

Carrigtwohill to Midleton Inter-Urban Cycleway Phase 2

Environmental Impact Assessment Screening Report

Cork County Council

December 2023



Notice

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Contents

Chap	oter	Page					
1.	Introduction	4					
1.1.	Proposed Project	4					
1.2.	Purpose of this Report	4					
2.	Methodology	5					
2.1. 2.2.	Requirement for Environmental Impact Assessment Relevant Guidance	5 6					
3.	Environmental Impact Assessment Screening	8					
3.1.	Step 1 - Mandatory Screening for EIA	8					
3.2.	Step 2 - Determining if the project is likely to have significant effect on the re	eceiving environment					
3.3.	Cycle Route	9					
3.4.	Proposed Cross Section	13					
3.5.	Traffic Signs and Road Markings	13					
3.6.	Street Lighting	13					
3.7.	Proposed Landscape Strategy	14					
3.8. to an	Criteria for Determining Whether Development Listed in Part 2 of Schedule SIA	5 Should be subject 20					
3.9.	Potential for Significant Effects on the Receiving Environment	47					
4.	Conclusion	48					
Figu	res						
Figure 3-1 Phase 2 Route Sections							
Figure 3-2 - Proposed location for raised table crossing on Carrigane Road (N)							
Figure	e 3-3 - Proposed location for raised table crossing on Carrigane Road	11					
Figure	e 3-4 - Typical Cross-section through Underpass	12					
Figure	e 3-5 - Proposed location for raised table crossing on Castle Rock Avenue	12					
Figure	Figure 3-6 – Typical Cross Section of Phase 2 Cycle Route						

Introduction

Cork County Council (CCC) have appointed Atkins to prepare an Environmental Impact Assessment (EIA) Screening Report for the proposed Carrigtwohill to Midleton Inter-Urban Cycleway Phase 2 project in Carrigtwohill, Co. Cork. The EIA Screening Report will be submitted as part of the Part 8 planning submission for the proposed works.

1.1. Proposed Project

The proposed development is located to the east of the town of Carrigtwohill, County Cork. The Carrigtwohill to Midleton Inter-Urban Cycleway Phase 2 project comprises a shared cycling/pedestrian paths connecting the new road network with the planned Carrigtwohill to Midleton Inter-urban Cycle Route. Services will be connected to existing services/infrastructure in Carrigtwohill as required.

A detailed Construction Environmental Management Plan (CEMP) will be developed by the contractor prior to construction in accordance with UK guidelines LA 120 Environmental management (in the absence of Irish guidelines). The CEMP will outline recommended measures to avoid, minimise and control adverse environmental impacts associated with the construction of the proposed development. The CEMP will document the commitment to safeguarding the environment through the identification, avoidance and mitigation of the potential significant negative environmental impacts which may be associated with the proposed development. An Environmental Clerk of Works or Site Environmental Manager will be appointed to ensure that control measures within the CEMP are upheld. The Environmental Clerk of Works or Site Environmental Manager will monitor construction activities, where they deem required.

A detailed Resource and Waste Management Plan (RWMP) will be developed by the contractor prior to commencement of construction works in accordance with the relevant industry standard guidance document; 'Best Practice Guidelines for the preparation of resources & waste management plans for construction & demolition projects' (EPA, 2021). This RWMP will ensure efficient use of material resources, reduce waste at source and reduce the quantity of waste that requires final off-site disposal to landfill in accordance with the waste hierarchy. The RWMP will also help facilitate the transition to a more circular economy thereby minimising the need for new inputs of virgin materials and energy, while reducing environmental pressures linked to resource extraction, emissions and waste management. A Waste Manager will be appointed to ensure that control measures contained within the RWMP are implemented during construction.

1.2. Purpose of this Report

The purpose of this report is to determine whether the proposed infrastructure project requires the preparation of an Environmental Impact Assessment Report (EIAR). This screening report has been prepared to accompany a planning application under Part 8 of the Planning and Development Regulations, 2001 (as amended), from Cork County Council to obtain planning permission for the proposed Carrigtwohill to Midleton Inter-Urban Cycleway project.

A Stage 1 Screening for Appropriate Assessment has been prepared for the proposed project (Atkins, 2023). The project has been assessed with regards to the likely significant effects of the project on European sites within the zone of influence of the proposed project. The Screening for AA concluded that:

'based on the nature of the proposed development and its integration with other projects under the Carrigtwohill URDF Initiative, UEA Masterplan and Cork County Development Plan, it will not give rise to significant effects on any of the Natura 2000 sites within the Zone of Influence, in combination with other plans or projects.'

2. Methodology

2.1. Requirement for Environmental Impact Assessment

This project has been screened in accordance with Section 3.2 of the 'Guidelines on the information to be contained in Environmental Impact Assessment Reports' (EPA, 2022), the Environmental Impact Directive (85/337/EEC) and all subsequent relevant amendments and Planning and Development regulations (2001-2023), including S.I. No. 296 of 2018 - European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018, which came into operation on 1st September 2018. The project has been screened in accordance with the Roads Act, 1993-2022 and the European Union (Roads Act 1993) (Environmental Impact Assessment) (Amendment) Regulation 2019 S.I. No. 279 of 2019.

Criteria to evaluate whether significant impacts on the receiving environment will arise from a proposed development are listed under Schedule 7 of the relevant Planning & Development Regulations (2001-2023). A list of the relevant information to be provided by the applicant or developer for the purposes of sub-threshold EIA screening is presented in Schedule 7A of the Regulations.

As set out under the relevant legislation (detailed further in Section 2.2 of this report), the following steps are involved when carrying out EIA screening for a particular project:

• Step 1 is to determine if the proposed infrastructure works represent a project as understood by the Directive and if a mandatory EIAR is required. Such projects are defined in Article 4 of the EIA Directive and set out in Annexes I and II. Projects requiring a mandatory EIAR are included under Planning and Development Regulations (2001-2023), specifically Schedule 5, Part 1 – Development for the purposes of Part 10, Section 50 of the Roads Act (1993-2022), S.I. No. 279 of 2019 amendments, and the prescribed projects listed in Section 8 of the Roads Regulations, 1994 (S.I. No. 119 of 1994).

Subthreshold development - The proposed development is also screened to determine if it requires the preparation of an EIAR under the Planning and Development Regulations (2001-2023) Schedule 5, Part 2 – Development for the purposes of Part 10 (the only type of development to which thresholds do not apply are those considered to always be likely to have significant effects and therefore require an EIAR) or Section 50(1)(b) and 50(1)(c) of the Roads Act 1993-2022.

• Step 2 is to determine if the project is likely to have significant effects on the receiving environment. Section 50 (1)(b) of the Roads Act (1993-2022) states that 'if An Bord Pleanála considers that any road development proposed (other than development to which paragraph (a) applies) consisting of the construction of a proposed public road or the improvement of an existing public road would be likely to have significant effects on the environment it shall direct that the development be subject to an environmental impact assessment.'

Section 50 (1)(c) of the Roads Act (1993-2022) states that 'where a road authority or, as the case may be, the Authority considers that a road development that it proposes (other than development to which paragraph (a) applies) consisting of the construction of a proposed public road or the improvement of an existing public road would be likely to have significant effects on the environment, it shall inform An Bord Pleanála in writing prior to making any application to the Bord for an approval referred to in section 51(1) in respect of the development.'

Section 50 (1)(e) of the Roads Act (1993-2022) states 'where a decision is being made pursuant to this subsection on whether a road development that is proposed would or would not be likely to have significant effects on the environment, An Bord Pleanála, or the road authority or the Authority concerned (as the case may be), shall take into account the relevant selection criteria specified in Annex III.' Annex III as has been transposed into Irish Legislation via Schedule 7 of the Planning and Development Regulations 2001-2023.

There are no exacting rules as to what constitutes "significant" in terms of environmental impacts. The responsibility is on Planning Authorities to carefully examine every aspect of a development in the context of characterisation of the project, location of the project and type and characteristics of potential impacts. It is generally not necessary to provide specialist studies or technical reports to complete this screening process, rather to investigate where further studies may be required, and where risks, if any, to the integrity of the receiving environment may lie.

For the purposes of screening sub-threshold development for EIA, all the relevant information as presented within EIA Planning and Development Regulations 2001-2023 (Schedule 7A) has been provided on behalf of the applicant, Cork County Council. The potential for the project to pose a significant impact to the receiving environment has also been evaluated in accordance with criteria listed in the Planning & Development Regulations, 2001 - 2023 (Schedule 7).

The findings of the EIA screening assessment prepared for the project has informed our professional opinion as to whether an EIAR is warranted for the proposed project, with due regard to all relevant statutory requirements and technical guidance. However ultimately it is the responsibility of the relevant planning authority to make a determination as to whether an EIAR is required for a particular project, based on screening conducted by the planning authority.

2.2. Relevant Guidance

The Environmental Impact Directive (85/337/EEC) was brought into force in 1985. Subsequent amendments were made with the following pieces of legislation - 97/11/EC, 2003/35/EC, 2009/31/EC, 2011/92/EU and 2014/52/EU. The Directive was originally transposed into Irish Law by the European Communities (Environmental Impact Assessment) Regulations, 1989 (S.I. No. 349/1989). This amended the Local Government (Planning and Development Act) 1963 and introduced the requirement for an Environmental Impact Assessment in certain specified circumstances. The most recent amendment to the Directive is focused on clarifying and simplifying the process of EIA. The screening criteria have been updated, and Member States have a mandate to simplify their assessment procedures. EIA reports are to be made more readily understandable to members of the general public. Section 50 of the Roads Acts 1993 and the 2022 amended Regulation outlines certain categories of roads projects which require an EIAR.

EIA Regulations ((Planning and Development) Environmental Impact Assessment) Regulations 2018 (S.I No. 296 of 2018)) transposing the 2014 EIA Directive came into operation on 1st September 2018. These regulations amend the Planning and Development Regulations 2001 (S.I. No.600 of 2001); they seek to transpose EIA Directive 2014/52/EU and to give further effect to the 2011 Directive.

Criteria to evaluate whether significant impacts on the receiving environment will arise from a proposed project are listed under Schedule 7 of the relevant Planning & Development Regulations (2001-2023). A list of the relevant information to be provided by the applicant or developer for the purposes of subthreshold EIA screening is presented in Schedule 7A of the Regulations, and summarised below;

- 1. A description of the proposed project, including in particular:
 - a. a description of the physical characteristics of the whole proposed project and, where relevant, of demolition works; and,
 - b. a description of the location of the proposed project, with particular regard to the environmental sensitivity of geographical areas likely to be affected.
- 2. A description of the aspects of the environment likely to be significantly affected by the proposed project.
- 3. A description of any likely significant effects, to the extent of the information available on such effects, of the proposed project on the environment resulting from:
 - a. the expected residues and emissions and the production of waste, where relevant: and,
 - b. the use of natural resources, in particular soil, land, water and biodiversity.
- 4. The compilation of the information at paragraphs 1 to 3 shall take into account, where relevant, the criteria set out in Schedule 7.

In addition to the requirements of the Planning Regulations, the following guidance was also considered in the preparation of this EIA Screening Report:

- Department of the Environment, Community & Local Government (2013). Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment.
- Department of the Environment, Heritage and Local Government (2003). *Guidance for Consent Authorities regarding sub-threshold Development*. Published by the Stationery Office.
- Department of Housing, Planning and Local Government (2018). Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment.
- Environmental Protection Agency (EPA) (2022). 'Guidelines on the information to be contained in Environmental Impact Assessment Reports'

- European Commission (2015). Environmental Impact Assessment EIA, Overview, Legal context.
- European Council Directive (EU) 2014/52/EU of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private developments on the environment.
- European Council Directive (EC) 97/11/EC of 3 March 1997 amending Directive 85/337/EEC on the assessment of the effects of certain public and private developments on the environment.
- European Council Directive (EU) 2009/31/EC on the geological storage of carbon dioxide and amending Council Directive 85/337/EEC, European Parliament and Council Directives 2000/60/EC, 2001/80/EC, 2004/35/EC, 2006/12/EC, 2008/1/EC and Regulation (EC) No 1013/2006.
- European Council Directive (EU) 2011/92/EU on the assessment of the effects of certain public and private developments on the environment.
- European Council Directive (EC) 85/337/EU of 1985 on Environmental Impact Directive.
- Environmental Resources Management (2001). *Guidance on EIA Screening.* Published by the European Commission.
- Statutory Instrument S.I. No. 349/1989. European Communities (Environmental Impact Assessment) Regulations, 1989.
- Statutory Instrument S.I. No. 600 of 2001. Planning and Development Regulations 2001.
- Statutory Instrument S.I. No. 296 of 2018. European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018.
- Statutory Instrument S.I. No. 235/2019. Planning and Development Act 2000 Exempted Development) (No. 2) Regulation 2019.
- Statutory Instrument S.I. No. 46/2020 Planning and Development (Amendment) Regulations 2020.
- Statutory Instrument S.I. No. 692/2020 Planning and Development (Amendment) (No. 2) Regulations 2020.
- Statutory Instrument S.I. No. 75/2022 Planning and Development Act (Exempted Development) Regulations 2022.
- Statutory Instrument No. 1/2023 Planning And Development And Foreshore (Amendment) Act 2022 (Commencement) Order 2023.



Environmental Impact Assessment Screening

3.1. Step 1 - Mandatory Screening for EIA

The proposed project has been screened against the criteria outlined in Section 50(1)(a) of the Roads Act 1993-2022¹ and Article 8 of S.I. No. 119/1994- Roads Regulations, 1994². This project does not fall within any category of development requiring a mandatory EIA; hence the preparation of an EIAR is not required under Section 50 (1)(a). The proposed project has been screened against the criteria outlined in Schedule 5 Part 1 of the Planning and Development Regulations 2001-2023 and it does not fall within any category of development requiring a mandatory EIA; hence the preparation of an EIAR is not required under Schedule 5 Part 1 of the Planning and Development Regulations 2001-2023.

3.1.1. Sub-threshold Development

The proposed project has been screened against the criteria outlined in Schedule 5 Part 2 of the Planning and Development Regulations 2001-2023, as follows:

10. Infrastructure Projects

b (iv) Urban development which would involve an area greater than 2 hectares in the case of a business district, 10 hectares in the case of other parts of a built-up area and 20 hectares elsewhere. (In this paragraph, "business district" means a district within a city or town in which the predominant land use is retail or commercial use.)

The proposed project is considered to be urban development and is located 'elsewhere' i.e. not in a business district or other parts of a built-up area. The project area is 4.77 hectares and therefore, it is considered that the preparation of an EIAR, under Schedule 5 Part 2 10(iv) of the Planning and Development Regulations 2001-2023 is not required.

The proposed project has been screened against the criteria outlined in Section 50(1)(b) and 50(1)(c) of the Roads Act 1993-2022, as follows;

Section 50(1)(b) – 'If An Bord Pleanála considers that any road development proposed (other than development to which paragraph (a) applies) consisting of the construction of a proposed public road or the improvement of an existing public road would be likely to have significant effects on the environment it shall direct that the development be subject to an environmental impact assessment.'

Section 50(1)(c) – 'Where a road authority or, as the case may be, the Authority considers that a road development that it proposes (other than development to which paragraph (a) applies) consisting of the construction of a proposed public road or the improvement of an existing public road would be likely to have significant effects on the environment, it shall inform An Bord Pleanála in writing prior to making any application to the Bord for an approval referred to in section 51(1) in respect of the development.'

Therefore, it is considered that the project should undergo an EIA screening to determine if an EIAR would be required in accordance with Section 50(1)(b) and 50(1)(c) of the Roads Act 1993-2022.

3.2. Step 2 - Determining if the project is likely to have significant effect on the receiving environment.³

All relevant information as required under Schedule 7A has been provided on behalf of Cork County Council and is presented within this screening report. The potential for this project to pose a significant impact to the receiving environment has also been evaluated in accordance with criteria listed in the Planning & Development Regulations, 2001-2023 (Schedule 7), as presented within this screening report.

¹ https://www.irishstatutebook.ie/eli/2022/si/437/made/en/print

² http://www.irishstatutebook.ie/eli/1994/si/119/made/en/print

³ Pursuant to Schedule 7(A) of the Planning and Development Regulations as amended 2001-2021



3.2.1. Description of the Proposed Project (Schedule 7A (1))

A description of the Physical Characteristics of the Whole Proposed Project and Where Relevant of Demolition Works (Schedule 7A (1) (a))

The Phase 2 Carrigtwohill to Midleton Inter-Urban Cycle Route is proposed as a high-quality, predominantly off-road cycling and walking facility that is approximately 3.7km long. The project location and red line boundary, as shown on the Locality Map provided with the Part 8 Drawings, covers an area of approximately 4.67 hectares. The route is designed to interface with and is compatible with new infrastructure planned in the Carrigtwohill UEA and the Water Rock UEA.

The Phase 2 study area starts just north of the railway line, at the termination point of Phase 1 and from there following an easterly direction through open agricultural lands that will be developed as part of the Carrigtwohill UEA. The route passes over several roads including Carrigane Road, Castle Rock Avenue and Ballyrichard More and crossing over the Water Rock Stream. The scheme will connect to the local community in Ballyrichard More before crossing Castle Rock Avenue and emerging into the Water Rock UEA development lands. From here the route will connect to proposed new road and cycle infrastructure that will be developed as part of the Water Rock UEA.

3.3. Cycle Route

The proposed Phase 2 cycle route is divided into a series of sections as shown in **Figure 3-1** below. These sections are described in summary below with further detail provided in the Part 8 drawings.

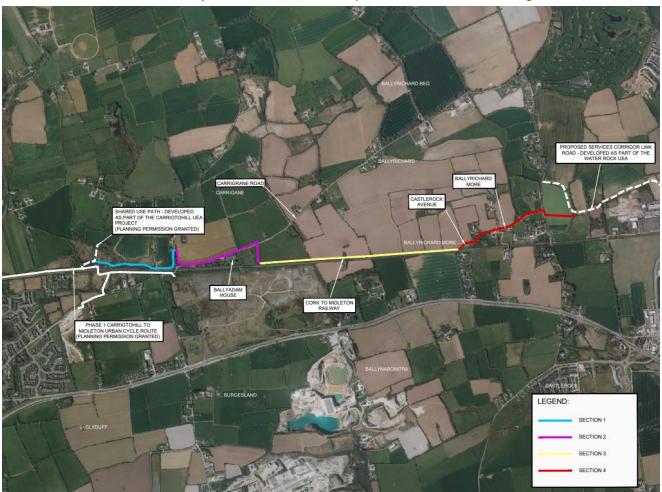


Figure 3-1 Phase 2 Route Sections

3.3.1. Section 1: Connection to Phase 1

The cycleway commences just north of the Cork to Midelton Railway Line within lands zoned for the Carrigtwohill Urban Expansion Area (UEA). The route connects to Phase 1 via a short link of active travel infrastructure being developed as part of the Carrigtwohill URDF Initiative – UEA Infrastructure. The Part 8 Planning Application for



the UEA Infrastructure was published by Cork County Council in June 2023 with a decision expected by October 2023. The connecting active travel link, being integral to the development of Phase 2, will thus be constructed in tandem with or ahead of the Phase 2 route.

The route will then be accessible from Phase 1 via the abovementioned link, before continuing in an easterly direction and running in parallel with the railway line. The alignment along this section is relatively straight, with minor changes in direction to avoid any impact to dense outcrops of vegetation while keeping to field boundary lines in general. The existing field boundaries along this section will be maintained with sections of hedgerow planted along a new fence line.

The route then turns northwards as it approaches Ballyadam Road Junction. The route continues northwards parallel to Ballyadam Road for a short section until adequate sight lines are achieved for a safe at-grade crossing. At this point, shown in **Figure 3-2** below, an uncontrolled raised table crossing will be provided, with a coloured surface texture. The proposed crossing point will include street lighting to improve visibility of pedestrians and cyclists, including traffic calming measures e.g. rumble strips and road signage to reduce the speed of approaching vehicles. The crossing point will require the removal of sections of existing hedges within the Ballyadam Road verge to provide adequate sight lines to cyclists and pedestrians, as indicated in the Part 8 Drawings.

New ducting will be provided to the road crossing on Ballyadam Road to facilitate connection of street lighting.



Figure 3-2 - Proposed location for raised table crossing on Carrigane Road (N)

A nature-based surface water drainage system involving a combination of over the edge drainage and swales will be provided along Section 1. Surface water runoff will be directed to the grassed verge on one or both sides of the cycleway where water will infiltrate into the ground. This will be augmented by the provision of a linear planted swale in the northern verge. A collector pipe in the swale will convey excess water and discharge it to an existing drainage ditch. Discharge will be limited to greenfield run-off rates via check dams in the swale and a flow control device if required. The drainage ditch discharges to the Poulinska Stream north of the railway line.

Existing natural vegetation and trees that will be removed as part of the works will be replaced by similar or suitable native planting, semi-mature trees and shrubs.

3.3.2. Section 2: Carrigane Road

From its crossing point on Ballyadam Road (N), the cycleway continues its east-west alignment north of and parallel to the Carrigane Road with the existing hedgerow maintained as a buffer between the road and cycle route. The buffer area will also include a grassed verge of 3m. Agricultural lands form a boundary on the northern side of the route. A new hedge will be planted inside a new fence line to screen these lands from the cycle route. This will also act as a wind break for cyclists.



The alignment then proceeds southwards with an at-grade road crossing proposed on Carrigane Road, provided to the east of Ballyadam House. The crossing location, as shown in **Figure 4-3**, will consist of a signalised toucan crossing with new street lighting to improve visibility of pedestrians and cyclists. The crossing location will include traffic calming measures in the form of rumble strips and road signage to reduce the speed of approaching vehicles. The crossing point will require the removal of the existing hedge line within the northern road verge, as indicated in the Part 8 Drawings, to facilitate adequate sight lines for cyclists and pedestrians. New ducting will be provided to facilitate connection of the streetlights and signal infrastructure.

The southern alignment passes through a private agricultural field with an existing stone boundary wall. Approximately 10m of the wall will be demolished to allow the cycle lane to pass through. The route proceeds southwards through the field before re-joining the general railway line alignment, proceeding in an easterly direction.

To the north of Carrigane Road, a nature-based surface water drainage system involving a combination of over the edge drainage and swales will be provided. Surface water runoff will be directed to a grassed verge on one or both sides of the cycleway where water will infiltrate into the ground via a linear planted swale.

Over the edge drainage is proposed south of the crossing of Carrigane Road. Again, a planted swale with check dams will collect water in the verge and allow it to infiltrate to ground. Excess water will be conveyed to an additional SuDs feature such as a rain garden i.e. a planted depression provided at the lowest point on the field.



Figure 3-3 - Proposed location for raised table crossing on Carrigane Road

3.3.3. Section 3: North of Cork to Midelton Railway Line

In Section 3 the cycle route follows the railway line along an east-west axis keeping to agricultural field boundaries. Trees will be planted along the northern field boundary, while maintaining the hedgerow to the south along the railway line. Approximately halfway through Section 3, the route crosses an existing agricultural overpass which facilitates farm activity across the railway line. Given the proximity of the cycle route to the railway line at this point, it was necessary to create an underpass beneath the embankment of the overbridge to maintain a straight cycle route. A cross-sectional profile of the underpass is provided in **Figure 3-4** below. The proposed underpass will be a minimum of 10m from the existing overpass abutments.



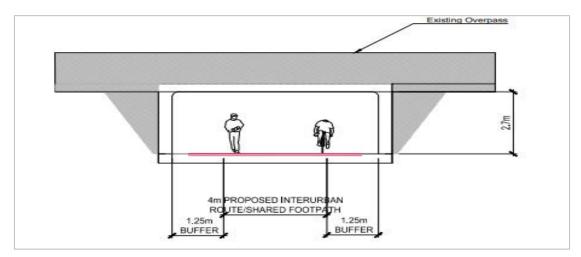


Figure 3-4 - Typical Cross-section through Underpass

Nature based over the edge drainage is again proposed along this section. Again, a planted swale with check dams will collect water in the verge and allow it to infiltrate to ground. Excess water will be conveyed to an additional SuDs feature such as a rain garden i.e. a planted depression provided at the lowest point on the field.

3.3.4. Section 4: Ballyrichard More Road

The cycle route deviates slightly from the railway line once it meets an existing access track to the west of the Ballyrichard More Road which accommodates minor farm movements. The route continues as a segregated cycle lane adjacent the farm track before proceeding northwards along Ballyrichard More Road. The short northern section of road that provides access to 3no. private properties will be re-surfaced and converted to a 4m wide shared street, where cyclists will have priority over vehicle movements. The shared street will be denoted by road signage and road markings.

The cycle route will then continue off road, and to the north of Ballyrichard More Road following agricultural field boundaries. An at-grade raised crossing is proposed at the junction with Castle Rock Ave./Water Rock Road. The route then crosses the Water Rock Stream, above the existing culvert structure, thus removing the need for an additional water crossing or works within the stream. The route continues across Castle Rock Ave./Wtaer Rock Road, with an at-grade crossing provided just north of its junction with Ballyrichard More Road, as shown in **Figure 3-5** below.



Figure 3-5 - Proposed location for raised table crossing on Castle Rock Avenue

An uncontrolled raised table crossing will be provided, with a coloured surface texture. The existing streetlights will be enhanced by new lighting columns provided at the junction, and may require additional ducting. Traffic



calming measures in the form of rumble strips and road signage will be included to reduce the speed of approaching vehicles.

From this point, the route crosses through the hedge boundary, a section of which will be removed to ensure adequate sightlines are provided for pedestrians and cyclists crossing. The route then emerges at the Water Rock UEA where it joins the planned Services Corridor Link Road.

The route running parallel to the farm track will include a grassed verge allowing water to infiltrate to ground. Any excess surface water will be directed to the lowest point of the field on the adjacent Section 3 where various SuDS features including a rain garden are proposed. The existing over the edge drainage system will be retained along the shared use section. The detailed design will ensure there is no increased risk of flooding to adjacent properties. The cycleway running parallel to Ballyrichard More Road will be sloped towards the grassed verge on the southern side. A perforated large collector pipe will be provided in this verge. This will collect and attenuate excess run-off in the verge. This pipe will connect to the existing drainage system on Ballyrichard More Road. Discharge will be limited to greenfield run-off rates. The road drainage system connects to the Water Rock Stream. The section crossing over to the Water Rock UEA lands will comprise a grassed verge with filter drain on the northern side of the cycleway. This filter drain will discharge attenuated flows to the surface water drainage system in the Water Rock LIHAF Initiative.

3.4. Proposed Cross Section

The cross section of the cycleway as shown in **Figure 3-6** will be a minimum of 4 metres wide with a minimum planted verge of 3m on either side where this is achievable. The path will generally consist of an asphalt surface and will be constructed at-grade or slightly above existing ground levels. A new fenceline that is permeable to wildlife will be erected along the sections noted above. The total area of hard surface will be approximately 14,850m² with drainage comprising natural, over-the-edge drainage into a filter drain running parallel to the cycleway. The natural drainage system will be augmented by SuDS features where required.

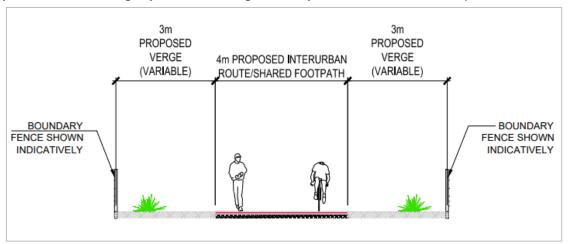


Figure 3-6 - Typical Cross Section of Phase 2 Cycle Route

3.5. Traffic Signs and Road Markings

Traffic signs and road markings will include shared use signage, traffic calming signage and associated road markings and cycle and pedestrian motifs on the shared use path. All signs and road markings will be designed in accordance with the DoT's Traffic Signs Manual.

3.6. Street Lighting

Public lighting will be provided at junction crossings.to improve the safety and security of all users. The public lighting design will be undertaken in accordance with Cork County Council's Public Lighting Manual and Product Specification 2021 and will include the proposed layout and associated ducting and power supply details. The cycle route itself will include lighting along its length. The design of the lighting system will take into consideration the potential impacts of artificial lighting on bats and other wildlife species occurring along the corridor. The design will also take into account the bat roost identified at the Ballyadam House as well as foraging and commuting routes such as hedgerows and treelines present in the study area. The lighting design will include low wattage, warm light consisting of Light Emitting Diode (LED) luminaires and column heights shall be carefully considered to minimise light spill and glare visibility .



3.7. Proposed Landscape Strategy

Ecological considerations have been key factors in the route selection of the inter-urban cycle route. Where possible the route has been chosen to run parallel and offset from existing hedgerows and treelines so that they can be preserved. The route will only require existing hedgerows to be removed at road and field boundary crossings. In total, it will be necessary to remove approximately 891m of hedgerows/ treelines to construct the route. This will be mitigated by the replacement of this with a minimum of 2,281m of new hedgerows/treelines (an increase of 1,390m) aligned to the route as well as new areas of planting in SuDS features throughout.

Planting will be specified by a Landscape Architect under the advice of a suitably qualified and experienced ecologist to enhance local biodiversity value as appropriate for each section of the route. An objective of the planting strategy will also be to provide amenity value to enhance the cycle route and to provide surface water pollution prevention measures.

3.7.1.1. Construction Methodology

The works will commence with site clearance and accommodation works. Temporary traffic management including measures for pedestrians and cyclists will be put in place. Trees/ vegetation to be retained will be marked and protected and the site boundary will be fenced off. Natural buffer areas on existing watercourses outside of the infrastructure area will be maintained and protected during the construction of the proposed infrastructure. The site will be cleared of redundant fencing and road signage, street lighting to be replaced and existing vegetation to be removed. Vegetation clearance will be done in the appropriate season, i.e. outside the bird nesting season (March 1st – August 31st inclusive).

Underground utilities that conflict with the main works will be uncovered using mechanical excavators and hand digging where appropriate. A utility survey, including slit trenches for verification, will be carried out during the detailed design stage to determine the location of services to the most accurate extent possible. Protection works or any service diversions that are required will be undertaken at this stage.

The route of the cycle/ pedestrian path will be excavated to formation/ sub-formation level. It is anticipated that generally the maximum excavation depth will be 500mm. Excavation of the topsoil and road verge will largely be undertaken by mechanical means with any spoil arisings to be removed off site or reused locally where testing confirms its suitability. The path will be limited to a 4m wide asphalt path with concrete kerb restraints on either side of the pavement. The new path will be constructed using a bituminous pavement construction in accordance with the TII Specification for Road Works Series 900 – Road Pavements. A 150mm layer of imported stone will be placed and compacted followed by asphalt layers respectively.

As detailed in the project description, the route crosses an existing agricultural overpass that crosses the Cork to Midleton railway line. An underpass with a 6.5m wide clearance will be constructed through the embankment of the existing overbridge to facilitate the cycle route. This will require temporary closure of the overbridge. The area for the underpass will be excavated and a pre-cast concrete box culvert installed. Spoil arisings will be removed offsite or re-used locally where testing confirms its suitability. The overbridge and embankments will be reinstated and the bridge re-opened. Once installation is complete, lighting and surfacing will be installed in the underpass and it will be connected to the rest of the route.

The route passes through an existing stone wall of which approximately 10m will be demolished. Suitable hand tools, alternatively a jack hammer, will be used and the demolished material will be removed as soon as possible. A temporary fence and barricading of the area around the structure will be undertaken to ensure safety of the travelling public along the Carrigane Road.

Where the route crosses the Water Rock Stream, west of the Ballyrichard More/Castle Rock Ave Junction, the existing culvert structure will be used, thus eliminating the need for additional construction works or instream works associated with a new crossing.

Drainage works will run in tandem with the route construction phase. Drainage will be 'over-the-edge' to a filter drain (perforated pipe in gravel trench) running alongside the length of the route.

At grade road crossings of Ballyadam Road, Carrigane Road and Castle Rock Avenue will be constructed under temporary traffic management measures. New road signs, road markings, public lighting columns, traffic signals and bollards will be installed and commissioned where required. Temporary traffic management measures will be removed when appropriate.

Areas of soft landscaping along the route will be top-soiled, seeded and planted following specification by a Landscape Architect working with a suitably qualified and experienced ecologist. Maintenance of new planting will be undertaken by the Contractor for a minimum of two years following completion.



A Description of the Location of the Proposed Development, with Particular Regard to the Environmental Sensitivity of Geographical Areas Likely to be Affected (Schedule 7A(1)(b)).

The location of the proposed project is detailed in Section 3.2.1. The environmental sensitivity of geographical areas, which could potentially be affected by the proposed project is evaluated in the following section.

The proposed project is located east of Carrigtwohill with surrounding lands designated with the following land use zonings:

- Residential.
- Green Infrastructure;
- Agricultural/Unzoned

Hydrology and Designated Sites

The proposed project is located within the Lee, Cork Harbour and Youghal Bay Water Framework Directive (WFD) catchment area and Tibbotstown and Owennacurra sub-catchment areas. There are 2no. EPA mapped watercourses crossed by the proposed project, the Poulinska and Water Rock Stream. There are a number of karst features including two turloughs (ID numbers 1707SWK006 and 1707SWK005) and two boreholes (1707SWW132 and 1707SEW038) within a 2km location accuracy of the proposed route.

There are 2no. European sites within the potential zone of influence of the proposed project;

- Great Island Channel SAC (site code: 001058) ca. 1.8km from route
- Cork Harbour SPA (site code: 004030) ca. 1.8km from route

The estuary to the south of Carrigtwohill forms part of these designated sites and they are both ca. 1.8km southeast from the project site. Surface and ground waters from within the Carrigtwohill lands discharge to this area.

The Great Island Channel SAC is designated as a site of international importance for the conservation of natural habitats; Mudflats and sandflats not covered by sea water at low tides, and Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*). The Great Island Channel SAC is selected for 2 No. habitat types.

The Cork Harbour SPA is a site of international conservation status for its importance in hosting the following birds; Little Grebe (*Tachybaptus rufi collis*), Great Crested Grebe (*Podicepts crisatus*), Cormorant (*Phalacro corax carbo*), Grey Heron (*Ardea cinerea*), Shelduck (*Tadorna tadorna*), Wigeon (*Anas penelope*), Teal (*Anas crecca*), Pintail (*Anas acuta*), Shoveler (*Anas clypeata*), Red-breasted Merganser (*Mergus serrator*), Oystercatcher (*Haematopus ostraleagus*), Dunlin (*Calidris alpina*), Black-tailed Godwit (*Limosa limosa*), Bartailed Godwit (*Limosa lapponica*), Curlew (*Numenius arquata*), Redshank (*Tringa tetanus*), Black-headed Gull (*Chroicocephalus ridibundus*), Common Gull (*Larus canus*), Lesser Black-backed Gull (*Lavus fuscus*), and Common Tern (*Sterna hirundo*).

There are no NHA's within the proposed project area. There are 16no. pNHA's within the zone of influence of the project location (15km), with the pNHAs listed in Table 3-1 located within 5km of the project site. The Great Island Channel pNHA is located within the estuary south of the proposed project.

Table 3-1 -pNHA's within 5km of the project area

Site Name & Code	Approximate Distance from Project site
Great Island Channel (001058)	1.8km southeast
Leamlara Wood (001064)	3.1km north
Ballynaclashy House, North Of Midleton (0000099)	2.7km north
Carrigshane Hill (001042)	3.85km southeast

Biodiversity

There are no Natura 2000 sites within, intersecting or adjoining the proposed development boundary. Therefore, there will be no direct effects on any such sites arising from habitat loss or fragmentation associated with the proposed development.

The nearest sites are the Great Island Channel SAC (site code: 002170) and the Cork Harbour SPA (site code: 004030), which are both located c. 1.8km southeast (over land) from the proposed development at their closest point.



The Great Island Channel SAC is selected for 2 no. habitat types and no species. As such, there are no species of qualifying interest in this SAC which depend on habitats closer to the proposed development. The qualifying interest habitats Tidal Mudflats and Sandflats [1140] and Atlantic Salt Meadows [1330] do not occur within or adjacent to the footprint of the proposed development.

Cork Harbour is listed as a Wetland of International Importance (site no. 837) under the Convention on Wetlands of International Importance especially as Waterfowl Habitat ("the Ramsar Convention"). Cork Harbour is also recognised as an Important Bird Area (site code: IE088) by BirdLife International. These designations are based on the significant examples of estuarine habitats occurring within and adjoining the harbour, particularly mudflats and saltmarshes, as well as the importance of the harbour for both wintering and breeding waterbirds, with numbers of wintering waterfowl regularly exceeding 20,000 individuals from 22 different species. The proposed development is within ca.1.8km of these sites, connected via surface water pathways and there is also potential for ex-situ impacts on field-feeding waders, e.g. Black-tailed Godwit (Limosa limosa) and Curlew (Numenius arquata), which may leave these sites to feed in the fields along the proposed URDF Infrastructure alignment.

There are no UNESCO World Heritage or Biosphere Reserve sites, or sites designated under the Convention for the Protection of the Marine Environment of the North-East Atlantic (the OSPAR Convention), in close proximity to the proposed development or within its Zone of Influence.

There are no statutory Nature Reserves, or any National Parks designated in close proximity to the proposed development or within its Zone of Influence.

Site walkover surveys have informed the locations and extent of invasive alien plant species within the proposed development area. Identified IAPS which are legally restricted do not occur along any watercourses which may provide a hydrological pathway to the SAC or SPA. Therefore, the Great Island Channel SAC and Cork Harbour SPA are considered to be well beyond the likely extent of any inadvertent spread of IAPS associated with the proposed development.

Table 3-2 details invasive species encountered during site walkover surveys with 4no. invasive species identified as requiring mitigation measures i.e., Himalayan Balsam (*Impatiens glandulifera*), Japanese Knotweed (*Fallopia japonica*), Cherry Laurel (*Prunus laurocerasus*), Three-cornered Leek (*Allium triquetrum*). Following a preconstruction survey to determine the precise locations and extents of all IAPS on site, the Contractor's ecologist will map the distribution and extents of all IAPS within and adjoining the red-line boundary and prepare an IAPS Management Plan.

Table 3-2 - IAPS identified during the field surveys, their impact ratings and status.

Species	O'Flynn et al. (2014)	Third Schedule	EU IAS Regulation
Himalayan Balsam (Impatiens glandulifera)	High-impact	Yes	Yes
Japanese Knotweed (Fallopia japonica)	High-impact	Yes	No
Cherry Laurel (Prunus laurocerasus)	High-impact	No	No
Three-cornered Leek (Allium triquetrum)	Medium-impact	Yes	No
Sycamore (Acer pseudoplatanus)	Medium-impact	No	No
Traveller's-joy (Clematis vitalba)	Medium-impact	No	No
Winter Heliotrope (Petasites fragrans)	n/a	No	No

IAPS surveys were carried out which identified 11no. non-native garden escapes were observed during surveys; Variegated Yellow Archangel (*Lamiastrum galeobdolon* subsp. *argentatum*), Greater Periwinkle (*Vinca major*) and Silver Ragwort (*Jacobaea maritima*), and shrubs such as dogwoods (*Cornus* spp.) and a cotoneaster (*Cotoneaster* sp.). Other non-native trees present included Bay Laurel (*Laurus nobilis*), Beech (*Fagus sylvatica*), Horse Chestnut (*Aesculus hippocastanum*), Spanish Chestnut (*Castanea sativa*) and a variety of maples (*Acer* spp.) and their cultivars, as well as non-native conifers such as cypresses (Cupressaceae). None of these are assessed in O'Flynn et al. (2014) or restricted under the Habitats Regulations or the EU IAS Regulation. 2no. invasive alien animal species including Harlequin Ladybird and Greater White-toothed Shrew. Both of which are considered to have no impact on the proposed project.

Hydrogeology



The GSI (2023) groundwater wells and springs database identifies 2no. wells which are potentially within the proposed project site, or the immediate vicinity. These boreholes (GSI Ref. 1707SWW132 and 1707SEW038) are used for domestic purposes and unknown purposes and are located to a 2km locational accuracy.

The GSI (1999) provides a framework for the protection of groundwater source zones (i.e. zone of contribution to water supply bore holes). There are no public supplies with designated source protection areas within a 5km radius of the proposed project.

The groundwater vulnerability rating beneath the site is predominantly 'high' with small portions of the northern portion classified as 'extreme' and a small portion on the eastern portion classified as 'rock at or near surface or karst' (GSI, 2023). These latter classifications indicate that groundwater is shallow and vulnerable to contamination.

According to the GSI (2023), the proposed project is underlain by 2no. aquifers. The area is predominantly underlain by a regionally important aquifer – karstified (diffuse). The western portion is underlain by a locally important aquifer – bedrock which is moderately productive only in local zones.

The proposed route is within the Midleton GWB (European code IE_SW_G_058). The Midleton GWB is of 'good' status with its likelihood of meeting good quality status by 2027 currently under review (EPA, 2023). A key component of the groundwater classification is the assessment of the impact of pollution on the groundwater body. The groundwater status classification process accounts for the ecological needs of the relevant rivers, lakes and terrestrial ecosystems that depend on contributions from groundwater.

Geology

The proposed project is primarily underlain by till derived from Devonian Sandstones, with minor portions of Gravels derived from Devonian sandstones underlying the eastern portion of the project (GSI, 2023).

The proposed project site is underlain by 2no. geological formations; Waulsortian Limestones (massive, unbedded lime-mudstone) is the predominant formation, Ballysteen Formation (dark muddy limestone, shale) lies under a minor portion of the western end of the proposed development.

There are a number of karst features reported by GSI (2023) within the general area of the proposed project, with a Turlough (GSI Ref. 1707SWK006) reported to a 20m locational accuracy located in the western portion of the proposed project. A second Turlough (GSI Ref. 1707SWK005) is located within 50m north of the project site and is potentially connected to the Turlough within the project site.

There are no Geological Heritage Sites within the vicinity of the proposed project. However, there are 2no. unaudited geological heritage sites with 5km of the proposed site; Baneshane Quarry (ca.1.54km) and Midleton Distillery Springs (ca. 2.29km).

There are no EPA licenced facilities within the site or its immediate environs (EPA, 2023). The closest licenced facility, John A.Wood (Burnt Lime) Limited (P0399), is located ca. 1.428km west of the site. However, Lagan Milebush quarry is located ca. 600m south of the proposed route.

Flooding

A search of OPW floodmaps (2023) does not indicate a probability of flood risk within the proposed project site. However, 2no. turloughs located in the vicinity of the proposed route are described as recurrent flooding (OPW 2023). With respect to these turloughs the FRA associated with this application states: "their (the turloughs) location is not precise and there is no other source to confirm the flood risk from the turlough. There is historic groundwater risk mapped along the N25 (Ref. to Figure 3-1) however it located far from the proposed route and therefore has no impact to the site."

A flood risk assessment (FRA) has been undertaken in accordance with under the Planning System and Flood Risk Management Guidelines for Planning Authorities (Department of Environment, Heritage and Local Government & Office of Public Works, 2009). The FRA was completed to inform the proposed development as it relates to flood risk and is included as part of the Part 8 planning application.

The FRA states: "Having reviewed the available information there are some historic flood event records in the area, however none of each is affecting the site itself. The nearest potential source of flooding has been identified as the Water Rock River which is flowing beneath the existing bridge under the proposed greenway. Review of predictive flood mapping identify that there is no overtopping of the bridge and the site residing in Flood Zone C."

The FRA also states: "Review of the available Cork Development Plan SFRA, Water Rock UEA FRA and Interurban Cycle Route Phase 1 FRA mapping confirms that the proposed greenway is not at risk of inundation. The flood extents for the Water Rock that the bridge structure along the Owenacurra River has sufficient capacity to convey the predicted 1% and 0.1% AEP flood events. The proposed cycle route is



outside the Poulanska Stream flood mapping for 1% EAP and 0.1% AEP. The cycle route does not cross any other river body in the study area."

Archaeology and Cultural Heritage

National Monuments Features

A desktop assessment of the archaeological/heritage impacts was undertaken with no recorded sites detailed on the Sites and Monuments Record for Cork which are directly or indirectly impacted by the proposed project infrastructure. All undisturbed green field locations retain the potential to contain unrecorded features of archaeological origin and a programme of pre-construction geophysical survey and licensed archaeological testing is required to establish if any such features exist within the any project affiliated green fields.

Architectural Heritage Features

The National Inventory of Architectural Heritage (NIAH) database identifies no Architectural Heritage sites within the boundary of the proposed development and 5no. NIAH features within ca. 50m of the proposed cycleway. The proposed development will not directly impact any structures identified by the National Inventory of Archaeological Heritage (NIAH). There will be a slight negative indirect impact from the proposed pedestrian/cycleway underneath current agricultural access.

Population and Human Health

There are 20no. Seveso (Control of Major Accident Hazards Regulations (COMAH)) establishments within 15km of the proposed project site, the closest being Merck Millipore Ltd., which is a lower tier site, ca.2.7km southwest of the project site. Due to the distance of this Seveso site from the proposed project site and the activity carried out at this site the proposed project is not located in a high-risk area with respect to major accidents/ disasters. Due to the nature, scale and location of the proposed project, there will be no impact on any of these Seveso sites.

The proposed project site is located within a predominantly rural area with a number of sensitive receptors in terms of dust nuisances and noise and vibration nuisances located within the vicinity of the project including (but not limited to) residential houses.

Given the requirement for works within the confines of road corridors and associated verges in places throughout the project site, there will be local impacts on traffic.

Given the location of the proposed project partially within agricultural lands and along field boundaries, land take is required and therefore there is potential for impacts to agricultural practices.

The environmental sensitivity of geographical areas likely to be affected by the proposed project are evaluated further within Section 3.8.1 of this report ('Location of proposed project - The environmental sensitivity of geographical areas likely to be affected by the proposed project') as required under Schedule 7 of the relevant regulations.

3.7.2. Description of Aspects of the Environment Likely to be Significantly affected by the Proposed Project (Schedule 7A (2)).

The proposed project is located 1.8km north of Great Island Channel SAC / pNHA (Site Code 001058), Cork Harbour SPA (Site Code 004030) / pNHA (Site Code: 000268). The proposed project does not lie within any nature reserves or natural heritage areas (detailed in Section 3.2.1 of this report). The Stage 1 Screening for Appropriate Assessment concluded that 'based on the nature of the proposed development and its integration with other projects under the Carrigtwohill URDF Initiative, UEA Masterplan and Cork County Development Plan, it will not give rise to significant effects on any of the Natura 2000 sites within the Zone of Influence, in combination with other plans or projects.'

The other relevant aspects of the environment (including human health), which could potentially be significantly affected by the proposed project are receiving groundwater environment, surface water environment, soils and geology, air quality environment, the receiving noise and vibration environment, and the receiving traffic environment, during the proposed project.

The project will involve excavations to a maximum depth of 500mm below ground level (bgl). Groundwater vulnerability in the vicinity of the proposed project is classified as 'high' with a small portion of the eastern portion classified as 'extreme' and a small portion on the eastern portion classified as 'rock at or near surface or karst' (GSI, 2023) indicating that groundwater is potentially shallow and vulnerable to contamination. A dewatering management plan will be developed by the contractor as required in consultation with the design team and client



and implemented during construction. The plan will include at a minimum anticipated areas and depths of groundwater, anticipated volumes, proposed discharge location, environmental site setting, need for any permits or consents and all required details for water treatment as required.

Refuelling will only occur at site compounds. All vehicles and equipment will be inspected on a daily basis for potential fuel leaks. All site vehicles and equipment will be supplied with spill kits. Due to the nature and scale of the project there will be no likely significant impact on groundwater.

There is small potential for contamination associated with urban soils and made ground within the vicinity. In the unlikely event that contaminated materials are encountered these will need to be segregated from all uncontaminated soils, temporarily stored (any stockpiles should be lined and covered by heavy duty 1000-gauge plastic), sampled and analysed for relevant parameters (Waste Acceptance Criteria suite e.g., Rilta Disposal Suite). Any contaminated soils must be characterised as per the requirements of the relevant Waste Acceptance Criteria (WAC) under the relevant European Communities Council Decision (EC) (92003/33/EC) and classified in accordance with the requirements of the EPA as set out in the following documents 'Waste Classification List of Waste & Determining if Waste is Hazardous or Non-hazardous' (EPA, 2018). Any contaminated soils must be transported by appropriately permitted hauliers and disposed of to an appropriate EPA licensed Waste Facility in accordance with all relevant waste management legislation.

Drainage works will run in tandem with the route construction phase. Drainage will be 'over-the-edge' to a filter drain (perforated pipe in gravel trench) running alongside the length of the route.

Discharge from the surface water drainage network will generally be restricted to greenfield run-off rates using flow control devices. Accordingly, no significant adverse impacts are anticipated with respect to surface quality, levels or flow.

The proposed project location lies within rural lands with sensitive receptors adjacent to a number of locations i.e. residential properties. Dust may be generated during the construction phase. Construction will require the use of machinery such as dump trucks, mechanical excavators etc. The presence of such machines may result in a temporary increase in noise and dust. The air quality at the proposed project is 'Good' (EPA, 2023). However, management of dust will be in line with relevant best practice measures such as those set out in 'Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes' (NRA, 2011). Due to the nature and scale of the proposed project, no significant impact on air quality is anticipated.

Noise levels will not exceed the indicative levels of acceptability for construction noise in an urban environment as set out in the NRA guidance 'Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes' (NRA, 2014). It is anticipated that the works will be scheduled during day-time hours. Construction contractors will be required to comply with the requirements of the European Communities (Construction Plant and Equipment) (Permissible Noise Levels) Regulations, 1988 as amended in 1990 and 1996 (S.I. No. 320 of 1988, S.I. No. 297 of 1990 and S.I. No. 359 of 1996), and the Safety, Health and Welfare at Work (Control of Noise at Work) Regulations, 2006 (S.I. No. 371 of 2006). Due to the nature and scale of the project it is anticipated that the construction works, and operation of the proposed project will not have a significant impact on noise.

Due to the scale and nature of the project it is not anticipated that there will be impacts on traffic volumes during the construction phase of the project. There will be impacts on existing roads where upgrades are proposed and where other works are required within existing roads. These will be local in nature. Traffic Management will be implemented and continuously monitored during construction works so as to manage impacts on traffic flows.

3.7.3. A Description of Any Likely Significant Effects (To the Extent of the Information Available on Such Effects) of The Proposed Project on The Environment (Schedule 7A (3)).

The Expected Residues and Emissions and the Production of Waste where relevant (Schedule 7A (3)(a)).

The proposed project may give rise to air, noise, water emissions and waste. Standard mitigation measures will be implemented by the Contractor to address potential air and noise emissions during the construction phase. The Contractor will ensure that onsite storm water management during the construction phase is carried out in accordance with relevant best practice measures as set out in Construction Industry Research and Information Association (CIRIA) guidance 'C532 - Control of Water Pollution from Construction Sites'.

During the construction phase the following waste streams will be generated: construction and demolition (C&D) waste including footways and asphalt / road surface, soil arisings, mixed municipal waste (MMW), recyclables such as plastic wrapping, wooden pallets and paper. All waste will be removed offsite and disposed of by the Contractor to an appropriately licenced waste recovery or waste disposal facility. All waste generated will be disposed of by the Contactor in accordance with all relevant waste management legislation. The Contractor will be responsible for segregating each waste type as per the relevant List of Waste (LoW) (also referred to European



Waste Catalogue (EWC) code). All waste materials must be removed offsite by a suitably permitted waste haulage contractor who holds a current valid waste collection permit issued by the National Waste Collection Permit Office (NWCPO). The Contractor will be obliged to ensure all works are carried out in accordance with the relevant guidelines 'Best Practice Guidelines for the preparation of resource & waste management plans for construction & demolition projects' prepared by the EPA (2021).

The proposed scheme is not likely to have a significant environmental effect with regard to expected residues and emissions and the production of waste.

The Use of Any Natural Resources in particular soil, land, water and biodiversity (Schedule 7A (3)(b)).

The project works will be predominantly within agricultural lands and therefore natural resources will be required. Trees and vegetation to be retained shall be protected as required in accordance with BS:587:2012 during all works

Natural buffer areas on existing watercourses outside of the infrastructure area will be maintained and protected during the construction of the proposed cycleway. The site will be cleared of redundant fencing and road signage, street lighting to be replaced and existing vegetation to be removed. Vegetation clearance will be done in the appropriate season, i.e. outside the bird nesting season (March 1st – August 31st inclusive).

The proposed project involves an anticipated maximum excavation depth of 500mm bgl. All soil requiring disposal offsite will require waste classification in accordance with EPA requirements as set out in the documents 'Waste Classification List of Waste & Determining if Waste is Hazardous or Non-hazardous' (EPA, 2015), and 'Determining if waste is hazardous or non-hazardous' (EPA, 2018), and all relevant waste management legislation. In addition to screening against relevant WAC, the preparation of a waste classification tool (hazwaste online / EPA paper tool or similar etc.) will be required to be carried out in order to determine the relevant LoW / EWC code for the transport of any waste soils which require offsite removal and disposal.

Therefore, based on the environmental setting, and taking account of the nature, scale and location of the proposed project (during both construction and operational phases), the proposed project will not have a significant impact on natural resources.

3.7.4. The Compilation of The Information at Paragraphs 1 To 3 Shall Take into Account, where Relevant, the Criteria set out in Schedule 7 (Schedule 7A (4)).

All relevant criteria set out in Schedule 7 of the Regulations is presented in Section 3.8 ('Criteria for Determining Whether Development Listed in Part 2 of Schedule 5 Should be subject to an EIA') of this screening report.

During the preparation of Sections 3.2.1 to 3.7.3 (i.e. Schedule 7A (1) to (3)) all pertinent Schedule 7 information has been taken account of as required, with specific details presented in the following section of this report (Section 3.8 and 3.9).

3.8. Criteria for Determining Whether Development Listed in Part 2 of Schedule 5 Should be subject to an EIA

The size and design of the whole of the proposed project (Schedule 7(1)(a))

Refer to Section 3.2.1 under 'A description of the Physical Characteristics of the Whole Proposed Project and Where Relevant of Demolition Works (Schedule 7A (1) (a))'.

Cumulation with other existing development and/or development the subject of a consent for proposed project for the purposes of section 172(1A)(b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment (Schedule 7(1) (b))

Committed Development

A search of Cork County Council Planning records has been undertaken for the applications submitted within the past 5 years in the vicinity of the proposed development (last reviewed 05/10/2023). Some of the granted applications have already been completed and of those which are not completed, most are generally small scale in nature (i.e., residential extension works, or property improvement works). Completed or granted applications of such small scale (such as residential improvements) have not been considered further in terms of potential for cumulative impacts.

There are 68no. large scale projects/committed developments, which have been further evaluated with respect to cumulative impacts with the proposed project, listed in Table 3-3.



Table 3-3 – Committed developments within vicinity of the proposed project

Competent Authority	Applicatio n No.	Applicant Name	Location	Description	Screening for significant cumulative environmental impacts
Cork County Council	216339	Liam Ryan	Woodstock, Carrigtwohill, Co. Cork	Construction of a hay store / machinery shed and associated works.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork County Council	234576	Thomas Murphy	Gortnamucky, Carrigtohill, Co. Cork	Permission to construct a new two- storey side extension, single storey front entrance porch, install a new rooflight to the rear roof of their existing dwelling and all associated site works	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork County Council	225432	Michal Galda	Carrigtwohill Td., Carrigtwohill, Co.Cork	The construction of dwelling house, detached garage and all associated site works.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork County Council	194676	Edward Cummins	Carrigtohill Townland, Carrigtwohill, Co. Cork	Outline planning permission for the erection of 4 detached dwelling houses, each with individual vehicular entrances from the public road, together with all associated site development works.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork County Council	184198	Patrick & Adrienne Kennedy	'Thomond', Bog Road, Carrigtohill, Co. Cork	Construct a new bay window extension to the front elevation of existing dwelling and all associated ancillary site works	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork County Council	206267	Anne and Robert Jones	No. 1 Ashdale Drive, Terrys Land, Carrigtohill Td., Carrigtwohill, Co. Cork	Conversion of existing attic space to comprise a new bedroom with ensuite, construction of a new dormer window to rear, installation of 2 no.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to



				rooflights to rear and internal alterations to existing detached dwelling house with all associated site development works and services.	arise associated with the proposed development.
Cork County Council	195707	The Minister for Education and Skills	Station Road, Terry's-Land & Carrigtohill, Carrigtwohill, Co. Cork	The demolition of 1 No. derelict two storey dwelling and 1 no. derelict single storey agricultural storage building; the construction of 3 no. new school buildings and the construction of a main link road with a roundabout from Castlelake Housing Estate to Station Road and an additional link from the roundabout to Station Road. The site works to the school grounds will consist of the provision of cycle spaces, bin store/external store, ball courts, secure special play area, landscaping and new entrance gates, boundary treatment and all other associated site development works. The works to the remainder of the school grounds will consist of the provision of car parking spaces, disabled access car parking spaces, disabled access car parking spaces, 1 No. ESB substation and drop-off and pick-up facilities. School C which comprises 1 no. 3 storey, 1000 pupil, post primary school building (Roll No: RN76333G), with physical education hall, 3 classroom SNU, support teaching spaces, external material storage room for wood and metal work studies with associated covered work area and ancillary accommodation. The site works to the school grounds will consist of the provision of cycle spaces, bin store/external store, ball courts, secure special play area, landscaping and new entrance gates,	Based on the location, nature and scale of this project it is considered that there is a potential risk for cumulative environmental impacts to arise. Accordingly this project has been assessed further below, with regards to potential cumulative impacts.



				boundary treatment and all other associated site development works. The works to the remainder of the school grounds consist of the provision of car parking spaces, disabled access car parking spaces, drop-off and pick-up facilities. Inline channel and onsite attenuation storage measures will be incorporated into the development to manage flood risk.	
Cork County Council	194124	Murnane & O'Shea Ltd.	Carrigane Road, Carrigtohill (townland), Carrigtwohill, Co. Cork	The construction of 94 no. dwelling houses and all ancillary site works. The proposed residential development represents a change of house type from that permitted under Cork County Council planning reference 06/10171 [as amended under planning reference 09/4276 and subsequently extended under planning reference 14/4654]. Access to the proposed development will be provided via the estate entrance as permitted under planning reference 06/10171 [as amended under planning reference 09/4276 and subsequently extended under planning reference under planning reference 14/4654].	Based on the location, nature and scale of this project it is considered that there is a potential risk for cumulative environmental impacts to arise. Accordingly this project has been assessed further below, with regards to potential cumulative impacts.
Cork County Council	214267	Murnane & O'Shea Limited	Carrigtohill (townland), Carrigtwohill, Co. Cork	The construction of 10 no. 4 bed semi- detached dwelling houses and all ancillary site development works. The proposed development is a change of plan from that previously permitted under Cork County Council planning application reference 19/4124.	Based on the location, nature and scale of this project it is considered that there is a potential risk for cumulative environmental impacts to arise. Accordingly this project has been assessed further below, with regards to potential cumulative impacts.



Cork County Council	216000	Murnane & O' Shea Limited	Elmbury, Carrigtohill (townland), Carrigtwohill, Co. Cork	The construction of 9 no. dwellinghouses, comprising 8 no. 4-bedroom semi-detached dwellings and 1 no. 4-bedroom detached dwelling and all ancillary site works. Access to the proposed development will be provided via the estate entrance and internal road network permitted by Cork County Council planning reference 19/4124, serving the Elmbury residential development which is currently under construction	Based on the location, nature and scale of this project it is considered that there is a potential risk for cumulative environmental impacts to arise. Accordingly this project has been assessed further below, with regards to potential cumulative impacts.
Cork County Council	187344	Coirce Ban Developments Ltd.	Ballyadam, Carrigtohill, Co. Cork	Demolition of the existing dwelling house, garage and garden sheds and the construction of a residential development consisting of 2 no. detached dwellings, 4 no. semi-detached dwellings and all associated ancillary site works including vehicular access, parking, footpaths, drainage, landscaping and amenity spaces. Access to the proposed development will via the existing local road serving the adjacent properties.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork County Council	197048	Lisa Collins	Poulaniska, Carrigtwohill, Co. Cork	Construct a two-storey dwellinghouse, domestic garage, domestic vehicular entrance, treatment unit and percolation area and all associated site works	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork County Council	235880	Derek O'Brien, Sara Chow O'Brien	Ballyadam, Carrigtwohill, Co Cork, T45XK03	1. Demolition of side and rear extensions, front porch and roof of the existing dwelling, detached garage and roof of detached storage shed, 2. Construction of single storey extensions to the front, rear and side of the existing dwelling, to include a new roof over same, 3. Change of use of storage shed to habitable rooms	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.



				(namely bedroom, en-suite and walk- in), and construction of a new roof over same, 4. Construction of a new site entrance wall, detached garage, new wastewater treatment system, and all associated site works.	
Cork County Council	217130	Connaught Trust Limited	Ballyadam and Carrigtohill (townlands), Carrigtwohill, Co. Cork	The construction of a residential development of 63 no. residential units consisting of 47 no. dwelling houses and 16 no. duplex apartment units and all ancillary site development works. Ancillary site works include the provision of bin/bicycle stores, an inter-urban greenway along the sites northern boundary which will provide pedestrian/cyclist access onto the Carrigane Road. Vehicular access to the proposed development will be provided via an upgraded site entrance from the Bog Road.	Based on the location, nature and scale of this project it is considered that there is a potential risk for cumulative impacts to arise. Accordingly, this project has been assessed further below, with regards to potential cumulative impacts.
Cork County Council	217374	IDA Ireland	Ballyadam, Hedgy Boreen Carrigtohill, Carrigtwohill, Co Cork	New site access, local road improvement works and site development works comprising; new vehicular site entrance from L-7642 (Hedgy Boreen) including approx. 34m of internal stub road; road improvement works to approx. 140m of the northern end of the L-7642 to widen approx. 80m of carriageway and provide a grass verge and new set back boundary to the north and south of proposed entrance; improvement of sightlines along L-3617 (Carrigane road) from the L-7642 by lowering of vegetation at the junction and set back boundary on the northern side of the site; provision of	Based on the location, nature and scale of this project it is considered that there is a potential risk for cumulative impacts to arise. Accordingly, this project has been assessed further below, with regards to potential cumulative impacts.



				IDA-branded signage; associated site development and landscaping works; all on a site of approximately 1.5Ha.	
Cork County Council	235064	Megan Goodale, Dermuid Harte	Carrigdhoun House, Carrigane, Carrigtwohill , Co. Cork	Alterations to dwelling house consisting of 1) Demolition of front porch area, garden wall, outhouse and existing extensions to the rear. 2) Construction of new single storey rear extension with first floor balcony, elevational changes including external insulation and all associated site works.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork County Council	185871	Jacqueline Walsh	Ballyrichard More, Midleton, Co. Cork	Construction of an extension to the eastern side of existing dwellinghouse and alterations including roof windows and demolition of existing extension, increase height of existing roadside boundary wall, new entrance gates and all associated site works. Extension of Duration of Permission granted under Planning Reference: 13/5074.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork County Council	184321	Ger Lawton	Ballyrichard More, Midleton, Co. Cork	Demolition of existing dwelling house and farm sheds, construction of new dwelling house, detached garage, revised site entrance and new wastewater treatment system along with all other associated site works. Extension of Duration of Permission granted under planning ref: 13/4022	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork County Council	225839	Ingram Homes Limited	Water-Rock, Midleton, Co. Cork	Largescale Residential Development. Ten-year planning permission for 400 residential units to be constructed in a series of phases, a creche and community use unit and ancillary infrastructure, services, and site development works. The proposed	Based on the location, nature and scale of this project it is considered that there is a potential risk for cumulative impacts to arise. Accordingly, this project has been assessed further below, with regards to potential cumulative impacts.



					development includes a number of public open spaces and play areas in addition to general landscaping, boundary treatments and landscaped parkland. The proposal includes an internal distributor road providing access to neighbouring lands, associated internal roads, car and bicycle parking, pedestrian and cycle paths (providing access to neighbouring lands), public lighting, bin storage (21.5 sq.m.) and all site services infrastructure. A greenway is also proposed as part of this application running east to west through the site. Future connections and linkages to adjoining lands are also provided. Entrances to provide vehicular, pedestrian and cycle access to serve the proposed development will connect with the permitted Part 8 road to be delivered under the Local Infrastructure Housing Activation Fund. The application may also be inspected online at the following website set up by the applicant: www.IngramLRDWaterrock.com.	
Cork County Council	217264	EMR Ltd	Projects	Lands at Knockgriffin (Imokilly) and Water Rock, Midleton, Co.Cork	We, EMR Projects Ltd, intend to apply for permission for development at this site (6.7 ha) on existing greenfield lands at Knockgriffin (Imokilly) and Water Rock, Midleton, Co. Cork. The application site is bounded by existing fields in agricultural use to the north, the Nordic Enterprise Park to the east, the Cork to Midleton rail line to the south and two dwelling houses to the west accessed via Castle Rock	Based on the location, nature and scale of this project it is considered that there is a potential risk for cumulative impacts to arise. Accordingly, this project has been assessed further below, with regards to potential cumulative impacts.



				Avenue. The development will consist of the demolition and removal of existing derelict buildings, structures, outbuildings and hardstanding (total 842sq.m) and the construction of a mixed-use scheme comprising 284no. residential units, a Childcare Facility, a Retail unit, a Café unit, a Medical clinic, Office units and all associated ancillary accommodation, site and development works.	
Cork County Council	217265	Dawn Meats Ireland	Knockgriffin (Imokilly), Knockgriffin (Barrymore), Water Rock, Midleton, Co. Cork	We, Dawn Meats Ireland, intend to apply for permission for development at this site (10.8 ha) on existing greenfield/brownfield lands at Knockgriffin (Imokilly), Knockgriffin (Barrymore) and Water Rock, Midleton, Co. Cork. The application site is bounded by existing fields in agricultural use to the north, the Nordic Enterprise Park to the south and east, the Cork to Midleton rail line to the south, and further agricultural lands to the west. The development will consist of the demolition and removal of existing derelict buildings, structures, outbuildings and hardstanding (total 1661sq.m) and the construction of a mixed-use scheme comprising 434no. residential units, a childcare facility, a Research and Development building, a Neighbourhood Centre, a 90-bed Nursing Home and all associated ancillary accommodation, site and development works.	Based on the location, nature and scale of this project it is considered that there is a potential risk for cumulative impacts to arise. Accordingly, this project has been assessed further below, with regards to potential cumulative impacts.
Cork County Council	226627	Havenfalls Limited	Knockgriffin, Midleton, Co.Cork	A ten-year planning permission for the following Large Scale Residential	Located 0.37km from proposed cycleway. Based on the location and nature of this



				development comprising the construction of 330 no. residential units (199 no. 3 and 4-bed dwelling houses and 131 no. 2 bed apartment units). 136 no. dwelling houses will have the option to include side ground floor windows. Access to the site will be via a new vehicular access point on to the permitted services link corridor to be delivered under the local infrastructure housing activation fund. A Natura Impact Statement is submitted to the planning authority with this application. The Natura Impact Statement will be available for inspection or purchase at a fee not exceeding the reasonable cost of making a copy during office hours at the offices of the planning authority.	project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork County Council	195219	CGI Food Park Ltd	Knockgriffin, Midleton, Co. Cork	Installation of 1.7 mega watts (12.810sq.m) of roof mounted solar pv panels to be mounted on both the pitched roof of the permitted (Reg No. 18/6790) but not yet constructed cold store extension and flat roof of the existing cold storage building together with a handrail surrounding the flat roof area and all associated ancillary works	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork County Council	206062	Margaret McDonnell	Knockgriffin, Midleton, Co. Cork	Construction of a new entrance, 2 no. silage pits, concrete apron, an animal house and all associated works.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork County Council	184532	Martin and Noreen Noonan	Water-Rock, Midleton, Co. Cork	Erect a single storey extension to dwelling, to carry out improvements to sewerage treatment system and to carry out improvement to the vehicular	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to



				entrance to the property from the public road	arise associated with the proposed development.
Cork County Council	184711	Padraig Dalton, Deirdre Dalton	Water-Rock, Midleton, Co. Cork	Planning Permission for alterations and conversion of existing carport into living accommodation including construction of a new single storey front extension to dwelling with entrance canopy and door.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork County Council	234514	Murnane & O'Shea Limited	Carrightohill, Carrigtwohill, Co. Cork	Construction of a residential development of 99 No. units and all ancillary site works including bicycle and bin stores. Access to the proposed development will be provided via the existing estate entrance from the Carrigane Road and internal road network of the Elmbury residential development which is currently under construction.	This development is located ca. 200m from the proposed development. However based on the nature and scale of this project, no significant cumulative environmental impacts are likely to arise associated with the proposed development.
An Bord Pleanála	ABP.3138 27	BAM Property Limited	Castlelake, Terrysland, Carrigtwohill, Co. Cork.	Construction of 716 no. residential units (224 no. houses, 492 no. apartments), creche and associated site works.	Based on the location, nature and scale of this project it is considered that there is a potential risk for cumulative environmental impacts to arise. Accordingly, this project has been assessed further below, with regards to potential cumulative impacts.
Cork County Council	225005	Murnane & O'Shea Limited	Elmbury, Carrigtohil (townland), Carrigtwohill, Co. Cork	Construction of 47 no. dwelling houses and all ancillary site works. Access to the proposed development will be provided via the estate entrance and internal road network from the Carrigane Road permitted by planning reference 19/4124 and extended by planning reference 21/5150 and provides for the extension of the permitted spine road.	Based on the location, nature and scale of this project it is considered that there is a potential risk for cumulative environmental impacts to arise. Accordingly this project has been assessed further below, with regards to potential cumulative impacts.



Cork County Council	234313	Murnane & O'Shea Limited	Elmbury, Carrigtohill Td., Carrigtwohill, Co.Cork	Construction of a single storey creche and all ancillary site works including car/bicycle parking and bin stores.	Based on the nature and scale of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork County Council	22/05378	Merck Millipore Ltd.	Fota Retail and Business Park, Killacloyne, Carrigtwohill, Co. Cork	Construction of an access road, a temporary unsurfaced carpark, temporary security hut, temporary bus shelter building, temporary portaloo toilets, temporary lighting, temporary fencing and ancillary works.	Based on the nature and scale of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
An Bord Pleanála	225032	Irish Water	Ownparks, Broomfield West, & Knockgriffin (Imokilly), Midleton, Co. Cork.	Midleton North Wastewater Pumping Station and Network, which will consist of: 1) a new wastewater pumping station with below ground wet well and chambers, 2 no. above ground kiosks, vent stack (c.6.2m in height), telemetry pole (c. 6m in height), associated works; (2) construction of a below ground pipeline (c. 650m long) connecting the proposed wastewater pumping station to the previously approved Water-Rock Pumping Station); (3) construction of c. 30m of an underground pipeline to connect the existing foul network on the mill road to the proposed foul pumping station; and (4) all associated site development, landscaping and site excavation works above and below ground.	Based on the location of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork County Council	216240	Compass Homes Ltd	Station Road, Carrigtwohill, Carrigtohill (townland), Co. Cork	Demolition of 2no. existing dwellings and the construction of 38 no. apartments and a café (with outdoor seating) and includes for site access, car parking, landscaping, open spaces and boundary treatments, bin	Based on the location, nature and scale of this project it is considered that there is a potential risk for cumulative impacts to arise.



				and bicycle storage, and all associated and ancillary site development works.	Accordingly, this project has been assessed further below, with regards to potential cumulative impacts.
An Bord Pleanála	ABP- 310798-21	EirGrid plc	County Cork, between the existing Knockraha substation in the townland of Ballynanelagh in County Cork and Claycastle Beach in Youghal in the townland of Summerfield in Co. Cork	That portion of the Celtic Interconnector project to be constructed onshore in Ireland, to the Mean High Water Mark (HWM), including an electricity converter station in the townland of Ballyadam east of Carrigtwohill in County Cork.	Based on the nature and anticipated programming of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork County Council	21/5965	Kilsaran Concrete Unlimited Company	Barryscourt and Rossmore townlands, Carrigtwohill, Co. Cork	The development will comprise continuance of use of the existing quarry development within an overall application area of c. 24.ha; extraction to the permitted level of 40m below Ordnance Datum, within the area permitted under P. Ref. 03/4570.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork County Council	21/6983	Lagan Materials Ltd	Rossmore Townland, Carrigtwohill, Co. Cork	Permission sought for deepening the existing quarry from -20mOD to -50mOD within the existing permitted quarry footprint (P. Ref. S/02/5476; ABP Ref. PL04.203762; & ABP Ref. PL04.QD.0010) within an application area of 12ha.	Based on the location and nature and of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork County Council	21/7265	Dawn Meats Ireland and EMR Projects Ltd	Lands at Water Rock, Midleton, Co. Cork	Two separate residential developments on adjoining sites at Water Rock, Midleton. EMR development will consist of 284no. residential units and associated buildings. Dawn Meats development will consist of 434no. residential units and associated buildings.	Based on the existing land use within footprint of and adjoining this project and the sensitivities of the Great Island Channel SAC and Cork Harbour SPA, and given the nature and scale of this project it does not have potential to give rise to adverse ecological effects, or adverse effects on any Natura 2000 sites in combination with the proposed development.
					Based on the location of this project, no significant cumulative environmental



					impacts are likely to arise associated with the proposed development.
An Bord Pleanála	ABP- 315087-22	Córas Iompair Éireann (CIÉ)	Traverses through the townlands of Anngrove; Ballyadam, Ballyrichard More; Broomfield East; Broomfield West; Carrigane; Carrigtwohill; Harpers Island; Johnstown; Killacloyne; Killahora, Co. Cork	Twin tracking of the existing single-track sections of railway between Glounthaune and Midleton, Co. Cork.	Based on the existing land use within footprint of and adjoining this project and the sensitivities of the Great Island Channel SAC and Cork Harbour SPA, and given the nature and scale of this project it does not have potential to give rise to adverse ecological effects, or adverse effects on any Natura 2000 sites in combination with the proposed development.
					Based on the location, nature and scale of this project it is considered that there is a potential risk for cumulative environmental impacts to arise.
					Accordingly this project has been assessed further below, with regards to potential cumulative impacts.
Cork County Council	17/5659	Janssen Sciences Ireland UC	Barnahely, Ringaskiddy, Co. Cork	An extension to the existing biomedicines manufacturing facility (proposed gross floor area c. 19,116m2).	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
An Bord Pleanála	PL04.2481 54	GE Healthcare Life Sciences BioPark	Barnahely, Raheens East, Ringaskiddy, Co. Cork	BioPark and all ancillary site development works including landscaping.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork County Council	17/7428	John Garde	Courtstown Industrial Estate, Courtstown, Little Island, Co. Cork	Construct a building (6625m2) containing a waste transfer and recycling facility. The proposed development also includes the construction of a separate two storey administration block (178m2).	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.



EPA	P0778-02	Janssen Sciences Ireland UC	Barnahely, Ringaskiddy, County Cork	5.16 The production of pharmaceutical products including intermediates.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork County Council	18/7200	Country Clean Recycling Unlimited Company	Courtstown Industrial Estate, Courtstown, Little Island, Co. Cork	Construct a building containing a waste transfer and recycling facility along with a separate Administration Block, ESB Sub-Station, weighbridges, underground tanks, service yard, new boundary treatments and all associated drainage and site works.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
EPA	n/a	Indaver Ireland Limited	Ringaskiddy, County Cork (National Grid Ref. E179055, N064279)	Waste to Energy Facility (waste incinerator with energy recovery) for the treatment of residual household, commercial and industrial waste which includes up to 24,000 tonnes of suitable hazardous waste with an annual capacity of 240,000 tonnes per annum.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork City Council	n/a	Tower Development Properties Ltd	The Custom House site at North Custom House Quay and South Custom House Quay, Custom House Street, Cork City	Refurbishment of the existing buildings on site including the Custom House and Bonded Warehouses, construction of a 34-storey tower c. 140m over the Revenue Building, a distillery, remedial works to quay walls, and the provision of a new public realm.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
An Bord Pleanála	n/a	Progressive Commercial Construction Ltd	Site of Carey Tool Hire and the former Sextant bar, Albert Quay, Cork City	A Strategic Housing Development of 201no. Build To Rent apartments in a building that ranges in height from 8 to 11 to 24 storeys over ground floor, ancillary resident & communal facilities; cafe; private rented office; public bar/restaurant; basement.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.



Cork County Council	19/6783	Belvelly Marino Development Company DAC	Belvelly Port Facility, Marino Point, townlands of Marino, Belvelly and Oldcourt, Cobh, Co. Cork	Demolition, site infrastructure improvements, and utility upgrade works to stabilise the existing site and to provide capacity for future industrial development proposals.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork County Council	19/6964	Architectural and Metal Systems Limited	Wallingstown, Little Island, Co. Cork, T45 VP40	Construction of a new single-storey extension for the surface treatment (anodising) of aluminium sections, underground services and associated site works.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Minister for Public Expenditure and Reform	DPE63- 18-2018	Commissioners for Public Works	Blackpool, Cork	Flood Relief Scheme for Blackpool, Cork involving the construction of direct flood defences and conveyance improvement measures along a stretch of the River Bride and its tributaries in Blackpool, Cork.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Minister for Public Expenditure and Reform	DPE63-9- 2018	Commissioners for Public Works	Glanmire/Sallybrook, Cork	Flood Relief Scheme for Glanmire/Sallybrook, Cork involving the construction of direct flood defences and conveyance improvement measures along the Glashaboy River and its tributaries.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork County Council	20/5627	Portfolio Concentrate Solutions UC ("PepsiCo Ireland")	Ballytrasna, Little Island, Co. Cork	Extension to the existing Production Building, expansion of the Site Utility Services and provision of a new Waste Water Treatment Plant.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
An Bord Pleanála	n/a	Marina Quarter Limited	Former Ford Distribution Site, Centre Park Road, Cork	Permission for a Strategic Housing Development at the Former Ford Distribution Site, Centre Park Road, Cork, comprising demolition of existing structures and construction of a mixed-use development including apartments, commercial and community facilities.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.



Cork County Council	20/6955	Goulding Chemicals Limited and Belvelly Marino Development Company DAC	Belvelly Port Facility, in the townland of Marino, Marino Point, Cobh, Co. Cork	The construction of a new agricultural fertiliser facility for use by Goulding Chemicals Limited; and additional port operational use of the jetty to facilitate cargo vessels. An EIAR, and NIS will be submitted with the application.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork City Council	n/a	University College Cork & Tyndall National Institute	University College Cork, Distillery Fields, North Mall, Cork, T23 XA50	Construction of a new purpose-built research facility comprising of approximately 16,325m2 (GIA) rising from 4 storeys at the east to 7 storeys at the west accommodating mix of research laboratories, seminar rooms, offices, exhibition space and café.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork County Council	21/5132	Pfizer Ireland Pharmaceutical s	Townlands of Ballintaggart and Ballybricken, Ringaskiddy, County Cork, P43 X336	The construction of a new five-storey clinical manufacturing building, associated buildings, utilities, piperack, and associated site development works.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork City Council	n/a	Progressive Commercial Construction Ltd	Carey Tool Hire site, Albert Quay, Cork City, bounded by Albert Quay East to the north, Albert Street to the west, Albert Road to the south, and Navigation Square to the east	Office building 5-12-14-16 storeys over ground floor, external terraces at Levels 2, 6, 13, & 15; two levels of basement for parking; café/deli & restaurant with outdoor seating; refurbishment 2no. Protected Structures; Demolition of Carey Tool Hire.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork County Council	21/5965	Kilsaran Concrete Unlimited Company	Barryscourt and Rossmore townlands, Carrigtwohill, Co. Cork	The development will comprise continuance of use of the existing quarry development within an overall application area of c. 24.ha; extraction to the permitted level of 40m below Ordnance Datum, within the area permitted under P. Ref. 03/4570.	Based on the nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork County Council	21/6983	Lagan Materials Ltd	Rossmore Townland, Carrigtwohill, Co. Cork	Permission sought for deepening the existing quarry from -20mOD to -	Based on the nature and of this project, no significant cumulative environmental



				50mOD within the existing permitted quarry footprint (P. Ref. S/02/5476; ABP Ref. PL04.203762; & ABP Ref. PL04.QD.0010) within an application area of 12ha.	impacts are anticipated to arise associated with the proposed development.
Cork County Council	21/7265	Dawn Meats Ireland and EMR Projects Ltd	Lands at Water Rock, Midleton, Co. Cork	Two separate residential developments on adjoining sites at Water Rock, Midleton. EMR development will consist of 284no. residential units and associated buildings. Dawn Meats development will consist of 434no. residential units and associated buildings.	Based on the location of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork City Council	n/a	Leeside Quays Limited	Kennedy Quay, Marina Walk, Victoria Road and Mill Road, South Docklands, Cork City	3.1426ha at Kennedy Quay & Marina Walk, South Docks, Cork City. Mixed Use: residential, office, entertainment, food & beverage, cinema, retail and public open space including Odlums Building (RPS ref. PS856) and rehabilitation hospital, all over double basement.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
EPA	n/a	Irish Water	Cork Lower Harbour Ringaskiddy, Shanbally, Co. Cork	The provision of wastewater collection systems and treatment facilities in the Cork Lower Harbour area, with the wastewater treatment plant treating waste from Carrigaline, Crosshaven, Shanbally, Coolmore, Ringaskiddy, Passage West, Glenbrook, Monkstown & Cobh.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
An Bord Pleanála	ABP- 313216-22	Estuary View Enterprises 2020 Limited	Bessborough, Ballinure, Blackrock, Cork	Facilities, café, crèche, and all ancillary site development works.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.



An Bord Pleanála	ABP- 313206-22	Estuary View Enterprises 2020 Limited	Bessborough, Ballinure, Blackrock, Cork	Demolition of 10no. existing agricultural buildings/sheds and log cabin residential structure and the construction of a residential development of 140no. apartment units, resident amenity facilities, crèche, and all ancillary site development works.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
An Bord Pleanála	ABP- 313277-22	Tiznow Property Company Limited (Comer Group Ireland)	Former Tedcastles Yard, Centre Park Road and the Marina, Cork	The demolition of existing structures and the construction of a strategic housing development of 823no. apartments in 6no. buildings ranging in height from part-1 to part-35no. storeys over lower ground floor level.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
Cork County Council	n/a	Merck Millipore Ltd	Tullagreen, Carrigtwohill, Co. Cork, T45KD29	The demolition of an existing switch room and an existing drum store and the construction of a new 3-storey manufacturing building, a two storey Utilities Building, a single drum store, expansion to WWTP and Tank Farm with all associated site works.	Based on the existing land use within footprint of and adjoining this project and the sensitivities of the Great Island Channel SAC and Cork Harbour SPA, and given the nature and scale of this project it does not have potential to give rise to adverse ecological effects, or adverse effects on any Natura 2000 sites in combination with the proposed development.
					Based on the location of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
An Bord Pleanála	ABP- 313720-22	Reside Investments Limited	Kilmoney Road, Carrigaline, Co. Cork	Consists of Strategic Housing Development providing 224no. residential units, a creche/childcare facility and 3no. retail units and all associated works.	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to arise associated with the proposed development.
An Bord Pleanála	ABP- 313919-22	Hibernia Star Limited	Jacobs Island, Ballinure, Mahon, Cork	The development will consist of the construction of 489no. apartments, creche and offices in 5 no. buildings ranging in height from part-1 to part-8	Based on the location and nature of this project, no significant cumulative environmental impacts are anticipated to



			no. storeys over lower ground and semi-basement podium levels.	arise associated with the proposed development.
Council C	University College Cork & Tyndall National Institute	9 . ,	3.5-4.5m wide tri-span bridge on two	environmental impacts are anticipated to arise associated with the proposed



Based on proximity to the proposed Carrigtwohill to Midleton Inter-Urban Cycleway Project as well as the nature, scale and anticipated programme, the following projects were identified as having the potential to result in cumulative impacts associated with the proposed development:

- Murnane & O'Shea Limited; Construction of 94 no. dwelling houses and all ancillary site works;
- Murnane & O'Shea Limited; Construction of 47 no. dwelling houses and all ancillary site works;
- BAM Property Limited; Construction of 716 no. residential units, creche and associated site works.
- CIÉ; Twin tracking of the existing single-track sections of railway between Glounthaune and Midleton;
- IDA Ireland; New site access, local road improvement works and site development works;
- Connaught Trust Limited; Construction of a residential development of 63 no. residential units; and
- Compass Homes Ltd; Demolition of 2no. existing dwellings and the construction of 38 no. apartments and a café
- EMR Projects Ltd; The development will consist of the demolition and removal of existing derelict buildings, structures, outbuildings and hardstanding (total 842sq.m) and the construction of a mixed-use scheme comprising 284no. residential units, a Childcare Facility, a Retail unit, a Café unit, a Medical clinic, Office units and all associated ancillary accommodation, site and development works
- Dawn Meats Ireland; The development will consist of the demolition and removal of existing derelict buildings, structures, outbuildings and hardstanding (total 1661sq.m) and the construction of a mixeduse scheme comprising 434no. residential units, a childcare facility, a Research and Development building, a Neighbourhood Centre, a 90-bed Nursing Home and all associated ancillary accommodation, site and development works.
- Ingram Homes Limited; Largescale Residential Development. Ten-year planning permission for 400
 residential units to be constructed in a series of phases, a creche and community use unit and ancillary
 infrastructure, services, and site development works.

A Waste Management & Construction Management Plan has been prepared (OSL, 2020 & 2022) for the Murnane & O'Shea Ltd. Developments which will be implemented during construction to avoid / reduce the potential for significant environmental impacts from the project.

The BAM Property Limited Strategic Housing Development was subject to an Environmental Impact Assessment Report which found that there will be no significant environmental impacts.

The CIÉ twin tracking project was subject to an Environmental Impact Assessment Report which found that there will be no significant environmental impacts given that mitigation measures would be implemented.

A Report to inform EIA Screening was prepared (RPS, 2021) for the IDA Ireland project which found that 'no likely significant impacts' are anticipated during the construction or operational phases.

A Preliminary Construction Environmental Management Plan has been prepared (MHL & Associates Ltd., 2021) for the Connaught Trust Ltd. Development which will be implemented during construction to avoid / reduce the potential for significant environmental impacts from the project.

A Construction Environmental Management Plan has been prepared (DOSA, 2021) for the Compass Homes Ltd. Development which will be implemented during construction to avoid / reduce the potential for significant environmental impacts from the project.

The EMR Projects Ltd. project was subject to an Environmental Impact Assessment Report which found that there will be no significant environmental impacts given that mitigation measures would be implemented.

The Dawn Meats Ireland project was subject to an Environmental Impact Assessment Report which found that there will be no significant environmental impacts given that mitigation measures would be implemented.

A Report to inform EIA Screening was prepared (CJLC, 2022) for the Ingram Homes Limited project which found that no likely significant impacts are anticipated during the construction or operational phases.



Furthermore, a Construction Environmental Management Plan and Traffic Management Plan will be implemented by the contractor during the construction phase of the proposed development. Accordingly, and taking account of the nature of the proposed development, the risk of significant adverse cumulative effects arising from the proposed development in combination with the projects assessed above is considered to be low. No likely significant environmental cumulative adverse effects will arise.

Given the nature and scale of the other projects listed in Table 3-3 above, it is considered that they do not have any potential to give rise to significant adverse environmental cumulative impacts with the proposed development.

Other Key Infrastructure Projects

Additionally, a number of key infrastructure projects are currently being implemented in Carrigtwohill as follows:

Carrigtwohill URDF Initiative - Public Realm Infrastructure Bundle

Cork County Council approved Part 8 planning for the Carrigtwohill URDF Initiative – Public Realm Infrastructure Bundle in 2022. This project includes a wide range of public realm enhancement measures and junction upgrades in Carrigtwohill along Station Road, Main Street and at N25 Junction 3 (Cobh Cross). The works include: -

- Main Street and Station Road Public Realm Works including footpath widening, provision of off-road cycling facilities, road re-alignment, resurfacing, signalisation, traffic calming measures, street lighting, demolition of buildings at the junction of Main Street and Station Road along with other smallscale demolition works and provision of new public spaces.
- Upgrade of Wises Road junction.
- Additional capacity measures at N25 Junction 3 (Cobh Cross) including widening and realignment of approach roads to the roundabout.

These proposed works are complimentary to the proposed Carrigtwohill UEA Infrastructure. Together both projects will: -

- Support regeneration, compact growth, and sustainable development in Carrigtwohill.
- Provide better quality streetscapes and public spaces to unlock the potential of Carrigtwohill Town.
- Improve connectivity between Carrigtwohill Town Centre and residential developments (existing and future), Carrigtwohill train station, schools, business parks, commercial premises etc.
- Encourage sustainable modes of transport by reducing car dominance and providing safe pedestrian and cyclist facilities.

Station Road Schools Campus

Cork County Council granted planning permission (Planning reference: 19/5707) for a new school's campus on Station Road. This campus, which is currently under construction, comprises of two primary schools and one post-primary school. It also includes two new link roads connecting Station Road and Castlelake. These link roads include segregated cycling facilities on both sides.

Midleton to Dunkettle Inter-urban Cycle Route

The Midleton to Dunkettle Inter-urban Cycle Route (IU-1) is proposed in the Cork Metropolitan Area Transport Strategy 2040. This cycle route will connect major employment centres such as Little Island (10,000+ employees) and Carrigtwohill IDA Business Park (3,800 employees) with existing and proposed residential areas including in Carrigtwohill, Midleton, Glanmire and Glounthaune. The Midleton to Dunkettle route will form part of the Cork to Waterford Inter-urban Demonstrator which is included in the Department of Transport Pathfinder Programme. Sections of this route will provide connectivity to the Carrigtwohill UEA as described below.

Bury's Bridge Cycleway

Cork County Council granted Part 8 planning permission for a strategic cycleway scheme connecting Bury's Bridge at Dunkettle outside Cork City with Carrigtwohill. This scheme, part of which has now been



constructed, provides approximately 7.7 kilometres of pedestrian and cycle path segregated from vehicular traffic. The cycleway enters the east side of Carrigtwohill to the north of Cobh Cross (N25 Junction 3). It runs parallel to Carrigtwohill Main Street before turning north and running along the Castlelake Access Road. It then joins the link roads associated with the new schools' campus as described above.

Carrigtwohill to Midleton Inter-urban Cycle Route Phase 1

The Carrigtwohill to Midleton Inter-urban Cycle Route received Part 8 Planning Approval from Cork County Council in 2022. This section of IU-1 runs to the north of Carrigtwohill, primarily through the Carrigtwohill UEA, connecting the IDA Business Park in the west with lands zoned for Industry to the south of Carrigane Road in the east. It will provide a sustainable transport link to the Carrigtwohill UEA lands. It will also provide a link to existing and future employment centres in Carrigtwohill, Carrigtwohill Train Station, the planned Carrigtwohill school's campus on Station Road which has obtained planning permission and existing and planned residential developments along Wises Road, Station Road and Leamlara Road in Carrigtwohill. As a section of IU-1 it will also provide sustainable transport connectivity from Carrigtwohill to the major employment centre in Little Island.

Water Rock LIHAF Initiative - UEA Infrastructure

To support the development of the Water Rock UEA lands, Cork County Council proposed, within the East Cork LAP, three 'bundles' of core infrastructure to be developed. This approach enabled the development of individual and privately owned parcels of zoned lands within the UEA to be developed independently of each other but in accordance with the LAP. The infrastructure bundles are to be delivered to facilitate the development of individual phases of the UEA construction. The first bundle 'A' would be constructed to facilitate the development of Phase 1 of the UEA which includes the development of up to 1000 houses. Bundles B and C would be delivered to facilitate subsequent development.

The above key infrastructure projects will complement the proposed Carrigtwohill to Midleton Inter-Urban Cycleway Project and will ensure connection between the various land uses within the vicinity. Given the nature and scale of the above projects / schemes, it is considered that these infrastructure projects will not result in significant adverse environmental impacts. Additionally, a Construction Environmental Management Plan will be implemented by the relevant contractor during the construction of each of these projects, further reducing the potential for adverse environmental impacts. It is considered that the proposed Carrigtwohill to Midleton Inter-Urban Cycleway project, will not result in significant environmental impacts. There is no potential for other projects to act in combination with the proposed project to give rise to cumulative significant environmental effects. Additionally, a CEMP and Traffic Management Plan will be implemented during the construction works of the proposed project.

The nature of any associated demolition works (Schedule 7(1)(c))

Refer to Section 3.2.1 under 'A description of the Physical Characteristics of the Whole Proposed Project and Where Relevant of Demolition Works (Schedule 7A (1) (a))'.

The use of natural resources, in particular land, soil, water and biodiversity (Schedule 7(1)(d))

Refer to Section 3.7.3 under 'The Use of Any Natural Resources in particular soil, land, water and biodiversity (Schedule 7A (3)(b)).

The production of waste (Schedule 7(1)(e))

Refer to Section 3.7.3 under 'The Expected Residues and Emissions and the Production of Waste where relevant (Schedule 7A (3)(a)).' The proposed project is not likely to have a significant environmental effect with regard to the production of waste. All waste will be removed to an appropriately licenced/ permitted waste disposal/ recovery facility.

Pollution and nuisances (Schedule 7(1)(f))

Refer to Section 3.7.2 under 'Description of Aspects of the Environment Likely to be Significantly affected by the Proposed Project (Schedule 7A (2))'.

Potential pollution impacts arising from construction activities (including site preparation) include pollution of surface waters and groundwater by sediment, cementitious materials (e.g. concrete), hydrocarbons (e.g. diesel,



hydraulic oils and lubricating oils) and other deleterious matter. In the case of the proposed project, these include fine sediment from excavations and earthworks, fuels and other hydrocarbons from vehicles, plant and machinery, concrete and other construction materials, and waste from on-site welfare facilities.

Drainage works will run in tandem with the route construction phase. Drainage will be 'over-the-edge' to a filter drain (perforated pipe in gravel trench) running alongside the length of the route. The development lands and construction activities will be managed following routine practices and procedures for the control of pollution from construction sites, including the relevant, well-established guidelines from CIRIA and TII, as listed in the outline Construction Environmental Management Plan (CEMP) included with the application. These include controls on the phasing of works, waste management, location of site compounds, and surface water management.

Given the works sequence and methodology, the probability of any significant pollution event occurring is minimal and the magnitude of any negative water quality impacts, were they do occur, would be low and their duration brief or temporary.

A Stage 1 Screening for Appropriate Assessment has been prepared (Atkins, 2023). The project has been assessed with regards to the likely significant effects of the project on European sites within the zone of influence of the proposed project. The Screening for AA concluded that:

'based on the nature of the proposed development and its integration with other projects under the Carrigtwohill URDF Initiative, UEA Masterplan and Cork County Development Plan, it will not give rise to significant effects on any of the Natura 2000 sites within the Zone of Influence, in combination with other plans or projects.'

Biosecurity protocols will be implemented during the proposed project to prevent the introduction of invasive species listed on the third schedule of the EC (Birds and Natural Habitats) Regulations 2011, as amended, to site.

The proposed project may generate waste such as asphalt, construction and demolition waste, plastic wrapping, wooden pallets or soil arisings. As outlined previously (under 'The production of waste (Schedule 7(1)(e))), appropriate robust waste management procedures will be implemented by the Contractor to ensure that any minimal volumes of waste which will be generated during the construction phase do not pose a pollution / nuisance risk to the receiving environment.

In the event that any excavated soils need to be disposed of offsite as part of the proposed project, such soils/waste material will require waste classification in accordance with EPA requirements as set out in the documents 'Waste Classification List of Waste & Determining if Waste is Hazardous or Non-hazardous' (EPA, 2015), and 'Determining if waste is hazardous or non-hazardous' (EPA, 2018), and all relevant waste management legislations. In addition to screening against relevant WAC, the preparation of a waste classification tool (hazwaste online / EPA paper tool or similar etc.) will be required to be carried out in order to determine the relevant LoW / EWC code for the transport of any waste soils/material which require offsite removal and disposal.

The risk of major accidents, and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge (Schedule 7(1)(g))

A flood risk assessment (FRA) has been undertaken in accordance with the Planning System and Flood Risk Management Guidelines for Planning Authorities (Department of Environment, Heritage and Local Government & Office of Public Works, 2009). The FRA was completed to inform the proposed development as it relates to flood risk and is included as part of the Part 8 planning application.

The FRA states: "Having reviewed the available information there are some historic flood event records in the area, however none of each is affecting the site itself. The nearest potential source of flooding has been identified as the Water Rock River which is flowing beneath the existing bridge under the proposed greenway. Review of predictive flood mapping identify that there is no overtopping of the bridge and the site residing in Flood Zone C.

The Climate Change scenario has been reviewed and there is no overtopping of the existing bridge during 1% AEP Climate Change event.

Potential blockage of the existing culvert will not increase the flood risk, as proposed works to fit within existing culvert crossing."

There are 20no. Seveso (Control of Major Accident Hazards Regulations (COMAH)) establishments within 15km of the proposed project site, the closest being Merck Millipore Ltd., which is a lower tier site, ca.2.7km south of the project site. Due to the distance of this Seveso site from the proposed project site and the activity carried out at this site the proposed project is not located in a high-risk area with respect to major accidents/ disasters. Due to the nature, scale and location of the proposed project, there will be no impact on any of these Seveso sites.

It is considered that the overall risk of major accidents and / or disasters associated with the proposed project is extremely low and does not warrant further consideration.



The risks to human health (for example, due to water contamination or air (Schedule 7(1)(h)) pollution)

Dust may be generated during the construction phase. However, management of dust will be in line with best practice such as that set out in 'Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes' (NRA, 2011).

Noise levels during the proposed project, will not exceed the indicative levels of acceptability for construction noise in an urban environment as set out in the NRA guidance 'Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes' (NRA, 2014). The Contractor will be required to comply with the requirements of the European Communities (Construction Plant and Equipment) (Permissible Noise Levels) Regulations, 1988 as amended in 1990 and 1996 (S.I. No. 320 of 1988, S.I. No. 297 of 1990 and S.I. No. 359 of 1996), and the Safety, Health and Welfare at Work (Control of Noise at Work) Regulations, 2006 (S.I. No. 371 of 2006). No significant impact on human health due to noise pollution is anticipated to occur during the operational phase of the project.

There are two reported wells (GSI, 2023) within the vicinity of the project site, reported to 2km locational accuracy. The exact location of these wells will be determined prior to construction, and should protection measures be required, these will be implemented as required. Accordingly, there will be no significant impact on human health. The proposed project is predominantly underlain by a regionally important aquifer – karstified (diffuse). A small portion of the eastern and western portion is underlain by a locally important aquifer – bedrock which is moderately productive only in local zones. If dewatering is required, a dewatering management plan will be developed by the contractor as required in consultation with the design team and client and implemented during construction. The plan will include at a minimum anticipated areas and depths of groundwater, anticipated volumes, proposed discharge location, environmental site setting, need for any permits or consents and all required details for water treatment as required. Due to the nature and scale of the proposed project it is not anticipated to have a significant impact on groundwater quality, resources or flow.

Given the location, nature and scale of the proposed project, the overall risk to human health is low.

3.8.1. Location of proposed project - The environmental sensitivity of geographical areas likely to be affected by the proposed project (Schedule 7(2))

The existing and approved land use (Schedule 7(2)(a))

The project will be constructed within a rural setting with the majority of the proposed site currently being used for agricultural purposes. The location of the proposed project has been detailed previously in Section 3.2.1 under Schedule 7A (1)(a).

The relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground (Schedule 7(2)(b))

Refer to Section 3.7.3 under *The Use of Any Natural Resources in particular soil, land, water and biodiversity (Schedule 7A (3)(b)).*

The absorption capacity of the natural environment, paying particular attention to the following areas (Schedule 7(2)(c)):

(i) Wetlands, riparian areas, river mouths

Cork Harbour is located ca. 7km from the proposed project and is listed as Wetland of International Importance. There are no EPA reported surface water features within the project site or its immediate vicinity. Based on the findings of the Stage 1 Appropriate Assessment, there will be no significant impacts on the quality of Great Island Channel or Cork Harbour. Based on the nature and scale of the proposed works, no significant impacts on wetlands, riparian habitats or river mouths are anticipated.

(ii) Coastal zones and the marine environment

The proposed project is located 1.8km from transitional waters of Owenacurra Estuary. Based on the nature and scale of the proposed works, it is not anticipated that it will have a significant impact on the coastal zone or marine environment.

(iii) Mountain and forest areas

There are no mountain or forest areas within 2km of the proposed project site and therefore no impacts on this habitat type.

(iv) Nature reserves and parks

There are no nature reserves or national parks located within 15km of the proposed project site.



(v) Areas classified or protected under legislation, including Natura 2000 areas designated pursuant to the Habitats Directive and the Birds Directive

The proposed project lies ca. 1.8km from Cork Harbour SPA (004030) and Great Island Channel SAC (001058).

Based on the findings of the Stage 1 Appropriate Assessment Screening report (Atkins, 2023) there will be no potential significant adverse effects to European sites arising from the proposed project.

There are 16no. pNHA's within the zone of influence of the project location, the closest of which are Great Island Channel, pNHA located within the estuary to the southwest of the proposed project and and Ballynaclashy House pNHA located north of the proposed project. There is no anticipated potential for significant impact on areas classified or protected under legislation.

(vi) Areas in which there has already been a failure to meet the environmental quality standards laid down in legislation of the European Union and relevant to the project, or in which it is considered that there is such a failure.

The proposed project lies within the Midleton GWB. The Midleton GWB is of 'good' status with its likelihood of meeting good quality status by 2027 currently under review (EPA, 2023). A CEMP will be developed and implemented by the appointed contractor during construction works which will set out standard control measures for the protection of groundwater and an Environmental Clerk of Works or Site Environmental Manager will be appointed to monitor construction activities, where they deem required. Due to the nature and scale of the works it is not anticipated to significantly impact groundwater quality.

The proposed project is located within the Lee, Cork Harbour and Youghal Bay Water Framework Directive (WFD) catchment area and Tibbotstown and Owennacurra sub-catchment area.

Air quality in the area is reported as 'good' (EPA, 2023). Dust may be generated during the proposed project which has the potential to impact on human health. However, management of dust will be in line with best practice such as that set out in 'Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes' (NRA, 2011). A CEMP will be developed and implemented by the appointed contractor during construction works which will set out standard control measures for the protection of air quality. Due to the nature and scale of the works it is anticipated that there will be no significant impact on air quality.

It is anticipated that there may be a temporary increase in noise volumes. Noise levels shall not exceed the indicative levels of acceptability for construction noise in a rural environment as set out in the TII guidance 'Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes' (TII, 2014). A CEMP will be developed and implemented by the appointed contractor during construction works which will set out standard control measures for the protection of noise nuisances.

It is considered that due to the nature and scale of the project there will be no significant impact on baseline air and water quality from the proposed project.

(vii) Densely populated areas

The proposed project is located within rural lands and is therefore not located within a densely populated area. It has been considered that there may be an increase in population within the area in the future. Given the scale and nature of the proposed development, it is not expected that impacts to or from the proposed infrastructure development will be significant. It is anticipated that the impacts of the proposed infrastructure development will be primarily positive in terms of the local population and Human Health effects as it will provide for connections to surrounding lands, and access to sustainable transport options. Based on the scale and nature of the project, there will be no likely significant negative effect on the local population.

(viii) Landscapes and sites of historical, cultural, or archaeological significance

Refer to 3.2.1 under 'A Description of the Location of the Proposed Project, with Particular Regard to the Environmental Sensitivity of Geographical Areas Likely to be Affected (Schedule 7A(1)(b)).'

There are no ZoN for SMR features crossed by the proposed project, with the closest ZoN located ca.0.2km from the project. There are 3no. SMR features within 200m, but none of these lie within the site boundary with 5no. additional sites within 50m of the site boundary.

A desktop assessment of the archaeological/heritage impacts was undertaken with no recorded sites detailed on the Sites and Monuments Record for Cork which are directly or indirectly impacted by the proposed project infrastructure. All undisturbed green field locations retain the potential to contain unrecorded features of archaeological origin and a programme of pre-construction geophysical



survey and licensed archaeological testing is required to establish if any such features exist within the any project affiliated green fields.

It is considered that due to the nature and scale of the project there will be no significant impact on landscapes and sites of historical, cultural or archaeological significance from the proposed project.

3.8.2. Types and characteristics of potential impacts (Schedule 7(3))

The likely significant effects on the environment of the proposed project have been evaluated considering the following specific criteria.

The magnitude and spatial extent of the impact (for example, geographical area and size of the population likely to be affected) (Schedule 7(3)(a))

The spatial extent of potential impacts is limited to the localised footprint of the proposed project site. Based on the location, current site setting, and the nature of the proposed project there is potential for localised impact to field drains and watercourses, groundwater and ecological sensitive areas, however impacts will not be significant in nature. Additionally, a CEMP will be developed and implemented by the contractor during construction, further reducing the potential for environmental impacts. There will be no likely significant impacts from the proposed project.

The nature of the impact (Schedule 7(3)(b))

Based on the nature and scale of the proposed development as described in section 3.2.1 - 3.7.3, there is potential for localised impacts. However, noting that a CEMP and RWMP will be developed and implemented during the construction phase, it is not anticipated that impact on the receiving environment arising from the proposed project is significant in nature (during the construction or operational phases).

The transboundary nature of the impact (Schedule 7(3)(c))

There is no potential for transboundary impacts as a result of the proposed project (during the construction or operational phases).

The intensity and complexity of the impact (Schedule 7(3)(d))

Based on the nature and scale of the proposed development as described in section 3.2.1-3.7.3, there is potential for localised impacts. However, given that a CEMP and RWMP will be developed and implemented during the construction phase, it is not anticipated that impact on the receiving environment arising from the proposed project is significant in nature (during the construction or operational phases).

The probability of the impact (Schedule 7(3)(e))

Based on the nature and scale of the proposed development as described in sections 3.2.1 - 3.7.3, the probability of significant impact is considered to be low. Furthermore, a CEMP and RWMP will be developed and implemented during the construction phase, which will further reduce the potential for significant impact via. the implementation of standard control measures for the onsite management of any pollution / nuisance issues which could arise during the construction phase.

The expected onset, duration, frequency and reversibility of the impact (Schedule 7(3)(f))

It is considered that there is potential for significant permanent impacts from the proposed works on existing habitats within the project site. ca. 891m of hedgerows/ treelines will be required to be removed. This will be mitigated by the replacement of this with a minimum of 2281m of new hedgerows/ treelines (an increase of 1390m) aligned to the new infrastructure as well as new areas of planting in SuDs features throughout the scheme. Trenchless technologies will be used where proposed drains cross watercourses / ditches to ensure minimal impact on existing buffer areas along watercourses outside of the project site. Based on the nature and scale of the proposed development as detailed in section 3.2.1, as well as the proposed construction methodologies (see section 3.7.3), it is considered that these impacts will not be significant in nature and no reversibility of significant impacts will be required.

The cumulation of the impact with the impact of other existing and/or development the subject of a consent for proposed project for the purposes of section 172(1A)(b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment (Schedule 7(3)(g))

As previously detailed no significant cumulative impacts associated with the project (during the construction or operational phases) have been identified, arising from other existing and/or approved projects. Refer to Section 3.8 under 'Cumulation with other existing development and/or development the subject of a consent for proposed development for the purposes of section 172(1A) (b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment (Schedule 7(1) (b)).



The possibility of effectively reducing the impact (Schedule 7(3)(h))

Based on the nature and scale of the proposed development as described in section 3.2.1 - 3.7.3, there is potential for in-significant impacts. As previously mentioned, ca. 891m hedgerow / treeline will be lost because of the proposed development, however, will be mitigated against/compensated via. the replacement of this with a minimum of 2281m of new hedgerows/ treelines (an increase of 1390m) aligned to the new infrastructure as well as new areas of planting in SuDs features throughout the scheme.

Additionally, a CEMP will be developed and implemented by the contractor during construction, further reducing the potential for environmental impacts. There will be no likely significant impacts from the proposed project.

3.9. Potential for Significant Effects on the Receiving Environment

All relevant information as required under Schedule 7A has been provided on behalf of Cork County Council and is presented within Sections 3.2.1-3.7.4 of this screening report. The potential for the proposed project to pose a significant impact to the receiving environment has also been evaluated in accordance with criteria listed Planning and Development Regulations (2001-2023) (Schedule 7), as presented within Section 3.8 of this screening report.

Based on the information provided within Section 3.2 - 3.9 of this report, and summarised below, it is considered that due to the size, nature, and characteristics of the proposed project, no significant effects on the receiving environment are expected; hence the preparation of a sub-threshold EIAR is not required.



4. Conclusion

This EIA screening report has been carried out in accordance with the Planning and Development Regulations as amended 2001- 2023 (which give effect to the provisions of EU Directive 2014/52/EU), and the Roads Acts 1993-2022. The report assessed the impact of the Carrigtwohill to Midleton Inter-urban Cycleway project in conjunction with committed developments in the surrounding area.

Based on all available information, and taking account of the scale, nature and location of the proposed project it is our opinion that the preparation of an EIAR is not a mandatory requirement. The proposed project is deemed a sub-threshold development; hence the potential for significant environmental effects arising as a result of the proposed project has been evaluated, in accordance with the requirements of Schedule 7A and Schedule 7 of the Planning and Development Acts 2001-2023.

No significant adverse impacts to the receiving environment will arise as a result of the proposed development. Therefore, it is our opinion that the preparation of an EIAR is not required.



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