

# Cork County Council



## EIA Screening Determination Report

Planning & Development Act 2000 & Regulations 2001 (as amended)

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PART 8: WATER-ROCK URBAN EXPANSION AREA INFRASTRUCTURE WORKS

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13<sup>th</sup> Nov 2018

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## 1.0 Introduction

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

## 2.0 Nature and Extent of Proposed Development

The proposed development at Water-Rock, Midleton, Cork comprises 8 project elements:

1. **Services Corridor Link Road** - Serviced roadway with footpaths and cycle tracks, public lighting and ancillary mains services within the roadway, connecting the Midleton Northern Relief Road to the Water Rock Road (L3618);
2. **Surface Water Drainage System** – consisting of gullies, pipes, manholes and underground attenuation tanks for Services Corridor Link Road and upgrade/ realignment of existing Water Rock Road and provision to accommodate future attenuated flows from the Urban Expansion Area;
3. **Junction Upgrade of Cork/ Midleton Road and Midleton Northern Relief Road** - comprising the reconfiguration of: junction layout; traffic signals; traffic markings and permitted movements;
4. **Traffic Management Measures for Water Rock Road (L3618)** – Erection of bollards within the existing Water Rock public road (L3618) each side of the railway line to close the level crossing to vehicular traffic. Railway level crossing to remain operational and access across the level crossing will be maintained for pedestrians and cyclists;
5. **Bridge over Railway and Extension to Services Corridor Link Road** – New bridge over the Cork to Midleton railway line connecting the Services Corridor Link Road to lands to the south of the railway line and new serviced road corridor with footpaths and cycle tracks to access the proposed railway stop and bridge and ancillary works;
6. **Railway Stop** – New railway stop along the Cork to Midleton railway line consisting of a platform and shelter, drop-off area, cycle parking, disabled parking and access, ticket machines and ancillary works;
7. **Upgrade/ Realignment of Water Rock Road (L3618)** – Upgrade/ realignment between the Carrigane Road and north of the railway line level crossing of Water Rock Road. This consists of (i) online upgrade of sections of the existing road by widening, re-surfacing and the provision of services and cyclist and pedestrian facilities and ancillary works; (ii) offline realignment of sections of the road through the provision of new serviced road corridor with footpaths and cycle facilities running parallel to the existing road and ancillary works;

8. **Wastewater Pumping Station** – To facilitate the pumping of wastewater from the Urban Expansion Area to the Carrigtwohill Wastewater Treatment Plant with provision for a future connection from other areas. The pumping station will consist of below ground chambers, above ground control building and kiosks located within a fenced and gated compound.

### **3.0 EIA Legislation**

Part 10 of the Planning and Development Act 2000 (as amended) provides for the implementation of EIA Directive, the most recent amendment of which is 2014/52/EU. This Directive was transposed into Irish Legislation through the Planning and Development Regulations 2001-2018, and commenced on 1<sup>st</sup> September 2018.

The requirement for an EIA or a sub-threshold screening for the proposed development is therefore assessed in accordance with the provisions of the Planning and Development Act Part 10 Section 176 'Prescribed classes of development requiring assessment' along with Schedule 5 of Planning and Development Regulations 2001-2018, and also the Planning and Development Regulations 2001-2018 Part 10 Chapter 4 'Sub-threshold EIAR'.

### **4.0 Requirement for EIA**

The Planning and Development Act 2000 (as amended) Part 10 Section 176 requires the establishment of thresholds for the purposes of determining which classes of development are likely to have a significant impact as transposed from the EIA Directive 2014/52/EU. These are outlined in Schedule 5 Part 1 and 2 of the Planning and Development Regulations 2001-2018.

Schedule 5 Part 1 outlines EU Directive Annex I thresholds which require a mandatory EIA. They are in summary:

- Crude-oil refinery
- Gasification & Liquifaction
- Nuclear Power
- Radioactive Waste Storage & Disposal
- Melting of cast-iron or steel
- Extraction or processing of asbestos, or products containing asbestos.
- Integrated chemical installation
- Railway line
- Aerodrome runway
- Trading port or inland waterway
- Disposal of hazardous waste

The proposed provision of infrastructure does not fall within the processes of activities listed above therefore a mandatory EIA is not required.

Schedule 5 Part 2 outlines Annex II discretionary thresholds determined by Ireland (each EU Member State) which if met or exceeded require a mandatory EIA. They are in summary:

- Intensive Agriculture, including salmon farming and land reclamation
- Extractive industries, including peat extraction, associated processes and geothermal drilling.
- Energy industry
- Processing of metals
- Manufacture of glass
- Chemical Industry
- Food industry
- Textile, leather, wood and paper industries
- Rubber industry
- **Infrastructure projects**
- Other projects
- All modifications to specified developments

The particular class of development in Schedule 5 Part 2 relevant to Water-Rock is ‘Infrastructure Projects’, the subcategories of which are outlined below:

a		Industrial estate development projects where area would exceed 15 ha
b	i	Construction of more than 500 dwelling units
	ii	Construction of a car-park providing more than 400 spaces
	iii	Construction of a shopping centre with a gross floor space exceeding 10,000 sq.m.
	iv	Urban development which would involve an area greater than 2 ha in the case of a business district, 10 ha in the case of other parts of a built up area and 20 ha elsewhere
c		All construction of railways and of intermodal transshipment facilities and of intermodal terminals not included in Part 1 Schedule 5
d		Airfields not included in Part 1 of Schedule 5
dd		All private roads which would exceed 2000 metres in length
e		New or extended harbours and port installations, including fishing harbours, not included in Part 1 of Schedule 5
f	i	Inland waterway construction not included in Part 1 of this Schedule which would extend over a length exceeding 2 kilometres
	ii	Canalisation and flood relief works, where the immediate contributing sub-catchment of the proposed works would exceed 100 ha or where more than 2 ha of wetland would be affected or where the length of the river channel on which works are proposed would be greater than 2 kilometres
g		Dams and other installations not included in Part 1 Schedule 5
h		All tramways, elevated and underground railways, suspended lines or similar lines of a particular type, used exclusively or mainly for passenger transport

i	Oil and gas pipeline installations and pipelines for the transport of CO2 streams for the purposes of geological storage (projects not included in Part 1 Schedule 5)
j	Installation of overground aquaducts
k	Coastal work to combat erosion and maritime works capable of altering the coast through the construction
l	Groundwater abstraction and artificial groundwater recharge schemes not included in Part 1 of Schedule 5
m	Works for the transfer of water resources between river basins not included in Part 1 Schedule 5 where the annual volume of water abstracted or recharged would exceed 2 million cubic metres

In relation to subcategory b(i), construction of more than 500 dwelling units, although the infrastructure will facilitate future housing development on adjoining zoned lands, the proposed development is for the infrastructure works only which specifically and independently received funding from the government under the Local Infrastructure Housing Activation Fund. Therefore the proposed development is not considered to fall into this class as housing unit development will be a separate and independent application process.

In relation to subcategory b(iv) regarding urban development which involves an area greater than 2 ha in the case of a business district, 10 ha in the case of other parts of a built up area and 20 ha elsewhere, the development site only includes the area for the infrastructure (as presented within the red line boundary) which does not exceed 12ha and therefore does not meet/exceed the threshold of 20 ha for non-built up areas.

Regarding subcategory dd, all private roads which would exceed 2000 metres in length, the proposed Services Corridor Link Road will be a public road, not a private road, and will be c.1.2km in total and therefore does not fall into this class. The upgrade/realignment of the Water-Rock Road will also be c.1.2km in length. The Water-Rock Road will remain a public road and the upgrade/realignment works do not fall into this category.

In summary, the proposed development does not fall under any of the thresholds in Schedule 5 Part 1 for mandatory EIA and it does not meet/exceed the threshold regarding 'Infrastructure Projects –Urban Development' for which it falls under in Schedule 5 Part 2 b.iv, therefore a mandatory EIA is not required.

## **5.0 Requirement for Sub-Threshold Developments in Relation to EIA**

Sub-threshold development is defined in the Planning and Development Regulations 2001-2018 Part 10 Section 92 as “development of a type set out in Part 2 of Schedule 5 which does not equal or exceed, as the case may be, a quantity, area or other limit specified in that Schedule in respect of the relevant class of development”.

While the proposed development does not fall under the thresholds of the Schedule 5 Part 1 (Annex I) list, activities requiring mandatory EIA, or Schedule 5 Part 2 (Annex II) list, activities requiring consideration for EIA, it does fit into the class of 'Infrastructure Projects' Schedule 5 Part 2.b(iv) for Urban Areas. The area of the proposed development (as represented in the red line boundary) does not exceed 12 ha which is below the prescribed threshold of 20 ha for non-built up areas in Schedule 5 Part 2.b.iv and is therefore classified as a sub-threshold development for the purposes of EIA.

The Planning and Development Regulations 2001-2018 Part 10 Section 120 outline the requirements for proposed sub-threshold developments in relation to EIA.

1	a		Where a local authority proposes to carry out a sub-threshold development, the authority shall carry out a preliminary examination of, at the least, the nature, size or location of the development.
	b		Where the local authority concludes, based on such a preliminary examination, that -
		i	There is no real likelihood of significant effects on the environment arising from the proposed development, it shall conclude that an EIA is not required
		ii	There is significant and realistic doubt in regard to the likelihood of significant effects on the environment arising from the proposed development, it shall prepare, or cause to be prepared, the information specified in Schedule 7A for the purposes of a screening determination or
		iii	There is a real likelihood of significant effects on the environment arising from the proposed development, it shall (a) conclude that the development would be likely to have such effects, and (b) prepare or cause to be prepared , an EIAR in respect of the development.

On the basis of a preliminary examination of the proposed development, the Council working with Atkins on their behalf, concluded that a screening determination for EIA should be carried out as per Section 120.1.b.ii taking account of the nature of the infrastructural project along with the sensitivity of the receiving environment.

## 6.0 Screening Determination for EIA

The Local Authority in making its EIA Screening Determination for Water-Rock has regard to the requirements for a Screening Determination outlined in the Planning and Development Regulations 2001-2018 Section 120(4)a and makes its comments in the screening determination matrix below:

	Must have regard to -	Cork County Council Assessment
i	The criteria outlined in Schedule 7	
	1. Characteristics of the Proposed Development	
	1.1 the size and design of the whole of the proposed development	The proposed development comprises eight infrastructure elements consisting of a new spine road, water-rock road realignment works, junction upgrade works, traffic management measures for the Water-Rock Road, a new railway station with access road, bridge, drainage and wastewater pumping station measuring a combined area of approximately 12 ha within the red line boundary. The full details are including drawings are available in Appendix A of the EIA Screening Report carried out by Atkins. The project is not considered to be significantly different in scale or character to the existing surrounding urban environment.
	1.2 cumulation with other existing development	As well as existing development, the EIA Screening Report reviews all applications submitted in the last 7 years in the general Midleton area to assess development the subject of a consent as per Section 172 (1A)(b) of the PDA 2000 as amended (those granted permission but not yet constructed). This has been reviewed and verified by the Council. There are 9 committed developments which warrant further examination including the Midleton Flood Relief Scheme and 8 other developments granted conditional consent. Based on the distance of each development to the proposed development and taking account of specific project details and decision dates, the Council concur that it is unlikely that any of the proposed developments will result in a cumulative impact with the proposed development. An EIAR will be prepared as part of the Midleton Flood Relief Scheme.
	1.3 nature of any demolition works	There are no proposed demolition works.
	1.4 the use of any natural resources	The site of the proposed works is relatively level and generally greenfield. Other than construction materials, the proposed development will not require the use of

		any natural resources (land, soil, water and biodiversity). Where practical, reuse of existing material will be undertaken in as far as possible.
	1.5 the production of waste	The appointed contractor will be responsible for preparing a site specific Construction Environmental Management Plan based on the preliminary CEMP which stipulates that waste prevention and minimisation should be the primary driver of the waste management system during the construction phase. Waste soils shall be reused on site where possible to minimise waste going to landfill. Although the construction phase may generate waste soils and other waste i.e. pallets, wrapping, this will be removed off-site and stored before being recycled or disposed of at a waste license facility. The operation phase will not result in any waste being produced. This approach is acceptable to the Council.
	1.6 pollution and nuisances	<p><u>Construction Stage</u></p> <p>The area of the proposed works is partially underlain by karst and a gravel aquifer so there is potential for silt and hydrocarbon run-off to impact on the Owenacurra River and Water-Rock stream. Again, the appointed contractor will be responsible for preparing a site specific Construction Environmental Management Plan based on the preliminary CEMP which will set out all required environmental control measures identified at this juncture. The Council will ensure this is to their satisfaction at construction appointment stage. Management of dust will be in line with National Guidelines as will management of noise levels in an urban environment. The mitigation measures re run-off and commitment to adhering to National Guidelines re dust and noise are acceptable to the Council.</p> <p><u>Operation Stage</u></p> <p>All surface water discharges to the Owenacurra will be to Greenfield run-off rates. Discharge to the Water-Rock Stream will be lower than existing rates. The intensified use of the Water-Rock Road might result in elevated noise levels for existing houses however trees lining the road will be maintained where possible and given that the land has been zoned for development for a number of years this is considered acceptable in an urban environment.</p>
	1.7 the risk of major accidents and /or disasters, including those caused by climate change	The risk of major accidents and/or disasters during the construction phase is low given the relatively small-scale nature of the proposed works. The appointed contractor will be required to prepare a site-specific CEMP which will require

		adherence with all latest health and safety procedures. The risk is also low during operation stage. The impact of climate change has been taken into account within the preliminary drainage design and also within the detailed Flood Risk Assessment. The Council is satisfied that the overall risk is low.
	1.8 The risk to human health	Management of dust will be in line with National Guidelines as will management of noise levels in an urban environment. Atkins EIA Screening Report outlines that there are no reported public drinking water supplies within a 2km radius of the project. The Council is satisfied that the risk to human health is low.
	2. Location of Proposed Development – environmental sensitivity with regard to	
	2.1 existing and approved land use	The majority of the site is agricultural lands with a small portion of industrial lands to the south and adjoining residential properties to the west of the water-rock road. The environmental sensitivity regarding land use in this regard is low. There may be a noise impact on existing residents along the water-rock road however given that the land has been zoned for development for a number of years (identified in CASP 2001 and zoned 2005) this is considered acceptable in the context of a planned urban environment which will expand Middleton town.
	2.2 abundance, availability, quality and regenerative capacity of natural resources in the area and underground	<p>Natural resources are not required to facilitate the provision of the development.</p> <p><u>Soil</u> The contractor will be responsible for preparing a site specific CEMP including best practise as regards soil and construction waste generation.</p> <p><u>Groundwater</u> There is a potential risk of impact to groundwater quality and/or quantity beneath the proposed development site based on the complex and hydrogeological setting of the proposed development in an area underlain by karst and a gravel aquifer which has a predominantly high groundwater vulnerability rating with localised portions of extreme rating. Localised temporary dewatering will be required and is proposed during the construction of the wastewater pumping station. A detailed Hydrogeological Characterisation Report has been prepared by Atkins and the Council are satisfied with the conclusion that once standard environmental management systems are applied, there will be no significant adverse impacts on groundwater (and surface water via groundwater migration) arising from the</p>

		<p>proposed development.</p> <p><u>Surface Water</u></p> <p>In relation to surface water, the site is hydrologically connected to the Owenacurra estuary via the Owenacurra River and the Water-Rock stream therefore there is potential for impact to surface water quality such as accidental pollution. The site-specific CEMP will take account of mitigation measures recommended in the Ecological Impact Assessment Report and Hydrogeological Characterisation Report therefore the Council are satisfied that there is no residual risk.</p> <p><u>Biodiversity</u></p> <p>The site is not located within any Natura 2000 sites but is hydrologically connected to the great island SAC and Cork Harbour SPA. The AA Screening Report concludes that there is no likely significant effects on Natura 2000 sites.</p>
	2.3 the absorption capacity of the natural environment including wetlands/riparian areas/coastal zones/mountain and forest parks/nature reserves and parks/Natura 2000 areas/areas where failure to meet the environmental quality standards laid down in legislation of the EU/densely populated areas/landscapes and sites of historical , cultural or archaeological significance	The site is a relatively level greenfield site on the edge of an existing town and adjoining a rail-line which has been zoned for residential development. The proposed works are in line with this zoning and the site is considered suitable to absorb such development. It is also noted that a Strategic Environmental Assessment of the most recent Local Area Plan 2017 was carried out and found the zoning objective for Water-Rock to acceptable. The AA Screening also finds there to be no likely impact on the two Natura 2000 sites with which the proposed development is connected. (The details of all national designated sites within 15km are outlined in the EIA Screening Report Table 4.1). In addition an archaeological, architectural and built heritage report has been prepared which concludes no known direct impacts and recommends mitigation measures regarding sub-surface archaeology which will be implemented as part of the proposed development.
	3. Types and characteristics of potential impacts	
	3.1 magnitude and spatial extent of the impact	The extent of potential impacts are limited to the footprint of the proposed development of the eight projects measuring 12 ha total area within the red line boundary on a greenfield site. Based on the location, setting and nature of the proposed development, the Council are satisfied that any potential impacts during construction and operational stages are not likely to be significant.
	3.2 nature of the impact	The nature of potential impacts comprises pollution of receiving waters, potential ecological impacts, potential hydrogeological impacts, potential archaeological impacts and flood risk.

	3.3 transboundary nature of the impact	The Council is satisfied that there is no potential for transboundary impacts during the construction or operational stages.
	3.4 intensity and complexity of the impact	The Council is satisfied that significant effects on the receiving environment are not anticipated during construction or operational stages.
	3.5 probability of the impact	Having regard to the conclusions of all associated technical detailed assessments, the design measures incorporated into the preliminary design to address these risks and the requirements for a site specific Construction Environmental Management Plan as specified in the EIA Screening Report carried out by Atkins, the Council, who have been heavily involved in the above processes with the Design Consultants, are satisfied that the probability of the risk impacts is low.
	3.6 expected onset, duration, frequency and reversibility of the impact	The expected Phase 1 is projects 1, 3, 4 and 6 as outlined in the Introduction. The probability of impacts is considered to be low therefore there shall be no requirement for the reversibility of the impacts as per the conclusion of the EIA Screening Report carried out by Atkins.
	3.7 cumulation of the impact with the impact of other existing and approved projects	As per section 1.2 it is considered to be unlikely that any of the proposed developments will result in a cumulative impact with the proposed development.
	3.8 possibility of effectively reducing the impact	Significant effects are not anticipated. In any case a site specific CEMP will be prepared by the Contractor which will take account of all proposed mitigation measures.
ii	The information submitted pursuant to Schedule 7(A)	
	<p>1. Description of the proposed development, including</p> <p>a. A description of the physical characteristics of the whole proposed development and where relevant of demolition works</p> <p>b. A description of the location of the proposed development, with particular regard to the environmental sensitivity of geographical areas likely to be affected.</p>	<p>The proposed development comprises eight infrastructure elements, the physical characteristics of which are outlined below (No demolition works are proposed as part of the proposed development);</p> <p>a.1 <i>New Services Corridor Link Road</i> – New c1.2km long road, 7m wide carriageway, planted verge, off-road cyclist facilities &amp; footpaths. Services for the proposed UEA will be installed in the road; electricity, water, wastewater, gas, telecoms.</p> <p>a.2 <i>Surface water drainage system for new infrastructure and for UEA</i> – 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. The system consists of trapped road gullies, associated pipework, by-pass separator, attenuation tanks. Discharge for run-off from the Services Corridor Link Road and the majority of the Water Rock</p>

		<p>Road Upgrade/ Realignment will be to an extension of an existing surface water sewer in the Northern Relief Road which 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 including an allowance for climate change.</p> <p>a.3 <i>Upgrade of Cork/Midleton Road and Northern Relief Road Junction</i> – This junction will be reconfigured, 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. 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.</p> <p>a.4 <i>Traffic management measures for Water Rock Road</i> – Closure of 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 on the south side of the proposed closure.</p> <p>a.5 <i>Road to access railway station and bridge to cross over existing Cork-Midleton Railway line</i> – New c200m long road off the Services corridor Link Road to provide access to the proposed Railway Station, consists of 7m wide carriageway, planted verge, off-road cyclist facilities &amp; footpaths.</p> <p>a.6 <i>New railway-stop along existing Cork-Midleton Railway</i> – The station shall consist of a 90-metre long, 4-metre-wide platform,</p>
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		<p>waiting area shelter, automated ticket machines, disabled car parking areas, set down areas, taxi parking areas and cycle parking facilities.</p> <p>a.7 <i>Upgrade/ realignment of existing Water Rock Road between Water Rock Road Level Crossing and the Carrigane Road</i> – provide a 6m wide carriageway between the proposed junction of the Water Rock Road and the Services Corridor Link Road and the Carrigane Road. New off-road cyclist and pedestrian facilities north of this junction. South of the proposed junction, the proposed carriageway width is 5.5m 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 provided.</p> <p>a.8 <i>Wastewater Pumping Station for Future UEA Development</i> – A new wastewater pumping station to pump wastewater from the future UEA development to the existing Carrigtwohill Wastewater Treatment Plant. 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.</p> <p>b. The proposed infrastructure works are located west of Midleton town, Co. Cork, with lands consisting of primarily agricultural lands with portions of industrial developments in the east and south. The majority of the proposed works will occur to the north of the railway line with some works extending south of the railway.</p> <p>The EIA Screening Report refers to the following environmentally sensitive geographical areas; There are 4 European designated sites within 15km of the proposed project. The proposed project is located ca. 1km north east of Cork Harbour SPA and Great Island Channel SAC and is therefore hydrologically linked to these sites. Ballycotten Bay SPA and Blackwater River SAC are located ca. 13.8km and 12.5km from the site respectively and are not connected to the proposed works. There are also 19no. proposed</p>
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		<p>Natural Heritage Areas (pNHAs) within 15km of the proposed works. 7 of these national designated sites are hydrologically linked to the proposed works and 1no. is connected to the proposed works via land features. The closest pNHA to the proposed works is the Great Island Channel pNHA (001058) ca. 1km south east of the works and is encompassed within the Great Island Channel SAC.</p> <p>The proposed development is not located within any designated Natura 2000 site. Cork Harbour SPA and Great Island Channel SAC are located ca. 1km south east of the proposed project by land. The closest national designated site, Great Island Channel pNHA is located ca.1km south east of the proposed works. There will be no land take from any of the designated sites within 15km of the proposed works and, based on the findings of the Appropriate Assessment Screening the proposed development is not likely to have significant effects on Cork Harbour SPA and Great Island Channel SAC.</p>
	<p>2. Description of aspects of the environment likely to be significantly affected</p>	<p>The proposed development is not located within any designated Natura 2000 site. Cork Harbour SPA and Great Island Channel SAC are located ca. 1km south east of the proposed project by land. The closest national designated site, Great Island Channel pNHA is located ca.1km south east of the proposed works. There will be no land take from any of the designated sites within 15km of the proposed works and, based on the findings of the Appropriate Assessment Screening the proposed development is not likely to have significant effects on Cork Harbour SPA and Great Island Channel SAC.</p> <p>There are a number of residential developments located along the Water Rock Road which may experience increased noise levels arising from the project; however such impacts will be localised and, with regard to the construction stage and temporary in nature.</p> <p>A recurring flood event occurs to the north west of the level crossing point on the Water Rock Road at Ballyrichard More after periods of heavy rainfall. A site-specific Flood Risk Assessment (FRA) for the Water Rock UEA Infrastructure Works (Atkins, 2018) summarises:</p> <ul style="list-style-type: none"> <li>• The overall drainage design strategy includes SUDS treatment trains</li> </ul>

		<p>and flow attenuation, to improve water quality, reduce run off into the existing public infrastructure and maintain surface water runoff at pre-development levels.</p> <ul style="list-style-type: none"> <li>• Surface water runoff from the majority of the Water Rock UEA Infrastructure Works will be attenuated to greenfield runoff rates (QBAR where practicable and 1 in 100year greenfield runoff rates where QBAR is not practicable) with most discharging to the Owenacurra River. Technical input from the Midleton Flood Relief Scheme project has confirmed that these flows would have negligible impact on water levels and flood risk in the Owenacurra River.</li> <li>• Discharge rates to the Water Rock Stream will be significantly lower than existing rates. This is due to a reduction in catchment draining to the Water Rock Stream and attenuation of previously unattenuated sections of Water Rock Road. These works would therefore provide a slight reduction in flows during extreme flood events and so the Water Rock UEA Infrastructure Works would be neutral or slightly beneficial with regards to flood risk in the Water Rock Stream.</li> </ul> <p>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.</p> <p>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 Natura 2000 sites during the operation of the proposed project.</p>
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		<p>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 &amp; IW-TEC-800). Emergency storage capacity is provided at the pumping station and there are no emergency overflows provided from the pumping station.</p> <p>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.</p>
	<p>3. Description of any likely significant effects on the environment, to the extent of information available on such effects, of the proposed development on the environment resulting from</p> <ul style="list-style-type: none"> <li>a. The expected residues and emissions and the production of waste, where relevant, and</li> <li>b. The use of natural resources, in particular soil, land, water and biodiversity.</li> </ul>	<ul style="list-style-type: none"> <li>a. As outlined previously, the appointed contractor will be responsible for preparing a site specific Construction Environmental Management Plan based on the preliminary CEMP which stipulates that waste prevention and minimisation should be the primary driver of the waste management system during the construction phase. Waste soils shall be reused on site where possible to minimise waste going to landfill. Although the construction phase may generate waste soils and other waste i.e. pallets, wrapping, this will be removed off-site and stored before being recycled or disposed of at a waste license facility. The operation phase will not result in any waste being produced. This approach is acceptable to the Council.</li> </ul>

		<p>The area of the proposed works is partially underlain by karst and a gravel aquifer so there is potential for silt and hydrocarbon run-off to impact on the Owenacurra River and Water-Roc stream. Again, the appointed contractor will be responsible for preparing a site specific Construction Environmental Management Plan based on the preliminary CEMP which will set out all required environmental control measures identified at this juncture. The Council will ensure this is to their satisfaction at construction appointment stage. Management of dust will be in line with National Guidelines as will management of noise levels in an urban environment. The mitigation measures re run-off and commitment to adhering to National Guidelines re dust and noise are acceptable to the Council.</p> <p>All surface water discharges to the Owenacurra River and the majority of discharge to the Water-Rock Stream will be to greenfield run-off rates. In any event discharge rates to the Water-Rock stream will be lower than existing levels. The intensified use of the Water-Rock Road might result in elevated noise levels for existing houses however trees lining the road will be maintained where possible and given that the land has been zoned for development for a number of years this is considered acceptable in an urban environment.</p> <p>b. The site of the proposed works is relatively level and Greenfield. Other than construction materials, the proposed development will not require the use of any natural resources (land, soil, water and biodiversity). Where practical, reuse of existing material will be undertaken in as far as possible.</p>
iii	Any further relevant information on the characteristics of the proposed development and its likely significant effects on the environment in accordance with sub-article (1A)(a) and its description of features and measures to avoid/prevent adverse impacts on the environment in accordance with sub-article (1A)(b)	The assessment of risk and environmental impact as well as mitigation measures is considered to be thorough based on all detailed technical assessments carried out including the EIA Screening Report, Ecological Impact Assessment Report, Flood Risk Assessment, Hydrogeological Characterisation Report and Preliminary Construction Environmental Management Plan.
iv	The available results, where relevant, of preliminary verifications or assessments of the effects on the environment carried out pursuant to European Union	The Local Authority has made a determination that Appropriate Assessment is not required in accordance with the conclusion of the Appropriate Assessment Screening report carried out by Atkins Consulting Engineers which states 'Due to the

	legislation other than the Environmental Impact Assessment Directive	scope and nature of the proposed project, it is considered that the proposed project will not give rise to likely significant effects on features of interest of the Great Island Channel SAC and Cork harbour SPA.'
v	In respect of development which would be located on, or in, or have the potential to impact on the following, the likely significant effects of the development on such site, area, land, place or feature as appropriate:	
	European site	The proposed development is not located within any designated Natura 2000 sites. There are four Natura 2000 sites located within 15km of the proposed project which are outlined in Table 4-2 of the EIA Screening report prepared by Atkins. Of these four Natura 2000 sites, two have connectivity with the proposed project; Great Island Channel SAC (001058) and Cork Harbour SPA (004030). Both these Natura 2000 sites encompass the Owenacurra estuary, which is located immediately south of Midleton town. The site is hydrologically and hydrogeologically linked to the Owenacurra estuary via the Owenacurra River and Water Rock Stream however the Appropriate Assessment Screening Report and Determination conclude that the project is not likely to give rise to significant effects on features of interest of these European sites.
	NHAs	There are no Natural Heritage Areas (NHAs) s on the site of the proposed development.
	pNHAs/ Area the subject of a notice under 16(2)B of the Wildlife (Amendment) Act 2000	There are 19 proposed Natural Heritage Areas (pNHAs) located within 15km of the proposed project. Of these 19 pNHAs, 8 have hydrological connectivity to the proposed project. In accordance with the Ecological Impact Assessment, the Council is satisfied that the works proposed are not expected to have a residual impact on statutory designated sites specifically areas which are the subject of a notice under 16(2)B of the Wildlife (Amendment) Act 2000, NHAs, and proposed NHAs.
	Nature reserve	There are no nature reserves located within 15km of the proposed project.
	Refuge for flora or fauna	There is no flora and fauna refuge within 15km of the proposed project.

<p>Place, site or feature of ecological interest, the preservation /conservation/protection of which is an objective of a development plan/LAP/draft plan or variation of a plan</p>	<p>In terms of LAP objectives to preserve/conserve/protect sites of ecological interest, the Local Authority has regard to the following in its determination:</p> <p>General objective for Midleton MD-GO-13: to protect river corridors having regard to the need to avoid disturbance to wintering birds and managing flood risk.</p> <p>In relation to wintering birds, an Ecological Impact Assessment has been carried out which outlines that of the bird species recorded. Six species are birds of conservation concern; Lapwing, Dunlin, Curlew, Redshank, Black-headed gull and Herring gull. However, these species are of concern for their breeding populations, not for the wintering populations which occur in the Owenacurra Estuary. The numbers recorded for these species indicate that this part of Cork Harbour SPA, i.e. upper Owenacurra estuary, does not hold significant numbers of these species and are below the 1% nationally important threshold for the species.</p> <p>In relation to flood risk, technical input from the Midleton Flood Relief Scheme project has confirmed that surface water run-off would have a negligible impact on water levels and flood risk in the Owenacurra River. In addition, a Flood Risk Assessment (FRA) was conducted for the proposed project which concludes that given the design of proposed project and the incorporation of the FRA recommendations, the proposed project will not affect flood extents in the Owenacurra or the Water Rock Stream catchments, nor will the proposed project be impacted by extreme flood events. The Council is satisfied with this conclusion.</p>
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## 7.0 Main Considerations

Having regard to the examination of the environmental information contained in the EIA Screening Report, supported by the information provided in the Ecological Impact Assessment Report, the Appropriate Assessment Screening Report, the Outline Construction Environmental Management Plan the Hydrogeological Characterisation Report and the Flood Risk Assessment Report prepared by Atkins Consulting Engineers, and upon considered assessment of the issues by Cork County Council, it is considered that the main direct and indirect effects of the proposed development on the environment are as follows:

- Potential Water Quality Impacts

The potential for ground and surface water impacts will be mitigated by construction management measures and the drainage design strategy outlined in the Ecological Impact Assessment and the Construction Environmental Management Plan (as informed by the Hydrogeological Characterisation Report).

As outlined in the Ecological Impact Assessment section 5.63., the Contractor will be responsible for implementing a temporary surface water drainage management system at the construction stage including surface water runoff controls so as to ensure that the construction works have no adverse impact on water quality. Such measures if required upon assessment would include silt fences or berms erected between any exposed bodies of water and the works.

Further measures for the control of pollution and protection of groundwater and surface water are outlined in the Construction Environmental Management Plan section 6.64 (as informed by the Hydrogeological Characterisation Report) including implementing the recommendations of the Construction Industry Research and Information Association guides '*Control of Water Pollution from Construction Sites*' and '*Groundwater control – design and practise*' to minimise as far as possible the risk of pollution. In addition, all groundwater temporarily dewatered during the construction of the wastewater pumping station will be treated via the installation of a temporary in-situ water treatment system.

All of the above mitigation measures will form part of the site-specific Construction Environmental Management Plan (CEMP) which will be in operation during the construction phase.

The proposed road drainage will consist of trapped gullies which will collect surface water runoff from the new road surfaces. The gullies will connect to a network of pipes and catch-pit manholes which will remove sediment and debris from the runoff. treatment shall be provided by a by-pass separator. Run-off to the Owenacurra will be limited to greenfield run-off rates

(QBAR where practicable and 1 in 100-year greenfield run-off where QBAR is not practicable). Technical input from the Midleton Flood Relief Scheme project has confirmed that these flows would have negligible impact on water levels and flood risk in the Owenacurra.

Discharge rates to the Water Rock Stream will be lower than existing rates. This is due to a small reduction in catchment draining to the Water Rock Stream and attenuation of previously unattenuated sections of Water Rock Road.

Upon considered assessment of the potential impacts and mitigation measures, the Council does not anticipate significant residual effects directly to groundwater receptors and indirectly to surface water receptors.

- Potential Ecological impacts

The Construction Environmental Management Plan (CEMP) includes the mitigation measures set out in the supplementary Ecological Impact Assessment, both of which are included as part of the Part 8 planning application. The key environmental considerations set out in the CEMP includes measures regarding training, awareness and competence, site compound and access, emergency preparedness and response, waste management, traffic management, noise and vibration, invasive species, ecology, archaeology, dust and general pollution prevention measures.

Specifically in relation to ecology, an invasive species management plan will be required to be prepared by the appointed Contractor, translocation of bee orchid site turves shall take place prior to commencement of the site preparation phase, the removal of trees and hedgerows at the intersection points of the proposed project shall be minimised, vegetation clearance will be conducted outside of the breeding bird season and if this is not possible a breeding bird survey will be undertaken in advance of the works to ensure there will be no impacts on nesting birds. Pre-construction surveys of PRF trees will also be carried to confirm the presence or not of roosting bats for which a license from the NPWS shall be obtained if they are present and the tree is required to be felled. All conditions of the license will be met. Site clearance will also be conducted outside of the frog breeding season or if not possible, a search of suitable spawning and refuge areas shall be conducted by an ecologist prior to the works and a license from the NPWS obtained if necessary for which all conditions will be met. Night time lighting will be kept to a minimum.

Mitigation during construction includes consulting a suitably qualified and experienced ecologist during the design of the lighting design during the operational phase of the proposed project, which shall be completed during detail design.

Any lost trees and hedgerows will be compensated for with the area/ length of compensation required for the area/ length lost shall be like-for-like, as a minimum. The planting will be

implemented as part of the Contractor's landscape plan, in line with 'A Guide to Landscape Treatments for National Road Schemes in Ireland' (NRA, 2006).

In accordance with the conclusions of the Ecological Impact Assessment, the Council concludes that consideration of the pre-construction surveys and mitigation measures results in the residual effects being reduced to 'not significant'. In essence, this can be described as having no perceivable impacts on ecological features (habitats or species).

The appropriate assessment screening report and determination report also concludes that 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. 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 Natura 2000 sites during the operation of the proposed project.

- Potential Archaeological Impacts

An Archaeological, Architectural and Built Heritage Report has been prepared and reviewed by the County Archaeologist. There are no known archaeological monuments within the footprint of the proposed infrastructural works or within the immediate environs. And therefore no direct impacts. There are three monuments within 500m of the subject area which include a limekiln (CO076-018) c. 20m to SW, none of these will be impacted by the proposed infrastructural works.

Given the location with archaeological sites in the wider area and potential archaeological sites within the study area and the scale of the development, I concur with the recommendations of the report which calls for pre development programme of geophysical survey of the accessible green field area followed by a program of archaeological testing along the proposed development i.e. at centre of realignment of the Water Rock road, new corridor, railways station and crossing and targeting the results of the geophysical survey. The areas to be tested shall be agreed with the Planning Authority Archaeologist prior to submitting the licence.

- Flood Risk

The EIA Screening Report refers to the Flood Risk Assessment which has been undertaken including detailed hydraulic modelling and analysis of the Water Rock Stream as informed by historic flood events. The infrastructure works have been designed such that they are not

vulnerable to flooding and do not increase flood risk elsewhere. Recommendations from the flood risk assessment have been incorporated into the surface water drainage design. Technical input from the Midleton Flood Relief Scheme project has confirmed that the proposed discharge rates from the UEA Infrastructure Works to the Owenacurra would have negligible impact on water levels and flood risk in the Owenacurra.

Discharge rates to the Water Rock Stream will be lower than existing rates. The works will provide a reduction in flows during extreme flood events and so the Water Rock UEA Infrastructure Works will be neutral or slightly beneficial with regards to flood risk in the Water Rock Stream.

The impact of climate change has also been taken into account within the preliminary drainage design and also within the detailed Flood Risk Assessment. The Council is satisfied that the overall risk is low.

## **8.0 Environmental Impact Assessment Screening Determination**

This report has regard to and should be read in conjunction with the Environmental Impact Assessment Screening Report prepared by Atkins Consulting Engineers on behalf of Cork County Council.

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

Having regard to the scale and nature of the project and based on a considered assessment taking account of all available information including proposed mitigation measures outlined in the various detailed technical documents which are routine and known to work, the overall probability of impacts on the receiving environment arising from the proposed development (during the construction or operational phases) is considered to be low.

Cork County Council is satisfied that all possible risks of impact on the receiving environment have been identified in the screening report and that no significant environmental impacts are anticipated, once standard industry environmental management systems in accordance with the proposed standard mitigation measures are in place.

Thus it is recommended that it is not necessary for the proposed project to proceed to an Environmental Impact Assessment.