



Cork
City Council
Comhairle Cathrach Chorcaí

Kilcully Pedestrian Safety Scheme

Report to Inform Screening of Appropriate Assessment

October 2022

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Assessment

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1 Introduction

1.1 Overview

Mott MacDonald Ireland Limited has been appointed by Cork City Council to provide consultancy services for Kilcully Pedestrian Safety Scheme in Kilcully, County Cork.

The project is located on the northside of Cork city. The scheme comprises of a section of the L2962 Kilcully Road extending east from St. Catherine's Graveyard, along the L2962 to the junction with the L2958 Upper Dublin Hill Road, continuing north, before terminating at the Anname Bridge (Bridge No. CB-L2958-B-000).

The primary objective of the scheme is to improve pedestrian safety by enhancing pedestrian infrastructure within the study area.

The works are required to provide:

- Safe movement of pedestrians through the area
- Access to local services and amenities

1.2 Requirement for Appropriate Assessment

Article 6 of the Habitats Directive (92/43/EEC) requires that where a plan or project is likely to have a significant effect on a European site, while not directly connected with or necessary to the nature conservation management of the site, it will be subject to 'Appropriate Assessment' to identify any implications for the European site in view of the site's Conservation Objectives. Specifically, Article 6(3) of the Habitats Directive states:

"Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public".

Regulation 42 of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 437 of 2011) (as amended) transposes Article 6 of the Habitats Directive into Irish law. The regulations require that before consent for a project is given, a screening for Appropriate Assessment of a project must be carried out by the public authority to assess, in view of best scientific knowledge and in view of the conservation objectives of the site, if that project, individually or in combination with other plans or projects is likely to have a significant effect on the European site.

The Project is not associated with the 'management' of a European Site having regard to Article 6 of the Habitats Directive. Therefore, the Project is not directly connected with or necessary to the management of any European Site and must undergo screening for Appropriate Assessment in accordance with Regulation 42(1) of the European Communities (Birds and Natural Habitats) Regulations 2011.

This report has been prepared by Mott MacDonald on behalf of the Cork City Council to inform the screening determination of the Competent Authority required under Regulation 42 of the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended).

This report has been prepared in accordance with the following European Commission Guidance:

- EC (2018) Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC Commission Notice C (2018) 7621
- EC (2001) 'Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC'
- DEHLG (2009) Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities (Revised 2010)

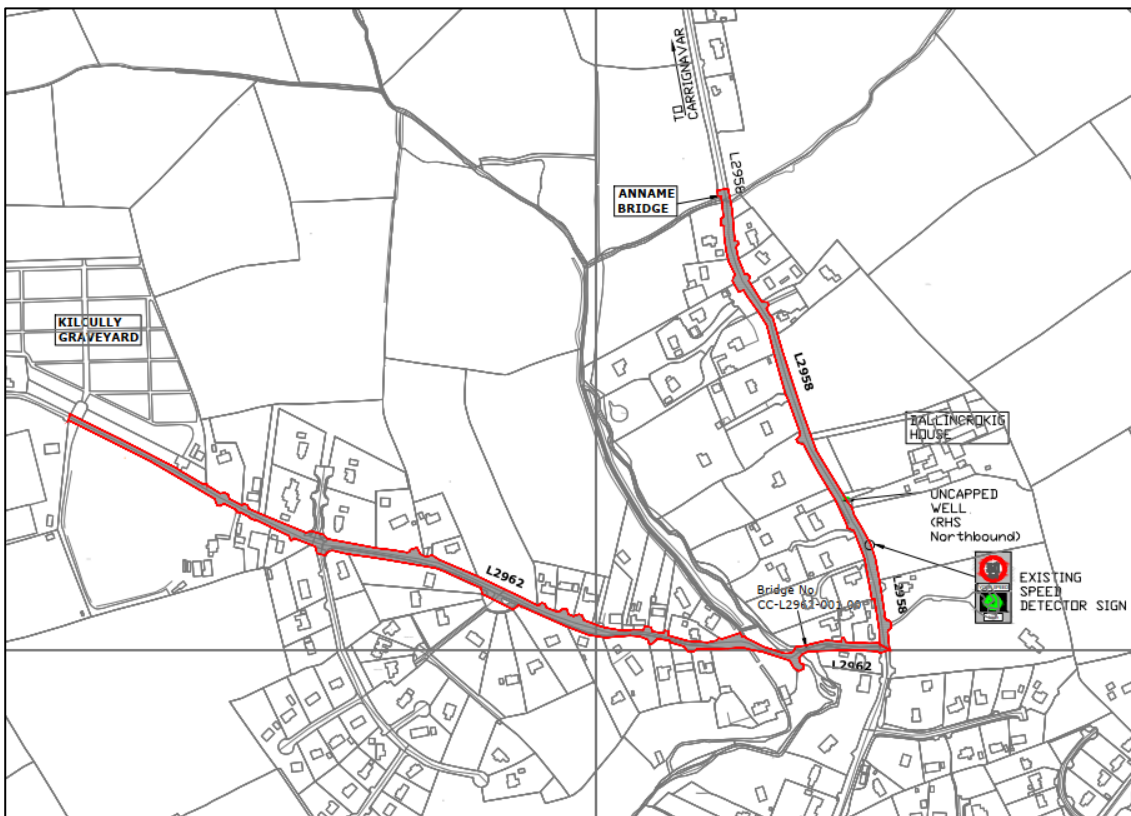
This report has similarly been prepared with regard to relevant rulings by the Court of Justice of the European Union (CJEU), the High Court, and the Supreme Court.

2 Project Description

2.1 Location

The project is located on the northside of Cork City. The scheme comprises of a section of the L2962 Kilcully Road extending east from St. Catherine's Graveyard, Kilcully, along the L2962 to the junction with the L2958 Upper Dublin Hill Road, continuing north, before terminating at Anname Bridge (Bridge No. CB-L2958-B-000).

Figure 2.1: Project Boundary



2.2 Baseline Description

A site walkover was carried out by Mott MacDonald Ecologist Dr Erin Johnston on the 6th of September 2021. Habitats within the footprint of the works are described hereunder and classified as per Fossitt (2000).

The survey area in Kilcully is comprised of the existing hardstanding road surface (BL3), with non-native hedges (BC4), bordered by treelines (WL2), hedgerows (WL1), with strips of grassy verges (GS2) and amenity grassland (GA2). Two water crossings were encountered, the River Glennamought, and a smaller unnamed tributary which feeds into the River Glennamought. The River Glennamought was also bordered by strips of broadleaved woodland (WD1).

Treelines were recorded in a number of locations along the scheme (Figure 2.2). Species recorded in the treelines included sycamore (*Acer pseudoplatanus*), ash (*Fraxinus excelsior*), beech (*Fagus sylvatica*), hawthorn (*Crataegus monogyna*), Eucalyptus (*Eucalyptus spp.*), bramble (*Rubus fruticosus*), nettles (*Urtica dioica*), ivy (*Hedera helix*), snowberry (*Symphoricarpos albus*) and bracken (*Pteridium aquilinum*).

Figure 2.2: Treeline Recorded Along the Scheme



Hedgerows were typically managed (Figure 2.3). Species recorded in the treelines included ash, hawthorn, bracken, pheasant berry (*Leycesteria Formosa*), meadowsweet (*Fillipendula ulmaria*), redshank (*Symphoricarpos albus*), montbretia (*Crocsmia x crocosmiiflora*), bindweed (*Calystegia sepium*), willowherb (*Epilobium hirsutum*), creeping bent grass (*Agrostis stolonifera*), bramble, creeping buttercup (*Ranunculus repens*), Hart's tongue fern (*Asplenium scolopendrium*), herb Robert (*Geranium robertianum*) and ivy.

Figure 2.3: Hedgerow and Non-native Border within the Study Area



Strips of dry meadows and grassy verges were recorded bordering the roadway (Figure 2.4). Species recorded within this habitat included Cock's foot grass (*Dactylis glomerata*), Yorkshire fog (*Holcus lanatus*), broad dock (*Rumex obtusifolius*), spear thistle (*Cirsium vulgare*), white clover (*Trifolium repens*), ragweed (*Jacobaea vulgaris*) and nettles.

Figure 2.4: Dry Meadows and Grassy Verges



A crossing of the River Glennamought (Figure 2.5) was recorded at the southern extent of the survey area. The river (FW2) was bordered by strips of broadleaf woodland (WD1). Species recorded along within the woodland included sycamore (*Acer pseudoplatanus*), alder (*Alnus glutinosa*), ash, yellow archangel (*Lamium galeobdolon*), nettle, ivy, purple loosestrife (*Lythrum salicaria*), tutsan (*Hypericum androsaemum*), bramble, bindweed, redshank. A small stand of Japanese knotweed (*Fallopia japonica*) was recorded along the bank of the river, on the downstream side. The bridge arch appeared to be comprised of steel beams.

Figure 2.5: River Glennamought Crossing



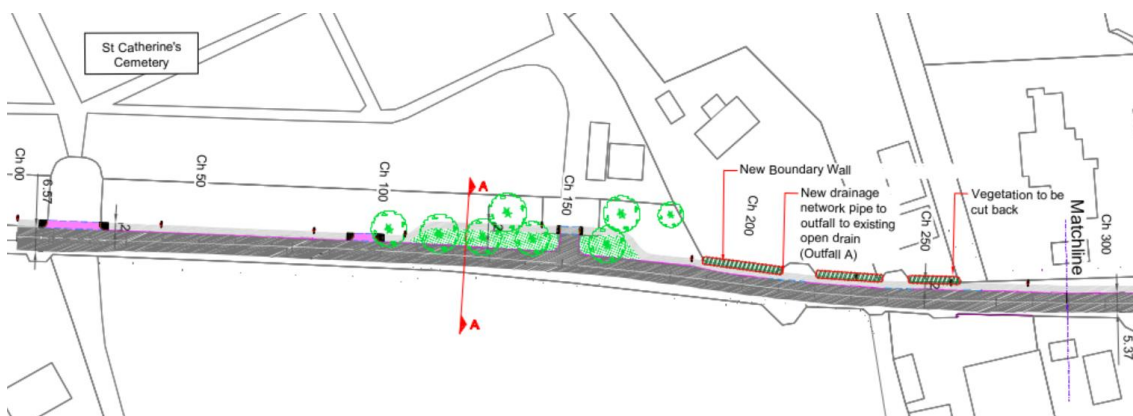
A second crossing of a tributary of the River Glennamought was encountered on the north eastern end of the scheme. This crossing was a small culvert, and the watercourse was a highly modified drainage ditch which formed part of a field boundary.

2.3 Works Description

The proposed works will comprise of the following (refer to Figure 2.6 and Figure 2.7):

1. New 2m wide concrete footpath, totalling a length of approximately 1550m
2. Upgrading of existing concrete footpath to provide a width of 2m, totalling a length of approximately 50m
3. 1No. pedestrian bridge crossing the Glennamought River adjacent to Bridge CC-L2962-B-000
4. 1No. Raised Pedestrian Crossing and reduction in junction radii to 6m;
5. 43No. new public lighting columns;
6. Improved drainage infrastructure comprising approximately 1100m of surface water drains ranging from 225mm to 450mm diameter, a series of roadside drainage gullies adjacent to the new footway, upgrade and formalisation of 3 no. drainage outfalls (A, B1 & B2) and maintenance of 1 no. existing over-the-edge drainage outfall (C);
7. Service diversions to facilitate the improvement works; and
8. All associated works to facilitate the development.

Figure 2.6: Layout of Proposed Development (chainage 0-300m)

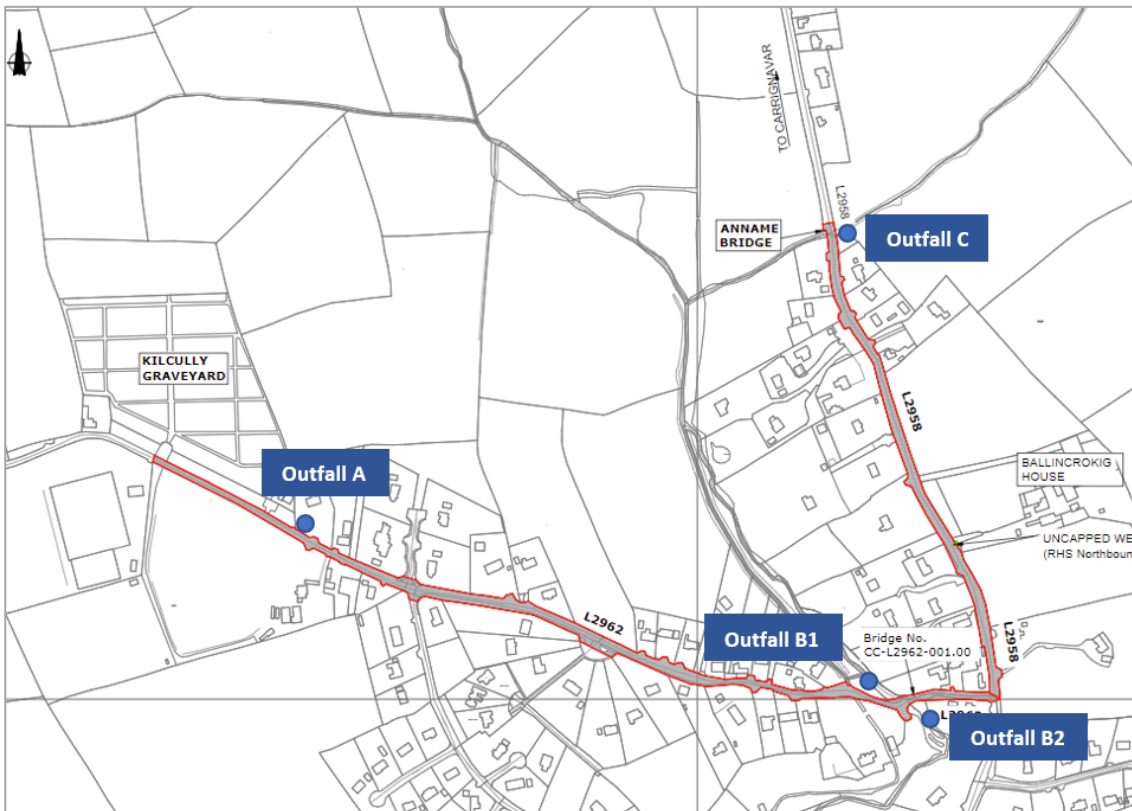


Source: Mott MacDonald Drawing 229101013-MMD-XX-DR-C-0009

Due to the scale of the work to be undertaken a designated construction compound is not envisaged. It is expected that through negotiated temporary parking and storage of a small amount of materials will be agreed with a local farmer/landowner. It is expected that material will be ordered and used as required and large stock piling will not be necessary.

As there will be an increase in hardstanding surface area there is a need for increased capacity in the existing drainage system. The topography of the proposed development is such that there are four discharge points for surface water drainage (refer to Figure 2.7).

Figure 2.7: Discharge Points



Source: Mott MacDonald

The proposed development incorporates new surface water drainage within the public road boundary to ensure the efficient removal of surface water run-off from the new footway and adjacent road carriageway. The drainage design has been prepared in accordance with best practice standards listed below and within the constraints of the existing site;

- TII Publications for Drainage
- Design Manual for Urban Roads and Streets (DMURS) Government of Ireland, 2019
- CIRIA Guidance Document C753: The SuDS Manual, 2015

A total of approximately 1100m of surface water drains ranging from 225mm to 450mm diameter will be laid within the site extents to formalise the existing drainage system. Run-off will be conveyed to the piped network through a series of roadside gullies situated adjacent to the new footway.

The new drainage network will outfall at 4 no. locations as follows;

- Outfall A: New drainage pipe to existing open drain at approximate Chainage 0+210
- Outfall B1: New drainage pipe with precast concrete headwall to the Glennamought River (upstream of Bridge CB-L2962-B-000) via an open ditch lined with irregular stones to provide flow and erosion control at approximate Chainage 0+885 (in place of existing drainage openings within the existing bridge parapet)
- Outfall B2: Upsized drainage pipe with new precast concrete headwall to the Glennamought River (downstream of Bridge CB-L2962-B-000) at approximate Chainage 0+930
- Outfall C: Existing over-the-edge/verge outfall to be maintained at approximate Chainage 1+600

The location of the drainage outfalls associated with the works are presented in Figure 2.7. Refer to drawings 229101013-MMD-0000-XX-DR-C-0013 & 0014 for further details.

2.3.1 Construction Phase Activities

The majority of the works area is located within the existing roadway. However, additional land-take outside of these hardstanding areas will be required to cater for the works. The following will therefore be required to facilitate the works:

- Vegetation clearance including the removal of trees along the route and bankside vegetation
- Breaking out of hardstanding surfaces
- Excavation and disposal of material from within the footprint of the works
- Pumping out of excavations should ground water levels be high
- Pouring of concrete
- Resurfacing of tarmac

This has potential to result in the following impacts:

- Surface water emissions
- Dust emissions
- Increased noise levels
- Accidental spread of Japanese knotweed
- Increased light levels during the works.

2.3.2 Operational Phase Activities

The proposed works comprise safety upgrades to the existing road. There will be no change of use, or increase in traffic, associated with these works.

Additional utilities including drainage will be included as part of these works. Discharge points will be located as they are currently, albeit with alterations as outlined previously relating to increased capacity, and headwalls. No additional outfalls to any surface water features will be added as part of these works.

New lighting will be installed along the route. This has potential to result in increased lighting levels along the proposed scheme.

2.4 Zone of Impact of the Works

Projects have the potential to impact on European sites beyond the footprint of the project itself. National Guidance¹ states that screening for Appropriate Assessment should be carried out for any European Site within the likely 'Zone of Influence' of a plan or project. For projects, the guidance recommends that the Zone of Influence (Zoi) must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, the sensitivities of the ecological receptors, and the potential for in combination effects.

In order to establish the Zoi of the proposed development, nationally available data on protected habitats and species was mapped using Geographic Information System (GIS). The potential environmental effects of the Proposed development are set out in Section 3. The zone of impact for each is outlined below.

The activities discussed hereunder are included as typical activities undertaken on similar construction sites. This report is being undertaken at feasibility stage. As such, these activities

¹ Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities, Department of the Environment, Heritage and Local Government, 2009

and the Zones of Impact calculated below may be subject to change dependant on the chosen option, the detailed design, the results of any site investigation works, and the ultimate construction sequencing.

Surface water run-off

There is the potential for surface water emissions to be generated during the construction phase of the works. As outlined previously the outfalls from existing drainage for outfalls B1, B2, and C are to the River Glennamought. It is not clear where the stream that outfall A discharges to ultimately leads, however given the lack of any other watercourses in the vicinity it is assumed it also discharges to the River Glennamought.

The Zol of surface water run-off is taken as being catchment wide.

Dust

The proposed works have the potential to cause dust. The proposed construction works are likely to result in the temporary generation of dust. The Institute of Air Quality Management *Guidance on the Assessment of the Impacts of Construction on Air Quality and the Determination of their Significance* (2014) prescribes potential dust emission risk classes to ecological receptors. The guidance specifies that the need for a detailed assessment arises “where there is an ‘ecological receptor’ within 50m of the works, or within 50m of the route(s) used by construction vehicles on the public highway, up to 500m from the site entrance” and that “Where the need for a more detailed assessment is screened out, it can be concluded that the level of risk is “negligible”, and any effects will not be significant”.

The Zol is, therefore, taken as 50m from the works and 500m along existing roadways from the works area.

Noise

There is potential for a temporary increase in noise during the construction of the proposed works. The zone of impact for noise will be dependent on the species being impacted. The British Standard 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites. Noise guidance prescribes typical noise level data for various construction plant and activities within 10m of the various sources. The inverse square law can be applied to determine likely noise levels at varying distances from the proposed works area. An estimate of the noise levels anticipated during the construction phase is presented below in Table 2.1

Table 2.1: Noise Levels dB(A), at Various Distances from Construction Activities

Plant Item	10m	100m	150m	200m	250m	300	350
Pneumatic breaker	95	72	68	64	62	60	58
Compactor rammer	91	68	64	60	58	56	54
Tracked excavator	85	62	58	54	52	50	48
Earthworks (Dozer)	81	58	54	50	48	46	44
Dump truck (empty)	88	65	61	57	55	53	51
Road planer	82	59	55	51	49	47	45
Asphalt paver (and tipper lorry)	84	61	57	53	51	49	47
Spreading chipping/fill (dozer)	82	59	55	51	49	47	45
Trenching	77	54	50	46	44	42	40
Vibratory roller	84	61	57	53	51	49	47
Handheld circular saw	87	64	60	56	54	52	50
Mobile crane	70	47	43	39	37	35	33

Plant Item	10m	100m	150m	200m	250m	300	350
Hydraulic hammer rig	89	66	62	58	56	54	52
Pumping water	65	42	38	34	32	30	28
All Above		76	71	68	66	64	62

Light Levels

There is potential for locally increased light levels associated with the works during both the construction and operational phases of the works. The lighting plan for the scheme will be fully determined at detailed design stage. As such, having regard to the precautionary principle the Zol for increased lighting levels is taken as 100m from the project boundary.

2.5 Source-Pathway-Receptor Connectivity to European Sites

Having regard to the Zone of Impact as outlined above, the source-pathway-receptor connectivity between European Sites and the works area were investigated. This was carried out using GIS software, and through examination of aerial photography to determine likely pathways of connection including ecological corridors and steppingstones.

The location of nearby European sites in relation to the proposed works is presented below in Figure 2.4. Any European sites identified to have a viable source-pathway-receptor connection to the proposed works were then examined further to determine the potential for significant effects. The source-pathway-receptor assessment is outlined below in Table 2.2 and Table 2.3.

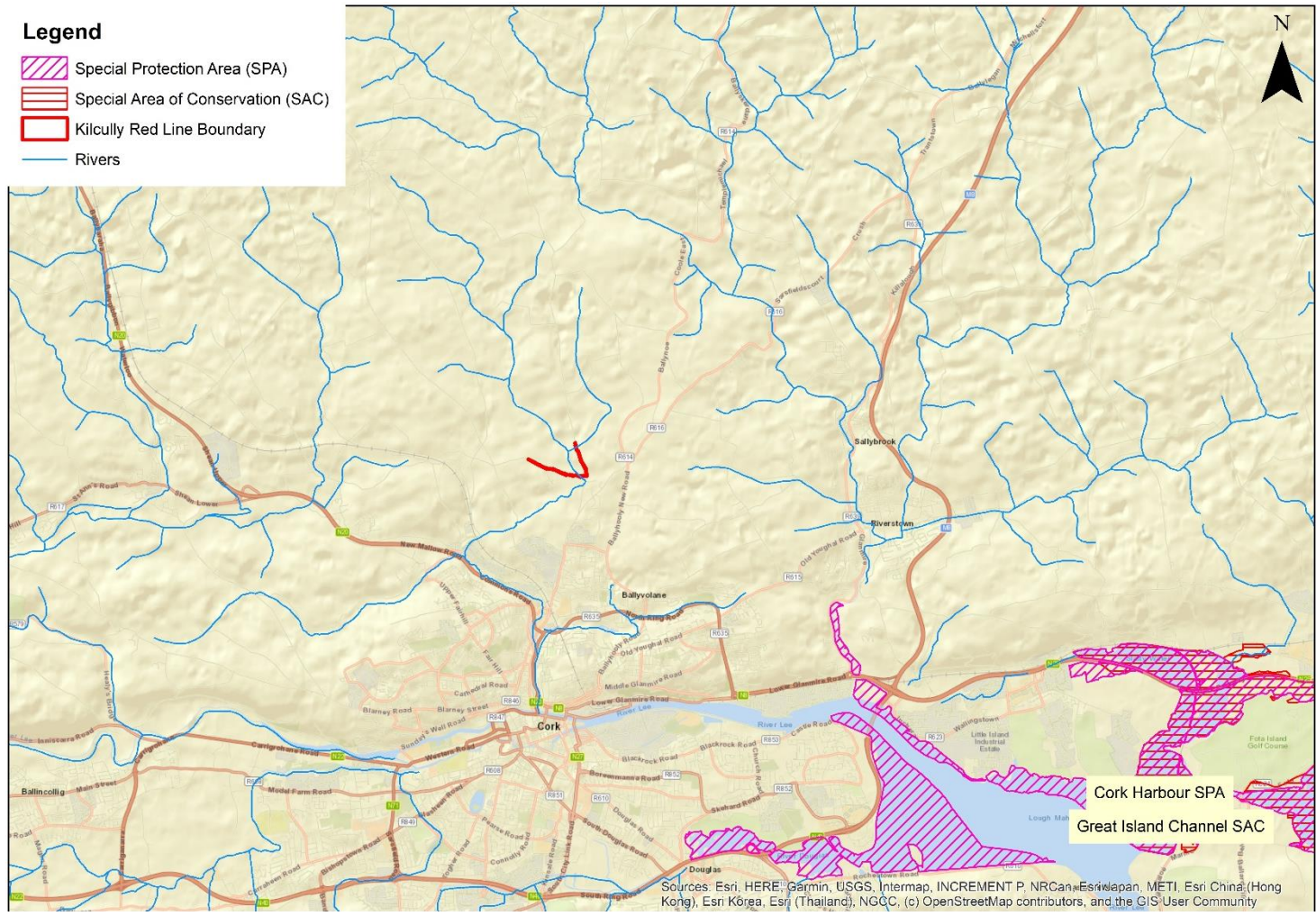
Table 2.2: Source Pathway Receptor Assessment for Special Areas of Conservation (SACs)

European Site	Distance	Qualifying Interests (QIs)	Source-Pathway-Receptor Assessment
Great Island Channel SAC (001058)	8.9km	1140 Mudflats and sandflats not covered by seawater at low tide 1330 Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>)	The River Glennamought and drainage ditches are noted along the survey area. A downstream hydrological pathway is identified between the scheme and the Great Island Channel SAC via the River Glennamought, the River Lee and the waters of Cork Harbour. Having regard to the precautionary principle it is assumed that surface water discharges may enter the river. Given the above, a source-pathway-receptor link is identified.
Blackwater River (Cork/ Waterford) SAC (002170)	11km	1130 Estuaries 1140 Mudflats and sandflats not covered by seawater at low tide 1220 Perennial vegetation of stony banks 1310 Salicornia and other annuals colonising mud and sand 1330 Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) 1410 Mediterranean salt meadows (<i>Juncetalia maritimi</i>) 3260 Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation 91A0 Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles 91E0 Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>)* 1096 Brook Lamprey (<i>Lampetra planeri</i>) 1106 Salmon (<i>Salmo salar</i>) 1421 Killarney fern (<i>Trichomanes speciosum</i>) 1095 Sea lamprey (<i>Petromyzon marinus</i>) 1355 Otter (<i>Lutra lutra</i>) 1103 Twaite shad (<i>Alosa fallax fallax</i>) 1092 White-clawed crayfish (<i>Austropotamobius pallipes</i>) 1029 Freshwater pearl mussel (<i>Margaritifera margaritifera</i>) 1099 River lamprey (<i>Lampetra fluviatilis</i>)	The SAC is located a significant distance from the proposed works area, with no downstream hydrological connectivity identified, as this SAC is within a different river catchment. As such, no source pathway receptor is identified.

Table 2.3: Source Pathway Receptor Assessment for Special Protection Areas (SPAs)

European Site	Distance	Special Conservation Interests (SCIs)	Source Pathway Receptor Assessment
Cork Harbour SPA (004030)	5km	A056 Shoveler (<i>Anas clypeata</i>) A149 Dunlin (<i>Calidris alpina</i>) A140 Golden plover (<i>Pluvialis apricaria</i>) A050 Wigeon (<i>Anas penelope</i>) A028 Grey heron (<i>Ardea cinerea</i>) A069 Red-breasted merganser (<i>Mergus serrator</i>) A142 Lapwing (<i>Vanellus vanellus</i>) A130 Oystercatcher (<i>Haematopus ostralegus</i>) A141 Grey plover (<i>Pluvialis squatarola</i>) A052 Teal (<i>Anas crecca</i>) A054 Pintail (<i>Anas acuta</i>) A157 Bar-tailed godwit (<i>Limosa lapponica</i>) A162 Redshank (<i>Tringa totanus</i>) A183 Lesser black-backed gull (<i>Larus fuscus</i>) A179 Black-headed gull (<i>Chroicocephalus ridibundus</i>) A004 Little grebe (<i>Tachybaptus ruficollis</i>) A160 Curlew (<i>Numenius arquata</i>) A182 Common gull (<i>Larus canus</i>) A048 Shelduck (<i>Tadorna tadorna</i>) A017 Cormorant (<i>Phalacrocorax carbo</i>) A193 Common tern (<i>Sterna hirundo</i>) A005 Great crested grebe (<i>Podiceps cristatus</i>) A156 Black-tailed godwit (<i>Limosa limosa</i>) Wetlands	<p>The River Glennamought and drainage ditches are noted along the survey area. A downstream hydrological pathway is identified between the scheme and the Cork Harbour SPA via the River Glennamought, the River Lee and the waters of Cork Harbour.</p> <p>Having regard to the precautionary principle it is assumed that surface water discharges may enter the river.</p> <p>Given the above, a source-pathway-receptor link is identified</p>

Figure 2.8: Site Location in Relation to European Sites



3 Potential for Significant Effects

The potential effects of the proposed scheme on European Sites are assessed hereunder.

Size, Scale, Area, Land-Take

The works comprise alterations to an existing roadway to improve pedestrian safety. The works are located entirely outside of any European sites. There will be no land take within any European sites.

Given the nature and location of the project, there is no potential for impact to European Sites from the size, scale, area of the project.

Physical Changes

The works area is located entirely outside of any European Sites and is comprised of an existing road, and roadside habitats such as treelines, watercourses, and hedgerows. As such there is no potential for direct impact to any habitats within European Sites or supporting habitat for QI or SCI species.

As noted previously, Japanese knotweed was recorded on the bank of the River Glennamought. The proposed scheme is located a significant distance from any European sites (closest site approximately 5km from the scheme).

Japanese knotweed is a Schedule 3 listed invasive species under the Birds and Natural Habitats Regulations. As such, under Article 49 (2) of the Regulations Article 49 (2) "*Save in accordance with a licence granted under paragraph (7), any person who plants, disperses, allows or causes to disperse, spreads or otherwise causes to grow in any place specified in relation to such plant in the third column of Part 1 of the Third Schedule, any plant which is included in Part 1 of the Third Schedule, shall be guilty of an offence.*" Given the legislative obligations surrounding the species, any contractor undertaking the works is obliged to prevent its spread through the implementation of biosecurity measures.

There is no potential for impact to European Sites due to physical changes.

Resource Requirements

Any material (for example gravel or other fill) required to facilitate the works will be imported from a licensed facility.

Any water required to lubricate plant will be imported to site in a bowser. There will be no abstraction within any European sites as result of the proposed works

There is no potential for effect on any European sites due to resource requirements associated with the proposed scheme.

Transportation Requirements

Transportation to the works area will be via the existing road network. The works will not result in an increase in local traffic volumes.'

There is no potential for effect on any European sites due to transportation requirements associated with the proposed scheme.

Emissions and Waste

Noise

The works will result in a temporary increase in noise at each ground investigation works location due to machinery operation.

Wetland birds have been documented to tolerate noise levels at or below 70dB(A) (Institute of Estuarine & Coastal Studies, University of Hull, 2009). As outlined in Table 2.1 noise levels (calculated on a worst-case scenario basis) fall below 70dB(A) within 200m of the works area. The proposed scheme is located a significant distance (5km) from the European site boundary. There will be no noise impacts to core habitat for any SCI species

As previously noted, SCI species for Cork Harbour SPA may occur outside of the SPA boundary. The footprint of the works is predominantly comprised of a busy road and roadside habitat (treelines and hedgerows) which do not comprise supporting habitat for SCI species.

The works area is surrounded by housing, with a strip of woodland running through the centre, alongside the River Glennamought. The existing road is very busy and so the environment is subject to a high degree of disturbance. As such, any potential disturbance effects associated with the works would not constitute a significant effect to SCIs (including any *ex-situ* populations which may occur) in the context of their conservation objectives.

Surface Water Emissions

There is potential for surface water run-off associated with site clearance, excavations, and stockpiled materials during the construction phase of the works.

Surface water emissions associated with the construction phase of the scheme will likely be largely confined to the existing road and surrounding fields. As outlined previously drainage will ultimately outfall to the River Glennamought. A new precast headwall will be installed at Outfall B1 and B2 in Figure 2.7. The design of the Outfall B1 is such that the headwall itself will be setback from the riverbank, and no in-situ concrete works will be required within the river. There is, however, the potential for sedimentation of the river during the construction phase of the works. The design of Outfall B2 will maintain the location of the existing outfall at this location. The River Glennamought flows in a southerly direction out falling into the River Lee approximately 6km (measured along the hydrological pathway) south of the proposed scheme.

Given the nature of the works, it is anticipated that any surface-water emissions will have dissipated prior to entering into the closest European Site which is located approximately 6km downstream (hydrological route). This is due to the distance along the hydrological route, in addition to the dilution which would be associated with the transitional waters downstream. Further, the habitats associated with the European sites downstream are marine. These habitats are reliant on inputs of sediments as part of their natural processes. There are no relatively sensitive species or habitats associated with marine qualifying habitats in downstream European sites. As such, it is considered that there is no potential for significant effects to any European site from surface water emissions.

As outlined previously there is potential for a slight increase in the volumes discharged by the scheme. Preliminary estimates for additional flow attributed to the increased hard surface area are based on a rainfall intensity 50mm/hr and outlined in Table 3.1 as follows;

Table 3.1: Additional Flows

Outfall Reference	Additional Flow (l/s)
A	5
B1	22

Outfall Reference	Additional Flow (l/s)
B2	15
C	10

Given the distance to European sites along the hydrological route, and the location of the downstream European sites in Cork harbour, this will not result in any impact to any European sites.

Given the nature, scale and location of the proposed development, there is no potential for any European sites to be impacted by surface water emissions during the construction and operational phases of the works.

Dust

As previously noted, the Zol for dust is taken as 50m from the works and 500m along existing roadways from the works area. The closest European site is located approximately 5km from the proposed scheme. Given the location of the scheme relative to the European sites, with no sensitive receptors within the Zol, there is no potential for any European sites to be impacted by dust during the operational phase of the works.

Light Levels

As outlined previously the Zol for increased lighting levels is taken as 100m from the red line boundary. The works area is located along a busy road with residential housing, and a school located adjacent. The closest European site is located approximately 5km from the proposed scheme. Given the location of the proposed scheme relative to the nearest European site, there will be no potential for impacts to any European sites associated with increased lighting levels.

3.1 Plans or projects which may act in combination

Article 6(3) of the Habitats Directive requires that:

'Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives.'

It is therefore required that the potential impacts of the proposed development are considered in combination with any other relevant plans or projects. A search of the Cork City Council planning database ([Planning Enquiry & Online Submissions | Cork City \(corkcoco.ie\)](#)), and the EIA portal (<https://www.housing.gov.ie/planning/environmental-assessment/environmental-impact-assessment-eia/eia-portal>) was undertaken to examine projects with potential for in combination effects. Applications which were made typically consisted of extensions and renovations to existing houses, and retention of existing developments. These are small scale developments which, due to their location do not have the potential to result in cumulative impacts in association with the proposed works. Other, larger planning applications area discussed hereunder:

Longview Estates Ltd (2019)

Longview Estates Ltd has proposed the construction of 753 residential units at Lahardane and Ballincolly (Townlands), Ballyvolane, Cork City located 1.6km south of the works area. The proposed development includes:

'a number of open spaces and play areas in addition to general landscaping, boundary treatments (including walls and landscaping to the houses to the north and lands to the east), and landscaped parkland / greenway. The proposal includes an internal distributor road providing access to

neighbouring lands, associated internal roads, car parking, pedestrian and cycle paths (providing access to neighbouring lands), public lighting, internal bus stops and turning area, bin storage (in apartment locations) and cycle parking and all site services infrastructure. The associated site and infrastructural works include water supply, foul and surface / storm water drainage infrastructure to local services and drains and 5 no. unit sub stations. The proposed development makes provision for two no. pumping stations (and connections to / from same), one in neighbourhood 5 and one adjacent to the Ballyhooly Road, with access, to serve this site and future lands as required by Irish Water'.

Given the distance between the works area and this development with no connectivity, there is no potential for in combination effects identified.

Office of Public Works (2020)

The Office of Public Works has proposed the construction of direct flood defences and improvement along a stretch of the River Glennamought and its tributaries in the Blackpool area of Cork City. The closest extent of this flood relief scheme is located 670m southwest of the works area. A description of the works is as follows:

'construction of new flood walls and embankments, construction of new culverts on a section of previously open channel, bridge replacement, installation of sediment traps, modifications to existing foul/surface water collection networks in the area, construction of pumping stations and some other minor works. The scheme will also allow for its future maintenance'.

Given the distance between the works area and this development occurring over the River Glennamought, there is potential for in combination effects.

HQ Developments Ltd. (2020)

Located 3.8km south of the works area

Permission for the redevelopment of a site at Horgan's Quay, Railway St., Lower Glanmire Rd. to provide for a mixed use residential, office, hotel and retail development. Construction for this project began in 2018 and is planned to be completed by 2022.

Given the distance between the works area and this development with no connectivity, there is no potential for in combination effects.

Progressive Commercial Construction Ltd. (2019-2020)

Located 3.9km south of the works area.

Permission for development incl. demolition of buildings bounded by Railway St., Alfred St. and Penrose Quay on site of 0.68 Ha. (excl. footpath areas and public realm works), and a Strategic Housing Development of 201no. Build to Rent apartments (2019).

Given the distance between the works area and this development with no connectivity, there is no potential for in combination effects.

Trigon Hotels Ltd. (2020)

Located 3.8km south of the works area.

Permission for the redevelopment and refurbishment of the Metropole Hotel. The proposed development consists of 1) the demolition of buildings to the south of the original Metropole hotel. The proposed development includes the construction of a new hotel extension of 6 floors over upper & lower ground level to the south of the existing Metropole Hotel. It includes hotel accommodation of 140 new bedrooms, bar and restaurant facilities, 4 no. retail / cafe units at ground floor level, penthouse function rooms, 2 levels of basement parking for 92 cars.

Given the distance between the works area and this development with no connectivity, there is no potential for in combination effects.

4 Screening Statement

The screening assessment considered whether the proposed works, alone or in combination with other projects or plans, have potential for likely significant effects on any European sites.

It can be concluded on the basis of objective scientific information following appropriate assessment screening, that the proposed works, individually or in combination with other plans or projects, will not have a significant effect on any European sites. This conclusion has not had regard to any measures intended to avoid or reduce harmful effects on European sites (i.e. mitigation measures).

Table 4.1: Findings of No Significant Effects Matrix

Name of project or plan	Kilcully Pavement Safety Scheme
Name and location of European sites	<ul style="list-style-type: none"> Great Island Channel SAC (001058) located 8.9km from the works area Blackwater River (Cork/Waterford) SAC (002170) located 9km from the works area Cork Harbour SPA (004030) located 4.2km from the works area
Description of the project or plan	<ul style="list-style-type: none"> New 2m wide concrete footpath, totalling a length of approximately 1550m Upgrading of existing concrete footpath to provide widths of 2m, totalling a length of approximately 50m 1no. Raised Pedestrian Crossings and reduction in junction radii to 6m 43no. new public lighting columns Provision of utility services such as drains, ducting etc. 1No. Pedestrian bridge crossing
Is the project or plan directly connected with or necessary to the management of the site?	No
Are there other projects or plans that together with the project or plan being assessed could affect the site?	Yes. There are identified plans or consented projects which have the potential to act in-combination with the proposed works in relation to the identified effects.
The assessment of significance of effects	
Describe how the project or plan (alone or in combination) is likely to affect the Natura 2000 site.	Potential for significant effects were identified given hydrological connectivity between proposed pedestrian safety scheme and Great Island Channel SAC (001058) and Cork Harbour SPA (004030).
Explain why these effects are not considered significant	There is potential for surface water emissions to enter the River Glennamought and travel downstream to the Great Island Channel SAC (001058) and Cork Harbour SPA (004030), potentially impacting their qualifying interests.
List of agencies consulted: provide contact name and telephone or e-mail address	None
Response to consultation.	N/A
Data collected to carry out the assessment	
Who carried out the assessment?	Erin Johnston
Sources of data?	Listed throughout this document.
Level of assessment?	Desktop and field study

5 References

NPWS (2014) Conservation Objectives: Great Island Channel SAC 001058. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2012) Conservation Objectives: Blackwater River (Cork/Waterford) SAC 002170. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2014) Conservation Objectives: Cork Harbour SPA 004030. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

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