



APPROPRIATE ASSESSMENT SCREENING REPORT

FOR

UPGRADE/INSTALLATION OF
BROADBAND NETWORK

AT

DA040, Dunboyne-Clonee, County
Meath

ON BEHALF OF



National Broadband Ireland

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1 INTRODUCTION

1.1 Background

Enviroguide Consulting was commissioned by National Broadband Ireland (NBI) to undertake a screening for Appropriate Assessment with respect to the upgrade/installation of broadband services to buildings in the Dunboyne-Clonee area. This Appropriate Assessment Screening Report (the “Screening Report”) considers whether the Proposed Project is likely to have a significant effect on a European Site and whether a Stage 2 Appropriate Assessment is required. The Proposed Project entails the upgrade and installation of telecommunications infrastructure to buildings in Dunboyne-Clonee and the surrounding area in County Meath, covering an approximate area of 307 km². The purpose of this report is to provide information to assist the relevant competent authority to carry out a screening for Appropriate Assessment. This AA Screening report has been prepared on the basis of design data presented in (DA040 LLD04)

1.2 Relevant Legislation

1.2.1 Legislative Background

Member States are required to designate Special Areas of Conservation (SACs) and Special Protected Areas (SPAs) under the EU Habitats and Birds Directives, respectively. SACs and SPAs are collectively known as European Sites. A screening for AA determines whether a plan or project, either alone or in combination with other plans and projects, is likely to have significant effects on a European Site (without the application of mitigation measures to avoid or reduce significant effects to a European Site), in view of its conservation objectives.

If likely significant effects are identified or cannot be ruled out, an ‘Appropriate Assessment’ (AA) is required to determine whether the significant effects of the project, either alone or in combination with other plans and projects, would have an adverse effect on the integrity of the European Sites, having regard to their conservation objectives and best scientific knowledge.

This AA Screening has been undertaken to determine the potential for significant effects on relevant European Sites.

1.2.2 Legislative Context

The Habitats Directive (92/43/EEC) seeks to conserve natural habitats and wild fauna and flora by the designation of SACs and the Birds Directive (2009/147/EC) seeks to protect birds of special importance by the designation of SPAs. It is the responsibility of each Member State to designate SPAs and SACs, both of which will form part of Natura 2000, a network of protected sites throughout the European Community.

An Appropriate Assessment is required under Article 6 of the Habitats Directive where a project or plan may give rise to significant effects upon a European Site, paragraph 3 states that:

“6(3) 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.”

These obligations in relation to Appropriate Assessment have been implemented in Ireland under Part XAB of the Planning and Development Act 2000, as amended (“the 2000 Act”) and the Birds and Natural Habitat Regulations 2011, as amended.

1.2.3 Stages of AA

The AA process is a four-stage process, with issues and tests at each stage. An important aspect of the process is that the outcome at each successive stage determines whether a further stage in the process is required.

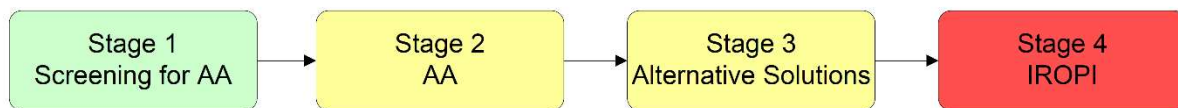


FIGURE 1. THE FOUR STAGES OF THE APPROPRIATE ASSESSMENT PROCESS (DEHLG, 2010).

The four stages of an AA, can be summarised as follows:

- Stage 1: *Screening*. The first stage of the AA process is to determine the likelihood of significant impacts of the project or plan.
- Stage 2: *Natura Impact Statement (NIS)*. The second stage of the AA process assesses the impact of the project or plan (either alone or in combination with other projects or plans) on the integrity of the European Site, with respect to the conservation objectives of the site and its ecological structure and function. A Natura Impact Statement containing a professional scientific examination of the project or plan is required and includes any mitigation measures to avoid, reduce or offset negative impacts.
- Stage 3: *Assessment of alternative solutions*. If the outcome of Stage 2 is negative i.e., adverse impacts to the sites cannot be scientifically ruled out, despite mitigation, the plan or project should proceed to Stage 3 or be abandoned. This stage examines alternative solutions to the proposal.
- Stage 4: *Assessment where no alternative solutions exist and where adverse impacts remain*. The final stage is the main derogation process examining whether there are imperative reasons of overriding public interest (IROPI) for allowing a plan or project to adversely affect a European Site, where no less damaging solution exists.

The Competent Authority must determine that an NIS is required where the project is not directly connected with or necessary to the management of the site as a European Site and if it cannot be excluded, on the basis of objective scientific information following screening, that the plan or project, individually or in combination with other plans or projects, will have a significant effect on a European Site.

2 APPROPRIATE ASSESSMENT – STAGE 1 SCREENING

2.1 Guidance

This AA Screening Report has been undertaken in accordance with the following 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.
- *Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC* (European Commission, 2001).
- *Communication from the Commission on the precautionary principle* (European Commission, 2000).
- *Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC* (European Commission, 2019).
- *Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC Brussels, 28.9.2021 C* (European Commission, 2021); and,
- *Appropriate Assessment Screening for Development Management, OPR Practice Note PN01, Office of the Planning Regulator March 2021.*

2.2 Screening Steps

Screening for AA involves the following steps:

- Establish whether the project is directly connected with or necessary for the management of a European Site.
- Description of the project and the description and characterisation of other projects or plans that in combination have the potential for having significant effects on the European Site.
- Identification of European Sites potentially affected.
- Identification and description of potential effects on the European Site(s).
- Assessment of the likely significance of the impacts identified on the European Site; and

Determination on whether it can be objectively concluded that there will be no significant effects, (without the application of mitigation measures to avoid or reduce significant effects to a European Site).

2.3 Management of European Sites

The development and operation of the plan by National Broadband Ireland (NBI) to install/upgrade the broadband services in the area of Dunboyne-Clonee, Co. Meath (the Project) is not directly connected with or necessary to the management of European Sites in the area or elsewhere.

2.4 Description of the Project

2.4.1 Project Overview

The National Broadband Plan (NBP) is the largest telecommunications project undertaken by the Irish State. It aims to transform the country's broadband landscape through the delivery of high-speed broadband to all parts of Ireland where such services are not available commercially.

The network will be designed, built and operated by National Broadband Ireland, using a combination of State subsidy and commercial investment. NBI will make its services available to the entire rollout area, which accounts for 23% of the population in approximately 537,000 homes, farms, schools and businesses.

In summary NBI will provide:

- A world-class, high-speed broadband network.
- The largest telecommunications project ever undertaken by the Government of Ireland.
- Around 146,000 kilometres of fibre to connect over half a million homes, covering 96% of Ireland's land mass.
- Up to 1,800 people will be working on the project at its peak.
- High speed broadband to approximately 115,000 farms, schools and businesses in the first two years, with an additional 70,000-100,000 per year after that.
- Before the fibre can be laid, the rollout area will be surveyed completely so that all existing infrastructure can be taken into account.
- In year one, NBI will also deliver approximately 300 Broadband Connection Points (BCPs) offering high-speed broadband access across every county in the nation.
- A range of wholesale services for broadband providers in the residential and business markets.
- Services to all broadband service providers.

To deliver on the commitments outlined above NBI has broken the country down into 227 separate project locations known as Deployment Areas or DAs.

2.4.2 Brief Description of Installation Activities

Where possible, existing infrastructure such as utility poles, cable ducts and underground chambers will be utilised for the installation of new broadband infrastructure.

Where this is not possible, the main installation activities include:

- Erection of new poles
 - o Proposed installation locations are safety checked for underground services and a temporary works area around the installation location is barriered off for reasons of safety.
 - o A hole of sufficient diameter to accommodate each pole is due to a typical depth of 1.5 – 1.7m below ground level.
 - o The hole is dug using a utility truck mounted auger as shown in Figure 2 and Figure 3.
 - o Approximately 115kgs (1-2 wheelbarrows) of soil is dug by the auger for the installation of each pole.
 - o The pole is lowered into place using lifting equipment. If required, cable stays will be installed to support the pole.
 - o The void around the newly installed pole is backfilled with excavated material, all surplus material is placed into suitable containers and removed from site by truck for compliant waste management (maximum 115kgs per pole).
 - o The installation of a single pole typically takes 20 – 30 minutes to complete.



FIGURE 2. UTILITY TRUCK CARRYING UTILITY POLES AND TRUCK MOUNTED AUGER



FIGURE 3. (A) UTILITY TRUCK MOUNTED AUGER EXCAVATING HOLE FOR UTILITY POLE, (B) AND (C) NEWLY INSTALLED UTILITY POLES.

- Installation of new underground chambers and fibre ducts
 - o Proposed installation locations are safety checked for underground services and a temporary works area around the installation location is barriered off for reasons of safety.
 - o A tracked mini-excavator or a wheeled back-hoe such as a JCB will excavate to the design depths required, a trench for the installation of ducting, or a hole for the installation of a chamber at the infrastructure installation location(s).
 - o All excavation works will be undertaken in accordance with the project specific risk assessment and method statement.
 - o Once the infrastructure has been installed the open excavation will be back-filled with the previously excavated spoil and the ground made good.
 - o The quantity of excavated material is dependent on the length and depth of the required excavations.
 - o All surplus material is placed into suitable containers and removed from site by truck for compliant waste management.



FIGURE 4. NEWLY INSTALLED CHAMBER.

All new and existing infrastructure within the Deployment Area (DA) is outlined in Table 1.

2.4.3 Contractor Compounds

The deployment of broadband infrastructure may require the use of a temporary compound including temporary office accommodation and welfare facilities, within the DA, for the storage of plant, equipment, and materials. Such temporary compounds will be situated in a fixed location for the duration of the activities. The minimum location and design standards for compounds are:

- Secure, fenced off locations with lockable gates.

- Impermeable concrete hardstanding areas with surface water drainage from the compound required to pass through a Class 1 petrol/oil interceptor with adequate silt storage capacity (maintained to manufacturer's specifications).
- Materials and waste storage will comply with the following criteria:
 - Storage of poles in bunded area
 - Waste must be appropriately stored and suitably bunded to prevent leakage.
 - There must be unobstructed access for loading and unloading as well as in case of emergencies.
 - Waste should only be handled by competent employees.
 - The management of all waste electrical and electronic equipment and materials and comply with its obligations under the WEEE Regulations; and
- No vehicle refuelling will take place at any of the compounds.

These design standards are in compliance with NBI's Environmental Management System (EMS) (outlined below).

2.4.4 Routine Operational Measures

The environmental commitments of the Proposed Project will be managed through the Environmental Management System (EMS). The implementation of the proposed operational protocols, monitoring and follow-up arrangements and management of impacts, will be managed through the Environmental Management Plan. The routine operational measures to be implemented are, by their very nature routine; none of the routine operational measures to be implemented are being implemented to avoid likely significant effects on any European Site.

Design standards for the compounds will be in compliance with NBI's EMS. NBI have developed Standard Operating Procedures for the completion of the specific works elements of the project, referred to as Workmanship Standards, and must be considered along with the Design, Design Risk Assessments (DRAs). The Workmanship standards applicable to the deployment of telecommunications infrastructure in each DA are provided to the Project Supervisor Construction Stage (PSCS) in the DA Build Pack (project information). Workmanship Standards do not contain any specific measures targeted at avoiding likely significant effects on a European Site.

2.4.5 Project Specific Description

This screening report is based on the proposal by NBI to install/upgrade broadband services to buildings in Dunboyne-Clonee and the surrounding area, in County Meath (DA040). The area under assessment is approximately 307 km² of mainly urban environment.

As noted previously, existing infrastructure (poles, underground ducting, and chambers) will be used for the installation of cable providing broadband service to buildings in the Project area. There is a requirement to supplement existing infrastructure with new additional infrastructure. Table 1 identifies the existing telecoms infrastructure in the project area and the new additional infrastructure to be installed as part of the Proposed Project.

TABLE 1. EXISTING AND PROPOSED ADDITIONAL TELECOMS INFRASTRUCTURE

Infrastructure description	Existing Infrastructure	Additional Proposed Infrastructure
Above ground / overhead cable	160.1 km	25.6 km
Underground cable and ducting	290.5 km	21.5 km
Network Utility Poles	3518	319
Underground chambers	4723	61
Co-Locations/Cabinets	Yes	0

The vast majority of the additional network equipment identified in Table 1 will be installed in the roadside verges, under existing footways and carriageways.

The installation of the infrastructure will not require water course crossing, or instream works.

New overhead cables will be slung between newly installed poles.

Underground ducting will follow the existing road network.

Table 2 identifies the installation location type and total length of underground ducting to be installed in each location type.

It is expected that the rollout of the infrastructure will commence 30/12/2022 with a completion date of 04/06/2023.

TABLE 2 NEW UNDERGROUND DUCTING INSTALLATION LOCATION TYPE AND LENGTH

Type of install location	Total Length km
Installation in roadside verge	9.3 km
Installation under existing footway	6.1 km
Installation under existing carriageway	6.0 km

2.4.6 Operation, maintenance and decommission project phases.

During the operation of the network, reactive maintenance of the new infrastructure will occur once an issue has been reported/detected e.g., pole broken, pole leaning, underground cable cut etc. Replacement of damaged underground cable will use existing ducting. During the operational phase, poles will be stored in established contractor's storage areas, in compliance with current legislation. Poles which are being replaced by NBI during the operational phase will be removed and disposed of by the appropriate means.

All operational maintenance, repair, replacement and upgrade of network equipment will be undertaken in strict compliance with the Workmanship Standards.

2.4.7 Existing Environment

The Project is located within an area that is a mainly urban (industry, residential, retail). contains the urban centre of Dunboyne-Clonee, Blanchardstown and Lucan.

A number of lake waterbodies, river waterbodies and groundwater bodies, are located within the project area and environs, which are shown in figure 5.

Rye Water Valley/Carton SAC is located within the project route at various points, see figure 6 below for details.

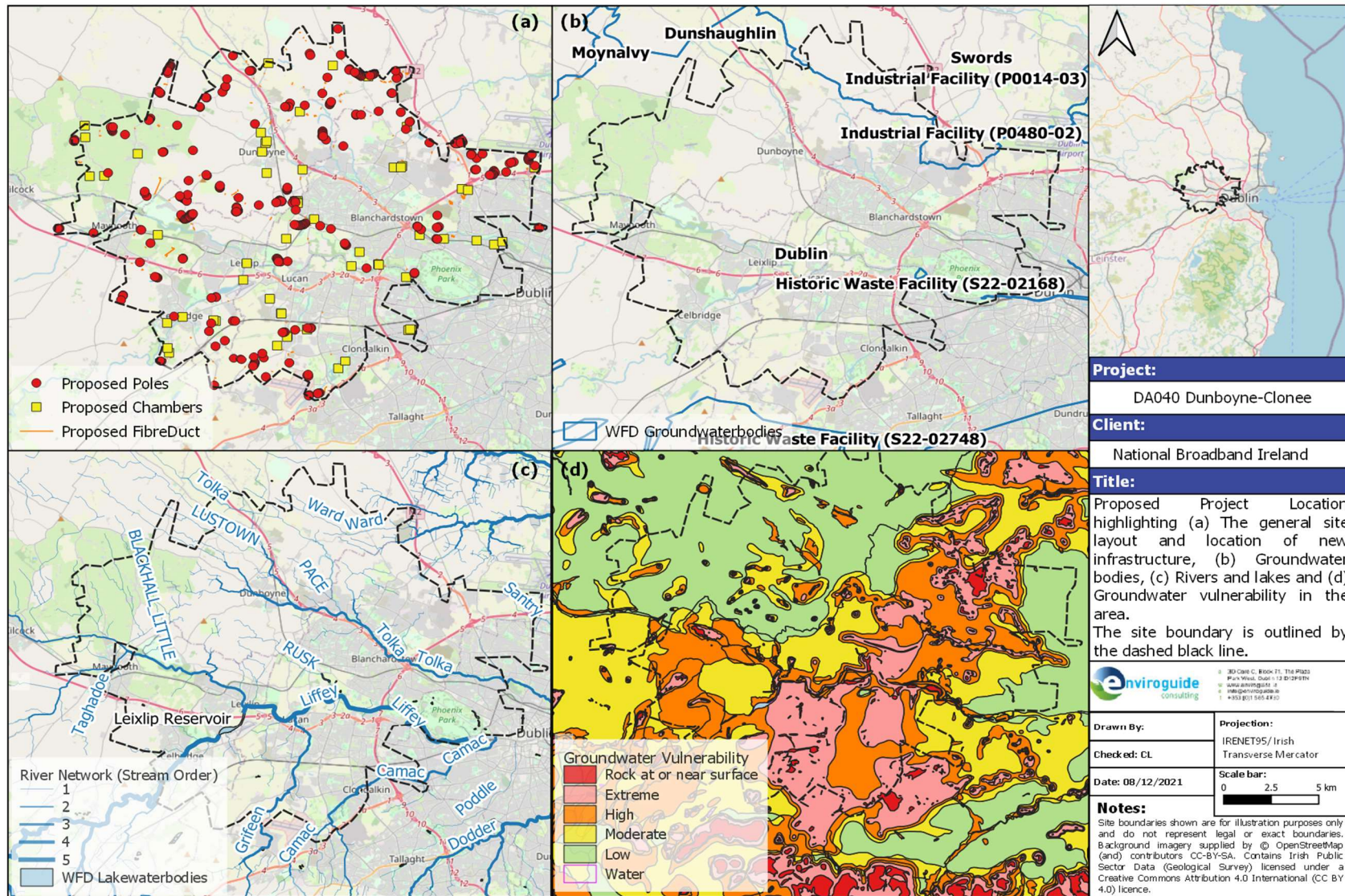


FIGURE 5. PROPOSED PROJECT LOCATION SHOWING THE LOCATION OF NEW INFRASTRUCTURE AND VARIOUS ENVIRONMENTAL FEATURES

2.5 Methodology

2.5.1 Desk Study

A desktop study was carried out to collate and review available information, datasets, and documentation sources relevant for the completion of the Screening Report. The desktop study, completed in December 2021, relied on the following sources:

- National Parks and Wildlife Service (NPWS) datasets.
- Geological Survey Ireland (GSI) online datasets and mapping.
- Environmental Protection Agency (EPA) mapping and datasets.
- OSI aerial imagery and Discovery Series mapping.
- Satellite imagery from various sources and dates (Google, Digital Globe, Bing).
- The Status of EU Protected Habitats in Ireland (NPWS).
- Office of Public Works (OPW) Flood Plans (<https://www.floodinfo.ie/map/floodplans/>).
- Department of Agriculture, Food and the Marine Forestry Licence Viewer <https://forestry-maps.apps.rhos.agriculture.gov.ie/>

For a complete list of the specific documents consulted as part of this assessment, see *Section 0 References*.

2.5.2 Assessment of Impacts

Once the potential impacts that may arise from the Proposed Project are identified, the significance of these is assessed through the use of key indicators:

- Habitat loss or alteration.
- Habitat/species fragmentation.
- Disturbance and/or displacement of species.
- Changes in population density; and
- Changes in water quality and resource.

In line with the EPA Guidelines (EPA, 2017), the following terms are defined when quantifying duration:

TABLE 3. DEFINITION OF DURATIONS (EPA, 2017).

Description of Duration	Corresponding Time Frame
Momentary Effects	Effects lasting from seconds to minutes
Brief Effects	Effects lasting less than a day
Temporary Effects	Effects lasting less than a year
Short-term Effects	Effects lasting one to seven years.
Medium-term Effects	Effects lasting seven to fifteen years.
Long-term Effects	Effects lasting fifteen to sixty years

Permanent Effects	Effects lasting over sixty years
Reversible Effects	Effects that can be undone, for example through remediation or restoration
Frequency of Effects	Describe how often the effect will occur. (once, rarely, occasionally, frequently, constantly – or hourly, daily, weekly, monthly, annually)

The criteria for confidence levels of the predicted likely impacts are given below in Table 4. The impact significance criteria follow EPA guidance (EPA, 2017).

TABLE 4. IMPACT SIGNIFICANCE CRITERIA (EPA, 2017).

Significance of Effects	Definition
Imperceptible	An effect capable of measurement but without significant consequences.
Not significant	An effect which causes noticeable changes in the character of the environment but without significant consequences.
Slight Effects	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.
Moderate Effects	An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends.
Significant Effects	An effect which, by its <u>character, magnitude, duration</u> or <u>intensity alters a sensitive aspect of the environment</u>

2.5.3 Identification of Relevant European Sites

In order to identify the European Sites that potentially lie within the Zone of Influence (ZOI) of the Proposed Development, a Source-Path-Receptor method (S-P-R) was adopted, as described in ‘OPR Practice Note PN01 - Appropriate Assessment Screening for Development Management’ (OPR, 2021), a practice note produced by the Office of the Planning Regulator, Dublin. This note was published to provide guidance on screening for appropriate assessment (AA) during the planning process, and although it focuses on the approach a planning authority should take in screening for AA, the methodology is also readily applied in the preparation of Appropriate Assessment Screening Reports such as this.

The guidance document published by the Department of Housing, Planning and Local Government (then DEHLG) ‘Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities’ (2009) recommends an arbitrary distance of 15km as the precautionary ZOI for a plan or project being assessed for likely significant effects on European Sites, stating however that this should be evaluated on a case-by-case basis.

As such, the 15km ZOI is used in this report as an initial starting point for collating European Sites for AA screening.

The methodology used to identify relevant European Sites comprised the following:

- Use of up-to-date GIS spatial datasets for European designated sites and water catchments – downloaded from the NPWS website (www.npws.ie) and the EPA website (www.epa.ie) to identify European Sites which could potentially be affected by the Proposed Project;
- The catchment data were used to establish or discount potential hydrological connectivity between the Project and any European Sites. The hydrological catchments are shown in Figure 5.
- Where relevant, the presence of a substantial marine buffer was used to discount potential marine hydrological connectivity between the Project Boundary and any European Sites.
- All European Sites within 15km of the Proposed Project were identified and included in the precautionary Zone of Influence (ZOI) of the Proposed Project (Figure 6 and Table 5). In addition, the potential for connectivity with European Sites at distances of greater than 15km from the Proposed Project was also considered in this initial assessment. In this case, there is no potential connectivity between the Proposed Project site and European Sites located at a distance greater than 15km.
- Table 5 provides details of all relevant European Sites as identified in the preceding steps which are within the precautionary ZOI of the Proposed Project. The potential for pathways between European Sites and the Proposed Development Site was assessed on a case-by-case basis using the Source-Pathway-Receptor framework as per the OPR Practice Note PN01 (March 2021). Where significant effects are ruled out, a rationale is provided. Pathways considered included:
 - a. Direct pathways (e.g., proximity (i.e., location within the European Site), water bodies, air (for both air emissions and noise impacts).
 - b. Indirect pathways (e.g., disruption to migratory paths, ‘Sightlines’ where noisy or intrusive activities may result in disturbance to shy species.
- The site synopses and conservation objectives of these sites, as per the NPWS website (www.npws.ie), were consulted and reviewed at the time of preparing this report.

There is absolutely no reliance placed in this Appropriate Assessment Screening Report on measures intended to avoid/reduce harmful effects on the European Sites.

2.5.4 Identification of Infrastructure Installation works within/adjacent to European Sites

To assess whether installation activities were proposed adjacent to European Sites, proposed installation works within 30m or less of European Sites were assessed.

To identify these items of infrastructure, the following process was undertaken:

- Using a Geographic Information System (GIS) the locations of all new proposed items of infrastructure were overlaid onto the locations of all European Sites in Ireland and Northern Ireland.
- Analysis was performed using GIS which identified any individual feature proposed to be installed within 30m or less of a European Site.

If individual features are identified they are recorded and presented on a drawing or series of drawings as required.

2.5.5 Assessment of the Impact of Infrastructure Installation works within, adjacent to or upstream of European Sites

The following process is undertaken to assess whether the installation of individual items of new infrastructure within, adjacent to or upstream of a European Site may give rise to significant effects upon a European Site:

- The survey data for each proposed location is reviewed along with available aerial imagery of the location.
- If the proposed infrastructure locations lie along the public road network, Google street-view imagery of the location is reviewed, if available.
- The context of the proposed infrastructure is also considered; for example, the new infrastructure is assessed to determine if it will be filling in gaps in an existing run of poles, or if it will be an entirely new string of poles.
- The QI/SCI species and Conservation Objectives of the European Site are considered when reaching a conclusion as to whether or not the infrastructure has the potential to give rise to a significant effect.
- All items of infrastructure within 30 metres of relevant EPA waterbody GIS layers (e.g., river, lakes, transitional and coastal waterbodies) were assessed to determine potential hydrological linkages with European Sites. A distance of 30m was chosen to account for differences in river width and potential mapping errors.
- If the location of the proposed infrastructure is validated as being correct, and the site where the installation works are proposed cannot be adequately assessed using aerial and other available imagery, the location of the proposed infrastructure will be assessed by way of a field survey to identify potential likely significant effects on the European Site.

2.6 European Sites within the Zone of Influence

Fourteen SACs and ten SPA's are located within the precautionary ZOI of the Proposed Project site.

No installation works will occur within European sites. In addition, no installation works will occur within 30m of European sites. A total of 15 poles, 2 chambers and 32 lengths of ducting are proposed to be placed within 30m of watercourses which may ultimately flow into European Sites within the precautionary ZOI of the Project.

A desk study was sufficient for the above listed infrastructure as the proposed location of the infrastructure was located adjacent to the existing public/private road network and could be readily assessed using Google Street View, aerial imagery and up-to-date GIS data available from the NPWS¹. The habitat at these roadside locations typically consisted of made ground,

¹ <https://www.npws.ie/maps-and-data/habitat-and-species-data>

grassy verges or carriageways and was not a QI habitat for any European Site or important habitat for any QI/SCI species.

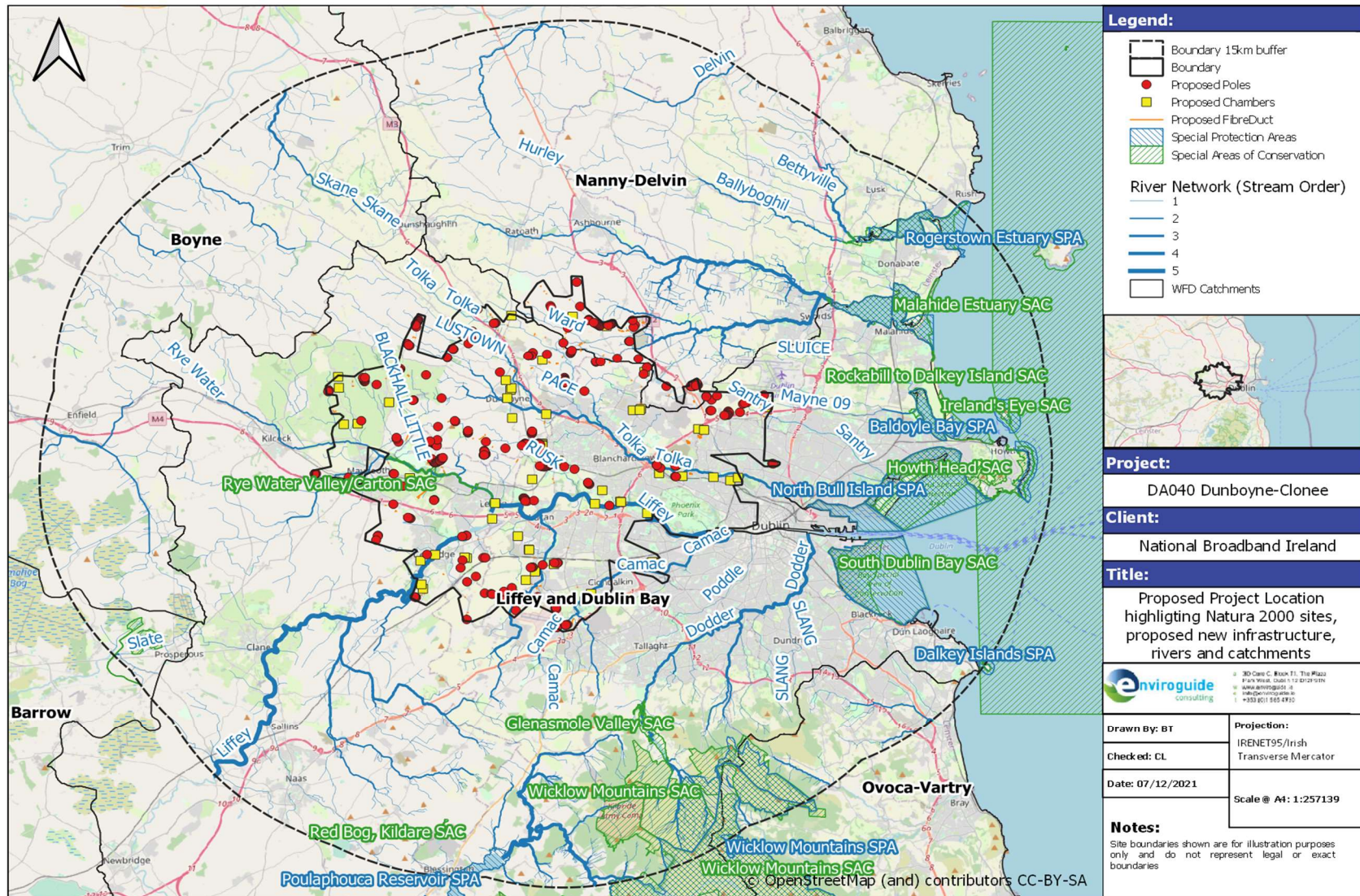


FIGURE 6 PROPOSED PROJECT LOCATION

TABLE 5 EUROPEAN SITES WITHIN THE PRECAUTIONARY ZONE OF INFLUENCE OF THE PROPOSED PROJECT SITE, THE DISTANCE BETWEEN EACH EUROPEAN SITE AND THE PROJECT BOUNDARY AND THE POTENTIAL PATHWAYS BETWEEN THEM, AND POTENTIAL DIRECT AND INDIRECT EFFECTS ON EACH EUROPEAN SITE AS A RESULT OF THE PROPOSED PROJECT. WHERE NO SIGNIFICANT EFFECTS ARE ENVISAGED, A RATIONALE IS PROVIDED.

Site Name & Code	Qualifying Interests	Distance to Project Route	Pathway	Potential Direct Effects	Potential Indirect Effects	Rationale for exclusion
Special Areas of Conservation (SAC)						
Rye Water Valley/Carton SAC (001398) https://www.npws.ie/protected-sites/sac/001398	Conservation Objectives Version 1.0 (NPWS, 2021b) <ul style="list-style-type: none"> - Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220] - <i>Vertigo angustior</i> (Narrow-mouthed Whorl Snail) [1014] - <i>Vertigo moulinsiana</i> (Desmoulin's Whorl Snail) [1016] 	Within Project Route	Hydrological	None envisaged	Pollution of watercourse from potential sediment / pollutants entering SAC via various waterbodies which intersect project route and flow into SAC.	No potential for direct effects as no works are proposed within or immediately adjacent to this SAC.
South Dublin Bay SAC (000210) https://www.npws.ie/protected-sites/sac/000210	Conservation Objectives Version 1.0 (NPWS, 2013e) <ul style="list-style-type: none"> - Mudflats and sandflats not covered by seawater at low tide [1140] - Annual vegetation of drift lines [1210] - <i>Salicornia</i> and other annuals colonising mud and sand [1310] - Embryonic shifting dunes [2110] 	4.2 km	Hydrological	None envisaged	Pollution of watercourse from potential sediment / pollutants entering SAC via various waterbodies which intersect project route and flow into SAC.	No potential for direct effects as no works are proposed within or immediately adjacent to this SAC.

Site Name & Code	Qualifying Interests	Distance to Project Route	Pathway	Potential Direct Effects	Potential Indirect Effects	Rationale for exclusion
<p>North Dublin Bay SAC (000206)</p> <p>https://www.npws.ie/protected-sites/sac/000206</p>	<p>Conservation Objectives Version 1.0 (NPWS, 2013d)</p> <ul style="list-style-type: none"> - Mudflats and sandflats not covered by seawater at low tide [1140] - Annual vegetation of drift lines [1210] - <i>Salicornia</i> and other annuals colonising mud and sand [1310] - Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330] - Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] - Embryonic shifting dunes [2110] - Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] - Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] - Humid dune slacks [2190] - <i>Petalophyllum ralfsii</i> (Petalwort) [1395] 	<p>5.2 km</p>	<p>Hydrological</p>	<p>None envisaged</p>	<p>Pollution of watercourse from potential sediment / pollutants entering SAC via various waterbodies which intersect project route and flow into SAC.</p>	<p>No potential for direct effects as no works are proposed within or immediately adjacent to this SAC.</p>

Site Name & Code	Qualifying Interests	Distance to Project Route	Pathway	Potential Direct Effects	Potential Indirect Effects	Rationale for exclusion
Glenasmole Valley SAC (001209) https://www.npws.ie/protected-sites/sac/001209	<p>Conservation Objectives Version 1.0 (NPWS, 2021a)</p> <ul style="list-style-type: none"> - Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210] - Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [6410] - Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220] 	5.6 km	None	None envisaged	None envisaged	No potential direct or indirect effects as no proposed works occur within the SAC or immediately adjacent to it. No hydrological connection
Malahide Estuary SAC (000205) https://www.npws.ie/protected-sites/sac/000205	<p>Conservation Objectives Version 1.0 (NPWS, 2013b)</p> <ul style="list-style-type: none"> - Mudflats and sandflats not covered by seawater at low tide [1140] - Salicornia and other annuals colonising mud and sand [1310] - Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330] - Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] 	6.1 km	None	None envisaged	None envisaged	No potential direct or indirect effects as no proposed works occur within the SAC or immediately adjacent to it. No hydrological connection

Site Name & Code	Qualifying Interests	Distance to Project Route	Pathway	Potential Direct Effects	Potential Indirect Effects	Rationale for exclusion
	<ul style="list-style-type: none"> - Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] - Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] 					
Wicklow Mountains SAC (002122) https://www.npws.ie/protected-sites/sac/002122	<ul style="list-style-type: none"> - Conservation Objectives Version 1.0 (NPWS, 2017a) - Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) [3110] - Natural dystrophic lakes and ponds [3160] - Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010] - European dry heaths [4030] - Alpine and Boreal heaths [4060] - <i>Calaminarian</i> grasslands of the <i>Violetalia calaminariae</i> [6130] - Species-rich <i>Nardus</i> grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230] 	7.3 km	None	None envisaged	None envisaged	No potential direct or indirect effects as no proposed works occur within the SAC or immediately adjacent to it. No hydrological connection

Site Name & Code	Qualifying Interests	Distance to Project Route	Pathway	Potential Direct Effects	Potential Indirect Effects	Rationale for exclusion
	<ul style="list-style-type: none"> - Blanket bogs (* if active bog) [7130] - Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>) [8110] - Calcareous rocky slopes with chasmophytic vegetation [8210] - Siliceous rocky slopes with chasmophytic vegetation [8220] - Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] - <i>Lutra lutra</i> (Otter) [1355] 					
Baldoyle Bay SAC (000199) https://www.npws.ie/protected-sites/sac/000199	Conservation Objectives Version 1.0 (NPWS, 2012) <ul style="list-style-type: none"> - Mudflats and sandflats not covered by seawater at low tide [1140] - Salicornia and other annuals colonising mud and sand [1310] - Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330] - Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] 	7.5 km	None	None envisaged	None envisaged	No potential direct or indirect effects as no proposed works occur within the SAC or immediately adjacent to it. No hydrological connection

Site Name & Code	Qualifying Interests	Distance to Project Route	Pathway	Potential Direct Effects	Potential Indirect Effects	Rationale for exclusion
<p>Rogerstown Estuary SAC (000208)</p> <p>https://www.npws.ie/protected-sites/sac/000208</p>	<p>Conservation Objectives Version 1.0 (NPWS, 2013a)</p> <ul style="list-style-type: none"> - Estuaries [1130] - Mudflats and sandflats not covered by seawater at low tide [1140] - Salicornia and other annuals colonising mud and sand [1310] - Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330] - Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] - Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] - Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] 	9.7 km	None	None envisaged	None envisaged	No potential direct or indirect effects as no proposed works occur within the SAC or immediately adjacent to it. No hydrological connection
<p>Howth Head SAC (000202)</p> <p>https://www.npws.ie/protected-sites/sac/000202</p>	<p>Conservation Objectives Version 1.0 (NPWS, 2016)</p> <ul style="list-style-type: none"> - Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] - European dry heaths [4030] 	10.3 km	None	None envisaged	None envisaged	No potential direct or indirect effects as no proposed works occur within the SAC or immediately adjacent to it.

Site Name & Code	Qualifying Interests	Distance to Project Route	Pathway	Potential Direct Effects	Potential Indirect Effects	Rationale for exclusion
						No hydrological connection
Rockabill to Dalkey Island SAC (003000) https://www.npws.ie/protected-sites/sac/003000	Conservation Objectives Version 1.0 (NPWS, 2013c) - Reefs [1170] - <i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	10.9 km	None	None envisaged	None envisaged	No potential direct or indirect effects as no proposed works occur within the SAC or immediately adjacent to it. No hydrological connection
Red Bog, Kildare SAC (000397) https://www.npws.ie/protected-sites/sac/000397	Conservation Objectives Version 1.0 (NPWS, 2019c) - Transition mires and quaking bogs [7140]	11.7 km	None	None envisaged	None envisaged	No potential direct or indirect effects as no proposed works occur within the SAC or immediately adjacent to it. No hydrological connection
Ireland's Eye SAC (002193) https://www.npws.ie/protected-sites/sac/002193	Conservation Objectives Version 1.0 (NPWS, 2017b) - Perennial vegetation of stony banks [1220]	12.4 km	None	None envisaged	None envisaged	No potential direct or indirect effects as no proposed works occur within the SAC or

Site Name & Code	Qualifying Interests	Distance to Project Route	Pathway	Potential Direct Effects	Potential Indirect Effects	Rationale for exclusion
	<ul style="list-style-type: none"> - Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] 					immediately adjacent to it. No hydrological connection
Ballynafagh Lake SAC (001387) https://www.npws.ie/protected-sites/sac/001387	Conservation Objectives Version 1.0 (NPWS, 2021c) <ul style="list-style-type: none"> - Alkaline fens [7230] - <i>Vertigo moulinsiana</i> (Desmoulin's Whorl Snail) [1016] - <i>Euphydryas aurinia</i> (Marsh Fritillary) [1065] 	12.4 km	None	None envisaged	None envisaged	No potential direct or indirect effects as no proposed works occur within the SAC or immediately adjacent to it. No hydrological connection
Ballynafagh Bog SAC (000391) https://www.npws.ie/protected-sites/sac/000391	Conservation Objectives Version 1.0 (NPWS, 2015a) <ul style="list-style-type: none"> • Active raised bogs [7110] • Degraded raised bogs still capable of natural regeneration [7120] • Depressions on peat substrates of the Rhynchosporion [7150] 	12.4 km	None	None envisaged	None envisaged	No potential direct or indirect effects as no proposed works occur within the SAC or immediately adjacent to it. No hydrological connection

Site Name & Code	Qualifying Interests	Distance to Project Route	Pathway	Potential Direct Effects	Potential Indirect Effects	Rationale for exclusion
Special Protection Areas (SPA)						
South Dublin Bay and River Tolka Estuary SPA (004024) https://www.npws.ie/protected-sites/spa/004024	Conservation Objectives Version 1.0 (NPWS, 2015b) <ul style="list-style-type: none"> - Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] - Oystercatcher (<i>Haematopus ostralegus</i>) [A130] - Ringed Plover (<i>Charadrius hiaticula</i>) [A137] - Grey Plover (<i>Pluvialis squatarola</i>) [A141] - Knot (<i>Calidris canutus</i>) [A143] - Sanderling (<i>Calidris alba</i>) [A144] - Dunlin (<i>Calidris alpina</i>) [A149] - Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] - Redshank (<i>Tringa totanus</i>) [A162] - Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] - Roseate Tern (<i>Sterna dougallii</i>) [A192] 	2.7 km	Hydrological	None envisaged	Pollution of watercourse from potential sediment / pollutants entering SPA via various waterbodies which intersect project route and flow into SPA.	No potential for direct effects as no works are proposed within or immediately adjacent to this SPA.

Site Name & Code	Qualifying Interests	Distance to Project Route	Pathway	Potential Direct Effects	Potential Indirect Effects	Rationale for exclusion
	<ul style="list-style-type: none"> - Common Tern (<i>Sterna hirundo</i>) [A193] - Arctic Tern (<i>Sterna paradisaea</i>) [A194] - Wetland and Waterbirds [A999] 					
North Bull Island SPA (004006) https://www.npws.ie/protected-sites/spa/004006	Conservation Objectives Version 1.0 (NPWS, 2015c) <ul style="list-style-type: none"> - Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] - Shelduck (<i>Tadorna tadorna</i>) [A048] - Teal (<i>Anas crecca</i>) [A052] - Pintail (<i>Anas acuta</i>) [A054] - Shoveler (<i>Anas clypeata</i>) [A056] - Oystercatcher (<i>Haematopus ostralegus</i>) [A130] - Golden Plover (<i>Pluvialis apricaria</i>) [A140] - Grey Plover (<i>Pluvialis squatarola</i>) [A141] - Knot (<i>Calidris canutus</i>) [A143] 	5.2 km	Hydrological	None envisaged	Pollution of watercourse from potential sediment / pollutants entering SPA via various waterbodies which intersect project route and flow into SPA.	No potential for direct effects as no works are proposed within or immediately adjacent to this SPA.

Site Name & Code	Qualifying Interests	Distance to Project Route	Pathway	Potential Direct Effects	Potential Indirect Effects	Rationale for exclusion
	<ul style="list-style-type: none"> - Sanderling (<i>Calidris alba</i>) [A144] - Dunlin (<i>Calidris alpina</i>) [A149] - Black-tailed Godwit (<i>Limosa limosa</i>) [A156] - Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] - Curlew (<i>Numenius arquata</i>) [A160] - Redshank (<i>Tringa totanus</i>) [A162] - Turnstone (<i>Arenaria interpres</i>) [A169] - Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] - Wetland and Waterbirds [A999] 					
<p>Malahide Estuary SPA (004025)</p> <p>https://www.npws.ie/protected-sites/spa/004025</p>	<p>Conservation Objectives Version 1.0 (NPWS, 2013f)</p> <ul style="list-style-type: none"> - Great Crested Grebe (<i>Podiceps cristatus</i>) [A005] - Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] 	6.1 km	None	None envisaged	None envisaged	<p>No potential direct or indirect effects as no proposed works occur within the SAC or immediately</p>

Site Name & Code	Qualifying Interests	Distance to Project Route	Pathway	Potential Direct Effects	Potential Indirect Effects	Rationale for exclusion
	<ul style="list-style-type: none"> - Shelduck (<i>Tadorna tadorna</i>) [A048] - Pintail (<i>Anas acuta</i>) [A054] - Goldeneye (<i>Bucephala clangula</i>) [A067] - Red-breasted Merganser (<i>Mergus serrator</i>) [A069] - Oystercatcher (<i>Haematopus ostralegus</i>) [A130] - Golden Plover (<i>Pluvialis apricaria</i>) [A140] - Grey Plover (<i>Pluvialis squatarola</i>) [A141] - Knot (<i>Calidris canutus</i>) [A143] - Dunlin (<i>Calidris alpina</i>) [A149] - Black-tailed Godwit (<i>Limosa limosa</i>) [A156] - Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] - Redshank (<i>Tringa totanus</i>) [A162] - Wetland and Waterbirds [A999] 					adjacent to it. No hydrological connection

Site Name & Code	Qualifying Interests	Distance to Project Route	Pathway	Potential Direct Effects	Potential Indirect Effects	Rationale for exclusion
<p>Baldoyle Bay SPA</p> <p>https://www.npws.ie/protected-sites/spa/004016</p>	<p>Conservation Objectives Version 1.0 (NPWS, 2013g)</p> <ul style="list-style-type: none"> - Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] - Shelduck (<i>Tadorna tadorna</i>) [A048] - Ringed Plover (<i>Charadrius hiaticula</i>) [A137] - Golden Plover (<i>Pluvialis apricaria</i>) [A140] - Grey Plover (<i>Pluvialis squatarola</i>) [A141] - Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] - Wetland and Waterbirds [A999] 	7.5 km	None	None envisaged	None envisaged	No potential direct or indirect effects as no proposed works occur within the SAC or immediately adjacent to it. No hydrological connection
<p>Wicklow Mountains SPA (004040)</p> <p>https://www.npws.ie/protected-sites/spa/004040</p>	<p>Conservation Objectives Version 1.0 (NPWS, 2021d)</p> <ul style="list-style-type: none"> - Merlin (<i>Falco columbarius</i>) [A098] - Peregrine (<i>Falco peregrinus</i>) [A103] 	9.7 km	None	None envisaged	None envisaged	No potential direct or indirect effects as no proposed works occur within the SAC or immediately adjacent to it.

Site Name & Code	Qualifying Interests	Distance to Project Route	Pathway	Potential Direct Effects	Potential Indirect Effects	Rationale for exclusion
						No hydrological connection
Rogerstown Estuary SPA (004015) https://www.npws.ie/protected-sites/spa/004015	Conservation Objectives Version 1.0 (NPWS, 2013a) <ul style="list-style-type: none"> - Greylag Goose (<i>Anser anser</i>) [A043] - Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] - Shelduck (<i>Tadorna tadorna</i>) [A048] - Shoveler (<i>Anas clypeata</i>) [A056] - Oystercatcher (<i>Haematopus ostralegus</i>) [A130] - Ringed Plover (<i>Charadrius hiaticula</i>) [A137] - Grey Plover (<i>Pluvialis squatarola</i>) [A141] - Knot (<i>Calidris canutus</i>) [A143] - Dunlin (<i>Calidris alpina</i>) [A149] - Black-tailed Godwit (<i>Limosa limosa</i>) [A156] - Redshank (<i>Tringa totanus</i>) [A162] 	10.1 km	None	None envisaged	None envisaged	No potential direct or indirect effects as no proposed works occur within the SAC or immediately adjacent to it. No hydrological connection

Site Name & Code	Qualifying Interests	Distance to Project Route	Pathway	Potential Direct Effects	Potential Indirect Effects	Rationale for exclusion
	- Wetland and Waterbirds [A999]					
Ireland's Eye SPA (004117) https://www.npws.ie/protected-sites/spa/004117	Conservation Objectives Version 1.0 (NPWS, 2021e) - Cormorant (<i>Phalacrocorax carbo</i>) [A017] - Herring Gull (<i>Larus argentatus</i>) [A184] - Kittiwake (<i>Rissa tridactyla</i>) [A188] - Guillemot (<i>Uria aalge</i>) [A199] - Razorbill (<i>Alca torda</i>) [A200]	12.1 km	None	None envisaged	None envisaged	No potential direct or indirect effects as no proposed works occur within the SAC or immediately adjacent to it. No hydrological connection
Howth Head Coast SPA (004113) https://www.npws.ie/protected-sites/spa/004113	Conservation Objectives Version 1.0 (NPWS, 2021f) - Kittiwake (<i>Rissa tridactyla</i>) [A188]	13.0 km	None	None envisaged	None envisaged	No potential direct or indirect effects as no proposed works occur within the SAC or immediately adjacent to it.

Site Name & Code	Qualifying Interests	Distance to Project Route	Pathway	Potential Direct Effects	Potential Indirect Effects	Rationale for exclusion
						No hydrological connection
Poulaphouca Reservoir SPA (004063) https://www.npws.ie/protected-sites/spa/004063	Conservation Objectives Version 1.0 (NPWS, 2021g) <ul style="list-style-type: none"> - Greylag Goose (<i>Anser anser</i>) [A043] - Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183] 	13.2 km	None	None envisaged	None envisaged	No potential direct or indirect effects as no proposed works occur within the SAC or immediately adjacent to it. No hydrological connection
Dalkey Islands SPA (004172) https://www.npws.ie/protected-sites/spa/004172	Conservation Objectives Version 1.0 (NPWS, 2021h) <ul style="list-style-type: none"> - Roseate Tern (<i>Sterna dougallii</i>) [A192] - Common Tern (<i>Sterna hirundo</i>) [A193] - Arctic Tern (<i>Sterna paradisaea</i>) [A194] 	14.2 km	None	None envisaged	None envisaged	No potential direct or indirect effects as no proposed works occur within the SAC or immediately adjacent to it. No hydrological connection

2.7 Brief Description of European Sites

All 24 of the European Sites within the precautionary ZOI of the Project were assessed for potential direct and indirect impacts. A total of 19 European Sites were screened out following this assessment (Table 5). It was concluded that these European Sites would not be directly or indirectly affected by the Proposed Project due to the minimal nature of the proposed installation activities and the absence of pathways (e.g., hydrological, land, air) between the Project and the European Site. Shown below are brief descriptions of the remaining 5 European Sites which will be further assessed in section 2.9 as they have a direct connection with, or are within close proximity to, the project route. The below descriptions are taken from the "Site Description" section of the NPWS Natura 2000 Standard Data Forms.

2.7.1 Rye Water Valley/Carton SAC (001398)

A river valley site which includes at its western end a large area of estate woodland and an artificial lake. The eastern section of the site includes a section of railway, canal and aquaduct; it continues as far as Leixlip town. The site is underlain by carboniferous limestone over which has been laid a layer of glacial drift.

*The importance of the site lies in the presence of a number of rare plant and animal species and a rare habitat, i.e. thermal, mineral, petrifying spring. The spring gives rise to a calcareous marsh, the habitat for *Vertigo angustior* and *Vertigo moulinsiana*. This marsh is species-rich and holds a number of plant and insect species which are rare or locally uncommon in Ireland. Four Red Data Book plant species have been recorded from the site, two of which, *Hypericum hirsutum* and *Viola hirta* are legally protected. The woods at the eastern end of the site have some ornithological interest.*

2.7.2 South Dublin Bay SAC (000210)

This intertidal site extends from the South Wall at Dublin Port to the West Pier at Dun Laoghaire, a distance of c. 5 km. At their widest, the intertidal flats extend for almost 3 km. The seaward boundary is marked by the low tide mark, while the landward boundary is now almost entirely artificially embanked. Several permanent channels exist, the largest being Cockle Lake. A small sandy beach occurs at Merrion Gates, while some bedrock shore occurs near Dun Laoghaire. A number of small streams and drains flow into the site. The proximity of the site to Dublin City results in it being a very popular recreational area. It is also important for educational and research purposes.

*Site possesses a fine and fairly extensive example of intertidal flats. Sediment type is predominantly sand, with muddy sands in the more sheltered areas. A typical macro-invertebrate fauna exists. Has the largest stand of *Zostera* on the east coast. Supports part of the important wintering waterfowl populations of Dublin Bay. Regularly has an internationally population of *Branta bernicla horta*, plus nationally important numbers of at least a further 6 species, including *Limosa lapponica*. Regular autumn roosting ground for significant numbers of *Sterna* terns, including *S. dougallii*. The scientific interests of the site have been well documented.*

2.7.3 North Dublin Bay SAC (000206)

The North Bull Island sand spit is a relatively recent depositional feature, formed as a result of improvements to Dublin Port during the 18th and 19th centuries. It is almost 5km long and

1km wide and runs parallel to the coast between Clontarf and Sutton. The sediment which forms the island is predominantly glacial in origin and siliceous in nature. Between the island and the mainland there occurs two sheltered intertidal areas which are separated by a solid causeway constructed in 1964. The seaward side of the island has a fine sandy beach. A substantial area of shallow marine water is included in the site. The interior of the island is excluded from the site as it has been converted to golf courses. The proximity of the North Bull Island to Dublin City results in it being a very popular recreational area. It is also very important for educational and research purposes. Nature conservation is a main landuse within the site.

*Site possesses an excellent diversity of coastal habitats. The North Bull Island dune system is one of the most important systems on the east coast and is one of the few in Ireland that is actively accreting. It possesses extensive and mostly good quality examples of embryonic, shifting marram and fixed dunes, as well as excellent examples of humid dune slacks. Both Atlantic and Mediterranean salt marshes are well represented and a particularly good marsh zonation is shown. The salt marshes grade into mudflats and sandflats, some of which are dominated by annual *Salicornia* species. *Petalophyllum ralfsii* occurs at its only known station away from the western seaboard. The site has five Red Data Book vascular plant species and four Red Data Book bryophyte species. This is one of the most important sites for wintering waterfowl in Ireland, with internationally important populations of *Branta bernicla horta*, *Calidris canutus* and *Limosa lapponica*, plus nationally important numbers of a further 14 species. 20% of the national total of *Pluvialis squatarola* occurs here. Formerly it had important colony of *Sterna albifrons*. North Dublin Bay is nationally important for three insect species. The scientific interests of the site have been well documented and future prospects are good owing to the various designations assigned to site.*

2.7.4 South Dublin Bay and River Tolka Estuary SPA (004024)

*This site comprises a substantial part of Dublin Bay. It includes virtually all of the intertidal area in the south bay, as well as much of the Tolka Estuary to the north of the River Liffey. A portion of the shallow bay waters is also included. In the south bay, the intertidal flats extend for almost 3 km at their widest. The sediments are predominantly well-aerated sands. The sands support the largest stand of *Zostera noltii* on the East Coast. Several permanent channels exist, the largest being Cockle Lake. A small sandy beach occurs at Merrion Gates, while some bedrock shore occurs near Dun Laoghaire. The landward boundary is now almost entirely artificially embanked. Sediments in the Tolka Estuary vary from soft thixotropic muds with a high organic content in the inner estuary to exposed, well aerated sands off the Bull Wall. The proximity of the site to Dublin City results in it being a very popular recreational area. It is also important for educational and research purposes.*

*The site possesses extensive intertidal flats which support wintering waterfowl which are part of the overall Dublin Bay population. It regularly has an internationally important population of *Branta bernicla horta*, which feeds on *Zostera noltii* in the autumn. It has nationally important numbers of a further 6 species: *Haematopus ostralegus*, *Charadrius hiaticula*, *Calidris canutus*, *Calidris alba*, *Calidris alpina* and *Limosa lapponica*. It is an important site for wintering gulls, especially *Larus ridibundus* and *Larus canus*. South Dublin Bay is the premier site in Ireland for *Larus melanocephalus*, with up to 20 birds present at times. Is a regular autumn roosting ground for significant numbers of terns, including *Sterna dougallii*, *S. hirundo* and *S. paradisaea*.*

2.7.5 North Bull Island SPA (004006)

The North Bull Island sand spit is a relatively recent depositional feature, formed as a result of improvements to Dublin Port during the 18th and 19th centuries. It is almost 5km long and 1km wide and runs parallel to the coast between Clontarf and Sutton. The sediment which forms the island is predominantly glacial in origin and siliceous in nature. A well-developed dune system runs the length of the island, with good examples of embryonic, shifting marram and fixed dunes, as well as excellent examples of humid dune slacks. Extensive salt marshes also occur. Between the island and the mainland occur two sheltered intertidal areas which are separated by a solid causeway constructed in 1964. The seaward side of the island has a fine sandy beach. A substantial area of shallow marine water is included in the site. Part of the interior of the island has been converted to golf courses. The proximity of the North Bull Island to Dublin City results in it being a very popular recreational area. It is also very important for educational and research purposes. Nature conservation is a main landuse within the site.

The site is among the top ten sites for wintering waterfowl in the country. It supports internationally important populations of Branta bernicila hrota and Limosa lapponica and is the top site in the country for both of these species. A further 14 species have populations of national importance, with particular notable numbers of Tadorna tadorna (8.5% of national total), Anas acuta (11.6% of national total), Pluvialis squatarola (6.9% of national total), Calidris canutus (10.5% of national total). North Bull Island SPA is a regular site for passage waders such as Philomachus pugnax, Calidris ferruginea and Tringa erythropus. The site supports Asio flammeus in winter. Formerly the site had an important colony of Sterna albifrons but breeding has not occurred in recent years. The site provides both feeding and roosting areas for the waterfowl species. Habitat quality for most of the estuarine habitats is very good. The site has a population of the rare Petalophyllum ralfsii which is the only known station away from the western seaboard as well as five Red Data Book vascular plant species and four bryophyte species. It is nationally important for three insect species. Wintering bird populations have been monitored more or less continuously since the late 1960s, and the other scientific interests of the site have also been well documented. Future prospects are good owing to various designations assigned to site.

2.8 Conservation Objectives

Table 6 identifies the Conservation Objectives of European Sites which have a direct connection, or are within close proximity, with the project route. The contents in the below table are taken from the NPWS conservation objectives documents. The Conservation Objectives for other European Sites which lie within the precautionary ZOI, but which have been screened out by virtue of distance or no other possible link (Table 5), are not included in this document.

TABLE 6 CONSERVATION OBJECTIVES OF EUROPEAN SITES WHICH HAVE A DIRECT CONNECTION, OR ARE WITHIN CLOSE PROXIMITY, WITH THE PROJECT ROUTE.

European Site & code	Conservation Interests
Special Areas of Conservation (SAC)	
Rye Water Valley/Carton SAC (001398)	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: <ul style="list-style-type: none"> - Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220] - <i>Vertigo angustior</i> (Narrow-mouthed Whorl Snail) [1014]

	<ul style="list-style-type: none"> - <i>Vertigo moulinsiana</i> (Desmoulin's Whorl Snail) [1016]
South Dublin Bay SAC (000210)	<p>To <u>maintain</u> the favourable conservation condition of the following habitats for which this SAC has been selected:</p> <ul style="list-style-type: none"> - Mudflats and sandflats not covered by seawater at low tide [1140] - Annual vegetation of drift lines [1210] - <i>Salicornia</i> and other annuals colonising mud and sand [1310] - Embryonic shifting dunes [2110]
North Dublin Bay SAC (000206)	<p>To <u>maintain</u> or <u>restore</u> the favourable conservation condition of the following habitats for which this SAC has been selected:</p> <ul style="list-style-type: none"> - Mudflats and sandflats not covered by seawater at low tide [1140] - Annual vegetation of drift lines [1210] - <i>Salicornia</i> and other annuals colonising mud and sand [1310] - Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330] - Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] - Embryonic shifting dunes [2110] - Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] - Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] - Humid dune slacks [2190] - <i>Petalophyllum ralfsii</i> (Petalwort) [1395]
Special Protection Areas (SPA)	
South Dublin Bay and River Tolka Estuary SPA (004024)	<p>To <u>maintain</u> the favourable conservation condition of the following species for which this SPA has been selected:</p> <ul style="list-style-type: none"> - Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] - Oystercatcher (<i>Haematopus ostralegus</i>) [A130] - Ringed Plover (<i>Charadrius hiaticula</i>) [A137] - Grey Plover (<i>Pluvialis squatarola</i>) [A141] - Knot (<i>Calidris canutus</i>) [A143] - Sanderling (<i>Calidris alba</i>) [A144] - Dunlin (<i>Calidris alpina</i>) [A149] - Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] - Redshank (<i>Tringa totanus</i>) [A162] - Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] - Roseate Tern (<i>Sterna dougallii</i>) [A192] - Common Tern (<i>Sterna hirundo</i>) [A193] - Arctic Tern (<i>Sterna paradisaea</i>) [A194] - Wetland and Waterbirds [A999]
North Bull Island SPA (004006)	<p>To <u>maintain</u> the favourable conservation condition of the following species for which this SPA has been selected:</p> <ul style="list-style-type: none"> - Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] - Shelduck (<i>Tadorna tadorna</i>) [A048] - Teal (<i>Anas crecca</i>) [A052] - Pintail (<i>Anas acuta</i>) [A054] - Shoveler (<i>Anas clypeata</i>) [A056] - Oystercatcher (<i>Haematopus ostralegus</i>) [A130] - Golden Plover (<i>Pluvialis apricaria</i>) [A140] - Grey Plover (<i>Pluvialis squatarola</i>) [A141] - Knot (<i>Calidris canutus</i>) [A143] - Sanderling (<i>Calidris alba</i>) [A144] - Dunlin (<i>Calidris alpina</i>) [A149] - Black-tailed Godwit (<i>Limosa limosa</i>) [A156] - Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]

	<ul style="list-style-type: none">- Curlew (<i>Numenius arquata</i>) [A160]- Redshank (<i>Tringa totanus</i>) [A162]- Turnstone (<i>Arenaria interpres</i>) [A169]- Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]- Wetland and Waterbirds [A999]
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2.9 Assessment of Significance of Potential Impacts

Due to the lack of installations within European Sites, there will be no loss or fragmentation of QI habitat will occur as a result of the proposed Project, there will be no significant effects on QI/SCI species regarding disturbance, displacement or changes to population density and there will be no significant effects to the water quality and resource of any European Site. The following paragraphs outline the rationale for these conclusions.

2.9.1 Habitat Loss and Alteration

In conclusion, due to the minor and localised nature of the works, and the absence of any loss/alteration of QI habitats designated for the European Sites due to the Proposed Works, it is considered that the Proposed Project will not cause any significant impacts in relation to habitat loss/alteration at any European Site.

2.9.2 Habitat / Species Fragmentation

Habitat fragmentation has been defined as the 'reduction and isolation of patches of natural environment' (Hall et al., 1997 cited in Franklin et al., 2002) usually due to an external disturbance such that an alteration of the spatial composition of a habitat occurs that alters the habitat and 'create[s] isolated or tenuously connected patches of the original habitat' (Wiens, 1989 cited in Franklin et al., 2002). This results in spatial separation of habitat units which had previously been in a state of greater continuity.

As no installation works are to take place within or immediately adjacent to European sites, it can be concluded that there will be no loss of QI habitats within any European Sites and it is not considered that habitat fragmentation will arise from the Proposed Project.

2.9.3 Disturbance and/or Displacement of Species

As no installation works are to take place within or immediately adjacent to European sites, it can be concluded that the Proposed Project will not lead to significant disturbance or displacement to any species in the aforementioned sites.

2.9.3.1 Potential Impacts to QI and SCI Species

As no installation works are to take place within European sites, there will be no direct impact to QI or SCI species.

A total of 15 poles, 2 chambers and 32 lengths of ducting are proposed to be placed within 30m of watercourses which may ultimately flow into European Sites within the precautionary ZOI of the Project. There are numerous aquatic species which may be affected by the Project works, particularly within Rye Water Valley/Cartron SAC, South Dublin Bay and River Tolka Estuary SPA and North Bull Island SPA.

These new items of infrastructure were assessed for potential significant effects on downstream European Sites and the species designated for them. As noted previously, a

distance of 30m was chosen to account for differences in river width and mapping errors. It was concluded following desk studies that these new items of infrastructure would not result in significant effects on European Sites and the aquatic species therein for one or more of the following criteria:

1. The new item(s) of infrastructure being placed an acceptable distance from a watercourse (e.g., not on or immediately adjacent to a riverbank),
2. The new item(s) of infrastructure being placed on the opposite side of the road/laneway/track to the watercourse,
3. The presence of a vegetation buffer (e.g., hedgerow) between the new item(s) of infrastructure and the watercourse,
4. The distance between the new item(s) of infrastructure and downstream European Site, and consequent dilution factor.
5. The very minor nature and temporary duration of the Project works

There are several species listed for the aforementioned European Sites which may be susceptible to noise disturbance. However, given the very minor nature and short-term duration of the project works (the installation of a new pole and ducting will be within a very small, localised footprint and will not generate significant amounts of noise) it can be concluded that the Proposed Project will not have a significant effect on the aforementioned species associated with European Sites in close proximity to the works. In addition, the habitat at the roadside locations where new infrastructure will be placed consists of roadside grassy verges which does not provide important habitat for the bird and mammal species associated with the European sites within the Project boundary. In addition, no proposed items of infrastructure within 30m of watercourses will result in significant downstream effects on protected bird or mammal species.

2.9.4 Changes in Population Density

For the reasons outlined in section 2.9.3 above, the Proposed Project will not cause any reduction in the baseline population of species associated with any European Site.

2.9.5 Changes in Water Quality and Resource

The project route intersects with a large number of rivers and streams, which either flow through or discharge into a number of European Sites.

A potential impact on the water quality of these European Sites was identified through possible sediment run-off, caused by the project works, into waterbodies in close proximity to the project works. An additional potential impact on water quality was identified through accidental spillages of fuel or other substances.

All items of infrastructure within 30m or less of a waterbody were assessed using GIS imagery, street view or photos provided by NBI to determine potential hydrological linkages with European Sites. It was concluded, following desk studies that these items of infrastructure would not result in significant effects on European Sites and the aquatic species therein as each of the proposed infrastructure met one or more of the following criteria:

1. The new item(s) of infrastructure being placed an acceptable distance from a watercourse (e.g., not on or immediately adjacent to a riverbank),
2. The new item(s) of infrastructure being placed on the opposite side of the road/laneway/track to the watercourse,

3. The presence of a vegetation buffer (e.g., hedgerow) between the new item(s) of infrastructure and the watercourse,
4. The distance between the new item(s) of infrastructure and downstream European Site, and consequent dilution factor.
5. The very minor nature and temporary duration of the Project works

The results of the assessment of each of the proposed features on the basis of criteria 1-4 as described above are presented in Appendix 1

In addition, the project works do not include any water course crossing or instream works. The installation of each new pole or replacement of existing poles or installation of underground ducts or chambers takes place within a very small, localised footprint and will not generate significant amounts of sediment. The Proposed Project will have no impact on the flow rates or nutrient levels of any waterbody.

The poles being erected may carry the risk of contamination of soil and/or groundwater with creosote which is used as a preservative for telecommunications poles. Creosote is a dense non-aqueous liquid which is not soluble in water. Therefore, the risk associated with its use will be extremely localised by virtue of it not migrating through the watercourse or soil. The impact associated with its use can therefore be deemed negligible.

2.9.6 In-combination Effects

Cumulative impacts can be defined as “*impacts that result from incremental changes caused by other past, present or reasonably foreseeable actions together with the project*”. Effects which are caused by the interaction of effects, or by associated or off-site projects, are classed as indirect effects. Cumulative effects are often indirect, arising from the accumulation of different effects that are individually minor. Such effects are not caused or controlled by the project developer.

Plans include all statutory and non-statutory land use, framework and sectoral plans and strategies to the extent that they have the potential to have significant effects on a European Site. This incorporates ‘plans and programmes’ covered by the SEA Directive, and other plans and strategies, including those that are designed or intended to benefit the environment or heritage, such as Heritage and Biodiversity plans, recreation/amenity plans or strategies, and River Basin Management Plan (*Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities*. Report (2009). Prepared by Department Environment, Heritage and Local Government).

The following plans were reviewed and considered for possible in-combination effects with the Proposed Project:

- The National Broadband Plan,
- County Meath Draft Development Plan 2021-2027
- 2nd Cycle River Basin Management Plan 2018-2021,
- Flood Risk Management for the Liffey and Dublin Bay Catchment 2018.

The National Broadband Plan (NBP) has been considered and while detailed designs are not currently available for neighbouring DAs, based on the same criteria used in this assessment,

it is deemed that the NBP as a whole will not give rise to in-combination effects with the Dunboyne-Clonee Project. There are no neighbouring DAs scheduled to have build works in parallel with the Dunboyne-Clonee DA build, therefore no in-combination effects from adjoining DA's are possible.

The Meath County Development plan (2021-2027) outlines specific objectives and policies for the protection of European sites (HER OBJ 33 and HER OBJ 60).

The River Basin Management Plan is set out to protect and improve water quality, and as such will not result in negative in-combination effects with the current Project. Existing and proposed measures within the Flood Risk Management Plan for Liffey and Dublin Bay Catchment 2018 (including Dunboyne-Clonee) include the maintenance of arterial drainage schemes and the progression of various flood relief schemes within the catchment which propose the construction of new flood defence walls, embankments and flow diversions. It is not considered that these proposed measures will act in combination with the Proposed Project. Thus, upon examination of the listed plans, it is concluded that there is no possibility for any in-combination effects between these plans and the Proposed Project.

Projects considered to have significant effects on a European Site and require consideration for Appropriate Assessment, include the following:

- All development that requires a planning permission process.
- All public development carried out by planning authorities.
- Exempted development either within a European Site or which could potentially have a significant effect on European Sites.
- All material contravention proposals.
- All other local authority authorised 'projects' – waste permits, discharge licenses; and
- recreation and amenity projects and road works.
- Forestry Operations
- Flooding and Drainage

2.9.7 Proposed Infrastructure within 30m of European Sites.

No proposed items of infrastructure occur within 30m of European sites. As such it was concluded that none of the new items of infrastructure would result in significant effects to any European Sites. The items outlined above are proposed to be installed within agricultural land or along roadways, tracks and lanes, in both urban and rural areas, thus resulting in no significant habitat loss. Furthermore, the project works will be very minor in nature and short-term in duration and therefore do not present a threat to any protected species.

TABLE 7 SUMMARY OF IMPACT ASSESSMENT ON EUROPEAN SITES FROM THE PROPOSED PROJECT.

Site	Habitat Loss / Alteration	Habitat or Species Fragmentation	Disturbance and/or Displacement of Species	Changes in Population	Changes in Water Quality and/or	Stage 2 AA Required
Rye Water Valley/Carton SAC (001398)	No	No	No	None	None	No
South Dublin Bay SAC (000210)	No	No	No	None	None	No
North Dublin Bay SAC (000206)	No	No	No	None	None	No
Glenasmole Valley SAC (001209)	No	No	No	None	None	No
Malahide Estuary SAC (000205)	No	No	No	None	None	No
Wicklow Mountains SAC (002122)	No	No	No	None	None	No
Baldoye Bay SAC (000199)	No	No	No	None	None	No
Rogerstown Estuary SAC (000208)	No	No	No	None	None	No
Howth Head SAC (000202)	No	No	No	None	None	No
Rockabill to Dalkey Island SAC (003000)	No	No	No	None	None	No
Red Bog, Kildare SAC (000397)	No	No	No	None	None	No
Ireland's Eye SAC (002193)	No	No	No	None	None	No
Ballynafagh Lake SAC (001387)	No	No	No	None	None	No
Ballynafagh Bog SAC (000391)	No	No	No	None	None	No
South Dublin Bay and River Tolka Estuary SPA (004024)	No	No	No	None	None	No
North Bull Island SPA (004006)	No	No	No	None	None	No
Malahide Estuary SPA (004025)	No	No	No	None	None	No

Baldoyle Bay SPA	No	No	No	None	None	No
Wicklow Mountains SPA (004040)	No	No	No	None	None	No
Rogerstown Estuary SPA (004015)	No	No	No	None	None	No
Ireland's Eye SPA (004117)	No	No	No	None	None	No
Howth Head Coast SPA (004113)	No	No	No	None	None	No
Poulaphouca Reservoir SPA (004063)	No	No	No	None	None	No
Dalkey Islands SPA (004172)	No	No	No	None	None	No

3 CONCLUDING STATEMENT

The Proposed Project consisting of the installation of Broadband Network at DA040 Dunboyne-Clonee, Co. Meath has been assessed taking into account:

- the nature, size and location of the proposed works and possible impacts arising from the installation works.
- the qualifying interests and conservation objectives of the European Sites.
- the potential for in-combination effects arising from other plans and projects.

In conclusion, upon the examination, analysis and evaluation of the relevant information and applying the precautionary principle, it is concluded by the authors of this report that, on the basis of objective information; the possibility **may be excluded** that the Proposed Project will have a likely significant effect on any of the European Sites listed below:

Baldoyle Bay SAC (000199)

Howth Head SAC (000202)

Glenasmole Valley SAC (001209)

Wicklow Mountains SAC (002122)

Ballynafagh Bog SAC (000391)

Ireland's Eye SAC (002193)

Red Bog, Kildare SAC (000397)

Rogerstown Estuary SAC (000208)

Rye Water Valley/Carton SAC (001398)

Ballynafagh Lake SAC (001387)

Malahide Estuary SAC (000205)

Rockabill to Dalkey Island SAC (003000)

North Dublin Bay SAC (000206)

South Dublin Bay SAC (000210)

North Bull Island SPA (004006)

Rogerstown Estuary SPA (004015)

Baldoyle Bay SPA

South Dublin Bay and River Tolka Estuary SPA (004024)

Malahide Estuary SPA (004025)

Wicklow Mountains SPA (004040)

Poulaphouca Reservoir SPA (004063)

Howth Head Coast SPA (004113)

Ireland's Eye SPA (004117)

Dalkey Islands SPA (004172)

Thus, it can be concluded on the basis of the results of Stage 1 of the Appropriate Assessment process that there is no requirement to proceed to Stage 2 of said process; and the preparation of a Natura Impact Statement (NIS) is not required.

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NPWS (2021h) Conservation objectives for Dalkey Islands SPA [004172]. Generic Version 8.0. Department of Housing, Local Government and Heritage.

APPENDIX 1

The following table presents the results of the assessment of all items of infrastructure within 30m or less of a waterbody against the following criteria:

1. The new item(s) of infrastructure being placed an acceptable distance from a watercourse (e.g., not on or immediately adjacent to a riverbank),
2. The new item(s) of infrastructure being placed on the opposite side of the road/laneway/track to the watercourse,
3. The presence of a vegetation buffer (e.g., hedgerow) between the new item(s) of infrastructure and the watercourse,
4. The distance between the new item(s) of infrastructure and downstream European site, and consequent dilution factor.

Table 1: Summary of the likely impacts of proposed infrastructure within 30m of watercourses leading to European Sites.

Infrastructure Barcode	Location	Criteria 1	Criteria 2	Criteria 3	Criteria 4	Conclusion
N2130002	Verge	Yes	Yes	Yes	Yes	No likelihood of significant effects
N2130003	Verge	Yes	Yes	Yes	Yes	No likelihood of significant effects
N2130023	Verge	Yes	No	No	Yes	No likelihood of significant effects
N2130139	Verge	Yes	NA	Yes	Yes	No likelihood of significant effects
N2130157	Verge	Yes	Yes	Yes	Yes	No likelihood of significant effects
N2130158	Verge	Yes	Yes	Yes	Yes	No likelihood of significant effects
N2130169	Verge	Yes	NA	Yes	Yes	No likelihood of significant effects
N2130170	Verge	Yes	Yes	Yes	Yes	No likelihood of significant effects
N2130172	Verge	Yes	Yes	Yes	Yes	No likelihood of significant effects
N2130209	Verge	Yes	NA	Yes	Yes	No likelihood of significant effects
N2130210	Verge	Yes	NA	Yes	Yes	No likelihood of significant effects
N2130229	Verge	Yes	NA	Yes	Yes	No likelihood of significant effects
N2130230	Verge	Yes	NA	Yes	Yes	No likelihood of significant effects
N2130327	Verge	Yes	NA	Yes	Yes	No likelihood of significant effects
N2130355	Verge	Yes	NA	Yes	Yes	No likelihood of significant effects
DEZ/B/NBI/CH176	Footpath Other	Yes	Yes	Yes	Yes	No likelihood of significant effects
DEZ/B/NBI/CH169	Carriageway Other	Yes	NA	Yes	Yes	No likelihood of significant effects
DEZ/E/NBI/DT02695888	Carriageway	Yes	NA	Yes	Yes	No likelihood of significant effects
DEZ/D/NBI/DT286	Carriageway	Yes	NA	Yes	Yes	No likelihood of significant effects
DEZ/C/NBI/DTN2130209	Carriageway	Yes	NA	Yes	Yes	No likelihood of significant effects
DEZ/A/NBI/DTN2130157	Carriageway	Yes	Yes	Yes	Yes	No likelihood of significant effects
DEZ/A/NBI/DT27022758	Carriageway	Yes	NA	Yes	Yes	No likelihood of significant effects
DEZ/B/NBI/DTN2130080	Carriageway	Yes	NA	Yes	Yes	No likelihood of significant effects
DEZ/C/NBI/DT40740913	Carriageway	Yes	NA	Yes	Yes	No likelihood of significant effects
DEZ/A/NBI/DT40753290	Footway	Yes	NA	Yes	Yes	No likelihood of significant effects
DEZ/A/NBI/DT27022759	Verge	Yes	NA	Yes	Yes	No likelihood of significant effects
DEZ/B/NBI/DT40829326	Carriageway	Yes	NA	Yes	Yes	No likelihood of significant effects
DEZ/B/NBI/DT02524972	Verge	Yes	NA	Yes	Yes	No likelihood of significant effects

DEZ/B/NBI/DT176	Carriageway	Yes	Yes	Yes	Yes	No likelihood of significant effects
DEZ/B/NBI/DT169	Carriageway	Yes	NA	Yes	Yes	No likelihood of significant effects
DEZ/C/NBI/DT2040000003	Verge	Yes	NA	Yes	Yes	No likelihood of significant effects
DEZ/A/NBI/DT40724352	Verge	Yes	Yes	Yes	Yes	No likelihood of significant effects
DEZ/B/NBI/DT40289297	Verge	Yes	NA	Yes	Yes	No likelihood of significant effects
DEZ/B/NBI/DT80753253	Verge	Yes	NA	Yes	Yes	No likelihood of significant effects
DEZ/B/NBI/DT27093785	Verge	Yes	NA	Yes	Yes	No likelihood of significant effects
DEZ/A/NBI/DT38512670	Verge	Yes	NA	Yes	Yes	No likelihood of significant effects
DEZ/A/NBI/DT80561785	Verge	Yes	NA	Yes	Yes	No likelihood of significant effects
DEZ/C/NBI/DT80784564	Verge	Yes	Yes	Yes	Yes	No likelihood of significant effects
DEZ/A/NBI/DT27022758/2	Carriageway	Yes	NA	Yes	Yes	No likelihood of significant effects
DEZ/A/NBI/DT27022758/3	Carriageway	Yes	NA	Yes	Yes	No likelihood of significant effects
DEZ/B/NBI/DTN2130080/2	Carriageway	Yes	NA	Yes	Yes	No likelihood of significant effects
DEZ/A/NBI/DT36355266	Footway	Yes	NA	Yes	Yes	No likelihood of significant effects
DEZ/A/NBI/DT36355266/2	Footway	Yes	NA	Yes	Yes	No likelihood of significant effects
DEZ/A/NBI/DT36355266/3	Footway	Yes	NA	Yes	Yes	No likelihood of significant effects
DEZ/B/NBI/DT169/2	Carriageway	Yes	NA	Yes	Yes	No likelihood of significant effects
DEZ/E/NBI/DT02695888/2	Carriageway	Yes	NA	Yes	Yes	No likelihood of significant effects
DEZ/B/NBI/DT176/2	Carriageway	Yes	Yes	Yes	Yes	No likelihood of significant effects
DEZ/B/NBI/DT80752429	Carriageway	Yes	NA	Yes	Yes	No likelihood of significant effects
DEZ/A/NBI/DT00082745	Carriageway	Yes	NA	Yes	Yes	No likelihood of significant effects