



ESC
Environmental Ltd

Company Register Number: 687386

W: www.escenvironmental.ie

E: info@escenvironmental.ie

Tobernanía Ballintogher

County Sligo

P: 071 913 4001

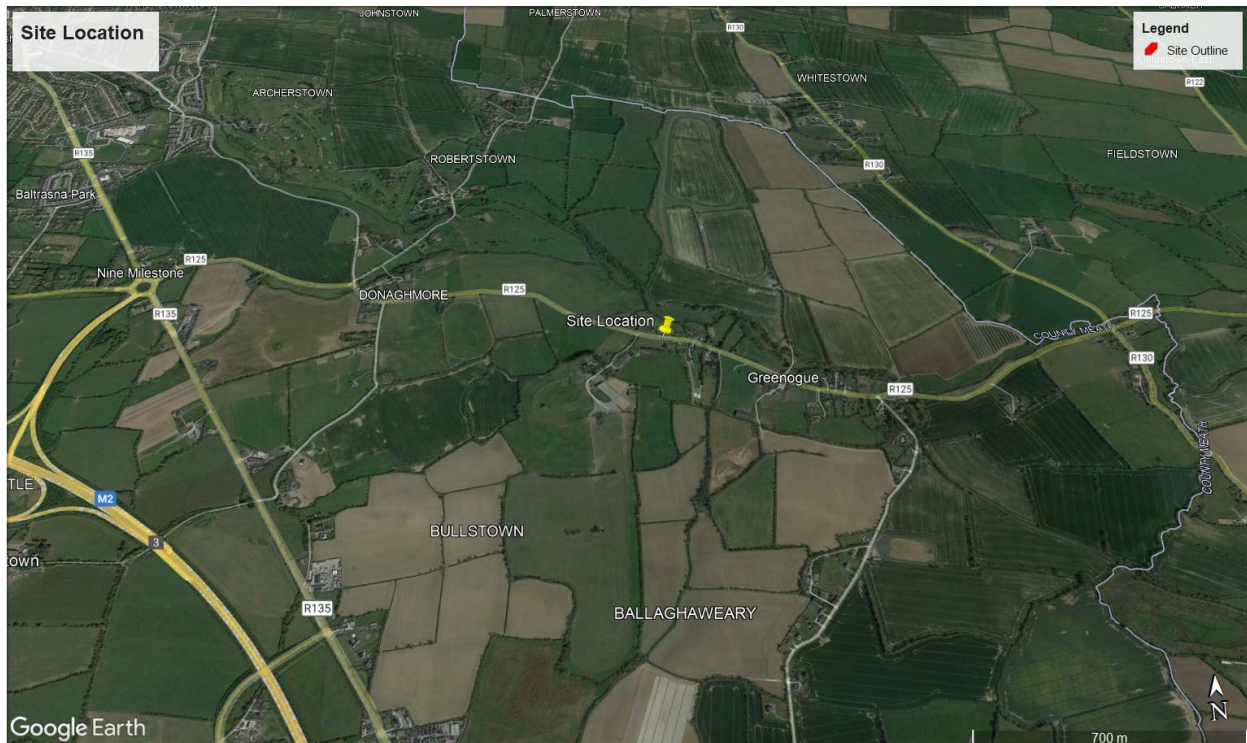
M: 086 308 0356



ESC Environmental Ltd

Appropriate Assessment – Natura Impact Statement Screening - Greenogue Rural Bus Stops Scheme

Reference no.: 2320 Appropriate Assessment – Natura Impact Statement Screening





ESC
Environmental Ltd

Company Register Number: 687386

W: www.escenvironmental.ie

E: info@escenvironmental.ie

Tobernania Ballintogher

County Sligo

P: 071 913 4001

M: 086 308 0356

Client Name: Meath County Council
Site Address: Greenogue, Co. Meath
Project Type: Appropriate Assessment Screening
Date: September 2023
Our Ref: Greenogue Bus Stop- Appropriate Assessment Screening



Contents

1	Introduction	4
1.1	Background	4
1.2	The Appropriate Assessment Process	4
2	Regulatory context.....	6
2.1	Relevant legislation.....	6
2.2	Guidance	8
2.3	Stages Involved in the Appropriate Assessment Process.....	9
3	Screening Assessment	10
3.1	Project and site description	10
3.2	Existing Environment	10
3.2.1	Desk Studies	10
3.2.2	Existing Environment.....	11
3.3	Overview of potential Impacts.....	11
3.4	Determination of the Likely Zone of Influence	11
3.5	Natura 2000 sites identified	12
3.5.1	Natura sites considered.....	13
4	Identification of Likely Significant Effects.....	16
4.1	Potential for Likely Significant Effects.....	16
4.2	Potential for Indirect Impacts.....	16
4.3	Potential for In-Combination Effects.....	16
5	Screening conclusions	16
	Appendix 1 – Supporting Maps.....	17

1 Introduction

1.1 Background

This report forms an Appropriate Assessment (AA) Screening Report which was prepared for Meath County Council for a site in Greenogue, Co. Meath. The proposed development consists of the erection of two bus stops along the R125 in Greenogue, Co. Meath. The proposed development shall include: “(1) Construction of new kerb lines and footpath, (2) Provision of 2 no. recessed bus stops, (3) Provision of 1 no. uncontrolled pedestrian crossing point, Ducting and pole installation for public lighting along the scheme, (4) Some localised re-profiling of existing road cross falls/ cambers, (5) Earthworks excavations of portions of existing verges and embankments adjacent to the existing roadway (6) All associated civil works with the above i.e. ducting, drainage, concreting, macadam, surfacing works, signage and road marking works, potential minor services alterations, etc. (7) Adjustment to existing boundaries, and associated landscaping”

The purpose of this Screening Report is to inform the AA process, which is carried out by the competent authority. Appropriate Assessment is an assessment of whether a plan or project, alone and/or in-combination with other plans or projects, may have significant effects on a European site, collectively known as the Natura 2000 network, in view of the site’s conservation objectives.

This report provides information to assist the competent authority in undertaking a Screening Assessment of the proposed development and was informed by a desktop study undertaken by competent ecologists/environmental scientists at ESC Environmental Ltd in September 2023 (Peter McCormick B.Sc. (Hons)), and senior reviewed by Senior Consultants and Environmental Scientists Martijn Leenheer and Leo Cosgrove.

1.2 The Appropriate Assessment Process

The AA process is an assessment of the potential for likely significant effects or negative effects of a plan or project, alone and/or in-combination with other plans or projects, on the conservation objectives of a European site(s). The Natura 2000 network is made up of European sites including Special Protection Areas (SPAs), established under the EU Birds Directive (2009/147/EC) (more generally referred to as the ‘Birds Directive’) and Special Areas of Conservation (SACs), established under the EU Habitats Directive (92/43/EEC) (more generally referred to as the ‘Habitats Directive’). The Natura 2000 network helps provide for the protection and long-term survival of Europe’s most valuable and threatened species and habitats.

The Screening Stage of the AA process identifies any likely significant effects upon European sites from the proposed development alone or in-combination with other projects or plans. A series of questions are asked during the Screening Stage of the AA process to determine:

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



Fig. 1. Outline of the Site

2 Regulatory context

2.1 *Relevant legalisation*

The Birds Directive (Council Directive 2009/147/EC) recognises that certain species of birds should be subject to special conservation measures concerning their habitats. The Directive requires that Member States take measures to classify the most suitable areas as Special Protection Areas (SPAs) for the conservation of bird species listed in Annex 1 of the Directive. SPAs are selected for bird species (listed in Annex I of the Birds Directive), that are regularly occurring populations of migratory bird species and the SPA areas are of international importance for these migratory birds.

The EU Habitats Directive (92/43/EEC) requires that Member States designate and ensure that particular protection is given to sites (Special Areas of Conservation) which are made up of or support particular habitats and species listed in annexes to this Directive.

Articles 6(3) and 6(4) of this Directive also call for the undertaking of an Appropriate Assessment for plans and projects not directly connected with or necessary to the management of, but which are likely to have a significant effect on any European designated sites (i.e. SACs and SPAs).

The Water Framework Directive (WFD) (2000/60/EC), which came into force in December 2000, establishes a framework for community action in the field of water policy. The WFD was transposed into Irish law by the European Communities (Water Policy) Regulations 2003 (S.I. 722 of 2003). The WFD rationalises and updates existing legislation and provides for water management on the basis of River Basin Districts (RBDs). RBDs are essentially administrative areas for coordinated water management and are comprised of multiple river basins (or catchments), with cross-border basins (i.e. those covering the territory of more than one Member State) assigned to an international RBD. The aim of the WFD is to ensure that waters achieve at least good status by 2015 and that status doesn't deteriorate in any waters.

Appropriate Assessment and the Habitats Directive

Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora – the 'Habitats Directive' - provides legal protection for habitats and species of European importance. Article 2 of the Directive requires the maintenance or restoration of habitats and species of European Community interest, at a favourable conservation status. Articles 3 - 9 provide the legislative means to protect habitats and species of Community interest through the establishment and conservation of an EU-wide network of sites known as Natura 2000. Natura 2000 sites are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79/409/EEC).

Articles 6(3) and 6(4) of the Habitats Directive sets out the decision-making tests for plans or projects affecting Natura 2000 sites. Article 6(3) establishes the requirement for Appropriate Assessment:

"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."



Article 6(4) deals with the steps that should be taken when it is determined, as a result of appropriate assessment, that a plan/project will adversely affect a European site. Issues dealing with alternative solutions imperative reasons of overriding public interest and compensatory measures need to be addressed in this case.

Article 6(4) states:

"If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member States shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest."

The provision for an AA is transposed into Irish law by Part XAB of the Planning and Development Act 2010 (as amended). Section 177U (4) of the said Acts provides for screening for Appropriate Assessment as follows:

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

Section 177U (5) provides as follows:

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

An AA should be based on best scientific knowledge and the competent authority should ensure that expertise such as ecological, geological, and hydrological are utilised, where relevant.

The Court of Justice of the European Union (CJEU) has made a number of rulings in relation to AA, regarding when it is required, its purpose, and the standards it should meet. Consideration has been given to the evolution in interpretation and application of directives and national legislation arising from jurisprudence of the European and Irish courts, in respect of Article 6 of the Habitats Directive.

2.2 Guidance

This report has been carried out using the following guidance (and relevant case law):

- Communication from the Commission on the Precautionary Principle. Office for Official Publications of the European Communities, Luxembourg (European Commission [EC, 2000).
- Nature and biodiversity cases: Ruling of the European Court of Justice. Office for Official Publications of the European Communities, Luxembourg (EC, 2006).
- Marine Natura Impact Statements in Irish Special Areas of Conservation: A working document, National Parks and Wildlife Service, Dublin (NPWS, 2012).
- Circular L8/08 – Water Services Investment and Rural Water Programmes – Protection of Natural Heritage and National Monuments. Department of Environment, Heritage and Local Government (DoEHLG, 2008).
- Managing Natura 2000 Sites – The provisions of Article 6 of the Habitats Directive 92/43/EEC. European Commission (EC, 2018).
- Interpretation Manual of European Union Habitats. Version EUR 28. European Commission (EC, 2013).
- Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities, Department of the Environment, Heritage and Local Government (DoEHLG, 2010).
- Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the commission. Office for Official Publications of the European Communities, Luxembourg (EC, 2007).
- 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, Office for Official Publications of the European Communities, Luxembourg (EC, 2001).

Definitions of conservation status, integrity and significance used in this assessment are defined in accordance with 'Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC' (EC, 2018):

- The conservation status of a natural habitat is defined as the coherent sum of the site's ecological structure, function and ecological processes, across its whole area, which enables it to sustain the habitats, complex of habitats and/or populations of species for which the site is designated.
- The conservation status of a species is defined as the sum of the influences acting on the species concerned that may affect the long-term distribution and abundance of its population.
- The integrity of a European site is defined as the coherent sum of the site's ecological structure, function, and ecological processes, across its whole area, which enables it to sustain the habitats, complex of habitats and/or populations of species for which the site is designated.
- Significant effect should be determined in relation to the specific features and environmental conditions of the protected site concerned by the plan or project, taking particular account of the site's conservation objectives and ecological characteristics.



2.3 Stages Involved in the Appropriate Assessment Process

There are potentially four stages in the AA process; the result of each stage determines the requirement for assessment under the next.

Stage 1: Screening / Test of Significance

This process identifies the likely significant effects upon a European site from a proposed project or plan. Its purpose is to determine, on the basis of a preliminary assessment and objective criteria, whether a plan or project which is not directly connected with or necessary to the management of the site as a European site, individually or in-combination with other plans or projects is likely to have a significant effect upon the European site, in view of its conservation objectives. A project may be 'screened-in' if there is a possibility or uncertainty of possible effects upon the European site, requiring a Stage Two AA. If there is no evidence to suggest significant effects due to the proposed plan or development the project is 'screened-out' from further assessment.

Stage 2: Appropriate Assessment

Consideration is given if potential impact(s) of a project or plan could cause likely significant effects to the integrity of surrounding European sites, either alone or in-combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where likely significant effects have been identified, an assessment of the potential mitigation to avoid/reduce such impacts is required. A NIS is often produced at this stage to inform the AA which is undertaken by the competent authority. This stage is required where uncertainty of effect arises, or a potential effect has been defined which requires further procedures/mitigation to remove uncertainty of a defined impact.

Stage 3: Assessment of Alternatives

This stage of the potential process arises where adverse effects on the integrity of a European site cannot be excluded and examines alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the European site. However, in circumstances where there will not be any adverse effects on any European site, the developer places no reliance upon this third stage of the process in the context of this application for planning permission for the proposed development.

Stage 4: Assessment Where Adverse Effects Remain

This is the derogation process of Article 6(4), which examines whether there are imperative reasons of overriding public interest [IROPI] for allowing a project to proceed where adverse effects on the integrity of a European site have been predicted. Compensatory measures must be proposed and assessed as part of this stage and the EU Commission must be informed of the compensatory measures. Again, the developer places no reliance upon this stage of the process in the context of the application for planning permission for the proposed development.



3 Screening Assessment

3.1 *Project and site description*

The proposed development is for the following elements: "(1) Construction of new kerb lines and footpath, (2) Provision of 2 no. recessed bus stops, (3) Provision of 1 no. uncontrolled pedestrian crossing point, Ducting and pole installation for public lighting along the scheme, (4) Some localised re-profiling of existing road cross falls/ cambers, (5) Earthworks excavations of portions of existing verges and embankments adjacent to the existing roadway (6) All associated civil works with the above i.e. ducting, drainage, concreting, macadam, surfacing works, signage and road marking works, potential minor services alterations, etc. (7) Adjustment to existing boundaries, and associated landscaping."

The site is situated on flat land on the southern boundary of the Regional Road R125 in Greenogue. The site is within the Nanny-Delvin (Catchment ID 08) Water Framework Directive catchment area and in the Broadmeadow_SC_010 Subcatchment. The site is situated within the Swords groundwater body (European Code: IE_EA_G_011), which has a groundwater status of "Good" and is considered "Not at Risk" in the Water Framework Directive risk categorisation. The nearest watercourse is the Broadmeadows 08 River (EPA code: 08B02) located c. 110m north of the site. The Broadmeadows River flows in a easterly direction before flowing into the Irish Sea c. 12km downstream. The groundwater flow from the site is in a northerly direction downgradient towards the Broadmeadows River.

3.2 *Existing Environment*

3.2.1 Desk Studies

Information on the site and the area of the proposed development was studied prior to the completion of this statement. The following data sources were accessed in order to complete a thorough examination of potential impacts:

- National Parks and Wildlife Service - aerial photographs and maps of designated sites, information on habitats and species within these sites and information on protected plant or animal species; conservation objectives, site synopses and standard data forms for relevant designated sites;
- Environmental Protection Agency (EPA)- Information pertaining to water quality, geology and licensed facilities within the area;
- Ordnance Survey of Ireland (GeoHive) - access to spatial mapping data and metadata, including historical layers.
- National Biodiversity Data Centre (NBDC) – Information pertaining to protected plant and animal species within the study area;
- Meath County Council – Information on planning and planning history in the area, landscape characterisation;
- Water Matters – Catchment based information;
- Environmental Services Consultancy – Plans and information pertaining to the development.
- HeritageMaps.ie – general background information relating to the study area
- GSI.ie- Information on water sources, geology, and mapping.



3.2.2 Existing Environment

The site is located in Greenogue, Co. Meath, at Grid Ref (ITM): 709036, 750320. The site is currently habitat of hedgerows (WL1) and Treelines (WL3) where the southern bus stop is planned, and Buildings and Artificial Surfaces (BL3) at the northern bus stop according to "A Guide to Habitats in Ireland by Fossitt (2000).

The site is on a bedrock of dark limestone and shale from the Lucan Formation. The groundwater vulnerability is classed as Moderate while it is also classed as a Locally important aquifer with bedrock which is moderately productive only in local zones. The soil is classed as Brown Earths and Grey Brown Podzolics derived from mainly calcareous parent materials, with a subsoil of till derived from limestones.

3.3 Overview of potential Impacts

The proposed development site is not located within or directly adjacent to any designated European site. The Appropriate Assessment is for the installation of two bus stops and all associated site works. There is very little potential for direct impact on any European sites as a result of the proposed development as there is sufficient distance between the site and nearby drainage ditches and streams which have a hydrogeological link to the Natura 2000 sites within 15km.

The site does not have many potential emissions or indirect impacts with the potential to cause likely significant effects. The significance of these impacts depends on the scale of the impact as well as the ecological condition and the sensitivities of the qualifying interests. Due to the nature of the development, there is not much scope for potential impacts on nearby Natura 2000 sites.

3.4 Determination of the Likely Zone of Influence

Guidance in AA of plans and projects in Ireland notes that a distance of 15km is recommended for the identification of relevant European sites in the case of plans. For some projects the distance could be much less than 15km, and in some cases less than 100m, but this must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, and the sensitivities of the ecological receptors, and the potential for in-combination effects.

Using the source-receptor-pathway model an examination of the potential effects of the proposed development was undertaken (alone and/or in-combination) to identify what European sites, and which of their qualifying interests or special conservation interest species were potentially at risk. This was required to determine the Zone of Influence (Zoi) for the proposed development.

It is vital that an assessment of potential source-pathway-receptor links is undertaken to assess potential impact links between the receptor (European sites) and source (proposed development) to establish the risk of any likely significant effects. Additional designated sites including proposed Natural Heritage Areas (pNHA's), Natural Heritage Areas (NHA's) and RAMSAR sites were also reviewed, as although they do not form part of the AA, they often provide important supporting functions to European sites.

With regards potential habitat degradation effects associated with the release of sediment and other pollutants to surface water, the Zoi of the proposed development is considered to include receiving waterbodies adjacent to or downstream of the site. The distance downstream is associated with the current biological condition of the accepting waterbody and its capacity to accept and assimilate sediment and other pollutants.



3.5 Natura 2000 sites identified

In compliance with the Departmental Guidance, this screening assessment includes any Natura 2000 sites within or adjacent to the plan area, any sites within 15 km of the area (see Appendix 1) and depending on the likely impacts of the plan and the sensitivities of the receptors, could be further than 15 km away. Due to the size of the site the Natura sites identified within a 15 km range of the site are listed in Table 1 & 2 with reference to full spatial illustration available in Appendix 1. Sites were evaluated for the potential of impacts arising, as an individual development or in combination with other plans or projects.

Table 1. List of Special Areas of Conservation within 15 km of the site

Special Area of Conservation (SAC)	Evaluation	Potential Impact
Malahide Estuary SAC (0000205) (Proximity: 10.06 km E)	The Broadmeadow River 110m north of the site flows to the Malahide Estuary SAC. Due to the scale of the site and distance to the SAC no impact is predicted	None
Rogerstown Estuary SAC (0000208) (Proximity: 10.82 km E)	No hydrological/geographical pathways or connections other than marine	None

Table 2. List of Special Protection Areas within 15 km of the site

Special Protection Area (SPA)	Evaluation	Potential Impact
Broadmeadow/Swords Estuary SPA (Proximity 10.45 km E)	The Broadmeadows River 110m north of the site flows to the Broadmeadows/Swords Estuary SPA. Due to the scale of the site and distance to the SAC no impact is predicted	None
Rogerstown Estuary SPA (Proximity 11.66 km E)	No hydrological/geographical pathways or connections other than marine	None

There are two SACs and two SPAs within the 15km range of the site. The nearby Broadmeadows River flows eastwards into the Malahide Estuary SAC and the Broadmeadows/Swords Estuary SPA c. 12 km downstream. There is considered to be very little potential for likely significant effects on these sites as a result of the proposed development due to the distance from the site.



3.5.1 Natura sites considered

Natura sites identified and considered in this screening assessment are presented in Table 3.

Table 3. List of Natura sites considered for appropriate assessment screening, including distance to the proposed site and respective site qualifying interests.

Site name/code	Dist. to site (km)	Description of Potential Impacts	Site qualifying interests
Malahide Estuary SAC (0000205)	10.06 km E	None, due to the distance to the SAC, the distance to any hydrogeological links, and the scale of the development	<p><u>Annex I Habitats</u></p> <p>Mudflats and sandflats not covered by seawater at low tide [1140] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]</p> <p><u>Annex II Species</u></p> <p>Pintail (<i>Anas acuta</i>) Teal (<i>Anas crecca</i>) Wigeon (<i>Anas Penelope</i>) Mallard (<i>Anas platyrhynchos</i>) Turnstone (<i>Arenaria interpres</i>) Pochard (<i>Aythya ferina</i>) Brent Goose (<i>Branta bernicla</i>) Goldeneye (<i>Bucephala clangula</i>) Sanderling (<i>Calidris alba</i>) Dunlin (<i>Calidris alpina</i>) Knot (<i>Calidris canutus</i>) Ringed Plover (<i>Charadrius hiaticula</i>) Snipe (<i>Gallinago gallinago</i>) Oystercatcher (<i>Haematopus ostralegus</i>) Bar-tailed Godwit (<i>Limosa lapponica</i>) Black-tailed Godwit (<i>Limosa limosa</i>) Goosander (<i>Mergus merganser</i>) Curlew (<i>Numenius arquata</i>) Golden Plover (<i>Pluvialis apricaria</i>) Grey Plover (<i>Pluvialis squatarola</i>) Great Crested Grebe (<i>Podiceps cristatus</i>) Shelduck (<i>Tadorna tadorna</i>) Greenshank (<i>Tringa nebularia</i>) Redshank (<i>Tringa totanus</i>) Lapwing (<i>Vanellus vanellus</i>)</p>



<p>Broadmeadow/Swords Estuary SPA (0004025)</p>	<p>10.45 km NE</p>	<p>None, due to the distance to the SPA, the distance to any hydrogeological links, and the scale of the development</p>	<p><u>Annex II Species</u></p> <p>Pintail (<i>Anas acuta</i>) Teal (<i>Anas crecca</i>) Mallard (<i>Anas platyrhynchos</i>) Turnstone (<i>Arenaria interpres</i>) Pochard (<i>Aythya ferina</i>) Brent Goose (<i>Branta bernicla</i>) Goldeneye (<i>Bucephala clangula</i>) Sanderling (<i>Calidris alba</i>) Dunlin (<i>Calidris alpina</i>) Knot (<i>Calidris canutus</i>) <i>Calidris ferruginea</i> Little Stint (<i>Calidris minuta</i>) Ringed Plover (<i>Charadrius hiaticula</i>) Oystercatcher (<i>Haematopus ostralegus</i>) Common Gull (<i>Larus canus</i>) Black-headed Gull (<i>Larus ridibundus</i>) Bar-tailed Godwit (<i>Limosa lapponica</i>) Black-tailed Godwit (<i>Limosa limosa</i>) Red-breasted Merganser (<i>Mergus serrator</i>) Curlew (<i>Numenius arquata</i>) Cormorant (<i>Phalacrocorax carbo</i>) Ruff (<i>Philomachus pugnax</i>) Golden Plover (<i>Pluvialis apricaria</i>) Grey Plover (<i>Pluvialis squatarola</i>) Great Crested Grebe (<i>Podiceps cristatus</i>) Shelduck (<i>Tadorna tadorna</i>) Greenshank (<i>Tringa nebularia</i>) Green Sandpiper (<i>Tringa ochropus</i>) Redshank (<i>Tringa totanus</i>) Lapwing (<i>Vanellus vanellus</i>)</p>
<p>Rogerstown Estuary SAC (0000208)</p>	<p>10.82 km E</p>	<p>None, due to size and scale of the site, and a lack of hydrogeological links</p>	<p><u>Annex I Habitats</u></p> <p>Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Salicornia and other annuals colonising mud and sand [1310] Spartina swarda (<i>Spartinion maritimae</i>) [1320] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]</p> <p><u>Annex II Species</u></p> <p>Pintail (<i>Anas acuta</i>) Shoveler (<i>Anas clypeata</i>) Teal (<i>Anas crecca</i>) Wigeon (<i>Anas penelope</i>) Mallard (<i>Anas platyrhynchos</i>)</p>



<p>Rogerstown Estuary SAC (0000208)</p>			<p><u>Annex II Species</u></p> <p>Greylag Goose (<i>Anser anser</i>) Turnstone (<i>Arenaria interpres</i>) Brent Goose (<i>Branta bernicla</i>) Sanderling (<i>Calidris alba</i>) Dunlin (<i>Calidris alpina</i>) Knot (<i>Calidris canutus</i>) Ringed Plover (<i>Charadrius hiaticula</i>) Snipe (<i>Gallinago gallinago</i>) Oystercatcher (<i>Haematopus ostralegus</i>) Black-tailed Godwit (<i>Limosa limosa</i>) Goosander (<i>Mergus merganser</i>) Curlew (<i>Numenius arquata</i>) Golden Plover (<i>Pluvialis apricaria</i>) Grey Plover (<i>Pluvialis squatarola</i>)</p> <p>Little Tern (<i>Sterna albifrons</i>) Shelduck (<i>Tadorna tadorna</i>) Greenshank (<i>Tringa nebularia</i>)</p> <p>Redshank (<i>Tringa totanus</i>) Lapwing (<i>Vanellus vanellus</i>)</p>
<p>Rogerstown Estuary SPA (0004015)</p>	<p>11.66 km E</p>	<p>None, due to size and scale of the site and a lack of hydrogeological links</p>	<p><u>Annex II Species</u></p> <p>Shoveler (<i>Anas clypeata</i>) Teal (<i>Anas crecca</i>) Wigeon (<i>Anas penelope</i>) Mallard (<i>Anas platyrhynchos</i>) Greylag Goose (<i>Anser anser</i>) Turnstone (<i>Arenaria interpres</i>) Brent Goose (<i>Branta bernicla</i>) Sanderling (<i>Calidris alba</i>) Dunlin (<i>Calidris alpina</i>) Knot (<i>Calidris canutus</i>) <i>Caladris ferruginea</i> Little Stint (<i>Calidris minuta</i>) Ringed Plover (<i>Charadrius hiaticula</i>) Snipe (<i>Gallinago gallinago</i>) Oystercatcher (<i>Haematopus ostralegus</i>) Black-tailed Godwit (<i>Limosa limosa</i>) Red-breasted Merganser (<i>Mergus serrator</i>) Curlew (<i>Numenius arquata</i>) Cormorant (<i>Phalacrocorax carbo</i>) Ruff (<i>Philomachus pugnax</i>) Golden Plover (<i>Pluvialis apricaria</i>) Grey Plover (<i>Pluvialis squatarola</i>) Shelduck (<i>Tadorna tadorna</i>) Greenshank (<i>Tringa nebularia</i>) Green Sandpiper (<i>Tringa ochropus</i>) Redshank (<i>Tringa totanus</i>) Lapwing (<i>Vanellus vanellus</i>)</p>



4 Identification of Likely Significant Effects

4.1 *Potential for Likely Significant Effects*

There are no direct hydrological/geographical pathways or connections for all Natura 2000 sites within the 15km radius of the Zol. As the scale and nature of the site is small, there is limited potential for significant effects. Due to the nature of the site, the distance and location of the identified European Sites from the site there are no likely significant impacts on any European site. There is significant distance between the site and nearby drainage ditches and streams so that siltation as a result of the proposed ground improvement is very unlikely.

4.2 *Potential for Indirect Impacts*

Due to the nature of the site, and the distance to the identified European sites there is no significant indirect impact on any European site identified.

4.3 *Potential for In-Combination Effects*

The characteristics of existing, proposed, or other approved plans or projects, which may result in in-combination effects with the proposed development and have likely significant effects on European site(s), were assessed. As there are no emissions that can have any impact on any European Site, there is no significant potential for in-combination effects.

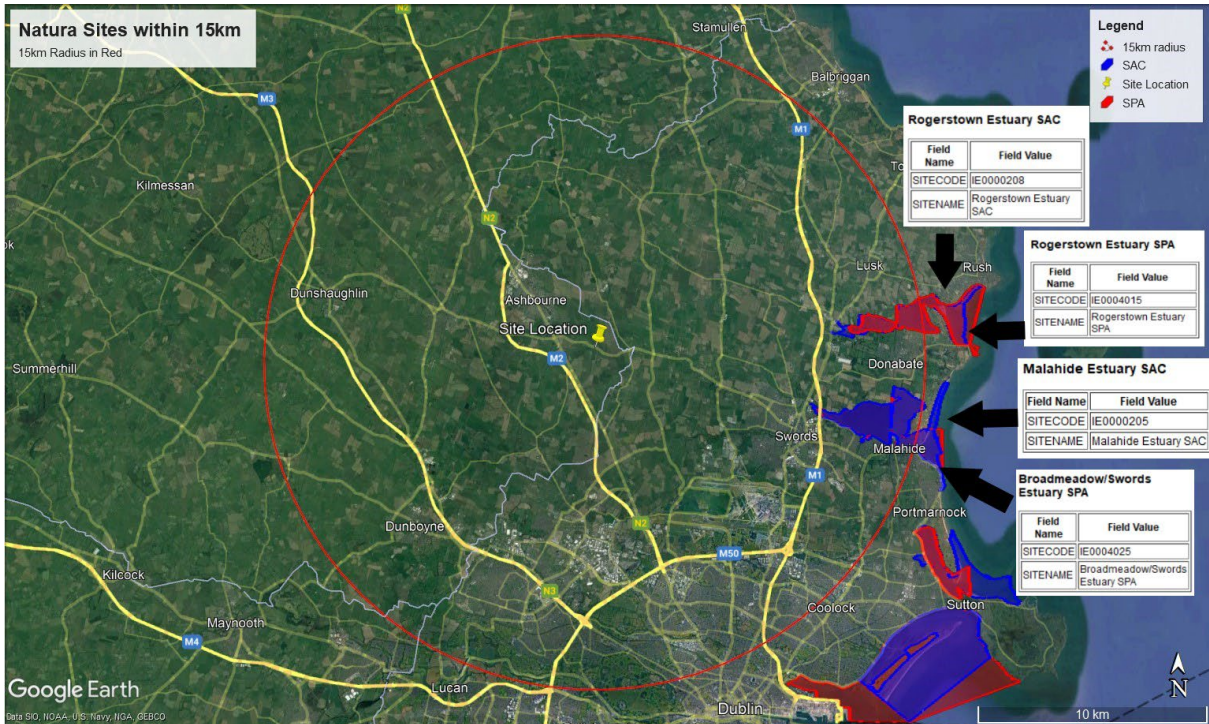
5 Screening conclusions

It is not likely that there would be any significant impacts either directly or indirectly on the identified Natura sites with respect to the activities carried out on site.

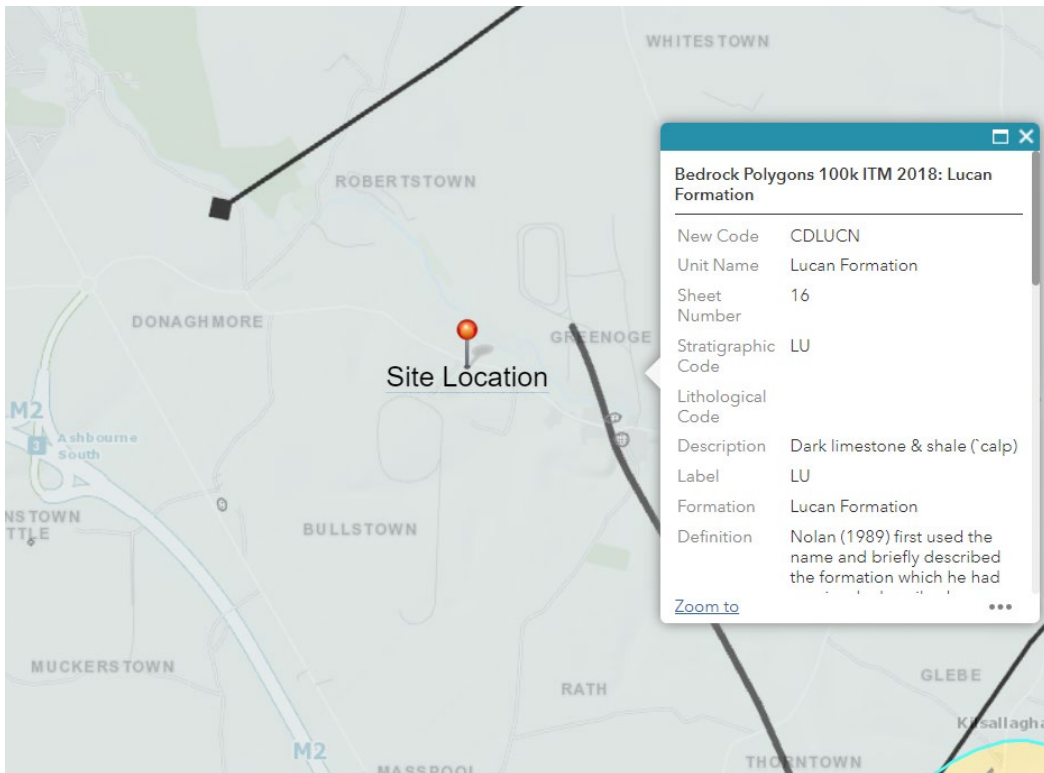
The location, scale and nature of the works is such that it will not directly or indirectly impact on any of the habitats or species of the Natura sites considered, nor will it contravene their conservation objectives, plans or targets. The development location consists of non-annexed habitat. The proposed development does not require water abstraction or direct discharge to surface water, land or air. No changes to surface water quality (microbiologically, chemically, physically or quantitatively) are anticipated given that there are no direct discharges or abstraction from surface water.



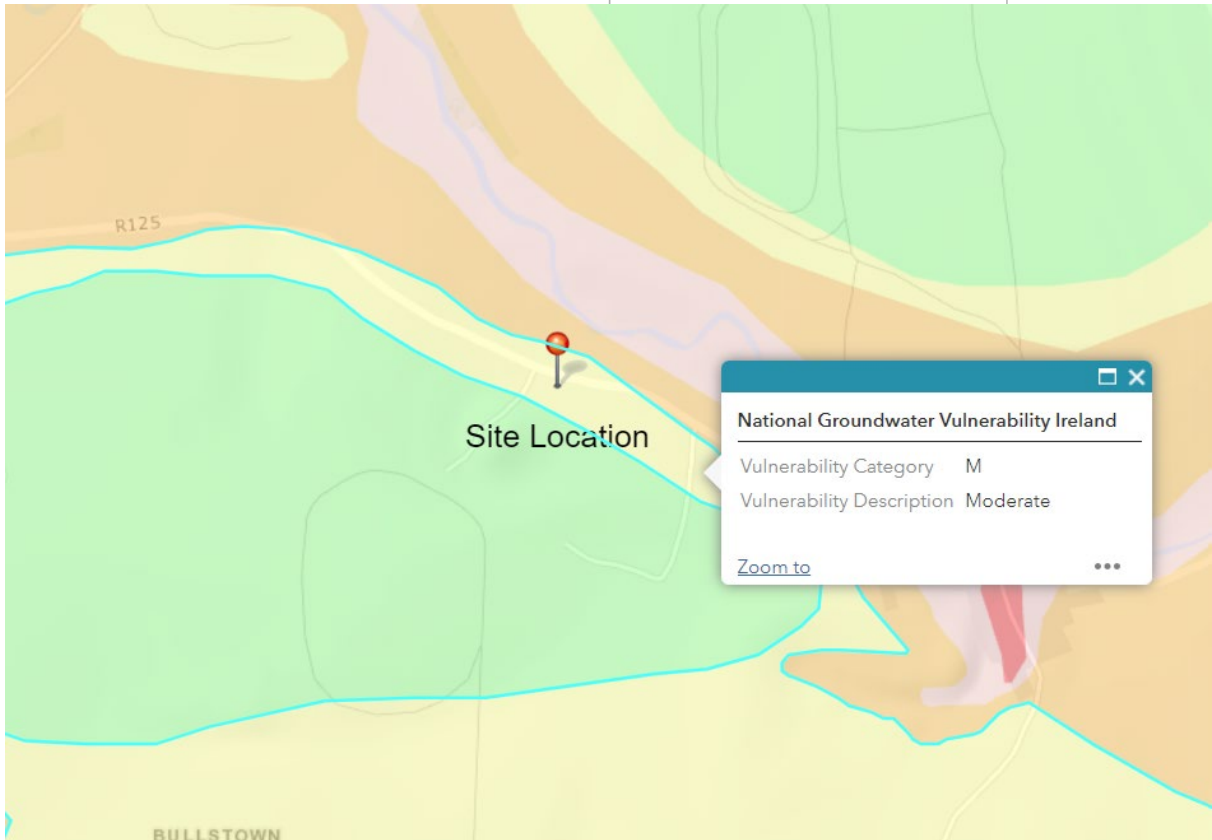
Appendix 1 – Supporting Maps



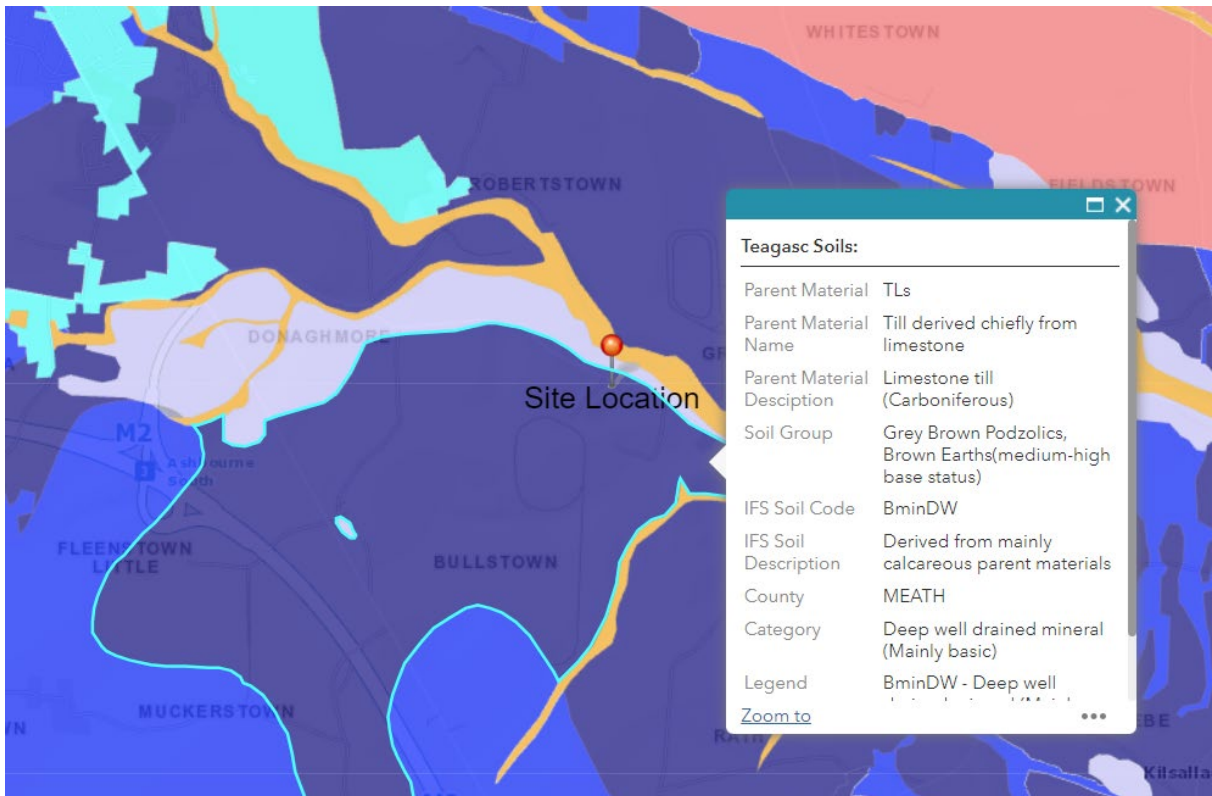
SACs and SPA relative to the site location
15km radius in red



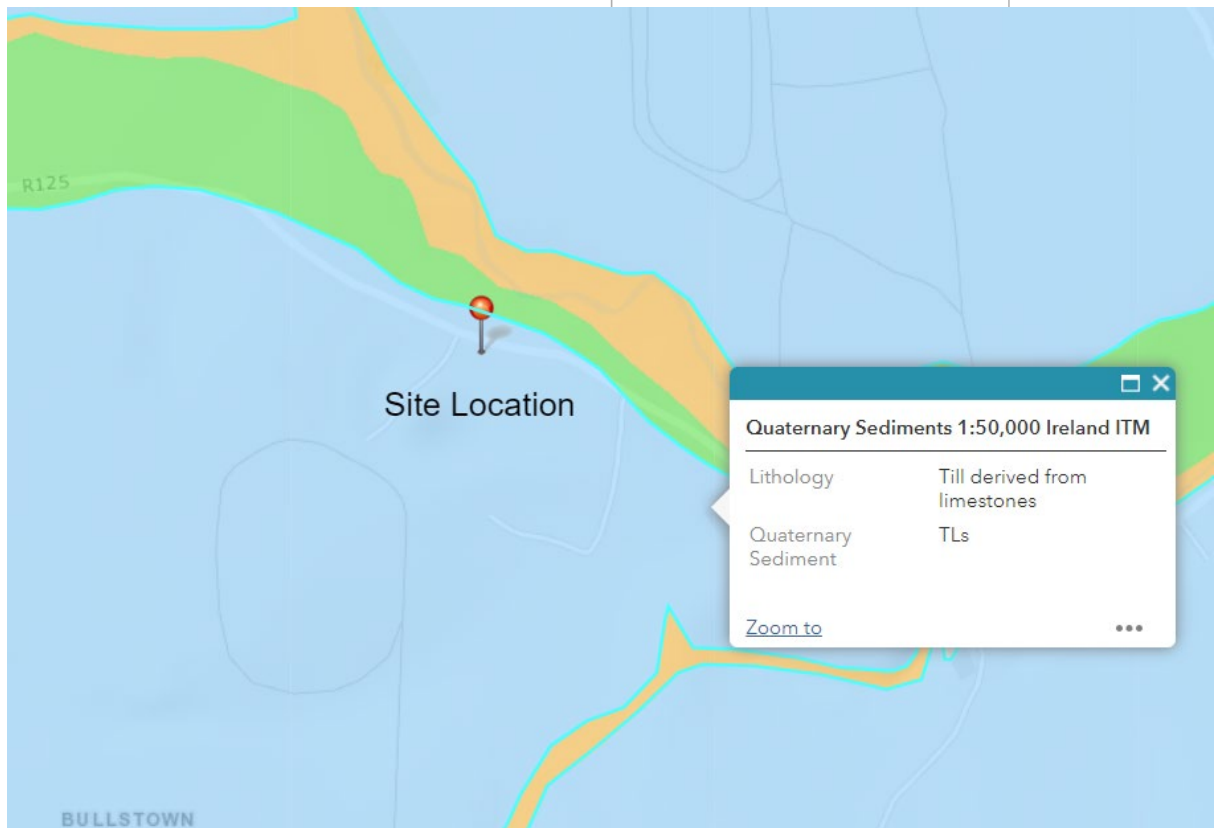
Bedrock map



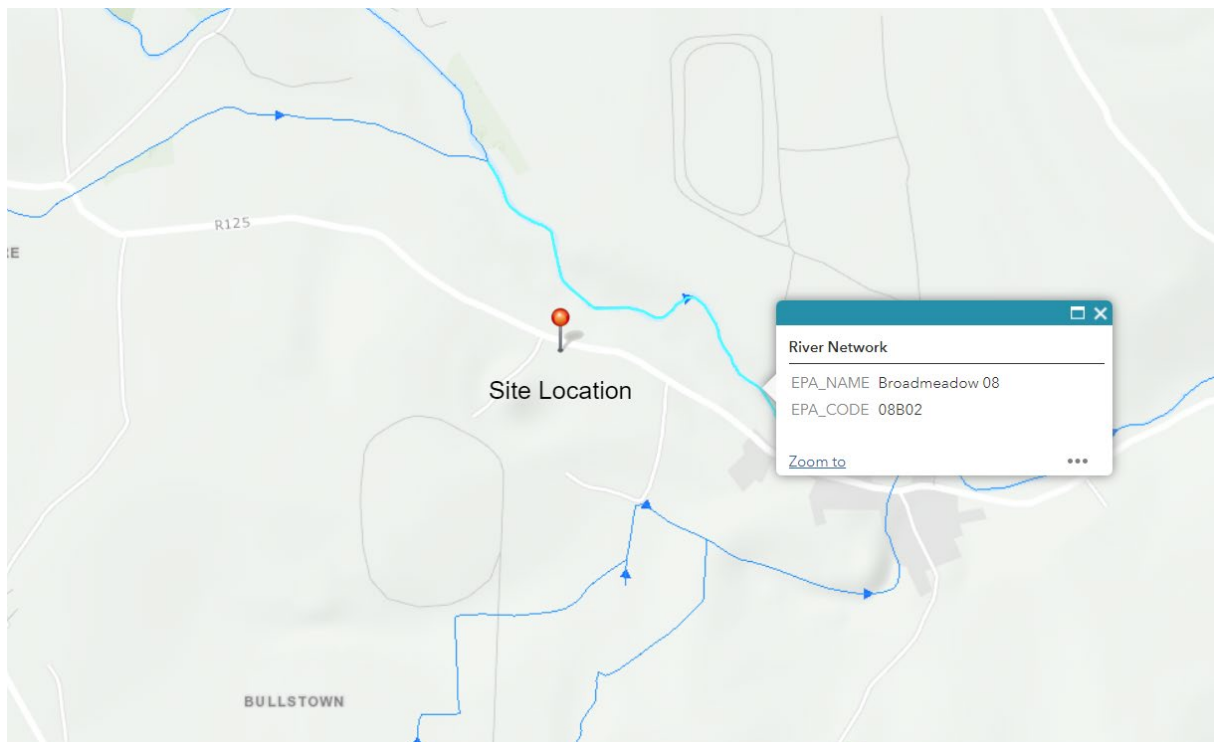
Groundwater Vulnerability



Soil map



Sub soil map



Surface water map