

MWP

Screening for Appropriate Assessment Report

Bantry Mill Culvert Upgrade Project

Cork County Council

November 2024

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Appendices

Appendix 1 – Stages of Appropriate Assessment

Project No.	Doc. No.	Rev.	Date	Prepared By	Checked By	Approved By	Status
24349	6002	A	07/11/2024	OS	GH	AO'C	FINAL

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Summary of Findings

Project Title	Bantry Mill Culvert Upgrade Project
Project Proponent	Cork County Council
Project Location	Bantry, County Cork
Screening for Appropriate Assessment	The report for screening for AA is undertaken to determine the potential for likely significant effects of proposed culvert upgrade works at Bantry, Co. Cork, individually, or in combination with other plans or projects, in view of the conservation objectives of certain European sites identified within this report.
Conclusion	It has been objectively concluded during the screening process, on the basis of objective information and with regard to the characteristics of the proposed development, that significant effects on European Sites can be ruled out. Therefore, no further assessment is needed and Natura Impact Statement (NIS) is not required.

1. Introduction

1.1 Purpose of the Assessment

This screening for Appropriate Assessment (AA) report has been undertaken to determine whether a proposed upgrade works to Bantry Mill Culvert in Bantry, Co. Cork is likely to result in significant effects on nearby sites with European conservation designations (i.e. European sites). This has been prepared to provide a sufficient level of information to the competent authority, in this case Cork County Council (CoCoCo), to screen the project. The screening exercise determines the need for a full appropriate assessment, in which case a Natura Impact Statement (NIS) would need to be prepared.

This report comprises a description of the proposed works, as described in **Section 3.2** below, particularly in relation to the aspects that could interact with the receiving environment, the identification in **Section 3.5** of the impacts that are reasonably foreseeable as potentially ensuing from it, and a determination as to whether these predicted impacts, either alone or in combination with the other plans or projects identified in **Section 3.3**, are likely to have significant effects on the European sites identified in **Section 3.4**, in view of those sites' conservation objectives.

The screening for AA report has been undertaken by a qualified ecologist from Malachy Walsh and Partners (MWP).

1.2 Legislative Context

The Habitats Directive (92/43/EEC) seeks to conserve natural habitats of wild fauna and flora by the designation of Special Areas of Conservation (SACs) and the Birds Directive (79/409/EEC) seeks to protect birds of special importance by the designation of Special Protection Areas (SPAs). It is the responsibility of each member state to designate SPAs and SACs, both of which form part of Natura 2000, a network of protected sites throughout the European Community. The Habitats Directive has been transposed into Irish law and the relevant Regulations are the European Communities (Birds and Natural Habitats) Regulations 2011. The requirement for AA of the implications of plans and projects on the Natura 2000 network of sites comes from the Habitats Directive (Article 6(3)).

Under the European Communities (Birds and Natural Habitats) Regulations 2011, the Competent Authority is required to carry out a screening for AA of a proposed development prior to issuing consent to assess, in view of best scientific knowledge and the sites conservation objectives, if that project or plan, individually or in combination with other plans or projects, is likely to have a significant effect on a European site. The screening for AA will determine whether an AA of the 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, in view of the site's conservation objectives, then AA of the proposed development is required. If it is determined that an AA is required in respect of the proposed development, an NIS must be prepared.

1.3 Stages of Appropriate Assessment

The process is a four-stage process with issues and tests at each stage. The purpose of the screening assessment is to record in a transparent and reasoned manner the likely effects on European sites of a proposed development. An important aspect of the process is that the outcome at each successive stage determines whether a further stage in the process is required. The stages are set out in **Appendix 1**.

1.4 Statement of Competency

This screening for AA report has been prepared by Otto Storan (BSc. (Hons), MSc.) Ecologist at MWP. Otto has over 5 years of professional experience in consulting and has worked on numerous projects regarding ecological impact assessment and the AA process. He is an appropriately qualified, trained, and competent professional having completed numerous ecological assessments for a wide variety of projects. He is an experienced ecologist with a diverse assessment profile, including a number of civil engineering projects in terrestrial and aquatic environments.

2. Methodology

2.1 Appropriate Assessment Screening

2.1.1 Guidance

This AA Screening Report has been undertaken in accordance with the:

- Appropriate Assessment Screening for Development Management, OPR Practice Note PN01 (Office of the Planning Regulator, 2021);
- European Commission, Commission Notice - Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (2021/C 437/01);
- European Commission Guidance ‘Managing Natura 2000 sites’ (EC, 2018); and
- *Appropriate Assessment of Plans & Projects - Guidance for Planning Authorities* prepared by the NPWS (DoEHLG, 2010, rev. 2010)).

2.1.2 Screening Steps

The screening analysis comprises four steps:

1. ascertaining whether the plan or project is directly connected with or necessary to the management of a European site;
2. identifying the relevant elements of the plan or project and their likely impacts;
3. identifying which (if any) European sites may be affected, considering the potential effects of the plan or project alone or in combination with other plans or projects;
4. assessing whether likely significant effects on the European site can be ruled out, in view of the site's conservation objectives.

In the context of AA there is a clear difference between the ‘impact’ which is the source and the ‘effect, which is how it relates to the conservation objectives. When assessing impact, European sites are only considered relevant where a credible or tangible source-pathway-receptor (S-P-R) link exists between the proposed development and a protected species or habitat type. In order for an impact to occur there must be a risk initiated by having a 'source' (e.g. excavation), and an impact pathway between the source and the receptor (e.g. a waterbody which connects the proposal site to the protected species or habitats). In establishing

receptors potentially affected by the proposed development, the ‘*zone of influence*’ (ZOI) concept was applied (see **Section 2.1.3**).

The following criteria were used in determining European sites considered in screening, based on DoEHLG (2009):

- Any European sites within or adjacent to the plan or project area;
- Any European sites within the likely ZOI of the project

In the case of sites with water dependent habitats or species, and a plan or project that could affect water quality or quantity, for example, it may be necessary to consider the full extent of the upstream and/or downstream catchment.

2.1.3 Zone of Influence

The ‘*zone of influence*’ (ZOI) for a project is the area over which ecological features may be affected by biophysical changes as a result of the proposed project and associated activities. This is likely to extend beyond the project site, for example where there are ecological or hydrological links beyond the site boundaries. The zone of influence will vary for different ecological features depending on their sensitivity to an environmental change (CIEEM, 2018).

The zone of influence of the Proposed Development (the project) was identified during desk study using the available information on the Proposed Development and publicly available information as described in the desk study. According to OPR (2021), the zone of influence of a proposed development is the geographical area over which it could affect the receiving environment in a way that could have significant effects on the Qualifying Interests of a European site. This should be established on a case-by-case basis using the Source-Pathway-Receptor framework and not by arbitrary distances (such as 15 km).

The ZOI for this project was identified through a review of the nature of the project, known impacts and effects likely to arise as a result of the project, distance from European sites and their qualifying interests and any landscape¹ or ecological² connectivity between the Proposed Development and European sites.

Similarly, there may be indirect impacts to European sites via impacts to non-Qualifying Interest habitats within a site or such habitats outside a site, or via impacts to species for which a site has been designated beyond the site where this might affect the conservation objectives of the site. This is particularly relevant in relation to SPAs where areas outside the European site are often important for bird species.

Following identification of European sites, the potential effects associated with the proposal are identified before an assessment is made of the likely significance of these effects. As described above, the test for the screening for AA is to assess, in view of best scientific knowledge, if the development, individually or in combination with other plans/projects, is likely to have a significant effect on a European site. If there are any significant, potentially significant, or uncertain effects, it will be necessary to proceed to AA and submit an NIS.

¹ Landscape connectivity is a combined product of structural and functional connectivity, i.e. the effect of physical landscape structure and the actual species use of the landscape (Kettunen *et al.* 2007)

² Connectivity is defined as a measure of the functional availability of the habitats needed for a particular species to move through a given area. Examples include the flight lines used by bats to travel between roosts and foraging areas or the corridors of appropriate habitat needed by some slow colonising species if they are to spread (CIEEM, 2018).

2.1.4 Assessment Criteria

As set out in the NPWS guidance, the task of establishing whether a plan or project is likely to have an effect on a European site(s) is based on a preliminary impact assessment using available information and data, including that outlined above, and other available environmental information, supplemented as necessary by local site information and ecological surveys. This is followed by a determination of whether there is a risk that the effects identified could be significant. The precautionary principle approach is required.

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

- Habitat loss and alteration
- Disturbance and/or displacement of species
- Habitat or species fragmentation
- Water quality

The criteria for assessing significance, in view of the site-specific conservation objectives is as follows:

- degree of habitat loss (absolute, relative), changes in habitats structure;
- risk of species populations' displacement, level of disturbance, reduction of species home range, feeding area, refuge areas, alteration of favourable condition for breeding
- importance of the habitats and species affected, e.g. representativeness, local variety;
- importance of the site (e.g. limit of distribution area for certain habitats and species, stepping stone, important for ecological connectivity);
- disruption or alteration of ecological functions; and
- changes to key ecological features of the site (e.g. water quality).

2.2 Desktop Study

A desk study was carried out to collate available information on the subject site's natural environment. This comprised a review of the following publications, data and datasets:

- Ordnance Survey Ireland (OSI) Aerial photography and 1:50000 mapping
- National Parks and Wildlife Service (NPWS)
- National Biodiversity Data Centre (NBDC) (on-line map-viewer)
- Environmental Protection Agency (EPA) water quality data
- BirdWatch Ireland
- Geological Survey Ireland (GSI) area maps
- Cork County Development Plan 2022-2028
- Natura 2000 Standard Data Forms
- Other information sources and reports are mentioned in the course of the report

Concise and site-specific information on species records available for the hectad V94 was retrieved from the NBDC on-line database and reviewed.

GIS shapefiles downloaded from the websites of the National Parks and Wildlife Service (NPWS) and Environmental Protection Agency (EPA) along with mapping of the proposed development were transferred to a GIS platform to allow information on the natural environment to be analysed.

Watercourse naming follows EPA nomenclature. Watercourse order is described using the classification system given in Strahler (1957) which defines stream size based on a hierarchy of tributaries (with 1st order streams being the smallest). In relation to referencing riverbanks, RHS refers to right hand side and LHS refers to left hand side, when looking downstream.

3. Screening for Appropriate Assessment

The purpose of the screening assessment is to record in a transparent and reasoned manner the likely effects, on relevant European sites, of the project, and whether these likely effects are significant. Screening for AA (Stage 1) determines the need for a full AA (Stage 2) and consists of a number of steps, each of which is addressed in the following sections of this report:

- 3.1 Establish whether the project is necessary for the management of a European site
- 3.2 Description of the project
- 3.3 Identification of other plans, projects and activities with which the proposed development could interact to create in-combination effects
- 3.4 Identification of European sites potentially affected
- 3.5 Identification and description of potential individual and cumulative impacts (in-combination effects) of the project
- 3.6 Assessment of the significance of the impacts on European sites
- 3.7 Conclusion of screening stage

3.1 Management of European Sites

The proposal is not connected with or necessary to the conservation management of a European site.

3.2 Description of Project

3.2.1 Site Location and Context

The culvert location is detailed below in **Figure 3-1** and project components include the following:

- Reconstruction of a new Mill River Culvert along Bridge Street and New Street and Wolfe Tone Square and connection to the existing Mill River Culvert at chainage 80m; This includes:
- A new Mill River Culvert of internal dimensions 5.2m wide, 1.5m high which will be constructed from a tie in at Wolfe Tone Square, at Chainage 80m, to William Street, at Chainage 242m

- A new Mill River Culvert of internal dimensions 3.6m wide, 1.5m high which will be constructed from William Street junction at Chainage 242m to the Mill on Bridge Street at Chainage 452m
- Connect to existing drainage/services at William Street and Main Street
- Repair/upgrade works to be carried out to the Mill River Culvert from Chainage 0 to 80m
- Road and footpath reinstatement works
- Removal and reinstatement of the sections of Wolf Tone Square will be required to facilitate the tie in of the New Mill River culvert and backfilling of the old offline stone culvert
- Construction of new services and utilities including foul water drainage. Surface water drainage, watermain infrastructure, electricity and communications will be required at Wolfe Tone Square, New Street and Bridge Street;
- Construction of 2 No. surface water pumping sumps in Wolfe Tone Square

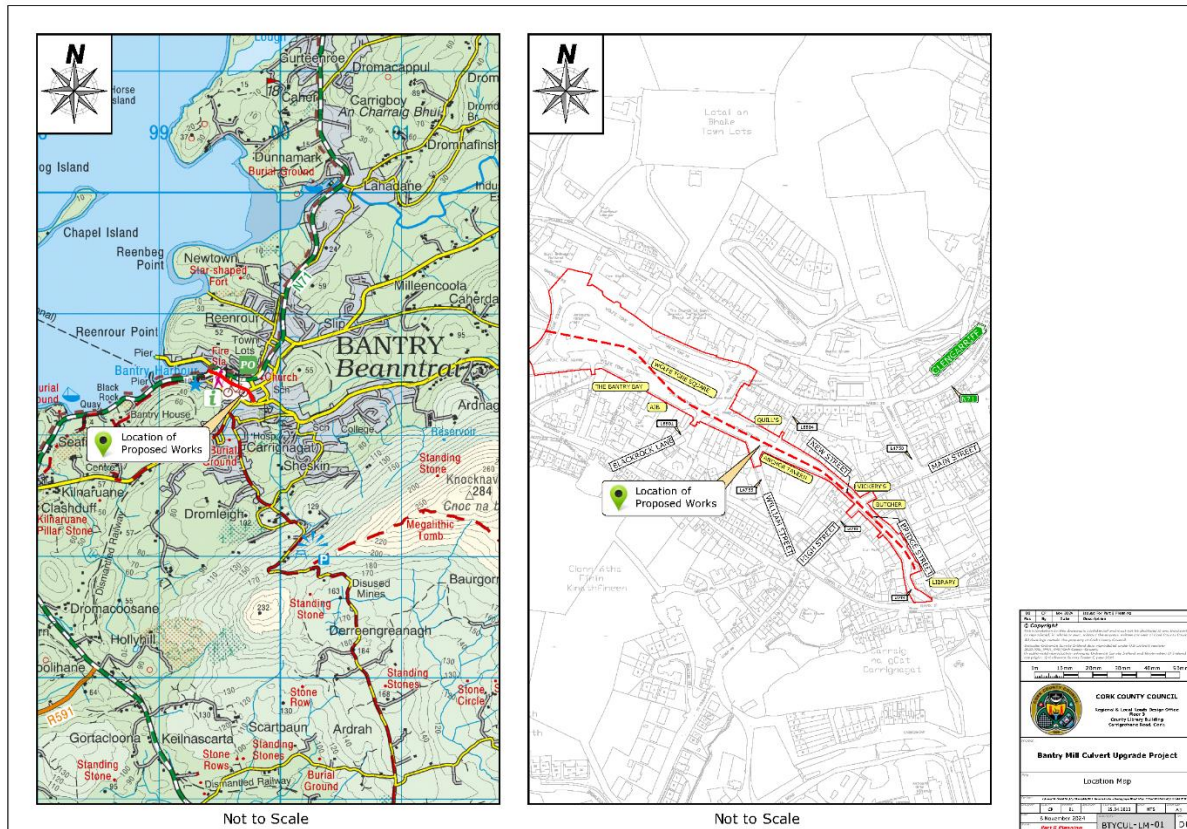


Figure 3-1: Location of proposed development

Drainage at Bantry is centered around the 2.2 km long River Mealagh, also known as the Bantry River, a high gradient watercourse. A distributory channel of the Doneelagh stream, which itself is a tributary of the River Mealagh, flows southwest to become the Mill Stream where it flows overland until entering a tidal culvert under Chapel Street in Bantry. The culvert passes under Bantry Town Centre and has an outfall into Bantry marina.

There are multiple other tributaries which join the River Mealagh to the north: the Knocknaveagh, Sheskin East, Carrinagat, Alley River, and Scart. These are relatively steep and narrow, with many engineered sections including culverts, weirs, bridges, and aqueducts. The Alley River, also known as the Reenrou, has a shallower

gradient, and is culverted in its lower reaches. The culvert system in Bantry consists of a main culvert and two side culverts. The main culvert is 445m long and carries the Mill Stream under the centre of Bantry along New Street until it outfalls west of Wolf Tone Square. There is a 103m long side culvert from the south which carries the Scart Stream into the main culvert at Bridge Street approximately 440m upstream of the outfall. The other side of the culvert connects from the north and carries the Alley River into the Mill Stream approximately 309m upstream of the outfall.

There are surface water capacity issues with the Mill Stream and existing surface water culverts which contribute to flooding in the area. Foul water in the Bantry area is conveyed via a combined sewer system to the Bantry Wastewater Treatment Plant (WWTP), which has a design capacity of 6,000 population equivalent (PE) and is situated on the northern side of Bantry Harbour. Sewage treatment discharge locations were gathered from EPA maps (2024). The primary discharge location for foul water is in Inner Bantry Bay, approx. 2.6 km west of the Mill Stream outflow into Bantry Harbour. A secondary outflow is at the junction of Glengarriff Road and Barrack Street, while emergency outflows are located on the Scart Rd south of the Harbour, at Reenrou East north of the Harbour, and in Bantry Harbour itself, near the WWTP.

In 2018 an Inlet Survey was carried out by MWP to determine the inlets to the culverts (MWP, 2018). The findings of the inlet survey recorded 132 inlets of varying size and condition. During the inlet survey, it was not possible to fully determine whether the inlets were a foul service, storm service or combined although the presence of faecal matter throughout the culvert was noted.

Significant access difficulties, close proximity of the culvert to buildings and absence of adjacent sewerage infrastructure at a number of locations in the town were also noted. To confirm their (inlets) source and the likely permanent infrastructure and temporary diversion works requirements, a detailed connectivity survey was recommended.

The survey was conducted in October 2020 and additional survey works were completed in June 2021. MWP prepared the Drainage Options Report for the Bantry Culverts Connectivity Survey in 2022. The report recommended the options for the Bantry Mill Culvert Upgrade Project (BMCUP).

The purpose of the BMCUP is to upgrade the existing Mill culvert within the town and remove the existing foul connections to the culvert and change these to discharge into an independent foul network. An overall plan view of the proposed development is provided on **Figure 3-2** below and typical cross sections are given on **Figure 3-3**.

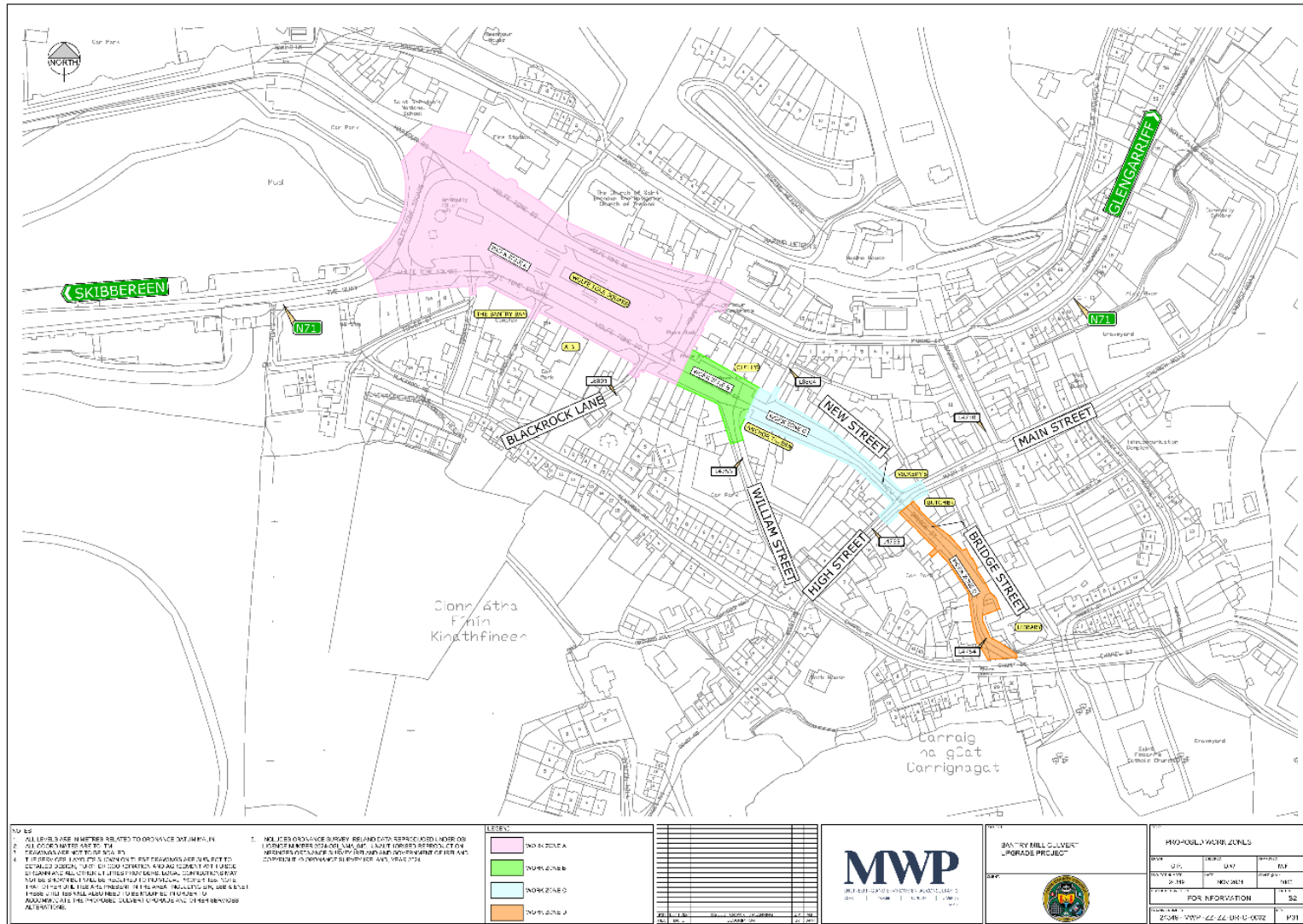


Figure 3-2: Overall plan of proposed culvert upgrade works

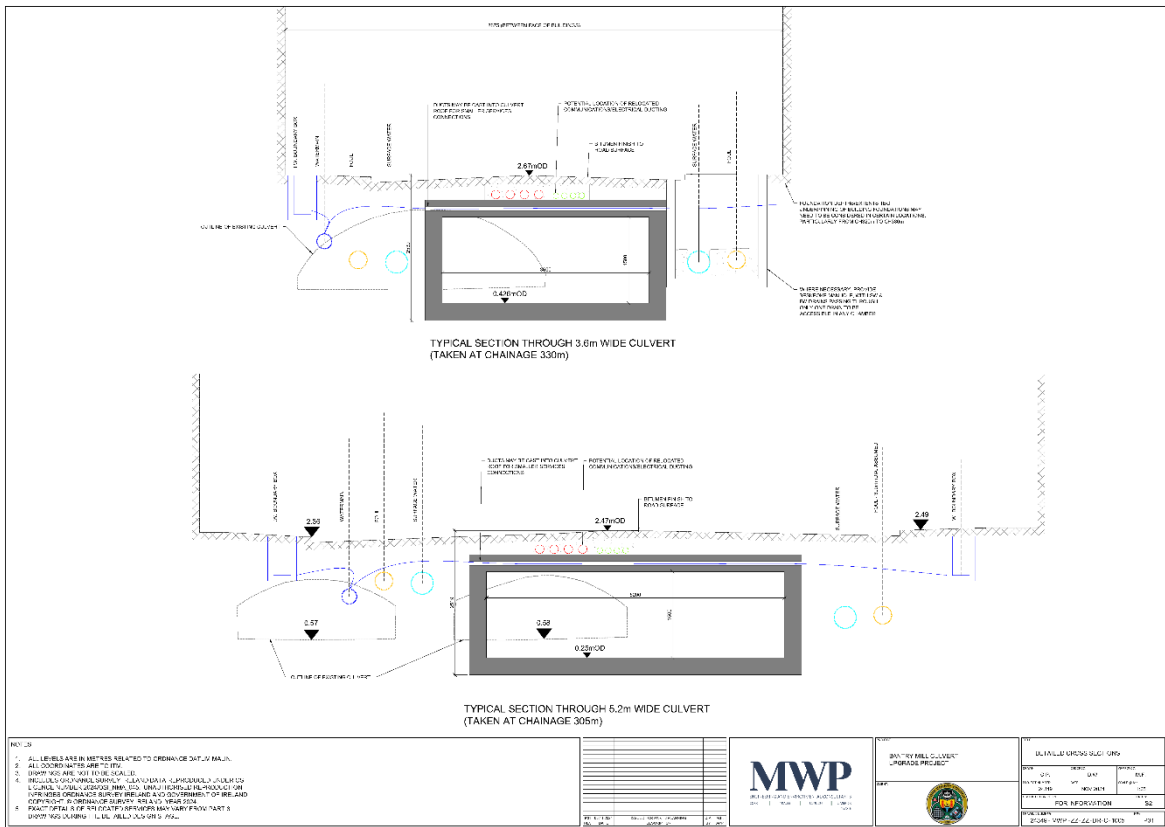


Figure 3-3: Typical cross-section of proposed works

3.2.2 Purpose of the Project

The purpose of the project is to upgrade the existing Mill Culvert within the town and remove the existing foul connections to the culvert and change these to discharge into an independent foul network.

3.2.3 Description of Existing Site

3.2.3.1 Desk study results

The proposed development is located near the mouth of the Mill Stream where the watercourse meets the estuary. The proposed development site is influenced by the tide, so flows and water levels vary considerably.

The Corine (2018) land cover categories for the development site comprise 'Continuous urban fabric' which moves to 'Sea and ocean' where the culvert outfalls to the marina. The marina itself is highly modified with an artificial wall bordering the entire marina with no pronounceable change in shore zonation between upper and lower shore zones. The WFD Status (2016 – 2021) of Inner Bantry Bay is 'High'.

3.2.4 Characteristics of the Project

The following table provides a summary of the characteristics of the project.

Size, scale, area, land-take	Reconstruction of a new Mill River Culvert along Bridge Street and New Street and Wolfe Tone Square and connection to the existing Mill River Culvert at
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	<p>chainage 80m. This includes: a new Mill River Culvert of internal dimensions 5.2m wide, 1.5m high which will be constructed from tie-in at Wolfe Tone Square, at Chainage 80m, to the Scart and Mill culvert overflow connection from William Street, at Chainage 242m.</p> <p>A new Mill River Culvert of internal dimensions 3.6m wide, 1.5m high which will be constructed from William St. junction at Chainage 242m to the Mill on Bridge Street at Chainage 452m.</p>
<p>Details of physical changes that will take place during the various stages of implementing the proposal</p>	<p>Including those changes noted above, the following will also be carried out:</p> <ul style="list-style-type: none"> • Road and footpath reinstatement works, • The removal and reconstruction of the central section of Wolfe Tone Square architectural feature will be required to facilitate the tie in of the new Mill River culvert; • Construction of new services and utilities including foul water drainage; • Surface water drainage, watermain infrastructure, electricity and communications will be required at Wolfe Tone Square, New Street, and Bridge Street; • The construction of two surface water pumping sumps in Wolfe Tone Square.
<p>Description of resource requirements for the construction/operation and decommissioning of the proposal (water resources, construction material, human presence etc.)</p>	<p>Mechanical machinery and electrical equipment typically used for construction projects will be required to facilitate the proposed development. The following is a non-exhaustive list of plant machinery that is typical of civil engineering works and may be used in this proposed development. The exact equipment to be used is not known at this stage, however the plant and machinery listed below are typical of equipment that are commonly used in construction projects of this nature and scale.</p> <ul style="list-style-type: none"> • Telescopic Handler • Mobile Crane • 15-30T Hydraulic Excavator • 12T Roller • Dump truck • Tractor & Trailer • 15-20T Rubber Tired Excavator • 3-10T mini digger • Generators – with acoustic shielding • Water pumps 100mm or 150mm with integral drip trays • Settling Tanks • Cement Mixers

	<ul style="list-style-type: none"> • Handheld drilling equipment for grout holes • Grout mixer and pump • Formwork • Hand tools • Surfacing Equipment <p>The following personnel will be required during the duration of the construction phase:</p> <ul style="list-style-type: none"> • 1 no. Project Manager • 1 no. Construction Manager • 1 no. Environmental Manager • Health and Safety Personnel • Construction Personnel
<p>Description of wastes arising and other residues (including quantities) and their disposal</p>	<p>The principal waste is the excavation material, which comprises of subsoils, rocks and tarmac, for the most part.</p>
<p>Identification of wastes arising and other residues (including quantities) that may be of particular concern in the context of the Natura 2000 network</p>	<p>Fine sediments may be released during excavations and general site works; however, these are likely to be most mobile in topsoil and subsoil layers above the culvert.</p>
<p>Description of any additional services required to implement the project or plan, their location and means of construction</p>	<p>N/A</p>

3.3 Identification of Other Projects or Plans or Activities

3.3.1 Plans

With regards to the potential for in-combination effects, the Cork County Development Plan was considered. The areas pertaining to the culvert location are zoned as ‘Town Centres/ Neighbourhood Centres’.

3.3.2 Permitted and Proposed Minor Developments

A search of Cork County Council’s online planning enquiry system for granted or on-going planning applications for the as undertaken in July 2024.

Table 1: List of granted and/or on-going planning applications within the vicinity of the proposed development site

Application No	Applicant	Location	Proposed Development	Decision	Status	Decision Date/Due Date
21205	DMCA Consultants Ltd.	Vickery’s Inn Complex, New Street Townlots, Bantry, Co. Cork	Construction of single-storey office building and all associated site works	Conditional	Finalised	20/5/2021
24217	Eugene Daly	Vickery’s Inn Complex, New Street, Bantry, Co. Cork	Demolition and reconstruction of existing unstable laneway boundary wall, construction of building to be used as a mixed market/food emporium and all associated site works	Conditional	Finalised	26/6/2024

3.3.3 EPA Licenced/Registered Facilities

A review of the EPA mapping tool determined that there are no IPPC, IPC or IEL³ facilities within the immediate vicinity of the subject site. The Port of Cork is a waste licence holder regarding the Bantry Inner Harbour Development (Registered Licence No. W0290-01). The only other EPA licence facility is the area is on Whiddy Island; Sunoco Bantry Bay Terminal Limited (Registered Licence P0419-01) located approximately 4km northwest of the nearest point to the proposed development area.

3.3.4 Potential for Significant In-combination Effects

It is considered unlikely that discharges to inner Bantry Bay could potentially interact synergistically with the proposed development to result in significant cumulative or in-combination effects when works are being done in the dry.

3.4 Identification of European Sites

3.4.1 European Sites outside the ZOI

With regards to the proposal, the works do not include any element that has the potential to significantly affect the conservation objectives for which certain European sites are designated. These European sites are outside the zone of potential impact influence of the proposal due to the absence of plausible impact pathways and/or the attenuating effect of the distance intervening. Therefore, it is objectively concluded that significant effects on the conservation objectives of these sites are not reasonably foreseeable as a result of the proposed

³ Integrated Pollution Control (IPC) Licence (formerly IPPC Licence), and Industrial Emissions Licence (IEL)

development. These sites, which are listed in **Table 2** below, along with their distance from the subject site and the rationale for exclusion, will not be considered further in this report.

Table 2: European Sites excluded from further assessment including rationale for exclusion

Designated Site	Proximity of Designated Site to Nearest Point of Subject Site	Rationale for Exclusion from Assessment
Caha Mountains SAC (Site code: 000093)	9.5km northwest of nearest point	<ul style="list-style-type: none"> - Designated for a number of freshwater aquatic habitats, terrestrial habitats, Kerry slug and Killarney Fern. - No spatial overlap with the proposed site - SAC is located in separate in separate river system with respect to the proposed development, the only pathway between the European site and the development site is across Bantry Bay. - Consequently, there is no hydrological connection or ecological connection between European site and proposed development site. - No plausible impact for significant effects to the SAC
Derryclogher (Knockboy) Bog SAC (Site code: 001873)	9.8km north	<ul style="list-style-type: none"> - Designated for blanket bogs - No spatial overlap with the proposed site - The SAC for which the bog habitat is designated is located in relatively upland area, there is no hydrological connection between SAC and proposed works area as all distributary channels from the bog drain ultimately to the Coomhola River which drains to coastal waters in northeast Bantry Bay. - No hydrological connection between European site and proposed development site. - No plausible impact for significant effects to the SAC
Dunbeacon Shingle SAC (Site code: 002280)	11km southwest	<ul style="list-style-type: none"> - Designated for perennial vegetation of stony banks - No potential for habitats designated for this site to perceive effect as a result of the proposed works - No spatial overlap with the proposed site - European site is located in the inner reaches of Dunmanus Bay, separated from the proposed development site at Bantry Bay by Sheep's Head peninsula and significant intervening body of water - Consequently, there is no plausible pathway for significant effects to arise.
Sheeps Head SAC (Site code: 000102)	11.5km southwest	<ul style="list-style-type: none"> - Designated for two heath habitats and Kerry slug. - No spatial overlap with the proposed site. - Due to the coastal location of the proposed works in relation to the European site, as well as the intervening distance, there is no likely pathway for significant effects to arise which may affect Qualifying Interests for which this site is designated.
Reen Point Shingle SAC (Site code: 002281)	13.5km southwest	<ul style="list-style-type: none"> - Designated for perennial vegetation of stony banks. - No spatial overlap with the proposed site. - European site is located in the inner reaches of

Designated Site	Proximity of Designated Site to Nearest Point of Subject Site	Rationale for Exclusion from Assessment
		<p>Dunmanus Bay, separated from the proposed development site at Bantry Bay by Sheep’s Head peninsula and significant intervening body of water.</p> <ul style="list-style-type: none"> - No plausible impact for significant effects to the SAC.
Roaringwater Bay and Islands SAC (Site code: 000101)	14km south	<ul style="list-style-type: none"> - Designated for a number of coastal and marine habitats, dry heath habitat, harbour porpoise, grey seal, and otter - No spatial overlap with the proposed site - The site is located in separate subcatchment and catchment area than the proposed development area - Site is located beyond the limit for otter (6.5km)
Sheep’s Head to Toe Head SPA (Site code: 004156)	21.7km southwest	<ul style="list-style-type: none"> - Designated for peregrine falcon and chough - No spatial overlap with site - Proposed development site and environs does not contain or represent suitable habitat located within the proposed development to support either bird species for which this site is designated
Beara Peninsula SPA (Site code: 004155)	25.8km west	<ul style="list-style-type: none"> - Designated for fulmar and chough - No spatial overlap with the proposed site - Neither species were observed during site visits - Species are coastal marine bird species which forage within usual cliff habitats or other man-made sites with elevation (as is the case with chough) - Habitat is not typical of that utilised by either species - Consequently, there is limited potential for significant effects to occur as a result of the proposed development

3.4.2 European Sites within the ZOI

Identifying the European sites that may be affected takes into consideration all aspects of the project that could have potential effects on any European sites located within the ZOI of the proposed development. This takes into account all of the designating features (species, habitat types) that are significantly present on the sites and their conservation objectives.

Designated SACs and SPAs within the potential likely zone of impact of the proposal, including their proximity are shown in **Table 3** below. The locations of these designated sites in relation to the subject site was considered and their locations are shown on a map in **Figure 3-4** below.

Table 2. European Sites within the ZOI of the proposal

Designated Site	Site Code	Proximity of Designated Site to Nearest Point of Subject Site	Hydrological/Ecological Connection? (Yes/No)
Glengarriff Harbour and Woodland SAC (Site code: 000090)	7.5km	<ul style="list-style-type: none"> - Designated for woodland habitats, Kerry slug, lesser horseshoe bat, otter, and harbour seal. - No spatial overlap with the proposal site - Proposal site located outside the maximum foraging 	<p>Limited hydrological connection,</p> <p>Limited ecological connection</p>

Designated Site	Site Code	Proximity of Designated Site to Nearest Point of Subject Site	Hydrological/Ecological Connection? (Yes/No)
		range of lesser horseshoe bat (c.6 km) (BCI, 2012) - Proposal site located outside the typical range for otters (typically 1-4km) when location context is considered - Harbour seal may occur within the immediate aquatic environment of the inner harbour area where they may forage for prey species fish, therefore further examination may be required where indirect effects may occur - Further examination of effects to SAC required	

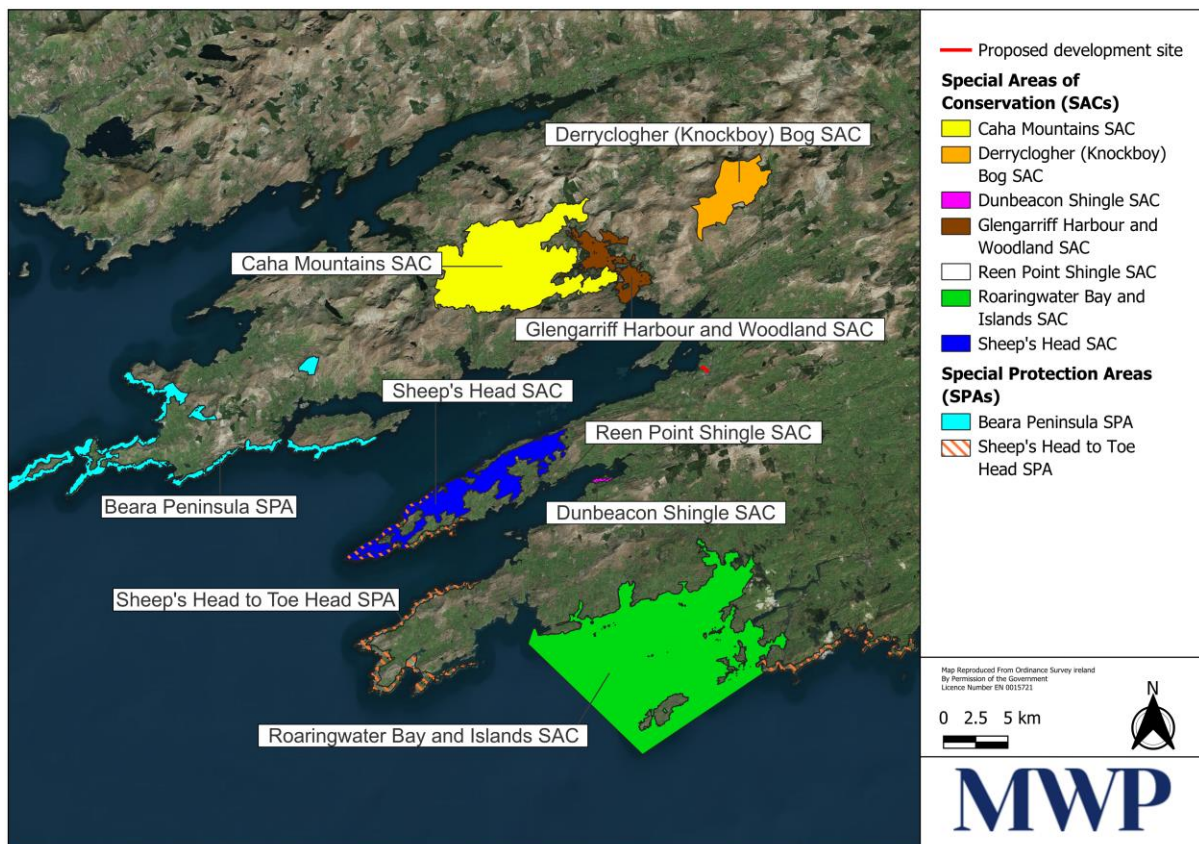


Figure 3-4: European sites considered.

3.4.2.1 Conservation Objectives

According to the Habitats Directive, the *conservation status of a natural habitat* will be taken as ‘favourable’ within its biogeographic range when:

- its natural range and areas it covers within that range are stable or increasing, and
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable as defined below.

According to the Habitats Directive, the conservation status of a species means the sum of the influences acting on the species concerned that may affect the long-term distribution and abundance of its populations. The conservation status will be taken as 'favourable' within its biogeographical range when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

The conservation objectives for each individual site listed in the tables above are available on www.npws.ie. These have been accessed on the 3rd of July 2024. Management plans are not currently available for any of the designated sites.

Site-specific conservation objectives were available for the following sites:

- Glengarriff Harbour and Woodland SAC (000090). Produced May 2015

3.4.2.2 Characteristics of European Sites

The following table (**Table 3**) details the qualifying features of conservation interest for the European sites identified in the previous table. Information pertaining to the European sites is from site synopses, conservation objectives and other information available on www.npws.ie.

Table 3: Qualifying features of designated sites in the ZOI

Designated Site	Site Code	Qualifying features
Glengarriff Harbour and Woodland SAC	000090	<ul style="list-style-type: none"> - Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0] - Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) [91E0] - Kerry Slug (<i>Geomalacus maculosus</i>) [1024] - Lesser Horseshoe Bat (<i>Rhinolophus hipposideros</i>) [1303] - Otter (<i>Lutra lutra</i>) [1355] - Harbour Seal (<i>Phoca vitulina</i>) [1365]

3.4.2.3 Threats and Pressures

3.4.2.3.1 Glengarriff Harbour and Woodland SAC

The most important pressures and activities with effect on the Glengarriff Harbour and Woodland SAC are outlined in the sites Natura 2000 Standard data form. These include 'High', 'Medium', and 'Low' ranking threats, as listed in **Table 4**. The main threats to the site, ranked as high is from invasive non-native species. Medium threats are limited to forestry clearance outside the site whilst lesser threats include invasion by non-native species, silviculture, forestry and removal of beach materials.

Table 4: Impacts and activities with high effect on the Glengarriff Harbour and Woodland SAC (Adapted from the Natura 2000 Standard Data Form)

Rank	Threats and pressures Description	inside/outside/both [i o b]
High	Invasive non-native species	b
Medium	Forestry clearance	o
Low	Walking, horseriding and non-motorised vehicles	i
	Dispersed habitation	b
	Tree surgery, felling for public safety, removal of roadside trees	i
	Grazing in forests/ woodland	i
	Fishing and harvesting aquatic resources	i
	Burning down	i
	Suspension culture	i
	Pollution to surface waters (limni, terrestrial, marine & brackish)	b
	Nautical sports	l
	Non-intensive grazing	B
Piers/ tourists harbours or recreational piers	i	

3.5 Identification of Potential Impacts and Effects

Potential likely direct, indirect or secondary ecological impacts arising from the proposed development (either alone or in combination with other plans or projects) are identified in this section.

Table 5. Description of elements of the project likely to give rise to potential ecological impacts

Construction Phase
<ul style="list-style-type: none"> Elevated Suspended Solids to coastal waters during construction. Machinery: The presence and sustained use of heavy machinery on site, albeit at variable rates, during daylight hours for the duration of the works. Human presence: Sustained increase in human activity, albeit at variable rates and numbers, during daylight hours for the duration of the works. Use of fuels/oils/lubricants, concrete and other such substances considered harmful to the aquatic environment increased noise and air emissions associated with construction activity.
Operation phase
<ul style="list-style-type: none"> None

Table 6. Direct, indirect or secondary ecological impacts of the construction, operational and decommissioning phases (either alone or in combination with other plans or projects) which have the potential for having significant effects

<p><i>Describe any likely direct, indirect or secondary ecological impacts of the project (either alone or in combination with other plans or projects) by virtue of:</i></p> <ul style="list-style-type: none"> Size and scale; Land-take; Distance from European Site or key features of the Site; Resource requirements; Emissions; Excavation requirements; 	<ul style="list-style-type: none"> There is no overlap between the subject site and any European site. Potential for water quality impacts through increased suspended solids from construction and ingress of fuels/oils to the waters of Bantry Bay. Potential for indirect species disturbance/displacement due to in-situ or ex-situ habitat loss/alteration impacts, impairment of water quality and/or impacts on prey availability. Potential for direct species disturbance/displacement impacts due to construction activity including fugitive noise emissions from machinery, human activity.
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- | | |
|---|--|
| <ul style="list-style-type: none">• <i>Transportation requirements;</i>• <i>Duration of construction, operation etc.; and Other.</i> | |
|---|--|

3.6 Assessment of Significance of Potential Impacts

This section considers the list of sites identified in **Section 3.4.2** above, together with the potential ecological impacts identified in the previous section and determines whether the project is likely to have significant effects on a European site. An evaluation based on the S-P-R model to determine which European sites are the plausible ecological receptors for potential impacts of the proposed development will be conducted in **Sections 3.6.1** to **3.6.5** below. The evaluation takes cognisance of the scope, scale, nature and size of the project, its location relative to the European sites listed in **Table 3** above, and the degree of connectedness that exists between the project and the European site's potential ecological receptors.

The likelihood of significant effects from the project to the European site identified above was determined based on several indicators including:

- Water quality
- Habitat loss and/or alteration
- Habitat or species fragmentation
- Disturbance and/or displacement of species

The likelihood of significant in-combination effects is assessed in **Section 3.6.5**.

3.6.1 Water Quality

Construction activities have the potential to release suspended solids and pollutants into the Mill Stream, which could impact negatively on water quality in the river course and immediate receiving coastal waters downstream of the proposed development site.

With regard to the potential for any unlikely immediate impacts in the event of any sediment and/or pollutants (e.g. hydrocarbons) being released into the river course, suspended sediments will settle upon entry to the relatively slow flowing coastal waterbody whilst any substance will be subjected to a pronounced dilution effect upon entry to larger coastal waters such as Bantry Bay.

However, as part of standard measures for works of this nature, all the proposed repair and construction works will be undertaken in the dry of the river, whereby the immediate works areas will be dammed thus removing any potential pathway for any fuel, concrete, and/or sediment runoff associated with the construction phase to enter riverine and/or coastal waters.

Consequently, in light of the standard measures and intervening distance between the proposed works site and the European site, the proposed project will not result in negative water quality impacts within the Glengarriff Harbour and Woodland SAC.

3.6.2 Habitat Loss and/or Alteration

The proposed works area is not located within the Glengarriff Harbour and Woodland SAC. There is no direct or indirect loss of habitat from the European site as a result of the proposed works undertaken and there is no potential for significant habitat loss effects.

3.6.3 Disturbance and/or Displacement of Species

Nursery and spawning areas for common fish species are located throughout inner Bantry Bay and extend westwards to coastal waters. These areas provide ample feeding opportunities for harbour seal which prey opportunistically on fish species present. Mapping of the fisheries in the environs of the inner bay area highlight large areas of both mackerel nursery ground and cod nursery ground located in waters within the Glengarriff Harbour and Woodland SAC with this area extending over the near entirety of Bantry Bay, extending to waters east of Whiddy Island on approach to the marina area at Bantry (see **Figure 3-5**). Waters west of Whiddy Island hold spawning and nursery grounds for both Atlantic Herring and Whiting which are also preyed on by harbour seal.

Due to the location of the proposed development site within Bantry marina and town area, there is no risk of restriction of the species by artificial means in light of the SAC’s conservation objective for harbour seal regarding its access to suitable habitat. Furthermore, due to the location of the proposed works, the intervening distance, and presence of nursery and spawning grounds for prey species within the SAC, it is considered unlikely for significant effects to occur which may result in the deterioration of key resources including prey availability for the designated species.

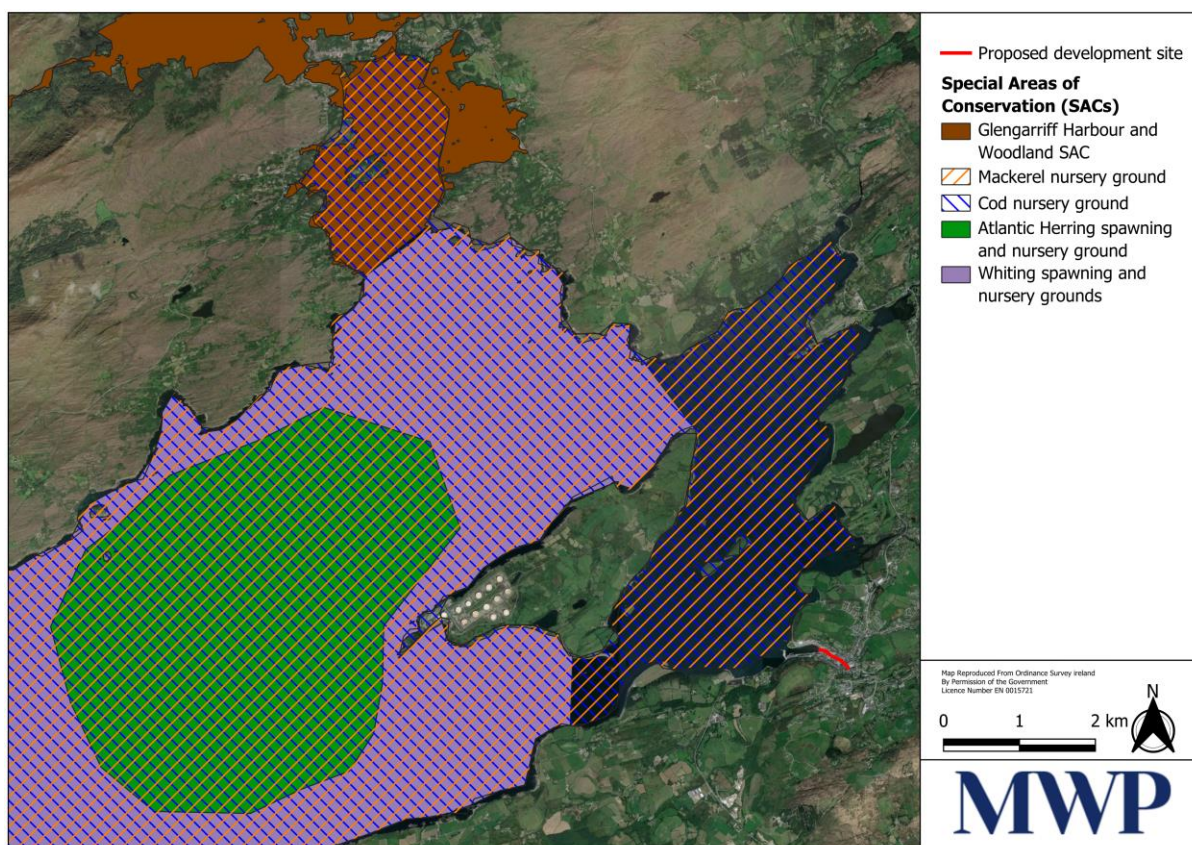


Figure 3-5: Fish species' spawning and nursery areas, Inner Bantry Bay

Harbour seal habitat is considered to cover the entire aquatic area and some rocky islets located within the Glengarriff Harbour and Woodland SAC, see **Figure 3-6**. Breeding, moulting and resting sites within the harbour are relatively focussed in the western areas of the SAC, highlighting the importance of these relatively sheltered shores. As these sites are located entirely within the SAC and in consideration of the proposed works, there is no likelihood for significant effects considered to occur which may impact the breeding, moulting or resting sites for the species.

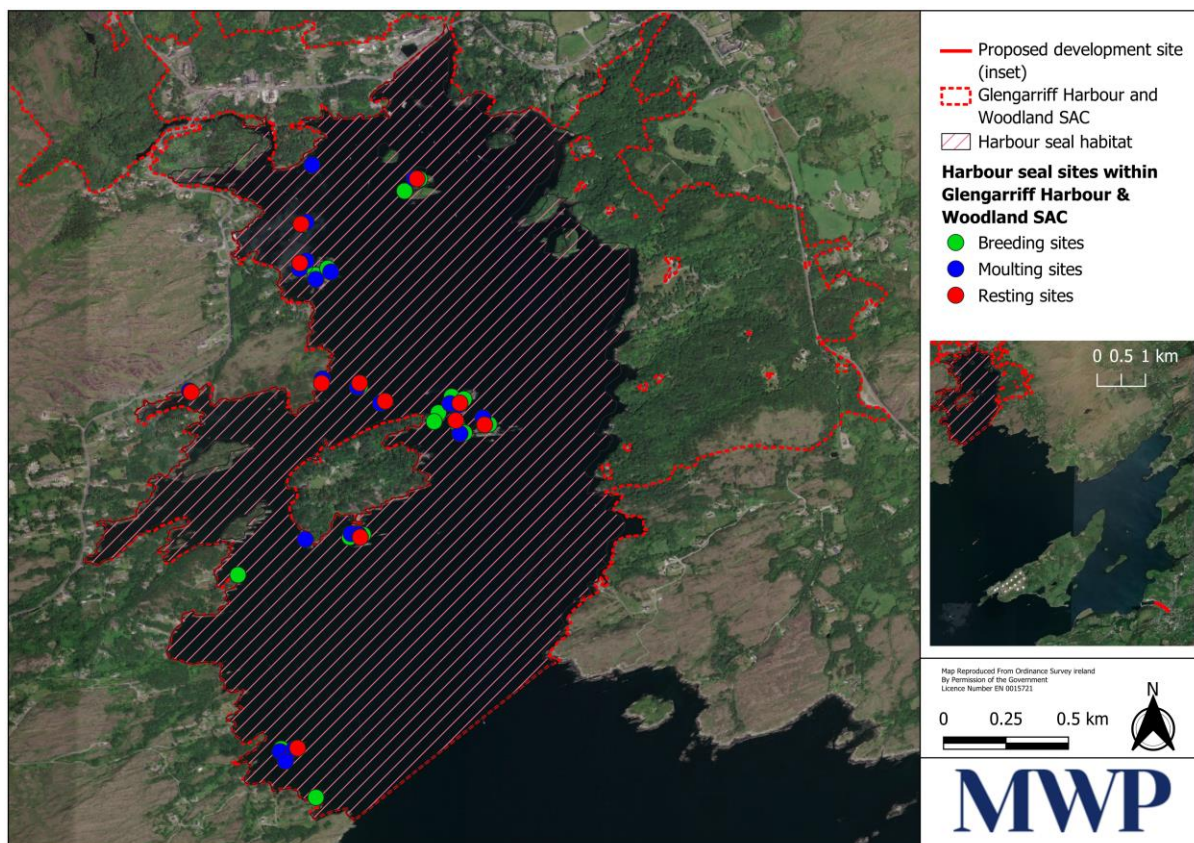


Figure 3-6: Harbour seal habitat and sites within Glengarriff Harbour and Woodland SAC

Consequently, there is no likelihood for significant disturbance and/or displacement effects of harbour seal designated for the Glengarriff Harbour and Woodland SAC in light of the site’s conservation objectives.

3.6.4 Habitat or Species Fragmentation

Habitat fragmentation has been defined as ‘reduction and isolation of patches of natural environment’ (Hall, *et al.*, 1997) cited in (Franklin, *et al.*, 2002) which results in spatial separation of habitat areas which had previously been in a state of greater continuity. Adverse effects of habitat fragmentation on species include the increased isolation of populations which can detrimentally impact on the resilience or robustness of the populations.

The proposed works are located within the inner reaches of the marina at Bantry in the southeast of the bay and therefore due to its location in relation to the location of the Glengarriff Harbour and Woodland SAC in the north of the bay, habitat fragmentation is not considered likely to occur as a result of the proposed works.

3.6.5 In-Combination Effects

Cumulative impact arises from incremental changes caused by other past, present or reasonably foreseeable actions together with the proposed rehabilitation works. There are no activities that could act in combination with the proposal to affect water quality in the Glengarriff Harbour and Woodland SAC. With regard to those identified in **Section 3.3**, above, it is considered that their individual compliances with licence requirements will preclude the possibility of significant adverse cumulative impacts ensuing from them.

No in-combination effects are considered likely to occur as a result of the proposed works acting in-combination with other activities in the vicinity of the proposed works which may lead to likely significant effects to the Glengarriff Harbour and Woodland SAC.

3.7 Conclusion of Screening Stage

The screening for AA is undertaken to determine the potential for likely significant effects of a project, individually, or in combination with other plans or projects, in view of the conservation objectives of the site, on a European site or sites. It has been objectively concluded that the Glengarriff Harbour and Woodland SAC site and any other European site identified in **Section 3.4** are not likely to be significantly affected by the proposal, individually or in-combination with other plans or projects and can therefore be screened out for appropriate assessment.

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Appendix 1

Stages of Appropriate Assessment

Stage 1 - Screening

This is the first stage of the AA process and that undertaken to determine the likelihood of significant impacts as a result of a proposed project or plan. It determines the need for a full Appropriate Assessment.

If it can be concluded that no significant impacts to European sites are likely then the assessment can stop here. If not, it must proceed to Stage 2 for furthermore detailed assessment.

Stage 2 - Natura Impact Statement (NIS)

The second stage of the AA process assesses the impact of the proposal (either alone or in combination with other projects or plans) on the integrity of the European Site with respect to the conservation objectives of the site and its ecological structure and function. This is a much more detailed assessment than Stage 1. A Natura Impact Statement containing a professional scientific examination of the proposal is required and includes any mitigation measure to avoid, reduce or offset negative impacts.

If the outcome of Stage 2 is negative i.e. adverse impacts to the sites cannot be scientifically ruled out, despite mitigation, the plan or project should proceed to Stage 3 or be abandoned.

Stage 3 - Assessment of alternative solutions

A detailed assessment must be undertaken to determine whether alternative ways of achieving the objective of the project/plan exists.

Where no alternatives exist the project/plan must proceed to Stage 4.

Stage 4 - Assessment where no alternative solutions exist and where adverse impacts remain

The final stage is the main derogation process examining whether there are imperative reasons of overriding public interest (IROPI) for allowing a plan or project to adversely affect a European Site where no less damaging solution exists.