



CONSULTANTS IN ENGINEERING,  
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PLANNING

# KERRY PIKE PEDESTRIAN IMPROVEMENT SCHEME

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## Appropriate Assessment Screening Report

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Prepared for:  
Cork City Council



Cork  
City Council  
Comhairle Cathrach Chorcaí

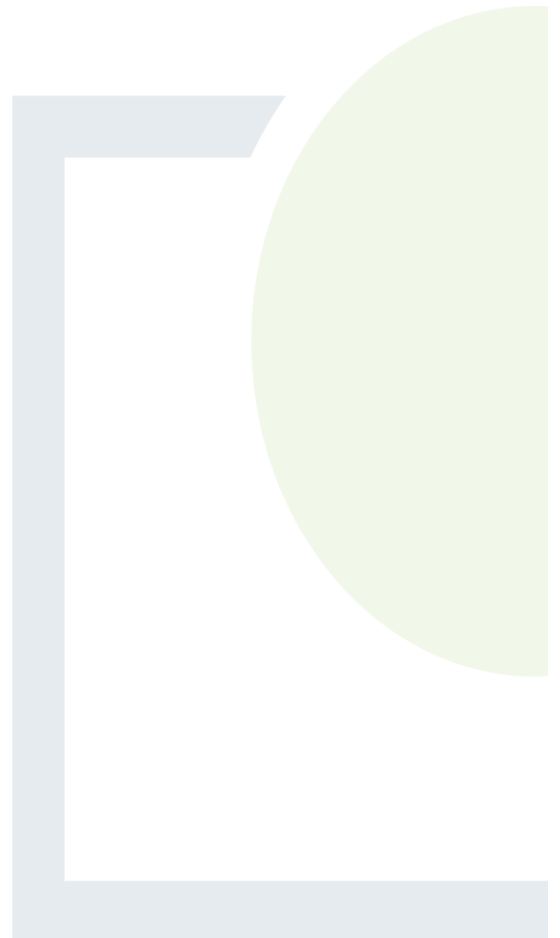
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## APPROPRIATE ASSESSMENT SCREENING REPORT

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**Abstract:** This document is to inform the Competent Authority in carrying out their statutory obligations relating to the Habitats Directive requirement for Appropriate Assessment for plans and projects seeking consent. Appropriate Assessment is required under Article 6 (3) of the Habitats Directive for any project or plan that may give rise to significant effects on a European (Natura 2000) site.

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## 1. INTRODUCTION

Fehily Timoney and Company<sup>1</sup> have been commissioned by Cork City Council (CCC) to provide consultancy services - including the preparation of this Appropriate Assessment Screening Report - for the design of improved pedestrian facilities in Kerry Pike, County Cork

This report presents an examination of whether the proposed development is likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and is based on best available scientific knowledge. This report has been prepared to inform the competent authority in completing their statutory obligations in relation to Appropriate Assessment, as required by Article 6(3) under Council Directive 92/43/EEC (Habitats Directive).

### 1.1 Legislative Context

Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats Directive) provides legal protection for habitats and species of European importance. The Directive 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:

*"6(3) Any plan or project not directly connected with or necessary to the management of the site (Natura 2000 sites) but likely to have 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."*

The competent authority must carry out a screening for appropriate assessment to assess, in view of best scientific knowledge, if the development, individually or in combination with another plan or project is likely to have a significant effect on the European site. 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, an appropriate assessment of its implications for the European Site(s) in view of the Site's conservation objectives is required to be carried out.

The provisions of Article 6(3) do not apply where the proposed plan or project is 'connected with or necessary to the management of the site'. In this case, the proposed project is not directly connected with or necessary to the management of any European site(s).

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<sup>1</sup> Details on the contributors to this report are provided in Appendix 2.



## 1.2 Methodology

### 1.2.1 Guidance

The assessment was conducted in accordance with the following guidance:

- Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg (European Commission, 2002).
- Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC. Commission Notice (2021) Brussels, 28.9.2021 C(2021) 6913 final (European Commission, 2021).
- Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin (2009, updated 2010) (Environment Heritage and Local Government, 2009).
- Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC. European Commission (2019). Brussels, (2019/C 33/01). OJ C 33, 25.1.2019.
- Interpretation Manual of European Union Habitats. Version EUR 28. (European Commission, 2013)
- OPR Practice Note PN01 Appropriate Assessment Screening for Development Management, (Office of the Planning Regulator, 2021).

### 1.2.2 Process

The process of determining the likelihood of significant effects from a proposed project on European sites is an iterative process centred around a Source-Pathway-Receptor model. In order for an effect to be established, all three elements of this mechanism must be in place. The absence or removal of one of the elements of the mechanism is sufficient to conclude that a potential effect is not of any relevance or significance.

- Source(s) – e.g., pollutant run-off, noise, removal of vegetation, etc.;
- Pathway(s) – functional link, or ecological pathway e.g., groundwater connecting to nearby qualifying wetland habitats; and,
- Receptor(s) –the qualifying habitats and species of European sites and ecological resources supporting those habitats/species.

In the context of this report, a source is any identifiable element of the proposed project that is known to interact with the receiving environment. A receptor is the Qualifying Interests (QI)<sup>2</sup> for an SAC or Special Conservation Interests (SCI)<sup>3</sup> for an SPA or an ecological feature that is known to be utilised by the QI/SCI. In practice, the term Qualifying Interests also applies to SCIs (and is used in this document for simplicity). A pathway is any connection or link between the source and the receptor

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<sup>2</sup> SACs are areas designated under the Habitats Directive to conserve habitats listed in Annex I of the Directive and plant and animal species listed in Annex II. Collectively these are referred to as the 'Qualifying Interests' or 'QIs' of the SAC.

<sup>3</sup> SPAs are sites classified under the Birds Directive to protect rare or vulnerable bird species listed in Annex I to the Directive as well as regularly occurring migratory species and wetlands. Wetland habitats that support internationally important populations of migratory birds may be coastal or inland. Collectively, these species and habitats are referred to as the 'Special Conservation Interests' of the SPA.



The assessment commences with a description of the project, along with a description of the receiving environment and the associated sources for impacts to the receiving environment. All elements of the project are presented including the project location and existing baseline environment. The type of impacts that are likely due to the project (Source) are identified having regard to the spatial and temporal scale of the project, resource requirements and likely emissions. These sources are then used to define the zone of influence (Zoi) of the project as detailed in Section 2.3.

The European Commission Notice (2021) on the 'Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC, states that in identifying European sites (Natural 2000 sites), which may be affected by the project, the following should be identified:

- Any European sites geographically overlapping with any of the actions or aspects of the plan or project in any of its phases, or adjacent to them;
- Any European sites within the likely zone of influence of the plan or project. European sites located in the surroundings of the plan or project (or at some distance) that could still be indirectly affected by aspects of the project, including as regards the use of natural resources (e.g., water) and various types of waste, discharge or emissions of substances or energy;
- European sites whose connectivity or ecological continuity can be affected by the plan or project.

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 potential effects on the Qualifying Interests of a European site. The OPR (2021) practice note states that the Zone of Influence must be established on a case-by-case basis using the Source-Pathway-Receptor (S-P-R) framework and not by arbitrary distances (such as 15 km). Section 3.2 sets out the detailed rationale for the identification of relevant European sites within the Zoi based on the sources of impacts arising from the proposed project. Subsequently, an assessment is undertaken with respect to potential connectivity (Pathways) to European Sites and their qualifying interests/special conservation interests are identified.

The potential for in-combination effects with other plans and projects is examined in Section 3.3, having regard to the identified impacts of the project along the ecological pathways identified to European sites.

In section 3.4 the likelihood of significant effects of the European Sites within the Zoi is examined having regard to the sensitivity of the site with pathways for impacts associated with the project on its own and in combination with other plans and projects.

Having regard to the European Commission Communication on the Precautionary Principle (European Commission, 2021) the:

*“absence of scientific evidence on the significant negative effect of an action cannot be used as justification for approval of this action. When applied to Article 6(3) procedure, the precautionary principle implies that the absence of a negative effect on Natura 2000 sites has to be demonstrated before a plan or project can be authorised. In other words, if there is a lack of certainty as to whether there will be any negative effects, then the plan or project cannot be approved.”*

Where significant effects are determined to be likely, or where there is uncertainty regarding the likelihood of significant effects, the project will be required under law to be subjected to Appropriate Assessment.



This AA screening is based on best scientific knowledge and has utilised ecological expertise. In addition, a detailed online review of published scientific literature was conducted. This included a detailed review of the National Parks and Wildlife Website including mapping and available reports for relevant sites and in particular sensitive qualifying interests/special conservation interests described and their conservation objectives.





## 2. DESCRIPTION OF THE PROJECT

### 2.1 Existing Environment

#### 2.1.1 Project location and the receiving environment

This project aims to extend the pedestrian facilities through Kerry Pike village along the L2779 and the L2780 for a length of approx. 2.3km including junctions with the L6848 (to Leemount Terrace), and the L2780 (to Blarney). The surrounding environment primarily consists of residential developments in the immediate vicinity including a GAA club playing field towards the eastern section of the site boundary. Agriculture is widespread in the greater area with pastures dominating the land. Non-irrigated arable land also covers a significant amount of the area. As seen in aerial imagery, there are several large glasshouses to the south of the site boundary in the north-western section of the study area. The proposed project lies within the River Lee Catchment which flows into Cork Harbour. There are two tributaries of the River Lee in the surrounding area including the River Bride which lies to the north of the site and the River Shournagh to the south.

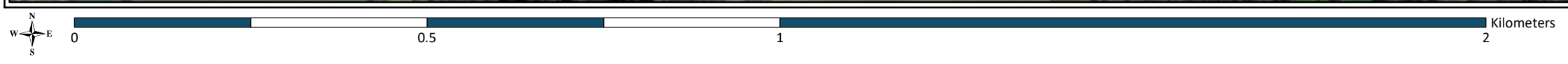
#### 2.1.2 Description of existing ecological baseline

The proposed project is located in Kerry Pike which lies north-west of Cork City. The project will run through the townland of Ballycannon. See Figure 2-1 for an aerial view of the project site location. The existing environment was investigated using aerial imagery. According to Corine 2018, the immediate environment of the proposed site boundary consists of Discontinuous urban fabric (112). The greater surrounding area is predominantly made up of Pastures (231) and Non-irrigated arable land (211). Broad-leaved forests (311) are located to the south of the site. Aerial imagery also display sections of woodland and hedgerow dispersed within the immediate urban environment. There are two waterbodies in the vicinity of the site boundary including the River Bride immediately north of the boundary and River Shournagh to the south.



— Site Boundary

<b>TITLE:</b>	Site Location		
<b>PROJECT:</b>	Kerry Pike Pedestrian Improvement Scheme		
<b>FIGURE NO:</b>	2-1		
<b>CLIENT:</b>	Cork City Council		
<b>SCALE:</b>	1:7500	<b>REVISION:</b>	0
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## 2.2 Project Description

### 2.2.1 Construction Phase

#### 2.2.1.1 *Route development*

The total length of the route will be approximately 2.3km and will incorporate the existing footpath where possible with additional concrete paths constructed where no existing path is present and targeted improvements to the existing pedestrian infrastructure in areas where the path is currently substantially narrower than 1.8m in width. Approx. 960m of new full width footpath is to be constructed. An additional approximate 480m of widening is required to existing footpaths. Proposed footpaths are generally 1.8m wide. The existing road will be narrowed in places however a minimum carriageway width of 5.5m will be maintained where the existing carriageway is 5.5m or wider.

In addition to the proposed enhanced pedestrian facilities, improved access to public transport is also proposed through the inclusion of a number of new bus stops within the village.

A number of controlled pedestrian crossings will be located on the L2779. Each crossing will be positioned on raised tables and supplemented with belisha beacons. The raised tables will act as traffic calming devices and the crossings will be located at the junction with the L2708 Bawwnafinny Road, the entrance to the Woodlands estate, the entrance to the Ravenscourt Garden Centre / Café, the carpark at the Rest Bar / Raj Gaylord Indian Restaurant and the entrance to Mitchell's Court estate.

Additional traffic calming measures in the form of raised tables will be introduced at the junction of the L2779 and the L6848 Monument Cross Road, at the junction of the L2779 and the GAA grounds access road and at the entrance to the Clonlara estate on the L6848 Monument Cross Road.

Twelve new car parking spaces are proposed along the south side of the L2779 at the Ravenscourt Garden Centre / Café to formalise the existing situation whereby cars park on the wide road.

The project includes a new footpath along the western side only of the L2708 Bawwnafinny Road for approx. 200m.

#### 2.2.1.2 *Construction*

The following approx. construction material volumes will be used:

- Cast in-situ concrete for retaining walls – 50m<sup>3</sup> to 60m<sup>3</sup>
- Cast in-situ concrete for footpaths and ancillary road requirements – 300m<sup>3</sup> to 320m<sup>3</sup>
- Granular sub-base - 240m<sup>3</sup> to 250m<sup>3</sup>
- Asphalt - 100m<sup>3</sup>
- Lighting columns / belisha beacons – 15 to 20
- Service ducts – 80m to 120m
- Precast Concrete Manholes – 5 to 15
  
- Gullies – 35 to 50
- Drainage pipe – 320m to 360m



Waste and emissions will arise from typical concreting construction methods.

#### 2.2.1.3 Demolition

Excavation of the existing verge and road edge areas to a general depth of between 0.2 and 0.4m will occur in areas of new footpath.

Land acquisition will be necessary to construct the project. The garden/boundary frontage of 4 properties will be affected, all of which are residential properties with approx. 0.011 acres of land required. Concrete retaining walls between approx. 0.5m and 2.0m in height will be constructed at these locations.

Hedgerow, garden hedge and/or tree removal will be necessary during the construction of the project. Removal of approx. 48m of hedgerow vegetation along the L2779 will be required and this occurs where land is required at residential properties.

Existing traffic signs and public lighting columns may need to be relocated or removed as part of the works and approx. 13 new public lighting columns and approx. 15 road signs may be required to supplement existing infrastructure.

#### 2.2.1.4 Drainage

The works will be drained to the existing pit and pipe drainage system. New drainage pipes are required at the northern and southern scheme extents to expand the existing drainage system. New gullies will be required and existing gullies may need to be relocated where clashes occur with new footpaths. As part of the proposed construction works existing gullies will be blocked in advance of relocated. Adjustments will be made to the levels of existing manholes affected by the works.

#### 2.2.1.5 Working Hours and Workforce

All construction work will typically be conducted Monday to Friday 08:00 to 18:00. At the peak of the construction phase for the proposed development approximately 5-15 people would be working within the site. The construction phase will last for a period of 4-5 months.

#### 2.2.1.6 Services and Road Access

The project will require connections to electricity for new public lighting columns and belisha beacons at pedestrian crossing points.

The development shall not require any connections to communications, natural gas or water supply but may require adjustment to inspection chamber levels for these services.

Access to the site will be via the existing road network. No road upgrades or road widening is required. No additional access roads will need to be constructed.

#### 2.2.1.7 Vehicle, Machinery and Fuelling

Refuelling will be required for the following vehicles/machinery on site during construction phase:



- Mini excavator
- Tracked excavator
- Dumper
- Concrete transportation vehicle
- Other construction materials transportation vehicle

### 2.2.2 Operational Phase/Post Construction

Following construction, traffic will resume and likely slower than pre-construction speeds due to the new traffic calming measures. There may be increased foot traffic along the improved route. Levels artificial lighting will be higher compared with pre-construction phase as result of the new public lighting columns.

Ongoing environmental monitoring would not be required except during periods of road maintenance works.

### 2.2.3 Decommissioning Phase (if proposed)

A decommissioning phase is not proposed for this project.

## 2.3 Potential Interactions of the Proposed Project on the Receiving Environment

Having regard to the European Commission (2021) guidance document and the OPR (2021) practice note, the potential impacts of the project on the receiving environment at source are set out in Table 2.1 relative to the following criteria:

- Habitat destruction/fragmentation/deterioration;
- Surface water run-off carrying suspended silt and contaminants, into local watercourses;
- Changes to groundwater quality, yield and/or flow paths associated with the proposed project;
- Project related activities (noise, vibration, lighting, human presence, structures, etc) leading to disturbance / displacement of species;
- Project related activities leading to a reduction in species populations / density;
- Air pollution due to dust and other airborne emissions; and
- Disturbance and potential spread of invasive species during the proposed works

These impacts are further examined in defining the Zone of Influence (Zol) of the project to identify likely significant effects through the Source-Pathway-Receptor assessment (Section 3.2)



**Table 2.1: Potential Interactions of the Proposed Project on the Receiving Environment**

Criteria	Potential sources of impact	Conclusion
<p>Habitat destruction / fragmentation / deterioration</p>	<p><i>Construction Phase</i>            Grassland and hedgerow habitat will be removed along the margins of an existing local road during the construction phase. Garden/boundary frontage of four residential properties will be affected, with approx. 0.011 acres of land required. Removal of approx. 48m of vegetation along the L2779 will be required.</p> <p><i>Operational Phase</i>            There will be ongoing trimming of roadside vegetation for maintenance during the operational phase which may cause minor habitat deterioration.</p>	<p>No Annex I habitats will be removed during construction. Removal of vegetation (predicted c.2.24% of existing vegetation habitat will be lost). However, the habitats in question are situated directly adjacent to a local road and trimmed/cut as part of ongoing maintenance of the road. Therefore, these habitats have low potential for QI species (bats, birds and mammals).</p>
<p>Surface water run-off carrying suspended silt and contaminants, into local watercourses.</p>	<p><i>Construction Phase</i>            Vegetation clearance has the potential to contribute to sediment outputs from the construction site, causing increased sedimentation of the drainage channels.            Existing drainage channels could potentially be contaminated by concrete washout from the construction of new footpaths. Concrete washout may flow into gullies and contaminate storm water.            There is potential for fuel/oil runoff into drainage systems due to on-site vehicles/machinery.</p> <p><i>Operational Phase</i>            There will be no additional emissions other than those from the current land use.</p>	<p>Potential for emissions of soil and pollutants to flow into River Bride north of site during the construction phase of the proposed project.</p> <p>The release of concrete to an aquatic environment can have the effect of altering the levels of pH, nitrate, phosphate, total solids, total suspended solids, total dissolved solids, turbidity, and biological oxygen demand in the water. Cement products are particularly harmful to aquatic life due to the associated change in alkalinity in the water, which can cause burns to fish skin. There is a risk of contamination to local streams leading to the River Bride.</p> <p>These potential impacts are further assessed in Tables 3-1 and 3.3 below, which conclude No Likely Significant Effect.</p>
<p>Changes to groundwater quality, yield and/or flow paths</p>	<p><i>Construction Phase</i>            There will be no source of groundwater contamination during the construction works</p> <p><i>Operational Phase</i></p>	<p>No potential sources of impact.</p>



Criteria	Potential sources of impact	Conclusion
associated with the proposed project.	There are no potential sources of impacts to groundwater during the operational phase.	
Project related activities (noise, vibration, lighting, human presence, structures, etc) leading to disturbance / displacement of species.	<p><i>Construction Phase</i></p> <p>The main aspects of the construction phase, with the potential to generate noise, include the use of machinery and plant vehicles. Lighting during the construction phase is another potential source of impact locally.</p> <p><i>Operational Phase</i></p> <p>Noise will return to pre-construction levels. There may be potential increases in lighting due to new public lighting columns required for new footpath.</p>	<p>Disturbance to noise varies between species and is dependent on the nature of the noise source and sensitivity of the species e.g. the potential effects of anthropogenic sound on fish can range from direct mortality to no obvious behavioural responses and are dependent on the class of sound i.e., either continuous or impulsive (Popper and Hawkins, 2019). Similarly, the disturbance response of birds (e.g., becoming alert or a flight response) can vary depending on season, species sensitivity, and weather.</p> <p>Potential impact of additional lighting during the construction phase and operation phase of the proposed project may deter sensitive bat species (Lesser horseshoe bats) from the area. However, this will unlikely cause any additional significant light pollution to the existing street lamps in this built-up residential area.</p>
Project related activities leading to a reduction in species populations / density.	<p><i>Construction Phase</i></p> <p>Removal of hedgerow vegetation could potentially lead to reduction in local bird and bat populations.</p> <p><i>Operational Phase</i></p> <p>No elements of the operational phase will result in mortality leading to a reduction in species population or density.</p>	<p>This may cause impacts to foraging ex-situ SCIs.</p> <p>This potential impact is further assessed in Tables 3-1 and 3.3 below which conclude No Likely Significant Effect.</p>
Air pollution due to dust and other airborne emissions.	<p><i>Construction Phase</i></p> <p>The principal sources of potential air emissions during the construction works will be dust. This dust will arise from excavation, vegetation removal, loading, and unloading of soil.</p> <p><i>Operational Phase</i></p> <p>There will be no additional dust emissions from the current land use.</p>	<p>The Institute of Air Quality Management 'Guidance on the Assessment of dust from demolition and construction' (Holman et al., 2014) states that "Dust can have two types of effect on vegetation: physical and chemical. Direct physical effects include reduced photosynthesis, respiration, and transpiration through smothering. Chemical changes to soils or watercourses may lead to the loss of plants or animals, for example via changes in acidity. Indirect effects can include increased susceptibility to stresses such as pathogens and air pollution. These changes are likely to occur only because of long-term demolition and construction works adjacent to a sensitive habitat. Often impacts will be reversible once the works are completed, and</p>



Criteria	Potential sources of impact	Conclusion
		<p>dust emissions cease.” The guidance prescribes potential dust emission risk classes to ecological receptors. The guidance specifies that, for sensitive ecological receptors (i.e. European sites) sensitivity to dust is ‘High’ up to 20m from the source and reduces to ‘Medium’ over 50m from the source.</p> <p>No works are proposed adjacent to sensitive ecological receptors.</p>
<p>Disturbance and potential spread of invasive species during the proposed works.</p>	<p><i>Construction Phase</i></p> <p>Following a desktop assessment (NBDC grid square search), invasive species were not identified at the proposed development site.</p> <p><i>Operational Phase</i></p> <p>Invasive species were not identified at the proposed development site.</p>	<p>As no invasive species were encountered, there is no potential source of impact to the receiving environment.</p>





## 3. SCREENING FOR APPROPRIATE ASSESSMENT

### 3.1 Introduction

This section of the report examines if the Kerry Pike Pedestrian Improvement Scheme is likely to have a significant effect upon European sites, either alone or in combination with other plans or projects.

### 3.2 Identification of European Sites within the Zone of Influence of the Proposed Project

The OPR (2021) AA Screening practice note states that the Zone of Influence must be established on a case-by-case basis using the Source-Pathway-Receptor model. The S-P-R model has been used to identify the ZoI to ensure that relevant European sites are identified. The S-P-R model minimises the risk of overlooking distant or obscure effect pathways, while also avoiding an over reliance on buffer zones (e.g. 15 km), within which all European sites should be considered. This approach follows the DoEHLG (2009 rev 2010) guidance on AA which states that:

*“For projects, the distance could be much less than 15 km, and in some cases less than 100m, but this must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, and the sensitivities of the ecological receptors, and the potential for in combination effects”*

As detailed in Section 1.2.2, in order for an effect to occur, all three elements of this mechanism must be in place. The absence of one of the elements of the mechanism means there is no likelihood for the effect to occur. The potential impacts of the proposed development are set out in Section 2.3 of this report. The impact is essentially the ‘source’ in the S-P-R model.

These impacts may be very localised and confined to the Kerry Pike Pedestrian Improvement Scheme site with no potential connectivity to a European site and therefore no potential for effects. Alternatively, where an ecological or functional pathway exists they may give rise to a potential effect to a Qualifying Interest of a European site. This section of the report identifies the potential pathways to European sites emanating from these potential sources of impact.

The dominant ecological pathways to consider are:

- Direct physical interactions or changes to the local environment;
- Air dispersal (noise, dust, odour emissions etc.);
- Hydrological interactions; and
- Dispersal patterns of mobile species.

The potential impacts of the Kerry Pike Improvement Scheme on the receiving environment (identified in Table 2.1) are as follows:

- Removal of habitat for foraging ex-situ QIs/SCIs of European sites.
- Release of pollutants and sedimentation to watercourses with hydrological connectivity to European sites;
- Disturbance bat and bird species may arise due to noise and light pollution.



- Ecological receptors may be impacted by dust emissions during construction phase which can have harmful physical and chemical effects on vegetation.

These impacts are assessed under the following criteria below:

- Release of pollutants and sedimentation to watercourses with hydrological connectivity to European sites;
- Potential effects to groundwater / hydrogeology;
- Potential effects to mobile SCI from surrounding SPAs;
- Potential effect to mobile QI species;
- European sites geographically overlapping or adjacent to any of the actions or aspects of the proposed project (noise, lighting and dust).
- Disturbance and potential spread of invasive species during the proposed works.

### 3.2.1 Release of pollutants and sedimentation to watercourses with hydrological connectivity to European sites

As a precautionary approach in defining the ecological receptors that may be affected, all European sites hydrologically connected to the Kerry Pike Improvement Scheme were examined using Geographic Information System (GIS) mapping. The QI's/SCI's of these European sites were assessed to identify potential physical or ecological connectivity to the Kerry Pike Improvement Scheme lands.

### 3.2.2 Potential effects to groundwater / hydrogeology

A search was conducted using GIS to identify any European sites with Groundwater Dependent Ecosystems, within the catchment area of the project.

### 3.2.3 Potential effect to mobile SCI from surrounding SPAs

The habitats within the subject lands and the surrounding area could offer potential resources for mobile SCI bird species from SPA's. As Identified in Table 2.1 there is potential for direct and indirect impacts to these local habitats. Therefore, the assessment has considered the potential pathways for effects these bird species. Generally, the core foraging range for SCI birds species is less than 15km. However, SNH (2016)<sup>4</sup> core foraging range for some geese species can be larger. Namely:

- Greylag goose Core range of 15-20km\* Greylag Geese feed mostly on cereal stubble and grassland in their wintering areas.
- Barnacle goose Core range of 15km, with maximum recorded distance of up to 25km.

Therefore, as a precautionary approach in defining the ecological receptors that may be affected, all SPA's within 15km and SPA's within 25km designed for Greylag and Barnacle Geese were examined using Geographic Information System (GIS) mapping. The conservation objectives of these European sites were assessed to identify potential physical or ecological connectivity to the Kerry Pike Improvement Scheme.



### 3.2.4 Potential effect to mobile QI species

Lesser horseshoe bats tend to forage in summer in broadleaved woodland and around riparian vegetation (Bontadina et al., 2002; Biggane, 2003). In 2016, the Bat Conservation Trust (BCT) carried out a review of literature pertaining to mean and maximum bat foraging distances (BCT, 2016). In their review, a Core Sustainment Zone (CSZ) refers to the area surrounding a communal bat roost within which habitat availability and quality will have a significant influence on the resilience and conservation status of the colony using the roost. For the BCT review, lesser horseshoe bat data was available from 83 radio-tracked individuals from four separate studies. The weighted average maximum foraging distance for lesser horseshoe bats was 2.02km. The BCT noted that for Annex II species there is justification for increasing the CSZ to reflect use of the landscape by all bats in a population. Some researchers have found that lesser horseshoe bats normally forage in woodlands/scrub within 2.5 km of their roosts (Bontadina et al., 2002); thus, for each roost, a 2.5 km zone is considered an appropriate distance to foraging areas for the purpose of the current SSCO targets. The 2.5 km zone around each known roost is mapped and potential foraging grounds within the zone are identified and mapped for each SAC using the Forestry Inventory and Planning System (FIPS) (2007/2012) spatial dataset. The target is that there is no significant decline in potential foraging habitat within 2.5 km of qualifying roosts. However, Collins et al. (2016) also note that seasonal movements between summer and winter roosts are reported to be between 5 to 10 km in distance.

As a precautionary approach in defining the ecological features that may be affected, all SAC's designated for Lesser Horseshoe bats within 10km was first examined using Geographic Information System (GIS) mapping and the conservation interests of these European sites were examined in order to ascertain whether there could be potential physical or ecological connectivity to the project and the associated impacts from the Kerry Pike Pedestrian Improvement Scheme.

### 3.2.5 European sites geographically overlapping or adjacent to any of the actions or aspects of the proposed project (noise, lighting and dust)

There are no European sites geographically overlapping or adjacent to the proposed development. The closest European site is Cork Harbour SPA (004030) located 8.79km away (direct distance). However, there could be effect beyond the boundary of the site due to sources such as noise, light, dust, etc.

Dust emissions from construction sites can range from 10m for minor sites to 25m for major sites. Dust from soiling (excavation works) can occur up to 25m, 50m and 100m, at minor, moderate, and major construction sites respectively (NRA, 2011).

Disturbance due to noise impact varies between species and is dependent on the nature of the noise source and sensitivity of the species in question e.g. the potential effects of anthropogenic sound on fish can range from direct mortality to no obvious behavioural responses and are dependent on the class of sound i.e., either continuous or impulsive (Popper and Hawkins, 2019). Similarly, the disturbance response of birds (e.g. becoming alert or a flight response) can vary depending on season, species sensitivity, and weather. Goodship and Furness (2022) provides estimates of species-specific buffer zones to protect birds from human disturbance during breeding and non-breeding seasons. Therefore, a precautionary Zone of Influence of 1km was identified. This 1km buffer also accounts for noise disturbance to otters and other aquatic species.

Other emissions source identified in Table 2.1 (e.g. lighting) are likely to be more localised than the distances stated for noise impacts.

Considering the actions or aspects of the proposed project, a precautionary ZoI of 2km has been adopted.



### 3.2.6 Disturbance and potential spread of invasive species during the proposed works

Invasive species can spread from an area of infection to other habitats by the transportation of plant fragments or soil containing seeds typically during excavation and vegetation clearance. Machinery, vehicles and personnel coming into contact with infected areas can spread these species outside of the site. The ZOI of this potential impact requires the consideration of European sites in close proximity to the footprint of works. As a precautionary approach a ZOI of 2km has been adopted.

Hydrologically connected European sites will also need to be considered e.g. soil containing invasive species material washing downstream to a European site. The potential effects to hydrologically connected European sites is considered in Section 3.2.1 above.

### 3.2.7 Summary of the Zone of Influence of the proposed project

The ZOI of the proposed project have been identified as:

- Any European sites hydrologically connected to the Kerry Pike Pedestrian Improvement Scheme.
- Any European sites with groundwater dependent habitats within the catchment area of the Kerry Pike Pedestrian Improvement Scheme;
- All SAC's designated for Lesser Horseshoe bats within 10km of the Kerry Pike Pedestrian Improvement Scheme;
- All SPAs within 15km SPA's and SPA's designed for Greylag and Barnacle Geese within 25km of the Kerry Pike Pedestrian Improvement Scheme;
- Any European sites within 2km of the Kerry Pike Pedestrian Improvement Scheme, with potential impacts from habitat loss, noise, lighting, invasive species and dust.

The findings of the ZOI assessment are presented in Table 3.1.

There were no European sites identified within the ZOI for the following criteria:

- No SACs for Qis such as Lesser Horseshoe Bats are present within 10km of the Kerry Pike Pedestrian Improvement Scheme.
- There were no EU sites with Groundwater Dependent Ecosystems identified within the catchment area of the project.
- There were no EU sites with potential impacts from habitat loss, noise, lighting, invasive species and dust identified within 2km of the Kerry Pike Pedestrian Improvement Scheme.

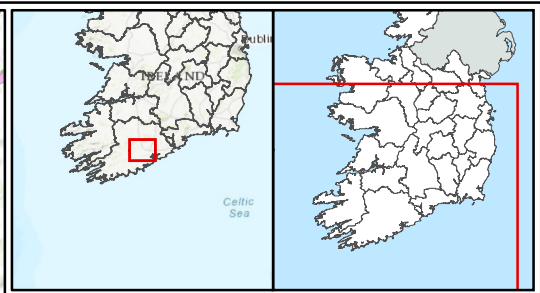
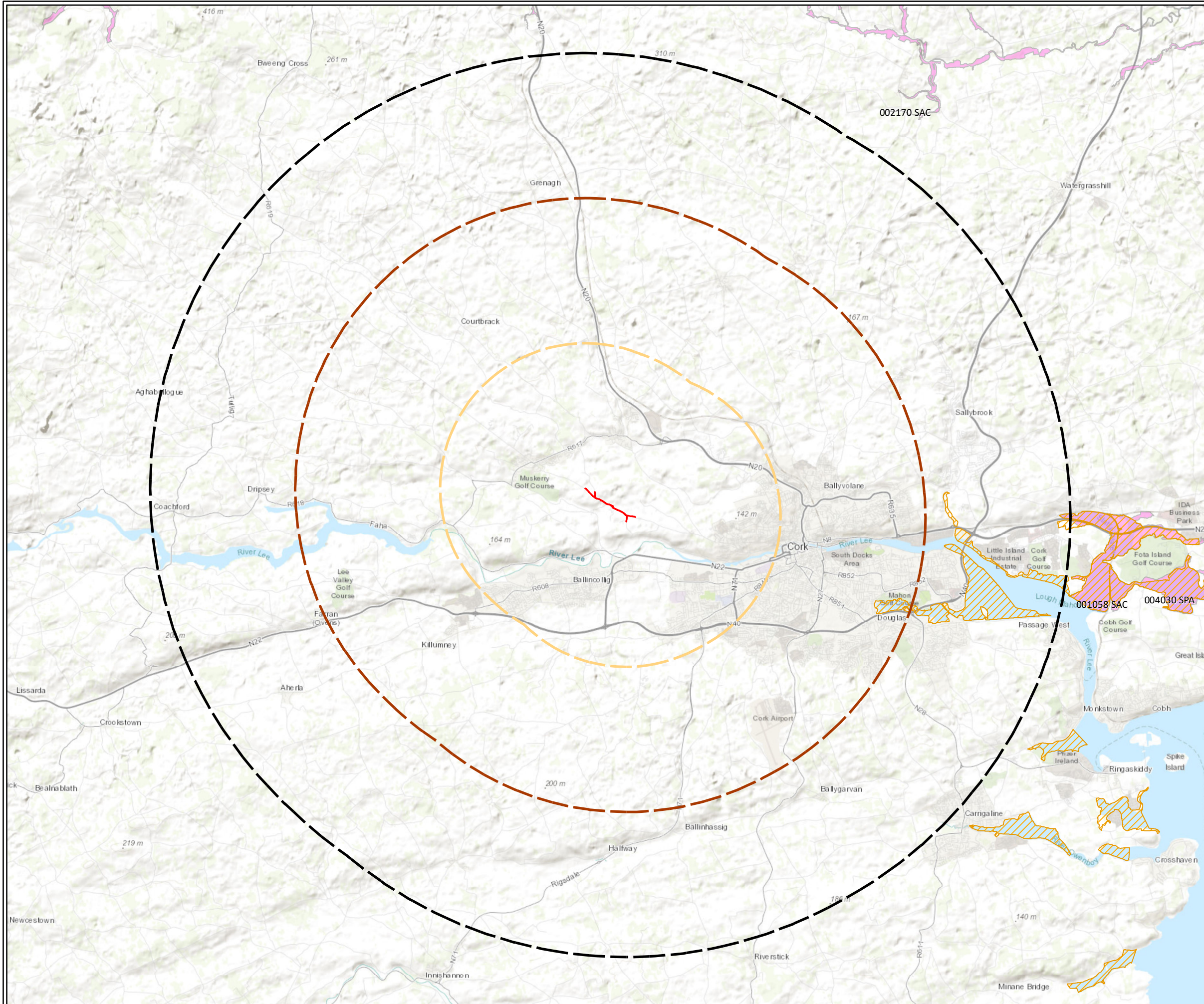


**Table 3.1: Identification of European Sites within the Zone of Influence of the Kerry Pike Pedestrian Improvement Scheme**

European Site (Code)	List of Qualifying Interests	Distance from the proposed development (km)	Criteria	Pathway for potential effects	Considered further in screening (Y/N)
Cork Harbour SPA (004030) <a href="https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO04030.pdf">https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO04030.pdf</a> Accessed 19/06/2023	Redshank ( <i>Tringa totanus</i> ) [A162] Grey Heron ( <i>Ardea cinerea</i> ) [A028] Curlew ( <i>Numenius arquata</i> ) [A160] Lesser Black-backed Gull ( <i>Larus fuscus</i> ) [A183] Common tern ( <i>Sterna hirundo</i> ) [A193] Wetland and Waterbirds [A999], Lapwing ( <i>Vanellus vanellus</i> ) [A142] Shelduck ( <i>Tadorna tadorna</i> ) [A048] Grey Plover ( <i>Pluvialis squatarola</i> ) [A141], Black-headed Gull ( <i>Chroicocephalus ridibundus</i> ) [A179] Teal ( <i>Anas crecca</i> ) [A052] Golden Plover ( <i>Pluvialis apricaria</i> ) [A140], Cormorant ( <i>Phalacrocorax carbo</i> ) [A017] Dunlin ( <i>Calidris alpina</i> ) [A149] Common Gull ( <i>Larus canus</i> ) [A182] Great Crested Grebe ( <i>Podiceps cristatus</i> ) [A005] Oystercatcher ( <i>Haematopus ostralegus</i> ) [A130] Bar-tailed Godwit ( <i>Limosa lapponica</i> ) [A157]	8.79km (Direct-Distance) (c. 14.99 km In-Stream for European sites hydrologically connected)	Hydrologically connected European Sites	There are two distant hydrological pathways via the River Bride and River Shournagh. The River Bride flows into the River Lee, 9.8km downstream, which opens into Cork Harbour further 5.2km downstream. The River Shournagh flows into the River Lee 1.8km downstream and which opens into Cork Harbour a further 12.3km downstream. Although the river does not directly flow into the SPA, the shoreline is designated as Cork Harbour SPA which may be impacted by this hydrological link (see Figure 3-1). Therefore, as a precautionary measure this European Site is assessed as being within the Zol of the project.	Y



European Site (Code)	List of Qualifying Interests	Distance from the proposed development (km)	Criteria	Pathway for potential effects	Considered further in screening (Y/N)
	Wigeon ( <i>Anas penelope</i> ) [A050], Little Grebe ( <i>Tachybaptus ruficollis</i> ) [A004] Black-tailed Godwit ( <i>Limosa limosa</i> ) [A156] Shoveler ( <i>Anas clypeata</i> ) [A056] Pintail ( <i>Anas acuta</i> ) [A054] Red-breasted Merganser ( <i>Mergus serrator</i> ) [A069]				
Great Island Channel SAC (001058) <a href="https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO01058.pdf">https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO01058.pdf</a> Accessed 19/06/2023	Mudflats and sandflats not covered by seawater at low tide [1140] Atlantic salt meadows ( <i>Glaucopuccinellietalia maritima</i> ) [1330]	14.64km (Direct Distance)  (c. 20km In-Stream for European sites hydrologically connected)	Hydrologically connected European Sites	There is a remote hydrological link to the Great Island Channel SAC. The River Bride flows into the River Lee 9.8km downstream which opens into Cork Harbour further 5.2 km downstream. The River Shournagh flows into the River Lee 1.8km downstream which opens into Cork Harbour a further 12.3km downstream. Although The Great Island Channel SAC lies within Cork Harbour in a separate inlet, the southerly river flow prevents any contamination to the SAC as it bypasses The Great Island Channel through Lough Mahon and out into the Harbour (see Figure 3 1).	N

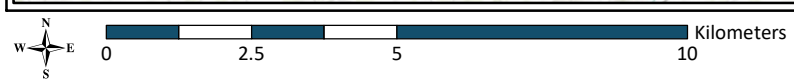


**Legend**

- Site Boundary
- 5km Buffer
- 10km Buffer
- 15km Buffer
- Special Protection Area (SPA)
- Special Area of Conservation (SAC)

<b>TITLE:</b>	European Sites within ZOI		
<b>PROJECT:</b>	Kerry Pike Pedestrian Improvement Scheme		
<b>FIGURE NO:</b>	3-1		
<b>CLIENT:</b>	Cork City Council		
<b>SCALE:</b>	1:130000	<b>REVISION:</b>	0
<b>DATE:</b>	03/07/2023	<b>PAGE SIZE:</b>	A3

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### 3.3 Consideration of in-combination Effects with other plans or projects

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 likely significant effects of the proposed project are considered in-combination with any other plans or projects within the zone of influence.

The consideration of in-combination effects with other plans or projects, focused on the sources of impacts identified for the proposed project in section 2.3 and ecological pathways identified in section 3.2.

The following sources were referred:

- Geohive datasets – Planning Application Sites (Planning Registers of participating Irish Local Authorities and includes Planning Applications received since June 2023) [https://www.geohive.ie/datasets/d78667c678d543b3b82c424c11ac24cc\\_1/about](https://www.geohive.ie/datasets/d78667c678d543b3b82c424c11ac24cc_1/about)
- An Bord Pleanála (Strategic infrastructure development (SID) applications and Strategic Housing Development (SHD) applications) (<https://www.pleanala.ie/en-ie/home>);
- Department of Department of Housing, Local Government and Heritage’s EIA Portal (<https://www.gov.ie/en/publication/9f9e7-eia-portal/>).

#### 3.3.1 Projects

To identify other committed development in the area, a planning search was carried out using the online planning enquiry system. The planning search focused on the sources of impacts identified for the proposed project in section 2.3 and ecological pathways identified in section 3.2. To identify projects for consideration for the in-combination effects section, the Department of Housing, Local Government and Heritage planning database was used<sup>5</sup>. A review of all planning applications within the identified zone was conducted focusing on all application within the past 5 years<sup>6</sup> (Table 3-2). The full planning search is available in Appendix 1.

A total of 15 project applications were found within 1-2km buffer of the proposed development site. A number of smaller-scale developments applications were also identified in the area including applications for single dwellings with domestic wastewater treatment plants, extensions, garages, agricultural buildings and retentions. Due to the size and scale of these projects, there are not likely to be any significant in-combination effects.

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<sup>5</sup> <https://data-housinggovie.opendata.arcgis.com/datasets/planning-application-sites-2010-onwards>; 13th June 2022

<sup>6</sup> planning application have a standard lifespan of 5 years as per Section 40 (3)(b) of the Planning & Development Act 2000, as amended; therefore, these are viewed the ‘live’ applications, all other projects are considered as part of the site context





**Table 3-2: Planning Applications within 1-2km buffer of the KPPIS**

Planning Reference	Status	Overview	Environmental Assessments (AASR, NIS, EIAR, EcIA)	Characteristics of the potential interactions between the identified project and the proposed project	Potential for in-combination effects (Y/N)
184591	Extension of duration	Construction of 32 dwelling houses	None	Duration of planning permission has expired since 31/12/2021. Review of aerial photography shows that this development has not been built and therefore will not have any interaction with the proposed project.	N
186729	Conditional	Construction of 6 dwelling houses	AA Screening	This project was screened out and so is not likely to have any interaction with the proposed project.	N
187417	Conditional	Construction of 20 dwelling houses	AA screening	This project was screened out and so is not likely to have any interaction with the proposed project.	N
194557	Conditional	Removal of 10 glasshouses and construction of 22 dwelling houses	AA Screening	This project was screened out and so is not likely to have any interaction with the proposed project.	N
194570	Conditional	Demolition of existing structures and construction of 21 dwelling houses	AA Screening	This project was screened out and so is not likely to have any interaction with the proposed project.	N
1939001	Conditional	Removal of existing structures, changes to roads and construction of 40 no. dwelling houses	AA Screening & Environment Report	This project was screened out and so is not likely to have any interaction with the proposed project.	N
2039116	Conditional	Construct 13 dwelling houses	AA Screening & Environment Report	This project was screened out and so is not likely to have any interaction with the proposed project.	N
2039213	Conditional	Construct 13 dwelling houses	AA screening & Environment Report	This project was screened out and so is not likely to have any interaction with the proposed project.	N



Planning Reference	Status	Overview	Environmental Assessments (AASR, NIS, EIAR, EclA)	Characteristics of the potential interactions between the identified project and the proposed project	Potential for in-combination effects (Y/N)
2140189	Conditional	Construction of 60 dwellings	AA Screening & Environment Report	This project was screened out and so is not likely to have any interaction with the proposed project.	N
2240890	Conditional	Construct slatted tank, slatted feeding passage, calf house and office/store	AA Screening	This project was screened out and so is not likely to have any interaction with the proposed project.	N
2240915	Conditional	Construct 31 dwelling houses	AA Screening & Environment Report	This project was screened out and so is not likely to have any interaction with the proposed project.	N
2240926	Conditional	Continuation of use for a transmission station comprising a 24m high structure	AA Screening & Environment Report	This project was screened out and so is not likely to have any interaction with the proposed project.	N
2240976	Conditional	Construct 94 dwelling houses	AA Screening & Environment Report	This project was screened out and so is not likely to have any interaction with the proposed project.	N
1938985	Conditional	Importation of soil and stone in order to improve the agricultural output of the field	AA Screening NIS AA	<p>The findings of the NIS conclude that there is a potential pathway for surface water and dust contamination to have an effect on Cork Harbour SPA via the River Lee.</p> <p>It is proposed to create an earthen bund along the entire southern fill area boundary of the site. A 5m buffer zone will be maintained between the earthen bund and the stream. Surface water run-off from the fill area will be intercepted by the bund. Surface water will be contained on site and will not have the potential to infiltrate the stream.</p> <p>Not likely to have any interaction with the proposed project.</p>	N



### 3.3.2 Plans

#### 3.3.2.1 *The National Biodiversity Action Plan 2017-2021*

Ireland's National Biodiversity Action Plan sets out actions through which a range of government, civil and private sectors will undertake to achieve Ireland's 'Vision for Biodiversity' and follows on from the work of the first and second National Biodiversity Action Plans.

A total of 119 targeted actions are contained in the Plan, underpinned by seven strategic objectives. The objectives lay out a clear framework for Ireland's national approach to biodiversity, ensuring that efforts and achievements of the past are built upon, while looking ahead to what can be achieved over the next five years and beyond.

They include:

- Mainstreaming biodiversity across the decision-making process in the State;
- Strengthening the knowledge base underpinning work on biodiversity issues;
- Increasing public awareness and participation;
- Ensuring conservation of biodiversity in the wider countryside;
- Ensuring conservation of biodiversity in the marine environment;
- Expanding and improving on the management of protected areas and protected species;
- Enhancing the contribution to international biodiversity issues.

The construction works will not be contrary to the above objectives.

#### 3.3.2.2 *Ireland's 4th National Biodiversity Action Plan (2023- 2027)- Draft for Public Consultation*

Ireland's 4th National Biodiversity Action Plan is currently in development and undergoing a public consultation process. This plan will outline the agenda for national biodiversity for 2023 to 2027.

The draft plan is underpinned by 10 key thematic areas, with 6 objectives containing a series of targetable Actions. These objectives are:

- Adopt a Whole of Government, Whole of Society Approach to Biodiversity
- Meet Urgent Conservation and Restoration Needs
- Secure Nature's Contribution to People
- Embed Biodiversity at the Heart of Climate Action
- Enhance the Evidence Base for Action on Biodiversity
- Strengthen Ireland's Contribution to International Biodiversity Initiatives

The construction works will not be contrary to the above objectives.



Construction and Environmental Management Plans (CEMPs)/ Construction and Demolition Management Plans shall be prepared for larger scale projects as set out in paragraph 15.12.24 and this requirement shall be assessed on a case-by-case basis as part of the development management process.

Support the implementation of the recommendations and policies of the National Hazardous Waste Management Plan 2014-2020.

The construction works will not be contrary to the above objectives.

### 3.3.2.3 *Cork City Development Plan 2022-2028*

The Cork City Development Plan dedicated a chapter to Green and Blue Infrastructure, Open Space and Biodiversity. This includes a series of strategic biodiversity goals, which include:

- 3.13.1: To protect and enhance designated areas of natural heritage and protected species and to adhere to all relevant biodiversity legislation;
- 3.13.2: To ensure that sites and species of natural heritage and biodiversity importance in non-designated areas are identified, protected and managed appropriately;
- 3.13.3: To create green and blue infrastructure network thereby creating ecological corridors linking areas of biodiversity importance;
- 3.13.6: To protect and maintain the integrity and maximise rivers and watercourses within the city;
- 3.13.7: To protect and enhance the city's trees and urban woodlands; and
- 3.13.8: To promote best practice guidelines for management, control and eradication of invasive alien species.

### 3.3.3 Existing practices in the surrounding area

The surrounding environment primarily consists of residential developments in the immediate vicinity including a GAA club playing field towards the eastern section of the site boundary. Agriculture is widespread in the greater area with pastures dominating the land. Non-irrigated arable land also covers a significant amount of the area. The main source of pollution associated with such agricultural practices is fertiliser/pesticide runoff which may contaminate surface waters in the surrounding environment. As seen in aerial imagery, there are several large glasshouses to the south of the site boundary in the north-western section of the study area. There are several sources of pollution to the environment from urban residential developments including domestic waste, sewage and increased carbon emissions.

## 3.4 **Assessment of Likely Significant Effects**

This section of the report explains the metrics used when assessing if the potential effects (previously identified) are likely to result in significant implications for European sites.

The European sites with evident pathways for potential effects arising from the sources for impact from the proposed project - either alone or in combination - are:

- Cork Harbour SPA (004030)

The EC (2021) Guidance notes that the significance of the effects will vary depending on factors such as the magnitude of impact, the type, extent, duration, intensity, timing, probability, in-combination effects and the vulnerability of the habitats and species concerned.



These sites are now examined for the potential for likely significant effects. The following parameters are described when characterising impacts (following guidance from the Chartered Institute of Ecology and Environmental Management, Environmental Protection Agency and National Roads Authority):

- Direct and Indirect effects - An effect can be caused either as a direct or as an indirect consequence of a Plan/Project.
- Magnitude - Magnitude measures the size of an impact, which is described as high, medium, low, very low or negligible.
- Extent - The area over that the effect occurs – this should be predicted in a quantified manner.
- Duration - The time that the effect is expected to last prior to recovery or replacement of the resource or feature.
  - Temporary: Effects up to 1 Year;
  - Short Term: Effects lasting 1-7 years;
  - Medium Term: Effects lasting 7-15 years;
  - Long Term: Effects lasting 15-60 years; and
  - permanent: Effects lasting 60 years.

The EC (2021) outlines the following potential changes that may occur at a European site, which may result in effects on the function of the site:

- Reduction of habitat area, habitat degradation or fragmentation;
- Disturbance to species, reduction in species populations and density;
- Changes in ecological functions and/or features that are essential for the ecological requirements of habitats and species (e.g. water quality and quantity);
- Interference with the key relationships that define the structure and function of the site.

The guidance document outlines the following criteria for assessing significance, indicators of significance, in view of the site specific conservation objectives e.g.:

- 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;
- Changes to key ecological features of the site (e.g. water quality).

The potential for the proposed development to have likely significant effects on Cork Harbour SPA (004030) and Great Island Channel (001058) is examined in Table 3-3 on the basis of the source-pathway-receptor connectivity, and the sensitivity of the European sites qualifying interests to the effects of the impacts.



**Table 3-3: Description of likely significant effects on the European sites within the Zone of Influence of the Proposed Project**

Site Name (Site Code)	Criteria for assessing potential changes that may occur at a European site, which may result in effects on the function of the site: <sup>7</sup>	Assessment of effects on the European sites functionality	Assessment of the significance of effects either alone and in-combination with other plans or projects	Likely Significant Effect
<b>Cork Harbour SPA (004030)</b>	Reduction of habitat area, habitat degradation or fragmentation.	Excavation works during the construction phase will unlikely result in potential habitat loss for SCIs in surrounding Cork Harbour SPA as the SCIs are primarily estuarine and coastal birds. Therefore, there is no pathway for effects.	There is no pathway for direct/indirect effects to the SPA.  All other projects are small in scale and far removed from the SPA. No likely in-combination effects with other plans and projects are envisaged.	No Likely Significant Effect
	Disturbance to species, reduction in species populations and density.	There will be no disturbance to species the habitats and sessile species within the SPA due to distance of the site from the construction works.  The proposed development site does not provide suitable foraging habitat for the SCIs. Therefore, there is no pathway for disturbance and these species will not be significantly impacted.  Therefore, there is no potential for effects.	There is no pathway for direct/indirect effects to the SPA.  All other projects are small in scale and far removed from the SPA. No likely in-combination effects with other plans and projects are envisaged.	No Likely Significant Effect

<sup>7</sup> Taken from the EC (2021) Guidelines  
 P22-181



Site Name (Site Code)	Criteria for assessing potential changes that may occur at a European site, which may result in effects on the function of the site:7	Assessment of effects on the European sites functionality	Assessment of the significance of effects either alone and in-combination with other plans or projects	Likely Significant Effect
	Changes in ecological functions and/or features that are essential for the ecological requirements of habitats and species (e.g. water quality and quantity).	The ecological functions of localised streams/ rivers may be impacted due to concrete washout contamination. However, the hydrological link to the SPA via the River Bride and River Lee is considered remote due to the large distance (c.14.99km in-stream), indirect overlap with the SPA and dilution factor. Therefore, the magnitude of impact once it reaches the SPA is negligible.	The project on its own will have a localised, negligible, temporary effect on the receiving environment. No likely significant effects are identified to the SPA.  All other projects are of a small scale and far removed from the SPA, there are no likely in-combination effects related to other plans and projects.	No Likely Significant Effect
	Interference with the key relationships that define the structure and function of the site.	There will not be any interference with the key relationships that define the structure and function of the SPA due to large distance and dilution from the construction works.	The project on its own will have a localised, negligible, temporary effect on the receiving environment. No likely significant effects are identified to the SPA.  All other projects are of a small scale and far removed from the SPA, there are no likely in-combination effects related to other plans and projects.	No Likely Significant Effect



### 3.5 Screening Conclusion

The results of the s-p-r modelling process identified that - given the scale and nature of the potential sources identified in Table 2.1 - there are no likely significant effects identified to any European sites. The AA screening process has considered potential effects which may arise during the construction and operational phases as a result of the implementation of the proposed project. Through an assessment of the pathways for effects and an evaluation of the sources for impacts, taking account of the processes involved and the distance of separation from European sites, it has been evaluated that there are no likely significant effects on the qualifying interests, special conservation interest or the conservation objectives of any designated European site.





## 4. REFERENCES

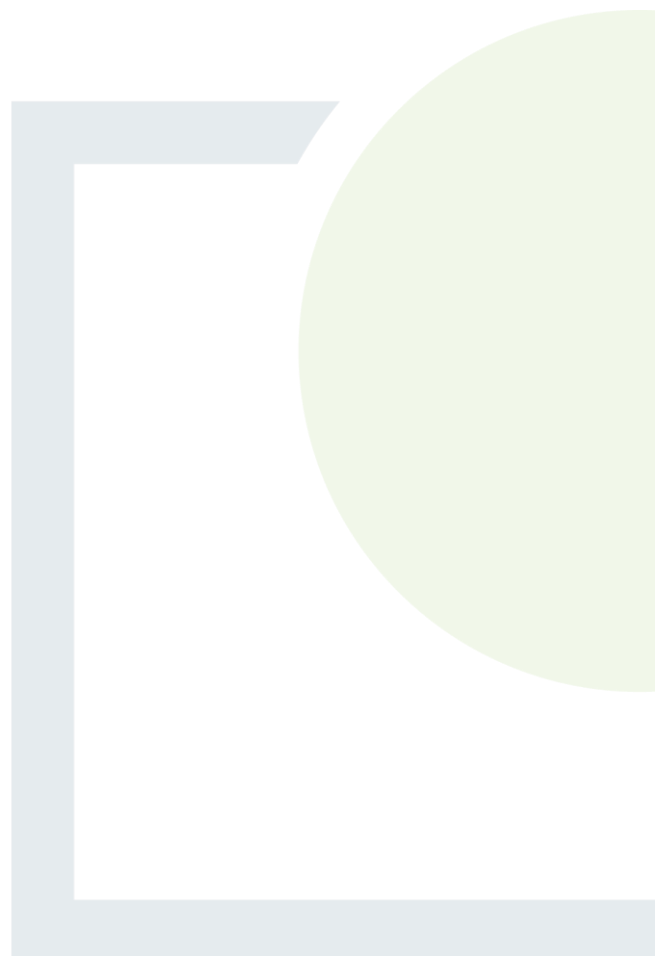
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# APPENDIX 1

Planning Applications



Planning Reference	Status	Overview	Year Granted Permission
184591	Extention of duration	Residential development - 32 no. dwelling houses, entrance, treatment plant & associated site works. Extension of Duration to Permission granted under planning ref. No. 01/3276 and Extended under planning ref. No. 13/4089	2018
186729	Conditional	Construction of 6 no. dwelling units (change of layout from that previously permitted residential development under Cork County Council Ref. 01/3276 and extended under Ref. 13/4089 and Ref. 18/4591) and modifications to the previously permitted disposal of foul and surface water discharges and all ancillary site development works	2019
186760	Conditional	Permission is sought for (1) Retention of dwellinghouse, attached domestic garage and all associated site development works and (2) Permission for a new waste water treatment plan	2019
187417	Conditional	Construction of 20 no. dwelling houses (changes and amendments to part of the development approved originally under Planning Reg. Nos. 92/291 and 92/292) consisting of changes to the site layout, house types and levels for house nos. 105-119 and 123-127 as follows: 1. Amendments to house locations and house levels; 2. Amendments to the location and levels of roads; 3. Amendments to the design of House Types H, H1, J & J1, including plan and elevational changes; 4. All associated site development works.	2019
194557	Conditional	Phase 1 of a residential development consisting of the removal of all existing glasshouses (4no. in total), the removal of 1 no. existing water tank, the removal of 2 no. raised tanks and the removal of 2 no. sheds and the construction of 22 no. dwelling houses (10 no. houses will have an option of a rear extension and 4 no. houses will have an option of a rear sunroom) and all associated ancillary development works including access, roads, parking, footpaths, drainage, landscaping and amenity areas.	2019
194570	Conditional	Demolition of an existing dwelling house, demolition of outbuildings used as a garden nursery and demolition of polytunnels, and the construction of 21 No. dwelling houses and all associated ancillary development works including access, roads, parking, footpaths, drainage, landscaping, sewage pumping station, storm water attenuation tank and amenity areas.	2020
1938985	Conditional	Permission for the importation of soil and stone in order to improve the agricultural output of the field at Ballycannon, Kerrypike, Co. Cork. A Natura Impact Statement (NIS) has been prepared and will be submitted to the authority with this application.	2020
1939001	Conditional	Permission for the following Phase 2 development at Gleann Fia, Bawnafinny (townland), Tower, Blarney, Cork comprising (1) The removal of existing temporary construction compound; (2) The change in levels to estate roads and 22 no. dwelling houses permitted under Cork County Council Ref. No. 18/5562 (Phase 1) and (3) The construction of 40 no. dwelling houses permitted under Phase 2 (all units will have an option of side ground floor windows	2020

Planning Reference	Status	Overview	Year Granted Permission
		and 31 no. units will have an option of a rear sunroom, and (4) All associated ancillary development works including access, footpaths, parking drainage, landscaping and amenity areas.	
2039116	Conditional	For permission to construct 13 dwelling houses and all associated ancillary development works including access roads, parking, footpaths, drainage, landscaping and amenity areas	2020
2039213	Conditional	Permission to construct 13 dwelling houses (phase 3) and all associated ancillary development works including access roads, parking, footpaths, drainage, landscaping and amenity areas.	2020
2039273	Conditional	Permission for the demolition of an existing two storey dwelling house and the decommissioning of an existing septic tank. The construction of new 2 storey and single storey dwelling house new shed and carport new vehicular entrance new effluent treatment unit and percolation area and all ancillary site works at Windmill View Coolymurraghue Kerrypike Co Cork .	2020
2140189	Conditional	Permission for the construction of 60 no. dwellings at Kilonan, Ballycannon, Kerrypike, Co. Cork, involving a change of layout and design from that previously permitted on this site under Cork County Council Reg. Ref. 01/3276, subsequently extended under Cork County Council Reg. Ref. 13/4089 and Cork City Council Reg Ref 18/4591 and further amended under Cork County Council Reg Ref 17/6275 and Cork City Reg Ref 18/6729. The proposed development includes an increase in the number of houses proposed from the previously permitted 32 detached dwellings to 60 dwellings, consisting of 2 no. detached dwellings, 42 semi-detached dwellings and 16 terraced dwellings, changes to house designs, and includes all ancillary site development works.	2021
2140340	Conditional	Permission for new two storey dwelling, domestic garage, sewerage system, site entrance and all associated works.	2022
2140558	Conditional	Permission for the construction of a new dwellinghouse, a detached domestic use garage, a waste water treatment system, a new vehicular entrance to the site from a right-of-way access within a farm holding and all other associated site works.	2022
2140750	Conditional	Permission to construct a 2 storey dwelling with a new site entrance and a site specific treatment unit and all other associated site works	2022
2240890	Conditional	Permission for construction of (A) Slatted tank in an existing shed, (B) Slatted feeding passage, (C) Calf house and (D) Office/store	2022
2240915	Conditional	Permission for development at a site at Ballycannon, Kerrypike, Cork. The proposed development will consist of the demolition of an existing boundary wall and gated access, and 2 no. existing animal shelters; the construction of a 2-storey commercial building including signage, with ground floor pharmacy and 1 no. medical consulting room, and 4 no. medical consulting rooms and ancillary services at first floor; 31 no. residential housing units to include: 3 no., 4 -bed detached dwellings, 8 no. 4-bed semi-detached dwellings, 16 no. 3-	2022

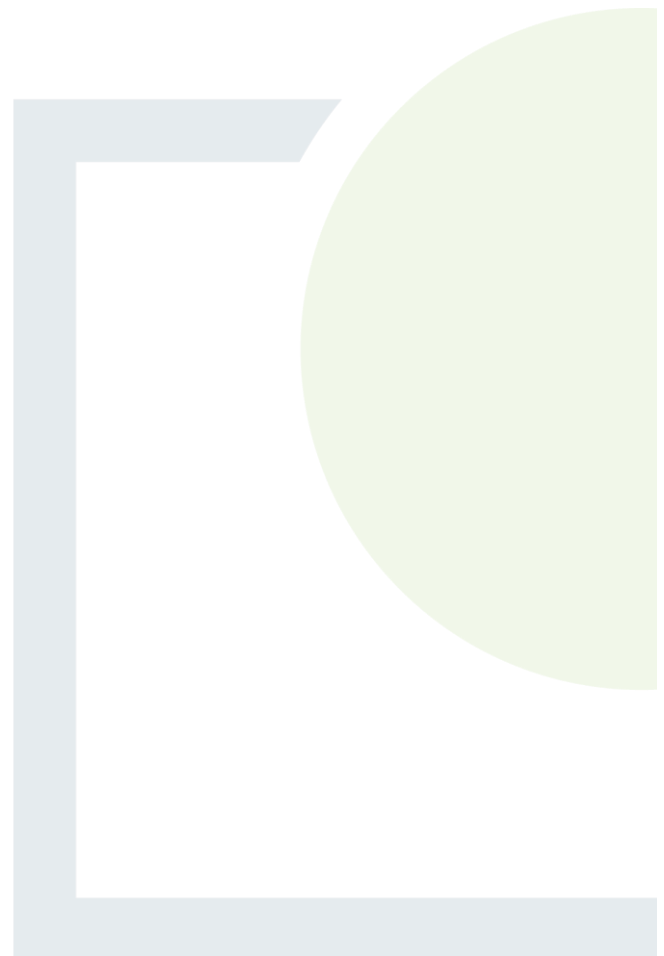
Planning Reference	Status	Overview	Year Granted Permission
		bed semi-detached/end of terrace dwellings, 2 no. 3-bed end of terrace dwellings, and 2 no. 2-bed mid-terrace dwellings; car parking; 1 no. new access; new footpath along the public road; public lighting; provision of a new boundary wall with fence, 1 no. new gated access and 1 no. relocated gated access to an existing dwelling; 1 no. new internal access with entrance pillars to an existing dwelling; and all associated site development, drainage and landscaping works.	
2240926	Conditional	Permission for the continuation of use for a transmission and communications station comprising a 24 metre high structure with associated equipment attached and with ground containers and cabinets within a chain-link fence compound at Bawnafinny (TD), Blarney, County Cork. This application is subsequent to a previous grant of permission by Cork County Council planning reference 12/05524.	2022
2240976	Conditional	Permission for development at Coolymurraghue, Upper Leemount, Kerry Pike, Co.Cork. The proposed development will consist of (1) The development of 94 no. residential housing units comprising 7 no. 4-bed detached dwellings, 5 no. 3-bed detached dwellings, 19 no. 4-bed semi-detached dwellings, 41 no. 3-bed semi-detached dwellings, 12 no. 3-bed terraced dwellings and 10 no. 2-bed terraced dwellings with associated residential car parking. (2) The construction of 2 no. commercial units (140 sqm and 158 sqm respectively), 1 no. retail unit (392 sqm) and 1 no. creche (476 sqm) all fronting onto the public road junction and with associated public amenity areas and 46 no. car parking spaces. (3) Three new vehicular accesses, public footpaths with new pedestrian accesses and the realignment of the existing road junction to allow for safer pedestrian movement. (4) The development will also include public lighting, landscaping, amenity open space areas and all associated site development and infrastructural works including water, foul and surface water drainage services with associated connections and attenuation proposals.	2022
2241372	Conditional	Permission for retention of alterations to existing site entrance and (2) Permission for the construction of a horticultural shed and all associated works.	2023
2241650	Conditional	Permission for the construction of a new dwelling house, new detached domestic garage, new vehicular entrance, new domestic wastewater treatment system and all associated site works.	2023



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## APPENDIX 2

Statement of Authority



Surveyor	Surveys Completed	Biography
Kate O'Regan	Report Author	Kate O'Regan holds a first-class BSc. in Zoology and first-class MSc in Marine Biology from University College Cork. She has prepared ornithological reports and desktop studies for renewable energy projects since joining Fehily Timoney and has previous experience in data management, statistical analysis, mapping and technical report writing. Kate has also completed a wide range of surveys including bird, bat, intertidal, subtidal, insect and mammal surveys.
Jon Kearney	Report Reviewer	Jon is a principal ecologist with Fehily Timoney & Company. Jon is a specialist planner and ecologist with over 17 years' experience in both the UK and Ireland. His skills include an extensive knowledge of planning environmental law and planning requirements for ecology and biodiversity. Jon's experience spans ecology survey techniques and methodology, ornithological surveys, mitigation design, water quality assessment, Appropriate Assessment and Ecological Impact Assessment. Jon has completed ecological assessments, ECIAs, Environmental Impact Assessment Reports (EIAR) and Appropriate Assessments for a wide variety of projects in Ireland and the UK. Jon completed the review of this report.



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