pipes, tree pits, bioretention areas, soakaways, green roofs and filter drains. These SuDS measures will allow a level of treatment and / or attenuation to be provided before discharging to the network, slightly reducing the impact on water quality as well as preventing an increase in runoff rates.

28 Sustainable Urban Drainage Systems (SuDS) solutions are summarised in Table 1.

***Table 1: Summary of Impermeable Areas and SuDS proposed* by waterbody**

Waterbody	Approximate Impermeable Surface Area			SuDS measures Proposed
	Existing (m^2)	Additional (m^2)	Percentage change (%)	
River Camac (Camac_040)	176,785	39,816	23	Oversized pipes, Tree pits, Bioretention areas, Soakaways and Filter drains
River Poddle (Poddle_010)	118,326	17,394	15	Oversized pipes, bioretention areas
River Dodder (Dodder_040)	33,836	1,668	5	Oversized pipes, bioretention areas and green roofs
Ringsend WwTP	146,794	490	0	Oversized pipes.

3.3 Construction Compounds

29 Thirteen Construction Compounds will be required along the length of the Proposed Scheme to facilitate construction:

- Construction Compound TC1 located in an area of amenity grassland at the western end of Old Blessington Road, adjacent to the junction with the N81 Tallaght bypass;
- Construction Compound TC2 located in an area of amenity grassland along R819 Greenhills Road, immediately south of the junction of Bancroft Park and R819 Greenhills Road;
- Construction Compound TC3 located in in an area of amenity grassland / scrub along R819 Greenhills Road, between Birchview Avenue and R819 Greenhills Road;
- Construction Compound TC4 located in an area of amenity grassland along R819 Greenhills Road, between Treepark Road and R819 Greenhills Road;
- Construction Compound TC5 located in an area of unmanaged grassland along R819 Greenhills Road, to the north of Tymon Lane, south-east of the M50 Motorway;
- Construction Compound TC6 located in an area of amenity grassland along R819 Greenhills Road, outside Tallaght Truck Dismantlers, north-east of the M50 Motorway;
- Construction Compound TC7 located in green space along R819 Greenhills Road, between Ballymount Avenue and R819 Greenhills Road;

- Construction Compound TC8 located in an area of amenity grassland at Bunting Park, along Bunting Road;
- Construction Compound TC9 located in an area of green space along R110 Crumlin Road, immediately west of the junction of Rafter's Road and the R110 Crumlin Road;
- Construction Compound TC10 located in an area of green space along R110 Crumlin Road, immediately east of the junction of Rutland Avenue and the R110 Crumlin Road;
- Construction Compound TC11 located in an area of hardstanding at Dean Street / R137 Patrick Street;
- Construction Compound TC12 in an area of scrub and unmanaged grassland between R134 New Nangor Road and Killeen Road; and
- Construction Compound TC13 located in an area of hardstanding along R110 Long Mile Road, south of the New Nangor Road / Naas Road / Long Mile Road junction.

30 The locations of the Construction Compounds are shown in Images 1 to 13.

31 The Construction Compounds will be established with appropriate services. Water, wastewater, power, and communications connections will be organised by the appointed contractor. At work areas along the Proposed Scheme, where permanent provisions (for the duration of the construction programme) are not practicable, appropriate temporary provisions will be made including the use of generators if required. Temporary welfare facilities will need to be used, for example, portable toilets in the vicinity of works. Wastewater from temporary welfare facilities will be collected and disposed of to a suitably licenced facility.

32 These 13 Construction Compounds will be used to store materials, plant and equipment, to manage the activities from and to provide welfare facilities for construction personnel.

33 The Construction Compounds will be in place for the duration of the Construction Phase of the Proposed Scheme. The compounds will be dismantled and the sites returned to its existing condition on completion of the Construction Phase.

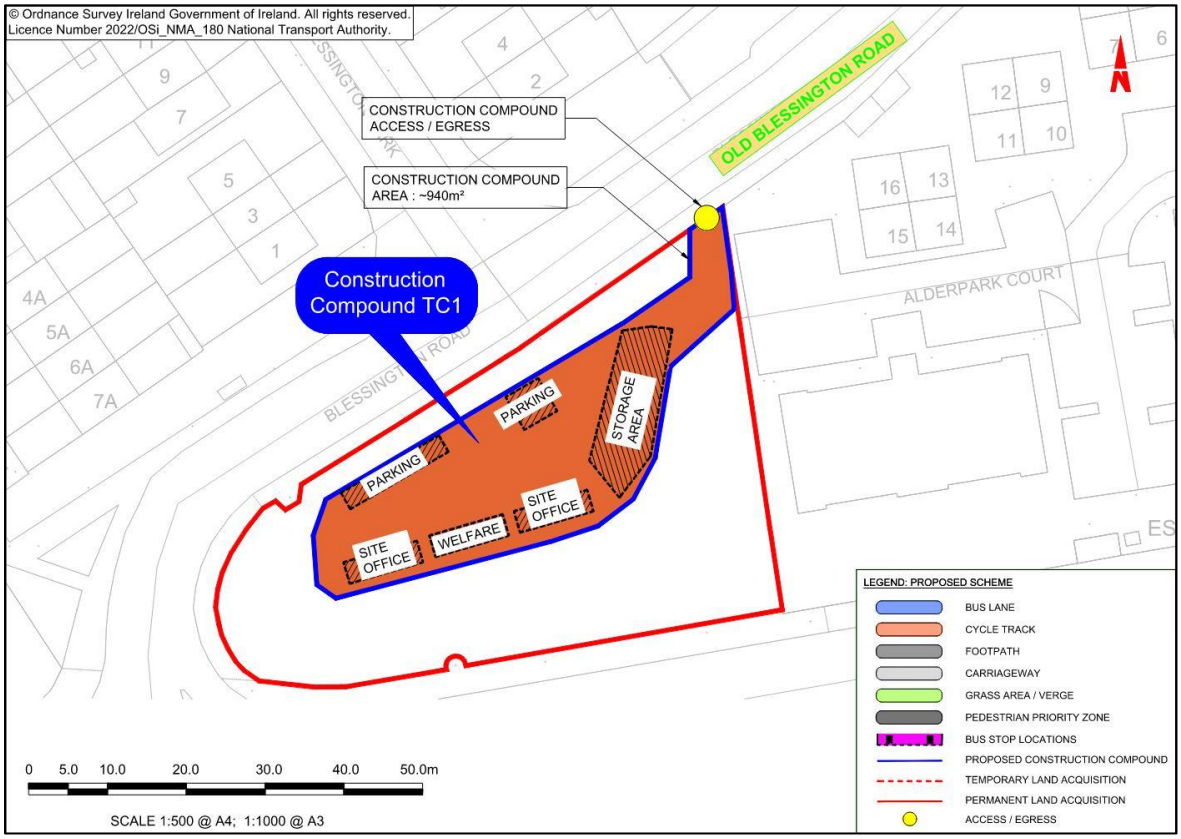

Image 1: Location and Extent of Construction Compound TC1

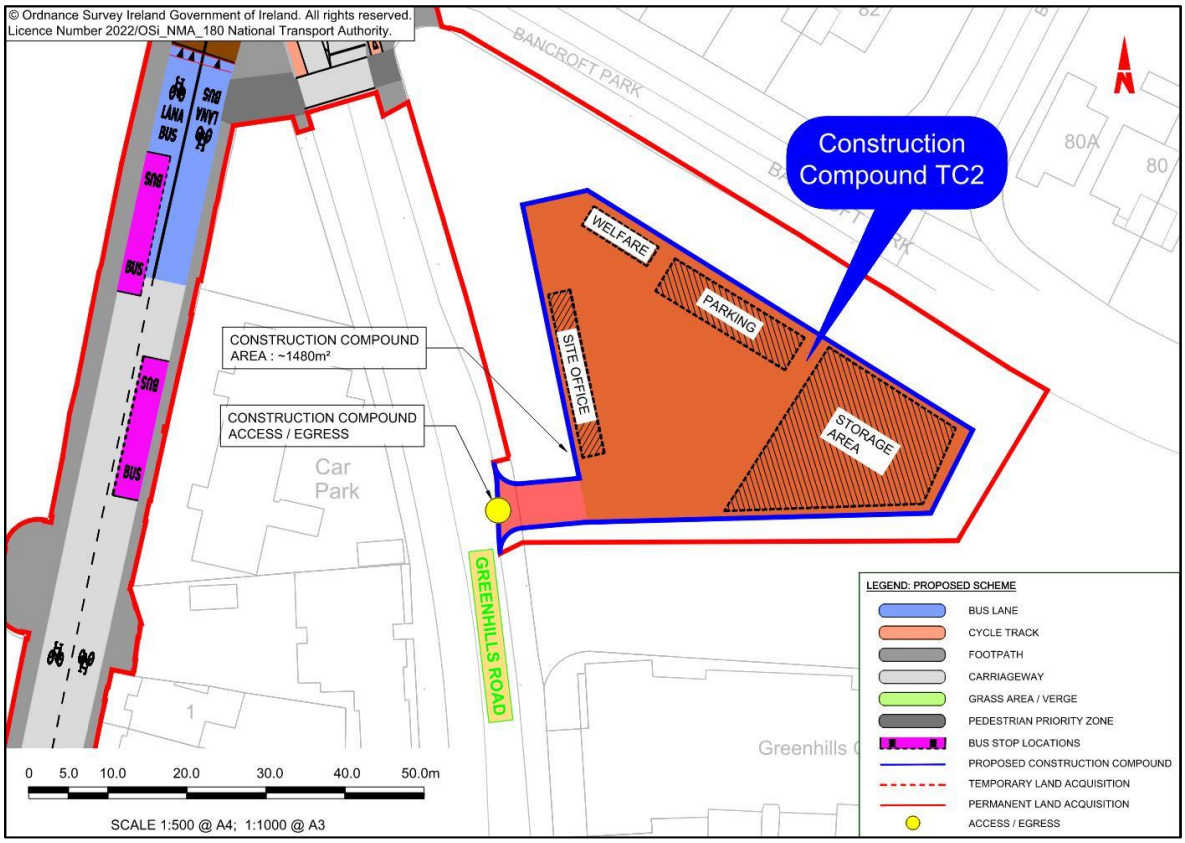

Image 2: Location and Extent of Construction Compound TC2

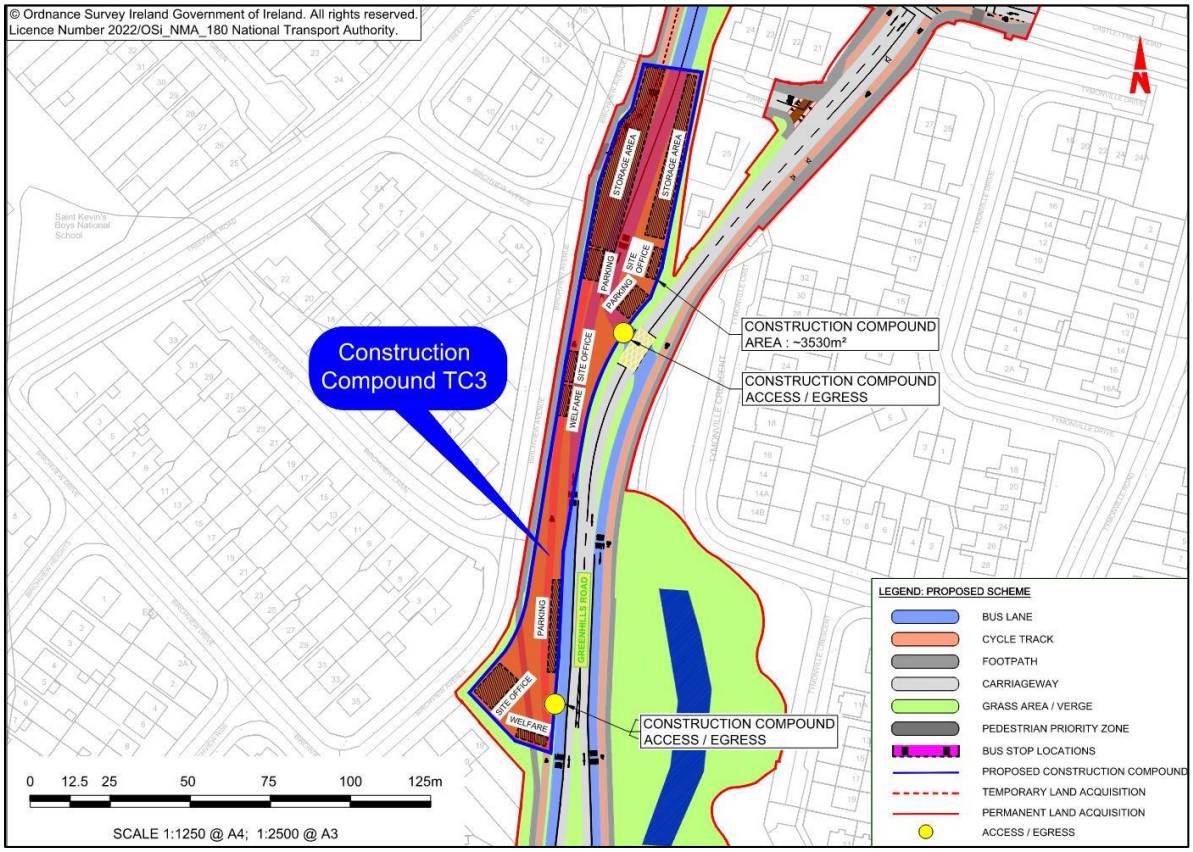

Image 3: Location and Extent of Construction Compound TC3

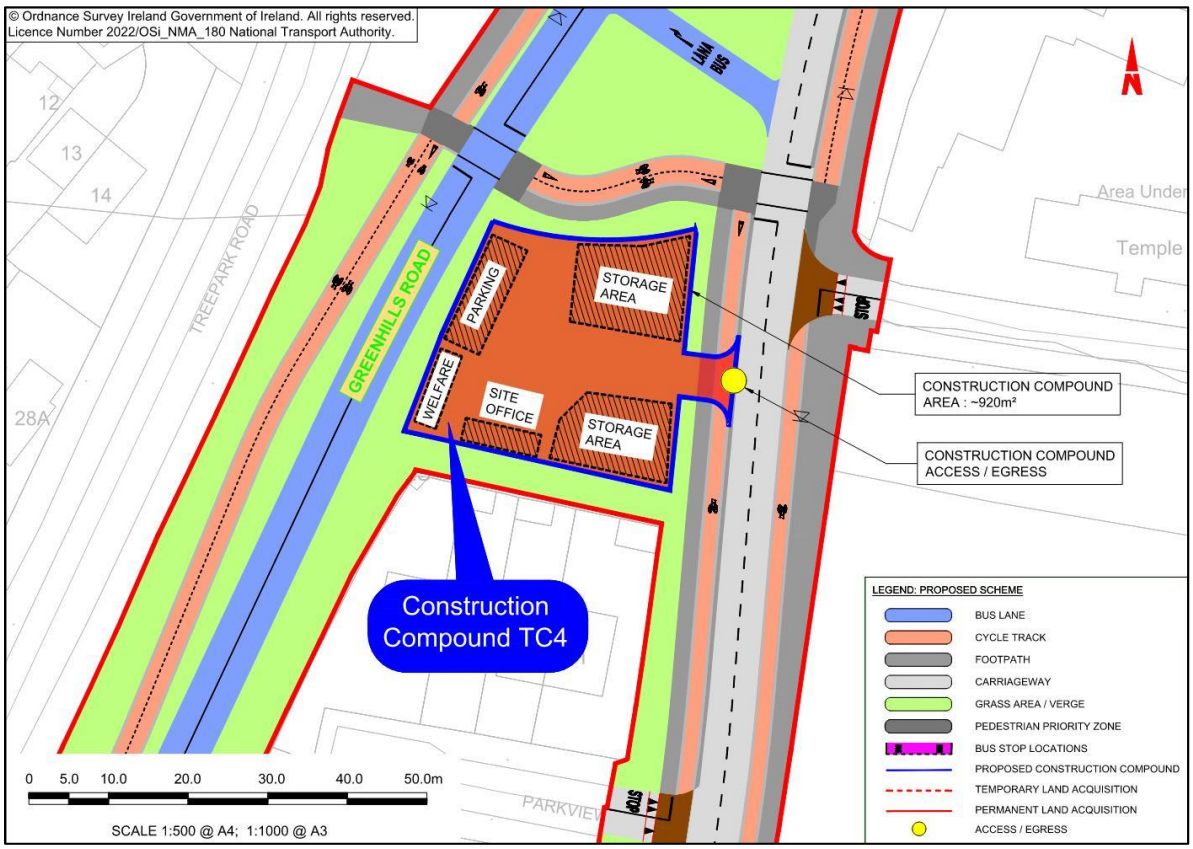

Image 4: Location and Extent of Construction Compound TC4

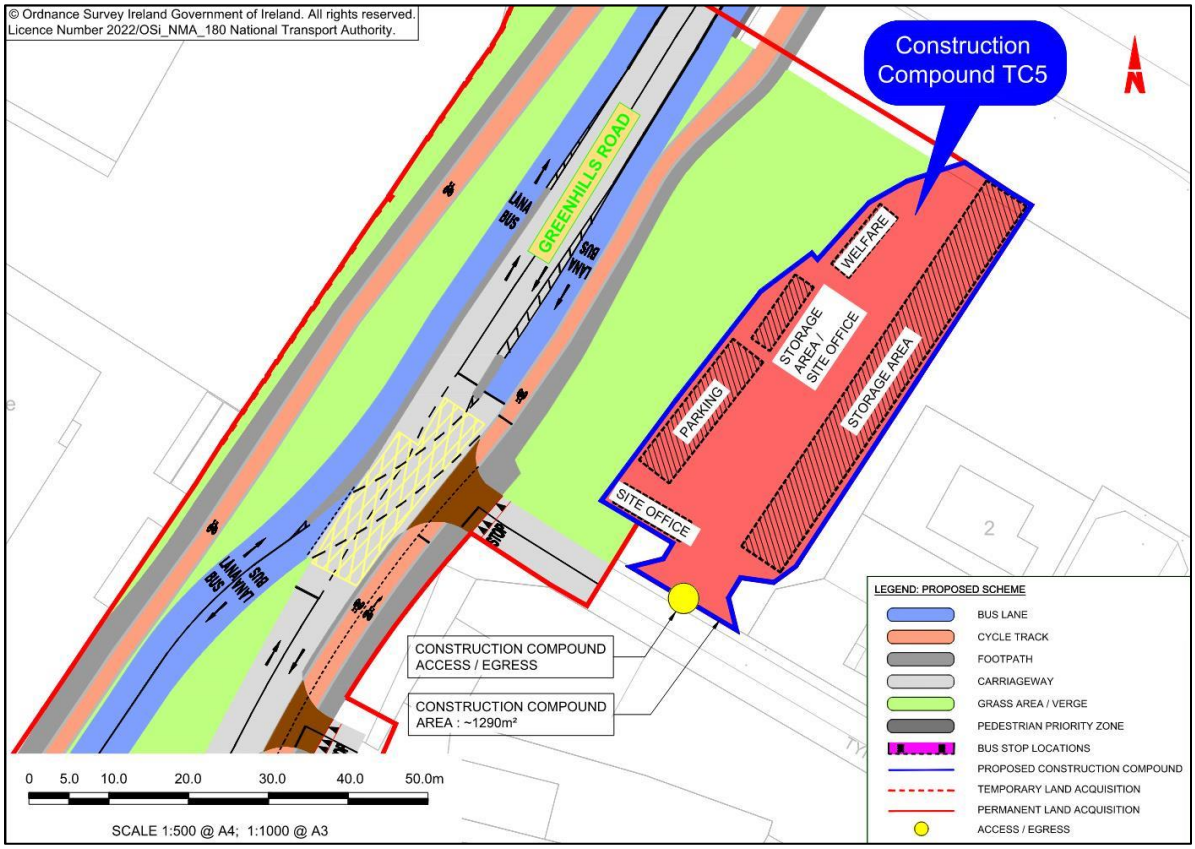

Image 5: Location and Extent of Construction Compound TC5

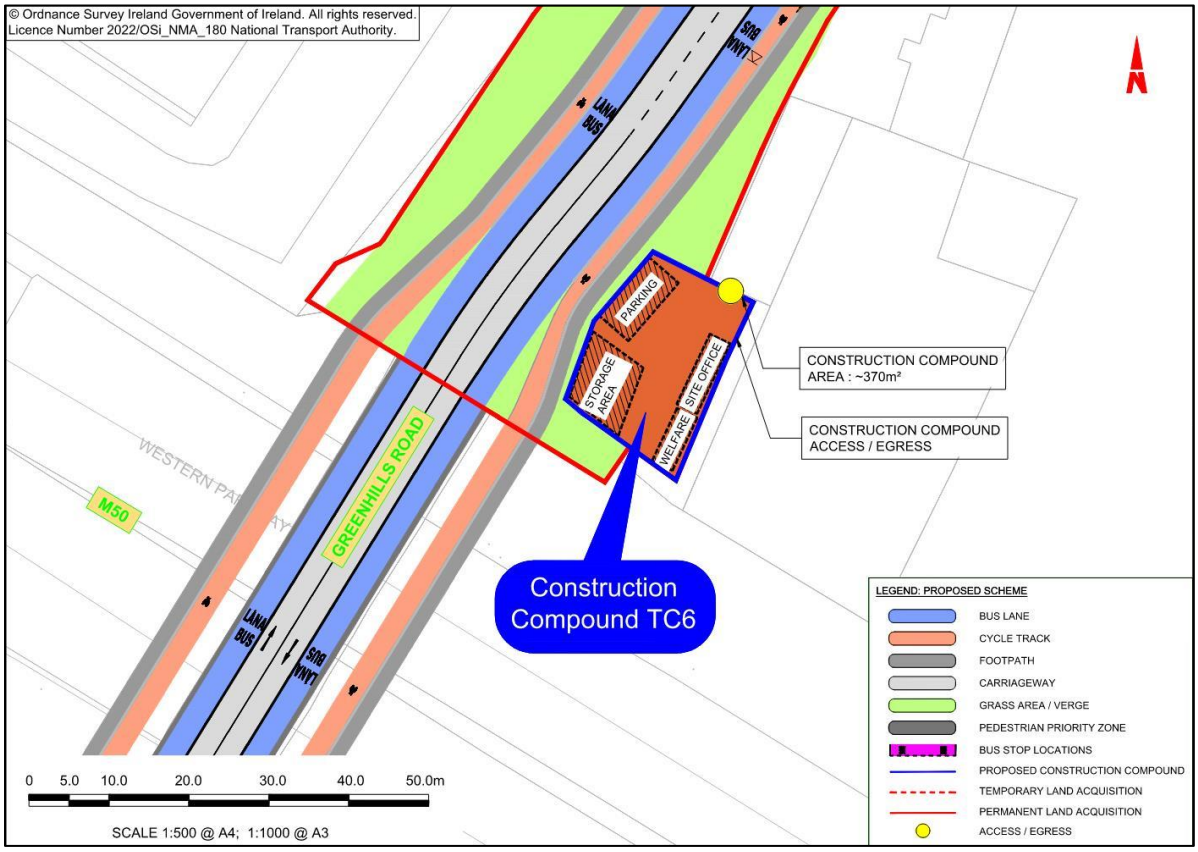

Image 6: Location and Extent of Construction Compound TC6

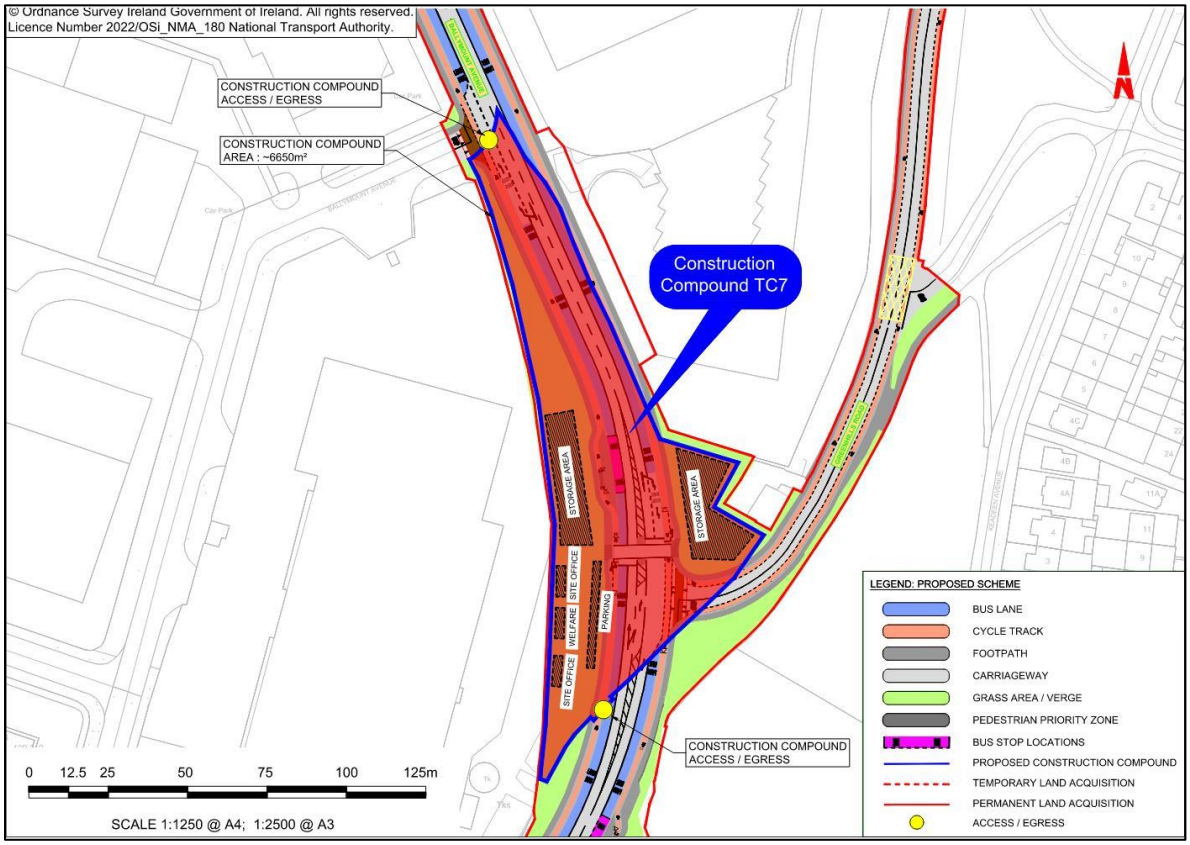

Image 7: Location and Extent of Construction Compound TC7

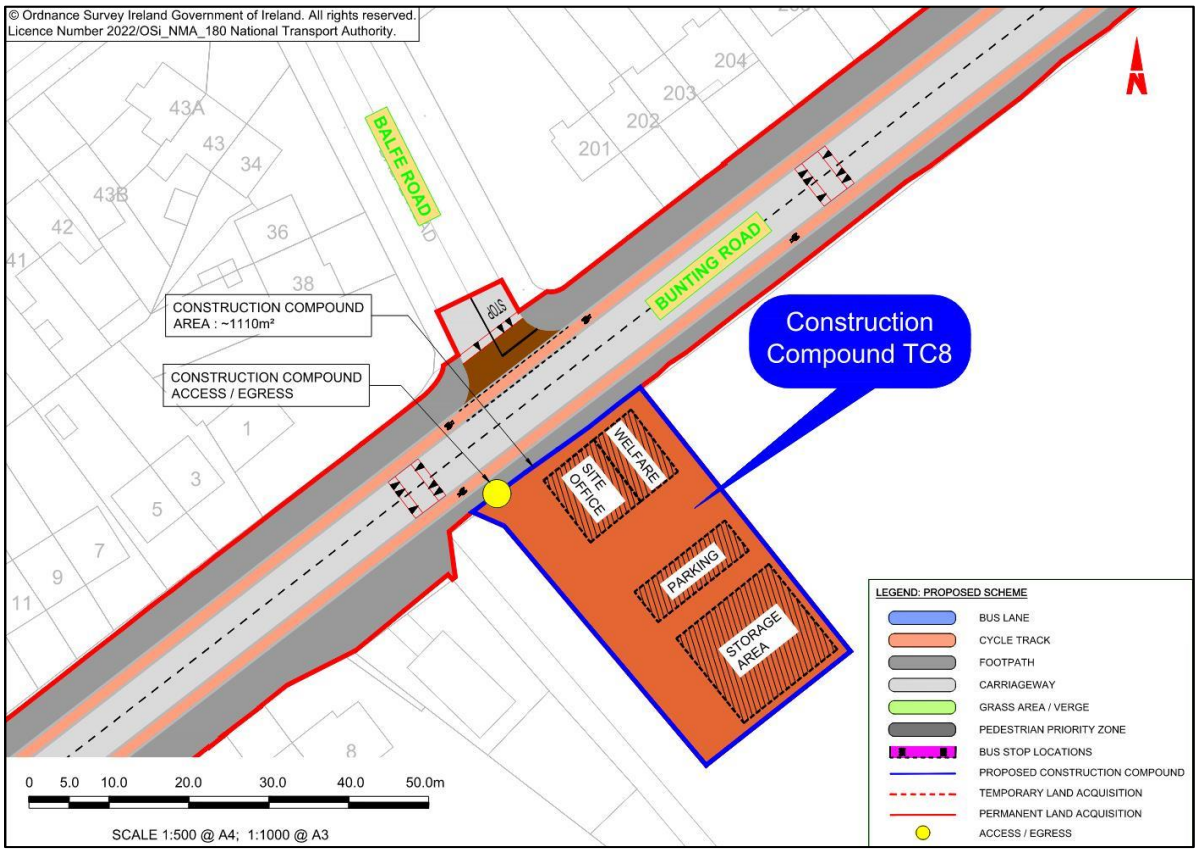

Image 8: Location and Extent of Construction Compound TC8

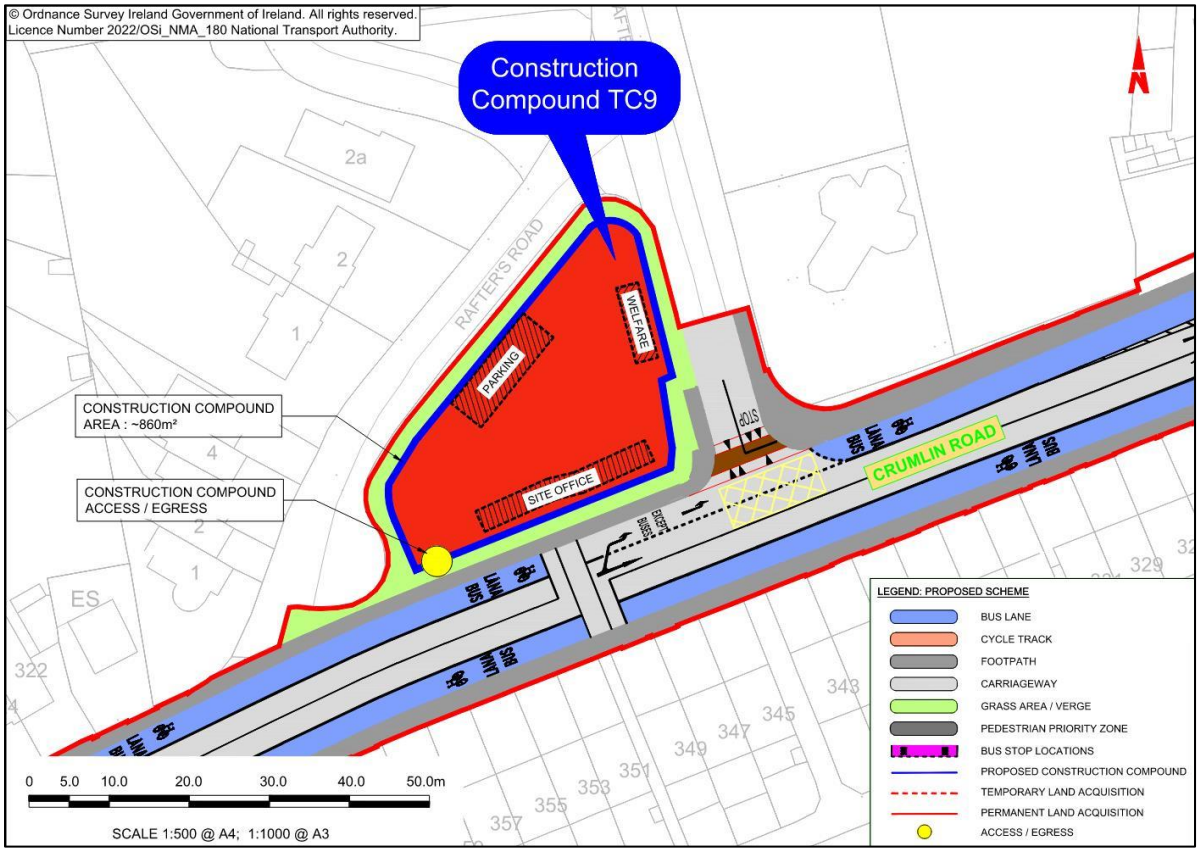

Image 9: Location and Extent of Construction Compound TC9

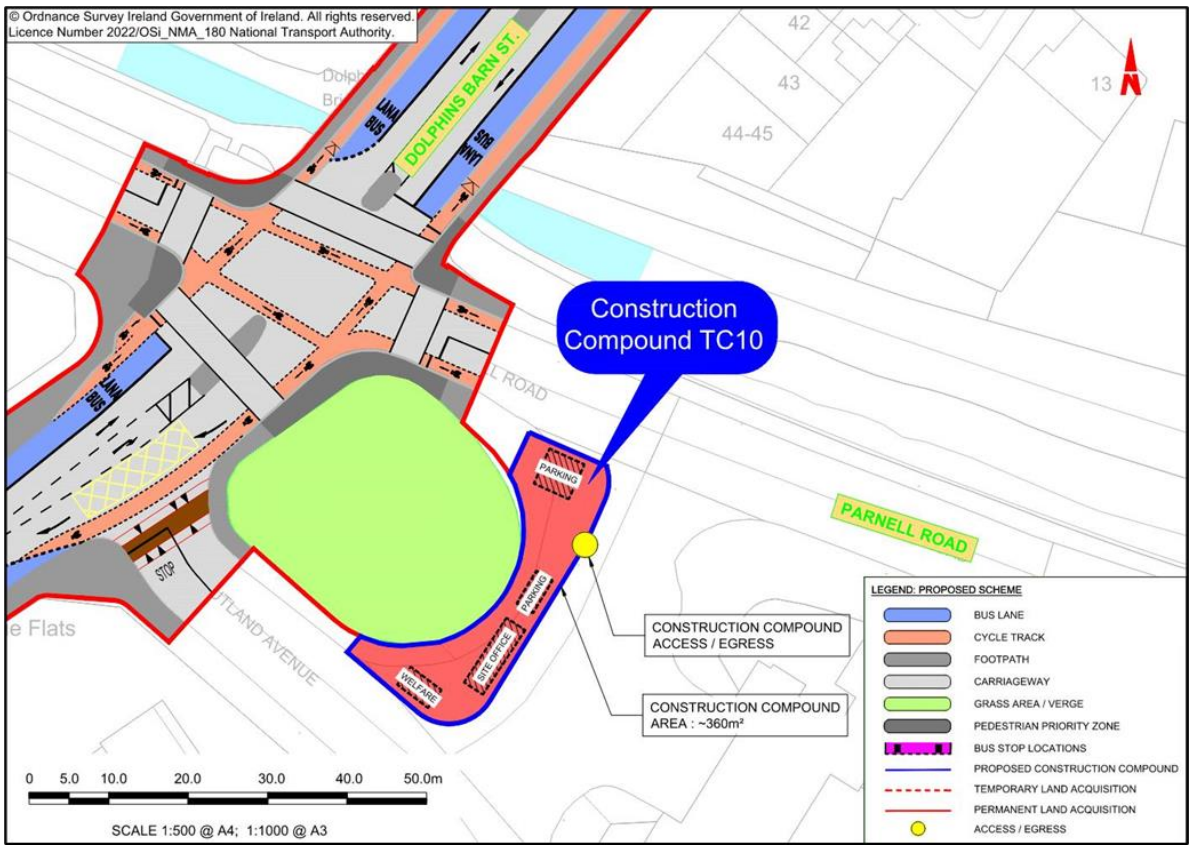

Image 10: Location and Extent of Construction Compound TC10

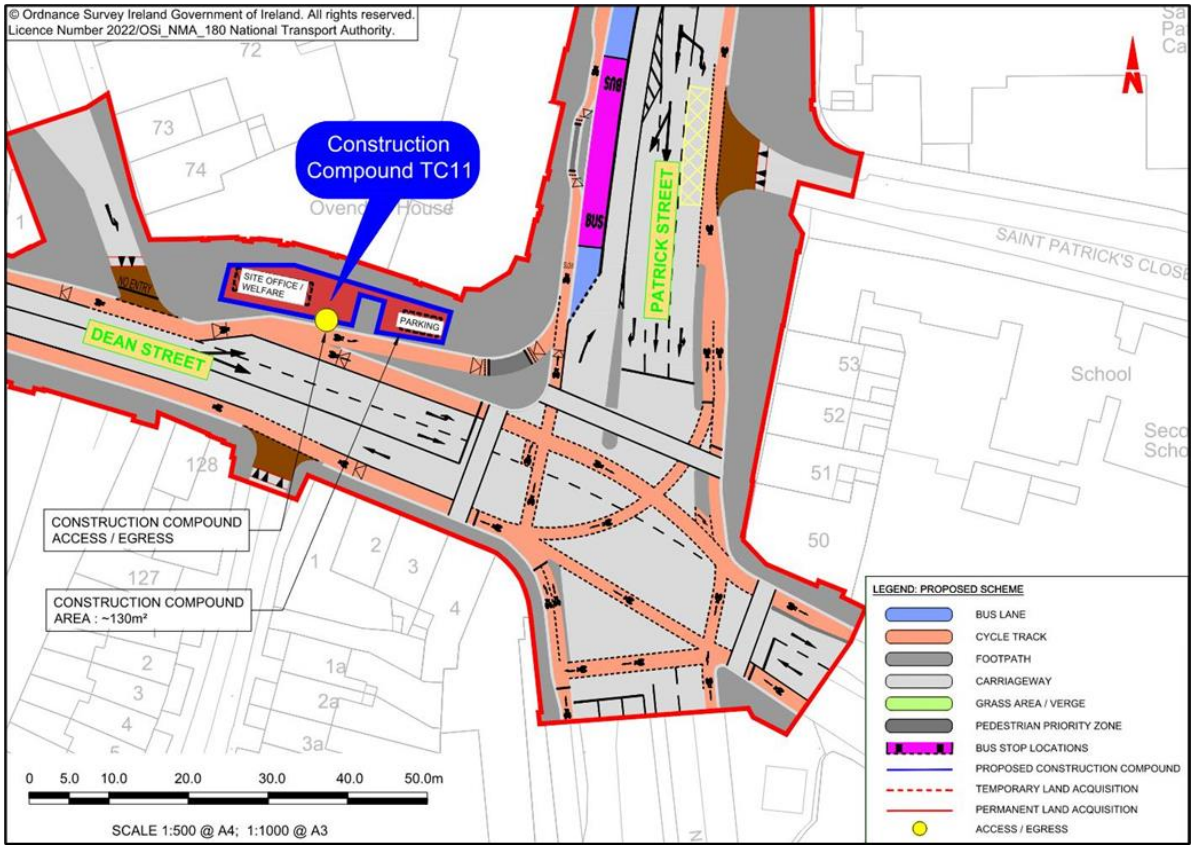

Image 11: Location and Extent of Construction Compound TC11

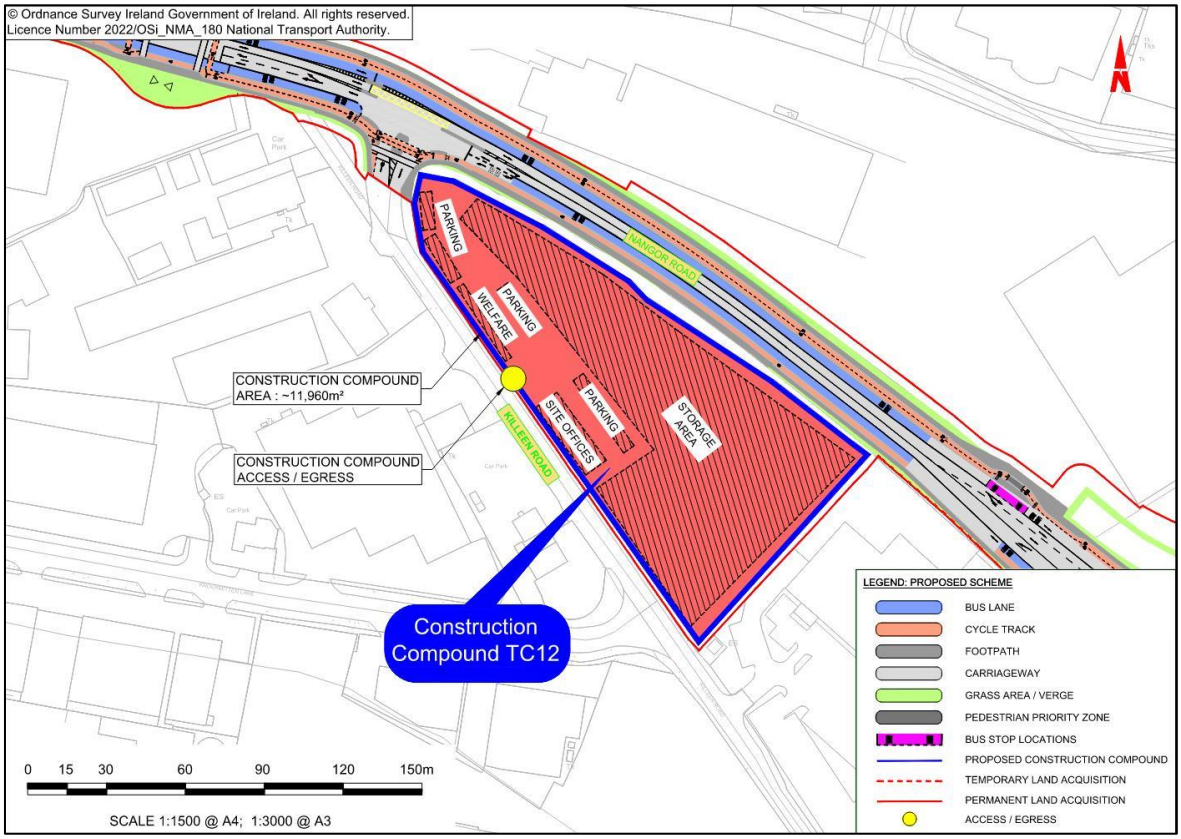

Image 12: Location and Extent of Construction Compound TC12

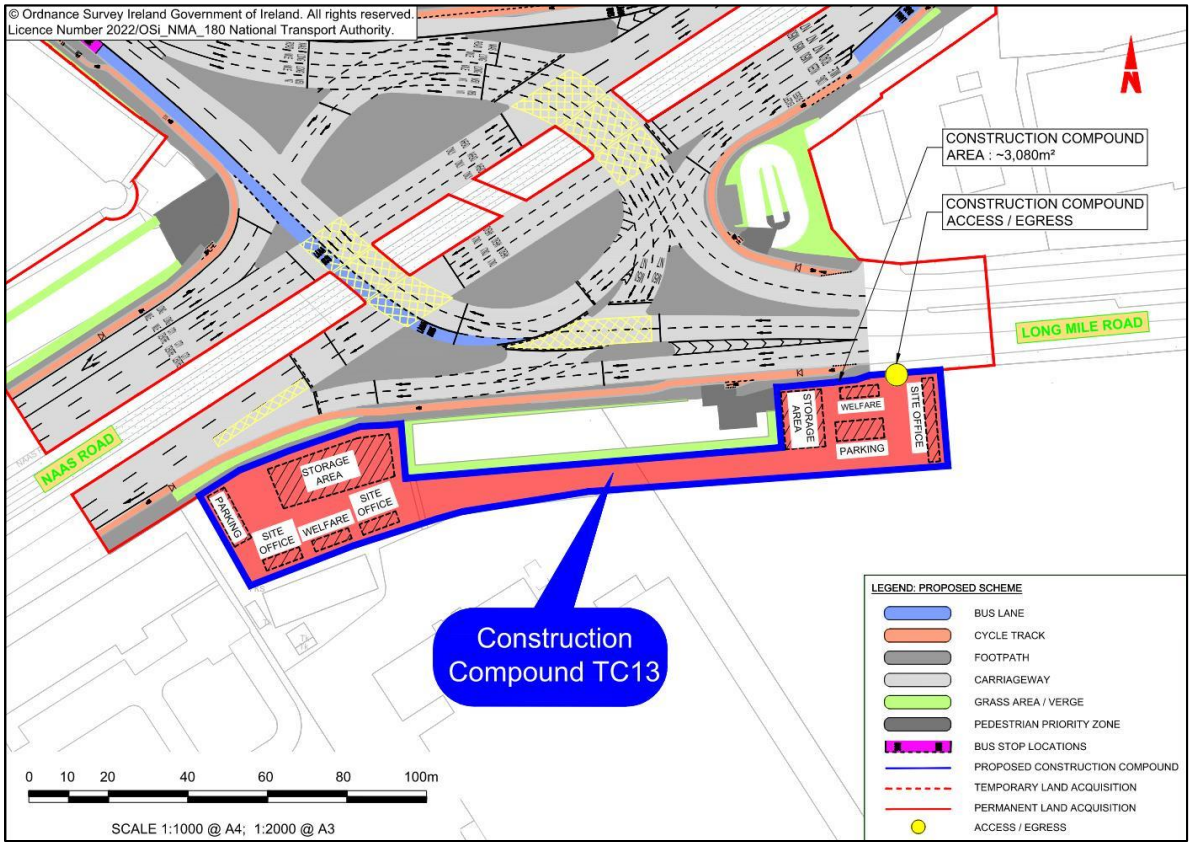

Image 13: Location and Extent of Construction Compound TC13

3.4 Estimated Construction Phase Duration

34 The duration of the Construction Phase is estimated to be 36 months.

3.5 Operational Phase

35 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

36 This NIS was co-authored by Laura Higgins, Kristie Watkin-Bourne, Caroline Kelly, and Tim Ryle, and reviewed by Suvi Harris and Aebhín Cawley of Scott Cawley Ltd. The background and experience of the authors and contributors to this report are set out below.

Laura Higgins

37 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

38 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.

Tim Ryle

39 Tim Ryle is a Principal Ecologist with Scott Cawley Ltd. He holds an honours degree in Botany from University College Dublin and was later awarded a Ph.D. from the same institution. He is a full Member of the Institute of Environmental Scientists. Tim is an experienced ecological consultant with twenty years' experience in private consultancy in designing, undertaking and managing a wide range of ecological survey and in assessing impacts and designing mitigation measures and biodiversity enhancements, in particular for protected species including badgers, otters, bats, birds, amphibians as well as habitats of conservation importance. He is also experienced in undertaking appropriate Assessment for small-scale development projects and larger infrastructural projects, land plans as well as national/government plans.

Caroline Kelly

40 Caroline holds an honours degree in Environmental Biology, from University College Dublin (UCD) and a Masters in Applied Ecological Assessment from University College Cork (UCC). She is a Principal Ecologist at Scott Cawley Ltd., having worked at the company since 2015. Caroline has experience in habitat survey and assessment (including Annex I habitats and legally protected sites) in a range of terrestrial, freshwater and coastal environments, surveys for protected species (e.g., bats, badger, otter), bird surveys (both breeding and overwintering), and surveys for invasive species. Whilst working at Scott Cawley Ltd. Caroline has managed ecological assessments for a wide range of projects including tourism, recreational, industrial, commercial, residential, transport and renewable energy developments.

Suvi Harris

41 Suvi Harris is a Senior Environmental Project Manager at Scott Cawley Ltd. Suvi holds an honours degree BSc. in Botany from University College Dublin and a PhD. in Environmental Risk Assessment from University College Dublin. Suvi is a Full member of the CIEEM. Suvi has over 8 years' experience in environmental consultancy and over 12 years' experience in the environmental field with a particular focus on aquatics. Suvi has worked on national and international multidisciplinary teams developing environmental and ecological solutions for engineering challenges. Suvi leads, coordinates and assists on a range of areas including EIA, AA, Water Framework Directive Compliance Assessment, Surface Water Impact Assessment, Sustainability Appraisal, Planning, Licencing etc. Suvi holds a deep technical understanding of the relevant National and European Legislation which govern environmental protection and planning in Ireland.

Aebhín Cawley

42 Aebhín Cawley is Chief Executive Officer 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

43 This NIS has been prepared having regard to the following documents.

European Commission Guidance

- *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 2014);

Irish Guidance

- *Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities* (Department of Environment, Heritage and Local Government 2010 revision);
- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. *Circular NPW 1/10 & PSSP 2/10* (NPWS, 2010); and
- *OPR Practice Note PN01. Appropriate Assessment Screening for Development Management* (Office of the Planning Regulator, 2021);

44 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

45 As per section 1.0, this NIS assesses the final the Proposed Scheme design (Section 3.0). To account for the changes in design, additional walkover (Section 4.6) and desktop surveys were completed to ensure the most up to date data informed this assessment. Changes in data and desktop surveys were completed to ensure the most up to date data informed this assessment. The assessment presented in this NIS has been undertaken with respect to the requirements of Article 6(3) of the Habitats Directive and 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 all European sites' QIs / SCIs, as detailed below.

46 The Proposed Scheme was analysed and assessed to identify the potential impacts associated with the Proposed Scheme that could affect the ecological environment.

47 From this, the 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.

48 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., 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.

49 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).

50 The identification of a source-pathway-receptor risk does not automatically 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 and exposure to the risk and the characteristics of the receptor. Where there is any uncertainty, the precautionary principle has been applied.

51 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.

52 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 SAC 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".

53 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.

54 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.

55 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.

56 In the case of some European sites e.g., Rockabill 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.

57 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.

58 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 Desk Study

59 The data sources used to inform the assessment presented in this report are as follows (accessed in June 2022):

- 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 2022) (See Appendix IV);
- 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;
- Bus Connects Drone Imagery, surveyed November 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 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.

[2] The following SAC and SPA GIS boundary datasets are the most recently available at the time of writing: SAC_ITM_2023_02 and SPA_ITM_2021_10.

[3] Article 17 of the EU Directive on the Conservation of habitats, Flora 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 (2019a). 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.

4.5 Consultation

60 Table 2 outlines the Appropriate Assessment issues raised during consultation.

Table 2: Appropriate Assessment Issues raised during Consultation

Consultee	Phase / Date of Consultation	Issues Raised	Relevant Section of the NIS where this is addressed
Department of Housing, Local Government and Heritage (formerly Department of Culture, Heritage and the Gaeltacht	30 July 2019 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 4.6 Baseline Surveys; Section 5 Overview of the Receiving Environment and Section 7 Assessment of Potential 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 4.6 Baseline Surveys
		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 6.4 Habitat Degradation as a Result of Introducing/ Spreading Non-native Invasive Species
		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; Section 2 Legislative Context; Section 6.6 Disturbance and Displacement Impacts and

Consultee	Phase / Date of Consultation	Issues Raised	Relevant Section of the NIS where this is addressed
			Section 9 In-Combination Assessment
		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 application. Section 6 Potential Impacts, Zone of Influence and Identifying European Sites at Risk of Effects
Inland Fisheries Ireland (IFI)	3 November 2020	The topics addressed in the IFI letter received on 3 November 2020 did not specifically mention Appropriate Assessment. Topics included: • Water bodies that will be crossed by the Proposed Scheme; • Fisheries importance of water bodies that will be crossed by the Proposed Scheme; • Scheme design in regard to structures at water crossings;	Section 5.10 Hydrology; Section 5 Overview of the Receiving Environment; Section 3 Description of the Proposed Scheme, Section 6 Potential Impacts, Zone of

Consultee	Phase / Date of Consultation	Issues Raised	Relevant Section of the NIS where this is addressed
		• Baseline data; • Impact Assessment; and • Mitigation measures.	Influence and Identifying European Sites at Risk of Effects and Section 7 Assessment of Potential Effects on European Sites

4.6 Baseline Surveys

61 Baseline ecological surveys were undertaken as necessary to inform environmental assessments of the Proposed Scheme. This section describes those ecological surveys which are relevant to and have informed the assessment of likely significant effects on European sites.

4.6.1 Habitats and Flora

62 Habitat surveys were carried out by Scott Cawley Ltd. between June and August 2018 along the then Proposed Scheme alignment. Confirmatory surveys were subsequently undertaken on the Proposed Scheme again 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 along any new route sections added since 2018. This included revisiting specific areas on December 22nd 2022 and January 6th 2023 to confirm habitat characteristics for proposed minor design changes. 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 (S.I. 235/2022) 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 European Communities (Birds and Natural Habitats) Regulations were also recorded. The 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].

63 A desk study was carried out to identify all hydrological crossing points within the footprint of the Proposed Scheme. Previous iterations of the Proposed Scheme identified three sites where water bodies may be subject to significant disturbance as a consequence of the Proposed Scheme; the River Camac at Yellowmeadows R134 / New Nangor Road (referred to as CBC0809AR001), the River Camac at the junction between Oak Road and R134 New Nangor Road (referred to as CBC0809AR002) and the River Poddle adjacent to Bancroft Park, Estate / Astro Park at Tallaght (referred to as CBC0809AR003). These aquatic environs were surveyed by Triturus Environmental Ltd. in July 2022. A broad habitat assessment was conducted at each site utilising elements of the methodology given in the Environment Agency's *'River*

[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.

Habitat Survey in Britain and Ireland Field Survey Guidance Manual 2003'[10] and the Irish Heritage Council's 'A Guide to Habitats in Ireland'7. All sites were assessed in terms of:

- Channel width and depth and other physical characteristics;
- Substrate type, listing substrate fractions in order of dominance, i.e. bedrock, boulder, cobble, gravel, sand, silt etc.;
- Flow type, listing percentage of riffle, glide and pool in the survey area;
- In-stream macrophyte and aquatic bryophytes occurring and the prominence of each (DAFOR scale); and
- General riparian vegetation composition.

4.6.2 Fauna Surveys

64 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.

65 Dedicated fisheries or aquatic surveys, including white-clawed crayfish habitat, and biological water quality (Q-sampling), were undertaken at three sites where previous iterations of the Proposed Scheme indicated that the waterbodies at these locations (e.g., CBC0809AR001, CBC0809AR002 and CBC0809AR003) may be subject to significant disturbance during Construction. It should be noted that the Proposed Scheme is not hydrologically connected to any European site designated for Annex II fish species or white-clawed crayfish *Austropotamobius pallipes*. The nearest known European site designated for Atlantic salmon *Salmo salar* and river lamprey *Lampetra fluviatilis* is the River Boyne and River Blackwater SAC, located approximately 39km north-west of the Proposed Scheme in the Boyne River catchment. The nearest known European site designated for white-clawed crayfish and brook lamprey *L. planeri* is the River Barrow and River Nore SAC, which is located approximately 42km south-west of the Proposed Scheme in the River Barrow catchment, River Nore catchment and River Ballyteigue-Bannow River catchment.

4.6.3 Otter

66 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, in August 2020 and March 2022, and July 2022 in respect of survey sites for the aquatic survey. 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.

67 A desk study was carried out to identify all hydrological crossing points within the footprint of the Proposed Scheme. Construction methodologies which involved in-stream works, modifications to banks or significant disturbance were deemed to require habitat suitability assessments for otter. Previous iterations of the Proposed Scheme identified three sites where water bodies may be subject to significant disturbance as a consequence of the Construction of the Proposed Scheme; CBC0809AR001 on the River Camac, CBC0809AR002 on the River Camac and CBC0809AR003 on the River Poddle. A corridor of approximately 150m upstream and downstream from these locations were surveyed to identify the presence of otter holts in October 2020, while update surveys in 2022 including the aquatic survey did not record any holt features, although evidence of sprainting was recorded.

[10] Environment Agency. (2003).*River Habitat Survey in Britain and Ireland: Field Survey Guidance Manual*: 2003 Version. Forest Research.

4.6.4 Kingfisher

68 A desk study was carried out to identify all hydrological crossing points within the footprint of the Proposed Scheme. Construction methodologies which involved in-stream works, modifications to banks or significant disturbance were deemed to require habitat suitability assessments for nesting kingfisher *Alcedo atthis*. Previous iterations of the Proposed Scheme identified three sites where water bodies may be subject to significant disturbance as a consequence of the Construction of the Proposed Scheme; CBC0809AR001 on the River Camac, CBC0809AR002 on the River Camac and CBC0809AR003 on the River Poddle.

69 The suitability of water features and associated foraging, roosting, and nesting habitats, located within or directly adjacent to the Proposed Scheme, were assessed for kingfisher potential in October 2020. Where suitable habitat existed, surveys extended approximately 500m upstream and downstream of the proposed crossing point.

4.6.5 Other Birds

70 The results of the desk study have informed the assessment of likely significant effects on breeding bird species arising from the Proposed Scheme.

71 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 *Branta bernicla hrota*[8] (Scott Cawley Ltd., 2017). A habitat suitability assessment was carried out in October 2020 to verify the suitability of potential inland feeding / roosting sites identified during the desk study.

72 There are five suitable wintering bird sites, located adjacent to the Proposed Scheme, which would be subject to habitat loss, or disturbance at the very least by the Proposed Scheme. These were located along amenity grassland sections along R819 Greenhills Road to the west of the M50, referred to as CBC0809WB001, at grassland area adjacent to Templewoods residential area off R819 Greenhills Road, referred to as CBC0809WB002, Tymon Park along R819 Greenhills Road, referred to as CBC0809WB003, at amenity grassland along Calmount Road, referred to as CBC0809WB004, and amenity grassland at Bunting Park, referred to as CBC0809WB005 (displayed in Figure 2).

73 Field surveys were carried out to confirm the suitability or presence of wintering birds at CBC0809WB001, CBC0809WB002, CBC0809WB003, CBC0809WB004, and CBC0809WB005; which were deemed suitable for wintering birds and were surveyed twice a month, between the months November 2020 and March 2021,[11] and again between October 2021 and March 2022. The results of the desk study and field surveys have informed the assessment of likely significant effects on wintering bird species arising from the Proposed Scheme.

74 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.

[11] A scheduled visit in early January 2021 was postponed owing to government restrictions having been revised around that time.

5 Overview of the Receiving Environment

5.1 European Sites

75 The Proposed Scheme does not overlap with any European site. The nearest European site to the Proposed Scheme is Glenasmole Valley SAC, which is located approximately 2.9km away.

76 The Proposed Scheme is also hydrologically connected to South Dublin Bay and River Tolka Estuary SPA, as well as South Dublin Bay SAC. These European sites are located approximately 6.5km downstream of the point at which the River Poddle discharges into the Liffey Estuary Upper.

77 There are eight European sites located in Dublin Bay which are downstream of the Proposed Scheme. These sites include South Dublin Bay SAC, North Dublin Bay SAC, Howth Head SAC, Rockabill to Dalkey Island SAC, Dalkey Islands SPA, Howth Head Coast SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA. European sites will be hydrologically connected to the Proposed Scheme via the River Camac (Camac_040), River Poddle (Poddle_010), Grand Canal, River Dodder (Dodder_040), the Liffey Estuary Upper and Liffey Estuary Lower. In addition, the Rye Water Valley / Carton SAC is located upstream of the Proposed Scheme and is hydrologically connected to the Proposed Scheme via the River Liffey.

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

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

80 The European sites present in the vicinity of the Proposed Scheme are shown in Figure 4 at the end of this report and listed in Table 3, along with their Qualifying Interests (QIs)/Special Conservation Interests (SCIs) 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 (as the crow flies)**
Special Area of Conservation (SAC)	
Rye Water Valley / Carton SAC [001398] 1014 Narrow-mouthed Whorl Snail *Vertigo angustior* 1016 Desmoulin's Whorl Snail *Vertigo moulinsiana* 7220 Petrifying springs with tufa formation (Cratonerion)* *S.I. No.494/2018 – European Union Habitats (Rye Water Valley / Carton Special Area of Conservation 001398) Regulations 2018.* NPWS (2021a) *Conservation Objectives: Rye Water Valley / Carton SAC 001398.* Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.	Approximately 7.9km from 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.*	Approximately 3.9km 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 (as the crow flies)
NPWS (2013a) *Conservation Objectives: South Dublin Bay SAC 000210.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
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 (2013b) *Conservation Objectives: North Dublin Bay SAC 000206.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	Approximately 6.2km from the Proposed Scheme
Rockabill to Dalkey Island SAC [003000] 1170 Reefs 1351 Harbour porpoise *Phocoena phocoena* *S.I. No. 94/2019 – European Union Habitats (Rockabill To Dalkey Island Special Area Of Conservation 003000) Regulations 2019.* NPWS (2013c) *Conservation Objectives: Rockabill to Dalkey Island SAC 003000.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	Approximately 12.1km 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 11.9km from the Proposed Scheme
Wicklow Mountains SAC [002122] 3110 Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) 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)* 7130 Blanket bogs (* if active bog)	Approximately 5.3km 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 (as the crow flies)
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 (2017a) *Conservation Objectives: Wicklow Mountains SAC 002122.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.	
Knocksink Wood SAC [000725] 7220 Petrifying Springs with Tufa formation (Cratonuerion)* 91A0 Old Sessile oak woods with *Ilex* and *Blechnum* in the British Isles 91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae)* *S.I. No. 93/2019- European Union Habitats (Knocksink Wood Special Area of Conservation 000725) Regulations 2019.* NPWS (2021b) *Conservation objectives for Knocksink Wood SAC [000725].* Version 1.0. Department of Housing, Local Government and Heritage.	Approximately 12.7km from the Proposed Scheme
Ballyman Glen SAC [000713] 7220 Petrifying springs with tufa formation (Cratoneurion)* 7230 Alkaline fens *S.I. No. 92/2019- European Union Habitats (Ballyman Glen Special Area of Conservation 000713) Regulations 2019.* NPWS (2019d) *Conservation objectives: Ballyman Glen SAC [000713].* Version 1.0. Department of Housing, Local Government and Heritage.	Approximately 15.5km from the Proposed Scheme
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 (2012a) *Conservation Objectives: Baldoyle Bay SAC 000199.* Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	Approximately 11.1km 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.*	Approximately 2.9km 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 (as the crow flies)
NPWS (2021c) *Conservation objectives for Glenasmole Valley SAC [001209].* Version 1.0. Department of Housing, Local Government and Heritage.	
Bray Head SAC [002193] 1230 Vegetated sea cliffs of the Atlantic and Baltic coasts 4030 European dry heaths *S.I. No. 620/2017 - European Union Habitats (Bray Head Special Area of Conservation 000714) Regulations 2017.* NPWS (2017b) *Conservation objectives: Bray Head SAC [000714].* Version 1.0. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.	Approximately 19.7km 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 (2017c) *Conservation objectives: Ireland's Eye SAC [002193].* Version 1.0. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.	Approximately 15.1km from 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*)*[12] 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 (2013d) *Conservation Objectives: Malahide Estuary SAC 000205.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	Approximately 13.8km 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 18km from the Proposed Scheme

[12] 1320 *Spartina* swards (Spartinion maritimae) habitat is included within the conservation objectives document for Malahide Estuary SAC, but not within the Statutory Instruments document. This is likely because *Spartina* is an invasive alien species in Ireland and as such NPWS have not set a conservation target for it, nor is there a requirement to assess the habitat as a QI.

European Site Name [Code] and its Qualifying interest(s)/Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Scheme (as the crow flies)
S.I. No. 286/2018 European Union Habitats (Rogerstown Estuary Special Area of Conservation 000208) Regulations 2018. NPWS (2013e) Conservation Objectives: Rogerstown Estuary SAC 000208. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
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 (2013f) *Conservation Objectives: Lambay Island SAC 000204. Version 1*. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	Approximately 22.5km from the Proposed Scheme
Special Protection Area (SPA)	
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 (2015a) *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 3.3km from the Proposed Scheme
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*	Approximately 6.2km 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 (as the crow flies)
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 *S.I. No. 211/2010 - European Communities (Conservation of Wild Birds (North Bull Island Special Protection Area 004006)) Regulations 2010.* NPWS (2015b) *Conservation Objectives: North Bull Island SPA 004006.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
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 (2022a) *Conservation objectives for Dalkey Islands SPA [004172]. First Order Site-specific Conservation Objectives Version 1.0*. Department of Housing, Local Government and Heritage.	Approximately 13.6km 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 (2022b) *Conservation objectives for Wicklow Mountains SPA [004040]. First Order Site-specific Conservation Objectives Version 1.0.*. Department of Housing, Local Government and Heritage.	Approximately 6.7km 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 (2013g) *Conservation Objectives: Baldoyle Bay SPA 004016. Version 1.* National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	Approximately 11.4km 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 (as the crow flies)
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 (2022c) *Conservation objectives for Howth Head Coast SPA [004113]. First Order Site-specific Conservation Objectives Version 1.0*. Department of Housing, Local Government and Heritage.	Approximately 14.6km from 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 (2022d) *Conservation objectives for Ireland's Eye SPA [004117]. First Order Site-specific Conservation Objectives Version 1.0.* Department of Housing, Local Government and Heritage.	Approximately 14.9km from the Proposed Scheme
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 (2013h) *Conservation Objectives: Malahide Estuary SPA 004025.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	Approximately 13.8km from the Proposed Scheme
Rogerstown Estuary SPA [004015] A043 Greylag Goose *Anser anser* A046 Light-bellied Brent Goose *Branta bernicla hrota* A048 Shelduck *Tadorna tadorna* A056 Shoveler *Anas clypeata* A130 Oystercatcher *Haematopus ostralegus*	Approximately 18.3km 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 (as the crow flies)
A137 Ringed Plover *Charadrius hiaticula* A141 Grey Plover *Pluvialis squatarola* A143 Knot *Calidris canutus* A149 Dunlin *Calidris alpina 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 (2013i) *Conservation Objectives: Rogerstown Estuary SPA 004015*. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
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 (2022e) Conservation objectives for Lambay Island SPA [004069]. *First Order Site-specific Conservation Objectives Version 1.0*. Department of Housing, Local Government and Heritage.	Approximately 22.4km from the Proposed Scheme
The Murrough SPA [004186] A001 Red-throated Diver *Gavia stellata* A043 Greylag Goose *Answer 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 Wetland and Waterbirds *S.I. No. 298/2011 - European Communities (Conservation of Wild Birds (The Murrough Special Protection Area 004186)) Regulations 2011.* NPWS (2022f) *Conservation objectives for The Murrough SPA [004186]. First Order Site-specific Conservation Objectives Version 1.0.*. Department of Housing, Local Government and Heritage.	Approximately 29.2km from the Proposed Scheme
Skerries Islands SPA [004122] A017 Cormorant *Phalacrocorax carbo*	Approximately 27.8km 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 (as the crow flies)
A018 Shag *Phalacrocorax aristotelis* A046 Light-bellied 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 (2022g) *Conservation objectives for Skerries Islands SPA [004122]. First Order Site-specific Conservation Objectives Version 1.0*. Department of Housing, Local Government and Heritage.	
Rockabill SPA [004114] 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 004114)) Regulations 2012.* NPWS (2013j) *Conservation objectives for Rockabill SPA [004114].* Generic Version 1.0. Department of Arts, Heritage and the Gaeltacht.	Approximately 28.5km from the Proposed Scheme

5.2 Habitats

81 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);
- Stonewalls and other stonework (BL1);
- Buildings and artificial surfaces (BL3);
- Exposed sand, gravel or till (ED1);
- Spoil and bare ground (ED2);
- Recolonising bare ground (ED3);
- Reed and large sedge swamps (FS1);
- Depositing / lowland rivers (FW2);
- Canals (FW3);
- Drainage ditches (FW4);
- Amenity Grassland (Improved) (GA2);
- Dry meadows & grassy verges (GS2);
- Residential;
- (Mixed) broadleaved woodland (WD1);
- Mixed broadleaved / conifer woodland (WD2);

- Scattered trees and parkland (WD5);
- Hedgerows (WL1);
- Treelines (WL2);
- Scrub (WS1);
- Immature woodland (WS2); and
- Ornamental / non-native shrub (WS3).

82 None of the habitats listed above correspond to Annex I Qualifying Interest habitats.

5.3 Flora and Fauna Species

5.3.1 Flora

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

84 There was one non-native invasive plant species, Japanese knotweed *Reynoutria japonica*, listed on the Third Schedule of the Birds and Habitats Regulations which was identified along the Proposed Scheme. This species was identified in six locations, as summarised in Table 4, five of which occurred within the proposed red line boundary.

Table 4: Non-native invasive plant species listed on the Third Schedule of the Birds and Habitats Regulations 2011 recorded along or adjacent to the Proposed Scheme

Reference	Species	Location	Within Red Line Boundary (Y / N)
CBC0809IAPS01	Japanese knotweed *Reynoutria japonica*	Stand along Calmount Road	Y
CBC0809IAPS02	Japanese knotweed *Reynoutria japonica*	Extensive stand adjacent to Woodies on a greenfield site at the junction of the New Nangor Road (R134) and Killeen Road	Y (within temporary land take boundary-area proposed for Construction Compound TC12)
CBC0809IAPS03	Japanese knotweed *Reynoutria japonica*	Extensive stand adjacent to Woodies on a greenfield site at the junction of the New Nangor Road (R134) and Killeen Road	Y (within temporary land take boundary-area proposed for Construction Compound TC12)
CBC0809IAPS04	Japanese knotweed *Reynoutria japonica*	Extensive stand adjacent to Woodies on a greenfield site at the junction of the New Nangor Road (R134) and Killeen Road	Y (within temporary land take boundary-area proposed for Construction Compound TC12)
CBC0809IAPS05	Japanese knotweed *Reynoutria japonica*	Extensive stand adjacent to Woodies on a greenfield site at the junction of the New Nangor Road (R134) and Killeen Road	Y (within temporary land take boundary-area proposed for Construction Compound TC12)

Reference	Species	Location	Within Red Line Boundary (Y / N)
CBC0809IAPS06	Japanese knotweed *Reynoutria japonica*	Stand along New Nangor Road (R134) along grassy verge	N

85 The desk study returned records of a total of 20 species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations across the wider study area (i.e., Grid Squares O02, O03, O12 and O13).

86 Records returned within approximately 1km of the Tallaght section of the Proposed Scheme included Indian balsam *Impatiens glandulifera*, Japanese knotweed *Reynoutria japonica*, rhododendron *Rhododendron ponticum*, Spanish bluebell *Hyacinthoides hispanica*, three-cornered garlic *Allium triquetrum*, giant-rhubarb *Gunnera tinctoria*, giant knotweed *Reynoutria sachalinensis*, bohemian knotweed *Reynoutria japonica x sachalinensis = R. x bohemica*, American skunk-*cabbage Lysichiton americanus* and several non-native species associated with aquatic habitats such as the Grand canal (e.g. water fern *Azolla filiculoides*, Nuttall's waterweed *Elodea nuttallii*, Canadian waterweed *Elodea canadensis*, parrot's-feather *Myriophyllum aquaticum*, New Zealand pigmyweed *Crassula helmsii* and curly waterweed *Lagarosiphon major*. Canadian waterweed *Elodea canadensis*, which is also noted from the wider vicinity was delisted as a third schedule species with the introduction of the European Communities (Birds and Natural Habitats) (Amendment) Regulations 2015 (SI 355/2015).

87 Records returned within approximately 1km of the Clondalkin section of the Proposed Scheme included Canadian waterweed, giant hogweed *Heracleum mantegazzianum*, Indian balsam, Japanese knotweed, bohemian knotweed and Nuttall's waterweed, which is associated with the Grand Canal.

88 The only Third Schedule non-native species recorded within the footprint of the Proposed Scheme was Japanese knotweed (refer to Table 4).

5.3.2 Otter

89 A desk study found that otter are known to occur within 1km of the Proposed Scheme and across the wider study area, including the River Poddle, River Camac, River Dodder and Grand Canal. Records include a single spraint along the River Poddle, recorded underneath a footbridge in Tymon North Park between April 2018 and April 2019[13]. A total of eight signs of otter activity, including four spraints, were recorded on the River Camac during the Dublin City Otter Survey 2019. Spraint and prey remains were recorded along the River Camac, as it flows alongside the Nangor Road, east of the M50 motorway. A single holt and sprainting post was recorded along the River Camac at Bluebell, approximately 360m north of the Proposed Scheme13.

90 A total of 47 otter signs, including 30 spraints and six holts, were recorded along the River Dodder during the 2019 study13. At its closest point the Proposed Scheme lies approximately 220m north of the River Dodder. Otter are known to occur along the Grand Canal[14], with a live sighting recorded at Dolphins Barn Bridge in 2014 (NBDC Online database, 2022).

91 No signs of otter, an Annex II species, were recorded during surveys within the footprint of the Proposed Scheme during the early multidisciplinary surveys. No signs of otter were recorded within 150m upstream and downstream of the proposed crossing points of the River Camac and the River Poddle. In the 2022 aquatic survey of watercourses, two number mixed age otter spraints were recorded along the River Camac near the Nangor Road/ Oak Road culvert. Additionally, a potential otter slide was separately noted from the Grand Canal (a short distance outside the Proposed Scheme Red Line Boundary.

[13] 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.*

[14] NPWS (2009). *Site Synopsis for Grand Canal pNHA [002104].* 09/12/2009

92 The nearest European site for which this species is designated is the Wicklow Mountains SAC, which is located approximately 5.3km south of the Proposed Scheme. The Proposed Scheme is located within the Liffey and Dublin Bay catchment and the Liffey_SC_090 (Clondalkin section) and Dodder_SC_010 (Tallaght section) subcatchments. The River Liffey, River Dodder and their tributaries are known to support otter. Current guidance in respect of the hydrological distance that territorial otters roam suggests a range of approximately 7.5km for females and 21km for male otters (O'Neill *et al*., 2009). Therefore, watercourses in proximity to the Proposed Scheme, particularly in its southern extent along the Tallaght section, could potentially be associated with QI populations associated with the Wicklow Mountains SAC. Wicklow Mountains SAC is located within the Dodder_SC_010 subcatchment, within which the Tallaght section of the Proposed Scheme is also located. As such, populations of otter within the footprint of the Proposed Scheme are potentially connected to the SAC population.

5.3.3 Marine mammals

93 The Proposed Scheme is hydrologically connected to Dublin Bay via the River Camac (Camac_040), Grand Canal, River Poddle (Poddle_010), River Dodder (Dodder_040), the Liffey Estuary Upper and Liffey Estuary Lower.

94 Harbour seal, grey seal, and harbour porpoise are known to be present in Dublin Bay. Both seal species are listed on Annex II of the habitats directive and harbour porpoise is listed on Annex II of the Habitats Directive. The nearest European site for which harbour seal and grey seal have been designated is Lambay Island SAC located approximately 22.6km from the Proposed Scheme. The nearest European site for which harbour porpoise has been designated is Rockabill to Dalkey Island SAC located approximately 12.2km from the Proposed Scheme.

5.3.4 Invertebrates

95 During ecological surveys for the Proposed Scheme, a search for species and or suitable supporting habitat was made. Two species included on Annex II list of Habitats Directive, namely marsh fritillary *Euphydryas aurinia* and white-clawed crayfish *Austropotamobius pallipes* were returned from the desktop review of the NBDC online database. The desk study returned records for white-clawed crayfish in the River Liffey, at Leixlip Bridge, approximately 17.7km upstream of the Proposed Scheme's outfall into the Liffey Estuary Upper. They have not been recorded downstream of Leixlip Bridge. Records for white-clawed crayfish also exist for the River Camac, approximately 360m south of the Proposed Scheme in an upstream section of the river. Additional records for this species exist further upstream in the River Camac.

96 White-clawed crayfish were recorded during aquatic surveys carried out in suitable aquatic habitats along the Proposed Scheme in 2022 White-clawed crayfish were recorded in low densities at in the River Camac at CBC0809AR001, where two male crayfish were identified. White-clawed crayfish were recorded in very high densities approximately 0.8km further downstream at CBC0809AR002, where 25 crayfish (including males, females and juveniles) were recorded[15] (See Appendix VII). It should be noted that the nearest European site designated for white-clawed crayfish is the River Barrow and River Nore SAC, which is located approximately 42km south-west of the Proposed Scheme in the River Barrow catchment, River Nore catchment and River Ballyteigue-Bannow catchment. As such they are not further considered in the NIS, but are dealt with in the chapter 12 (Biodiversity) of the EIAR.

97 There were no records of marsh fritillary from within the footprint of the Proposed Scheme. Desk study records in the wider area were largely historical (pre-1980s). Recent records for marsh fritillary were identified approximately 1.3km north-west of the Proposed Scheme near Arbour Hill in 2019 and in Clontarf in 2020 (NBDC Online database 2022). Recent records (2019) for this species also exist for North Bull Island, approximately 8km north-east from the Proposed Scheme (NBDC Online database, 2022). Marsh fritillary

[15] Triturus Environmental Ltd. (2022). *Aquatic baseline report for the BusConnects Dublin – Core Bus Corridor Infrastructure Works.* Prepared by Triturus Environmental Ltd. for Scott Cawley. July 2022.

are restricted to habitats containing a low, open sward with abundant devil's-bit scabious *Succisa pratensis* including sand dunes, calcareous grassland, fens, raised and blanket bogs, upland heaths and grasslands. Neither devil's-bit scabious nor these habitats were recorded within the footprint of the Proposed Scheme.

5.3.5 Kingfisher

98 The desk study found that kingfisher *Alcedo atthis*, an Annex I bird species, are known to occur within 1km of the Proposed Scheme and across the wider study area (NBDC Online database, 2022). Kingfisher are known to occur on the River Camac[16]. The River Liffey is known to support a population of kingfisher[17] and there are also records of kingfisher on the Grand Canal, which is traversed by the Proposed Scheme at Dolphin's Barn[18].

99 Habitat suitability assessment surveys carried out in October 2020 recorded suitable habitat for nesting kingfisher within 500m of the proposed crossing point of the River Camac. A number of overhanging trees along the River Camac were considered to have some roosting/fishing potential for kingfisher, however, the riverbanks are largely overgrown or reinforced with cement. There are also high levels of disturbance along the River Camac from traffic and dogs. No habitat suitable to support nesting kingfisher was recorded at the River Poddle crossing point.

100 Kingfisher were not recorded during multidisciplinary surveys or habitat suitability surveys within the footprint of the Proposed Scheme. The nearest European site for which this species is designated is River Boyne and River Blackwater SPA, which is located approximately 40.3km from the Proposed Scheme and lies within a separate catchment. Kingfisher populations within close proximity to the Proposed Scheme are not deemed to be SCI species.

5.3.6 Birds

101 The desk study returned records of three breeding 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* and lesser black-backed gull *Larus fuscus*.

102 The desk study returned records of a total of 44 regularly occurring wintering bird species across the study area (i.e., Grid Squares O03 and O13). Records included 9 species listed under Annex I of the Birds Directive,[19] 32 SCI species and an additional 2 Red Listed and 1 Amber Listed species. This includes 30 species with breeding and wintering populations.

103 The majority of wintering birds identified in the desk study are typically found in coastal, estuarine and intertidal habitats including the Liffey Estuary and Dublin Bay. A desk review of lands surrounding the Proposed Scheme returned records of several SCI wintering bird species which may use inland amenity grassland feeding sites, including light-bellied Brent goose, oystercatcher, curlew, black-headed gull, herring gull, lesser black-backed gull, lapwing and golden plover.

104 Five separate locations along the Proposed Scheme were surveyed for wintering birds between November 2020 and March 2021 and October 2021 and March 2022; amenity grassland sections along R819 Greenhills Road to the west of the M50 (referred to as CBC0809WB001); grassland area adjacent to Templewoods residential area off R819 Greenhills Road (referred to as CBC0809WB002); Tymon Park (referred to as CBC0809WB003); amenity grassland along Calmount Road (referred to as CBC0809WB004); and amenity grassland at Bunting Park (referred to as CBC0809WB005).

[16] Friends of the Camac- *Flora and Fauna* https://fotc.ie/flora-and-fauna [Accessed 07/07/2022]

[17] DCC (2022) *Dublin City Biodiversity Action Plan 2021-2022.*

[18] FERS Ltd. (2018). *Ecological survey of Clonburris Strategic Development Zone, Clondalkin, Co. Dublin.*

[19] Note that some species listed on the Annex I of the Birds Directive are also SCI species.

105 A total of 21 wintering bird surveys were carried out for the Proposed Scheme at the five locations described above (e.g., CBC0809WB001, CBC0809WB002, CBC0809WB003, CBC0809WB004 and CBC0809WB005). Species identified included herring gull, black-headed gull, common gull, Mediterranean gull, grey heron, oystercatcher, light-bellied brent goose and lesser black-backed gull. A single dropping, attributed to light-bellied brent goose was recorded during surveys undertaken. This dropping was recorded within the transect area surveyed in Bunting Park (CBC0809WB005) on 9 February 2021. Table 5 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 5: Wintering birds of Conservation Concern recorded at sites during the wintering bird surveys (2020-2021 and 2021-2022 seasons)

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	
CBC0809WB001- Amenity Grassland along R819 Greenhills Road (west of M50)					
Grey heron *Ardea cinerea* (H.)	1 bird loafing on site (06/10/2021)	Green	-	✓	N/A
Black-headed gull *Chroicocephalus ridibundus* (BH)	3 birds loafing on site (06/10/2021)	Amber (B/W)	-	✓	N/A
Herring gull *Larus argentatus* (HG)	5 birds loafing on site (18/01/2022)	Amber (B/W)	-	✓	N/A
CBC0809WB002- Templewoods Grassland					
Herring gull *Larus argentatus* (HG)	2 birds foraging on site (21/12/2021)	Amber (B/W)	-	✓	N/A
CBC0809WB003- Tymon Park					
Light-bellied brent goose *Branta bernicla hrota* (BG)	No birds observed for transect	Amber (W)	-	✓	45 birds feeding on football pitch near transect (24/11/2021)
Oystercatcher *Haematopus ostralegus* (OC)	2 birds flying north-west over site (18/01/2022)	Red (B/W)	-	✓	N/A
Black-headed gull *Chroicocephalus ridibundus* (BH)	1 bird flying east over site (09/11/2021)	Amber (B/W)	-	✓	65 birds feeding on football pitch near transect (24/11/2021)
Lesser back-backed gull *Larus fuscus* (LB)	N/A	Amber (B/W)	-	✓	One bird flying over transect (22/02/2021)
CBC0809WB004- Calmount Road Amenity Grassland					
Herring gull *Larus argentatus* (HG)	6 birds foraging on site (08/03/2022)	Amber (B/W)	-	✓	N/A
Lesser back-backed gull *Larus fuscus* (LB)	1 bird loafing on site (29/03/2022)	Amber (B/W)	-	✓	N/A
CBC0809WB005- Bunting Park					
Light-bellied brent goose *Branta bernicla hrota* (BG)	No birds observed for transect, but one dropping recorded (09/02/2021)	Amber (W)	-	✓	N/A
Black-headed gull *Chroicocephalus ridibundus* (BH)	73 birds foraging on site (01/02/2022)	Amber (B/W)	-	✓	N/A

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	
Herring gull *Larus argentatus* (HG)	9 birds foraging on site (26/10/2021)	Amber (B/W)	-	✓	N/A
Common gull *Larus canus* (CM)	15 birds loafing on site (11/01/2022)	Amber (B/W)	-	✓	N/A
Mediterranean gull *Larus melanocephalus* (MU)	CBC0809WB005: One bird feeding within transect (09/03/2021)	Amber (B)	✓	-	N/A

106 Wintering bird activity was low across all visits. Table 6 compares peak counts identified across surveys to their national and international populations.

Table 6: Wintering bird species recorded during wintering bird surveys in comparison to the 1% of its International and National Populations

Common Name/Scientific Name/BTO Code	Site Peak Counts	Associated European sites within the ZoI	1% of International Population	1% of National Population
Common gull *Larus canus* (CM)	15	-	16,400	n/a
Black-headed gull *Chroicocephalus ridibundus* (BH)	73	South Dublin Bay and River Tolka Estuary SPA North Bull Island SPA The Murrough SPA	31,000	n/a
Herring gull *Larus argentatus* (HG)	9	Ireland's Eye SPA Lambay Island SPA Skerries Islands SPA	14,400	n/a
Lesser back-backed gull *Larus fuscus* (LB)	1	-	5,500/ 6,300	n/a
Oystercatcher *Haematopus ostralegus* (OC)	2	South Dublin Bay and River Tolka Estuary SPA Malahide Estuary SPA North Bull Island SPA Rogerstown Estuary SPA	8,200	610
Grey heron *Ardea cinerea* (H.)	1	-	5,000	25
Mediterranean gull *Larus melanocephalus* (MU)	1	N/A	2,400	n/a
Light-bellied Brent goose Branta bernicla hrota (BG)	N/A (single dropping recorded in CBC0809WB005)	South Dublin Bay and River Tolka Estuary SPA Baldoyle Bay Malahide Estuary SPA North Bull Island SPA Rogerstown Estuary SPA Skerries Islands SPA The Murrough SPA	400	350

107 A review of a study into light-bellied Brent goose inland feeding sites[8] has identified no known SPA wintering bird feeding sites in the footprint of the Proposed Scheme. However, there are six known inland wintering bird feeding sites within approximately 300m of the Proposed Scheme i.e., the disturbance ZoI[20]. These sites include Tymon Park (major importance); Beechfield Road Sports Grounds Walkinstown (high importance); Pearse Memorial Park Crumlin (high importance); Clonmacnoise Roundabout / Crumlin (major importance); Synge St. GAA Pitches / Crumlin (major importance); and Brickfields Park / Crumlin (high importance). No droppings attributed to light-bellied Brent goose were recorded in any of the sites surveyed for the Proposed Scheme, indicating that these sites are not significant for this SCI species.

108 The desk study returned records of peregrine falcon *Falco peregrinus* and merlin *Falco columbarius,* two raptor species for which Wicklow Mountains SPA is designated, from within the wider vicinity of the Proposed Scheme. Records for peregrine exist for the Liffey Valley Park (Waterstown) area (Grid Ref: O0835) (2011) and Oblate Park area (Grid Ref: O1133) (2016), as well as the wider O13 10km grid square. Merlin is known to occur in the O03 10km grid square.

109 A number of SPAs have been included on a precautionary basis for assessment as it cannot with certainty be confirmed that their Special Conservation Interest species do not use areas in the vicinity of the Proposed Scheme as *ex-situ* habitat.

5.4 Hydrology

110 The Proposed Scheme is hydrologically connected to Dublin Bay via the River Camac (Camac_040), Grand Canal, River Poddle (Poddle_010), River Dodder (Dodder_040), the Liffey Estuary Upper and Liffey Estuary Lower.

111 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 7.

Table 7: 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 (2016-2021 Period)	Name of and Distance to Downstream Waterbodies along with their associated Water Quality
River Camac (Camac_040)	Three existing crossing points – under New Nangor Road (R134) to the west of the M50, under the New Nangor Road (R134) at Oak Road Business Park and under the Naas Road (R810). Runs parallel to the Proposed Scheme for much of the Clondalkin – Drimnagh section.	Q3 Riversdale Estate Bridge, Camac – Orchard and just downstream Clondalkin bridge, Camac – Kylemore Road bridge, Camac Close Emmet Road Poor 'At risk'	It enters the Liffey Estuary Upper (classified as "Potentially Eutrophic") adjacent to Heuston Station. It then enters the Liffey Estuary Lower transitional waterbody (classified as "Intermediate") at Custom House Quay, which ultimately drains to Dublin

[20] *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.

Watercourse	Location in relation to the Proposed Scheme	EPA Q-Values (Monitoring Station) and Water Framework Directive Water Quality Status/Risk Score (2016-2021 Period)	Name of and Distance to Downstream Waterbodies along with their associated Water Quality
			Bay coastal waterbody (classified as "Unpolluted").
Grand Canal **(Main Line (Liffey and Dublin Bay)**	One existing crossing point- at Dolphins Barn bridge. Lies adjacent to the Proposed Scheme at Yellowmeadows in the western extent of the Clondalkin section.	Q-Value Score not applicable Good Ecological Potential Risk - N/A	It flows into the Liffey Estuary Lower transitional waterbody (classified as "Intermediate") at Grand Canal Dock, which ultimately drains to Dublin Bay coastal waterbody (classified as "Unpolluted").
River Poddle (Poddle_010)	Two existing crossing points - at Bancroft Park and under Sant Luke's Avenue (R110) in the City Centre where the river is culverted.	Q3 The Priory, Kimmage Road Poor 'At risk'	It flows under the Proposed Scheme in Tallaght and then continues flowing to the east of the Proposed Scheme, until it flows into the Liffey Estuary Upper at Usher's Quay (classified as "Potentially Eutrophic"). It then enters the Liffey Estuary Lower transitional waterbody (classified as "Intermediate") at Custom House Quay, which ultimately drains to Dublin Bay coastal waterbody (classified as "Unpolluted").
Liffey Estuary Upper	Hydrologically connected to the Proposed Scheme via the River Poddle.	Q-Value Score not applicable Good 'At risk'	It flows into the Liffey Estuary Lower transitional waterbody (classified as "Intermediate") at Custom House Quay, which ultimately drains to Dublin Bay coastal waterbody (classified as "Unpolluted").
Liffey Estuary Lower	Hydrologically connected to the Proposed Scheme via the Liffey Estuary Upper and Grand Canal.	Q-Value Score not applicable Moderate 'At risk'	The Liffey Estuary Lower transitional waterbody (classified as "Intermediate") at Custom House Quay and Grand Canal Dock ultimately drains to Dublin Bay coastal waterbody (classified as "Unpolluted").
Dublin Bay	Hydrologically connected to the Proposed Scheme via the Grand Canal and Liffey	Q-value score N/A Good	N/A

Watercourse	Location in relation to the Proposed Scheme	EPA Q-Values (Monitoring Station) and Water Framework Directive Water Quality Status/Risk Score (2016-2021 Period)	Name of and Distance to Downstream Waterbodies along with their associated Water Quality
	Estuaries (Upper and Lower)	'Not at Risk'	

5.5 Hydrogeology

112 The Geological Survey of Ireland (GSI) data indicates that underlying aquifer is a Locally Important Aquifer-Bedrock which is Moderately Productive only in Local Zones, and that the bedrock formation 1:500k underlying the Proposed Scheme is "*Dark-grey argillaceous & cherty limestone and shale (Calp)*".

113 The Proposed Scheme overlies one ground waterbody, namely the Dublin ground waterbody. Environmental data sourced from the EPA for this ground waterbody is presented below:

Dublin Groundwater Body

- The groundwater body it is ranked as being of "*Good*" Ground Waterbody WFD Status (2016-2021) and "*not at risk*" of failing the WFD groundwater quality objectives for the majority of its area; and
- The aquifers located within this ground waterbody and where the Proposed Scheme transverses are classified as "*locally important aquifer – moderately productive only in local zones*".

114 The vulnerability of the Dublin ground waterbody to human activities largely ranges from "Rock at or Near *Surface*", "*Extreme*", "*High*", "*Moderate*" to "*Low*" within the footprint of the Proposed Scheme.

5.6 Soils & Geology

115 The 1:100,000 GSI bedrock geology map of the area indicates that the underlying bedrock along the Proposed Scheme is underlain by the Lucan Formation comprising Carboniferous Limestones. The majority of the Dublin City area was a deep marine basin known as the Dublin Basin where these sedimentary rocks were deposited.

116 The GSI Quaternary subsoils map shows the footprint of the Proposed Scheme is predominantly underlain by made ground. Additionally, there are areas of alluvial deposits, tills and gravels. The majority of the soils expected to be encountered within the study area are made ground comprising varying forms of hard standing materials including road pavements and footpaths. However, there are topsoil and other soils present within the study area.

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

117 Based on 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

118 The Proposed Scheme does not overlap with any European site. The nearest European site to the Proposed Scheme is Glenasmole Valley SAC, which is located 2.9km away. The nearest European site with a hydrological connection to the Proposed Scheme is also Glenasmole Valley SAC, which lies approximately 3.9km upstream of the Proposed Scheme. The next nearest European sites are South Dublin Bay SAC which is located approximately 6.5km downstream of the Proposed Scheme, as is South Dublin Bay and River Tolka Estuary SPA. Therefore, there is no potential for direct habitat loss and fragmentation to occur as a result of the Proposed Scheme. Habitat loss may occur indirectly as a consequence of severe habitat degradation arising from a reduction in water quality and /or a change to the hydrological regime, as described in section 6.2 below.

119 Special Conservation Interest (SCI) species for which SPAs in the vicinity of the Proposed Scheme have been designated 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, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA and The Murrough SPA).

120 Five potential inland feeding sites within the footprint of the Proposed Scheme were surveyed to inform this assessment- CBC0809WB001, CBC0809WB002, CBC0809WB003, CBC0809WB004 and CBC0809WB005. Sections of CBC0809WB001, composed of stretches of amenity grassland along R819 Greenhills Road, will be lost, as a result of the construction of the Proposed Scheme. Construction Compound TC4 is proposed for an area of grassland between R819 Greenhills Road and Treepark Road. In addition, amenity grassland between R819 Greenhillls Road and Birchview Avenue will be lost to facilitate the installation of a proposed cycle track and bus only route. Another area of grassland will be lost to accommodate proposed SuDS features between R819 Greenhills Road and Tymonville Crescent. Low numbers of herring gull, black-headed gull and a single heron were recorded during winter bird surveys at CBC0809WB001.

121 Construction Compound TC6 is proposed for an area within Tymon Park (CBC0809WB003) east of the M50 (south of the wintering bird transect. Construction Compound TC7 is located on the opposite side of the R819 Greenhills Road from the north-western tip of Tymon park / transect CBC0809WB003 extent).In addition, permanent land take at the edge of this site will also be required to accommodate proposed pedestrian and cyclist infrastructure. One black-headed gull, two oystercatchers and one lesser black-backed gull were recorded flying over this site during winter bird surveys undertaken. A flock of 45 light-bellied brent goose were observed foraging on pitches close to the survey area also. Low numbers of herring gull and lesser black-backed gull were also recorded at Calmount Road (CBC0809WB004), where Construction Compound TC3 and TC4 are proposed for the duration of construction. Finally, Construction Compound TC8 is proposed at Bunting Park (CBC0809WB005), where flocks of black-headed gull, herring gull and common gull were recorded, as well as a single Mediterranean gull, during winter bird surveys undertaken. A single goose dropping was also recorded here on 9th February 2021.

122 The provision of Construction Compounds TC3, TC4 and TC8, to facilitate nearby construction works, will result in the short-term (36 months) loss of suitable wintering bird habitat for the duration of construction of the Proposed Scheme. According to the data collected at these sites during winter bird surveys undertaken during both the 2020-2021 and 2021-2022 winter bird season, none of these sites are deemed to be significant inland foraging resources for wintering birds, given the low numbers, with respect to their national or international populations, of birds recorded here. Regardless, the Proposed Scheme will result (for the duration of the Construction Phase) in the loss of a suitable inland feeding site for these SCI bird species. Therefore, there is potential for impacts on SCI species associated with SPAs to occur as a result of habitat loss / fragmentation. Therefore, there is potential for in-combination effects to occur.

123 Regarding the two raptor species which are designated for the Wicklow Mountains SPA, according to the Scottish Natural Heritage Guidance[21] during the breeding season the core foraging range for peregrine is estimated at 2km from the nest site, with the maximum recorded distance of 18km in Britain. During the winter season the mean foraging range reduces to 3km with the maximum range being 6.5km. Likewise, during the breeding season merlin are known to forage within 5km of the next site, while in winter this generally reduces to 500m but can extend to 1.5km. Wicklow Mountains SPA lies approximately 7.3km south-east of the Proposed Scheme, which is well outside the typical foraging ranges for both peregrine and merlin. Therefore, likely significant effects on these two SCI bird species, as a result of *ex-situ* habitat loss / fragmentation, can be excluded.

124 With the exception of otter, the location of the Proposed Scheme and its construction will not result in any direct loss or fragmentation of Annex I habitats or supporting habitats to Annex II species, for which European sites are designated for within the ZoI of the Proposed Scheme. In terms of otter, while the Proposed Scheme does cross the River Camac at Oak Road Business Park, it does so at an existing crossing location within which the river is culverted. In-combination effects with the River Camac Flood Alleviation Scheme will comprise the extension of twin culverts, the demolition of the existing concrete headwall, and its replacement with a new pre-cast concrete headwall at this location. Disturbance to White clawed crayfish are no QI Population and potential impacts are addressed in Chapter 12 (Biodiversity) of the EIAR.

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

125 The Proposed Scheme has the potential to result in habitat degradation / effects on QI / SCI species as a consequence of hydrological impacts during the both the construction and operation phases. 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, which in turn can affect any species which utilise this aquatic environment. Otter use riparian habitats for foraging and commuting purposes and therefore would be potentially at risk of hydrological impacts. Wicklow Mountains SAC, which is located approximately 5.3km south of the Proposed Scheme, is the closest European site for which otter is the QI species. Typically, otter territories are within the range of 7.5km for females and up to 21km for males (Ó'Neill *et al*., 2009). The Proposed Scheme interacts with the following watercourses: River Poddle, River Camac, Grand Canal, River Dodder (through the construction of Construction Compound TC5 and associated potential contaminated run-off), Liffey Estuary Upper and Liffey Estuary Lower. Whilst these watercourses lie within the typical territorial ranges of otters, only the River Dodder (Dodder_040) shares a hydrological connection to the Wicklow Mountains SAC. The Tallaght section of the Proposed Scheme also lies within the same subcatchment as Wicklow Mountains SAC (Dodder_SC_010 subcatchment). Therefore, there is potential for otter associated with the Wicklow Mountains SAC to move downstream and to come within the ZoI of the Proposed Scheme. A reduction in water quality as a result of an accidental pollution event (either alone or in combination with other pressures on water quality) however could result in the degradation of the local aquatic environment, which could in turn negatively affect the otter population through direct contact with pollutants or a decline in fish prey. Notwithstanding the limited interaction between Construction

[21] Scottish Natural Heritage (SNH) (2016) *Assessing Connectivity with Special Protection Areas (SPAs).* June 2016 Version 3

Compound TC5 and the River Dodder, habitat degradation / effects on the QI otter population for Wicklow Mountains SAC, as a result of hydrological impacts by the Proposed Scheme, cannot be discounted.

126 The remaining QIs for the SAC, namely Oligotrophic water containing very few minerals of sandy plains (Littorelletalia); Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoteo-Nanojuncetea; Natural dystrophic lakes and ponds; Northern Atlantic wet heaths with *Erica tetralix*; European dry heaths; Alpine and Boreal heaths; Calaminarian grasslands of the Violetalia calaminariae; Species-rich *Nardus* grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe)*; Blanket Bogs (*if active bog); Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani); Calcareous rocky slopes with chasmophytic vegetation; and Old sessile oak Woods with *Ilex* and *Blechnum* in the British Isles do not occur within the ZoI of the Proposed Scheme. These habitats are located upstream of the Proposed Scheme and will not be subject to any hydrological impacts as a result of the Proposed Scheme.

127 In addition, the Proposed Scheme is hydrologically connected to Dublin Bay via the River Camac (Camac_040), River Poddle (Poddle_010), Liffey Estuary Upper and Liffey Estuary Lower, as well as a network of established combined sewer / surface water pipes which discharge via Ringsend WwTP. The potential 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 contaminants into receiving waters. This occurrence could happen at any time during construction but could potentially be exacerbated by the removal of vegetation. It should be noted that a highly substantial event / events would be required to generate such quantities, which is not deemed likely. In the absence of mitigation, the associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the discharge point or location of the accidental pollution event. Such an occurrence, of a sufficient magnitude, either alone or in combination with other pressures on water quality, could undermine the conservation objectives of the European sites downstream in Dublin Bay (i.e., North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Rockabill to Dalkey Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA and Dalkey Islands SPA).

128 The QI habitats for which Howth Head SAC is designated (i.e., vegetated sea cliffs [1230] and European dry heaths [4030]) lie above the high water mark. Pollution is not regarded to be a threat or pressure which could potentially impact this SAC (NPWS, 2021d)[22] and is not regarded to be a significant threat / pressure to this habitat at a national level (Barron *et al*., 2011)[23]. Therefore, the QI habitats of Howth Head SAC will be unaffected by a degradation in the surface water quality of the coastal waters of Dublin Bay and significant effects in that regard can be excluded.

129 In a potential worst case scenario, 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 SCI bird species and QI marine mammal species that commute, forage and loaf in Dublin Bay i.e. birds associated with Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Ireland's Eye SPA, North Dublin Bay SPA, South Dublin Bay and River Tolka Estuary SPA, Baldoyle Bay SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Dalkey Islands SPA, The Murrough SPA, as well as 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 downstream, which in turn could negatively affect the SCI bird species that rely

[22] NPWS (2021d). *Natura 2000- Standard Data Form - Howth Head SAC [000202].* Updated 12-2021.

[23] Barron, S.J., Delaney, A., Perrin, P.M., Martin, J.R. & O'Neill, F.H. (2011). *National survey and assessment of the conservation status of Irish sea cliffs. Irish Wildlife Manuals No. 53.* National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin, Ireland.

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. In a worst-case scenario these potential impacts could occur to such a degree that the conservation objectives of the Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Ireland's Eye SPA, North Dublin Bay SPA, South Dublin Bay and River Tolka Estuary SPA, Baldoyle Bay SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Dalkey Islands SPA, The Murrough SPA, Rockabill to Dalkey Island SAC and Lambay Island SAC are undermined.

130 As the Proposed Scheme has the potential to result in habitat degradation and effects on SCI bird species and QI marine mammal species associated with European sites located in Dublin Bay, as the result of hydrological impacts, there is the potential for in combination effects to occur.

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 Wicklow Mountains SAC, North Dublin Bay SAC, South Dublin Bay 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, 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.

6.3 Habitat degradation / effects as a result of hydrogeological Impacts

131 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.

132 The potential for hydrogeological impacts is highly variable depending on the nature of the proposed works at specific locations and the receiving environment ground conditions. The unmitigated hydrogeological ZoI of the Proposed Scheme is not considered to extend to any groundwater dependent terrestrial ecosystems linked to European sites. This ZoI follows the professional judgement of the hydrogeology specialists.

133 As the Proposed Scheme does not have the potential to result in habitat degradation of the Qualifying Interest species / Special Conservation Interest supporting habitat of a European site as the result of hydrogeological impacts there is no potential for in combination effects to occur in that regard.

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

134 Six areas of Japanese knotweed, a species listed on the Third Schedule of the (Birds and Natural Habitats) Regulations 2011, are present within, or in close proximity to, the Proposed Scheme. Four of these areas of Japanese knotweed were recorded in an area of scrub and unmanaged grassland between the R134 New Nangor Road and Killeen Road. Construction Compound TC12 is proposed in this area. In the absence of mitigation, there is potential for this species to spread or be introduced, during construction and / or routine maintenance / management works, to terrestrial and habitat areas in European sites downstream in 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). These in turn may result in the degradation of the existing habitats, in particular those habitats not permanently or regularly inundated by seawater, potentially outcompeting other native species and affecting species composition and physical structure of the habitat. Therefore, it is possible that the spread / introduction of non-native invasive species could undermine the conservation objectives of these European sites.

135 It is not considered possible that the listed non-native invasive species could spread to European sites that are located a considerable distance from the outfall locations of the River Camac, Poddle River, Grand Canal, Liffey Estuary Upper and Liffey Estuary Lower and separated by a large marine waterbody (i.e. Howth

Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, Ireland's Eye SPA, The Murrough SPA and Dalkey Islands SPA).

136 As the Proposed Scheme has the potential to result in habitat degradation of the Qualifying / Special Conservation Interest species of European sites as the result of the spread of non-native invasive species, there is the potential for in combination effects to occur in association with other activities / plans / projects.

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

137 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 may lead to a 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_x, NO_2), volatile organic compounds (VOCs), particulate matter (PM), heavy metals (HM) and ammonia (NH_4) 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.

138 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 from the Proposed Scheme boundary during the Operational Phase. There are no European sites present within these distances.

139 As such the Proposed Scheme does not have the potential to result in habitat degradation of the Qualifying / Special Conservation Interest species / habitats of any European sites, as a result of air quality impacts, during either the Construction or Operational Phase of the Proposed Scheme. There is, therefore, no potential for in combination effects to occur in that regard.

6.6 Disturbance and displacement impacts

140 A temporary and / or permanent increase in noise, vibration and / or human activity levels during the Construction Phase 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[24]. For wintering birds, disturbance effects would not be expected to extend beyond a distance of approximately 300m[25], as noise levels

[24] This is consistent with Transport Infrastructure Ireland (TII) guidance (Guidelines for the Treatment of Otters prior to the Construction of National Road Schemes (2006) and Guidelines for the Treatment of Badgers prior to the Construction of National Road Schemes (2005)) 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.

[25] 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

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.

141 There are a number of coastal SPAs located in relatively close proximity to the Proposed Scheme which are designated for SCI species that are known to forage and / or roost at inland sites, such as amenity grassland playing pitches i.e., Malahide Estuary SPA, Baldoyle Bay SPA, South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA and Lambay Island SPA, as well as The Murrough SPA (a distant site outside the typical 20km range, but nonetheless supporting Brent Geese and a number of other SCI species that are recorded from Dublin Bay). Suitable inland foraging / roosting sites, which these bird species utilise, are located within the potential ZoI of the Proposed Scheme (See Section 4.3 in particular associated with Construction Compounds TC3, TC4 and TC8). Therefore, there is potential for the Proposed Scheme to result in disturbance / displacement impacts on SCI populations associated with European sites. However, given the low number of populations of SCI bird species recorded at these locations during survey for the Proposed Scheme, the short term loss of these areas is not considered to be significant in terms of adversely affecting the integrity of these species' conservation objectives. They are considered further as part of the Chapter 12 (Biodiversity) in the EIAR and mitigation therein in respect of short term habitat loss is presented.

142 Regarding the raptor species, for which Wicklow Mountains SPA are designated (e.g., merlin and peregrine), a study by Ruddock & Whitfield[26], which included a review of previous studies in this area, offers no definitive distance after which disturbance to merlin is not significant but indicates that an upper limit of 300-500m may be sufficient in the case of breeding or nesting merlin. Likewise, a distance of 500-750m is likely to be sufficient for breeding peregrines. Adopting a precautionary approach, based on the available data regarding disturbance distances for merlin and peregrine, it can be concluded that disturbance to these bird species would be most likely to occur within 1km (i.e., the disturbance ZoI is 1km). There are no European sites within the disturbance ZoI; the next nearest European site to the Proposed Scheme is 4.3km away. There are also no habitat areas within the disturbance ZoI of the Proposed Scheme that support populations of the SCI species for which Wicklow Mountains SPA is designated. Considering the above, there is no potential for the Proposed Scheme to result in disturbance / displacement impacts on the SCI species for which Wicklow Mountains SPA is designated[27].

143 Although no signs of kingfisher were recorded during field surveys of the Proposed Scheme, kingfisher, an Annex I bird species, is known to be present in the wider study area, in particular, along the River Camac and the Grand Canal. 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[27]. The nearest SPA for which kingfisher has been designated is the River Boyne and Blackwater SPA, which is located approximately 40.3km away. Therefore, kingfisher present in the vicinity of the Proposed Scheme are not associated with an SPA population.

144 Although no signs of otter were recorded during the original multidisciplinary field surveys of the Proposed Scheme, the River Dodder, River Camac and the Grand Canal are known to support otter, an Annex II and IV mammal species. Additional surveys in March 2022 recorded a potential otter slide was noted in riparian vegetation along the northern side of the Grand Canal (downstream of where it flows under the M50 – outside of but adjacent to the Proposed Scheme Red Line Boundary). The July 2022 aquatic survey noted two degraded spraints around survey site CBC0809AR0002 on the River Camac. The nearest SAC to the

out of the affected zone or leaving the site altogether. At approximately 300m, typical noise levels associated with construction activity (BS 5228) are generally below 60dB or, in most cases, are approaching the 50dB threshold.

[26] Ruddock, M. & Whitfield, D.P. (2007). *A Review of Disturbance Distances in Selected Bird Species*. A report from Natural Research Projects) Ltd. to Scottish Natural Heritage. Available at: https://www.nature.scot/sites/default/files/2018-05/A%20Review%20of%20Disturbance%20Distances%20in%20Selected%20Bird%20Species%20-%20Natural%20Research%20Ltd%20-%202007.pdf [Accessed 24/05/2022]

[27] 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/

Proposed Scheme for which otter has been designated is Wicklow Mountains SAC which is located approximately 5.3km south of the Proposed Scheme. Research carried out by Ó'Néill *et al.,* (2009) on ranging behaviours of otter on river systems in Ireland found that female otter ranges averaged 7.5km while male otter home ranges varied up to 21km.). The Proposed Scheme interacts with the following watercourses: River Poddle, River Camac, Grand Canal, River Dodder (through the construction of Construction Compound TC5 and associated contaminated run-off), Liffey Estuary Upper and Liffey Estuary Lower. Whilst these watercourses lie within the typical territorial ranges of otters, only the River Dodder (Dodder_040) shares a hydrological connection to the Wicklow Mountains SAC. The Tallaght section of the Proposed Scheme also lies within the same subcatchment as Wicklow Mountains SAC (Dodder_SC_010 subcatchment). Notwithstanding the limited interaction between Construction Compound TC5 and the River Dodder, it cannot be excluded that the otter population in the vicinity of the Tallaght section of Proposed Scheme is associated with the Wicklow Mountains SAC population Therefore, disturbance and displacement impacts on the QI otter population for Wicklow Mountains SAC, as a result of the Proposed Scheme, cannot be excluded.

145 Although marine mammals associated with European sites may commute and forage within the Liffey Estuary, it is not considered to be likely that there will be any impacts on these species as a result of the Proposed Scheme as it lies approximately 6.7km upstream of Dublin Bay, in a highly urbanised environment and where water levels can drop diurnally reducing the likelihood of marine mammals venturing this far up-river.

146 As the Proposed Scheme has the potential to result in the disturbance / displacement of the Qualifying / Special Conservation Interest species of any European site, there is the potential for in combination effects to occur in association with other activities / plans / projects.

The ZoI for disturbance associated with general construction activities for wintering birds, disturbance effects would not be expected to extend beyond a distance of approximately 300m. There are no European sites within this ZoI. Although, potential *ex-situ* feeding sites, supporting SCI listed bird species of the following European sites, are known to be present within this ZoI; Malahide Estuary SPA, Baldoyle Bay SPA, South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA and The Murrough SPA . However the short term loss of these areas is not considered to be significant in terms of adversely affecting the integrity of these species' COs. In addition, QI mammal species (Otter) for which Wicklow Mountains SAC is designated is within the ZoI of the Proposed Scheme.

6.7 Summary

147 The potential impacts associated with the Proposed Scheme have the potential 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; Rockabill to Dalkey Island SAC; Lambay Island SAC; Wicklow Mountains 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.

148 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 8.

Table 8: 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 wintering 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, 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, namely: Wicklow Mountains SAC, North Dublin Bay SAC, South Dublin Bay 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, 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. There are non-native invasive species present within or adjacent to the Proposed Scheme and in the surrounding area, therefore there is a risk associated with the Proposed Scheme to downstream European sites from the spread / introduction of non-native invasive species: South Dublin Bay and River Tolka Estuary SPA, South Dublin Bay SAC, North Dublin Bay SAC, and North Bull Island SPA.
Air Quality impacts Potentially up to 50m from the Proposed Scheme boundary and 500m from the Construction Compound at Construction phase, and up to 200 metres at Operation Phase.	No. There are no European sites at risk of air quality effects associated with the Proposed Scheme
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 five *ex-situ* inland feeding site which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme. However, given the low numbers of birds recorded from these sites, none of which reached the national 1% population threshold and therefore the integrity of the COs for SCI species affected are

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?
	not considered to be adversely affected by the Proposed Scheme. In addition, otter in the vicinity of the Tallaght section of the Proposed Scheme may be associated with the QI population associated with Wicklow Mountains SAC and impacts on the QI population cannot be excluded as a result. Wicklow Mountains SAC, 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.

7 Assessment of Potential Effects on European Sites

149 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.

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

151 The assessment of the Proposed Scheme in combination with any other plans or projects on European sites is presented in Section 9.

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

7.1.1 Ecological Baseline Descriptions for North Dublin Bay SAC and South Dublin Bay SAC

North Dublin Bay SAC

152 The Natura 2000 Standard Data Form (NPWS, 2020a) 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 suggested to be actively accreting. Saltmarsh habitats are well represented at the site with particularly good zonation evident. Of note, is the occurrence of Petalwort *Petallophyllum ralfsii*, a QI plant species, with its only known location away from the western seaboard being on Bull Island. Threats to the site include pollution from Dublin Port, commercial bait digging, recreational activities and water abstraction by golf clubs.

South Dublin Bay SAC

153 According to the Natura 2000 standard data form for South Dublin Bay SAC (NPWS, 2020b), 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

154 The qualifying interests of North Dublin Bay SAC and South Dublin Bay SAC, and the overall conservation objectives, are listed in Table 9.

Table 9: Qualifying Interests and Conservation Objectives for North Dublin Bay SAC [000206] and South Dublin Bay SAC [000210]

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 (2013b) *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 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 (2013a) *Conservation Objectives: South Dublin Bay SAC 000210.* 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.

155 In conjunction with considering the generic conservation objective for this SAC "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.

156 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 is deemed to 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

157 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 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 species as a result of hydrological impacts

158 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 River Camac (Camac_040), River Dodder (Dodder_040), Grand Canal, River Poddle (Poddle_010), the Liffey Estuary Upper and Liffey Estuary Lower as well as a network of interconnecting and established surface or combined sewer/surface water pipes. 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

159 Six areas of Japanese knotweed, a species listed on the Third Schedule of the (Birds and Natural Habitats) Regulations, are present within, or in close proximity to, the Proposed Scheme. Four of these areas of Japanese knotweed were recorded in an area of scrub and unmanaged grassland between the R134 New Nangor Road and Killeen Road. Construction Compound TC12 is proposed in this area. During construction and / or routine maintenance / management work, this species could potentially, albeit unlikely, spread or be introduced to terrestrial habitats located within downstream European sites via surface water features. The introduction and / or spread of this non-native 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 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 the River Poddle (Poddle_010), River Camac (Camac_040), River Dodder (Dodder_040) and Grand Canal as well as the Liffey Estuary which ultimately discharges directly to South Dublin Bay. Therefore, there is potential, albeit unlikely, 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 non-native invasive species spread.

7.1.3.3 Summary

160 Table 10 presents a summary of the potential impacts of the Proposed Scheme on the qualifying interests of North Dublin Bay SAC and South Dublin Bay SAC, and how these impacts relate to affecting the sites' conservation objectives.

Table 10: ***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?**	**Residual Impacts?**
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 non-native 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 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. The mitigation measures prescribed in Section 7.1.4 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
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			
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	Yes	No

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
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 non-native invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats 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.	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. The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.	With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
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 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 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. The mitigation measures described in Section 7.1.4 will prevent the introduction and/or	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not
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			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Physical structure: flooding regime/Hectares flooded; frequency/Maintain natural tidal regime	The introduction and/or spread of non-native 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.	spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.	have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
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%			
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 quality (vegetation structure and composition) and area/distribution of intertidal/coastal habitats. The introduction and/or spread of non-native 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	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. The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation
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?	Residual Impacts?
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)	and abundance and the physical structural integrity of the habitat.		condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
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 quality (vegetation structure and composition) and area/distribution of intertidal/coastal habitats. The introduction and/or spread of non-native 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 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. The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
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			
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%			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
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 non-native 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 The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
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			
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.	Yes The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.	No With the effective implementation of the mitigation measures
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			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Vegetation structure: zonation/Occurrence/Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession	The introduction and/or spread of non-native 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.		outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
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			
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 non-native 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	Yes The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the
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			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
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)	and abundance and the physical structural integrity of the habitat.		conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
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			
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 non-native 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 The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual
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?	Residual Impacts?
Vegetation composition: negative indicator species/Percentage cover/Negative indicator species (including non-native species) to represent less than 5% cover			impacts which could adversely affect the integrity of the SAC
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	No 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 non-native 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.	No The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
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			
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:			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
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 non-native 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 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. The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
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:			
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	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.	No With the effective implementation of the mitigation measures outlined in
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			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Vegetation structure: zonation/Occurrence/Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession	(vegetation structure and composition) and area/distribution of intertidal/coastal habitats. The introduction and/or spread of non-native 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.	The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.	Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
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 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 non-native 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	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. The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or
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			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Vegetation structure: vegetation cover/Percentage cover at a representative number of monitoring stops/Maintain more than 90% of area outside creeks vegetated	other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.		favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
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:			
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 non-native 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 The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable
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?	Residual Impacts?
Vegetation composition: negative indicator species/Percentage cover/Negative indicator species (including non-native species) to represent less than 5% cover			conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC

7.1.4 Mitigation Measures

161 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.

162 The CEMP (Appendix III of this NIS) 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).

163 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.

164 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.

165 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).

- A number of sub-plans have also been prepared as part of the CEMP, including a SWMP and an 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 NIS will be implemented in full by the appointed contractor to the satisfaction of the NTA.

Measures to Protect Surface Water Quality

166 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.

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

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

- CIRIA (2015) *Environmental Good Practice on Site Guide*, 4th Edition (C741).
- 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 (2006a) *Control of water pollution from linear construction projects: Technical guidance (C648);*
- CIRIA (2006b) *Control of water pollution from linear construction projects: Site guide (C649);*
- 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

169 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 (EIRP) has been included within 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 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.
- Any dewatering in areas of contaminated ground shall be designed by the appointed contractor to minimise the mobilisation of contaminants into the surrounding environment.
- 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

170 Mitigation for the Operational phase has been built into the design of the Proposed Scheme. The overall net increase in impermeable area for the road corridor will be 59,368m^2. This increase in impermeable area will be managed for the Proposed Scheme through a combination of oversized pipes, bioretention areas, soakaways, green roofs, filter drains and tree pits. 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 Drawings).

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

172 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.

173 These standard drainage design controls have been proven through widespread use in developments across the country. The proposed drainage system incorporated into the engineering 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 (DDS, 2005).

174 In the Operational Phase, the infrastructure (including the maintenance regime for SuDS and monitoring of waterbodies) will be carried out by the relevant local authority and will be subject to their management procedures. No additional mitigation is required.

Measures to Prevent the Spread of Non-Native Invasive Species to Downstream European Sites

Confirmatory Pre-construction survey

175 The NTA will ensure that a confirmatory pre-construction non-native invasive species survey will be undertaken by a suitably qualified specialist to confirm the absence and / or extent of all Third Schedule non-native invasive species within the footprint of the Proposed Scheme. Where an infestation is confirmed / identified within the footprint of the Proposed Scheme, this will require the implementation of a Non-Native Invasive Species Management Plan (refer to the CEMP in Appendix III of this NIS).

Non-native Invasive Species Management Plan (ISMP)

176 Where a pre-construction non-native 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.

177 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 *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.

178 The NTA will ensure that all control measures specified in the Proposed Schemes non-native ISMP shall be implemented by a suitably qualified and licenced specialist prior to the construction of the Proposed Scheme to control the spread of newly established non-native invasive species within the footprint of the Proposed Scheme. Furthermore, the appointed contractor will adhere to control measures specified within the Non-Native ISMP throughout the Construction Phase of the Proposed Scheme.

179 The site will be monitored by the appointed contractor in consultation with the suitably qualified and licensed specialist after the control measures have been implemented. Any re-growth will be subsequently treated as detailed in the Proposed Scheme ISMP. The ISMP is contained within Appendix III to the NIS.

Measures to Prevent the Spread of Non-Native Invasive Species to Downstream European Sites During Operation

180 Once the Proposed Scheme is in operation, the Local Authorities will implement a maintenance and management regime subject to their management procedures, where any introduction of non-native invasive plant species will be managed. No additional mitigation is required.

7.1.5 Residual Impacts

181 With the effective implementation of appropriate mitigation identified in this NIS, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the Qualifying Interest habitats / species 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 the 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

182 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the Qualifying 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, it has been concluded that the Proposed Scheme does not pose a risk of adversely affecting (either directly or indirectly) the integrity of North Dublin Bay SAC and South Dublin Bay SAC.

7.2 Rockabill to Dalkey Island SAC [003000] and Lambay Island SAC [000204]

7.2.1 Ecological Baseline Description for Rockabill to Dalkey Island SAC

183 According to the Natura 2000 Standard Data Form (NPWS, 2019e), 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.

7.2.2 Ecological Baseline Description for Lambay Island SAC

184 In the Natura 2000 Standard Data Form (NPWS, 2019f), 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.

7.2.3 Qualifying Interests and Conservation Objectives of Rockabill to Dalkey Island SAC and Lambay Island SAC

185 The Qualifying Interests of Rockabill to Dalkey Island SAC and Lambay Island SAC, and the overall conservation objectives, are listed in Table 11.

Table 11: Qualifying Interests and Conservation Objectives of Rockabill to Dalkey Island SAC and Lambay Island SAC

Qualifying Interest(s)	Conservation Objective(s)
Rockabill to Dalkey Island SAC [003000] 1170 Reefs 1351 Harbour porpoise *Phocoena phocoena* *S.I. No. 94/2019 - European Union Habitats (Rockabill to Dalkey Island Special Area of Conservation 003000) Regulations 2019.* NPWS (2013c) *Conservation Objectives: Rockabill to Dalkey Island SAC 003000.* 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
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 (2013f) *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

186 In conjunction with considering the generic conservation objective for this SAC "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 Rockabill to Dalkey Island SAC and Lambay Island SAC also informed this assessment.

187 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 is deemed to 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 Rockabill to Dalkey Island SAC and Lambay Island SAC are presented in Section 7.2.4.2.

7.2.4 Examination and Analysis of Potential Direct and Indirect Impacts

188 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 Rockabill to Dalkey Island SAC and Lambay Island SAC is:

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

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

189 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 River Camac (Camac_040), River Dodder (Dodder_040), Grand Canal, River Poddle (Poddle_010), the Liffey

Estuary Upper and Liffey Estuary Lower as well as a network of interconnecting and established surface or combined sewer/surface water pipes. In a potential worst case scenario, 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 the QI marine mammal species that commute and forage in Dublin Bay i.e., 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 downstream (e.g., reefs [1170]), which in turn could negatively affect the QI marine mammal species that rely upon these habitats for foraging purposes. It could also negatively affect the quantity and quality of prey available to populations of QI marine mammals. Therefore, there is potential for the Proposed Scheme to result in significant effects which could have implications for the conservation objectives of Rockabill to Dalkey Island SAC and Lambay Island SAC as a result of hydrological impacts.

7.2.4.2 Summary

190 Table 12 presents a summary of the potential impacts of the Proposed Scheme on the Qualifying Interests of Rockabill to Dalkey Island SAC and Lambay Island SAC, and how these impacts relate to affecting the site's conservation objectives.

Table 12: Potential Impacts/Effects on the Conservation Objectives of Rockabill to Dalkey Island SAC and Lambay Island SAC

Conservation Objectives Attribute/Measure/Target	**Potential Impacts Requiring Mitigation?**	**Are mitigation measures required?**	**Residual Impacts?**
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 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	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 (community structure and composition) and area/distribution of this marine habitat.	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.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
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	No

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
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.	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.	With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
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 northern side of the Howth peninsula.	No	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:			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Habitat length Kilometres Area stable, subject to natural processes, including erosion	No There is no potential for impacts to occur on this habitat, as a result of degradation in surface water quality, due to the fact that this habitat lies above the high-water mark. In addition, pollution is not regarded to be a threat/ pressure which could potentially affect this SAC site (NPWS, 2019f)[28] and pollution is not regarded to be a significant threat/ pressure to this habitat type at a national level (Barron *et al*., 2011)[23]. Lambay Island SAC lies on the far side of the Howth Head peninsula, meaning that a significant marine water buffer exists between it and the discharge point of the Proposed Scheme (e.g. Liffey Estuary Lower and Ringsend WwTP). Given the level of separation between the Proposed Scheme and this SAC, and considering the above additional points, significant effects on this QI habitat as a result of surface water degradation can be excluded.	No	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	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.	No With the effective implementation of the mitigation measures outlined in
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			

[28] NPWS (2019f). *Natura 2000- Standard Data Form- Lambay Island SAC [000204].* Updated 09-2019

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Disturbance/ Level of impact/ Human activities should occur at levels that do not adversely affect the grey seal population at the site	the intertidal/marine habitats which support grey seal.		Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
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	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.	No With the effective implementation of the mitigation measures outlined in
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			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Disturbance/ Level of impact/ Human activities should occur at levels that do not adversely affect the harbour seal population at the site	the intertidal/marine habitats which support harbour seal.		Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC

7.2.5 Mitigation Measures

191 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 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

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

Measures to Protect Surface Water Quality during Operation

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

7.2.6 Residual Impacts

194 With the inclusion of appropriate mitigation identified in this NIS, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the Qualifying Interests of 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 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.

7.2.7 Conclusion of Assessment for Rockabill to Dalkey Island SAC and Lambay Island SAC

195 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the Qualifying Interests of 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, it has been concluded that the Proposed Scheme does not pose a risk of adversely affecting (either directly or indirectly) the integrity of Rockabill to Dalkey Island SAC and Lambay Island SAC.

7.3 Wicklow Mountains SAC [002122]

7.3.1 Ecological Baseline Description for Wicklow Mountains SAC

196 The Natura 2000 Standard Data Form (NPWS, 2020c) notes that this is an extensive upland site comprising much of the Wicklow Mountains. Most of the site is occurs above 300m and includes the source of many rivers including the Liffey, the Dargle and the Slaney. The dominant habitats of the site include blanket bog, heath and upland grassland. Seven Red Data Book plant species occur within its territory and it supports significant breeding populations of merlin *Falco columbarius* and peregrine *Falco peregrinus* (both Birds directive Annex I SCI species for the overlapping Wicklow Mountains SPA [004040]). The SAC is designated for a number of Annex I habitats as well as mobile otter, which occurs on several of the riverine systems. Major threats to the site include urbanised areas / human habitation, walking, horse riding and non-motorised vehicles, paths, tracks and cycling tracks, hunting and collection of wild animals, invasive non-native species, military manoeuvres, and grazing.

7.3.2 Qualifying Interests and Conservation Objectives of Wicklow Mountains SAC

197 The Qualifying Interests of Wicklow Mountains SAC, and the overall conservation objectives, are listed in Table 13.

Table 13: Qualifying Interests and Conservation Objectives of Wicklow Mountains SAC

Qualifying Interest(s)	Conservation Objective(s)
Wicklow Mountains SAC [002122][29] 1355 Otter *Lutra lutra* 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)* 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 NPWS (2017a*) Conservation Objectives: Wicklow Mountains SAC 002122*. 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

198 In conjunction with considering the generic conservation objective for this SAC "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 Wicklow Mountains SAC also informed this assessment.

199 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 is deemed to 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 Wicklow Mountains SAC are presented in Section 7.3.3.3.

7.3.3 Examination and Analysis of Potential Direct and Indirect Impacts

200 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 Wicklow Mountains SAC, are:

- Habitat degradation as a result of hydrological impacts; and
- Disturbance and displacement Impacts.

[29] Wicklow Mountains SAC has been included due to potential effects on the otter population (a mobile species). Qualifying Interest habitats for which this SAC has been designated are not at risk of effects arising from the Proposed Scheme as noted in section 6, as the SAC is located upstream of the Proposed Scheme. Habitats associated with the Wicklow Mountains SAC are not considered further in this report.

7.3.3.1 Habitat degradation as a result of hydrological impacts

201 As the Wicklow Mountains SAC is located upstream of the Proposed Scheme, there is no potential for a pollution event of any magnitude to affect any QI habitats or associated plant species for which this European site is designated. However, as the Proposed Scheme is hydrologically connected to the River Dodder there is potential for impacts to occur on otter populations (a mobile species) associated with the Wicklow Mountains SAC. The release of contaminated surface water runoff and / or an accidental spillage or pollution event into the Dodder_040 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 which could in turn negatively affect the otter population through direct contact with pollutants or a decline in fish prey. These potential impacts could occur to such a degree that the conservation objectives of the Wicklow Mountains SAC QI species are undermined.

202 Therefore, (albeit very unlikely) there is potential for the Proposed Scheme to result in significant effects which could have implications for the conservation objectives of Wicklow Mountains SAC as a result of hydrological impacts.

7.3.3.2 Disturbance and displacement impacts

203 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 QI otter populations present in the vicinity of the Proposed Scheme. Such disturbance effects would not be expected to extend beyond a distance of approximately 150m[30] for the majority of the Proposed Scheme, as noise levels associated with general construction activities would attenuate to close to background levels at that distance and beyond. Noisy works associated with the construction of the Proposed Scheme include road replanning / resurfacing at watercourse crossings. Works proposed for the extension of the River Camac culvert and installation of the new headwall at the River Camac are scheduled to take approximately 6.5 weeks. Owing to other aquatic ecological sensitivities, these works will be programmed to ensure that no instream works are carried out during the closed season and/or at low flow period (October to June). As this is the critical time for work within 150metres of a confirmed otter holt (NRA 2006b).

204 Albeit temporary, these potential impacts could occur to such a degree that the conservation objectives of the Wicklow Mountains SAC, in respect of utter are undermined.

205 Therefore, there is potential for the Proposed Scheme to result in significant effects which could have implications for the conservation objectives of Wicklow Mountains SAC as a result of disturbance / displacement impacts.

7.3.3.3 Summary

206 Table 14 presents a summary of the potential impacts of the Proposed Scheme on the Qualifying Interests of Wicklow Mountains SAC, and how these impacts relate to affecting the site's conservation objectives.

[30] This is consistent with Transport Infrastructure Ireland (TII) guidance (Guidelines for the Treatment of Otters prior to the Construction of National Road Schemes (NRA, 2006), and Guidelines for the Treatment of Badgers prior to the Construction of National Road Schemes (NRA, 2005)) 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.

Table 14: Potential Impacts/Effects on the Conservation Objectives of Wicklow Mountains SAC

Conservation Objectives **Attribute/Measure/Target**	**Potential Impacts Requiring Mitigation?**	**Are mitigation measures required?**	**Residual Impacts?**
Wicklow Mountains SAC[31]			
Otter To maintain the favourable conservation condition of Otter in Wicklow Mountains SAC, which is defined as follows:			
Distribution / Percentage positive survey sites / No significant decline	Yes An accidental pollution event during construction or operation could affect surface water downstream. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the otter population through direct	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 the downstream environment is protected during construction and operation of the Proposed Scheme.	No With the effective implementation of the mitigation measures outlined in
Extent of terrestrial habitat / Hectares / No significant decline.			
Extent of freshwater (river) habitat / Kilometres / No significant decline.			
Extent of freshwater (lake) habitat / Hectares / No significant decline			
Couching sites and holts / Number / No significant decline			
Fish biomass available / Kilograms / No significant decline			

[31] As the Annex I Qualifying Interest habitats for which this SAC has been designated are not at risk of effects arising from the Proposed Scheme, they have not been included in the summary table.

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Wicklow Mountains SAC[31]			
Otter To maintain the favourable conservation condition of Otter in Wicklow Mountains SAC, which is defined as follows:			
Barriers to connectivity / Number/ No significant increase	contact with pollutants or a decline in fish prey. Construction disturbance in the vicinity of the River Dodder and Grand Canal could result in disturbance to and potentially displacement of otter, particularly if works are undertaken at night-time.	Additional mitigation measures described in Section 7.3.4 specifically to protect otter from disturbance / displacement impacts will ensure that local QI otter population are protected during the construction of the Proposed Scheme.	Section 7.1.4 and Section 7.3.4, the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC

7.3.4 Mitigation Measures

207 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 Wicklow Mountains 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

208 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

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

Measures to Protect Otter - Reduce the Loss of Breeding / Resting Sites during Construction

210 Although there were no signs of otter habitation recorded during field surveys, otter could potentially establish new holt or couch sites within the ZoI of the Proposed Scheme. Therefore, the NTA will ensure that a confirmatory pre-construction check of all suitable otter habitat will be completed, by a suitably qualified ecologist, within 12 months prior to any construction works commencing.

211 The presence of any new holt / couch sites will be treated and / or protected in accordance with the Guidelines for the Treatment of Otters prior to the Construction of National Road Schemes (NRA, 2006).

Measures to Protect Otter - Disturbance / displacement during Construction

212 Although no otter holts were recorded along the River Camac in proximity to the proposed extension of the culvert and headwall installation at the Nangor Road/ Oak Road intersection, otter could potentially re-establish at this site during the Construction Phase of the Proposed Scheme.

213 As detailed above, prior to construction works commencing, the NTA will ensure that a pre-construction survey of all suitable otter habitat will be undertaken by a suitably qualified ecologist within 12 months prior to any construction works commencing, in accordance with Guidelines for the Treatment of Otters Prior to the Construction of National Road Schemes (NRA 2006b).

214 Night working within / directly adjacent to the River Camac at this location will not be undertaken, as otter, who are typically nocturnal mammals are known to commute. Where night-working adjacent to watercourses known to support otter, is required, owing to practical considerations of traffic restrictions etc., the advice of a suitably qualified ecologist must be sought and a derogation licence, if necessary, will be sought from the NPWS permitting such works.

215 Notwithstanding construction works being carried out during daylight hours, the commuting corridor along the Nangor Road / Oak Road intersection of the River Camac will be temporarily interfered with for a period of approximately six and a half (6.5) weeks. Thus, the proposed works will be carried out between July and September (in compliance with IFI guidance (2016)), unless a holt is discovered during the pre-construction survey. In such an event, works would be delayed by a month e.g., from July onwards, to ensure that potential disturbance of breeding holt and its occupants does not occur or as advised by a suitably qualified ecologist

Measures to Protect Otters - Prevent Injury / Mortality Impacts during Construction

216 To protect otters from indirect harm during construction, where practicable open excavations will be covered when not in use and backfilled as soon as practicable by the appointed contractor.

217 Excavations will also be covered at night, where practicable, and any deep excavations which must be left open will have appropriate egress ramps in place to allow mammals to safely exit should they fall in.

218 Fencing requirements as per the Guidelines for the Treatment of Otters Prior to the Construction of National Road Schemes (NRA, 2006) will be erected around the Construction Compounds and other

working areas which are in close proximity to significant watercourses and have suitable roaming territory for otter.

Measures to Reduce Lighting Impacts

219 Security lighting at the Construction Compounds or in active works areas in close proximity to watercourses with known otter activity will be designed in conjunction with a suitably qualified ecologist to minimise light spill. Similarly, where any new or amended lighting design is required at a watercourse crossing, it should be cognisant of downward light-spill onto watercourses. Measures to reduce light spill may include the following:

- The use of sensor / timer triggered lighting;
- LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability;
- Column heights should be considered to minimise light spill; and,
- Accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only where needed.

7.3.5 Residual Impacts

220 With the inclusion of appropriate mitigation measures identified in this NIS, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the Qualifying Interest species of Wicklow Mountains SAC (the remaining QI habitats being upstream and of sufficient distance removed that no impact is predicted), and there are therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of Wicklow Mountains 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 Wicklow Mountains SAC

221 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the Qualifying Interests of Wicklow Mountains 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, it has been concluded that the Proposed Scheme does not pose a risk of adversely affecting (either directly or indirectly) the integrity of Wicklow Mountains SAC.

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

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

222 The Natura 2000 Standard Data Form (NPWS, 2020c) 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 eelgrass *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.

7.4.2 Special Conservation Interests and Conservation Objectives of South Dublin Bay and River Tolka Estuary SPA

223 The Special Conservation Interests of South Dublin Bay and River Tolka Estuary SPA, and the overall conservation objective, are listed in Table 15.

Table 15: Special Conservation Interests and Conservation Objectives of South Dublin Bay and River Tolka Estuary SPA

Special Conservation 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 (2015a) *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 the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA To maintain the favourable conservation condition of the wetland habitat in South Dublin Bay and River Tolka Estuary SPA as a resource for the regularly occurring migratory waterbirds that utilise it

224 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.

225 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the Special Conservation Interests within the European site. Affecting the conservation condition of the special conservation interests is deemed to constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the Special Conservation Interests of South Dublin Bay and River Tolka Estuary SPA are presented in Section 7.4.3.5.

7.4.3 Examination and Analysis of Potential Direct and Indirect Impacts

226 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 Special Conservation Interests of South Dublin Bay and River Tolka Estuary SPA, are:

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

- Disturbance and displacement impacts.

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

227 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 River Camac (Camac_040), River Dodder (Dodder_040), Grand Canal, River Poddle (Poddle_010), the Liffey Estuary Upper and Liffey Estuary Lower as well as a network of interconnecting and established surface or combined sewer/surface water pipes. 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 hydrological impacts.

228 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 this European site, 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.

7.4.3.2 Habitat loss / fragmentation

229 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, curlew, black-headed gull and black-tailed godwit. There are five areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme, composing grassland habitats (CBC0809WB001, CBC0809WB002, CBC0809WB003, CBC0809WB004 and CBC0809WB005).

230 The Proposed Scheme will result in the short-term loss (36 months) of approximately 0.54ha in total ha of GA2 habitat suitable to support breeding gull and wintering bird species (e.g., light- bellied Brent goose) as a result of the installation of Construction Compounds TC3, TC4 and TC8. These areas will be lost, at least for the short-term, during the construction period of the Proposed Scheme as they will be used as Construction Compounds to facilitate nearby works.

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

- According to the data collected during winter bird surveys undertaken during both the 2020-2021 and 2021-2022 winter bird season, none of the sites to be lost are significant inland foraging resource for wintering bird species, given the low numbers of wintering bird species recorded, with respect to their national and international populations. Therefore, the temporary loss of this site during the construction of the Proposed Scheme will not result in any likely significant effect on the conservation status of any wintering bird species or undermine the conservation objectives of any SPAs in the vicinity which are designated for this species;
- Land take in these areas is temporary in nature and will be returned to its original state during the Operational Phase of the Proposed Scheme.

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

232 There are six discrete areas of Japanese knotweed, a species listed on the Third Schedule of the (Birds and Natural Habitats) Regulations present within, or in close proximity to, the Proposed Scheme. Four of these areas of Japanese knotweed were recorded in an area of scrub and unmanaged grassland between the R134 New Nangor Road and Killeen Road. Construction Compound TC12 is proposed in this area. During construction and / or routine maintenance / management work, this species could potentially spread or be introduced to terrestrial habitats located within downstream European sites via surface water features.

233 The introduction and / or spread of this non-native 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 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 River Camac (Camac_040), River Dodder (Dodder_040), Grand Canal, River Poddle (Poddle_010), the Liffey Estuary Upper and Liffey Estuary Lower as well as a network of interconnecting and established surface or combined sewer/surface water pipes. Therefore, (albeit unlikely) 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 the introduction of non-native invasive species.

7.4.3.4 Disturbance and displacement impacts

234 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 the footprint and / or the vicinity of the Proposed Scheme. Potential for 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 deemed 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 $L_{Aeq,4hr}$)**								
	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	83	80	77	73	69	65	63	59	55
Quiet Street Treatment	80	77	74	70	66	62	60	56	52
Urban Realm Landscaping	79	76	73	69	65	61	59	55	51
Construction Compounds	78	75	72	68	64	60	58	54	50
Boundary Wall Construction	80	77	74	70	66	62	60	56	49
Piling	80	77	74	70	66	62	60	56	52
Retaining Walls Construction	81	78	75	71	67	63	61	57	53

235 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 the Proposed Scheme.

236 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 and black-headed gull), it is likely that SCI bird species associated with the South Dublin Bay and River Tolka Estuary SPA currently utilise suitable lands in the wider area. However, no significant effects will occur on any SCI bird species populations of 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:

- For virtually all items of construction works, any winter birds present at a distance of 30m or more from the edge of works (where noise levels will be between 50dB and 70dB) would experience only a moderate effect / level of response, 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. Up to 30m distance from the edge of works (where construction noise levels will be above 70dB) birds would be likely to move out of the affected zone, or leave the site altogether. Therefore the worst case exclusion or displacement of birds due to noise impacts during construction works would be for birds using the zone within 30m of the edge of construction works only, with birds likely to not be displaced from areas beyond this 30m distance as a result of noise impacts[32].
- The low numbers of species recorded using the sites surveyed within the footprint of the Proposed Scheme (e.g. CBC0809WB001, CBC0809WB002, CBC0809WB003, CBC0809WB004 and CBC0809WB005) during field surveys undertaken in both the 2020-2021 and 2021-2022 winter season, which suggests 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;
- 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 Templeogue College, Ballyfermot/ Le Fanu Park, Blackrock College, Palmerstown/ Glenaulin Park, Shelbourne Park Dog Track, DCC Brent Field Ringsend and Fairview Park; and,
- The short-term nature of any disturbance related impacts associated with the construction of the Proposed Scheme, which is expected to last for 36 months. Following the completion of construction, disturbance levels will over time return to baseline conditions and as a result suitable lands will become available again as foraging and/or roosting habitat for these SCI species.

7.4.3.5 Summary

237 Table 17 presents a summary of the potential impacts of the Proposed Scheme on the Special Conservation Interests of South Dublin Bay and River Tolka Estuary SPA, and how these impacts relate to affecting the site's conservation objectives.

[32] Based on 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).

Table 17: 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?**	**Residual Impacts?**
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 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 SCIs 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 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	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 non-native 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 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. The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA
Roseate Tern (*Sterna dougallii*) [A192] To maintain the favourable conservation condition of the special conservation interests of the SPA, which is defined as follows:			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Passage population: individuals/Number/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 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	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 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. The introduction and/or spread of non-native 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 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. The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA
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 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	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 and the quality the of intertidal/coastal habitats that support the	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.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Barriers to connectivity/Number; location; shape; area (hectares)/No significant increase	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 non-native invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats 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 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.	the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA
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 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	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	No With the effective implementation of the
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?	Residual Impacts?
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	alone or cumulatively with other pollution sources, could potentially affect the quantity and quality of prey fish and the quality 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 non-native 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.	construction and operation of the Proposed Scheme. The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.	mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA
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?	Residual Impacts?
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 non-native 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 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. The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during Construction and Operation of the Proposed Scheme.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA

7.4.4 Mitigation Measures

238 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

239 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

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

Measures to Prevent the Spread of Non-Native Invasive Species to Downstream European Sites

241 The mitigation measures presented above in Section 7.1.4 will prevent the spread of non-native invasive species to downstream European sites.

7.4.5 Residual Impacts

242 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the Special Conservation Interests and supporting wetland habitat 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.

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

243 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the Special Conservation Interests of South Dublin Bay and River Tolka Estuary SPA, the potential impacts, and whether or not the predicted impacts and mitigation measures and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the Special Conservation Interests, it has been concluded that the Proposed Scheme does not pose a risk of adversely affecting (either directly or indirectly) the integrity of South Dublin Bay and River Tolka Estuary SPA.

7.5 North Bull Island SPA [004006]

7.5.1 Ecological Baseline Description for North Bull Island SPA

244 The Natura 2000 Standard Data Form (NPWS, 2020d) 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 Special Conservation Interests and Conservation Objectives of North Bull Island SPA

245 The special conservation interests of North Bull Island SPA, and the overall conservation objectives, are listed **Table 18**.

Table 18: Special Conservation Interests and Conservation Objectives of North Bull Island SPA

Special Conservation 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 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 *S.I. No. 211/2010 - European Communities (Conservation of Wild Birds (North Bull Island Special Protection Area 004006)) Regulations 2010.* NPWS (2015b) *Conservation Objectives: North Bull Island SPA 004006.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	To maintain the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA. To maintain the favourable conservation condition of the wetland habitat in North Bull Island SPA as a resource for the regularly occurring migratory waterbirds that utilise it.

246 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.

247 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the Special Conservation Interests within the European site. Affecting the conservation condition of the Qualifying Interests / Special Conservation Interests is deemed to constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the Special Conservation 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

248 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 Special Conservation Interests of North Bull Island SPA, are:

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

- Habitat degradation as a result of introducing / spreading non-native invasive species; and;
- Disturbance and displacement impacts.

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

249 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 River Camac (Camac_040), River Dodder (Dodder_040), Grand Canal, River Poddle (Poddle_010), the Liffey Estuary Upper and Liffey Estuary Lower as well as a network of interconnecting and established surface or combined sewer/surface water pipes. 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.

250 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 North Bull Island SPA.

7.5.3.2 Habitat loss / fragmentation

251 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 five areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme, comprising grassland habitats (CBC0809WB001, CBC0809WB002, CBC0809WB003, CBC0809WB004 and CBC0809WB005).

252 The Proposed Scheme will result in the short-term loss of approximately 0.54ha in total of GA2 habitat suitable to support breeding gull and wintering bird species (e.g. light- bellied Brent goose) as a result of the installation of Construction Compounds TC3, TC4 and TC8. These areas will be lost, at least for the short-term, during the construction period of the Proposed Scheme as they will be used as Construction Compounds to facilitate nearby works.

253 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 of inland feeding / roosting sites due to the following reasons:

- According to the data collected during winter bird surveys undertaken during both the 2020-2021 and 2021-2022 winter bird season, none of the sites to be lost are significant inland foraging resource for wintering bird species, given the low numbers of wintering bird species recorded, with respect to their national and international populations. Therefore, the temporary loss of this site during the Construction of the Proposed Scheme will not result in any likely significant effect on the conservation status of any wintering bird species or undermine the conservation objectives of any SPAs in the vicinity which are designated for this species;
- Land take in these areas is temporary in nature and will be returned to its original state during the Operational Phase of the Proposed Scheme.

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

254 There are six discrete areas of Japanese knotweed, a species listed on the Third Schedule of the (Birds and Natural Habitats) Regulations present within, or in close proximity to, the Proposed Scheme. Four of these areas of Japanese knotweed were recorded in an area of scrub and unmanaged grassland between the Nangor Road and Killeen Road. Construction Compound TC12 is proposed in this area. During construction and / or routine maintenance / management work, this species could potentially spread or be introduced to terrestrial habitats located within downstream European sites via surface water features.

255 The introduction and / or spread of this non-native 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 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 River Camac (Camac_040), River Dodder (Dodder_040), Grand Canal, River Poddle (Poddle_010), the Liffey Estuary Upper and Liffey Estuary Lower as well as a network of interconnecting and established surface or combined sewer / surface water pipes. Therefore, (albeit unlikely) 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 the introduction of non-native invasive species.

7.5.3.4 Disturbance and displacement impacts

256 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. Potential for 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 deemed 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 7.4.3.4 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.

257 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 areas of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme.

258 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 and black-headed gull), it is likely that SCI bird species associated with North Bull Island SPA currently utilise suitable lands in the wider area. However, no significant effects will occur on any SCI bird species populations 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:

- For virtually all items of construction works, any winter birds present at a distance of 30m or more from the edge of works (where noise levels will be between 50dB and 70dB) would experience only a moderate effect / level of response, 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. Up to 30m distance from the edge of works (where construction noise levels will be above 70dB) birds would be likely to move out of the affected zone or leave the site altogether. Therefore, the worst-case exclusion or displacement of birds due to noise impacts during construction works would be for birds using the zone within 30m of the edge of construction works

only, with birds likely to not be displaced from areas beyond this 30m distance as a result of noise impacts.[33]

- The low numbers of species recorded using the sites surveyed within the footprint of the Proposed Scheme (e.g. CBC0809WB001, CBC0809WB002, CBC0809WB003, CBC0809WB004 and CBC0809WB005) during field surveys undertaken in both the 2020-2021 and 2021-2022 winter season, which suggests 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;
- 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 Templeogue College, Ballyfermot/ Le Fanu Park, Blackrock College, Palmerstown/ Glenaulin Park, Shelbourne Park Dog Track, DCC Brent Field Ringsend and Fairview Park ; and,
- The short-term nature of any disturbance related impacts associated with the construction of the Proposed Scheme, which is expected to last for 36 months. Following the completion of construction, disturbance levels will over time return to baseline conditions and as a result suitable lands will become available again as foraging and/or roosting habitat for these SCI species.

7.5.3.5 Summary

259 Table 19 presents a summary of the potential impacts of the Proposed Scheme on the Special Conservation Interests of North Bull Island SPA, and how these impacts relate to affecting the site's conservation objectives.

[33] Based on 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).

Table 19: 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?**	**Residual Impacts?**
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 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 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 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	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 non-native 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 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. The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
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 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 non-native 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 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. The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during Construction and Operation of the Proposed Scheme.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA

7.5.4 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 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

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.

Measures to Prevent the Spread of Non-Native Invasive Species to Downstream European Sites

263 The mitigation measures presented above in Section 7.1.4 will prevent the spread of non-native invasive species to downstream European sites.

7.5.5 Residual Impacts

264 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 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

265 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the 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 Special Conservation Interests, it has been concluded that the Proposed Scheme does not pose a risk of adversely affecting (either directly or indirectly) the integrity of North Bull Island SPA.

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

7.6.1 Ecological Baseline Description for Howth Head Coast SPA

266 The Natura 2000 Standard Data Form (NPWS, 2020e) 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 EU Birds Directive. Threats to the site include walking, horse-riding and non-motorised vehicles as well as fire and fire suppression.

7.6.2 Ecological Baseline Description for Dalkey Islands SPA

267 The Natura 2000 Standard Data Form (NPWS, 2020f) 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.

7.6.3 Ecological Baseline Description for Rockabill SPA

268 The Natura 2000 Standard Data Form (NPWS, 2020g) 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 grille* and a small colony of kittiwake *Rissa tridactyla*.

7.6.4 Special Conservation Interests and Conservation Objectives of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA

269 The Special Conservation Interests of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA, and the overall conservation objective, are listed in Table 20.

Table 20: Special Conservation Interests and Conservation Objectives of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA

Special Conservation 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 (2022c) *Conservation objectives for Howth Head Coast SPA [004113First Order Site-specific Conservation Version 1.0*. 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.
Dalkey Islands SPA [004172] A192 Roseate Tern *Sterna dougallii*	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.

Special Conservation Interest(s)	Conservation Objective(s)
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 (2022a) *Conservation objectives for Dalkey Islands SPA [004172]. First Order Site-specific Conservation Version 1.0*.. Department Housing, Local Government and Heritage.	
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 (2013j) *Conservation Objectives: Rockabill SPA 004014.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	To maintain the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.

270 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 several European sites designated for similar SCI bird species to that of Rockabill SPA also informed this assessment. These European sites are identified in Table 21.

271 The site-specific conservation objectives document for Howth Head Coast and Dalkey Islands SPA does not set out the attributes, measures and targets that define the favourable conservation condition of the Special Conservation Interests within the European site. Affecting the conservation condition of the Special Conservation Interests is deemed to constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the Special Conservation Interests of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA are presented in Section 7.6.5.2.

7.6.5 Examination and Analysis of Potential Direct and Indirect Impacts

272 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 Special Conservation Interests of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA is:

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

7.6.5.1 Habitat degradation / effects on 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 River Camac (Camac_040), River Dodder (Dodder_040), Grand Canal, River Poddle (Poddle_010), the Liffey

Estuary Upper and Liffey Estuary Lower as well as a network of interconnecting and established surface or combined sewer / surface water pipes.

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 Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA.

7.6.5.2 Summary

275 Table 21 presents a summary of the potential impacts of the Proposed Scheme on the Special Conservation 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 21: 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?**	**Residual Impacts?**
Howth Head Coast SPA			
Kittiwake [A188] A first order site-specific conservation objectives document is available for this SPA, although there are no attributes, measures and targets defined., 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 Interests 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.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA
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			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Dalkey Islands SPA			
Roseate Tern (*Sterna dougallii*) [A192] A first order site-specific conservation objectives document is available for this SPA., although there are no attributes, measures and targets defined.,. 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] (NPWS, 2015a).			
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 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.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA
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] A first order site-specific conservation objectives document is available for this SPA., although there are no attributes, measures and targets defined.,. 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] (NPWS 2015a).			
Breeding population abundance: apparently occupied nests (AONs)/Number/No significant decline	Yes	Yes	No
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?	Residual Impacts?
Passage population: individuals/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 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.	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.	With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA
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] A first order site-specific conservation objectives document is available for this SPA., although there are no attributes, measures and targets defined.,. 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] (NPWS 2015a).			
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	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	No With the effective implementation of the
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?	Residual Impacts?
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	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.	construction and operation of the Proposed Scheme.	mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA
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 There is no pathway for impacts to occur on this SCI species as it is located a significant distance from the Proposed Scheme, and on the northern side of the Howth peninsula, separated by a large marine waterbody.	No	No
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			
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	Yes	No
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?	Residual Impacts?
Distribution: breeding colonies/ 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 this SCI species through direct contact with pollutants and/or a decline in the quantity and quality of prey fish species.	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.	With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA
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 Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect this SCI species	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.	No With the effective implementation of the mitigation measures
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			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Disturbance at breeding site/ Level of impact/ Human activities should occur at levels that do not adversely affect the breeding common tern population	through direct contact with pollutants and/or a decline in the quantity and quality of prey fish species.		outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA
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	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.	No With the effective implementation of the mitigation measures
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			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Disturbance at breeding site/ Level of impact/ Human activities should occur at levels that do not adversely affect the breeding common tern population	through direct contact with pollutants and/or a decline in the quantity and quality of prey fish species.		outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA

7.6.6 Mitigation Measures

276 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

277 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

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

7.6.7 Residual Impacts

279 With the inclusion of appropriate mitigation measures identified in this NIS, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of 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.

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

280 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the 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 Special Conservation Interests, it has been concluded that the Proposed Scheme does not pose a risk of adversely affecting (either directly or indirectly) the integrity of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA.

7.7 Baldoyle Bay SPA [004016]

7.7.1 Ecological Baseline Description for Baldoyle Bay SPA

281 The Natura 2000 Standard Data Form (NPWS, 2020h) 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.

7.7.2 Special Conservation Interests and Conservation Objectives of Baldoyle Bay SPA

282 The Special Conservation Interests of Baldoyle Bay SPA, and the overall conservation objective, are listed in Table 22.

Table 22: Special Conservation Interests and Conservation Objectives of Baldoyle Bay SPA

Special Conservation 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 (2013g) *Conservation Objectives: Baldoyle Bay SPA 004016. Version 1.* National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	To maintain the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA. To maintain the favourable conservation condition of the wetland habitat in Baldoyle Bay SPA

283 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.

284 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the Special Conservation Interests within the European site. Affecting the conservation condition of the Special Conservation Interests is deemed to constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the Special Conservation Interests of Baldoyle Bay SPA are presented in Section 7.7.3.4.

7.7.3 Examination and Analysis of Potential Direct and Indirect Impacts

285 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 Special Conservation Interests of Baldoyle Bay SPA, are:

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

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

286 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 River Camac (Camac_040), River Dodder (Dodder_040), Grand Canal, River Poddle (Poddle_010), the Liffey Estuary Upper and Liffey Estuary Lower as well as a network of interconnecting and established surface or combined sewer / surface water pipes.

287 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 SPA.

7.7.3.2 Habitat loss / fragmentation

288 Baldoyle 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 five areas of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme, composing grassland habitats (CBC0809WB001, CBC0809WB002, CBC0809WB003, CBC0809WB004 and CBC0809WB005).

289 The Proposed Scheme will result in the short-term loss of approximately 0.54ha in total of GA2 habitat suitable to support breeding gull and wintering bird species (e.g., light- bellied Brent goose) as a result of the installation of Construction Compounds TC3, TC4and TC8. These areas will be lost, at least for the short-term, during the construction period of the Proposed Scheme as they will be used as Construction Compounds to facilitate nearby works.

290 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 of inland feeding / roosting sites due to the following reasons:

- According to the data collected during winter bird surveys undertaken during both the 2020-2021 and 2021-2022 winter bird season, none of the sites to be lost are significant inland foraging resource for wintering bird species, given the low numbers of wintering bird species recorded, with respect to their national and international populations. Therefore, the temporary loss of this site during the construction of the Proposed Scheme will not result in any likely significant effect on the conservation status of any wintering bird species or undermine the conservation objectives of any SPAs in the vicinity which are designated for this species;
- Land take in these areas is temporary in nature and will be returned to its original state during the Operational Phase of the Proposed Scheme.

7.7.3.3 Disturbance and displacement impacts

291 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. Potential for 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 deemed 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 7.4.3.4 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.

292 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 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 the Proposed Scheme.

293 As records of SCI bird species associated with the Baldoyle Bay SPA have been returned from the desk study in the vicinity of the Proposed Scheme (i.e., light-bellied Brent goose), it is likely that SCI bird species associated with the Baldoyle Bay SPA currently utilise suitable lands in the wider area. However, no significant effects will occur on any SCI bird species populations of Baldoyle Bay 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:

- For virtually all items of construction works, any winter birds present at a distance of 30m or more from the edge of works (where noise levels will be between 50dB and 70dB) would experience only a moderate effect / level of response, 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. Up to 30m distance from the edge of works (where construction noise levels will be above 70dB) birds would be likely to move out of the affected zone or leave the site altogether. Therefore, the worst case exclusion or displacement of birds due to noise impacts during construction works would be for birds using the zone within 30m of the edge of construction works only, with birds likely to not be displaced from areas beyond this 30m distance as a result of noise impacts.[34]
- The low numbers of species recorded using the sites surveyed within the footprint of the Proposed Scheme (e.g. CBC0809WB001, CBC0809WB002, CBC0809WB003, CBC0809WB004 and CBC0809WB005) during field surveys undertaken in both the 2020-2021 and 2021-2022 winter season, which suggests 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;
- 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 Templeogue College, Ballyfermot / Le Fanu Park, Blackrock College, Palmerstown / Glenaulin Park, Shelbourne Park Dog Track, DCC Brent Field Ringsend and Fairview Park; and,
- The short term nature of any disturbance related impacts associated with the construction of the Proposed Scheme, which is expected to last for 36 months. Following the completion of Construction, disturbance levels will over time return to baseline conditions and as a result suitable lands will become available again as foraging and/or roosting habitat for these SCI species.

7.7.3.4 Summary

294 Table 23 presents a summary of the potential impacts of the Proposed Scheme on the Special Conservation Interests of Baldoyle Bay SPA, and how these impacts relate to affecting the site's conservation objectives.

[34] Based on 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).

Table 23: Potential Impacts/Effects on the Conservation Objectives of Baldoyle Bay SPA

Conservation Objectives **Attribute/Measure/Target**	**Potential Impacts Requiring Mitigation?**	**Are mitigation measures required?**	**Residual Impacts?**
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 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 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	Yes In a worst-case scenario, an accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay, which SCI birds may utilise outside of their core SPA foraging areas. 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 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.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
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 263ha, other than that occurring from natural patterns of variation	No There is no potential for impacts to occur on any habitats associated with the Baldoyle Bay SPA as the Proposed Scheme is not hydrologically connected to the Baldoyle Bay.	No	No

7.7.4 Mitigation Measures

295 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

296 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

297 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

298 With the inclusion of appropriate mitigation measures identified in this NIS, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the Special Conservation Interests and supporting wetland habitat 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.

7.7.6 Conclusion of Assessment for Baldoyle Bay SPA

299 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the Special Conservation Interests of 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 Special Conservation Interests, it has been concluded that the Proposed Scheme does not pose a risk of adversely affecting (either directly or indirectly) the integrity of Baldoyle Bay SPA.

7.8 Malahide Estuary SPA [004025]

7.8.1 Ecological Baseline Description for Malahide Estuary SPA

300 Malahide Estuary SPA comprises the estuary of the River Broadmeadow. According to the Natura 2000 Standard Data Form for the site (NPWS, 2020i), 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.

7.8.2 Special Conservation Interests and Conservation Objectives of Malahide Estuary SPA

301 The Special Conservation Interests of Malahide Estuary SPA, and the overall conservation objective, are listed in Table 24.

Table 24: Special Conservation Interests and Conservation Objectives of Malahide Estuary SPA

Special Conservation 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 tetanus* A999 Wetland and Waterbirds *S.I. No. 285/2011 – European Communities (Conservation of Wild Birds (Malahide Estuary Special Protection Area 004025)) Regulations 2011.* NPWS (2013h) *Conservation Objectives: Malahide Estuary SPA 004025.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	To maintain the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA. To maintain the favourable conservation condition of the wetland habitat in Malahide Estuary SPA as a resource for the regularly occurring migratory waterbirds that utilise it

302 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.

303 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the Special Conservation Interests within the European site. Affecting the conservation condition of the Special Conservation Interests is deemed to constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the Special Conservation Interests of Malahide Estuary SPA are presented in Section 7.8.3.4.

7.8.3 Examination and Analysis of Potential Direct and Indirect Impacts

304 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 Special Conservation Interests of Malahide Estuary SPA, are:

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

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

305 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 River Camac (Camac_040), River Dodder (Dodder_040), Grand Canal, River Poddle (Poddle_010), the Liffey Estuary Upper and Liffey Estuary Lower as well as a network of interconnecting and established surface or combined sewer / surface water pipes.

306 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 SPA.

7.8.3.2 Habitat loss / fragmentation

307 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, curlew, black-headed gull and black-tailed godwit. There are five areas of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme, composing grassland habitats (CBC0809WB001, CBC0809WB002, CBC0809WB003, CBC0809WB004 and CBC0809WB005).

308 The Proposed Scheme will result in the short-term loss of approximately 0.54ha in total of GA2 habitat suitable to support breeding gull and wintering bird species (e.g. light- bellied Brent goose) as a result of the installation of Construction Compounds TC3, TC4 and TC8. These areas will be lost, at least for the short-term, during the construction period of the Proposed Scheme as they will be used as Construction Compounds to facilitate nearby works.

309 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 of inland feeding / roosting sites due to the following reasons:

- According to the data collected during winter bird surveys undertaken during both the 2020-2021 and 2021-2022 winter bird season, none of the sites to be lost are significant inland foraging resource for wintering bird species, given the low numbers of wintering bird species recorded, with respect to their national and international populations. Therefore, the temporary loss of this site during the construction of the Proposed Scheme will not result in any likely significant effect on the conservation status of any wintering bird species or undermine the conservation objectives of any SPAs in the vicinity which are designated for this species; and
- Land take in these areas is temporary in nature and will be returned to its original state during the Operational Phase of the Proposed Scheme.

7.8.3.3 Disturbance/displacement impacts

310 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. Potential for 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 deemed 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 7.4.3.4 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.

311 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 the Proposed Scheme. It is possible that SCI bird species associated with the Malahide Estuary SPA currently utilise these and other suitable lands in the wider area.

312 As records of SCI bird species associated with the Malahide Estuary SPA have been returned from the desk study in the vicinity of the Proposed Scheme (i.e., light-bellied Brent goose and black-headed gull), it is likely that SCI bird species associated with the Malahide Estuary SPA currently utilise suitable lands in the wider area. However, no significant effects will occur on any SCI bird species populations 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:

- For virtually all items of construction works, any winter birds present at a distance of 30m or more from the edge of works (where noise levels will be between 50dB and 70dB) would experience only a moderate effect / level of response, 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. Up to 30m distance from the edge of works (where construction noise levels will be above 70dB) birds would be likely to move out of the affected zone or leave the site altogether. Therefore, the worst case exclusion or displacement of birds due to noise impacts during construction works would be for birds using the zone within 30m of the edge of construction works only, with birds likely to not be displaced from areas beyond this 30m distance as a result of noise impacts.[35]
- The low numbers of species recorded using the sites surveyed within the footprint of the Proposed Scheme (e.g. CBC0809WB001, CBC0809WB002, CBC0809WB003, CBC0809WB004 and CBC0809WB005) during field surveys undertaken in both the 2020-2021 and 2021-2022 winter season, which suggests 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;
- 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 Templeogue College, Ballyfermot / Le Fanu Park, Blackrock College, Palmerstown/ Glenaulin Park, Shelbourne Park Dog Track, DCC Brent Field Ringsend and Fairview Park; and
- The short-term nature of any disturbance related impacts associated with the construction of the Proposed Scheme, which is expected to last for 36 months. Following the completion of construction, disturbance levels will over time return to baseline conditions and as a result suitable lands will become available again as foraging and / or roosting habitat for these SCI species.

7.8.3.4 Summary

313 Table 25 presents a summary of the potential impacts of the Proposed Scheme on the Special Conservation Interests of Malahide Estuary SPA, and how these impacts relate to affecting the site's conservation objectives.

[35] Based on 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).

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?**	**Residual Impacts?**
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 alpina*) [A149], Black-tailed Godwit (*Limosa limosa*) [A156], Bar-tailed Godwit (*Limosa lapponica*) [A157], Redshank (*Tringa tetanus*) [A162] 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 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	Yes In a worst-case scenario, an accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay, which SCI birds may utilise outside of their core SPA foraging areas. 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 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.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA
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?	Residual Impacts?
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 There is no pathway for impacts to occur on any habitats associated with the Malahide Estuary SPA as the Proposed Scheme is not hydrologically connected to the Malahide Estuary.	No	No

7.8.4 Mitigation Measures

314 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

315 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

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

7.8.5 Residual Impacts

317 With the inclusion 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 Special Conservation Interests and supporting wetland habitat 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.

7.8.6 Conclusion of Assessment for Malahide Estuary SPA

318 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the Special Conservation Interests of 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 special conservation interests, it has been concluded that the Proposed Scheme does not pose a risk of adversely affecting (either directly or indirectly) the integrity of Malahide Estuary SPA.

7.9 Rogerstown Estuary SPA [004015]

7.9.1 Ecological Baseline Description for Rogerstown Estuary SPA

319 The Natura Standard Data Form (NPWS, 2020j) lists Rogerstown Estuary SPA as a relatively small estuarine system in north County Dublin. It has salt marsh and sand dune habitats, as well as agricultural fields which are of 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, non-native invasive species, disposal of industrial waste, fertilisation and landfill, land reclamation and drying out.

7.9.2 Special Conservation Interests and Conservation Objectives of Rogerstown Estuary SPA

320 The Special Conservation Interests of Rogerstown Estuary SPA, and the overall conservation objectives, are listed in Table 26.

Table 26: Special Conservation Interests and Conservation Objectives of Rogerstown Estuary SPA

Special Conservation 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 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 (2013i) *Conservation Objectives: Rogerstown Estuary SPA 004015*. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	To maintain the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA To maintain the favourable conservation condition of wetland habitat in Rogerstown Estuary SPA as a resource for the regularly occurring migratory waterbirds that utilise it

321 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.

322 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the Special Conservation Interests within the European site. Affecting the conservation condition of the Qualifying Interests / Special Conservation Interests is deemed to constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the Special Conservation Interests of Rogerstown Estuary SPA are presented in Section 7.9.3.4.

7.9.3 Examination and Analysis of Potential Direct and Indirect Impacts

323 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 Special Conservation Interests of Rogerstown Estuary SPA, are:

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

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

324 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 River Camac (Camac_040), River Dodder (Dodder_040), Grand Canal, River Poddle (Poddle_010), the Liffey Estuary Upper and Liffey Estuary Lower as well as a network of interconnecting and established surface or combined sewer / surface water pipes.

325 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.

7.9.3.2 Habitat loss and fragmentation

326 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, golden plover, oystercatcher, curlew, black-headed gull and black-tailed godwit. There are five areas of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme, composing grassland habitats (CBC0809WB001, CBC0809WB002, CBC0809WB003, CBC0809WB004 and CBC0809WB005).

327 The Proposed Scheme will result in the short-term loss of approximately 0.54ha in total of GA2 habitat suitable to support breeding gull and wintering bird species (e.g., light- bellied Brent goose) as a result of the installation of Construction Compounds TC3, TC4 and TC8. These areas will be lost, at least for the short-term, during the construction period of the Proposed Scheme as they will be used as Construction Compounds to facilitate nearby works.

328 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 of inland feeding / roosting sites due to the following reasons:

- According to the data collected during winter bird surveys undertaken during both the 2020-2021 and 2021-2022 winter bird season, none of the sites to be lost are significant inland foraging resource for wintering bird species, given the low numbers of wintering bird species recorded, with respect to their national and international populations. Therefore, the temporary loss of this site during the Construction of the Proposed Scheme will not result in any likely significant effect on the conservation status of any wintering bird species or undermine the conservation objectives of any SPAs in the vicinity which are designated for this species;
- Land take in these areas is temporary in nature and will be returned to its original state during the Operational Phase of the Proposed Scheme.

7.9.3.3 Disturbance and Displacement impacts

329 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. Potential for 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 deemed 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 7.4.3.4 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.

330 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 and oystercatcher and black-tailed godwit. There are areas of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme.

331 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), it is likely that SCI bird species associated with the Rogerstown Estuary SPA currently utilise suitable lands in the wider area. However, no significant effects will occur on any SCI bird species populations of Rogerstown 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:

- For virtually all items of construction works, any winter birds present at a distance of 30m or more from the edge of works (where noise levels will be between 50dB and 70dB) would experience only a moderate effect / level of response, 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. Up to 30m distance from the edge of works (where construction noise levels will be above 70dB) birds would be likely to move out of the affected zone or leave the site altogether. Therefore, the worst case exclusion or displacement of birds due to noise impacts during construction works would be for birds using the zone within 30m of the edge of construction works only, with birds likely to not be displaced from areas beyond this 30m distance as a result of noise impacts.[36]
- The low numbers of species recorded using the sites surveyed within the footprint of the Proposed Scheme (e.g. CBC0809WB001, CBC0809WB002, CBC0809WB003, CBC0809WB004 and CBC0809WB005) during field surveys undertaken in both the 2020-2021 and 2021-2022 winter season, which suggests 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;
- 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 Templeogue College, Ballyfermot/ Le Fanu Park, Blackrock College, Palmerstown / Glenaulin Park, Shelbourne Park Dog Track, DCC Brent Field Ringsend and Fairview Park; and,
- The short term nature of any disturbance related impacts associated with the construction of the Proposed Scheme, which is expected to last for 36 months. Following the completion of construction, disturbance levels will over time return to baseline conditions and as a result suitable lands will become available again as foraging and / or roosting habitat for these SCI species.

7.9.3.4 Summary

332 Table 27 presents a summary of the potential impacts of the Proposed Scheme on the Special Conservation Interests of Rogerstown Estuary SPA, and how these impacts relate to affecting the site's conservation objectives.

[36] Based on 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).

Table 27: Potential Impacts/Effects on the Conservation Objectives of Rogerstown Estuary SPA

Conservation Objectives **Attribute / Measure / Target**	**Potential Impacts Requiring Mitigation?**	**Are mitigation measures required?**	**Residual Impacts?**
Rogerstown Estuary SPA			
Greylag Goose (*Anser anser*) [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 alpina*) [A149], Black-tailed Godwit (*Limosa limosa*) [A156] and Redshank (*Tringa totanus*) [A162] 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 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	Yes In a worst-case scenario, an accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay, which SCI birds may utilise outside of their core SPA foraging areas. 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 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.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
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 646ha, other than that occurring from natural patterns of variation	No There is no pathway for impacts to occur on any habitats associated with the Rogerstown Estuary SPA as the Proposed Scheme is not hydrologically connected to Rogerstown Estuary.	No	No

7.9.4 Mitigation Measures

333 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

334 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

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

Measures to Prevent Disturbance and Displacement to SCI Birds Impacts during Construction

336 The mitigation measures presented in Section 7.4.4 will prevent Disturbance and Displacement to SCI Birds Impacts during Construction of the Proposed Scheme.

Measures to Reduce Impacts to SCI Birds due to vegetation loss during Operation

337 The mitigation measures presented in Section 7.4.4 will reduce impacts to SCI birds owing to vegetation loss of open territory during Operation of the Proposed Scheme.

7.9.5 Residual Impacts

338 With the inclusion 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 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.

7.9.6 Conclusion of Assessment for Rogerstown Estuary SPA

339 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the Special Conservation Interests of 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 Special Conservation Interests, it has been concluded that the Proposed Scheme does not pose a risk of adversely affecting (either directly or indirectly) the integrity of Rogerstown Estuary SPA.

7.10 Skerries Islands SPA [004122]

7.10.1 Ecological Baseline Description for Skerries Islands SPA

340 The Natura Standard Data Form (NPWS, 2020k) 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.

7.10.2 Special Conservation Interests and Conservation Objectives of Skerries Islands SPA

341 The Special Conservation Interests of Skerries Islands SPA, and the overall conservation objective, are listed in Table 28.

Table 28: Special Conservation Interests and Conservation Objectives of Skerries Islands SPA

Special Conservation Interest(s)	Conservation Objective(s)
Skerries Islands SPA [004122] A017 Cormorant *Phalacrocorax carbo* A018 Shag *Phalacrocorax aristotelis* A046 Light-bellied 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 (2022c) *Conservation objectives for Skerries Islands SPA [004122].* First Order Site-specific Conservation Objectives Version 1. 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

342 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 several European sites designated for similar SCI bird species to that of Skerries Islands SPA also informed this assessment. These European sites are identified in Table 29.

343 The site-specific conservation objectives document for this European site does not set out the attributes, measures and targets that define the favourable conservation condition of the Special Conservation Interests within the European site. Affecting the conservation condition of the Special Conservation Interests is deemed to constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the Special Conservation Interests of Skerries Islands SPA are presented in Section 7.10.3.4.

7.10.3 Examination and Analysis of Potential Direct and Indirect Impacts

344 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 Special Conservation Interests of Skerries Islands SPA, are:

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

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

345 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

River Camac (Camac_040), River Dodder (Dodder_040), Grand Canal, River Poddle (Poddle_010), the Liffey Estuary Upper and Liffey Estuary Lower as well as a network of interconnecting and established surface or combined sewer / surface water pipes.

346 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.

7.10.3.2 Habitat loss and fragmentation

347 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, golden plover, oystercatcher, curlew, black-headed gull and black-tailed godwit. There are five areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme, composing grassland habitats (CBC0809WB001, CBC0809WB002, CBC0809WB003, CBC0809WB004 and CBC0809WB005).

348 The Proposed Scheme will result in the short-term loss of approximately 0.54ha in total of GA2 habitat suitable to support breeding gull and wintering bird species (e.g., light- bellied Brent goose) as a result of the installation of Construction Compounds TC3, TC4 and TC8. These areas will be lost, at least for the short-term, during the construction period of the Proposed Scheme as they will be used as Construction Compounds to facilitate nearby works.

349 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 of inland feeding / roosting sites due to the following reasons:

- According to the data collected during winter bird surveys undertaken during both the 2020-2021 and 2021-2022 winter bird season, none of the sites to be lost are significant inland foraging resource for wintering bird species, given the low numbers of wintering bird species recorded, with respect to their national and international populations. Therefore, the temporary loss of this site during the construction of the Proposed Scheme will not result in any likely significant effect on the conservation status of any wintering bird species or undermine the conservation objectives of any SPAs in the vicinity which are designated for this species;
- Land take in these areas is temporary in nature and will be returned to its original state during the Operational Phase of the Proposed Scheme.

7.10.3.3 Disturbance and displacement impacts

350 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. Potential for 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 deemed 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 7.4.3.4 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.

351 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 the Proposed Scheme.

352 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 likely that SCI bird species associated with Skerries Islands SPA currently utilise suitable lands in the wider area. However, no significant effects will occur on any SCI bird species populations 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:

- For virtually all items of construction works, any winter birds present at a distance of 30m or more from the edge of works (where noise levels will be between 50dB and 70dB) would experience only a moderate effect / level of response, 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. Up to 30m distance from the edge of works (where construction noise levels will be above 70dB) birds would be likely to move out of the affected zone or leave the site altogether. Therefore, the worst case exclusion or displacement of birds due to noise impacts during construction works would be for birds using the zone within 30m of the edge of construction works only, with birds likely to not be displaced from areas beyond this 30m distance as a result of noise impacts.[37]
- The low numbers of species recorded using the sites surveyed within the footprint of the Proposed Scheme (e.g. CBC0809WB001, CBC0809WB002, CBC0809WB003, CBC0809WB004 and CBC0809WB005) during field surveys undertaken in both the 2020-2021 and 2021-2022 winter season, which suggests 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;
- 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 Templeogue College, Ballyfermot/ Le Fanu Park, Blackrock College, Palmerstown/ Glenaulin Park, Shelbourne Park Dog Track, DCC Brent Field Ringsend and Fairview Park; and,
- The short term nature of any disturbance related impacts associated with the construction of the Proposed Scheme, which is expected to last for 36 months. Following the completion of construction, disturbance levels will over time return to baseline conditions and as a result suitable lands will become available again as foraging and/or roosting habitat for these SCI species.

7.10.3.4 Summary

353 Table 29 presents a summary of the potential impacts of the Proposed Scheme on the Special Conservation Interests of Skerries Islands SPA, and how these impacts relate to affecting the site's conservation objectives.

[37] Based on 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).

Table 29: Potential Impacts/Effects on the Conservation Objectives of Skerries Islands SPA

Conservation Objectives **Attribute/ Measure / Target**	**Potential Impacts Requiring Mitigation?**	**Are mitigation measures required?**	**Residual Impacts?**
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] A first order site-specific conservation objectives document is available for this SPA., although there are no attributes, measures and targets defined.,. 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 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	Yes In a worst-case scenario, an accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay, which SCI birds may utilise outside of their core SPA foraging areas. 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 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.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA

7.10.4 Mitigation Measures

354 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

355 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

356 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

357 With the inclusion of appropriate mitigation measures identified in this NIS, the Proposed Scheme will not have any adverse effect on affecting the conservation objectives, or the favourable conservation condition, of the 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.

7.10.6 Conclusion of Assessment for Skerries Islands SPA

358 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the Special Conservation Interests of 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 Special Conservation Interests, it has been concluded that the Proposed Scheme does not pose a risk of adversely affecting (either directly or indirectly) the integrity of Skerries Islands SPA.

7.11 Ireland's Eye SPA [004117] and Lambay Island SPA [004069]

7.11.1 Ecological Baseline Description for Ireland's Eye SPA

359 According to the Natura 2000 Standard Data Form (NPWS, 2020l), 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.

7.11.2 Ecological Baseline Description for Lambay Island SPA

360 According to the Natura 2000 Standard Data Form (NPWS, 2020m), 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.

7.11.3 Special Conservation Interests and Conservation Objectives of Ireland's Eye SPA and Lambay Island SPA

361 The Special Conservation Interests of Ireland's Eye SPA and Lambay Island SPA, and the overall conservation objectives, are listed in Table 30.

Table 30: Special Conservation Interests and Conservation Objectives of Ireland's Eye SPA and Lambay Island SPA

Special Conservation 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 (2022d) *Conservation objectives for Ireland's Eye SPA [004117].* First Order Site-specific Conservation Objectives Version 1.0. 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
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 (2022h) *Conservation objectives for Lambay Island SPA [004069].* First Order Site-specific Conservation Objectives Version 1.*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

362 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 several European sites designated for similar SCI bird species to that of Ireland's Eye SPA and Lambay Island SPA also informed this assessment. These European sites are identified in Table 31.

363 The site-specific conservation objectives document for these European sites does not set out the attributes, measures and targets that define the favourable conservation condition of the Special Conservation Interests within the European site. Affecting the conservation condition of the Special Conservation Interests is deemed to constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the Special Conservation Interests of Ireland's Eye SPA and Lambay Island SPA are presented in Section 7.11.4.4.

7.11.4 Examination and Analysis of Potential Direct and Indirect Impacts

364 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 Special Conservation Interests of Ireland's Eye SPA and Lambay Island SPA, are:

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

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

365 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 River Camac (Camac_040), River Dodder (Dodder_040), Grand Canal, River Poddle (Poddle_010), the Liffey Estuary Upper and Liffey Estuary Lower as well as a network of interconnecting and established surface or combined sewer / surface water pipes.

366 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 and Lambay Island SPA.

7.11.4.2 Habitat loss and fragmentation

367 Ireland's Eye SPA and Lambay Island SPA are 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 five areas of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme, composing grassland habitats (CBC0809WB001, CBC0809WB002, CBC0809WB003, CBC0809WB004 and CBC0809WB005).

368 The Proposed Scheme will result in the short-term loss of approximately 0.54ha in total of GA2 habitat suitable to support breeding gull and wintering bird species (e.g., light- bellied Brent goose) as a result of the installation of Construction Compounds TC3, TC4 and TC8. These areas will be lost, at least for the short-term, during the construction period of the Proposed Scheme as they will be used as Construction Compounds to facilitate nearby works.

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

- According to the data collected during winter bird surveys undertaken during both the 2020-2021 and 2021-2022 winter bird season, none of the sites to be lost are significant inland foraging resource for wintering bird species, given the low numbers of wintering bird species recorded, with respect to their national and international populations. Therefore, the temporary loss of this site during the Construction of the Proposed Scheme will not result in any likely significant effect on the conservation status of any wintering bird species or undermine the conservation objectives of any SPAs in the vicinity which are designated for this species;

- Land take in these areas is temporary in nature and will be returned to its original state during the Operational Phase of the Proposed Scheme.

7.11.4.3 Disturbance and displacement impacts

370 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. Potential for 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 deemed 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 7.4.3.4 of this NIS provides the predicted construction noise limits associated with different Construction activities of the Proposed Scheme.

371 Ireland's Eye SPA and Lambay Island SPA are 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 areas of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme.

372 As records of SCI bird species associated with Ireland's Eye SPA and Lambay Island SPA have been returned from the desk study in the vicinity of the Proposed Scheme (i.e., Herring gull), it is considered to be possible that SCI species associated with Ireland's Eye SPA and Lambay Island SPA currently utilise these and other suitable lands in the wider area. However, no significant effects will occur on any SCI bird species populations of Ireland's Eye SPA or 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 the following reasons:

- For virtually all items of construction works, any winter birds present at a distance of 30m or more from the edge of works (where noise levels will be between 50dB and 70dB) would experience only a moderate effect / level of response, 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. Up to 30m distance from the edge of works (where construction noise levels will be above 70dB) birds would be likely to move out of the affected zone or leave the site altogether. Therefore, the worst case exclusion or displacement of birds due to noise impacts during construction works would be for birds using the zone within 30m of the edge of construction works only, with birds likely to not be displaced from areas beyond this 30m distance as a result of noise impacts.[38]
- The low numbers of species recorded using the sites surveyed within the footprint of the Proposed Scheme (e.g. CBC0809WB001, CBC0809WB002, CBC0809WB003, CBC0809WB004 and CBC0809WB005) during field surveys undertaken in both the 2020-2021 and 2021-2022 winter season, which suggests 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;
- 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 Templeogue College, Ballyfermot/ Le Fanu Park, Blackrock College, Palmerstown / Glenaulin Park, Shelbourne Park Dog Track, DCC Brent Field Ringsend and Fairview Park; and,

[38] Based on 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).

- The short-term nature of any disturbance related impacts associated with the construction of the Proposed Scheme, which is expected to last for 36 months. Following the completion of construction, disturbance levels will over time return to baseline conditions and as a result suitable lands will become available again as foraging and/or roosting habitat for these SCI species.

7.11.4.4 Summary

373 Table 31 presents a summary of the potential impacts of the Proposed Scheme on the Special Conservation Interests of Ireland's Eye SPA and Lambay Island SPA, and how these impacts relate to affecting the site's conservation objectives.

Table 31: Potential Impacts / Effects on the Conservation Objectives of Ireland's Eye SPA and Lambay Island SPA

Conservation Objectives **Attribute / Measure / Target**	**Potential Impacts Requiring Mitigation?**	**Are mitigation measures required?**	**Residual Impacts?**
Ireland's Eye SPA			
Cormorant (*Phalacrocorax carbo*) [A017], Herring Gull (*Larus argentatus*) [A184], Kittiwake (*Rissa tridactlya*) [A188], Guillemot (*Uria aalge*) [A199], Razorbill (*Alca torda*) [A200] A first order site-specific conservation objectives document is available for this SPA, although there are no attributes, measures and targets defined.. 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 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	Yes In a worst-case scenario, an accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay, which SCI birds may utilise outside of their core SPA foraging areas. 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 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.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Lambay Island SPA			
Fulmar (*Fulmarius glacialis*) [A009], Cormorant (*Phalacrocorax carbo*) [A017], Shag (*Phalacrocorax aristotelis*) [A018], Greylag Goose (*Anser anser*) [A043], Lesser Black-backed Gull (*Larus fuscus*) [A183], Herring Gull (*Larus argentatus*) [A184], Kittiwake (*Rissa tridactyla*) [A188], Guillemot (*Uria aalge*) [A199], Razorbill (*Alca torda*) [A200], Puffin (*Fratercula arctica*) [A204] A first order site-specific conservation objectives document is available for this SPA, although there are no attributes, measures and targets defined. 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 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	Yes In a worst-case scenario, an accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay, which SCI birds may utilise outside of their core SPA foraging areas. 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 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.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA

7.11.5 Mitigation Measures

374 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 and 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

375 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

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

7.11.6 Residual Impacts

377 With the inclusion 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 Special Conservation Interests of Ireland's Eye SPA or 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 Ireland's Eye SPA or 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.

7.11.7 Conclusion of Assessment for Ireland's Eye SPA or Lambay Island SPA

378 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the Special Conservation Interests of Ireland's Eye SPA or Lambay 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 Special Conservation Interest, it has been concluded that the Proposed Scheme does not pose a risk of adversely affecting (either directly or indirectly) the integrity of Ireland's Eye SPA or Lambay Island SPA.

7.12 The Murrough SPA [004186]

7.12.1 Ecological Baseline Description for The Murrough SPA

379 According to the Natura 2000 Standard Data Form (NPWS, 2020n), 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.

7.12.2 Special Conservation Interests and Conservation Objectives for The Murrough SPA

380 The Special Conservation Interests of The Murrough SPA and the overall conservation objectives are listed in Table 32.

Table 32: Special Conservation 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 (2022f) *Conservation Objectives for the Murrough SPA [004186]. First Order Site-specific Conservation Objectives Version 1.0.* 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.

381 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 a number of European sites (identified in Table 33) also informed this assessment.

382 The first order site-specific conservation objectives document does not set out the attributes, measures and targets that define the favourable conservation condition of the Special Conservation Interests within the European site. Affecting the conservation condition of the SCI is deemed to constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the SCIs in respect of The Murrough SPA are presented in Section 7.12.3.4.

7.12.3 Examination and Analysis of Potential Direct and Indirect Impacts

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

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

384 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 River Camac (Camac_040), River Dodder (Dodder_040), Grand Canal, River Poddle (Poddle_010), the Liffey Estuary Upper and Liffey Estuary Lower as well as a network of interconnecting and established surface or combined sewer / surface water pipes.

385 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.

7.12.3.2 Habitat Loss and Fragmentation

386 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, golden plover, oystercatcher, curlew, black-headed gull and black-tailed godwit. There are five areas of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme, composing grassland habitats (CBC0809WB001, CBC0809WB002, CBC0809WB003, CBC0809WB004 and CBC0809WB005).

387 The Proposed Scheme will result in the short-term loss of approximately 0.54ha in total of GA2 habitat suitable to support breeding gull and wintering bird species (e.g., light- bellied Brent goose) as a result of the installation of Construction Compounds TC3, TC4 and TC8. These areas will be lost, at least for the short-term, during the construction period of the Proposed Scheme as they will be used as Construction Compounds to facilitate nearby works.

388 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 of inland feeding / roosting sites due to the following reasons:

- According to the data collected during winter bird surveys undertaken during both the 2020-2021 and 2021-2022 winter bird season, none of the sites to be lost are significant inland foraging resource for wintering bird species, given the low numbers of wintering bird species recorded, with respect to their national and international populations. Therefore, the temporary loss of this site during the construction of the Proposed Scheme will not result in any likely significant effect on the conservation status of any wintering bird species or undermine the conservation objectives of any SPAs in the vicinity which are designated for this species; and
- Land take in these areas is temporary in nature and will be returned to its original state during the Operational Phase of the Proposed Scheme.

7.12.3.3 Disturbance and Displacement impacts

389 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. Potential for 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 deemed 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 7.4.3.4 of this NIS provides the predicted construction noise limits associated with different Construction activities of the Proposed Scheme.

390 The Murrough SPA is designated for a number of wintering SCI species that it is considered could forage and / or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include light-bellied Brent goose, greylag goose, wigeon, teal and gull species including black headed and herring

gull. There are areas of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme.

391 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 and black-headed gull), it is likely that SCI bird species associated with The Murrough SPA currently utilise suitable lands in the wider area. However, no significant effects will occur on any SCI bird species populations 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:

- For virtually all items of construction works, any winter birds present at a distance of 30m or more from the edge of works (where noise levels will be between 50dB and 70dB) would experience only a moderate effect / level of response, 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. Up to 30m distance from the edge of works (where construction noise levels will be above 70dB) birds would be likely to move out of the affected zone or leave the site altogether. Therefore, the worst case exclusion or displacement of birds due to noise impacts during construction works would be for birds using the zone within 30m of the edge of construction works only, with birds likely to not be displaced from areas beyond this 30m distance as a result of noise impacts.[39]
- The low numbers of species recorded using the sites surveyed within the footprint of the Proposed Scheme (e.g. CBC0809WB001, CBC0809WB002, CBC0809WB003, CBC0809WB004 and CBC0809WB005) during field surveys undertaken in both the 2020-2021 and 2021-2022 winter season, which suggests 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;
- 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 Templeogue College, Ballyfermot / Le Fanu Park, Blackrock College, Palmerstown / Glenaulin Park, Shelbourne Park Dog Track, DCC Brent Field Ringsend and Fairview Park; and,
- The short-term nature of any disturbance related impacts associated with the construction of the Proposed Scheme, which is expected to last for 36 months. Following the completion of Construction, disturbance levels will over time return to baseline conditions and as a result suitable lands will become available again as foraging and/or roosting habitat for these SCI species.

7.12.3.4 Summary

392 Table 33 presents a summary of the potential impacts of the Proposed Scheme on the SCIs of The Murrough SPA, and how these impacts relate to affecting the site's conservation objectives.

[39] Based on 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).

Table 33: Potential Impacts/Effects on the Conservation Objectives of The Murrough SPA

Conservation Objectives **Attribute / Measure / Target**	**Potential Impacts Requiring Mitigation?**	**Are mitigation measures required?**	**Residual Impacts?**
The Murrough SPA			
Red-throated Diver (*Gavia stellata*) [A001]; Greylag Goose (*anser anser*) [A043]; Light-Bellied Brent Goose (*Branta bernicola hrota*) [A046]; Wigeon (*Anas penelope*) [A050]; Teal (*Anas cracca*) [A052]; Black-Headed Gull (*Chroicocephalus ridibundus*) [179]; Herring Gull (*Larus argentatus*) [184]; A first order site-specific conservation objectives document is available for this SPA, although there are no attributes, measures and targets defined. Therefore, the attributes, measures and targets below have been developed based on the specific conservation objectives available for The Raven SPA [004019] (NPWS, 2012c); Rogerstown Estuary SPA [004015] (NPWS, 2013i); South Dublin Bay and River Tolka Estuary SPA [004024] (NPWS, 2015a); Wexford Harbour and Slobs SPA [004076] (NPWS, 2012c); North Bull Island SPA [004006] (NPWS, 2015b); and Boyne Estuary SPA [004080] (NPWS, 2013k)			
Population trend/% change/Long term population trend stable or increasing	Yes In a worst-case scenario, an accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay, which SCI birds may utilise outside of their core SPA foraging areas. 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	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.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not
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			
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			
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?	Residual Impacts?
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	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.		have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA.
Little Tern (*Sterna albifrons*) [195] A first order site-specific conservation objectives document is available for this SPA, although there are no attributes, measures and targets defined. 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, 2013k)			
Breeding population abundance: apparently occupied nests (AONs)/Number/No significant decline	No There is no potential for impacts to occur on this SCI bird species population at The Murrough SPA, in light of its conservation objectives, as a consequence of disturbance to areas used by these birds due to increased levels of distal disturbance impacts	No	No
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			

7.12.4 Mitigation Measures

393 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

394 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

395 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

396 With the inclusion of appropriate mitigation measures identified in this NIS, the Proposed Scheme, the Proposed Scheme will not have any adverse effect on the conservation objectives, or the favourable conservation condition, of the Special Conservation Interests of 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.

7.12.6 Conclusion of Assessment for The Murrough SPA

397 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the Special Conservation Interests including its supporting wetland habitat of 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 Special Conservation Interests it has been concluded that the Proposed Scheme does not pose a risk of adversely affecting (either directly or indirectly) the integrity of The Murrough SPA.

8 Summary of Mitigation Measures and Residual Impacts

8.1 Summary of Mitigation Measures

398 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 34, identifying the specific mitigation measures required for each relevant European site.

399 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 34: 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	Non-native Invasive Species	Air Quality	Disturbance / Displacement	Habitat Loss and Fragmentation	Hydrology	Hydro-geology	Non-native Invasive Species	Air Quality	Disturbance / Displacement	
North Dublin Bay SAC	X	✓ Section 7.1.4 / Section 5.4 of CEMP	X	✓ Section 7.1.4 / Section 5.3 of the CEMP	X	X	X	✓ Section 7.1.4 / Section 5.4 of CEMP	X	✓ Section 7.1.4 / Section 5.3 of the CEMP	X	X	No
South Dublin Bay SAC	X	✓ Section 7.1.4 / Section 5.4 of CEMP	X	✓ Section 7.1.4 / Section 5.3 of the CEMP	X	X	X	✓ Section 7.1.4 / Section 5.4 of CEMP	X	✓ Section 7.1.4 / Section 5.3 of the CEMP	X	X	No
Rockabill to Dalkey Island SAC	X	✓ Section 7.2.5 / Section 5.4 of CEMP	X	X	X	X	X	✓ Section 7.2.5 / Section 5.4 of CEMP	X	X	X	X	No
Lambay Island SAC	X	✓ Section 7.2.5 / Section 5.4 of CEMP	X	X	X	X	X	✓ Section 7.2.5 / Section 5.4 of CEMP	X	X	X	X	No
Wicklow Mountains SAC	x	✓ Section 7.2.5 / Section 5.4 of CEMP	x	x	x	✓ Section 7.3.4 Section 5.1.9 in CEMP	x	✓ Section 7.2.5 / Section 5.4 of 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	Non-native Invasive Species	Air Quality	Disturbance / Displacement	Habitat Loss and Fragmentation	Hydrology	Hydro-geology	Non-native Invasive Species	Air Quality	Disturbance / Displacement	
South Dublin Bay and River Tolka Estuary SPA	X	✓ Section 7.3.4 / Section 5.4 of CEMP	X	✓ Section 7.3.4 / Section 5.3 of the CEMP	X	X	X	✓ Section 7.3.4 / Section 5.4 of CEMP	X	✓ Section 7.3.4 / Section 5.3 of the CEMP	X	X	No
North Bull Island SPA	X	✓ Section 7.4.4 / Section 5.4 of CEMP	X	✓ Section 7.4.4 / Section 5.3 of the CEMP	X	X	X	✓ Section 7.4.4 / Section 5.4 of CEMP	X	✓ Section 7.4.4 / Section 5.3 of the CEMP	X	X	No
Howth Head Coast SPA	X	✓ Section 7.5.6 / Section 5.4 of CEMP	X	X	X	X	X	✓ Section 7.5.6 / Section 5.4 of CEMP	X	X	X	X	No
Dalkey Islands SPA	X	✓ Section 7.5.6 / Section 5.4 of CEMP	X	X	X	X	X	✓ Section 7.5.6 / Section 5.4 of CEMP	X	X	X	X	No
Rockabill SPA	X	✓ Section 7.5.6 / Section 5.4 of CEMP	X	X	X	X	X	✓ Section 7.5.6 / Section 5.4 of 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	Non-native Invasive Species	Air Quality	Disturbance / Displacement	Habitat Loss and Fragmentation	Hydrology	Hydro-geology	Non-native Invasive Species	Air Quality	Disturbance / Displacement	
Baldoyle Bay SPA	X	✓ Section 7.6.4 / Section 5.4 of CEMP	X	X	X	X	X	✓ Section 7.6.4 / Section 5.4 of CEMP	X	X	X	X	No
Malahide Estuary SPA	X	✓ Section 7.7.4 / Section 5.4 of CEMP	X	X	X	X	X	✓ Section 7.7.4 / Section 5.4 of CEMP	X	X	X	X	No
Rogerstown Estuary SPA	X	✓ Section 7.8.4 / Section 5.4 of CEMP	X	X	X	X	X	✓ Section 7.8.4 / Section 5.4 of CEMP	X	X	X	X	No
Skerries Islands SPA	X	✓ Section 7.9.4 / Section 5.4 of CEMP	X	X	X	X	X	✓ Section 7.9.4 / Section 5.4 of CEMP	X	X	X	X	No
Ireland's Eye SPA	X	✓ Section 7.10.5 / Section 5.4 of CEMP	X	X	X	X	X	✓ Section 7.10.5 / Section 5.4 of CEMP	X	X	X	X	No
Lambay Island SPA	X	✓ Section 7.10.5 / Section 5.4 of CEMP	X	X	X	X	X	✓ Section 7.10.5 / Section 5.4 of 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	Non-native Invasive Species	Air Quality	Disturbance / Displacement	Habitat Loss and Fragmentation	Hydrology	Hydro-geology	Non-native Invasive Species	Air Quality	Disturbance / Displacement	
The Murrough SPA	X	✓ Section 7.11.4 / Section 5.4 of CEMP	X	X	X	X	X	✓ Section 7.11.4 / Section 5.4 of CEMP	X	X	X	X	No

8.2 Summary of Residual Impacts

400 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.

A matrix identifying those aspects which will be subject to mitigation measures and the residual impacts post mitigation is provided in Table 34 for the relevant European sites.

9 In-Combination Assessment

401 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).

402 The seventeen European sites within the ZoI of the Proposed Scheme are:

- North Dublin Bay SAC;
- South Dublin Bay SAC;
- Rockabill to Dalkey Island SAC;
- Lambay Island SAC;
- Wicklow Mountains 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.

403 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

404 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.

405 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. These are presented below in Table 35.

406 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 35 were identified and assessed. This assessment is presented below in Table 36 and Table 37.

Table 35: Land Use Plans, Programmes and Projects Considered for the In-Combination Assessment

National Plans
National Energy & Climate Plan 2021-2030
Climate Action Plan 2023
National Spatial Strategy for Ireland 2002-2020
Project Ireland 2040 – Building Ireland's Future[40]
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) Report 2021
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 (supersedes Greater Dublin Area Cycle Network Plan 2013)
Greater Dublin Area Transport Strategy 2022-2042
Eastern Catchment Flood Risk Assessment and Management (CFRAM) study 2011-2016
County/Local Plans
Fingal Development Plan 2023-2029
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 2022-2028
Dublin City Biodiversity Action Plan 2021-2025
Dublin City Council Climate Action Plan 2019-2024 • Clongriffin-Belmayne Local Area Plan 2012-2018 • Ballymun Local Area Plan 2017 • Naas Road Local Area Plan 2013-2023 • Park West- Cherry Orchard Local Area Plan 2019

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

South Dublin County Council Development Plan 2022-2028

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

Dún Laoghaire- Rathdown Development Plan (2022-2028)

Dún Laoghaire- Rathdown Biodiversity Action Plan 2021-2025

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

- Stillorgan Local Area Plan 2018-2024
- Woodbrook-Shanganagh Local Area Plan 2017-2024

Wicklow County Development Plan 2022-2028

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

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
- 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
- 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
- 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

- 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 local traffic movements.
- 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.
- Alterations 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 crèche) partially 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.
- River Camac Flood Alleviation Scheme (excluding the extension of culvert and headwall at New Nangor Road and Oak Road intersection)
- Increase the capacity of the Dublin Waste to Energy Facility from 600,000 tonnes per annum to 690,000 tonnes per annum
- Clutterland 110kV GIS Substation building and 2 underground single circuit transmission lines
- 2 no. 110kV transmission lines and a 110kV Gas Insulated Switchgear (GIS) substation
- Provision of two 110kV transmission lines connecting Coolderrig 110kV GIS substation to Grand Castle – Kilmahud circuits.
- Snugborough Interchange Upgrade
- Park development project at the Racecourse Park
- BTR development at Hanover Lane.
- Development at Cookstown Industrial Estate.
- Phased completion of Football Stadium at Tallaght.
- Road reconfiguration at Merrywell Industrial Estate (Part 8 Application).
- Greenhills road realignment (Part 8 Application).
- Various upgrades centred on Greenhills Road bridge over M50 eastwards to Ballymount (Part 8 Application).

- Traffic calming measures on Keadeen Road (Part 8 Application).
- Extension of discrete section of Greenhills Road and various ancillary infrastructure works.
- Change o fuse from warehouse to data repository facility at M50 Business Park, Ballymount Avenue, Dublin 12.
- Extension and renovation of the Cuckoo's nest Public house.
- Demolition of derelict structure and construction of mixed-development at junction of Summer Street South and Marrowbone Lane.
- Demolition and reconstruction of structures at Mark's Alley West
- BTR development at 17-21 Foley Street Dublin 1.
- Retention development of Covid emergency extension block at Mater Misericordiae University Hospital, Eccles Street, Dublin 7.
- Construction development at Graymount, Dungriffin Road.
- Advance Infrastructure at Hackettstown Skerries.
- Advance Infrastructure at Castlelands, Balbriggan.
- Development at protected structure at 95 ST Stephen's Green.
- Residential development at Harolds Grange Road, Rathfarnham.
- Residential development at existing car wash facility at Braemor Road.
- Clongriffin to City Centre Core Bus Corridor Scheme
- 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
- Liffey Valley to City Centre Core Bus Corridor Scheme
- Lucan 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
- Blackrock / Belfield to City Centre Core Bus Corridor Scheme
- Ringsend to City Centre Core Bus Corridor Scheme
- A range of Strategic Housing Developments
- A range of Large -Scale Residential Developments
- A range of Irish Water Projects
- GDA Transport Strategy Park and Ride (All Included despite distance as hydrological connectivity cannot be ruled out to downstream European sites in Dublin Bay)
- Dolphins Barn Public Realm Improvement Scheme
- City Edge Project
- Francis Street Environmental Improvement Scheme

Table 36: 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.
Climate Action Plan 2023 – Changing Ireland for Better The Plan, which was not subject to AA, provides the Governments' second update to the Climate Action Plan 2019, outlines the actions required to 2035 and beyond, to guide the Governments' joint efforts over the coming years at reducing greenhouse gas emissions. The plan implements the carbon budgets and sectoral emissions ceilings and sets a roadmap for taking decisive action to halve our emissions by 2030 and reach net zero no later than 2050. It will be updated annually and will be improved and strengthened when required, allowing us to learn from our experiences in what is a very significant and complex undertaking.	There is the potential that actions and or developments implemented under the Climate Action Plan 2023 could affect European sites within the ZoI of the Proposed Scheme. The potential impact pathways cannot yet be defined and while the Plan includes a considerable number of actions, the detailed implementation steps are not yet available as a supplementary Annex of Actions is to be published in 2023.	No in combination impact. Although lacking full implementation detail, the bulk of the actions require the development of guidance, standards and plans, to positively reduce the greenhouse gas emissions. Any sectoral plans developed on foot of this will themselves be subject to AA and Strategic Environmental Assessment Any projects arising out of the Plan or the Sectoral plans required to achieve the objectives of the 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 DP (2023-2029), Dublin City DP (2022-2028), South Dublin CDP (2022-2028), Dún Laoghaire-Rathdown CDP (2022-2028), and Wicklow CDP (2022 - 2028). 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

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
		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 Climate Action Plan 2023 Plan poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.
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 DP (2023-2029), Dublin City DP (2022-2028), South Dublin CDP (2022-2028), Dún Laoghaire-Rathdown CDP (2022-2028), and Wicklow CDP (2022 - 2028). 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 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, BusConnects Scheme, and	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	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 DP (2023-2029), Dublin City DP

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
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	situated in a location where they may be within the ZoI of those European sites.	(2022-2028), South Dublin CDP (2022-2028), Dún Laoghaire-Rathdown CDP (2022-2028), and Wicklow CDP (2022-2028). 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, 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 DP (2023-2029), Dublin City DP (2022-2028), South Dublin CDP (2022-2028), Dún Laoghaire-Rathdown CDP (2022-2028), and Wicklow CDP (2022-2028). 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 effects on the integrity of any European sites in combination with the Proposed Scheme.

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
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 DP (2023-2029), Dublin City DP (2022-2028), South Dublin CDP (2022-2028), Dún Laoghaire-Rathdown CDP (2022-2028), and Wicklow CDP (2022-2028). 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 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.	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 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 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.

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 Air Pollution Control Programme (NAPCP) 2021 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.). All of these 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 the National Marine Planning Framework 2018, and in the county and local level land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the National Marine Planning Framework 2018 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.	Objectives of the WSSP 2015 are implemented through relevant local authorities and statutory bodies i.e. Fingal DP (2023-2029), Dublin City DP (2022-2028), South Dublin CDP (2022-2028), Dún Laoghaire-Rathdown CDP (2022-2028), and Wicklow CDP (2022-2028). 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	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 DP (2023-2029), Dublin City DP (2022-2028), South Dublin CDP (2022-2028), Dún Laoghaire-Rathdown CDP (2022-2028), and Wicklow CDP (2022-2028). 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
	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.	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 DP (2023-2029), Dublin City DP (2022-2028), South Dublin CDP (2022-2028), Dún Laoghaire-Rathdown CDP (2022-2028), and Wicklow CDP (2022-2028). 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 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.
2022 Greater Dublin Area Cycle Network Plan	The Proposed Scheme lies partly within the functional area of the Dublin City Development Plan 2022-2028 and South Dublin County Development Plan 2022-2028, and many of the objectives and	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
(Supersedes the Greater Dublin Area Cycle Network Plan 2013) The 2022 Greater Dublin Area Cycle Network Plan substantially updated the 2013 plan to strengthen access and local permeability within Dublin and GDA towns, and cycling connectivity between them to accompany the GDA Transport Strategy.	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 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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); • Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance effects on the QI otter population associated with Wicklow Mountains SAC); 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 2022 Greater Dublin Area Cycle Network Plan has 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 2022 Greater Dublin Area Cycle Network Plan 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 2022 Greater Dublin Area Cycle Network Plan, 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 2022 Greater Dublin Area Cycle Network Plan 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 DP (2023-2029), Dublin City DP (2022-2028), South Dublin CDP (2022-2028), Dún Laoghaire-Rathdown CDP (2022-2028), and Wicklow CDP (2022-2028). 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 2022 Greater Dublin Area Cycle Network Plan poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.

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
Greater Dublin Area Transport Strategy 2022- 2042 The Strategy, which replaces the 2016-2035 strategy, sets out the framework for investment in transport infrastructure and services over the next two decades to 2042. It has been developed to be consistent with National Planning framework and spatial planning policies and objectives.	The Proposed Scheme lies partly within the functional area of the Dublin City Development Plan 2022-2028 and South Dublin County Development Plan 2022-2028, and many of the objectives and policies of the Greater Dublin Area Transport Strategy 2022-2042, 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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); • Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance effects on the QI otter population associated with Wicklow Mountains SAC); 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 Greater Dublin Area Transport Strategy 2020-2042 has undergone AA and therefore, subject to the mitigation proposed in the NIS being incorporated, there would be no adverse effects on any European sites as a result of implementation of the plan. The Greater Dublin Area Transport Strategy 2020-2042 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 Greater Dublin Area Transport Strategy 2020-2042, 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 Transport Strategy 20020-2042 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 DP (2023-2029), Dublin City DP (2022-2028), South Dublin CDP (2022-2028), Dún Laoghaire-Rathdown CDP (2022-2028), and Wicklow CDP (2022-2028). 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 Transport Strategy 2020-2042 poses no identifiable risk 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
		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 **3.** Flood Risk Management Plans	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 situated in a location where they may be within the ZoI of those European sites.	No in combination impact. CFRAM Studies and their product Flood Risk Management Plans have undergone AA. The AA of the CFRAMs considered the potential for impacts from hard engineering solutions and how they might affect hydrological connectivity and hydromorphological supporting conditions for protected habitats and species. 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.). 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. Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the CFRAM will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites in combination with the Proposed Scheme.
Fingal Development Plan 2023-2029 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 2022-2028 and South Dublin County Development Plan 2022-2028, however many of the objectives and policies of the Fingal Development Plan 2023-2029, 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 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	No in combination impact. The Fingal Development Plan 2023-2029 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 2023-2029 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 this, 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
	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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); • Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance effects on the QI otter population associated with Wicklow Mountains SAC); 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)	
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.
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 2022-2028 and South Dublin County Development Plan 2022-2028, 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	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,

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
	environment that are measurable in some way, but themselves will not affect the conservation objectives 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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); • Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance effects on the QI otter population associated with Wicklow Mountains SAC); 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.
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 2022-2028 and South Dublin County Development Plan 2022-2028, 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:	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,

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/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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); • Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance effects on the QI otter population associated with Wicklow Mountains SAC); 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.
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 2022-2028 and South Dublin County Development Plan 2022-2028, 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 degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay	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
	affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); • Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance effects on the QI otter population associated with Wicklow Mountains SAC); 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).	
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 2022-2028 and South Dublin County Development Plan 2022-2028, 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 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 Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South	No in combination impact. The Kinsaley 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 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 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
	Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, 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); • Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance effects on the QI otter population associated with Wicklow Mountains SAC); 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).	
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 2022-2028 and South Dublin County Development Plan 2022-2028, 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 some way, but themselves will not affect the conservation objectives 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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide	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, 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.

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, Rogerstown Estuary SPA, and The Murrough SPA); • Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance effects on the QI otter population associated with Wicklow Mountains SAC); 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).	
Dublin City Development Plan 2022-2028 The Dublin City DP makes reference to improvement of the public transport network and facilities for pedestrians and cyclists and targets / obligations to create strategic development and regeneration areas.	The Proposed Scheme lies partially within the functional area of the Dublin City Development Plan 2022-2028 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. 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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); • Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise	No in combination impact. The Dublin City Development Plan 2022 – 2028 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 Dublin City Development Plan 2022-2028 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 2022-2028, 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
	levels and human presence (for example disturbance effects on the QI otter population associated with Wicklow Mountains SAC); 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).	
Dublin City Biodiversity Action Plan 2021-2025 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 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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide	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 DP (2023-2029), Dublin City DP (2022-2028), South Dublin CDP (2022-2028), Dún Laoghaire-Rathdown CDP (2022-2028), and Wicklow CDP (2022-2028). 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

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, Rogerstown Estuary SPA, and The Murrough SPA); • Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance effects on the QI otter population associated with Wicklow Mountains SAC); 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).	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 2022-2028 and South Dublin County Development Plan 2022-2028, 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 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 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 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 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
	• Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance effects on the QI otter population associated with Wicklow Mountains SAC); 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).	
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 2022-2028 and South Dublin County Development Plan 2022-2028, 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 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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); • Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance	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
	effects on the QI otter population associated with Wicklow Mountains SAC); 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).	
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 2022-2028 and South Dublin County Development Plan 2022-2028, 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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); • Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance effects on the QI otter population associated with Wicklow Mountains SAC); and,	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
	• 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).	
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 2022-2028 and South Dublin County Development Plan 2022-2028, 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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); • Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance effects on the QI otter population associated with Wicklow Mountains SAC); and, • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream	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.

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
	European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	
South Dublin County Council Development Plan 2022-2028 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 2022-2028 and South Dublin County Development Plan 2022-2028, however some of the objectives and policies of the South Dublin County Council Development Plan 2022-2028, 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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); • Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance effects on the QI otter population associated with Wicklow Mountains SAC); 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 South Dublin County Council Development Plan 2022-2028 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 South Dublin County Council Development Plan 2022-2028 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 2022-2028, 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 draft plan (once adopted) 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 2022-2028 and South Dublin County Development Plan 2022-2028, 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 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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); • Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance	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
	effects on the QI otter population associated with Wicklow Mountains SAC); 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).	
Dún Laoghaire- Rathdown County Development Plan (2022-2028) The Dún Laoghaire- Rathdown CDP makes reference to commercial and residential development (including Cherrywood SDZ) targets/obligations, and targets associated with providing suitable community infrastructure.	The Proposed Scheme lies partially within the functional area of the Dublin City Development Plan 2022-2028 and South Dublin County Development Plan 2022-2028, 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. 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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); • Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance effects on the QI otter population associated with Wicklow Mountains SAC); and,	No in combination impact. The Dún Laoghaire- Rathdown County Development Plan 2022-2028 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 Dún Laoghaire- Rathdown County Development Plan 2022-2028 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 County Development Plan 2022-2028, 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).	
Dún Laoghaire- Rathdown Biodiversity Action Plan 2021-2025; 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.
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.
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 2022-2028 and South Dublin County Development Plan 2022-2028, 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 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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island	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 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
	SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); • Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance effects on the QI otter population associated with Wicklow Mountains SAC); 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).	
Woodbrook-Shanganagh Local Area Plan 2017-2024 This LAP makes reference to 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 2022-2028 and South Dublin County Development Plan 2022-2028, 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. 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 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 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 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 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
	• Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance effects on the QI otter population associated with Wicklow Mountains SAC); 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).	
Wicklow County Development Plan 2022-2028 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 2022-2028 and South Dublin County Development Plan 2022-2028, 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 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 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 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 Wicklow County Development Plan 2022-2028 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 2022-2028 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 2022-2028, 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	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 halt the loss of biodiversity and the degradation of ecosystems.	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 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 The purpose of this action plan is to improve the council's energy efficiency, reduce their greenhouse emissions and create a climate resilient Wicklow.	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.
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 2022-2028 and South Dublin County Development Plan 2022-2028, 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 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 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 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 Bray Municipal District Local Area Plan 2018-2024 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 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.

Table 37: In Combination Assessment of Major Projects

Application Reference	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 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, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Howth Coast SPA, Dalkey Islands SPA, 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 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 N3 Castaheany 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.

Application Reference	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 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 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 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. 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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA,	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. 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

Application Reference	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?
		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).	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 the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay 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 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-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. 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	No in combination effect. The proposed the Reconfiguration of the N4 from its junction with the M50 to Leixlip must comply with all applicable planning and environmental approval

Application Reference	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 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 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).	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. 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 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 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 Coast SPA,	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.

Application Reference	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?
		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 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).	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 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 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 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 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 + 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. 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.

Application Reference	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?
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 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 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 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 Porterstown Distributor Link 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 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.
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	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.

Application Reference	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?
		aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay 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 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 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 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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); and,	No in combination effect. 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

Application Reference	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).	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: • 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 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 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 + 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. The proposed DART + 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 + 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.

Application Reference	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?
MP13	Junction upgrades and other capacity improvements on the M1 motorway, including additional lanes south of Drogheda, where required	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 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 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 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.
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 degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction	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.

Application Reference	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?
		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 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 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 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.
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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill 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,

Application Reference	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?
		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 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 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 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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); • Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance effects on the QI otter population associated with Wicklow Mountains SAC); and, • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin	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	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 SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary 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 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 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 Cross 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 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,	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 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

Application Reference	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, 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 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).	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.
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 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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); • Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance	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.

Application Reference	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 on the QI otter population associated with Wicklow Mountains SAC); 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 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
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 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 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.
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	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,

Application Reference	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 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 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).	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 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 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 SPA, Ireland's Eye	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 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.

Application Reference	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, 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).	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 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 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 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	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 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

Application Reference	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 SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	proposed Poolbeg SDZ roads development project and has included mitigation in that regard to prevent any such adverse effects.
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 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 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 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+ 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.
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	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

Application Reference	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 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 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).	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 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+ Coastal South Project	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+ 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.

Application Reference	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 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 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 DART+ Coastal South 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 DART+ Coastal South 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 DART+ Coastal South 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+ Coastal South Project 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 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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill 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. 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

Application Reference	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?
		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).	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 / M11 tie in) 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 local traffic movement	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.
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 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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA,	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

Application Reference	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?
		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 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.
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 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 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 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 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 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	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

Application Reference	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 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 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 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 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 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 SPA,	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 column in this table, either alone or in combination with the Proposed Scheme.

Application Reference	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?
		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).	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 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 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 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 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 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.

Application Reference	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?
MP37	Snugborough Interchange Upgrade	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, non-native invasive species, air quality or disturbance/displacement to SCI species).	No in combination effect.
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, non-native invasive species, air quality or disturbance/displacement to SCI species).	No in combination effect.
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, non-native 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 Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka	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.

Application Reference	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, Dalkey Islands SPA, 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).	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 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 degradation/effects on Q/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 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 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 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	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?
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 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 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 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 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 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	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, non-native invasive species, air quality or disturbance/displacement to SCI species).	No in combination effect.

Application Reference	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?
	development and ancillary works. Timahoe East		
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 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 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 Dublin Port 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. 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 crèche) practically 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:	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.

Application Reference	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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough 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 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 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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill 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 development for Brexit Infrastructure at Dublin Port, the environmental protection policies included within the relevant land use plans,

Application Reference	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?
		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).	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 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, non-native 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 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 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 not adversely affect the integrity of any European sites,

Application Reference	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).	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 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 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 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 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 and has included mitigation in that regard to prevent any such adverse effects.
Not available	River Camac Flood Alleviation 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	No in combination effect. The proposed Camac Flood Alleviation Scheme works must comply with all applicable planning and environmental approval requirements and be in

Application Reference	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 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 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).	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 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 Camac Flood Alleviation Scheme works and has included mitigation in that regard to prevent any such adverse effects.
311315	Park development project at the Racecourse Park (Baldoyle)	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 Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary	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. 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.

Application Reference	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, Dalkey Islands SPA, 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).	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 Racecourse Park and has included mitigation in that regard to prevent any such adverse effects.
5052/22 (DCC)	BTR development at Hanover Lane.	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 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 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 BTR development at Hanover Lane 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 was 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 BTR development at Hanover Lane, 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 office block redevelopment and has included mitigation in that regard to prevent any such adverse effects.

Application Reference	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?
SD22A/0361 (SDCC)	Development at Cookstown Industrial Estate.	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 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 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 Development at Cookstown Industrial Estate 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 was 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 Development at Cookstown Industrial Estate, 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 office block redevelopment and has included mitigation in that regard to prevent any such adverse effects.
SD058/0016 (SDCC)	Phased completion of Football Stadium at Tallaght.	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	No in combination effect. The proposed Phased completion of Football Stadium at Tallaght 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 was 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

Application Reference	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 SAC, South Dublin Bay 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA);	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 Phased completion of Football Stadium at Tallaght., 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 office block redevelopment and has included mitigation in that regard to prevent any such adverse effects.
SD058/0015 (SDCC)	Road reconfiguration at Merrywell Industrial Estate (Part 8 Application).	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 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 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 Road reconfiguration at Merrywell Industrial Estate 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 would 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 road reconfiguration at Merrywell Industrial Estate, 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	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 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 office block redevelopment and has included mitigation in that regard to prevent any such adverse effects.
SD058/013 (SDCC)	Greenhills road realignment (Part 8 Application).	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 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 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 Greenhills road realignment 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 would 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. Although proximal, there remains a lack of physical overlap between the Proposed Scheme and the proposed Greenhills road realignment, 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 office block redevelopment and has included mitigation in that regard to prevent any such adverse effects.
SD058/012 (SDCC)	Various upgrades centred on Greenhills Road bridge over M50 eastwards to Ballymount (Part 8 Application).	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 Various upgrades centred on Greenhills Road bridge over M50 eastwards to Ballymount 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,

Application Reference	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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA);	Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed project would 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. Although proximal, there remains a lack of physical overlap between the Proposed Scheme and the proposed upgrades centred on Greenhills Road bridge over M50 eastwards to Ballymount, 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 office block redevelopment and has included mitigation in that regard to prevent any such adverse effects.
SD058/0001	Traffic calming measures on Keadeen Road (Part 8 Application).	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 Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary	No in combination effect. The proposed Traffic calming measures on Keadeen Road 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 would 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.

Application Reference	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, Dalkey Islands SPA, 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);	Although proximal, there remains a lack of physical overlap between the Proposed Scheme and the proposed Traffic calming measures on Keadeen 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 proposed office block redevelopment and has included mitigation in that regard to prevent any such adverse effects.
SD058/0014	Extension of discrete section of Greenhills Road and various ancillary infrastructure works.	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 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 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 Extension of discrete section of Greenhills Road and various ancillary infrastructure 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 would 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. Although proximal, there remains a lack of physical overlap between the Proposed Scheme and the proposed Extension of discrete section of Greenhills Road and various ancillary infrastructure 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

Application Reference	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 office block redevelopment and has included mitigation in that regard to prevent any such adverse effects.
SD22A/0460	Change of use from warehouse to data repository facility at M50 Business Park, Ballymount Avenue, Dublin 12.	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 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 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 Change of use from warehouse to data repository facility at M50 Business Park, Ballymount Avenue, Dublin 12works 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 would 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 Change of use from warehouse to data repository facility at M50 Business Park, Ballymount Avenue, Dublin 12, 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 office block redevelopment and has included mitigation in that regard to prevent any such adverse effects.
SD22A/0285	Extension and renovation of the Cuckoo's nest Public house.	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 Extension and renovation of the Cuckoo's nest Public house 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	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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA);	The proposed project would 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. Although separated buy a short distance, there is a lack of physical overlap between the Proposed Scheme and the proposed Extension and renovation of the Cuckoo's nest Public house, 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 office block redevelopment and has included mitigation in that regard to prevent any such adverse effects.
3002/23 (DCC)	Demolition of derelict structure and construction of mixed-development at junction of Summer Street South and Marrowbone Lane.	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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island	No in combination effect. The proposed Demolition of derelict structure and construction of mixed-development at junction of Summer Street South and Marrowbone Lane 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 would 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.

Application Reference	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, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA);	Considering the lack of physical overlap between the Demolition of derelict structure and construction of mixed-development at junction of Summer Street South and Marrowbone Lane, 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 office block redevelopment and has included mitigation in that regard to prevent any such adverse effects.
3097/23	Demolition and reconstruction of structures at Mark's Alley 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 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 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 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 Demolition and reconstruction of structures at Mark's Alley West 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 would 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 Demolition and reconstruction of structures at Mark's Alley West, 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

Application Reference	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 office block redevelopment and has included mitigation in that regard to prevent any such adverse effects.
3996/20 (DCC)	BTR development at 17-21 Foley Street Dublin 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. 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 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 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 BTR development at 17-21 Foley Street Dublin 1.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 would 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 BTR development at 17-21 Foley Street Dublin 1., 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 office block redevelopment and has included mitigation in that regard to prevent any such adverse effects.
3400/21 (DCC)	Retention development of Covid emergency extension block at Mater Misericordiae University Hospital, Eccles Street, Dublin 7.	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 Retention development of Covid emergency extension block at Mater Misericordiae University Hospital, Eccles Street, Dublin 7must 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	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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough 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 Retention development of Covid emergency extension block at Mater Misericordiae University Hospital, Eccles Street, Dublin 7, 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 Racecourse Park and has included mitigation in that regard to prevent any such adverse effects.
F21A/0386 (FCC)	Construction development at Graymount, Dungriffin 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 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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island	No in combination effect. The proposed Construction development at Graymount, Dungriffin Road 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 Construction development at Graymount, Dungriffin Road, the environmental protection policies included within the relevant land use plans, the range of mitigation

Application Reference	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, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA);	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 Racecourse Park and has included mitigation in that regard to prevent any such adverse effects.
F21A/0287 (FCC)	Advance Infrastructure at Hackettstown Skerries.	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 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 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 Advance Infrastructure at Hackettstown Skerries 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 Advance Infrastructure at Hackettstown Skerries, 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 Racecourse Park and has included mitigation in that regard to prevent any such adverse effects.
F21A/0576	Advance Infrastructure at Castlelands, Balbriggan.	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. The proposed Advance Infrastructure at Castlelands, Balbriggan must comply with all applicable planning and environmental approval requirements and be

Application Reference	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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA);	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 Advance Infrastructure at Castlelands, Balbriggan, 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 Racecourse Park and has included mitigation in that regard to prevent any such adverse effects.
2062/21 (DCC)	Development at protected structure at 95 St. Stephen's Green.	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 Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary	No in combination effect. The proposed Development at protected structure at 95 St. Stephen's Green 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

Application Reference	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, Dalkey Islands SPA, 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);	previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Development at protected structure at 95 St. Stephen's Green, 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 Racecourse Park and has included mitigation in that regard to prevent any such adverse effects.
D20A/0746 (DLRCC)	Residential development at Harolds Grange Road, Rathfarnham.	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 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 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 Residential development at Harolds Grange Road, Rathfarnham 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 Residential development at Harolds Grange Road, Rathfarnham, 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

Application Reference	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 Park development project at Racecourse Park and has included mitigation in that regard to prevent any such adverse effects.
D19A/0439 (DLRCC)	Residential development at existing car wash facility at Braemor 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 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 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 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 Residential development at existing car wash facility at Braemor Road 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 Residential development at existing car wash facility at Braemor 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 proposed Park development project at Racecourse Park and has included mitigation in that regard to prevent any such adverse effects.
4936/22	Office Block redevelopment	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 office block redevelopment 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	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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); and,	The proposed project was 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 office block redevelopment, 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 office block redevelopment and has included mitigation in that regard to prevent any such adverse effects.
SD228/0008	Wellington Lane Walking and Cycling 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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island	No in combination effect. The proposed Wellington Lane Walking and Cycling 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 Wellington Lane Walking and Cycling Scheme will be subject to Part 8 planning consent, including AA Screening Report. In granting permission for the proposed Wellington Lane Walking and Cycling 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

Application Reference	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, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA);,	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 Wellington Lane Walking and Cyclin Scheme 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. 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 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 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 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 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.

Application Reference	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?
309812	Increase the capacity of the Dublin Waste to Energy Facility from 600,000 tonnes per annum to 690,000 tonnes per annum	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 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 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 project to increase the capacity of the Dublin Waste to Energy Facility 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 proposal to increase the capacity of the Dublin Waste to Energy, 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 increase in capacity of the Dublin Waste to Energy and has included mitigation in that regard to prevent any such adverse effects.
308585	Clutterland 110kV GIS substation building and 2 underground single circuit transmission lines	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	No in combination effect. The proposed project to develop a Clutterland 110kV GIS substation building and 2 underground single circuit transmission lines 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	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?
		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 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 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 Clutterland 110kV GIS substation building and 2 underground single circuit transmission lines, 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 Clutterland 110kV GIS substation building and 2 underground single circuit transmission lines and has included mitigation in that regard to prevent any such adverse effects.
309951	Provision of two 110kV transmission lines connecting Coolderrig 110kV GIS substation to Grange Castle – Kilmahud circuits	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 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 SPA,	No in combination effect. The proposed provision of two 110kV transmission lines connecting Coolderrig 110kV GIS substation to Grange Castle – Kilmahud circuit 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.

Application Reference	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?
		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).	Considering the lack of physical overlap between the Proposed Scheme and the proposed provision of two 110kV transmission lines connecting Coolderrig 110kV GIS substation to Grange Castle – Kilmahud circuit, 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 provision of two 110kV transmission lines connecting Coolderrig 110kV GIS substation to Grange Castle – Kilmahud circuit and has included mitigation in that regard to prevent any such adverse effects.
	Clongriffin 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 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	No in combination effect. The proposed Clongriffin 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 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

Application Reference	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 SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	proposed Clongriffin to City Centre Core Bus Corridor Scheme 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: • 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 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 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 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. 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.
-	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:	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.

Application Reference	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 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 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 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.
-	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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill 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

Application Reference	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?
		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).	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.
-	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 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 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 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	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 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 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 Lucan 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 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.
-	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 degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay	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.

Application Reference	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?
		affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); • Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance effects on the QI otter population associated with Wicklow Mountains SAC); 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 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.
-	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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island	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

Application Reference	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, 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).	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 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 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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); • Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance effects on the QI otter population associated with Wicklow Mountains SAC); and, • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin	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	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 SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	
-	Belfield/ Blackrock to City Centre Core Bus Corridor	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 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 SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); • Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance effects on the QI otter population associated with Wicklow Mountains SAC); 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 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 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 Ringsend 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	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

Application Reference	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 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 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).	(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 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.
	Strategic Housing Developments (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 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 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 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 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

Application Reference	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, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); • Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance effects on the QI otter population associated with Wicklow Mountains SAC); 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).	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. Proposed SHD projects will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including any proposed SHD schemes and has included mitigation in that regard to prevent any such adverse effects.
	Large -Scale Residential Developments (LRDS) (*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 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 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); • Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance	No in combination effect. Proposed LRD projects (some of which are amendments to or resubmission of previous SHD developments) 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 LRDs 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 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. Proposed LRDs projects will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including any

Application Reference	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 on the QI otter population associated with Wicklow Mountains SAC); 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).	proposed LRDs 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 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 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); • Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance effects on the QI otter population associated with Wicklow Mountains SAC); and, • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin	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. 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 measures in that regard to prevent any such adverse effects.

Application Reference	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 SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	
	GDA Transport Strategy Park and Ride (All Included despite distance as hydrological connectivity cannot be ruled out to downstream European sites in Dublin Bay	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 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); • Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance effects on the QI otter population associated with Wicklow Mountains SAC); 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 GDA Transport Strategy Park and Ride 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 GDA Transport Strategy Park and Ride 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 GDA Transport Strategy Park and Ride projects and has included mitigation in that regard to prevent any such adverse effects.
	Dolphins Barn Public Realm Improvement 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	No in combination effect. The Part 8 Dolphins Barn Public Realm Improvement Scheme was subject of a Part 8 planning process which included the preparation of an AA Screening report which concluded no significant adverse effects are predicted in respect of surface and ground waters.

Application Reference	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 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).	The application was approved in 2018 (DCC report number 275/2018) and received funding under the South Inner City Concept Area 2 (under remit of DCC) awarded funding under Call 2 of Urban Regeneration and Development FUND (URDF) in March 2021. It is unclear if the scheme has commenced and therefore construction could overlap with the Proposed Scheme. The Dolphins Barn Public Realm Improvement Scheme which was previously approved 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. 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, the Dolphins Barn Public Realm Improvement Scheme if commenced and has included mitigation in that regard to prevent any such adverse effects.
	City Edge Project	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 Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary	No in combination effect. Phase two of the City Edge Project has not yet commenced. It is an objective of the DCC land plan 2022-2028 (CSO2) that a transboundary Local statutory Plan be prepared in conjunction with South Dublin County Council to enable a co-ordinated and phased development on these lands over the medium to long term. The time frame for the preparation of the Land plan is unknown at present. Proposed projects that might arise out of the LAP once adopted (e.g., Phase 3 - Implementation), must themselves 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	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, 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); • Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance effects on the QI otter population associated with Wicklow Mountains SAC); 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).	Proposed City Edge 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 any such projects/developments 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 GDA Transport Strategy Park and Ride projects and has included mitigation in that regard to prevent any such adverse effects.
	Francis Street Environmental Improvement 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 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	No in combination effect. The Part 8 Francis Street Environmental Improvement Scheme was subject of a Part 8 planning process and was approved in 2017 9DCC Council Decision BF/DNR/0409). It received funding under the South Inner City Concept Area 2 (under remit of DCC) awarded funding under Call 2 of Urban Regeneration and Development FUND (URDF) in March 2021. Construction commenced in July 2021 and is almost complete (it being delayed owing to the pandemic) The Francis Street Environmental Improvement Scheme which was previously approved 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. 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.

Application Reference	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?
		Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); • Disturbance and displacement impacts on QI species as a result of a temporary/ permanent increase in noise levels and human presence (for example disturbance effects on the QI otter population associated with Wicklow Mountains SAC); 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 Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the almost completed Francis Street Environmental Improvement Scheme and has included mitigation in that regard to prevent any such adverse effects.

9.2 Plan Level Environmental Protection Policies and Objectives

407 This section lists the overarching plan level environmental protection policies from the following plans Fingal Development Plan 2023 – 2029, Dublin City Development Plan 2022 – 2028, South Dublin County Council Development Plan 2022 – 2028, Wicklow County Development Pan 2022 – 2028 and Dun Laoghaire-Rathdown County Development Plan 2022-2028.

408 The Proposed Scheme is compliant with all of the plan level biodiversity protection policies and objectives described above, including those within the Fingal Development Plan 2023 – 2029, the Dublin City Development Plan 2022 – 2028, the South Dublin County Council Development Plan 2022 – 2028, the Wicklow County Development Pan 2022 – 2028 and the Dún Laoghaire-Rathdown County Development Plan 2022-2028. 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 Development Plan 2023 - 2029

GINHO3 – Biodiversity in Open Space - Make provision for biodiversity within public open space and include water sensitive design and management measures (including SuDS) as part of a sustainable approach to open space design and management.

GINHO15 – SuDS - Limit surface water run-off from new developments through the use of appropriate Sustainable Urban Drainage Systems (SuDS) using nature-based solutions and ensure that SuDS is integrated into all new development in the County.

GINHP17 – Protection of European and National Sites - Strictly protect areas designated or proposed to be designated as Natura 2000 sites (i.e. Special Areas of Conservation (SACs) and Special Protection Areas (SPAs); also known as European sites) including any areas that may be proposed for designation or designated during the lifetime of this Plan.

GINHO33 – Annex I and Annex II - 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.

GINHO28 – Protection of Natural Heritage Area - 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.

Objective GINHO35 – Appropriate Assessment - In accordance with Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities (2010), any plans or projects that are likely to have a significant effect on a Natura 2000 site, either individually or in combination with other plans or projects, are subject to a screening for Appropriate Assessment unless they are directly connected with or necessary to the management of a Natura 2000 site.

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GI9: To conserve, manage, protect and restore the favourable conservation condition of all qualifying interest/special conservation interests of all European sites designated, or proposed to be designated, under the EU Birds and Habitats Directives, as Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) (European / Natura 2000 sites).

GI10: To adequately protect flora and fauna (under the EU Habitats and Birds Directives, the Wildlife Acts 1976 (as amended), the Fisheries Acts 1959 (as amended) and the Flora (Protection) Order 2022 S.I No. 235

of 2022), wherever they occur within Dublin City, or have been identified as supporting the favourable conservation condition of any European sites.

GI13: To ensure the protection, conservation and enhancement of all areas of ecological importance for protected species, and especially those listed in the EU Birds and Habitats Directives, including those identified as supporting the favourable conservation condition of any European sites, in accordance with development standards set out in this plan.

GI31: To support the improvement of the ecological status of all rivers / waterbodies within the administrative area of Dublin City Council and those rivers identified in accordance with the River Basin Management Plan 2018 – 2021 and the next management plan to be produced under the 3rd river basin planning cycle (2022-2027), as required under the EU Water Framework Directive (see Chapter 9, Section 9.5.2 Urban Watercourses and Water Quality).

South Dublin County Council Development Plan 2022 - 2028

Policy NCBH3 Natura 2000 Sites: Conserve and protect Natura 2000 sites and achieve and maintain favourable conservation status for habitats and species that are considered to be at risk through the protection of the Natura 2000 network from any plans or projects that are likely to have a significant effect on their coherence or integrity.

NCBH3 Objective 1: To prevent development and activities that would adversely affect the integrity of any Natura 2000 site located within or adjacent to the County and promote the favourable conservation status of the habitats and species integral to these sites.

NCBH3 Objective 3: To ensure that planning permission will only be granted for a development proposal that, either individually or in combination with existing and / or proposed plans or projects, will not have a significant adverse effect on a European Site, or where such a development proposal is likely or might have such a significant adverse effect (either alone or in combination), the planning authority will, as required by law, carry out an appropriate assessment as per requirements of Article 6(3) of the Habitats Directive 92 / 43 / EEC of the 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, as transposed into Irish legislation. Only after having ascertained that the development proposal will not adversely affect the integrity of any European site, will the planning authority agree to the development and impose appropriate mitigation measures in the form of planning conditions. A development proposal which could adversely affect the integrity of a European site may only be permitted in exceptional circumstances, as provided for in Article 6(4) of the Habitats Directive as transposed into Irish legislation.

Wicklow County Development Plan 2022 - 2028

CPO 17.4: To contribute, as appropriate, towards the protection of designated ecological sites including Special Areas of Conservation (SACs) 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 but not limited to the following and any updated/superseding documents:

- EU Directives, including the Habitats Directive (92/43/EEC, as amended)[6] , the Birds Directive (2009/147/EC)7 , the Environmental Liability Directive (2004/35/EC)[8] , the Environmental Impact Assessment Directive (2011/92/EU, as amended), the Water Framework Directive (2000/60/EC), EU Groundwater Directive (2006/118/EC) and the Strategic Environmental Assessment Directive (2001/42/EC); EU 'Guidance on integrating ecosystems and their services into decision-making' (European Commission 2019); and

- National legislation, including the Wildlife Acts 1976 and 2010 (as amended)[9] , European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018, 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), the European Communities (Environmental Liability) Regulations 2008 (as amended)[10] and the Flora Protection order 2015.

CPO 17.5: Projects giving rise to adverse effects on the integrity of European sites (cumulatively, directly or indirectly) 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 not be permitted on the basis of this plan[41].

CPO 17.6: Ensure that development proposals, contribute as appropriate towards the protection and where possible enhancement of the ecological coherence of the European Site network and encourage the retention and management of landscape features that are of major importance for wild fauna and flora as per Article 10 of the EU Habitats directive. All projects and plans arising from this Plan will be screened for the need to undertake Appropriate Assessment under Article 6 of the Habitats Directive.

CPO 17.8: 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.

CPO 17.24: To ensure and support the implementation of the EU Groundwater Directive and the EU Water Framework Directive and associated River Basin and Sub-Basin Management Plans and Blue Dot Catchment Programme, to ensure the protection, improvement and sustainable use of all waters in the County, including rivers, lakes, ground water, coastal and estuarine waters, and to restrict development likely to lead to a deterioration in water quality. The Council will also have cognisance of, where relevant, the EU's Common Implementation Strategy Guidance Document No. 20 and 36 which provide guidance on exemptions to the environmental objectives of the Water Framework Directive.

Dun Laoghaire-Rathdown County Development Plan 2022-2028

Policy Objective GIB18: Protection of Natural Heritage and the Environment. It is a Policy Objective 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 (SPAs), Special Areas of Conservations (SACs), proposed Natural Heritage Areas (pNHAs) and Ramsar sites (wetlands) - as well as non-designated areas of high nature conservation value known as locally important areas which also serve as 'Stepping Stones' for the purposes of Article 10 of the Habitats Directive

Policy GIB19: Habitats Directive. It is a Policy Objective 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 GIB21: Designated Sites It is a Policy Objective to protect and preserve areas designated as proposed Natural Heritage Areas, 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.

[41] Except as provided for in Article 6(4) of the Habitats Directive, viz. there must be: a) no alternative solution available, b) imperative reasons of overriding public interest for the project to proceed; and c) adequate compensatory measures in place.

9.3 Conclusion of In Combination Assessment

409 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.

410 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.

411 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.

412 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.

413 Table 36 and Table 37 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.

414 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.

415 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

416 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, how these could impact on the sites' Qualifying Interests / Special Conservation Interest and whether the predicted impacts would adversely affect the integrity of North Dublin Bay SAC, South Dublin Bay SAC, Rockabill to Dalkey Islands SAC, Lambay Island SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA, North Bull Island SPA, Dalkey Islands SPA, Baldoyle Bay SPA, Howth Head Coast SPA, Malahide estuary SPA, Rogerstown Estuary SPA, Rockabill SPA and The Murrough SPA. The possibility of significant effects on any other European sites can be excluded.

417 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 risk of adverse effects on these European sites.

418 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 with 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.

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