

CORK COUNTY COUNCIL



Habitats Directive (Appropriate Assessment) Screening Determination Report

**Project: Water Rock Urban Expansion Area (UEA)
Infrastructure Works**

Date - 9.11.2018

Introduction

This report represents the Cork County Council's determination on the need for Appropriate Assessment with respect to the infrastructure works proposed (listed below) and has regard to; and should be read in conjunction with the appropriate assessment screening report prepared by Atkins Consulting Engineers on behalf of Cork County Council.

The infrastructure works project comprises eight project elements (number on Figure 1-1).

1. New Services Corridor Link Road

This is a new c1.2km long road connecting the Midleton Northern Relief Road to Water Rock Road. This consists of a 7 metre wide carriageway with a planted verge and off-road cyclist facilities and footpaths provided on both sides. Services for the proposed UEA including water and wastewater, electricity, gas and telecoms shall be provided in the road. Bus stops and junctions with future UEA roads shall be provided along the road corridor.

2. Surface water drainage system for new infrastructure and for UEA

This is a surface water run-off collection and attenuation system to accommodate the design flows from the proposed Services Corridor Link Road and the Water Rock Road Upgrade/ Realignment. It will also accommodate the attenuated design flows that will be generated by the future UEA residential development. The surface water drainage system consists of trapped road gullies which will drain to a new network of catch-pits and pipes within the Services Corridor Link Road and the upgraded/ realigned Water Rock Road. The run-off will pass through a by-pass separator before being attenuated in below ground attenuation tanks. Discharge for run-off from the Services Corridor Link Road and the majority of the Water Rock Road Upgrade/ Realignment will be to an extension of an existing surface water sewer in the Northern Relief Road. This sewer discharges to the Owenacurra River. Attenuated surface water from remainder of the upgrade/re-alignment of Water Rock Road will continue to discharge to the Water Rock Stream. Surface water runoff from the Water Rock UEA Infrastructure Works to the Owenacurra will be attenuated to greenfield runoff rates (QBAR where practicable and 1 in 100-year greenfield runoff rates where QBAR is not practicable). Discharge rates to the Water Rock Stream will be lower than existing rates. The surface water drainage system has been designed to accommodate flows up to and including 1-in-100 year rainfall events.

3. Upgrade of Cork/ Midleton Road and Northern Relief Road Junction

This involves reconfiguring this junction so that on the western arm of the junction the existing left turn lane to the Northern Relief Road would be converted to a shared ahead and left lane. A merge lane would be provided on the eastern arm of the junction to allow the two Midleton bound lanes to merge into a single lane. In order to accommodate this the existing build-out between the footpath and the road will be removed. The existing right turn lane onto the Northern Relief Road from the eastern arm will also be removed and this movement will be prohibited. It will also be necessary to re-locate existing utility apparatus including existing ESB mini-pillars and Eir chambers.

4. Traffic management measures for Water Rock Road

The objective of traffic management measures for the Water Rock Road and its junction with the N25 is to prevent additional traffic from the UEA using the junction of the Water Rock Road and the N25. It is proposed to close the Water Rock Road level crossing to vehicular traffic using bollards at both sides of the railway level crossing. The crossing

shall remain open to pedestrian / cyclist traffic. A turning head facility for vehicles shall be provided on the south side of the proposed closure.

5. Road to access railway station and bridge to cross over existing Cork-Midleton Railway line

5a. – New road to access railway station – This is a proposed extension of the Services Corridor Link Road to provide access to the proposed Water Rock railway station. The proposed extension is just under 200 metres in length. It consists of a 7 metre wide carriageway with a planted verge and off-road cyclist facilities and footpaths provided on both sides.

5b. – Bridge – The proposed bridge will connect the extension of the Services Corridor Link Road with lands zoned for enterprise to the south of the Cork-Midleton Railway Line. The bridge shall provide a vertical clearance of 6.4 metres to the existing track. The maximum horizontal span of the bridge shall be 26 metres. The bridge shall be a reinforced concrete structure with reinforced earth wingwalls. The bridge shall have a 7 metre wide carriageway and shall have off-road pedestrian and cyclist facilities on both sides.

6. New railway-stop along existing Cork-Midleton Railway

The proposed new railway station shall be located between the Water Rock Road level crossing and the Industrial Estate level crossing. The station shall consist of a 90-metre-long, 4-metre-wide platform, waiting area shelter, automated ticket machines, disabled car parking areas, set down areas, taxi parking areas and cycle parking facilities.

7. Upgrade/ realignment of existing Water Rock Road between Water Rock Road Level Crossing and the Carrigane Road

The upgrade/ realignment of the Water Rock Road shall consist of both online upgrade works and offline realignment works. This will provide a 6 metre wide carriageway between the proposed junction of the Water Rock Road and the Services Corridor Link Road and the Carrigane Road. Off-road cyclist and pedestrian facilities shall be provided north of this junction. To the south of the proposed junction the proposed carriageway width is 5.5 metres with pedestrian facilities on both sides of the road. Services for the UEA shall be provided within the road corridor. Access points to existing houses along the road shall be consolidated into single access points where possible.

8. Wastewater Pumping Station for Future UEA Development

A wastewater pumping station is proposed to pump wastewater from the future UEA development to the existing Carrigtwohill Wastewater Treatment Plant via a new rising main. It will also include provision for a future connection from other areas of Midleton. The pumping station will be located south of the Cork-Midleton Railway line to the west of the Midleton Northern Relief Road. The main part of the pumping station will be located below ground. This includes the valve chamber, wet well and emergency storage. The above ground elements consist of a small control building and control kiosks which will be contained in a fenced and gated compound. The pumping station will be a fully sealed system, designed, constructed and operated in accordance with Irish Water's Code of Practices and Technical Standards (IW-CDS-5030-01 to 04 & IW-TEC-800).

Part XAB of the Planning and Development Act as amended, provides for the implementation of the EU Habitats Directive, and Section 177 of the Act, requires Planning Authorities to assess the impacts of land use plans and proposed new developments on proposed developments on sites that are

designated for the protection of nature (European Sites¹) prior to the giving consent for development of such projects. This is to determine whether or not the projects could have negative consequences for the habitats, or plant and animal species for which these sites are designated. This assessment process is called a **Habitats Directive Assessment (HDA)**. The requirements emanate from Article 6(3) of the Habitats Directive which 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.

EU and National Guidance sets out two main stages to the assessment process which are as follows:

Stage One: Screening

The process which identifies what might be likely impacts arising from a project or a plan on a Natura 2000 site, either alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant. No further assessment is required if no significant impacts on Natura 2000 sites are identified to be likely to arise, during the screening stage. The findings of the screening assessment are normally contained in a **Habitats Directive Screening Report**.

Stage Two: Appropriate Assessment

Where the possibility of significant impacts has not been discounted by the screening process, a more detailed assessment is required. This is called an Appropriate Assessment and involves the compilation of a **Natura Impact Statement** by the Planning Authority which is a report of scientific evidence and data relating to European sites for which significant negative impacts have not been previously screened out. This is used to identify and classify any implications of the project for these sites in view of their conservation objectives. The Appropriate Assessment must include a determination as to whether or not the project would adversely affect the integrity of any European site or sites. The project may only be consented if adverse effects on the integrity of European sites can be ruled out during the Appropriate Assessment process. The project may not be consented on foot of an Appropriate Assessment, if it is found that it will give rise to adverse impacts on one or more European sites, or if uncertainty remains in relation to potential impacts on one or more European sites.

¹ European sites include sites that are designated, or proposed for designation as Special Areas of Conservation designated under the Habitats Directive or Special Protection Areas under the Birds Directive. Special Areas of Conservation are sites that are protected because they support particular habitats and/or plant and animal species that have been identified to be threatened at EU community level. Special Protection Areas are sites that are protected for the conservation of species of birds that are in danger of extinction, or are rare or vulnerable. Special Protection Areas may also be sites that are particularly important for migratory birds. Such sites include internationally important wetlands.

The directive provides for a **derogation procedure** which can allow a plan or project to proceed in spite of a finding that the plan or project could / would give rise to adverse effects on the overall integrity of one or more Natura 2000 sites. Derogation procedures can only be progressed in very limited circumstances which are set out in Article 6(4) of the Directive (see below).

Habitats Directive Article 6(4)

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

EU and National Guidance identifies the procedures which must be followed in circumstances where a derogation from the Habitats Directive is sought to allow a project or a plan to proceed, despite a finding that it will give rise to adverse effects on the integrity of one or more Natura 2000 sites. These procedures can only be invoked where it has been shown that there are no alternative ways to implement the plan/project which avoid adverse effects on the integrity of one or more European sites, where it has been demonstrated that there are imperative reasons of overriding public interest for which the plan/project must proceed and where measures have been developed and provided to compensate for any losses to be incurred. These further stages are described below.

Stage Three: Assessment of alternative solutions

In circumstances where the potential for a plan or project to give rise to adverse effects on the integrity of a European site or sites has not been ruled out during the appropriate assessment process, it can only be considered for authorisation where it is demonstrated that there are no alternative solutions and that there Imperative Reasons of Overriding Public Interest (IROPI) which can allow the plan or project to proceed. Stage three of a Habitats Directive Assessment involves the assessment of alternative solutions.

Stage Four: Assessment where no alternative solutions exist and where adverse impacts remain

The fourth stage of the Habitats Directive Assessment process involves demonstrating that Imperative Reasons of Overriding Public Interest exist, and the assessment of the compensatory measures which are proposed to be implemented. In every case in which a local authority envisages approving or proceeding with a plan or project on grounds of IROPI, the Minister for Arts, Heritage and the Gaeltacht must be consulted.

The assessment may stop at any of the above stages if significant impacts on Natura 2000 sites can be ruled out.

Regulation 250 of the Planning and Development Regulations identifies the Local Authority to be the competent authority with responsibility for completing the Habitats Directive Screening process for Local Authority development. In circumstances where it is determined that Appropriate Assessment is required in respect of proposed development to be progressed by the

Local Authority, the competent authority with responsibility for completion of the Appropriate Assessment is an Bord Pleanála.

This document presents the outcomes of the screening assessment determination of Cork County Council in respect of proposed Water Rock UEA Infrastructure Works. All European sites within or close to Water Rock UEA Infrastructure Works or that might have an ecological linkage to the proposed development site have been identified and screened, to determine whether there is potential for this project to give rise to significant impacts on the qualifying features of these sites.

Methodology

Cork County Council had regard to the information presented within the appropriate assessment screening report prepared by Atkins Consulting Engineers on behalf of Cork County Council.

The approach taken in the making of this assessment follows *European Communities, 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, 2002*, and on *Local Government and Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities, 2009*. The guidance suggests the

- provision of a description of the project and the receiving environment (Sections 3 and 4 below);
- identification of Natura 2000 sites which could be affected by the proposed project, provision of a description of these sites including a listing of their qualifying features and the conservation objectives which apply (Section 5 below);
- identification of possible risks which could be associated with the project on any Natura 2000 sites identified to have a physical or other ecological linkage to the proposed development site (Section 6 below);
- assessment of likely significance of any such impacts, taking account of potential for impacts to be significant when considered in combination with impacts arising from other sources (Section 7 below).

This assessment is based on desktop review of information relating to relevant sites.

Existing Environment

The infrastructure works proposed are located to the west of Midleton town, Co. Cork, within a predominantly agricultural and rural area. The study area is generally flat with land elevations not changing significantly throughout. The proposed project is mainly located north of the Midleton-Cork railway with project elements 3, 5 and 8 located south of the railway (Figure 1-1).

The proposed project is located within the Water Framework Directive (WFD) Owenacurra subcatchment (SC_010). The Owenacurra River lies immediately to the east of the proposed project. The Owenacurra estuary is the receiving water body of the Owenacurra catchment.

A second watercourse located in the vicinity of the proposed project is the Water Rock stream that lies to the west of the study area. The Water Rock Stream is a first order stream that flows from the townland of Ballyleary to 'Water Rock House', where it flows underground and finds its way to the

Owenacurra estuary. The report refers to the proposed project having hydrological connectivity via surface water and groundwater pathways to the Owenacurra estuary.

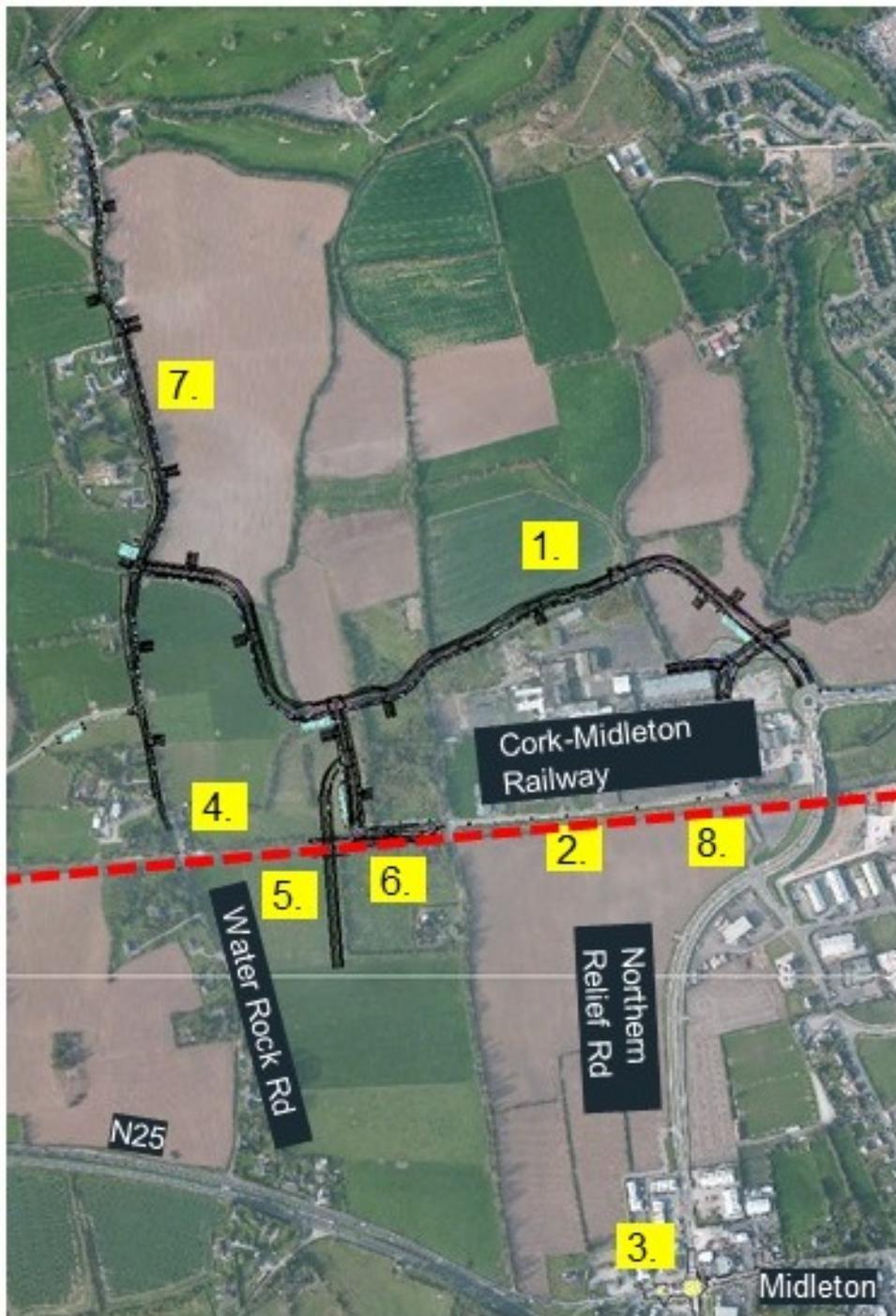


Figure 1.1_Location of the Proposed Projects (Numbers refer)

Project Details

The content and phased implementation of the proposed WaterRock UEA Infrastructure project will be in line with the East Cork Municipal District Local Area Plan (LAP) 2017, which identifies three ‘bundles’ of core infrastructure in the area. The sequencing of the ‘bundles’ reflects the opportunities to meet the requirements of the local housing needs.

Infrastructure works included in phase 1 are project elements 1 – 4 inclusive (described above); the link corridor road, its associated surface water drainage system, the Cork/Midleton Road and Northern Relief Road junction upgrade, and the traffic management measures for Water Rock road. These project elements are anticipated to commence on site in summer 2019. The construction of these project elements will take approximately 9-10 months. The major earthworks in the field adjacent to the roundabout of the Nordic Enterprise Park will take approximately 1 month to complete.

The construction of the railway station (project element no.6), the access road to the railway station (project 5a) and the wastewater pumping station (project element no. 8) are anticipated to be progressed around the same time as or shortly after the construction of project elements 1 - 4. It is anticipated that the wastewater pumping station will be commissioned by the end of 2021.

The remaining project elements (5b and 7) will be constructed as part of later phases with no estimated programme as of yet; upgrade and realignment of Water Rock Road, its associated surface water drainage system, and the access road to the railway and bridge.

Identification of Sites Subject to Screening

Connectivity of the proposed works site to the Natura 2000 network has been reviewed to determine whether there is any pathway for impact between the works site and any Natura 2000 site.

The proposed project site is approximately 1 km from the **Great Island Channel Special Area of Conservation 1058** and the Cork **Harbour Special Protection Area 4030**. Having regard to source-pathway-receptor model and the appropriate assessment screening report by Atkins Consulting Engineers, it is accepted that there is no potential for effects on any other European sites.

The Great Island Channel SAC is located approximately 1km by land from the proposed project. The Owenacurra River and Water Rock stream lie to the east and west respectively of the proposed project. Both watercourses flow into the Owenacurra estuary and thus hydrological connectivity via surface water pathways is present. Given the nature of the underlying groundwater bodies and aquifers, connectivity via groundwater pathways also exists. Thus, the Great Island Channel SAC is potentially within the zone of influence of the proposed project.

Cork Harbour SPA is located approximately 1km by land from the proposed project. Cork Harbour SPA encompasses the Owenacurra estuary, which as detailed above, has hydrological connectivity to the proposed project via the Owenacurra River, the Water Rock stream and the underlying groundwater bodies. Thus, Cork Harbour SPA is potentially within the zone of influence of the proposed project.

Site Details

Great Island Channel (1058)

Great Island Channel Special Area of Conservation extends through the North Channel of Cork Harbour, extending from Little Island to Midleton with its southern boundary formed by the Great Island. Within the site is the estuary of the Owenacurra and Dungourney Rivers. The rivers which flow through Midleton, provide the main source of freshwater to the North Channel. The site is designated for the following features:

- Tidal Mudflats and Sandflats [1140]
- Atlantic salt meadows (*Glauco-Puccinellietalia maritima*)[1330]

The **Conservation Objectives** and associated attributes and targets for this site are as follows:

Qualifying Feature	Mudflats and sandflats not covered by seawater at low tide [1140]
Conservation Objective	To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide in Great Island Channel SAC.
Attribute/Target 1	Habitat Area The permanent habitat is stable or increasing subject to natural processes (723ha).
Attribute/Target 2	Community Distribution Conserve the following community type in a natural condition: <i>Mixed sediment to sandy mud with polychaetes and oligochaetes community complex</i> .

Qualifying Feature	Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330]
Conservation Objective	To restore the favourable conservation condition of Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) in Great Island Channel SAC.
Attribute/Target 1	Habitat Area: Stable or increasing subject to natural processes including erosion and succession – Bawnard 0.29ha; Carrigtwohill 1.01ha.
Attribute/Target 2	Habitat Distribution: No decline or change in habitat distribution subject to natural processes.
Attribute/Target 3	Physical Structure: sediment supply: Maintain natural circulation of sediments and organic matter, without any physical obstructions.
Attribute/Target 4	Physical structure: creeks and pans: Maintain/restore creek and pan structure, subject to natural processes, including erosion and succession.
Attribute/Target 5	Physical structure: flooding regime: Maintain natural tidal regime.
Attribute/Target 6	Vegetation structure: zonation: Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession.
Attribute/Target 7	Vegetation structure: height Maintain structural variation in sward.
Attribute/Target 8	Vegetation structure: vegetation cover Maintain more than 90% of area outside creeks vegetated.
Attribute/Target 9	Vegetation composition: typical species and sub-communities Maintain range of sub-communities with typical species listed in SMP.
Attribute/Target 10	Vegetation structure: negative indicator species – <i>Spartina anglica</i> No significant expansion of common cordgrass with an annual spread of less than 1% where it is known to occur.

With reference to the NPWS conversation objectives data, the nearest mapped mudflat habitat is in the Owenacurra estuary and that is approximately 1.5km from the project site.

Mudflat and sandflat habitat: NPWS Guidance (Great Island Channel SAC, Conservation Objectives Supporting Document Marine Habitats, May 2014) advises that activities resulting in the permanent removal of areas of this habitat type and anthropogenic disturbances which could result in changes in biotic and/or abiotic variables in excess of what could reasonably be envisaged under natural processes (eg ongoing effluent discharges into this habitat type) could interfere with the achievement of the Conservation Objective which applies to this habitat type.

Activities resulting in the permanent removal of this habitat type, changes in natural hydrological conditions including natural tidal fluctuations, changes in natural patterns of accretion and erosion of sediments, alterations in grazing patterns or spread of invasive species including *Spartina* could have the potential to interfere with the Conservation Objective which has been set for this habitat type (NPWS Guidance (Great Island Channel SAC, Conservation Objectives Supporting Document, Coastal Habitats, May 2014).

There is Saltmarsh habitat also within the Owenacurra Estuary approximately 1.5km from the project site.

Saltmarsh habitat: Activities which could result in direct loss of this habitat, or which could cause physical obstructions resulting in changes natural patterns of circulation sediment and organic matter circulation, changes in natural tidal / flooding patterns within the estuary, or which could result in the introduction of invasive alien species to this habitat type, could have the potential to interfere with the Conservation Objective which has been set for this habitat type ((Great Island Channel SAC, Conservation Objectives Supporting Document, Coastal Habitats, May 2014).

Cork Harbour Special Protection Area (4030)

The **Cork Harbour SPA** is an estuarine complex which is primarily comprised of intertidal habitats, mainly mudflats as well as some other coastal and marine habitats. These habitats support very high numbers of wintering waterfowl. The Harbour regularly supports in excess of 20,000 wintering birds, making it an internationally important site and the fifth most important wintering waterfowl site in the country. The qualifying interests for this SPA are set out below, as are the Conservation Objectives which apply to the site.

- Little Grebe (*Tachybaptus ruficollis*) [A004]
- Great Crested Grebe (*Podiceps cristatus*) [A005]
- Cormorant (*Phalacrocorax carbo*) [A017]
- Grey Heron (*Ardea cinerea*) [A028]
- Shelduck (*Tadorna tadorna*) [A048]
- Wigeon (*Anas penelope*) [A050]
- Teal (*Anas crecca*) [A052]
- Pintail (*Anas acuta*) [A054]
- Shoveler (*Anas clypeata*) [A056]
- Red-breasted Merganser (*Mergus serrator*) [A069]
- Oystercatcher (*Haematopus ostralegus*) [A130]
- Golden Plover (*Pluvialis apricaria*) [A140]
- Grey Plover (*Pluvialis squatarola*) [A141]
- Lapwing (*Vanellus vanellus*) [A142]
- Dunlin (*Calidris alpina*) [A149]
- Black-tailed Godwit (*Limosa limosa*) [A156]
- Bar-tailed Godwit (*Limosa lapponica*) [A157]
- Curlew (*Numenius arquata*) [A160]
- Redshank (*Tringa totanus*) [A162]
- Black-headed Gull (*Chroicocephalus ridibundus*) [A179]
- Common Gull (*Larus canus*) [A182]
- Lesser Black-backed Gull (*Larus fuscus*) [A183]
- Common Tern (*Sterna hirundo*) [A193]
- Wetland and Waterbirds [A999]

The **Conservation Objectives** and associated attributes/targets for the qualifying interests for this site are as follows:

Qualifying Feature(s)	Little Grebe, Great Crested Grebe, Cormorant, Grey Heron, Shelduck Wigeon, Teal, Pintail, Shoveler, Red-breasted Merganser, Oystercatcher, Golden Plover, Grey Plover, Lapwing, Dunlin, Black-tailed Godwit, Bar-tailed Godwit, Curlew, Redshank, Black-headed Gull, Common Gull and Lesser Black-backed Gull
Conservation Objective	To maintain the favourable conservation condition of these species.
Attribute/Target 1	Population Trend: Long term population trends for these species are stable or increasing. (Water bird population trends are presented in part four of the Cork Harbour Conservation Objectives supporting document (November, 2014).
Attribute/Target 2	Distribution: No significant decrease in the range, timing or intensity of use of areas by these species other than occurring from natural patterns of variation. Waterbird distribution from the 2010/2011 waterbird survey programme is discussed in part five of the Cork Harbour Conservation Objectives supporting document (November, 2014).

Qualifying Feature	Common Tern
Conservation Objective	To maintain the favourable conservation condition of Common Tern in Cork Harbour SPA.
Attribute/Target 1	Breeding population abundance: No significant decline in apparently occupied nests (AONs). Measures based on standard tern survey methods (see Walsh et al., 1995). In 2012 the total population of common terns that nested within the wider Cork Harbour was between 85 and 95 pairs, a proportion of which now breeds outside the SPA (RPS, 2014).
Attribute/Target 2	Productivity rate: No significant decline in fledged young per breeding pair. Measure based on standard tern survey methods (see Walsh et al., 1995). The Seabird Monitoring Programme (SMP) (JNCC, 2014) provides population data for this species.
Attribute/Target 3	Distribution: breeding colonies: No significant decline in location, number and area (hectares) of breeding colonies. The Common Tern harbour colony now largely breeds on artificial structures in at least two locations.
Attribute/Target 4	Prey biomass available: No significant decline in availability of key prey items (Small fish, crustaceans, insects and occasionally squid. Key habitats: common tern forage in/over shallow coastal waters, bays, inlets, shoals, tidal-tips, drift lines, beaches, saltmarsh creeks, lakes, ponds or rivers. Foraging range max 37km, mean max. 33.81km, mean 8.67km.
Attribute/Target 5	Barriers to connectivity: No significant increase. Seabirds species can make extensive use of marine waters adjacent to their breeding colonies. Foraging range: max.37km , mean max.33.81km , mean 8.67km (BirdLife International Seabird Database 2014).
Attribute/Target 6	Disturbance at the level of impact breeding site: Human activities should occur at levels that do not adversely affect the breeding common tern population. In the Cork Harbour area, this species largely breeds on artificial structures (see Wilson et al., 2000 and RPS, 2014).

Qualifying Feature	Wetlands
Conservation Objective	To maintain the favourable conservation condition of wetland habitats in Cork Harbour SPA, as a recourse for the regularly – occurring migratory waterbirds that utilise it.
Attribute/Target 1	Habitats Area: The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 2,587 hectares, other than that occurring from natural patterns of variation. The wetland habitat area was estimated as 2,587ha using OSI data and relevant orthophotographs. For further information see part three of the conservation objectives supporting documents.

NPWS (2014) Conservation objective for Cork Harbour SPA {4030}. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs

Activities resulting in:

- the loss of the availability or decline in quality of feeding, roosting habitat or reduction in food availability for wintering birds;
- the loss of availability or decline in quality of breeding, feeding and roosting sites or a reduction in food availability for Common Tern; and/or
- a reduction in the quality and extent of wetland habitat within the SPA

Would be likely to interfere with the achievement of the Conservation Objectives which have been set for qualifying features for which this site has been designated.

Impact Assessment

Great Island Channel SAC
Cork Harbour SPA

With reference to the appropriate assessment screening report, there will be no direct impacts/habitat modification and the only potential pathways for impacts on the SPA and SAC are through the hydrological connectivity. These are as follows;

Discharge of contaminated runoff during construction
Discharge of surface water drainage to the Owenacurra River/WaterRock Stream.

The proposed infrastructure project is located outside the SAC boundary, approximately 1km from the Owenacurra estuary and 1.5km from Annexed Sites. The appropriate assessment screening report identifies the potential impacts and concludes that the associated risks are negligible or not applicable.

The main risks arise from excavation/earth movement giving rise to the generation of suspended solids or spillages and these finding a route to Owenacurra River/Water Rock Stream and to the estuary. Given the location of the project, its nature, existing landscape features, topography, distance to the receptors and the characteristics of both the Owenacurra River and Water Rock Stream, the potential risk of impacts is negligible.

The existing ground along the Owenacurra River Bank at/near the project site is flat or falls gently away from it and there is an existing low but protective mounding within the riparian corridor that was identified in the appropriate assessment screening report. The topography and riparian corridor will provide a buffer between the site/infrastructure works and the Owenacurra River.

The Water Rock Stream submerges (undergrounds) approximately 1.5km from the Owenacurra Estuary and its flow can disperse to groundwater. There is no surface over land flow channel/stream directly to the Owenacurra River/estuary from the Water Rock Stream at the project site. While the report refers to re-emergence of the stream to the south of the N25, the distance between flow undergrounding and re-emerging would provide attenuation of flow and contaminants. The

appropriate assessment screening report concludes the potential risk of impacts to habitats of the SAC or SPA via groundwater pathways is negligible. The distance to the receptor is such that there would be no realistic possibility of any measurable impact from silt laden run-off or contaminants such as oils and hydrocarbons.

Discharges from the surface water drainage system will not impact upon the water quality of the receiving water bodies due to the design of the system and incorporation of trapped road gullies, catch pits and by-pass separators. Thus, resulting discharges from the surface water drainage system are not anticipated to have likely significant effects on the SPA during the operation of the proposed project.

The appropriate assessment screening report refers to the pumping station as being a fully sealed system, designed, constructed and operated in accordance with Irish Water's Code of Practices and Technical Standards (IW-CDS-5030-01 to 04 & IW-TEC-800). Emergency storage capacity is provided at the pumping station and there are no emergency overflows provided from the pumping station.

Having regard to the screening report, there will not be any habitat modification within the SPA. The project is not immediately adjacent to the SPA and natural screening features such as tree lines, hedgerows and fields and other existing features are present between the proposed project and the SPA. While the report points out that the Owenacurra River does provide an ecological corridor to the SPA, studies have not recorded significant numbers of birds in the upper estuary and non-tidal stretches of the Owenacurra River. Thus, the construction phase of the project is not anticipated to have significant effects of the bird species of the SPA. Given the nature of the proposed infrastructure project, its location and the existing landscape features present between the proposed project and the SPA, anthropogenic disturbance impacts that may give rise to likely significant effects on the SPA bird species are not anticipated.

Cumulative Impacts

The screening report considers cumulative impacts in detail and makes reference to the 2014 County Development Plan which sets out policies and objectives for the development of the County during the period of the Plan. The Plan has outlined objectives for biodiversity within the county include: -

- Providing protection to all designated sites, national and European, and to maintain or develop linkages between these,
- Providing protection to protected plants and animals in accordance with legal requirements, and
- Retain areas of local biodiversity value, ecological corridors and habitats which contribute to the county ecological network, to protect them from inappropriate development.

A NIS was also prepared for the Cork County Development Plan which assessed the Plan and its potential to adversely affect the integrity of Natura 2000 sites. The findings of the NIS were integrated into the Plan, ensuring that potential impacts were avoided, reduced or offset.

The report refers to; development of housing areas in the UEA which will be carried out in a phased manner to regulate the overall delivery of housing. It also refers to other development projects that have been granted planning permission in the vicinity of the proposed infrastructure project within the

last 5 years. These projects include alterations or extensions to existing residential properties, installation of domestic wastewater treatment units to residential properties and the retention of small commercial outfits. These permissions were granted as conditional permissions, some of which stipulated specific environmental controls in order to protect the receiving environment.

It also refers to the OPW Midleton Flood Relief Scheme which is at an early design stage and will be screened for appropriate assessment separately in due course.

The report also refers to the completed upgrades of the Irish Water Wastewater Treatment Plants at both Midleton and Carrigtwohill. Irish Water has confirmed the availability of treatment capacity at Carrigtwohill WwTP to facilitate the future planned/phased development of housing at the WaterRock UEA.

The projects/items described above are not anticipated to act in-combination with the proposed Water UEA infrastructure project.

Appropriate Assessment Screening Determination

This report has regard to and should be read in conjunction with the appropriate assessment screening report by Atkins Consulting Engineers on behalf of Cork County Council.

This Appropriate Assessment Screening Determination Report is based on the best available information.

Cork County Council is satisfied that all possible risks of impact on the Cork Harbour SPA and the Great Island Channel SAC have been identified in the screening report and also that there is no risk of impacts on either of sites or of any disturbance related impacts on birds within the SPA.

Having regard to the nature and scale of the development, the nature of the receiving environment, the proximity to the nearest European sites, it is reasonable to conclude that the proposed project poses no likely significant effects on the Great Island Channel SAC and Cork Harbour SPA. Thus, it is recommended that it is not necessary for the proposed project to proceed to Appropriate Assessment.

Date: 9.11.2018

Cork County Council.