



APPROPRIATE ASSESSMENT SCREENING REPORT

FOR
UPGRADE/INSTALLATION OF
BROADBAND NETWORK

AT
DA075 Templemore

ON BEHALF OF



National Broadband Ireland

Prepared by
Enviroguide Consulting

Dublin

3D Core C, Block 71, The Plaza,
Park West, Dublin 12

Kerry

19 Henry Street
Kenmare, Co. Kerry

Wexford

M10 Wexford Enterprise
Centre, Strandfield Business
Park, Rosslare Road, Wexford

www.enviroguide.ie

info@enviroguide.ie

+353 1 565 4730



DOCUMENT CONTROL SHEET

Client	National Broadband Ireland
Project Title	Upgrade/Installation of Broadband Network at DA075 Templemore
Document Title	Appropriate Assessment Screening Report

Revision	Status	Author(s)	Reviewed	Approved	Issue Date
1.0	Internal Draft	Emma J Devereux <i>Project Ecologist</i> Yumi Mihara <i>Ecologist</i>	Nicola Byrne <i>Ecologist</i>	Lizy Tinsley Technical Director (Ecology)	
2.0	Draft for client review	Emma J Devereux <i>Project Ecologist</i> Yumi Mihara <i>Ecologist</i>	Nicola Byrne <i>Ecologist</i>	Lizy Tinsley Technical Director (Ecology)	
3.0	Final (LLD01)	Emma J Devereux <i>Project Ecologist</i> Yumi Mihara <i>Ecologist</i>	Nicola Byrne <i>Ecologist</i>	Lizy Tinsley Technical Director (Ecology)	08/12/2022

REPORT LIMITATIONS

Synergy Environmental Ltd. t/a Enviroguide Consulting (hereafter referred to as “Enviroguide”) has prepared this report for the sole use of National Broadband Ireland in accordance with the Agreement under which our services were performed. No other warranty, expressed or implied, is made as to the professional advice included in this Report or any other services provided by Enviroguide.

The information contained in this Report is based upon information provided by others and upon the assumption that all relevant information has been provided by those parties from whom it has been requested and that such information is accurate. Information obtained by Enviroguide has not been independently verified by Enviroguide, unless otherwise stated in the Report.

The methodology adopted and the sources of information used by Enviroguide in providing its services are outlined in this Report.

The work described in this Report is based on the conditions encountered and the information available during the said period of time. The scope of this Report and the services are accordingly factually limited by these circumstances.

All work carried out in preparing this report has used, and is based upon, Enviroguide’s professional knowledge and understanding of the current relevant national legislation. Future changes in applicable legislation may cause the opinion, advice, recommendations or conclusions set out in this report to become inappropriate or incorrect. However, in giving its opinions, advice, recommendations and conclusions, Enviroguide has considered pending changes to environmental legislation and regulations of which it is currently aware. Following delivery of this report, Enviroguide will have no obligation to advise the client of any such changes, or of their repercussions.

Enviroguide disclaim any undertaking or obligation to advise any person of any change in any matter affecting the Report, which may come or be brought to Enviroguide’s attention after the date of the Report.

Certain statements made in the Report that are not historical facts may constitute estimates, projections or other forward-looking statements and even though they are based on reasonable assumptions as of the date of the Report, such forward-looking statements by their nature involve risks and uncertainties that could cause actual results to differ materially from the results predicted. Enviroguide specifically does not guarantee or warrant any estimate or projections contained in this Report.

Unless otherwise stated in this Report, the assessments made assume that the site and facilities will continue to be used for their current or stated proposed purpose without significant changes.

The content of this report represents the professional opinion of experienced environmental consultants. Enviroguide does not provide legal advice or an accounting interpretation of liabilities, contingent liabilities or provisions.

If the scope of work includes subsurface investigation such as boreholes, trial pits and laboratory testing of samples collected from the subsurface or other areas of the site, and environmental or engineering interpretation of such information, attention is drawn to the fact that special risks occur whenever engineering, environmental and related disciplines are applied to identify subsurface conditions. Even a comprehensive sampling and testing programme implemented in accordance with best practice and a professional standard of care may fail to detect certain conditions. Laboratory testing results are not independently verified by Enviroguide and have been assumed to be accurate. The environmental, ecological, geological, geotechnical, geochemical and hydrogeological conditions that Enviroguide interprets to exist between sampling points may differ from those that actually exist. Passage of time, natural occurrences and activities on and/or near the site may substantially alter encountered conditions.

Copyright © This Report is the copyright of Enviroguide Consulting Ltd. any unauthorised reproduction or usage by any person other than the addressee is strictly prohibited.

TABLE OF CONTENTS

LIST OF TABLES	4
LIST OF FIGURES.....	4
1 INTRODUCTION	5
1.1 BACKGROUND	5
1.2 RELEVANT LEGISLATION.....	5
1.2.1 <i>Legislative Background</i>	5
1.2.2 <i>Legislative Context</i>	5
1.2.3 <i>Stages of AA</i>	6
2 APPROPRIATE ASSESSMENT – STAGE 1 SCREENING.....	7
2.1 GUIDANCE	7
2.2 SCREENING STEPS	7
2.3 MANAGEMENT OF EUROPEAN SITES.....	8
2.4 DESCRIPTION OF THE PROJECT	8
2.4.1 <i>Project Overview</i>	8
2.4.2 <i>Brief Description of Installation Activities</i>	8
2.4.3 <i>Contractor Compounds</i>	10
2.4.4 <i>Routine Operational Measures</i>	11
2.4.5 <i>Project Specific Description</i>	11
2.4.6 <i>Operation, Maintenance and Decommission Project Phases.</i>	13
2.4.7 <i>Existing Environment</i>	13
2.5 METHODOLOGY.....	15
2.5.1 <i>Desk Study</i>	15
2.5.2 <i>Assessment of Impacts</i>	15
2.5.3 <i>Identification of Relevant European sites</i>	16
2.5.4 <i>Identification of Infrastructure Installation activities within/adjacent to European sites</i>	17
2.5.5 <i>Assessment of the Impact of Infrastructure Installation activities within, adjacent to or upstream of European sites</i>	18
2.6 EUROPEAN SITES WITHIN THE ZONE OF INFLUENCE.....	18
2.7 BRIEF DESCRIPTION OF EUROPEAN SITES	35
2.7.1 <i>Lower River Suir SAC (002137)</i>	35
2.8 CONSERVATION OBJECTIVES.....	36
2.9 ASSESSMENT OF SIGNIFICANCE OF POTENTIAL IMPACTS.....	36
2.9.1 <i>Habitat Loss and Alteration</i>	37
2.9.2 <i>Habitat / Species Fragmentation</i>	37
2.9.3 <i>Disturbance and/or Displacement of Species</i>	37
2.9.4 <i>Changes in Population Density</i>	39
2.9.5 <i>Changes in Water Quality and Resource</i>	39
2.9.6 <i>In-combination Effects</i>	39
2.9.7 <i>Proposed Infrastructure within 30m of European sites.</i>	41
3 CONCLUDING STATEMENT	44
4 REFERENCES	46
APPENDIX 1	48

LIST OF TABLES

Table 1. Existing and proposed additional telecoms infrastructure	12
Table 2 New underground ducting installation location type and length	12
Table 3. Definition of Durations (EPA, 2022).	15
Table 4. Impact Significance Criteria (EPA, 2022).	16
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.	22
Table 6 Conservation Objectives Of European Sites Which Have A Direct Connection, Or Are Within Close Proximity, With The Project Boundary.	36
Table 7 Summary of impact assessment on European sites from the proposed project.	42

LIST OF FIGURES

Figure 1. The Four Stages Of The Appropriate Assessment Process (Dehlg, 2010).	6
Figure 2. Utility Truck Carrying Utility Poles And Truck Mounted Auger	9
Figure 3. (A) Utility Truck Mounted Auger Excavating Hole For Utility Pole, (B) And (C) Newly Installed Utility Poles.....	9
Figure 4. Newly Installed Chamber.....	10
Figure 5. Proposed Project Location Showing The Location Of New Infrastructure And Various Environmental Features	14
Figure 6 Proposed Project Location.....	20
Figure 7 New Infrastructure To Be Installed Within 30 Of Special Areas Of Conservation	21

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 Templemore 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 Templemore and the surrounding area, covering an approximate area of 397 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 Screening Report has been prepared on the basis of design data presented in (DA075 LLD01).

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 Screening Report 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 AA 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 AA 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.

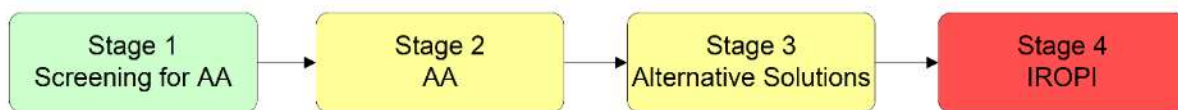


FIGURE 1. THE FOUR STAGES OF THE APPROPRIATE ASSESSMENT PROCESS (DEHLG, 2010).

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. An NIS 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 NBI to install/upgrade the broadband services in the area of Templemore, (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;
 - 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.
 - A hole of sufficient diameter to accommodate each pole is due to a typical depth of 1.5 – 1.7m below ground level.
 - The hole is dug using a utility truck mounted auger as shown in Figure 2 and Figure 3.
 - Approximately 115kgs (1-2 wheelbarrows) of soil is dug by the auger for the installation of each pole.
 - The pole is lowered into place using lifting equipment. If required, cable stays will be installed to support the pole.
 - 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).
 - 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;
 - 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.
 - A tracked mini-excavator or a wheeled backhoe 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).
 - All excavation activities will be undertaken in accordance with the project specific risk assessment and method statement.
 - Once the infrastructure has been installed the open excavation will be backfilled with the previously excavated spoil and the ground made good.
 - The quantity of excavated material is dependent on the length and depth of the required excavations.
 - 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 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 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 installation 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 Templemore and the surrounding area (DA075). The area under assessment is approximately 397 km² of mainly rural 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	374 km	619 km
Underground cable and ducting	70 km	31.2 km
Network Utility Poles	8134	1656
Underground chambers	678	165
Co-Locations/Cabinets	Yes	0

The vast majority of the additional network equipment identified in Table 1 will be installed in the roadside verges, or under existing 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 30/05/2024 with a completion date of 30/10/2024.

TABLE 2 NEW UNDERGROUND DUCTING INSTALLATION LOCATION TYPE AND LENGTH

Type of install location	Total Length km
Installation in roadside verge	27.7 km
Installation under existing footway	2.8 km
Installation under existing carriageway	0.8 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 rural. The Project Boundary also contains the town of Templemore.

A number of lake waterbodies, river waterbodies and groundwater bodies, are located within the project area and environs, which are shown in Figure 5. *Kilduff, Devilsbit Mountain SAC (000934)*, and *Lower River Suir SAC (002137)* are located within the Project Boundary at various points, see Figure 6 below for details.

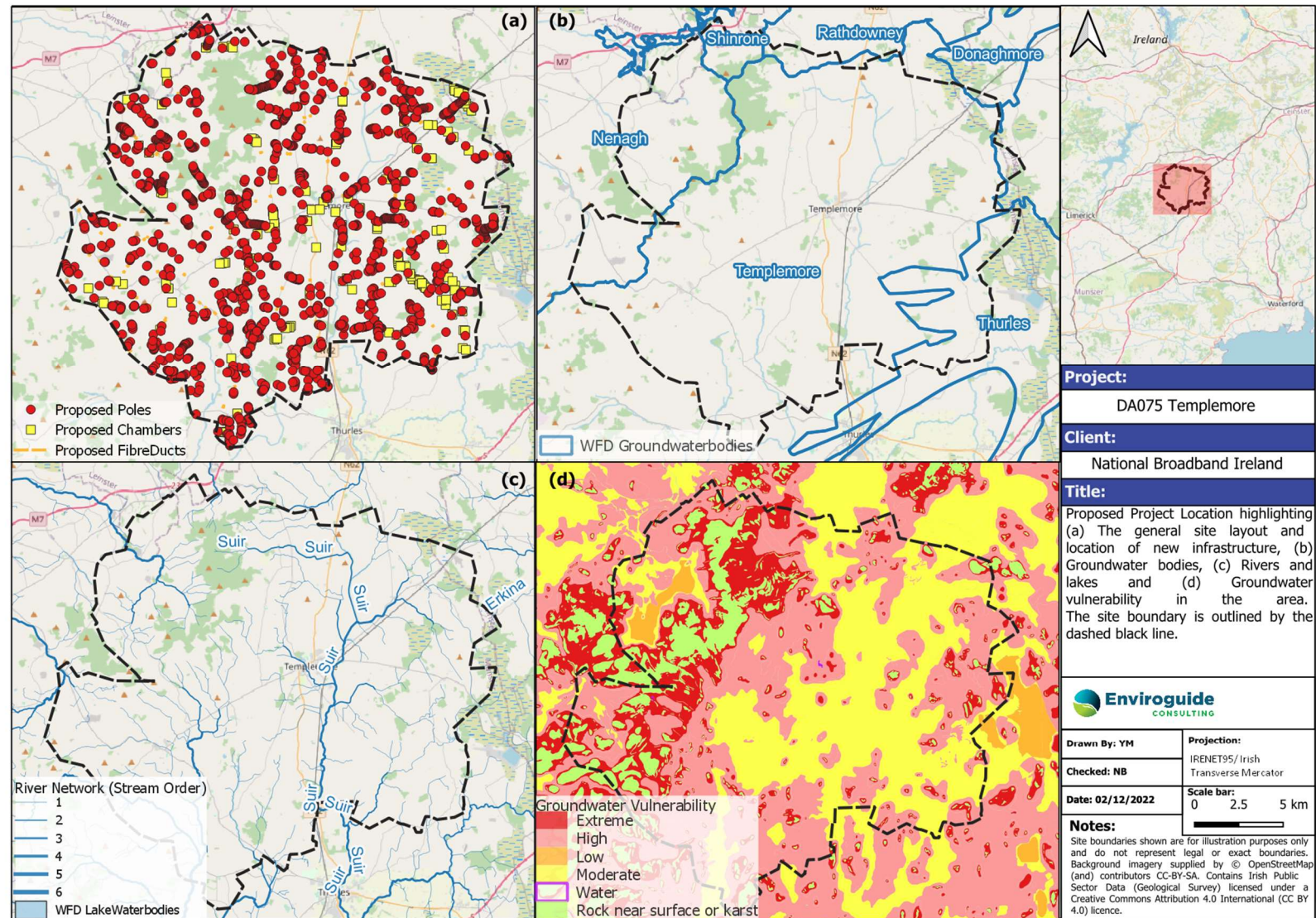


FIGURE 5. PROPOSED PROJECT LOCATION SHOWING THE LOCATION OF NEW INFRASTRUCTURE AND VARIOUS ENVIRONMENTAL FEATURES

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 2022 to reflect LLD01, 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 4 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, 2022), the following terms are defined when quantifying duration (Table 3):

TABLE 3. DEFINITION OF DURATIONS (EPA, 2022).

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, 2022).

TABLE 4. IMPACT SIGNIFICANCE CRITERIA (EPA, 2022).

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</u> , <u>magnitude</u> , <u>duration</u> or <u>intensity</u> <u>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 (S-P-R) method 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 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 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 Geographic Information System (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 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 European sites within the precautionary ZOI with potential for pathways between European sites and the Proposed Development Site. 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 Screening Report on measures intended to avoid/reduce harmful effects on the European sites.

2.5.4 Identification of Infrastructure Installation activities within/adjacent to European sites

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

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

- Using a GIS the locations of all new proposed items of infrastructure were overlayed 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 activities 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 activities 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

16 SACs and 5 SPAs are located within the precautionary ZOI of the Proposed Project site, as follows: *The Loughans SAC (000407), Sharavogue Bog SAC (000585), Cullahill Mountain SAC (000831), Spahill and Clomantagh Hill SAC (000849), Kilduff, Devilsbit Mountain SAC (000934), Silvermine Mountains SAC (000939), Keeper Hill SAC (001197), Galmoy Fen SAC (001858), Bolingbrook Hill SAC (002124), Anglesey Road SAC (002125), Lower River Suir SAC (002137), River Barrow And River Nore SAC (002162), Lower River Shannon SAC (002165), Scohaboy (Sopwell) Bog SAC (002206), Silvermines Mountains West SAC (002258), Coolrain Bog SAC (002332), Slieve Bloom Mountains SPA (004160), Slievefelim to Silvermines Mountains SPA (004165), River Nore SPA (004233).*

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, grassy verges and/or hedging and was not a Qualifying Interest (QI) habitat for any European site or important habitat for any QI and/or Species of Conservation Interest (SCI) species.

The results of the assessment methodology detailed in section 2.5.5 of this report regarding installation work within European sites are presented in Table 8.

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

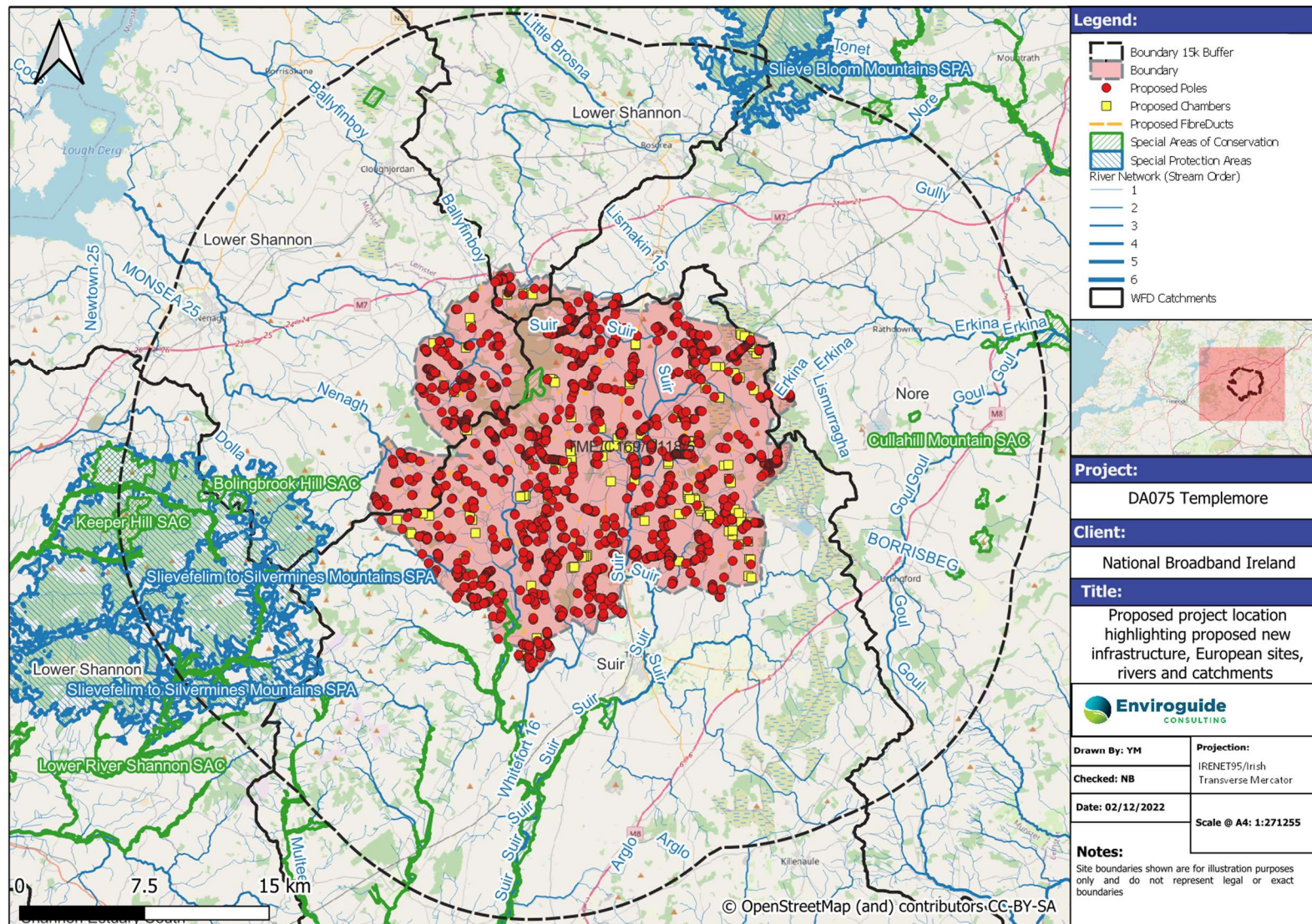


FIGURE 6 PROPOSED PROJECT LOCATION

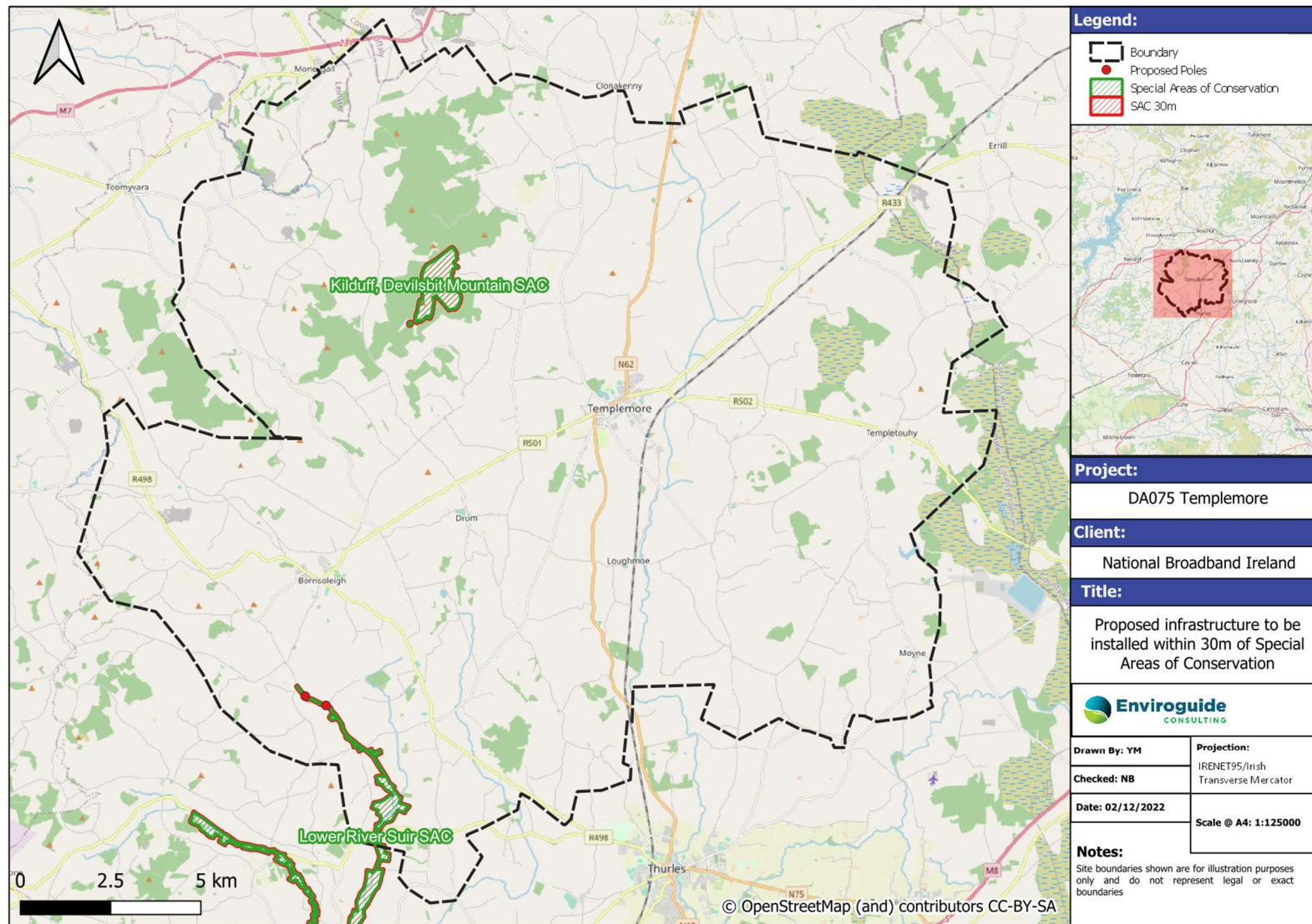


FIGURE 7 NEW INFRASTRUCTURE TO BE INSTALLED WITHIN 30 OF SPECIAL AREAS OF CONSERVATION

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 Boundary	Pathway	Potential Direct Effects	Potential Indirect Effects	Rationale for exclusion
Special Areas of Conservation (SAC)						
Lower River Suir SAC http://www.npws.ie/protected-sites/sac/002137	Conservation Objectives Version 1.0 (NPWS, 2017) <ul style="list-style-type: none"> – Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330] – Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] – Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation [3260] – Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430] – Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0] – Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion) 	Within Project boundary (See Figure 6)	Land, Air & Hydrological	<p>Loss/alteration of habitat along project route, which passes within SAC due to the installation of infrastructure.</p> <p>Potential disturbance to noise sensitive QI species, particularly during the installation phase.</p>	Deterioration of water quality due to potential sediment/pollutants entering SAC due to the installation of infrastructure within 30m of water bodies which flow into SAC.	n/a

Site Name & Code	Qualifying Interests	Distance to Project Boundary	Pathway	Potential Direct Effects	Potential Indirect Effects	Rationale for exclusion
	<p>incanae, Salicion albae) [91E0]</p> <ul style="list-style-type: none"> – Taxus baccata woods of the British Isles [91J0] – Margaritifera margaritifera (Freshwater Pearl Mussel) [1029] – Austropotamobius pallipes (White-clawed Crayfish) [1092] – <i>Petromyzon marinus</i> (Sea Lamprey) [1095] – Lampetra planeri (Brook Lamprey) [1096] – Lampetra fluviatilis (River Lamprey) [1099] – Alosa fallax fallax (Twaite Shad) [1103] – Salmo salar (Salmon) [1106] – <i>Lutra lutra</i> (Otter) [1355] 					
<p>Kilduff, Devilsbit Mountain SAC http://www.npws.ie/protected-sites/sac/000934</p>	<p>Conservation Objectives Version 1.0 (NPWS, 2018)</p> <ul style="list-style-type: none"> – European dry heaths [4030] – Species-rich Nardus grasslands, on siliceous substrates in mountain areas 	<p>Within Project boundary (See Figure 6)</p>	<p>None envisaged</p>	<p>None envisaged</p>	<p>None envisaged</p>	<p>Although this European site is within the project route, no infrastructure is proposed within the SAC, and no river</p>

Site Name & Code	Qualifying Interests	Distance to Project Boundary	Pathway	Potential Direct Effects	Potential Indirect Effects	Rationale for exclusion
	(and submountain areas, in Continental Europe) [6230]					courses adjacent to proposed infrastructure flow into this SAC. Hence, no potential for direct or indirect effects due to the lack of land, air and hydrological links to SAC.
Lower River Shannon SAC http://www.npws.ie/protected-sites/sac/002165	Conservation Objectives Version 1.0 (NPWS, 2012) <ul style="list-style-type: none"> – Sandbanks which are slightly covered by sea water all the time [1110] – Estuaries [1130] – Mudflats and sandflats not covered by seawater at low tide [1140] – Coastal lagoons [1150] – Large shallow inlets and bays [1160] – Reefs [1170] – Perennial vegetation of stony banks [1220] 	6.7 km	None envisaged	None envisaged	None envisaged	No potential for direct or indirect effects due to significant distance between proposed activities and this SAC, and no hydrological links to SAC.

Site Name & Code	Qualifying Interests	Distance to Project Boundary	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] – 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] – Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation [3260] – Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] – Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) [91E0] – <i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029] 					

Site Name & Code	Qualifying Interests	Distance to Project Boundary	Pathway	Potential Direct Effects	Potential Indirect Effects	Rationale for exclusion
	<ul style="list-style-type: none"> – <i>Petromyzon marinus</i> (Sea Lamprey) [1095] – <i>Lampetra planeri</i> (Brook Lamprey) [1096] – <i>Lampetra fluviatilis</i> (River Lamprey) [1099] – <i>Salmo salar</i> (Salmon) [1106] – <i>Tursiops truncatus</i> (Common Bottlenose Dolphin) [1349] – <i>Lutra lutra</i> (Otter) [1355] 					
Galmoy Fen SAC (001858) http://www.npws.ie/protected-sites/sac/001858	Conservation Objectives Version 1.0 (NPWS, 2019) Alkaline fens [7230]	6.8km	None envisaged	None envisaged	None envisaged	No potential for direct or indirect effects due to significant distance between proposed activities and this SAC, and no hydrological links to SAC.
Bolingbrook Hill SAC http://www.npws.ie/protected-sites/sac/002124	Conservation Objectives Version 1.0 (NPWS, 2018) <ul style="list-style-type: none"> – Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010] – European dry heaths [4030] 	7.3 km	None envisaged	None envisaged	None envisaged	No potential for direct or indirect effects due to significant distance between proposed activities and this

Site Name & Code	Qualifying Interests	Distance to Project Boundary	Pathway	Potential Direct Effects	Potential Indirect Effects	Rationale for exclusion
	<ul style="list-style-type: none"> Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230] 					SAC, and no hydrological links to SAC.
Anglesey Road SAC http://www.npws.ie/protected-sites/sac/002125	Conservation Objectives Version 1.0 (NPWS, 2021) Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230]	9.3 km	None envisaged	None envisaged	None envisaged	No potential for direct or indirect effects due to significant distance between proposed activities and this SAC, and no hydrological links to SAC.
Sharavogue Bog SAC http://www.npws.ie/protected-sites/sac/000585	Conservation Objectives Version 1.0 (NPWS, 2015) <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] 	10.8 km	None envisaged	None envisaged	None envisaged	No potential for direct or indirect effects due to significant distance between proposed activities and this SAC, and no hydrological links to SAC.

Site Name & Code	Qualifying Interests	Distance to Project Boundary	Pathway	Potential Direct Effects	Potential Indirect Effects	Rationale for exclusion
The Loughans SAC (000407) http://www.npws.ie/protected-sites/sac/000407	Conservation Objectives Version 1.0 (NPWS, 2020) Turloughs [3180]	11 km	None envisaged	None envisaged	None envisaged	No potential for direct or indirect effects due to significant distance between proposed activities and this SAC, and no hydrological links to SAC.
Spahill and Clomantagh Hill SAC (000849) http://www.npws.ie/protected-sites/sac/000849	Conservation Objectives Version 1.0 (NPWS, 2021) Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210]	11.6 km	None envisaged	None envisaged	None envisaged	No potential for direct or indirect effects due to significant distance between proposed activities and this SAC, and no hydrological links to SAC.
River Barrow and River Nore SAC (002162) http://www.npws.ie/protected-sites/sac/002162	Conservation Objectives Version 1.0 (NPWS, 2011) <ul style="list-style-type: none">– Estuaries [1130]– Mudflats and sandflats not covered by seawater at low tide [1140]– Reefs [1170]	11.7 km	Air	Potential disturbance to noise sensitive QI species, particularly during the installation phase	None envisaged	Although noise sensitive species are present, the distance between this European site and the proposed project works is such that any

Site Name & Code	Qualifying Interests	Distance to Project Boundary	Pathway	Potential Direct Effects	Potential Indirect Effects	Rationale for exclusion
	<ul style="list-style-type: none"> – <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] – Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation [3260] – European dry heaths [4030] – Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430] – Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220] – Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0] – Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion</i> 					impact is deemed negligible.

Site Name & Code	Qualifying Interests	Distance to Project Boundary	Pathway	Potential Direct Effects	Potential Indirect Effects	Rationale for exclusion
	<i>incanae</i> , <i>Salicion albae</i>) [91E0] – <i>Vertigo moulinsiana</i> (Desmoulin's Whorl Snail) [1016] – <i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029] – <i>Austropotamobius pallipes</i> (White-clawed Crayfish) [1092] – <i>Petromyzon marinus</i> (Sea Lamprey) [1095] – <i>Lampetra planeri</i> (Brook Lamprey) [1096] – <i>Lampetra fluviatilis</i> (River Lamprey) [1099] – <i>Alosa fallax fallax</i> (Twaite Shad) [1103] – <i>Salmo salar</i> (Salmon) [1106] – <i>Lutra lutra</i> (Otter) [1355] – <i>Trichomanes speciosum</i> (Killarney Fern) [1421] – <i>Margaritifera durrovensis</i> (Nore Pearl Mussel) [1990]					
Silvermine Mountains SAC	Conservation Objectives Version 1.0 (NPWS, 2018)	11.7 km	None envisaged	None envisaged	None envisaged	No potential for direct or indirect

Site Name & Code	Qualifying Interests	Distance to Project Boundary	Pathway	Potential Direct Effects	Potential Indirect Effects	Rationale for exclusion
http://www.npws.ie/protected-sites/sac/000939	<ul style="list-style-type: none"> Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010] Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230] 					effects due to significant distance between proposed activities and this SAC, and no hydrological links to SAC.
Cullahill Mountain SAC (000831) http://www.npws.ie/protected-sites/sac/000831	Conservation Objectives Version 1.0 (NPWS, 2021) <ul style="list-style-type: none"> Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210] 	12.2 km	None envisaged	None envisaged	None envisaged	No potential for direct or indirect effects due to significant distance between proposed activities and this SAC, and no hydrological links to SAC.
Scohaboy (Sopwell) Bog SAC http://www.npws.ie/protected-sites/sac/002206	Conservation Objectives Version 1.0 (NPWS, 2022) <ul style="list-style-type: none"> Degraded raised bogs still capable of natural regeneration [7120] 	12.4 km	None envisaged	None envisaged	None envisaged	No potential for direct or indirect effects due to significant distance between proposed activities and this SAC, and no hydrological links to SAC.

Site Name & Code	Qualifying Interests	Distance to Project Boundary	Pathway	Potential Direct Effects	Potential Indirect Effects	Rationale for exclusion
Keeper Hill SAC http://www.npws.ie/protected-sites/sac/001197	Conservation Objectives Version 1.0 (NPWS, 2017) <ul style="list-style-type: none"> Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010] Blanket bogs (* if active bog) [7130] 	12.8 km	None envisaged	None envisaged	None envisaged	No potential for direct or indirect effects due to significant distance between proposed activities and this SAC, and no hydrological links to SAC.
Silvermines Mountains West SAC http://www.npws.ie/protected-sites/sac/002258	Conservation Objectives Version 1.0 (NPWS, 2017) <ul style="list-style-type: none"> Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010] European dry heaths [4030] <p>Calaminarian grasslands of the <i>Violetalia calaminariae</i> [6130]</p>	13.0 km	None envisaged	None envisaged	None envisaged	No potential for direct or indirect effects due to significant distance between proposed activities and this SAC, and no hydrological links to SAC.
Coolrain Bog SAC https://www.npws.ie/protected-sites/sac/002332	Conservation Objectives Version 1.0 (NPWS, 2016) <ul style="list-style-type: none"> Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] 	14.4 km	None envisaged	None envisaged	None envisaged	No potential for direct or indirect effects due to significant distance between proposed activities and this SAC, and no hydrological links to SAC.

Site Name & Code	Qualifying Interests	Distance to Project Boundary	Pathway	Potential Direct Effects	Potential Indirect Effects	Rationale for exclusion
	– Depressions on peat substrates of the Rhynchosporion [7150]					
Special Protection Areas (SPA)						
Slievefelim to Silvermines Mountains SPA http://www.npws.ie/protected-sites/spa/004165	Conservation Objectives Version 1.0 (NPWS 2022) Hen Harrier (<i>Circus cyaneus</i>) [A082]	2.4 km	None envisaged	None envisaged	None envisaged	No potential for direct or indirect effects due to significant distance between proposed activities and this SAC, and no hydrological links to SAC.
Slieve Bloom Mountains SPA http://www.npws.ie/protected-sites/spa/004160	Conservation Objectives Version 1.0 (NPWS 2022) Hen Harrier (<i>Circus cyaneus</i>) [A082]	10.5 km	None envisaged	None envisaged	None envisaged	No potential for direct or indirect effects due to significant distance between proposed activities and this SAC, and no hydrological links to SAC.

Site Name & Code	Qualifying Interests	Distance to Project Boundary	Pathway	Potential Direct Effects	Potential Indirect Effects	Rationale for exclusion
River Nore SPA (004233) http://www.npws.ie/protected-sites/spa/004233	Conservation Objectives Version 1.0 (NPWS, 2022) – Kingfisher (<i>Alcedo atthis</i>) [A229]	11 km	None envisaged	None envisaged	None envisaged	No potential for direct or indirect effects due to significant distance between proposed activities and this SAC, and no hydrological links to SAC.

2.7 Brief Description of European sites

All 21 of the European sites within the precautionary ZOI of the Project were assessed for potential direct and indirect impacts. A total of 20 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 minor nature of the proposed installation activities and the absence of pathways (e.g., hydrological, land, air) between the Project and the European sites.

A land, air or hydrological pathway has been established between installation activities as part of the project (DA075) and the remaining 1 European site. A brief summary of each site is provided below, extracted from the NPWS Site Synopses available from the NPWS. QI and/or SCI species for each of the remaining sites are listed in Table 6.

2.7.1 Lower River Suir SAC (002137)

“Lower River Suir SAC consists of the freshwater stretches of the River Suir immediately south of Thurles, the tidal stretches as far as the confluence with the Barrow/Nore immediately east of Cheekpoint in Co. Waterford, and many tributaries including the Clodiagh in Co. Waterford, the Lingaun, Anner, Nier, Tar, Aherlow, Multeen and Clodiagh in Co. Tipperary. The Suir and its tributaries flow through the counties of Tipperary, Kilkenny and Waterford.

Upstream of Waterford city, the swinging meanders of the Suir criss-cross the Devonian sandstone rim of hard rocks no less than three times as they leave the limestone-floored downfold below Carrick-on-Suir. In the vicinity of Carrick-on-Suir the river follows the limestone floor of the Carrick Syncline. Upstream of Clonmel the river and its tributaries traverse Upper Palaeozoic Rocks, mainly the Lower Carboniferous Visean and Tournaisian. The freshwater stretches of the Clodiagh River in Co. Waterford traverse Silurian rocks, through narrow bands of Old Red Sandstone and Lower Avonian Shales, before reaching the carboniferous limestone close to its confluence with the Suir. The Aherlow River flows through a Carboniferous limestone valley, with outcrops of Old Red Sandstone forming the Galtee Mountains to the south and the Slievenamuck range to the north. Glacial deposits of sands and gravels are common along the valley bottom, flanking the present-day river course. Both rivers rise in the Old Red Sandstone of the Slieve Bloom Mountains before passing through a band of Carboniferous shales and sandstones. The Nore, for a large part of its course, traverses limestone plains and then Old Red Sandstone for a short stretch below Thomastown. Before joining the Barrow it runs over intrusive rocks poor in silica. The upper reaches of the Barrow also run through limestone. The middle reaches and many of the eastern tributaries, sourced in the Blackstairs Mountains, run through Leinster Granite. The southern end, like the Nore runs over intrusive rocks poor in silica. Waterford Harbour is a deep valley excavated by glacial floodwaters when the sea level was lower than today. The coast shelves quite rapidly along much of the shore.

The Lower River Suir contains excellent examples of a number of Annex I habitats, including the priority habitats alluvial forest and Yew woodland. The site also supports populations of several important animals species, some listed on Annex II of the Habitats Directive or listed in the Irish Red Data Book. The presence of two legally protected plants (Flora (Protection) Order, 1999) and the ornithological importance of the site adds further to the ecological interest and importance.”

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 Boundary. 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 BOUNDARY.

European site & code	Conservation Interests
Special Areas of Conservation (SAC)	
<p>Lower River Suir SAC http://www.npws.ie/protected-sites/sac/002137</p>	<p>To <u>maintain</u> or <u>restore</u> the favourable conservation condition of the habitats for which this SAC has been designated:</p> <ul style="list-style-type: none"> – Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330] – Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] – Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation [3260] – Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430] – Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0] – Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) [91E0] – <i>Taxus baccata</i> woods of the British Isles [91J0] – <i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029] – <i>Austropotamobius pallipes</i> (White-clawed Crayfish) [1092] – <i>Petromyzon marinus</i> (Sea Lamprey) [1095] – <i>Lampetra planeri</i> (Brook Lamprey) [1096] – <i>Lampetra fluviatilis</i> (River Lamprey) [1099] – <i>Alosa fallax fallax</i> (Twaiite Shad) [1103] – <i>Salmo salar</i> (Salmon) [1106] – <i>Lutra lutra</i> (Otter) [1355]

2.9 Assessment of Significance of Potential Impacts

Section 2.9 will consider the significance of potential impacts upon the QI and/or SCI species and/or habitats within aforementioned European sites.

No installation activity will occur within European sites. Hence, there is no potential for significant effects on European sites. Regarding infrastructure proposed adjacent to European sites, due to the minor, temporary nature of the proposed new infrastructure installations, no

significant 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

Should any of the estimated additional poles or any excavations for underground cables fall within a European site, it could conceivably constitute a loss/alteration of habitat, although extremely insignificant in size, at the designated site. Furthermore, tree trimming along the stretches of the route that pass within/adjacent to the European sites also has the potential to cause minor habitat alteration/loss.

No installation activity will occur within European sites as outlined above.

In conclusion, due to the location and minor nature of the project activities, and the fact that there is no infrastructure in European sites, it is considered that the Proposed Project will not cause any significant habitat loss and/or alteration within any European sites within the ZOI of the Proposed Project.

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.

Given the nature of the installations, species involved and as the absence of QI habitats loss within any European sites, it is not considered that habitat fragmentation will arise from the Proposed Project.

2.9.3 Disturbance and/or Displacement of Species

'Disturbance' in an ecosystem is defined as any event "that disrupts the structure of an ecosystem, community, or population, and changes resource availability or the physical environment" (White and Pickett, 1985). The installation of proposed new infrastructure upstream, within or in close proximity to a European site may result in brief disturbance and/or displacement of QI/SCI species at European sites. Examples of disturbance to QI/SCI species that could occur as a result of project activities include: (i) displacement due to noise, dust or light generation during the installation phase, (ii) increased collision risk presented by the installation of additional poles, or (iii) the deterioration in water quality as a result of sediment/pollutant discharge into a water body during the installation phase.

2.9.3.1 Potential Impacts to QI and SCI Species

No new infrastructure is proposed to be installed within European sites, as stated.

Where new infrastructure is proposed to be installed within or in close proximity to European sites, the potential impact of noise disturbance upon QI/SCI species during the installation phase is considered.

Proposed new items of infrastructure within 30m of European sites are identified in Figure 7. A total of 2 items of infrastructure (2 poles) are proposed to be installed within 30m of European sites.

In the case of *Lower River Suir SAC (002137)* listed QI species such as Otter (*Lutra lutra*) [1355] may be susceptible to noise disturbance as a result of project activities. However, project activities (the installation of poles, chambers and ducting) will not generate significant amounts of noise, will be localised in extent and short term, commencing 30/05/2024 with a completion date of 30/10/2024. Otter [1355] may be susceptible to disturbance due to habitat loss. However, infrastructure is being installed predominantly along roadside verges, and not within areas of suitable breeding habitat for Otter.

Therefore, it can be concluded that the Project activities will not have a significant effect as a result of disturbance and/or displacement to QI/SCI species within *Lower River Suir SAC (002137)*.

2.1.1.1 Potential impacts arising due to installation activities upstream or adjacent to European sites

Within the Project Boundary, 156 items of infrastructure (98 poles, 4 chambers and 54 lengths of ducting) will be placed within 30m of watercourses which may ultimately flow into European sites within the precautionary ZOI of the Proposed Project.

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. While it is unlikely that proposed items of infrastructure within 30m of watercourses will result in significant downstream effects on protected bird or mammal species in the aforementioned European sites, new items of infrastructure within close proximity to waterbodies within or flowing into European sites are assessed further below.

The new items of infrastructure within close proximity to waterbodies within or flowing into European sites 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 will not result in significant effects on European sites and the aquatic species therein for one or more of the following criteria:

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

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 Boundary 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 activities, into waterbodies in close proximity to the project activities. 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 activities.

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 activities 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,
- Tipperary County Development Plan 2022- 2028
- 2nd Cycle River Basin Management Plan 2018-2021,
- Draft River Basin Management Plan 2022-2027.
- Flood Risk Management Plan: Tipperary, published 2018.
- Flood Risk Management Plan: River Basin (16) Suir. 2018.

The 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 Templemore Project. There are no neighbouring DAs scheduled for installation activities in parallel with the Templemore DA build, therefore no in-combination effects from adjoining DA's are possible.

The Tipperary County Development Plan outlines specific objectives and policies for the protection of European sites.

The River Basin Management Plans are set out to protect and improve water quality, and as such will not result in negative in-combination effects with the current Project. The proposed measures for the Flood Risk Management Plan for the Suir River Basin, including Templemore, include the maintenance of arterial drainage schemes and the development and progression of flood forecasting schemes in the Templemore vicinity. It is not considered that these existing and 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 AA, 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.

Proposed new items of infrastructure within 30m of European sites are identified in Figure 7. A total of 2 items of infrastructure (2 poles) are proposed to be installed within 30m of European sites.

Having assessed these items of infrastructure following the methodology outlined in section 2.5.5, 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 along roadways, tracks and lanes, in both urban and rural areas, thus resulting in no significant habitat loss. Furthermore, the project activities 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 Density	Changes in Water Quality and/or Resource	Stage 2 AA Required
The Loughans SAC (000407)	No	No	No	None	None	No
Sharavogue Bog SAC (000585)	No	No	No	None	None	No
Cullahill Mountain SAC (000831)	No	No	No	None	None	No
Spahill and Clomantagh Hill SAC (000849)	No	No	No	None	None	No
Kilduff, Devilsbit Mountain SAC (000934)	No	No	No	None	None	No
Silvermine Mountains SAC (000939)	No	No	No	None	None	No
Keeper Hill SAC (001197)	No	No	No	None	None	No
Galmoy Fen SAC (001858)	No	No	No	None	None	No
Bolingbrook Hill SAC (002124)	No	No	No	None	None	No
Anglesey Road SAC (002125)	No	No	No	None	None	No
Lower River Suir SAC (002137)	No	No	No	None	None	No
River Barrow and River Nore SAC (002162)	No	No	No	None	None	No

Lower River Shannon SAC (002165)	No	No	No	None	None	No
Scohaboy (Sopwell) Bog SAC (002206)	No	No	No	None	None	No
Silvermines Mountains West SAC (002258)	No	No	No	None	None	No
Coolrain Bog SAC (002332)	No	No	No	None	None	No
Slieve Bloom Mountains SPA (004160)	No	No	No	None	None	No
Slievefelim to Silvermines Mountains SPA (004165)	No	No	No	None	None	No
River Nore SPA (004233)	No	No	No	None	None	No

3 CONCLUDING STATEMENT

The Proposed Project consisting of the installation of Broadband Network at DA075 Templemore, in County Tipperary, has been assessed taking into account:

- The nature, size and location of the proposed installations and possible impacts arising from the installation activities.
- 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 **can be excluded** that the Proposed Project will have a likely significant effect on any of the European sites listed below:

The Loughans SAC (000407)

Sharavogue Bog SAC (000585)

Cullahill Mountain SAC (000831)

Spahill and Clomantagh Hill SAC (000849)

Kilduff, Devilsbit Mountain SAC (000934)

Silvermine Mountains SAC (000939)

Keeper Hill SAC (001197)

Galmoy Fen SAC (001858)

Bolingbrook Hill SAC (002124)

Anglesey Road SAC (002125)

Lower River Suir SAC (002137)

River Barrow and River Nore SAC (002162)

Lower River Shannon SAC (002165)

Scohaboy (Sopwell) Bog SAC (002206)

Silvermines Mountains West SAC (002258)

Coolrain Bog SAC (002332)

Slieve Bloom Mountains SPA (004160)

Slievefelim to Silvermines Mountains SPA (004165)

River Nore SPA (004233)

Thus, it can be concluded on the basis of the results of Stage 1 of the AA process that there is no requirement to proceed to Stage 2 of said process; and the preparation of a NIS is not required.

It should be noted the any work that is carried out within an SAC, SPA or NHA may be considered “An Activity Requiring Consent” (including, but not limited to, ARC-05 and ARC-11)² As such it is advised that the local NPWS Conservation Ranger is consulted in advance of commencing works in a SAC, SPA or NHA, and consent granted by the Minister for Housing, Local Government and Heritage (or another relevant public body) where appropriate.

²: <https://www.npws.ie/farmers-and-landowners/activities-requiring-consent>

4 REFERENCES

DEHLG. (2010). Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities. Department of Environment, Heritage and Local Government.

Environmental Protection Agency. (2002). Guidelines on information to be contained in Environmental Impact Statements. Environmental Protection Agency, Ireland.

Environmental Protection Agency. (2017). Guidelines on information to be contained in Environmental Impact Assessment Reports (Draft). Environmental Protection Agency, Ireland.

European Commission. (2001). 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 Communities, Luxembourg.

Franklin, A. N. (2002). What is Habitat Fragmentation? Studies in Avian Biology, 20-29.

NPWS (2020c), Activities Requiring Consent, National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht [ONLINE] Available at: <https://www.npws.ie/farmers-andlandowners/activities-requiring-consent> [Accessed: December 2022]

NPWS (2020d), Activities Requiring Consent, National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht [ONLINE] Available at: <https://www.npws.ie/sites/default/files/general/approved-arc-list-v2.0.xlsx> [Accessed: December 2022]

NPWS (2011) Conservation Objectives: River Barrow and River Nore SAC 002162. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2012) Conservation Objectives: Lower River Shannon SAC 002165. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2014) Conservation Objectives: Sharavogue Bog SAC 000585. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht

NPWS (2016) Conservation Objectives: Coolrain Bog SAC 002332. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

NPWS (2017a) Conservation Objectives: Keeper Hill SAC 001197. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.

NPWS (2017b) Conservation Objectives: Lower River Suir SAC 002137. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

NPWS (2017c) Conservation Objectives: Silvermines Mountains West SAC 002258. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht

NPWS (2018a) Conservation Objectives: Bolingbrook Hill SAC 002124. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht

NPWS (2018b) Conservation Objectives: Kilduff, Devilsbit Mountain SAC 000934. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.

NPWS (2018c) Conservation Objectives: Silvermine Mountains SAC 000939. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.

NPWS (2019) Conservation Objectives: Galmoy Fen SAC 001858. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.

NPWS (2020) Conservation Objectives: The Loughans SAC 000407. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

NPWS (2021a) Conservation Objectives: Anglesey Road SAC 002125. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

NPWS (2021b) Conservation Objectives: Cullahill Mountain SAC 000831. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

NPWS (2021c) Conservation Objectives: Spahill and Clomantagh Hill SAC 000849. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

NPWS (2022a) Conservation objectives for River Nore SPA [004233]. First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.

NPWS (2022b) Conservation objectives for Scohaboy (Sopwell) Bog SAC [002206]. First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.

NPWS (2022c) Conservation Objectives: Slieve Bloom Mountains SPA 004160. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

NPWS (2022d) Conservation Objectives: Slievefelim to Silvermines Mountains SPA 004165. Version 1. National Parks and Wildlife Service, 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
N1052496	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1052501	Verge	Yes	Yes	Yes	Yes	No likelihood of significant effects
N1052505	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1052577	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1052588	Verge	Yes	Yes	Yes	Yes	No likelihood of significant effects
N1052602	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1052634	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1052641	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1052642	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1052643	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1052644	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1052645	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1052646	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1052648	Verge	No	Yes	Yes	Yes	No likelihood of significant effects

N1052809	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1052810	Verge	No	No	No	Yes	No likelihood of significant effects
N1052826	Carriage way Gravel	Yes	No	Yes	Yes	No likelihood of significant effects
N1052829	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1052845	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1052866	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1052875	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1052876	Verge	Yes	Yes	Yes	Yes	No likelihood of significant effects
N1052877	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1052880	Footway Brick	Yes	No	No	Yes	No likelihood of significant effects
N1052885	Verge	Yes	Yes	Yes	Yes	No likelihood of significant effects
N1052887	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1052905	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1052913	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1052965	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1052969	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1052970	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1052971	Footway Concrete	Yes	No	No	Yes	No likelihood of significant effects
N1052973	Verge	Yes	No	No	Yes	No likelihood of significant effects
N1052996	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1053021	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1053026	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1053031	Verge	No	No	Yes	Yes	No likelihood of significant effects

N1053046	Verge	Yes	Yes	Yes	Yes	No likelihood of significant effects
N1053049	Verge	Yes	Yes	Yes	Yes	No likelihood of significant effects
N1053053	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1053102	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1053108	Verge	No	Yes	Yes	Yes	No likelihood of significant effects
N1053109	Verge	No	Yes	Yes	Yes	No likelihood of significant effects
N1053117	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1053118	Verge	Yes	Yes	Yes	Yes	No likelihood of significant effects
N1053119	Verge	Yes	Yes	Yes	Yes	No likelihood of significant effects
N1053147	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1053151	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1053159	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1053165	Verge	Yes	Yes	Yes	Yes	No likelihood of significant effects
N1053166	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1053199	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1053256	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1053310	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1053314	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1053315	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1053316	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1053335	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1053340	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1053341	Verge	No	No	Yes	Yes	No likelihood of significant effects

N1053376	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1053407	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1053413	Verge	Yes	Yes	Yes	Yes	No likelihood of significant effects
N1053414	Verge	Yes	Yes	Yes	Yes	No likelihood of significant effects
N1053527	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1053528	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1053529	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1053530	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1053531	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1053560	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1053561	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1053570	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1053571	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1053573	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1053574	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1053576	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1053669	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1053672	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1053710	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1053742	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1053753	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1053754	Verge	Yes	Yes	Yes	Yes	No likelihood of significant effects
N1053755	Verge	Yes	No	Yes	Yes	No likelihood of significant effects

N1053835	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1053836	Verge	No	No	Yes	Yes	No likelihood of significant effects
N1053851	Verge	Yes	No	Yes	No	No likelihood of significant effects
N1053912	Verge	No	No	Yes	No	No likelihood of significant effects
N1053931	Verge	Yes	No	Yes	No	No likelihood of significant effects
N1053934	Verge	No	No	Yes	No	No likelihood of significant effects
N1053940	Verge	Yes	No	Yes	No	No likelihood of significant effects
N1053941	Verge	No	No	Yes	No	No likelihood of significant effects
N1053942	Verge	Yes	No	Yes	No	No likelihood of significant effects
N1053943	Verge	Yes	No	Yes	No	No likelihood of significant effects
N1053944	Verge	No	No	Yes	No	No likelihood of significant effects
N1053945	Verge	Yes	No	Yes	No	No likelihood of significant effects
N1053998	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1054086	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
N1054092	Verge	Yes	No	Yes	No	No likelihood of significant effects
TME/A/NBI/DT0060454 2	Verge	No	No	Yes	Yes	No likelihood of significant effects
TME/A/NBI/DT0148794 8	Verge	No	No	Yes	Yes	No likelihood of significant effects
TME/A/NBI/DT0149048 0	Verge	No	No	No	Yes	No likelihood of significant effects
TME/A/NBI/DT0231478 0	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
TME/A/NBI/DT4096362 2	Footway	Yes	No	Yes	Yes	No likelihood of significant effects
TME/B/NBI/DT0098683 7	Verge	No	No	Yes	Yes	No likelihood of significant effects
TME/B/NBI/DT024	Footway	No	No	Yes	Yes	No likelihood of significant effects
TME/B/NBI/DT1075000 038	Verge	Yes	Yes	Yes	Yes	No likelihood of significant effects

TME/B/NBI/DT1075000 041	Verge	Yes	Yes	Yes	Yes	No likelihood of significant effects
TME/B/NBI/DT1075000 056	Footway	Yes	No	No	Yes	No likelihood of significant effects
TME/B/NBI/DT2735210 4	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
TME/B/NBI/DT3817530 6	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
TME/B/NBI/DT3817559 7	Carriage way	Yes	No	Yes	Yes	No likelihood of significant effects
TME/B/NBI/DT3864975 3	Verge	Yes	Yes	Yes	Yes	No likelihood of significant effects
TME/B/NBI/DT3864977 7	Verge	No	No	Yes	Yes	No likelihood of significant effects
TME/B/NBI/DT3864978 1	Verge	No	No	Yes	Yes	No likelihood of significant effects
TME/B/NBI/DT4052124 8	Footway	Yes	No	No	Yes	No likelihood of significant effects
TME/B/NBI/DT4066549 6	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
TME/B/NBI/DT4067775 7	Verge	No	No	Yes	Yes	No likelihood of significant effects
TME/B/NBI/DT449	Footway	No	No	Yes	Yes	No likelihood of significant effects
TME/B/NBI/DT6004354 9	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
TME/B/NBI/DT6021759 4	Verge	No	No	Yes	Yes	No likelihood of significant effects
TME/B/NBI/DT8082845 9	Verge	No	No	Yes	Yes	No likelihood of significant effects
TME/B/NBI/DT8082847 0	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
TME/B/NBI/DT8082851 2	Verge	No	No	Yes	Yes	No likelihood of significant effects
TME/B/NBI/DTN10528 77	Verge	No	No	Yes	Yes	No likelihood of significant effects
TME/B/NBI/DTN10533 10	Verge	No	No	No	Yes	No likelihood of significant effects
TME/C/NBI/DT167	Verge	No	No	No	Yes	No likelihood of significant effects
TME/C/NBI/DT379283 60	Verge	No	No	Yes	Yes	No likelihood of significant effects
TME/C/NBI/DT809984 56	Footway	No	No	No	Yes	No likelihood of significant effects
TME/C/NBI/DTN10534 13	Verge	Yes	Yes	Yes	Yes	No likelihood of significant effects

TME/D/NBI/DT006974 47	Verge	No	No	Yes	Yes	No likelihood of significant effects
TME/D/NBI/DT107500 0088	Verge	No	No	Yes	Yes	No likelihood of significant effects
TME/D/NBI/DT107500 0092	Verge	Yes	No	Yes	No	No likelihood of significant effects
TME/D/NBI/DT256	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
TME/D/NBI/DT368867 87	Verge	No	No	Yes	Yes	No likelihood of significant effects
TME/D/NBI/DT405623 23	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
TME/D/NBI/DT410109 67	Verge	No	No	No	Yes	No likelihood of significant effects
TME/D/NBI/DT600489 04	Verge	Yes	No	Yes	No	No likelihood of significant effects
TME/D/NBI/DT615134 51	Verge	Yes	No	Yes	No	No likelihood of significant effects
TME/D/NBI/DT615134 52	Verge	Yes	No	Yes	No	No likelihood of significant effects
TME/D/NBI/DT808190 16	Verge	No	No	Yes	Yes	No likelihood of significant effects
TME/D/NBI/DT808258 62	Verge	Yes	No	Yes	Yes	No likelihood of significant effects
TME/D/NBI/DT808258 92	Verge	No	No	No	Yes	No likelihood of significant effects
TME/D/NBI/DT808264 17	Footway	Yes	No	Yes	Yes	No likelihood of significant effects
TME/A/EIR/CH311	Grass	No	No	Yes	Yes	No likelihood of significant effects
TME/B/NBI/CH449	Footpath Other	No	No	Yes	Yes	No likelihood of significant effects
TME/C/EIR/CH356	Grass	No	No	Yes	Yes	No likelihood of significant effects
TME/D/NBI/CH256	Grass	Yes	No	Yes	Yes	No likelihood of significant effects