OCSC
O'CONNOR · SUTTON · CRONIN
MULTIDISCIPLINARY CONSULTING ENGINEERS

W370: BALTINGLASS FIRE STATION

EIA SCREENING ASSESSMENT

For
Wicklow County Council

16 June 2023

NOTICE

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DOCUMENT CONTROL & HISTORY

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1 INTRODUCTION

1.1 PROJECT CONTRACTUAL BASIS & PARTIES INVOLVED

This report has been prepared by O'Connor Sutton Cronin & Associates Ltd. (OCSC) at the request of their Client, Wicklow County Council and as part of a Part 8 Application. The proposal is for the construction of a new fire station, a fire training tower, a concrete water tank for fire training, and associated lighting, drainage, and entrance infrastructure in Baltinglass, County Wicklow. The regulatory authority for the site is Wicklow County Council.

The purpose of this report is to determine whether the project requires the preparation of an Environmental Impact Assessment Report (EIAR). This report documents the screening completed to provide a summarised overview of the potential impacts on the receiving environment whilst taking cognisance of the relevant statutory requirements. The Report is prepared in the context of an application under Part 8 of the Planning & Development Regulations 2001 (as amended).

A Stage 1 Screening for Appropriate Assessment has also been prepared. A Stage 1 Screening exercise assesses the likely significant effects of the development on Natura 2000 sites within the zone of influence of the proposed project. This project was not foreseen to give rise to any significant adverse effects on any designated European sites, alone or in combination with other plans or projects. Therefore, it has been screened out at Stage 1.

This report was completed by Sinéad Doran, BSc, AMIEnvSc, Environmental Consultant and Bruna Guasti, BEng, MIEI, Environmental Consultant; reviewed by Glenda Barry, BSc, MSc, PGeo, Eurgeol, and Principal Consultant; and approved by Eleanor Burke, BSc, MSc, DAS, MIEnvSc, CSci, Technical Principal, and the OCSC Environmental Division Manager.

1.2 STUDY AREA

The site is located on the southeast edge of the town of Baltinglass, County Wicklow and 1.2 km southeast of the Market Square. The site is bounded by Sli na Slaine housing estate to the north-west, the L7276 to the north-east, and a municipal wastewater treatment plant to the south-east. The area immediately surrounding the site is of residential, agricultural, and municipal infrastructural use. The study area is shown in Figure 1.1.

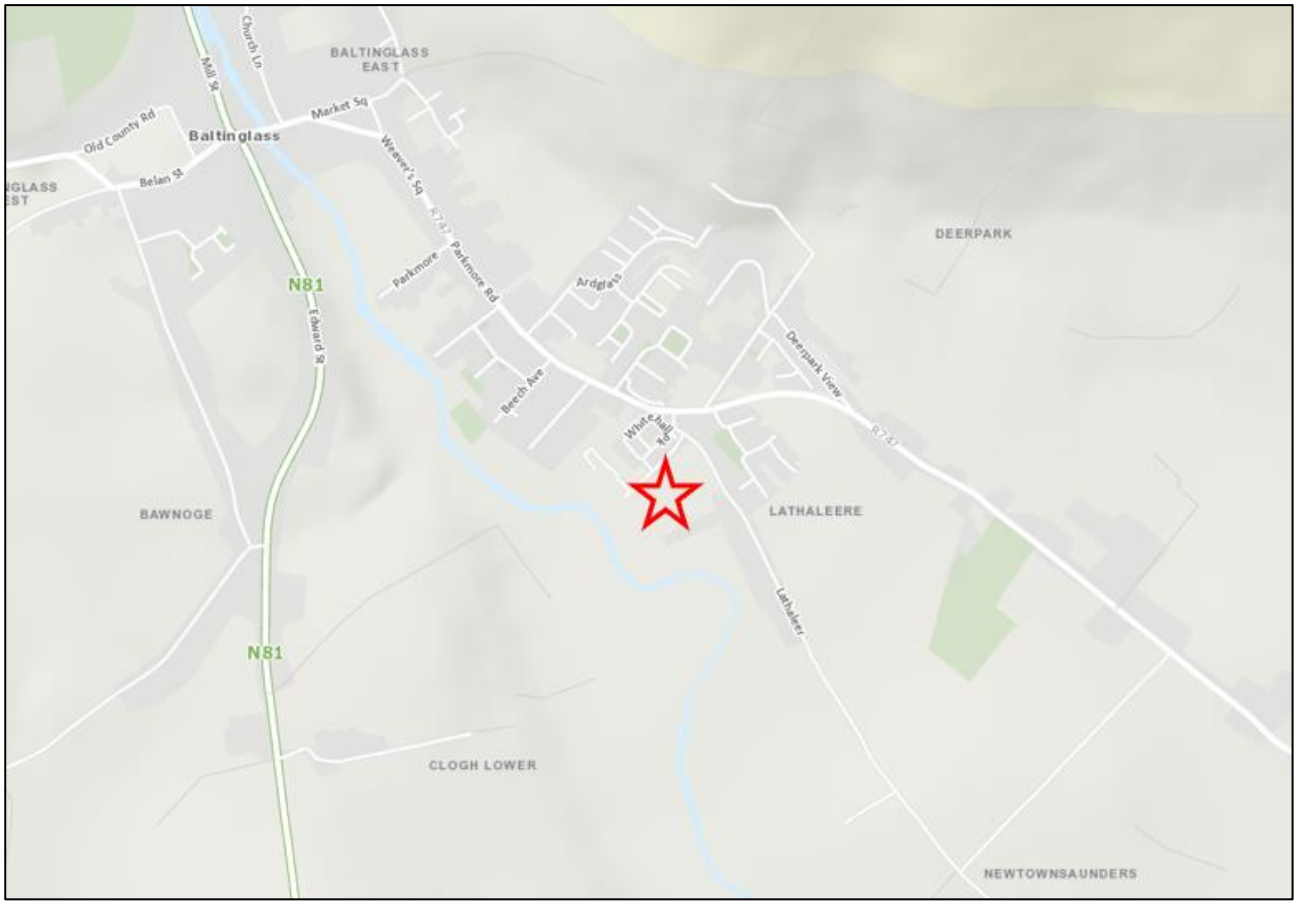

Figure 1.1: Study Area; site location indicated by the red star (Source: OSI, 2023)

1.3 SURROUNDING LAND USE

The area immediately surrounding the site is in residential, agricultural, and municipal infrastructural use as shown in Figure 1.2. The site consists of a greenfield site in agricultural use which is bordered to the east by a greenfield site, to the north by a housing estate, and to the south and west by agricultural land. Also bordering the site to the south is a municipal wastewater treatment plant. Further to the northeast and east are residential neighbourhoods, further to the west is the River Slaney, and further to the southeast is agricultural land with scattered residences and two abandoned structures. The town of Baltinglass is located to the northwest. Table 1.1 for adjacent land uses.

Table 1.1: Adjacent Land Uses

Boundary	Land Use
North	Sli na Slaine and private dwellings
South	A municipal wastewater treatment plant and agricultural land
East	Private dwellings, the L7276, and agricultural land
West	Private dwellings, the River Slaney

Figure 1.2: Surrounding Land Use; site location indicated by red star (Google Maps, 2023)

1.4 PROJECT DESCRIPTION

This Environmental Impact Assessment (Screening) Report has been prepared for the proposed construction of a new fire station in Baltinglass, County Wicklow. The fire station will be accessed through Sli na Slaine/Whitehall Park housing estate.

The development will consist of the following:

a. The construction of a new two-storey fire station building
b. On-site parking for 16 vehicles
c. A hard-landscaped training yard to the rear of the new building
d. The construction of a new four storey training tower at the northeast corner of the site to the rear of the main building
e. Hard and soft landscaping and all associated boundary treatments
f. The development will include all associated drainage and site development works.

Site layout and drainage can be seen in drawing W370-OCSC-BG-XX-DR-C-0500-S2-P01.

1.5 SCREENING REPORT

This screening report includes the following elements:

- a description of the physical characteristics of the whole project;
- a description of the location of the project, with particular regard to the environmental sensitivity of geographical areas likely to be affected;
- a description of the aspects of the environment likely to be significantly affected by the project; and
- a description of any likely significant effects, to the extent of the information available on such effects, of the project on the environment resulting from a) the expected residues and emissions and the production of waste, where relevant and b) the use of natural resources, in particular soil, land, water, and biodiversity.

1.6 METHODOLOGY AND APPROACH

The methodology and approach used in the preparation of this report will follow:

- Guidelines on the Information to be contained in Environmental Impact Assessment Reports, Irish Environmental Protection Agency, May 2022.
- European Commission (2015) Environmental Impact Assessment – EIA, Over, Legal Context
- European Union EIA Directive (85/337/EEC) and its amendments in 1997, 2003, and 2009
- Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment
- Planning and Development Act 2000 (as amended)
- Planning and Development Regulations 2001 (as amended)
- Directive 2014/52/EU
- Transposition of 2014 EIA Directive (2014/52/EU) in the Land Use Planning and EPA Licensing Systems – Key Issues Consultation Paper (2017; DoHPCLG)
- Preparation of guidance documents for the implementation of EIA directive (Directive 2011/92/EU as amended by 2014/52/EU) – Annex I to the Final Report (COWI, Milieu; April 2017)
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (August 2018)
- Environmental Impact Assessment – Guidance for Consent Authorities regarding Sub-threshold Development (2003; DoEHLG)

Using the above documents, it has been possible to carry out a desktop EIA Screening using the best available guidance and operating within the applicable legislation. The methodology employed in this screening exercise updates previous guidance in line with the new Directive 2014/52/EU.

1.7 SCOPE OF WORKS

To meet the project objectives, the following scope of works was completed:

- Present a discussion of the current site status and key environmental influences around the site;
- Undertake and present a historical site and area review, primarily referring to old Ordinance Survey Ireland maps but utilising other sources as appropriate and readily available;
- Present a discussion of the general soil and groundwater conditions within the topographical and area context; and
- Present an overview if any significant negative environmental impacts can arise from the proposed project.

1.8 LIMITATIONS

This Environmental Impact Assessment Screening Report has been prepared for Wicklow County Council ("the Client") as part of a Part 8 planning application. No other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by OCSC.

This assessment is based on a review of available historical information, environmental records, consultations, relevant guidance information, and reports from third parties. All information received has been taken in good faith as being true and representative.

This report has been prepared in line with best industry standards. The methodology adopted and the sources of information used by OCSC in providing its services are outlined in this Report. The assessment undertaken by OCSC and described was undertaken in May 2023 and is based on the information available during that period. The scope of this Report and the services are accordingly factually limited by these circumstances.

OCSC 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 OCSC's attention after the date of the Report.

The conclusions presented in this report represent OCSC's best professional judgement based on review of the relevant information available at the time of writing. The opinions and conclusions presented are valid only to the extent that the information provided was accurate and complete.

The findings of the EIA screening assessment prepared for the project has informed our professional opinion as to whether an EIAR is warranted for the proposed project, with due regard to all relevant statutory requirements and technical guidance. However, it is ultimately the responsibility of the relevant planning authority to determine as to whether an EIAR is required for a particular project, based on screening conducted by the planning authority.

2 EIA SCREENING PROCESS

2.1 INTRODUCTION

This section of the report discusses the legislative basis for screening used to decide if the proposed project requires the preparation of an EIAR. It also sets out the project in terms of planning context.

This project has been screened in accordance with Section 3.2 of the 'Guidelines on the Information to be contained in Environmental Impact Assessment Reports' (EPA, 2022), the Environmental Impact Directive (85/337/EEC) and all subsequent relevant amendments, and Planning and Development regulations (2001-2018), including S.I. No. 296 of 2018 - European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018, which came into operation on 1st September 2018.

2.2 EIA APPLICABLE LEGISLATION

The Environmental Impact Assessment (EIA) Directive 85/337/EEC has been in force across the European Union since 1985 and applies to a wide range of defined public and private projects which are defined in Annexes I (Mandatory EIA) and II (Screening-Discretion of Member States) of the directives. The EIA Directive of 1985 has been amended three times: 97/11/EC, 2003/35/EC, and 2009/31/EC. These amended directives have been coded and replaced by Directive 2011/92/EU of the European Parliament and Council on the assessment of the effects of certain public and private projects on the environment (and as amended by Directive 2014/52/EU). Directive 2014/52/EU has been transposed in 2018 in Irish law under the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (SI 296 of 2018).

2.3 MANDATORY EIAR REVIEW

Annex I of the European Communities (EIA) Directive lists the activities for which an EIA is required. The proposed project is not listed in Annex I; therefore, it is not mandatory for an EIA to be carried out.

Where a project is listed on Annex II or is a development that is not exempted, the national authorities of the member state must decide whether an EIA is needed for a proposed project. This is done by the "screening procedure", which determines the effects of project on the basis of thresholds/criteria or a case-by-case examination.

The project would be considered sub-threshold under Schedule 5 Part 2 (10b):

> *(iv) Urban developments which would involve an area greater than 2 hectares in the case of a business district, 10 hectares in the case of other parts of a built-up area and 20 hectares elsewhere. (In this*

paragraph, "business district" means a district within a city or town in which the predominant land use is retail or commercial use).

The proposed new construction of Baltinglass Fire Station will use 0.35ha of land to accommodate the development.

Annex III of the Directive outlines the specific criteria that must be considered when a sub-threshold project is being examined for Environmental Impact Assessment. The screening procedure investigates whether the project has a significant potential negative impact on the environment using different criteria including:

- Characterisation of the proposed development
- Location of the proposed development
- Type and Characteristics of the potential impact

Information to be provided for the purposes of screening sub-threshold development for Environmental Impact Assessment include:

1. A description of the proposed development, including in particular—
   a) A description of the physical characteristics of the whole proposed development and, where relevant, of demolition works and
   b) A description of the location of the proposed development, with regard to the environmental sensitivity of geographical areas likely to be affected.
2. A description of the aspects of the environment likely to be significantly affected by the proposed development.
3. A description of any likely significant effects, to the extent of the information available on such effects, of the proposed development on the environment, resulting from—
   a) The expected residues and emissions and the production of waste, where relevant, and
   b) The use of natural resources, in particular soil, land, water, and biodiversity.
4. The compilation of the information in paragraphs 1 to 3 shall consider, where relevant, the criteria set out in Schedule 7 of the Directive". (Schedule 7 states 'Criteria for determining whether a development listed in Part 2 of Schedule 5 should be subject to an environmental impact assessment)".

3 PLANNING CONTEXT

3.1 NATIONAL POLICY

3.1.1 NATIONAL PLANNING FRAMEWORK

The National Planning Framework (NPF) is the Government's high-level strategic plan for shaping the future growth and development of Ireland until 2040. This was released in tandem with the National Development Plan (NDP), which sets out the budget for national infrastructure investment for the next 10 years.

The NPF is considered a new approach that aims to improve the different areas of our lives while bringing the various government departments, agencies, State-owned enterprises, and local authorities together behind a shared set of strategic objectives for rural, regional, and urban development.

The proposed fire station will serve the existing community of Baltinglass, neighbouring towns and villages, and the adjacent counties of Kildare and Carlow. In the NPF's list of Strategic Investment Priorities, number 10 is Education, Health and Childcare. With regard to this Strategic Investment Priority, the NPF states:

> *"Good access to a range of quality education and health services, relative to the scale of a region, city, town, neighbourhood or community is a defining characteristic of attractive, successful and competitive places. Compact, smart growth in urban areas and strong and stable rural communities will enable the enhanced and effective provision of a range of accessible services."*

Furthermore, the NPF refers to key planning and development and place-making policy priorities for the Eastern and Midland Region and has specific goals toward:

> *"Preparing and implementing a regional priorities programme, to shape and inform delivery of the Regeneration and Development Initiative. Part of this programme should identify significant ready to-go city, rural town and village and rural rejuvenation priorities which could harness publicly owned land and other assets that are not being used actively at present such as former healthcare, military, transport and other complexes and combining the potential of such assets with community and wider private and public sector support and investment to bring about the transformation of both urban and rural areas and places in an integrated manner".*

The following National Policy Objectives (NPOs) set the context for regional/ local planning policy and are supportive of the Baltinglass Fire Station:

- **NPO 04** Ensure the creation of attractive, liveable, well designed, high quality urban places that are home to diverse and integrated communities that enjoy a high quality of life and well-being.

- **NPO 06** Regenerate and rejuvenate cities, towns and villages of all types and scale as environmental assets, that can accommodate changing roles and functions, increased residential population and employment activity and enhanced levels of amenity and design quality, in order to sustainably influence and support their surrounding area.
- **NPO 07** Apply a tailored approach to urban development, that will be linked to the Rural and Urban Regeneration and Development Fund, with a particular focus on:-
  a) Reversing the stagnation or decline of many smaller urban centres, by identifying and establishing new roles and functions and enhancement of local infrastructure and amenities;
  b) In more self-contained settlements of all sizes, supporting a continuation of balanced population and employment growth.
- **NPO 18a** To support the proportionate growth of and appropriately designed development in rural towns that will contribute to their regeneration and renewal, including interventions in the public realm, the provision of amenities, the acquisition of sites and the provision of services.
- **NPO 28** Plan for a more diverse and socially inclusive society that targets equality of opportunity and a better quality of life for all citizens, through improved integration and greater accessibility in the delivery of sustainable communities and the provision of associated services.

The proposal is in compliance with the above NPOs and will significantly upgrade the existing fire services in the area and provide a high-quality amenity.

3.2 LOCAL POLICY

3.2.1 WICKLOW COUNTY DEVELOPMENT PLAN 2021-2027

The Wicklow County Development Plan sets out a strategic spatial framework for the proper planning and sustainable development of County Wicklow for the period between 2022 and 2028. "It is the vision and aim of the plan to guide and facilitate the sustainable growth of the County in a manner which supports a deep respect for its unique natural heritage, capitalises on the potential of the towns and villages to deliver compact growth, facilitates healthy placemaking, supports the creation of self-sustaining settlements and rural areas that are attractive places to live in, work in and visit, provides for new job opportunities, embraces climate action and enables the transition to a low carbon, climate resilient and environmentally sustainable economy, improves sustainable mobility and conserves our heritage" (Wicklow County Council, 2022).

The development plan sets out ten Strategic County Outcomes informed by the National Planning Framework, the Regional Spatial and Economic Strategy, and the key issues arising in submissions from members of the public. The Strategic County Outcome most relevant to this development is:

- **SCO4 Sustainable Healthy Communities** - Places should facilitate a high quality of life for all regardless of age or ability. Access to quality housing, employment, childcare, education, health services, community facilities and a clean unpolluted, environment including clean air and water, are

defining elements of healthy, attractive and successful places. Investment in a well-designed public realm which includes public spaces, parks, playgrounds, streets and recreational infrastructure to cater for all ages is essential".

Baltinglass is a strong rural market town with a large rural hinterland and has been identified as one of five Self-Sustaining Towns in Wicklow. The addition of the new fire station to the area would upgrade the existing services and provide targeted 'catch up' investment to make the town more self-sustaining.

3.2.2 BALTINGLASS TOWN PLAN 2022-2028

This plan is from Volume 2 of the Wicklow County Development Plan which identifies Baltinglass as a 'Self Sustaining Town' which is defined as a 'town with high levels of population growth and a weak employment base which are reliant on other areas for employment and/or services and which require targeted 'catch up' investment to become more self-sustaining'. The purpose of this plan is to put in place a structure that will guide the future sustainable development of the town. This plan, in conjunction with the County Development Plan, informs and manages the future development of the town.

There is an existing fire station in Baltinglass. However, the land where the current station is located has been zoned as an 'Opportunity Site'. The current fire station site is located in a prime town centre location which is currently under-utilised in terms of development potential. The site is suitable for a landmark building of exceptional architectural quality for a mixed-use commercial, office, residential, or community development (WCC, 2022).

The proposed development site is shown in the Baltinglass Town Plan as within the land zoning category 'E-Employment'. The objective is 'to provide for the development of enterprise and employment'. This zoning aims to facilitate the further development and improvement of existing employment areas and to facilitate opportunities for the development of new high-quality employment and enterprise developments in a good-quality physical environment (WCC, 2022). The proposed fire station is a suitable development within this zone.

4 CHARACTERISTICS OF PROPOSED DEVELOPMENT

Schedule 7 of SI 296 of 2018 requires that the characteristics of a proposed development are identified. In particular, it references the following sections:

4.1 SIZE AND DESIGN

The proposed new construction of Baltinglass Fire Station will use 0.35ha of land to accommodate the development. The development will consist of a new fire station, a fire training tower, a concrete water tank for fire training, and associated lighting, drainage, and entrance infrastructure.

4.2 CUMULATION WITH OTHER EXISTING DEVELOPMENTS/DEVELOPMENT THE SUBJECT OF A CONSENT

Grants of planning in the vicinity of the site were reviewed to identify works of a significant scale which may produce in-combination effects with the proposed works. The following planning grants of larger than a single domestic scale were identified:

- **211117 (Conor Furey & Associates Ltd):** permission for a development consisting of 92 no. dwelling units and a two-storey creche together with a new entrance servicing the proposed development and future lands off the N81, new ancillary internal access roads, infrastructure, landscaping and boundary treatments, new connection to the existing sewer to the east of the site including pipe jacking of new sewer line under the Slaney River and all associated site works.
- **171455: (David Molloy):** permission for demolition of existing dormer dwelling and the construction of 4 no. single storey dwellings comprising of 2 no. 3 bedroom dwellings and 2 no. 4 bedroom dwellings, new site entrance and all associated site works
- **18807 (Wicklow County Council):** permission for 34 no houses and all associated works. The accommodation shall consist of the following 23 no 2 bed houses (two-storey) and 11 no 3 bed houses (2-storey)

Other granted planning permissions in the vicinity of the site pertain primarily to small-scale constructions, change of use, or retention of works. Although three larger planning grants were identified in the vicinity of the site, due to the small scale of the proposed development, in-combination effects with these are considered to be unlikely and not significant.

4.3 THE NATURE OF ANY ASSOCIATED DEMOLITION WORKS

There are no buildings or structures on the site which will require demolition.

4.4 THE USE OF NATURAL RESOURCES, IN PARTICULAR LAND, SOIL, WATER AND BIODIVERSITY

There will be no long-term use of any natural resources in association with the project, except during the operational phase of the proposed works when water will be required to supply the water tank for fire training and for general use within the station. However, this water will be sourced from the existing municipal water mains and will not impact the resources necessary for the maintenance of the conservation objectives of any European site.

4.5 PRODUCTION OF WASTE

Any waste generated during the construction will be reused on-site where possible, e.g., topsoil generated will be reused to provide landscaping and excavated material will be reused for backfill where this material meets acceptable construction criteria. However, if offsite disposal is required for any material, it will be managed in accordance with all relevant waste management legislation. There will be no generation of the waste following the completion of the works other than that of waste generated during the typical day-to-day running of the fire station.

4.6 POLLUTION AND NUISANCES

There will be a temporary increase in noise during the proposed works. However, noise levels will not exceed levels typical of construction works and will be short-term in duration. There will be a slight increase in traffic disturbance during the construction activities, i.e., bringing supplies to the site and removal of material if required. This disturbance will be short-term. Some dust will likely be generated during the works; however, this nuisance will be managed in line with best practice. There will be no pollution or nuisance after following the completion of the works other than noise related to the use of the site as a fire station.

Potential surface water pollution via runoff, including pollution by silt or hydrocarbons, will be managed in accordance with best practices. The risk of surface water pollution during the construction stage is considered unlikely and not significant due to the small scale of the project and subject to the implementation of mitigation measures.

The appointed contractor will be required to prepare a site-specific Construction Environmental Management Plan (CEMP) which will clearly detail all necessary pre-construction surveys regarding protected species such as Potential Roost Features for bats along the treelines and mitigation measures designed to reduce the risk to local biodiversity and conservation objectives of the local species to a non-significant level. These measures include:

- Careful project management in respect of water protection;
- Proper management of fuels and building materials;

- Pre-construction survey of otters (Lutra lutra);
- Pre-construction survey for Potential Roost Features for bats along the treelines and in structures adjacent to the site; and pre-construction survey of bats.

In general, otters do not forage more than 80m from riverbanks, lakes, or coastal shores. The nearest surface waterbody is the River Slaney (IE_SE_12S020800), which is located 114m west of the proposed development at the nearest point. Based on the distance between the proposed site and the 80m foraging ground otters utilise, it is unlikely that the site is used by otters.

Given the nature of the development, its scale, the duration of the proposed works, and the distance to the Slaney River Valley SAC, direct 0.11km west, despite the fact that the site is topographically and hydrologically upgradient of the River Slaney and its associated SAC and surface water drainage from the site will discharge to the municipal surface water system which discharges to the River Slaney, impact to this waterbody, European site and other designated sites within the ZOI are deemed to be short-term and unlikely.

Subject to the implementation of design and construction mitigation measures, no significant negative impacts on the local biodiversity and conservation objectives of the local species are anticipated as a result of this development.

4.7 THE RISK OF MAJOR ACCIDENTS OR DISASTERS INCLUDING THOSE CAUSED BY CLIMATE CHANGE

There is minimal risk of major accidents or disasters including those caused by climate change given the small-scale and short duration of the proposed construction works. Any risks that are present are associated with typical construction activities including working with machinery. However, the appointed contractor will be required to prepare a site-specific CEMP clearly detailing all necessary environmental control measures.

4.8 RISKS TO HUMAN HEALTH – E.G., WATER CONTAMINATION/AIR POLLUTION

Risks to surface water during the construction phase will be minimised via engineering design in line with best practices. In addition, contractors will be required to implement construction methods in line with best practices regarding fuel and chemical storage, excavation, waste storage, and use on the site of any items that may pose a risk to surface water or groundwater.

Based on the GSI database (refer to Section 5.15), two wells are potentially located within the site boundary (2617NEW006 & 2617NEW017). There one other well (2617NEW023) potentially in very close proximity to the proposed development. There are a further twenty-five wells/springs within a 1km radius of the site (See Figure 5.14).

The GSI database provides information on groundwater source protection zones (SPZs) (e.g., areas of contribution to water supply bores). SPZ delineation provides an assessment of the land area that contributes groundwater to a borehole or spring. The purpose of SPZs is to provide additional protection to safeguard drinking water quality through constraining the proximity of an activity that may impact upon a drinking water abstraction. The site is located 40m west of the Baltinglass Public Water Supply (PWS) Inner Protection Area (See Figure 5.15). As such, fuel and chemical storage and use on the site could pose a risk to water of groundwater contamination within this SPZ. However, the risks to both groundwater and surface water will be minimised via construction in line with best practice. Contractors will prepare and implement a site-specific CEMP which will address the mitigation of risks to the SPZ.

Given the short-term nature of the works and the undertaking of works in accordance with best practice, it is not anticipated that the works will pose a significant risk to groundwater quality during either the construction or operations phase of the works. In addition, air pollution will be limited to typical construction nuisance such as dust. Best practice guidelines will be applied to noise and dust nuisance mitigation. Overall, the risk to human health is low, subject to the implementation of mitigation measures in the CEMP.

5 LOCATION OF THE PROPOSED DEVELOPMENT

5.1 INFORMATION SOURCES

An understanding of the site setting and history was gained by undertaking a review of the following primary sources including:

- A review of available extracts of historical Ordnance Survey of Ireland (OSI) maps;
- National Monuments Service (NMS) viewer;
- A review of information held by the Environmental Protection Agency (EPA) EnVision online Mapping;
- Aerial images available of the site (OSI and Google);
- The Geological Survey of Ireland (GSI) and GeoHive online mapping tools;
- The National Parks and Wildlife Service (NPWS) online map tool;
- Heritage Maps online; and
- Environmental Sensitivity Mapping online.

5.2 ABUNDANCE, AVAILABILITY, QUALITY, AND REGENERATIVE CAPACITY OF NATURAL RESOURCES

Limited natural resources will be required to complete the work, except during the operational phase of the proposed works when water will be required to supply the water tank for fire training and for general use within the station. However, this water will be sourced from the existing municipal water mains and will not impact the resources necessary for the maintenance of the conservation objectives of any European site. It is proposed that any material generated during the works will be reused on site or removed from site for recycling or reuse where possible. The relevant natural resources have been looked at in more detail in the following sections.

5.3 THE ABSORPTION CAPACITY OF THE NATURAL ENVIRONMENT

The absorption capacity of the natural environment with regard to the proposed project has been screened in accordance with Regulations paying particular attention to:

i. wetlands, riparian areas, river mouths;
ii. coastal zones and the marine environment;
iii. mountain and forest areas;
iv. nature reserves and parks;
v. areas classified or protected under legislation, including Natura 2000 areas designated pursuant to the Habitats Directive and the Birds Directive;

vi. areas in which there has already been a failure to meet the environmental quality standards laid down in legislation of the European Union and relevant to the project, or in which it is considered that there is such a failure;
vii. densely populated areas; and
viii. landscapes and sites of historical, cultural, or archaeological significance.

5.4 SURROUNDING LAND USE

The terrestrial environment is characterized not only by its physical land cover but also from a human/social perspective by its land use which is distinguished by its designated or identifiable purpose (EPA, 2008).

The immediately surrounding area is comprised of residential, agricultural, and municipal infrastructural use. Refer to Section 1.3 for a full list of adjacent land uses.

5.5 SITE DEVELOPMENT

A review of the OSI historical maps dataset has found that the study area has not been developed since at least 1913. The following section outlines the historically mapped features on and in the immediate environs of the study area.

The 6-Inch map (1837-1842) shows the site as undeveloped land with a treeline on its northeast boundary. To the northwest of the site was undeveloped land with a pond, treelines, and parkland. The site was bordered to the west and south by undeveloped land. The Slaney River was located to the west and southwest. Also to the west of the site were several structures associated with Whitehall House and a bleach mill with a mill race which drew water from the Slaney River. The surrounding area to the north, east, and south was comprised primarily of undeveloped land with scattered residences as shown in Figure 5.1.

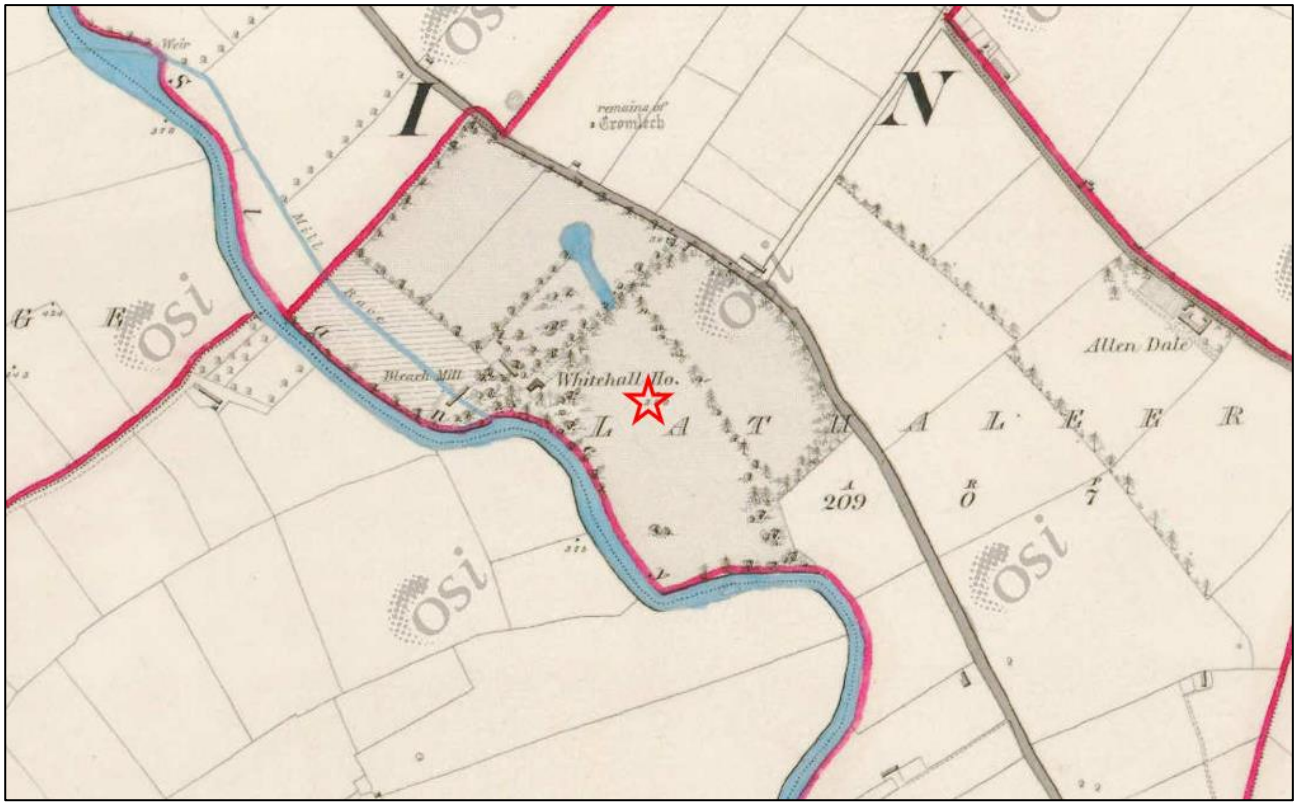

Figure 5.1: 1837-1842 6-inch OS Map; site location shown by red star (Source: GeoHive, 2023)

The 25-Inch map (1888-1913) indicates no changes to site usage other than the removal of the trees to the northeast. Whitehall House to the west is noted to be ruins. The Bleach Mill to the west was no longer present, and its race was partially infilled and no longer connected to the Slaney River. Further west, on the opposite side of the Slaney River, the Great Southern and Western Railway had been constructed along with a station further northwest in Baltinglass Centre. No other significant changes were noted in the surrounding area. See Figure 5.2.

Figure 5.2: 1888-1913 25 inch OSI Map; site location shown by red star (Source: GeoHive, 2023)

The 6-Inch Cassini map (1830s to 1930s) shows no change to the site or the surrounding area since the previous mapping as shown in Figure 5.3.

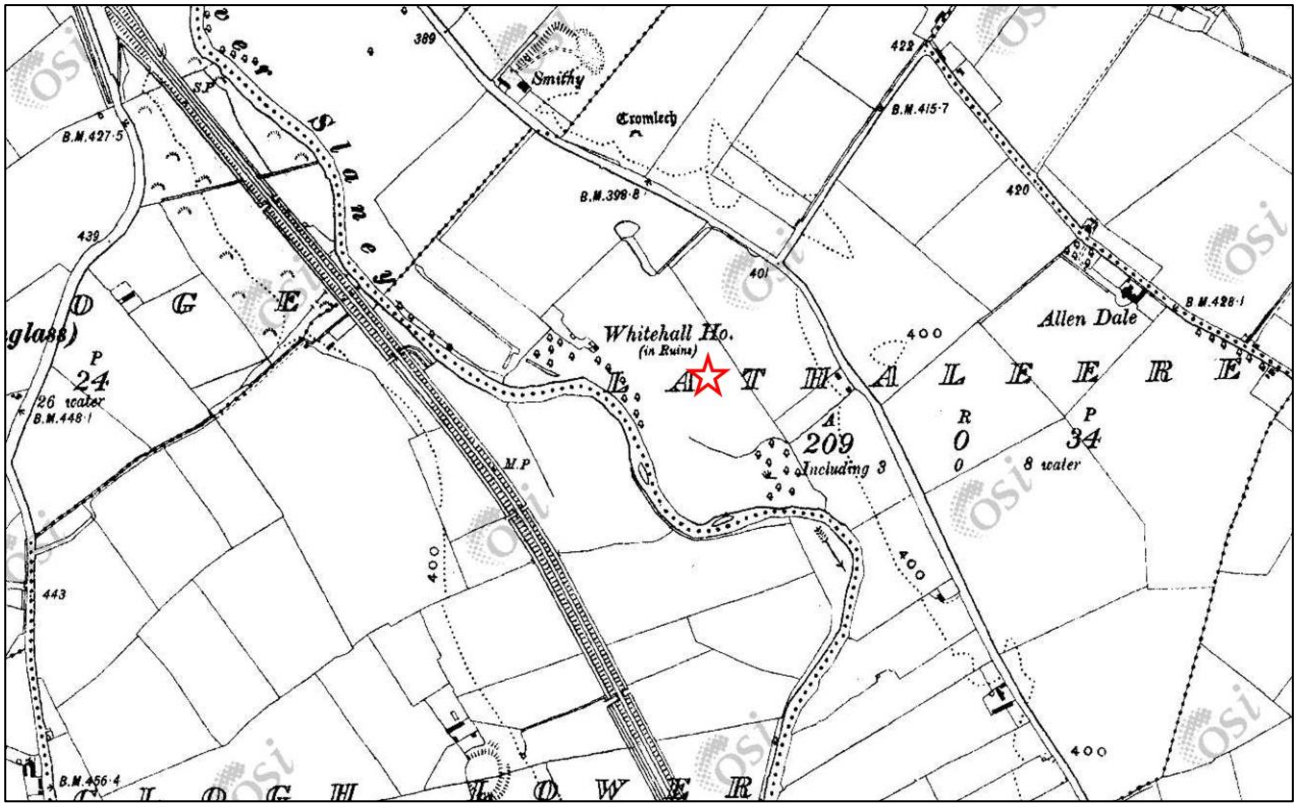

Figure 5.3: 6 Inch Cassini Map; site location shown by the red star (Source: GeoHive, 2023)

The 1995 aerial photograph (Figure 5.4) shows no significant change to the site since the Cassini mapping. To the north of the site, the pond had been infilled as had the remainder of the mill race to the west. The Great Southern and Western Railway had been removed to the west of the site and a new road constructed to the north. Significant residential development had occurred to the north and northwest with more scattered residential development to the east and southeast. Immediately south from the site a wastewater treatment plant had been constructed. See Figure 5.4.

Figure 5.4: Aerial photograph for 1995; site location shown by the red star (Source: GeoHive, 2023)

The 1999-2003 and 2004-2006 aerial photos show no significant changes to the site or the surrounding area other than the construction of housing estates to the north, northeast, and northwest. The 2011-2013 aerial photo (Figure 5.5) shows no significant changes to the site or adjacent lands since the previous aerial photo other than residential construction immediately to the north of the site and a park and playing field to the northwest.

Figure 5.5: 2011-2013 Aerial Photograph; site location shown by red star (Source: GeoHive, 2023)

The 2013-2018 aerial photo and subsequent Google Earth aerial photos show no significant changes to the site or adjacent lands since the 2011-2013 aerial photo other than residential construction on the adjoining property to the northwest as shown in Figure 5.6.

Figure 5.6: 2020 Aerial Photograph; site location shown by red star (Source: Google Earth, 2023)

5.6 SITE PHYSICAL SETTING

Information regarding the site topography, hydrology, geology, hydrogeology, and ecology of the area has been obtained from records held by the GSI, EPA Envision online mapping tool, OSI, GeoHive, Water Framework Directive Maps, and NPWS databases.

5.7 BIODIVERSITY

There are no surface water features within the site boundary. However, the Slaney River is located approximately 114m west of the site at its nearest point. The Slaney River flows in a southerly to south-easterly direction eventually discharging to the Irish Sea at Wexford Harbour.

An Appropriate Assessment (AA) Screening Report was prepared by OCSC which concluded that the potential for adverse impacts to the nearest designated European site, the Slaney River Valley SAC, is considered to be not significant given the nature of the development, its scale, and the localised and temporary nature of the construction effects identified as potential sources.

There is one SPA within 15km of the proposed scheme as shown on Figure 5.7, the Wicklow Mountains SPA (c. 12.5 km east). Therefore, there is no direct or hydrological link between the site and Wicklow Mountains SPA.

There are four SACs within the 15km of the proposed scheme as shown on Figure 5.7, the Slaney River Valley SAC (c. 0.11 km west), Holdenstown Bog SAC (c. 2.5 km south), River Barrow And River Nore SAC (c. 8.5 km west) and the Wicklow Mountains SAC (c. 11.5 km northeast). Despite the proximity from the Slaney River Valley SAC to the site, there is no hydrological link between the proposed development and the River Slaney and the Slaney River Valley SAC which are located approximately 114m and 110m, respectively, west of the site at their nearest points.

Although this site is topographically and hydrologically upgradient of the River Slaney and its associated SAC, due to the scale of the works and the distance to the river and SAC, impacts to this waterbody and European site during the construction phase are deemed to be short-term and unlikely.

There are no Natural Heritage Areas (NHAs), however there are six proposed Natural Heritage Area (pNHAs) within 15km of the site as shown on Figure 5.7. However, there is no hydrological or physical connectivity in the form of hedgerows, treelines, or woodlands between the area of the proposed works and any of the NHAs or pNHAs

The National Biodiversity Data Centre holds records of Annex I or Annex II species identified within the 2km square (S88T) in which the site is located. No Annex I or Annex II species are listed for S88T. Therefore, it is not anticipated any impacts originating from the works on local habitats for Annex I or Annex II species. There was one protected species, the Eurasian Badger (Meles meles) located within the 2km grid. However, in the OCSC EcIA Report r badgers were scoped out from further consideration as no evidence of them was found including the presence of setts, foraging evidence, access runs, hairs caught on wires and bushes, tracks, or prints .

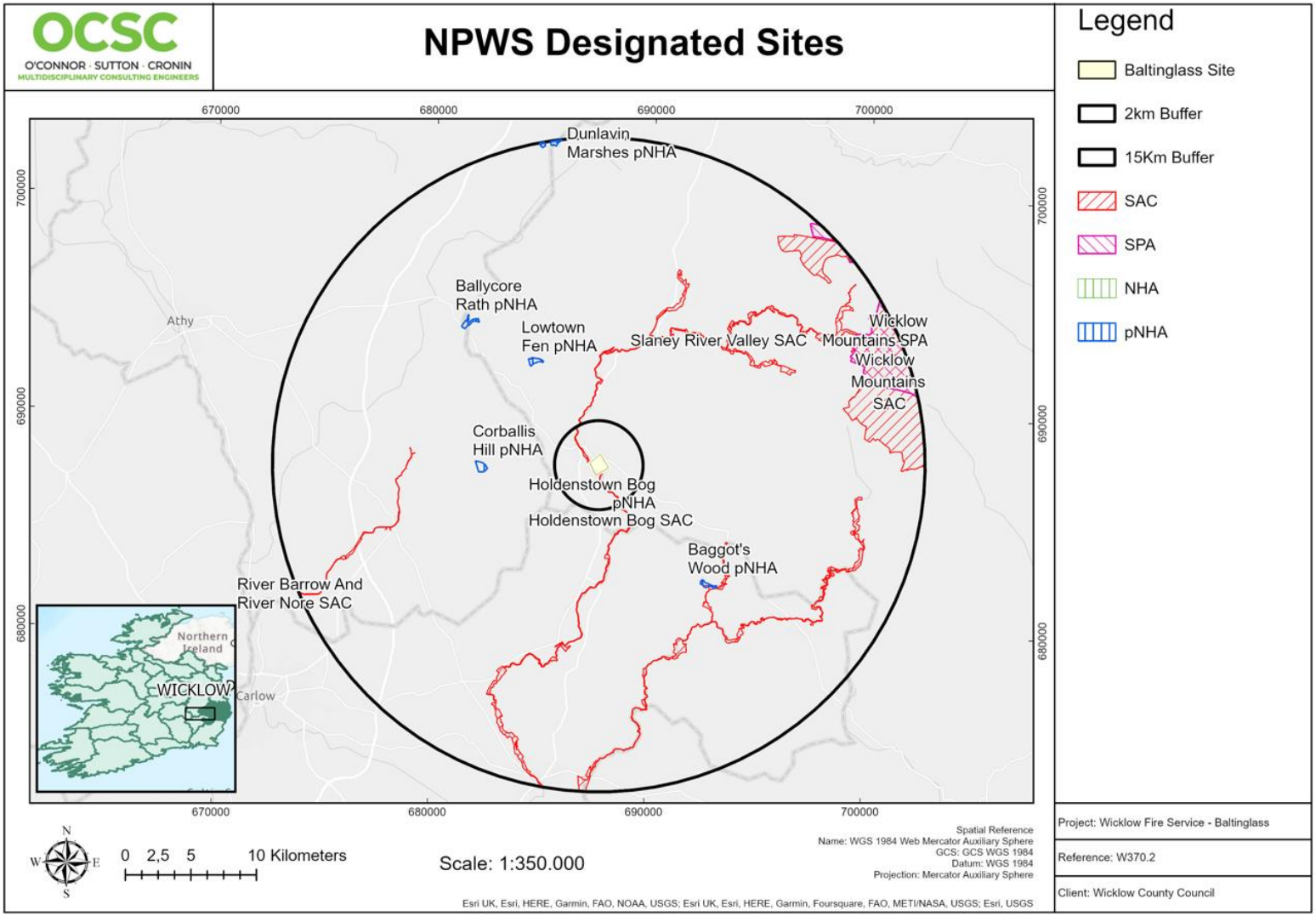

Figure 5.7: Designated Sites within 15km radius; site location shown as a yellow star (Source: OCSC, 2023).

5.8 TOPOGRAPHY

The topography of the site is relatively flat but slopes gently towards the River Slaney.

5.9 UNCONSOLIDATED GEOLOGY

The site is underlain by AminSW, Lithosols/Regosols soils as seen in Figure 5.8.

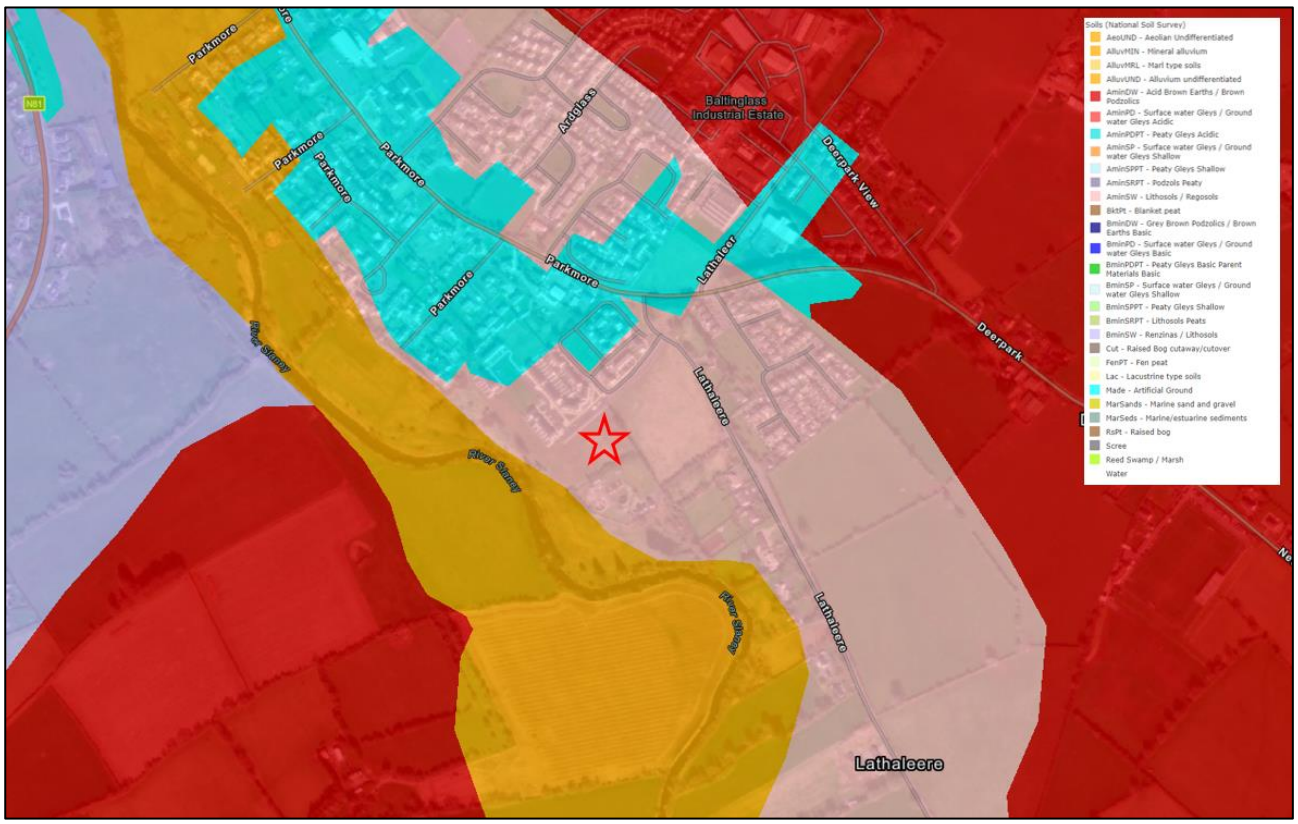

Figure 5.8: Teagasc Topsoil Soil Classification; approximate site location indicated by the red star (Source: GSI, 2023)

5.10 GEOLOGY

The site is underlain by Tullow Type 2 Equigranular Granite as shown in red in Figure 5.9. The formation comprises pale, fine to coarse-grained granite (GSI, 2023).

Figure 5.9: Bedrock Geology 100K; approximate site location indicated by the red star (Source: GSI, 2023)

5.11 AREAS OF GEOLOGICAL INTEREST

The GSI online mapping service was consulted regarding areas of geological interest in the vicinity of the site. The nearest area of geological interest is Manger-Saundersgrove (WW046) which is located 3.7km north of the site at its nearest point. It has been as a designated County Geological Site (CGS). The Manger-Saundersgrove site includes a number of elevated fields under pasture. The fields comprise a 'delta' feature composed of deep glaciofluvial and glaciolacustrine sediments. See Figure 5.10 for the location of the nearest geological heritage site.

Figure 5.10: Geological Heritage Sites; approximate site location indicated by the red star (Source: GSI, 2023)

5.12 AQUIFERS

The GSI provides a methodology for aquifer classification based on resource value (regionally important, locally important, and poor) and vulnerability (extreme, high, moderate, or low). Resource value refers to the scale and production potential of the aquifer whilst vulnerability refers to the ease with which groundwater may be contaminated by human activities (vulnerability classification is primarily based on the permeability and thickness of subsoils). The site is underlain by a Locally Important Aquifer (LI) - Bedrock which is Generally Moderately Productive only in Local Zones as shown in Figure 5.11.

Figure 5.11: Aquifers; approximate site location indicated by the red star (Source: GSI, 2023)

5.13 GROUNDWATER VULNERABILITY

The GSI database indicates that groundwater vulnerability for the site is High as seen in Figure 5.12. Vulnerability ratings are a function of overburden thickness and permeability which might offer a degree of protection and/or attenuation to the underlying aquifer from surface activities and pollution.

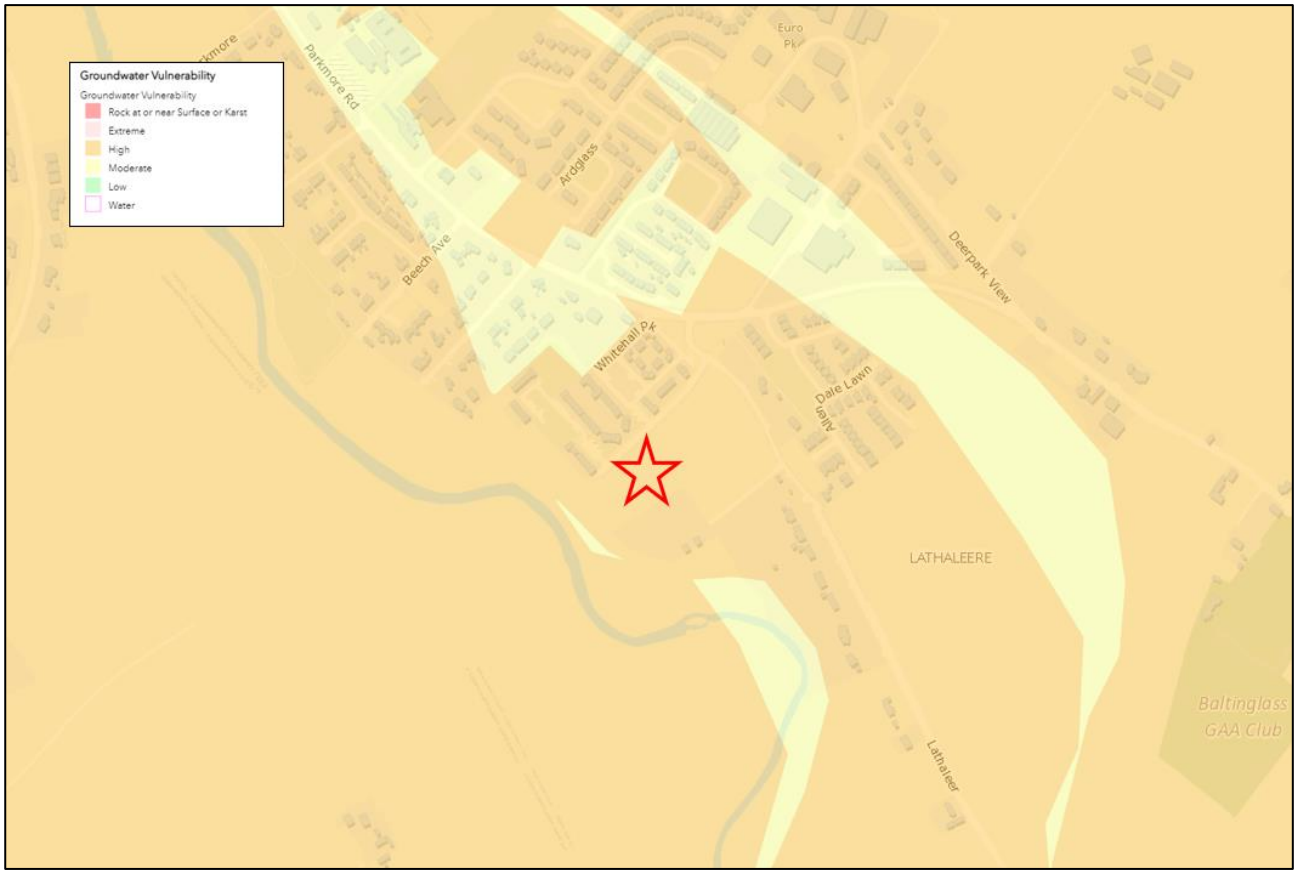

Figure 5.12: Groundwater Vulnerability; approximate site location indicated by the red star (Source: GSI, 2023)

5.14 GROUNDWATER RECHARGE

Diffuse recharge generally occurs via rainfall percolating through the subsoil with its rate being higher in areas where the subsoil is thinner and/or more permeable. The proportion of effective rainfall that recharges the aquifer is largely determined by the thickness and permeability of the soil and subsoil and by the slope. The groundwater recharge zones associated with the site are shown in Figure 5.13. GSI groundwater recharge model parameters for these zones are summarised in Table 5.1.

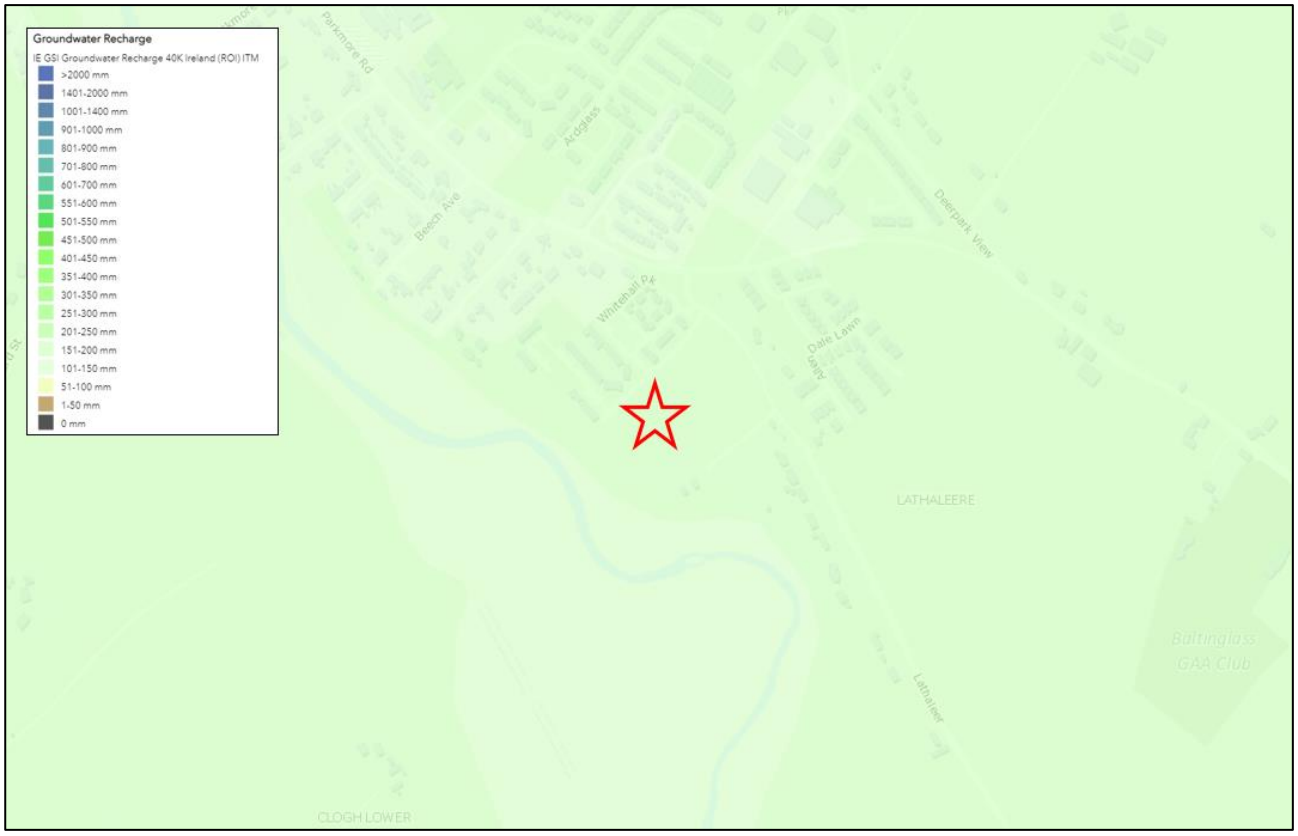

Figure 5.13: Groundwater Recharge; approximate site location indicated by the red star (Source: GSI, 2023)

Table 5.1: GSI Groundwater Recharge Parameters

Groundwater Recharge Parameters	
Average Recharge (mm/yr.):	200
Hydrogeological Setting Code:	2.ii
Hydrogeological Setting Description:	High permeability subsoil, sand & gravels overlain by well drained soil
Recharge Coefficient (%):	85.00
Effective Rainfall (mm/yr):	589
Average Recharge Range (mm/yr):	151-200
Subsoil Permeability Description:	High
GW Vulnerability:	High
Aquifer Category Description:	Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones
Rock Unit Group	Tullow Type 2 Equigranular Granite

5.15 WELLS AND SPRINGS

A search of the GSI groundwater well database was conducted to identify registered wells within the site footprint and/or the surrounding area.

Two wells are potentially located within the site: 2617NEW006 which was drilled on the 1st of September 1969 to 7.9m for an unspecified use and 2617NEW017 which was drilled on the 29th of December 1899 to 5.8m also for an unspecified use . There is one other well in very close proximity to the site, 2617NEW023 which is located 20m west of the site. This well was drilled on the 1st of September 1970 to 28.9m for domestic use. There are a further 25 wells or springs within 1km of the site, as shown in Figure 5.14.

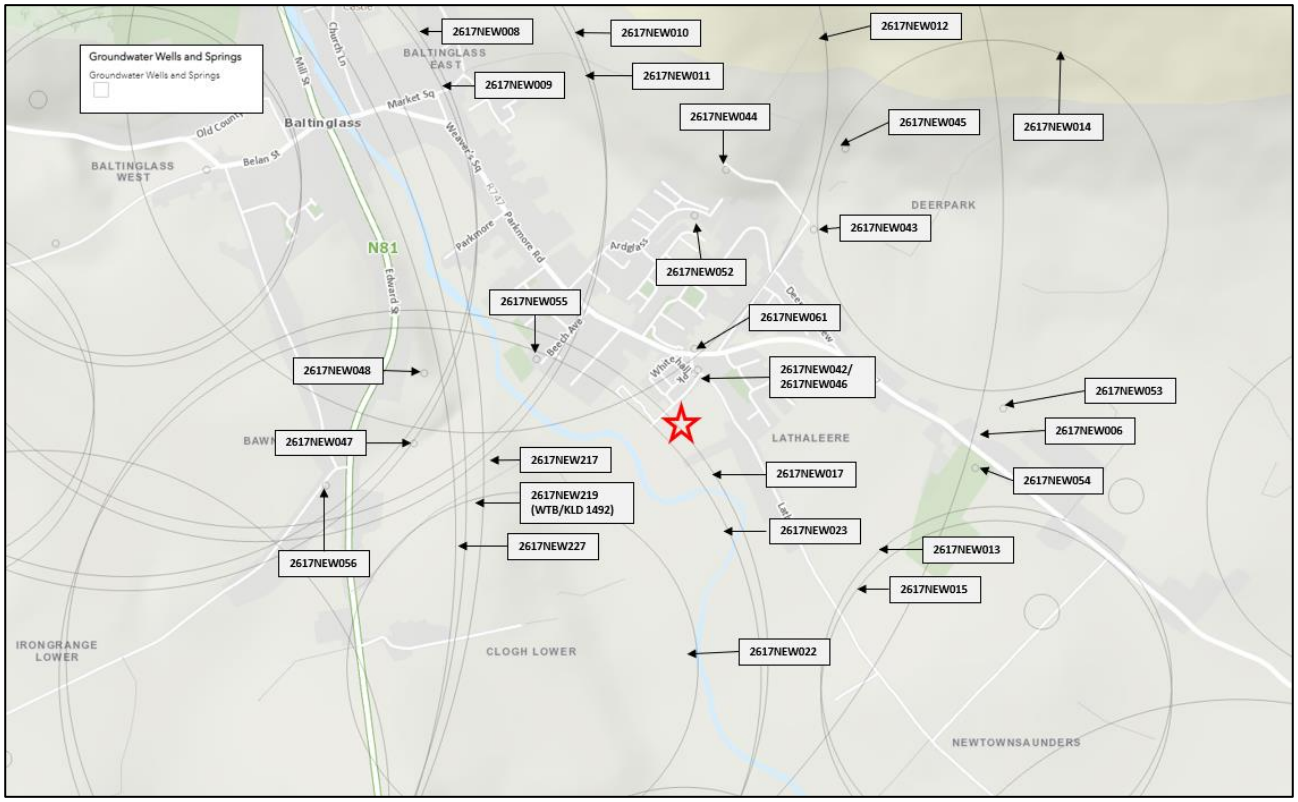

Figure 5.14: Wells and Springs; approximate site location indicated by the red star (Source: GSI, 2023)

The GSI database also provides information on groundwater Source Protection Zones (SPZs) (e.g., areas of contribution to water supply bores). The nearest SPZ is the Baltinglass PWS. The Inner Protection Area of the SPZ for this PWS is located 40m northeast of the site. See Figure 5.15.

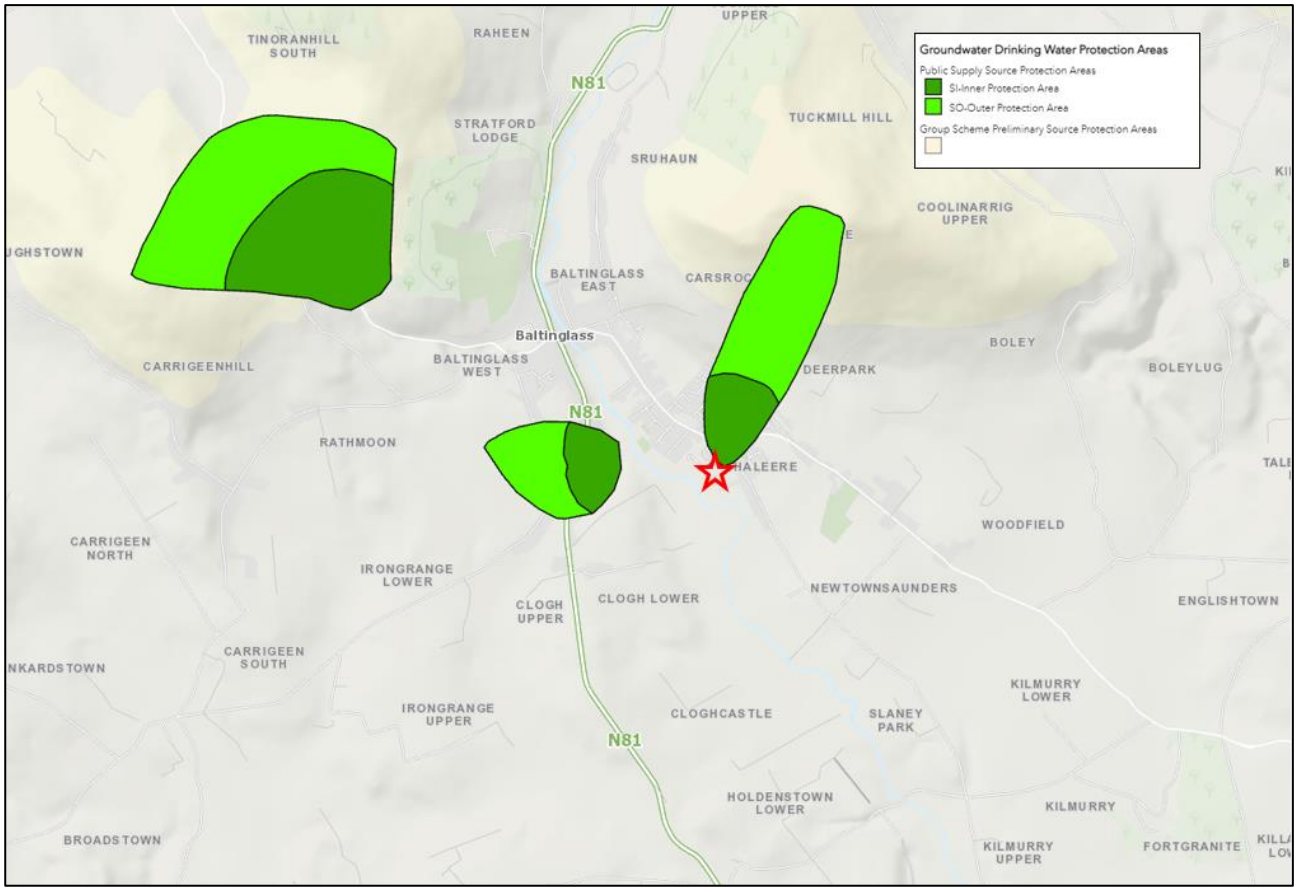

Figure 5.15: Source Protection Zones; approximate site location indicated by the red star (Source: GSI, 2023)

5.16 HYDROLOGY

There are no surface water features within the site boundary. The nearest surface waterbody is the Slaney River (Slaney_060 (IE_SE_12S020800)) which is located approximately 114m west of the site at its nearest point. The Slaney River flows in a southerly to south-easterly direction eventually discharging to the Irish Sea at Wexford Harbour. The next nearest surface water features to the site are two small tributaries of the Slaney which are located approximately 1km south and approximately 1km southeast of the study area at their closest points. Figure 5.16 and Figure 5.17 for waterbody locations.

Based on the most recent water quality information (2016-2021), the Slaney River has an overall Water Framework Directive (WFD) status of 'Moderate' in the vicinity of the site as shown in Figure 5.16.

The EPA spatial dataset indicates that the risk of the Slaney River is that it is at risk of failing to meet its WFD objectives by 2027 (EPA 2023) as shown in Figure 5.17. WFD information for this river is summarised in Table 5.2.

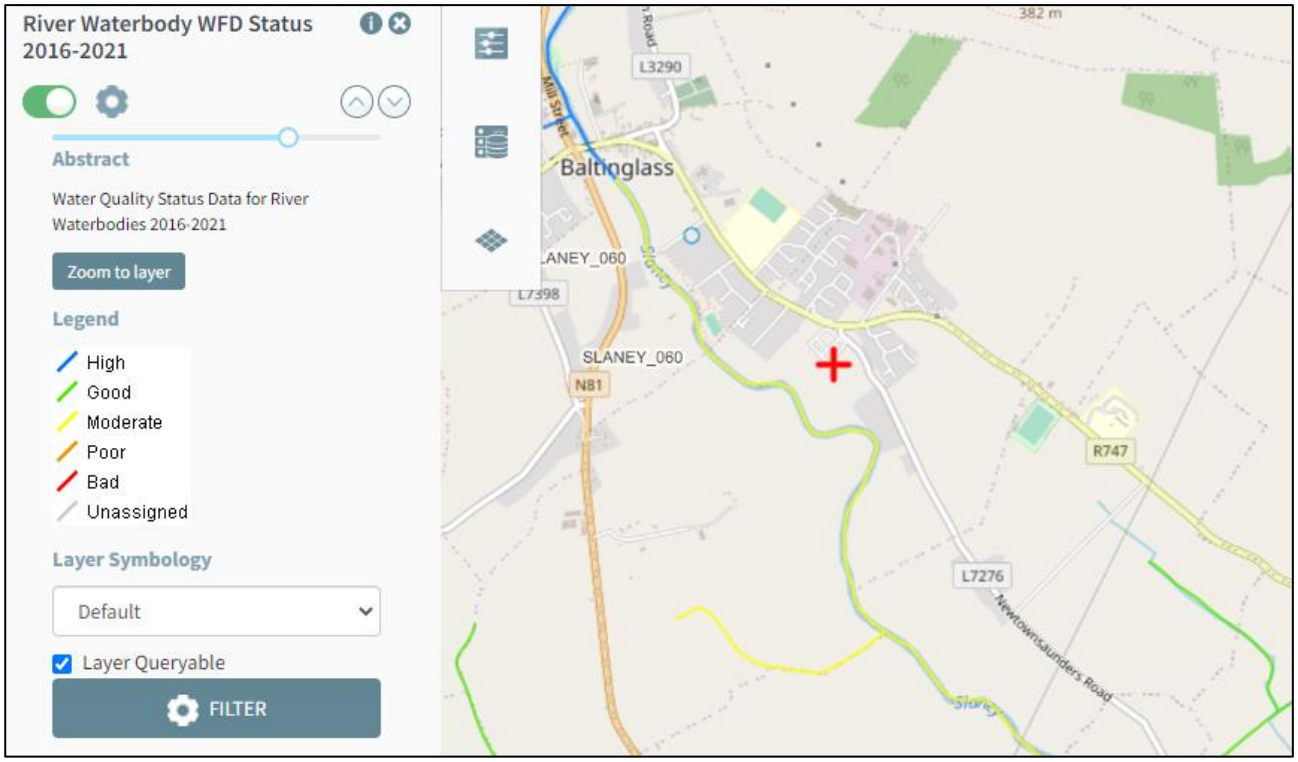

Figure 5.16: River Waterbody WFD Status; approximate site location indicated by red cross (Source: EPA Maps, 2023)

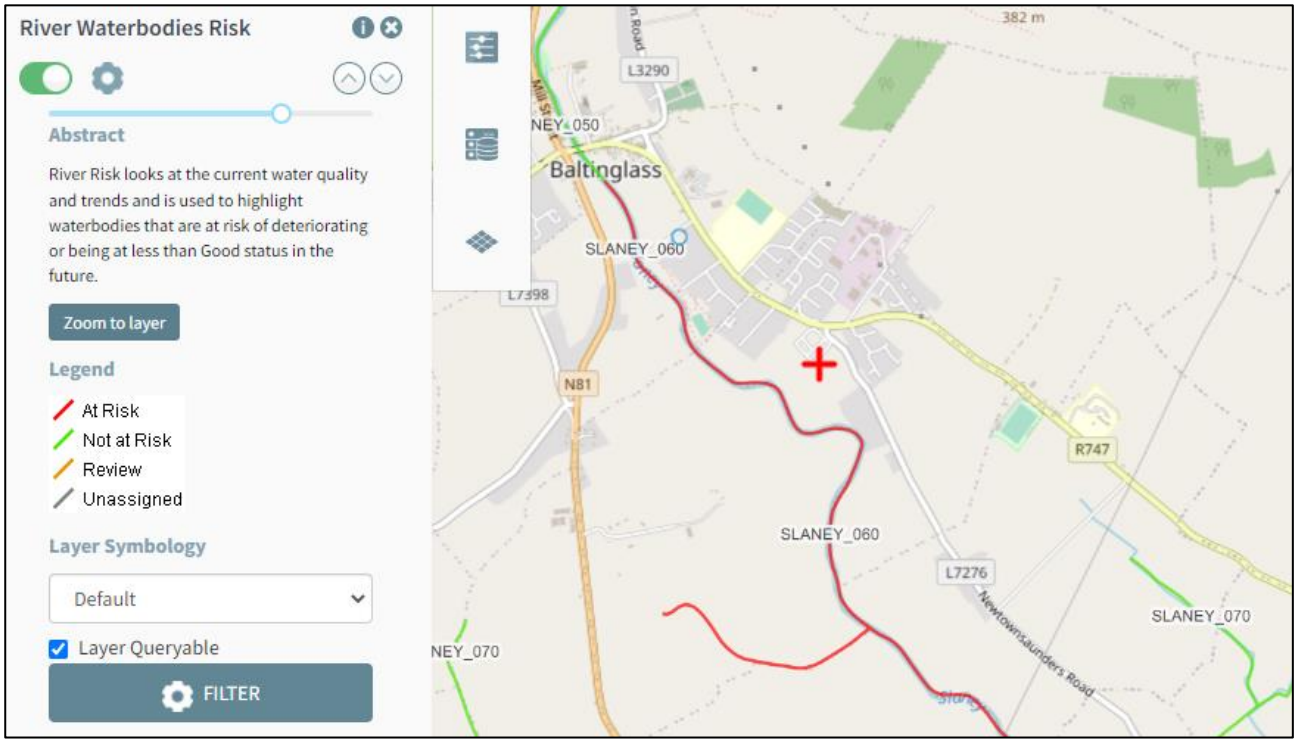

Figure 5.17: River Waterbodies Risk; approximate site location indicated by red cross (Source: EPA Maps, 2023)

Table 5.2: WFD Summary Information

Name	River Slaney
Waterbody Code	IE_SE_12S020800
Waterbody Name	SLANEY_060
Waterbody Type	River
Iteration	SW 2016-2021
Status	Moderate
Risk	At risk

5.17 RADON

According to the EPA, the site has been classified as an area where about 1 in 10 homes are likely to have high radon levels as shown in Figure 5.18.

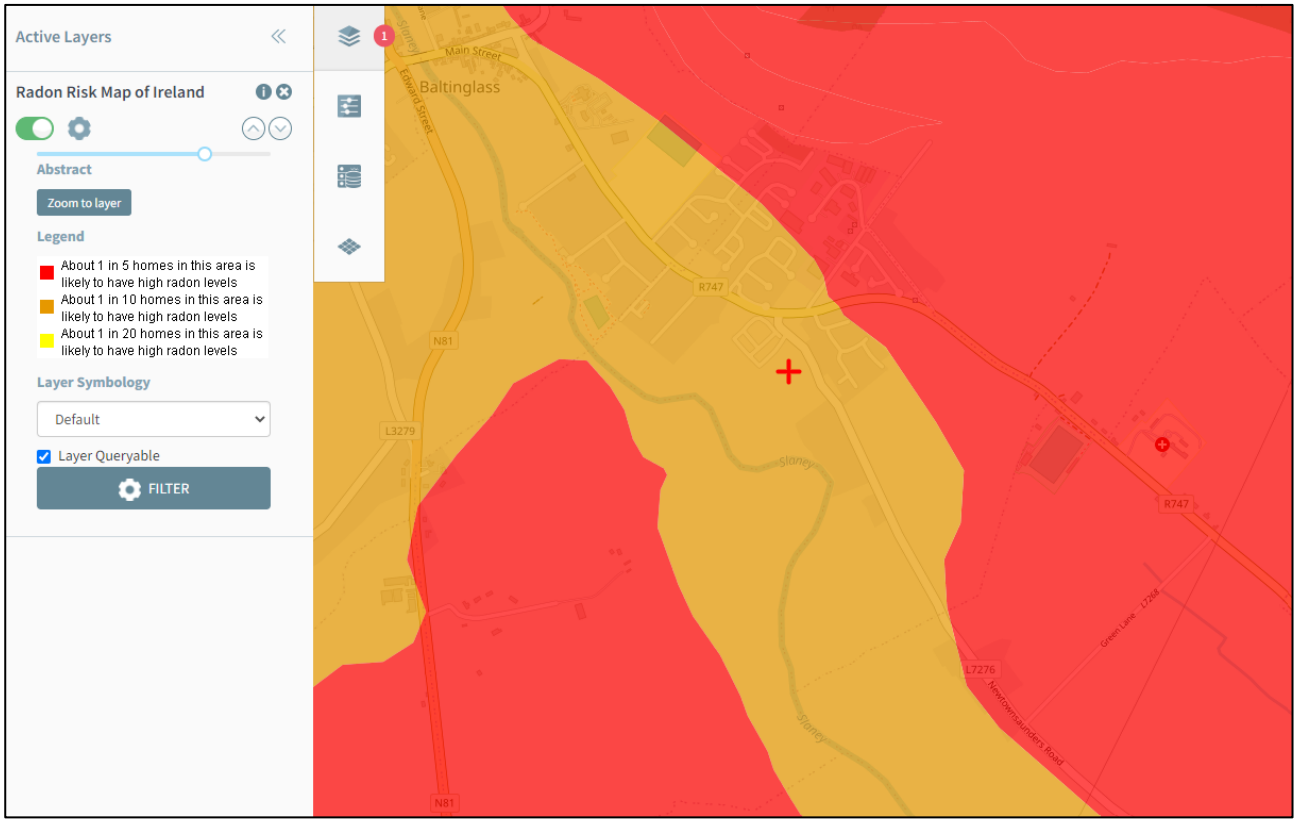

Figure 5.18: Radon Risk; approximate site location indicated by the red cross star (Source: EPA Maps, 2023)

5.18 PROTECTED STRUCTURES

The National Monuments Service (NMS) maps shows that there are no sites on the National Inventory of Architectural Heritage within 500m of the site. The nearest (16316038) is located 850m northwest of the site. See Table 5.3 and Figure 5.19.

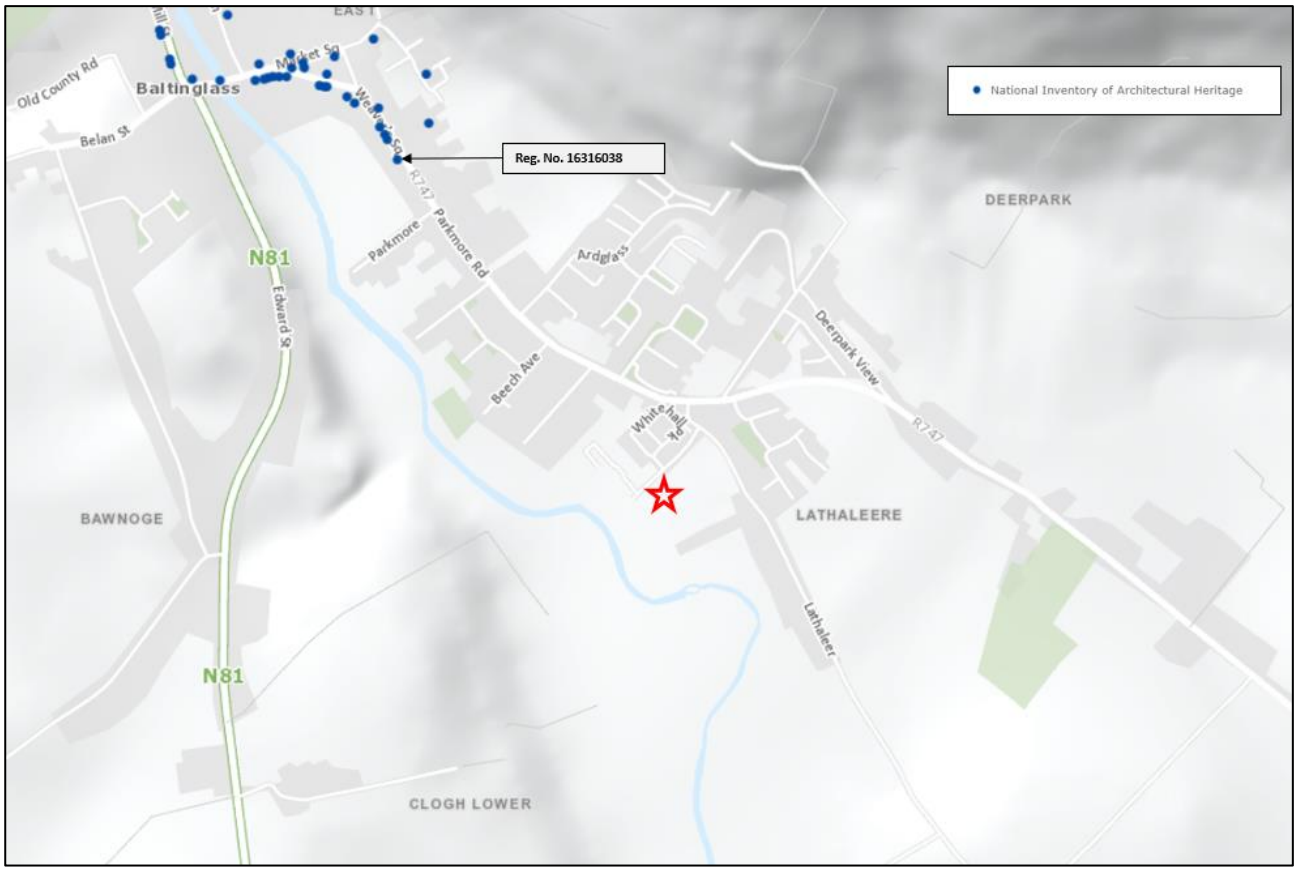

Figure 5.19: National Inventory of Architectural Heritage sites and Protected Structures in the vicinity of the proposed site; approximate site location indicated by the red star (Source: Source: NMS, 2023)

The NMS maps also show two listings on the Sites and Monuments Records within 500m of the site. These structures are listed in Table 5.4 and shown on Figure 5.20.

Figure 5.20: Sites and Monuments Records in the Vicinity of the Proposed Site; approximate site location indicated by the red star (Source: Source: NMS, 2023)

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Table 5.3: Summary Of National Inventory Of Architectural Heritage Sites and Record of Protected Structures Near the Site

NIAH Ref.	Name	Location	Description	Distance from site
16316038	House	Parkmore House, Weavers Square, Baltinglass East, Baltinglass, Wicklow	Detached five-bay two-storey over basement house, built c.1830. The house is finished in render. The panelled front door is flanked by Tuscan order freestanding columns which support a projecting cornice; above is a semi-circular headed fanlight and surmounting this is an out sized semi-circular headed drip moulding.	860m NW

Table 5.4: Summary of Sites and Monuments Records Near the Site

NIAH Ref.	Name	Location – Townland	Description	Distance from site
WI027-047-----	Megalithic structure	Lathaleere	Situated on the SW end of a level ridge overlooking the River Slaney to the SW. Described by Price (1934, 35-6) as an oblong mound (dims. 6.1m x 4m; H 0.6m) with a granite boulder at either end. There was a large prostrate slab (L 1.9m) with a small upright beside the SW edge in the centre of the mound. The monument was destroyed c. 1979-80 and a group of large boulders and a slab (L 2.67m; Wth 2.04m) beside the field boundary 40m SE of the site may be the dismantled remnants.	290m NW ZoN 275m
WI027-046-----	Enclosure	Baltinglass East	Situated on level ground SE of abandoned quarry. Oval enclosure (dims. c. 20m NE-SW x 15m NW-SE) marked on the 1838 OS 6-inch map. Not visible at ground level.	350m NW ZoN 300m

ZoN: Zone of Notification

All information taken from the Ordnance Survey Ireland website

5.19 NEARBY SITE INVESTIGATIONS

The Geological Survey of Ireland (GSI) have compiled a database of site investigations carried out in Ireland. There is one geotechnical site within 5km of the proposed site. The geotechnical investigation (Report ID 2,440) is located 4.9km northeast of the site and was ordered by the Road Engineer's Department of Wicklow County Council for a proposed bridge at Stratford on Slaney in 1985. This investigation included the construction of four boreholes using conventional shell and auger techniques in the overburden and field and laboratory testing of the soil. See Figure 5.21 for the location of nearby site investigations and boreholes.

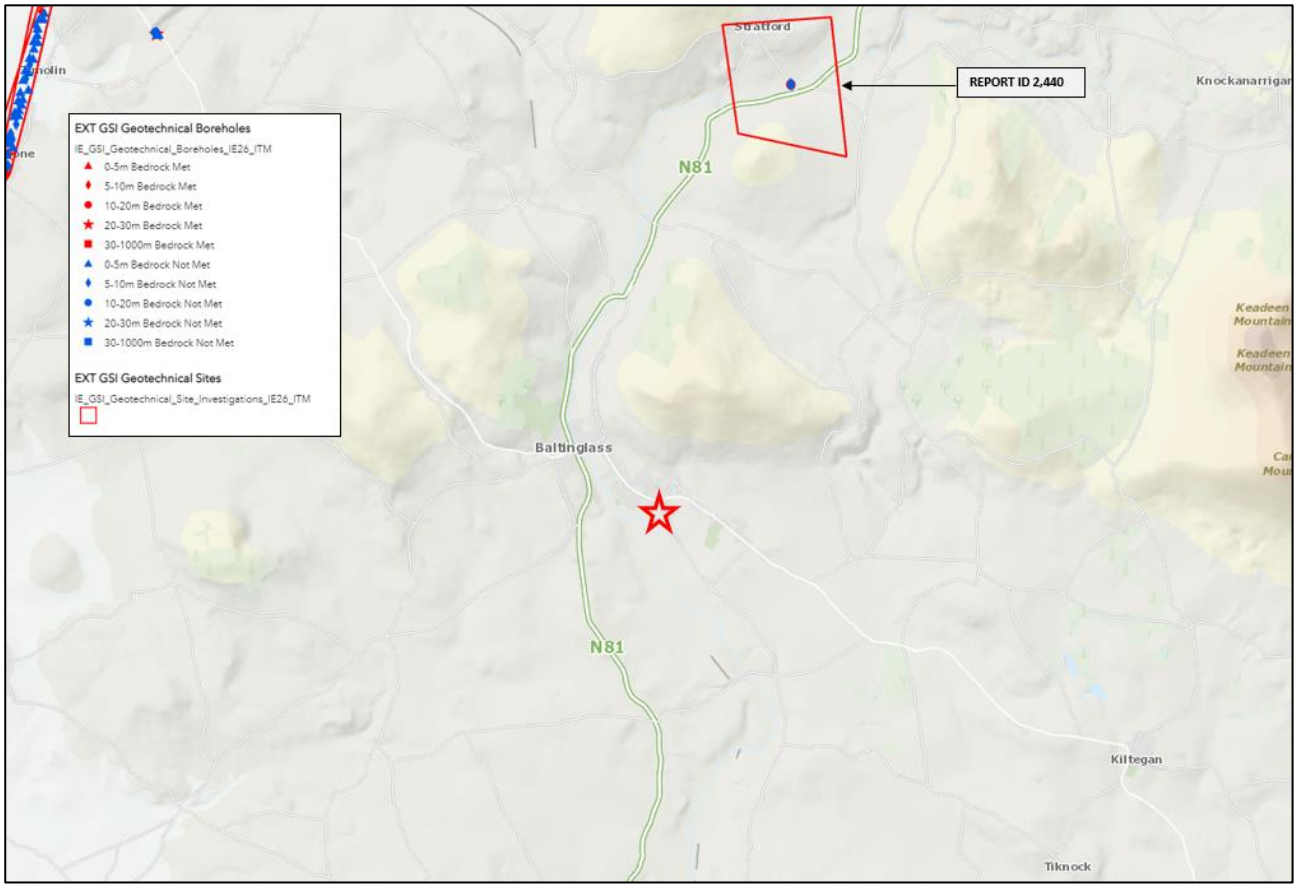

Figure 5.21: Nearby Boreholes and Site Investigations; approximate site location indicated by the red star (Source: GSI, 2023)

6 TYPES AND CHARACTERISTICS OF POTENTIAL IMPACTS

The likely effects on the environment of the proposed development in relation to specified criteria are assessed below.

6.1 MAGNITUDE AND SPATIAL EXTENT OF IMPACT

This project relates to the proposed new construction of the Baltinglass fire station. Works include the construction of a new fire station, a fire training tower, a concrete water tank for fire training, and associated lighting, drainage, and entrance infrastructure in Baltinglass, County Wicklow. The current site consists of a greenfield site in agricultural use.

Given the nature of the development, its scale, the duration of the proposed works, and the distance to the Slaney River Valley SAC, 0.11km west, despite the fact that the site is topographically and hydrologically upgradient of the River Slaney and its associated SAC and surface water drainage from the site will discharge to the municipal surface water system which discharges to the River Slaney, impacts to this waterbody, European site and other designated sites within the ZOI are deemed to be intermittent and not significant.

The appointed contractor will be required to prepare a site-specific Construction Environmental Management Plan (CEMP) which will clearly detail all necessary pre-construction surveys regarding protected species such as Potential Roost Features for bats within the treelines on site and mitigation measures designed to reduce this risk to local biodiversity and conservation objectives of the local species to a non-significant level. These measures include:

- Careful project management in respect of water protection;
- Proper management of fuels and building materials;
- Pre-construction survey of otters (Lutra lutra);
- Pre-construction survey for Potential Roost Features for bats along the treelines and structures adjacent to the site; and pre-construction survey of bats.

Subject to the implementation of mitigation measures, no significant negative impacts on the local biodiversity and conservation objectives of the local species are anticipated as a result of this development.

6.2 THE NATURE OF THE IMPACT

This project relates to the construction of a new fire station, a fire training tower, a concrete water tank for fire training, and associated lighting, drainage, and entrance infrastructure. This project is small in magnitude and

extent. Potential impacts relate primarily to noise, vibrations, lighting, and sedimentation resulting from earthworks and are likely to be temporary and not significant subject to implementation of mitigation measures.

6.3 THE TRANSBOUNDARY NATURE OF THE IMPACT

Due to the scale and nature of the works, transboundary impacts are unlikely subject to implementation of mitigation measures.

6.4 THE INTENSITY AND COMPLEXITY OF THE IMPACT

The project involves a small work area which has been limited to create a vital emergency service for the community. Any potential impacts are not likely to be significant.

6.5 THE PROBABILITY OF THE IMPACT

The probability of impact to nearby European sites and local flora and fauna is low subject to the implementation of mitigation measures detailed in the project-specific CEMP which will be prepared by the appointed contractor.

6.6 EXPECTED ONSET, DURATION, FREQUENCY AND REVERSIBILITY OF THE IMPACT

Based on scope of work and the short duration of the project and the distance to the nearest designated national or European site, the Slaney River Valley SAC which is located 0.11km west of the site at its closest point, potential impacts to designated sites are expected to be unlikely, not significant, and short-term subject to the implementation of the site-specific CEMP.

6.7 THE CUMULATION OF THE IMPACT WITH THE IMPACTS OF OTHER EXISTING AND/OR FUTURE DEVELOPMENTS

There are no likely cumulative impacts of the proposed works in conjunction with committed developments based on a review of planning grants.

6.8 THE POSSIBILITY OF EFFECTIVELY REDUCING THE IMPACT

The project involves a work area which has been limited to that required to facilitate the construction of a fire station in Baltinglass. A CEMP will be prepared by the appointed contractor considering all site works and detailing all required mitigation measures.

The potential exists during the construction stage for a small amount of nuisance associated with localised traffic disruption, construction noise and dust, and siltation associated with soil disturbance. However, construction impacts related to this project are likely to be short term and not significant subject to implementation of the CEMP.

6.9 SCREENING DECISION

Based on the size, nature, and scale of the proposed project, it is considered that the overall impact on the receiving environment will be low subject to implementation of all mitigation measures detailed in the CEMP.

An AA Screening Report has been prepared by OCSC which concluded that the proposed project is not likely give rise to adverse effects on nearby designated European sites. Therefore, a Natura Impact Statement (NIS) does not need to be prepared for this proposed project.

Please refer to the completed Screening Checklist (Table 6.1) identified in European Commission publication Environmental Impact Assessment of Projects, Guidance on Screening (2017).

Table 6.1:Environmental Impact Assessment of Projects Screening Checklist

Checklist	Response
Will there be a large change in environmental conditions?	No
Will new features be out-of-scale with the existing environment?	No
Will the impact be unusual in the area or particularly complex?	No
Will the impact extend over a large area?	No
Will there be any potential for transboundary impact?	No, subject to implementation of the CEMP.
Will many people be affected?	Minor, short-term impacts. Overall positive impact in creating this essential service.
Will many receptors of other types (fauna and flora, businesses, facilities) be affected?	There will be a short time impact on flora and fauna during the works; however, this will be reduced subject to implementation of an appropriate CEMP.
Will valuable or scarce features or resources be affected?	No
Is there a risk that environmental standards will be breached?	No, subject to implementation of an appropriate CEMP.
Is there a risk that protected sites, areas, and features will be affected?	No, subject to implementation of mitigation measures.

Is there a high probability of the effect occurring?	No
Will the impact continue for a long time?	Temporary to short term.
Will the effect be permanent rather than temporary?	No
Will the impact be continuous rather than intermittent?	Temporary to short-term during construction.
If it is intermittent, will it be frequent rather than rare?	-
Will the impact be irreversible?	No
Will it be difficult to avoid, or reduce or repair or compensate for the effect?	No

7 VERIFICATION

This report was compiled and verified by:

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