

Clifton Scannell Emerson
Associates

18_200 EIA Screening Report

Bilberry to City Centre Waterford Greenway Link



Comhairle Cathrach
& Contae Phort Láirge
Waterford City
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1. Executive Summary

1.1 Introduction

Clifton Scannell Emerson Associates Consulting Engineers (CSEA) was commissioned by Waterford City & County Council to provide consultancy services, including preparation of planning documents for the proposed Bilberry to City Centre Waterford Greenway Link (hereafter referred to as the “Greenway Link”). As part of this commission, CSEA has carried out a Screening for Environmental Impact Assessment (EIA) to determine whether an Environmental Impact Statement (EIS) is required for the Greenway Link. Specialist inputs were provided by Pat Doherty (BSc, MSc, MCIEEM) of DEC Ltd. for ecology and Órla Scully (MA MIAI) for archaeology and cultural heritage.

The proposed Greenway Link will be a high quality pedestrian and cycleway from the Waterford Greenway car park at Bilberry, following Bilberry Road as far as Rice Bridge and will then run along Merchant’s Quay as far as the proposed South Quay Plaza where it will meet the proposed River Suir Sustainable Transport Bridge.

1.2 The Proposed Development

The proposed Greenway Link is located along Bilberry Road and Merchants Quay for the majority of its length, linking the Waterford Greenway to Waterford City and the proposed River Suir Sustainable Transport Bridge – covering a distance of approximately 2km. The Waterford Greenway currently runs for more than 40kms in a north-easterly direction from Dungarvan in south west Waterford, past Kilmacthomas to Bilberry, which is 2km west of Waterford City Centre. The location of the proposed route is shown in Appendix B.

The proposed scheme involves:

- Construction of an approximate 4000 mm wide cycle and pedestrian corridor from the Greenway car park at Bilberry, along Bilberry Road, Grattan Quay and Merchants Quay, to the proposed South Quay Plaza.
- Undertake road widening along Bilberry Road, erect railings and fences and provision of accommodation works where necessary for adjoining landowners; provide 2No. 4000 mm wide boardwalks at the eastern end of Bilberry Road; upgrade the existing facilities on Grattan Quay and Merchants Quay, and upgrade the existing facilities in the car parks in Merchants Quay.

1.3 Methodology

This screening has been undertaken having regard to the following documents:

- Environmental Impact Assessment (EIA) Guidelines for Consent Authorities Regarding Sub-Threshold Development (DEHLG, 2003);
- Environmental Impact Assessment of National Road Schemes – A Practical Guide (NRA, 2008);
- The European Commission Guidelines on EIA Screening (European Commission, 2001); and,
- Guidelines on information to be contained in EIS (Environmental Protection Agency, 2002).

The following Draft Guidance documents have also been consulted: -

- Revised Guidelines on the Information to be Contained in Environmental Impact Statements, Draft August 2017.

1.4 Screening Conclusions

The Project does not meet the thresholds for which the preparation of an Environmental Impact Statement (EIS) is a mandatory requirement. The legislative requirements that deem whether an Environmental Impact Assessment is mandatory for a project are outlined in Schedule 5 of the Planning and Development Regulations 2001–2015.

The criteria under which the Project must be considered are outlined within Article 27 of the European Communities (Environmental Impact Assessment) Regulations, 1989, as amended, (which reflects the criteria in Annex III of the EIA Directive 2011/92/EU, as amended by 2014/52/EU).

The categories of screening criteria include:

- (i) Characteristics of the Proposed Development,
- (ii) Location of the Proposed Development and,
- (iii) Characteristics of Potential Impacts.

The proposed greenway link is located adjacent to the lower River Suir, which is designated as a SAC. A Screening for Appropriate Assessment pursuant to Regulation 42(1) of the Habitats Regulations and Part XAB: Section 177U (1) of the Planning and Development Act, 2000 (as amended) has been prepared by Doherty Environmental Consultants (DEC) Ltd. in April 2019 in accordance with current guidance (DEHLG, 2010) to assess and address all issues regarding the construction and operation of the proposed Greenway and to inform and allow the competent authority to comply with Article 6(3) of the Habitats Directive.

It has been concluded, in view of best scientific knowledge and the Conservation Objectives of the Natura 2000 sites within the Likely Zone of Impact, that the proposed Greenway Link, on its own or in combination with other plans or projects, does not have the potential to give rise to likely significant effects on any Special Conservation Interests / Qualifying Interests of any Natura 2000 site. Significant effects are not likely to arise as a result of construction works for the proposed Greenway Link and direct impacts can be objectively ruled out. In the opinion of DEC, the overall conclusion is that the construction of the Greenway Link can be “*screened out*” and a Stage 2: Appropriate Assessment will not be required.

The majority of the environmental impacts associated with the construction stage (e.g, disturbance and habitat modification) will be short-term, and will be reversible over time. However, the Project footprint will result in the permanent loss of some semi-natural habitat and the localised removal of a small quantity of natural material necessary for purposes of construction.

The proposed development will be designed in accordance with the National Cycle Manual; Transport Infrastructure Ireland (TII), previously National Roads Authority (NRA), Design Manual for Roads and Bridges (DMRB); the Department of Transport, Tourism and Sport’s Design Manual for Urban Roads and Bridges (DMURS); and, the NRA/TII Environmental Assessment and Construction Guidelines (EACG), Inland Fisheries Ireland (IFI) Guidelines (2016) will be adhered to during construction near watercourses. Adherence to these guidelines will ensure that the likelihood of significant environmental effects will be minimised.

CSEA recommend that Waterford City & County Council determine that the proposed Greenway Link does not have the potential to have significant effects on the environment. It is concluded that an Environmental Impact Statement is not required for the proposed Greenway.

2. Introduction

2.1 Project Brief

Clifton Scannell Emerson Associates Consulting Engineers has been engaged by Waterford City & County Council to provide Consultancy Services for the Bilberry to City Centre Waterford Greenway Link Project.

The Waterford Greenway was officially opened on the 26th March 2017. The existing link to Waterford City Centre is by way of a local road (Bilberry Road L1501) which has a restricted cross section. In March 2018, the Contracting Authority engaged the services of a Consultant Engineer to carry out a preliminary design of a one kilometre section of the Bilberry Road to enable a cost estimate for this section to be developed. The aim for the Bilberry Road section is the delivery of a single carriageway to take predicted traffic flows and pedestrian and cycle facilities to accommodate the number of users on the Greenway.

The function of the route will be manifold. The following is a non-exhaustive list of objectives for the route taken into account during the development of the Project:

- (i) To cater for tourist amenity – The Waterford Greenway attracted 283,503No. users in 2018 (128,689No. pedestrians, 154,814No. cyclists), however, the Bilberry counter recorded the lowest number of users in 2018, in particular for cyclists (<75,000No.) despite its close proximity to Waterford City. It is envisaged that improvement of the route from Bilberry to the City Centre will attract cycle tourists undertaking the Waterford Greenway cycle.
- (ii) To cater for commuting - the route will have to be sufficiently attractive to compete as an active travel alternative for commutes into Waterford City from Waterford IT and towns and villages such as Kilmeadan and Kilmacthomas.
- (iii) To cater for local amenity - the route should benefit local communities through providing improved pedestrian and cycle linkage from Waterford City to adjacent residential developments such as Water's Gate and Bowefield.
- (iv) To enhance the ecological corridor - the proposed Greenway Link should have a neutral to positive impact on local ecology. This can be achieved by inclusion of complementary planting and features for flora and fauna.
- (v) To complete a Greenway of international renown - the proposed Greenway Link must avoid compromises and be on a par with the best greenways in the world.

An Options Report was completed by Clifton Scannell Emerson Associates Consulting Engineers in April 2019. This included a Constraints Study in order to inform the design by identifying specific design issues which should be taken into account during early design and route selection. These constraints to the development of a route included hydrology, landscape and visual impacts and ecology. An ecological surveys was undertaken in April 2019.

This report has been prepared by Clifton Scannell Emerson Associates in accordance with published guidance to document the Screening of whether an Environmental Impact Assessment is required for the Project.

3. Description of the Proposed Development

3.1 Overview

The proposed Bilberry to City Centre Waterford Greenway Link commences at the Greenway car park in Bilberry, and follows the Bilberry Road and Merchant's Quay as far as the proposed South Quay Plaza and proposed River Suir Sustainable Transport Bridge. A site location map showing the proposed route of the Greenway Link is given in Appendix B.

A single Screening for Appropriate Assessment and Ecological Impacts Assessment has been carried out for this scheme.

3.2 Detailed Description of the Project

The development of the proposed Greenway Link will require varying degrees of intervention to existing conditions depending on the proposed location. In some areas, relatively minor works will be required to enhance existing shared surface or cyclelanes already in place. Elements of the design will require more significant interventions including the provision of cantilevered boardwalks. In order to limit the impact of the proposed scheme on the receiving environment, ecological enhancements are proposed in a number of areas to increase biodiversity, and also amenity value along the route. Unless otherwise stated, it is proposed to provide a 4m wide shared footpath/cycletrack.

A summary of the route and the interventions proposed are given below. This summary should be read in conjunction with the drawings in Appendix B.

- Bilberry Road junction with Quarry Road – buildout to allow for widening of the courtesy crossing from the Greenway to the Greenway Link.
- Bilberry Road – road widening to accommodate a 4m wide shared pedestrian and cycle facility along the northern side of Bilberry Road.
- Grattan Quay – the route runs along the northern side of Bilberry Road, including on 2No. cantilever boardwalk to accommodate a 4m wide footpath/cycleway (140m and 90m in length). Ecological enhancements are proposed in this area by the provision of additional planting and vegetation.
- Rice Bridge Junction – it is proposed to remove the left slip lane (maintaining the left only turn), and provide an all pedestrian phase at toucan crossing at this junction.
- Merchants Quay Roadway – proposed improved 2m cyclelanes and cycletracks with existing pedestrian footpaths utilised for pedestrian traffic, and improved in some areas.
- Merchants Quay Riverfront – the proposed route runs along the inside of the flood defence wall utilising a widened shared surface area.
- Crossing outside Waterford Bus Station – it is proposed to upgrade this crossing to a toucan crossing.
- Roundabout at the junction with Gladstone Street – cycle friendly improvements to this existing roundabout.

4. EIA Screening Process

4.1 Introduction

This report documents the significant environmental effects which the proposed Greenway Link development is likely to have on the receiving environment. The reference documents used to inform the process are summarised in Section 1.3.

The Guidelines on EIA Screening (European Commission, 2001) provide a flow diagram of the screening process and this is the process generally followed in this Screening Report (See Figure 4.1).

4.2 Relevant Legislation

EIA requirements derive from Council Directive 85/337/EEC (as amended by Directives 97/11/EC, 2003/35/EC and 2009/31/EC) and as codified and replaced by Directive 2011/92/EU of the European Parliament and the Council on the assessment of the effects of certain public and private projects on the environment (and as amended in turn by Directive 2014/52/EU).

The legislative requirements which deem whether an EIA is mandatory for a project are outlined in Schedule 5 of the Planning and Development Regulations 2001-2018.

All Projects can be placed into one of the following two categories:

- those that exceed the thresholds laid down and therefore have a mandatory requirement to prepare an EIS; and
- those projects that are sub-threshold and must be assessed on a case-by-case basis to determine whether or not they are likely to have significant effects on the environment.

4.3 Methodology

Screening is the process of deciding whether a development requires an EIA. The mandatory and discretionary provisions within Planning and Development Regulations 2001–2018 allow the requirement for an EIA to be determined.

4.4 Mandatory EIA

The Project does not meet the thresholds to require a mandatory EIA. The legislative requirements which deem whether an EIA is mandatory for a project are outlined in Schedule 5 of the Planning and Development Regulations 2001-2018.

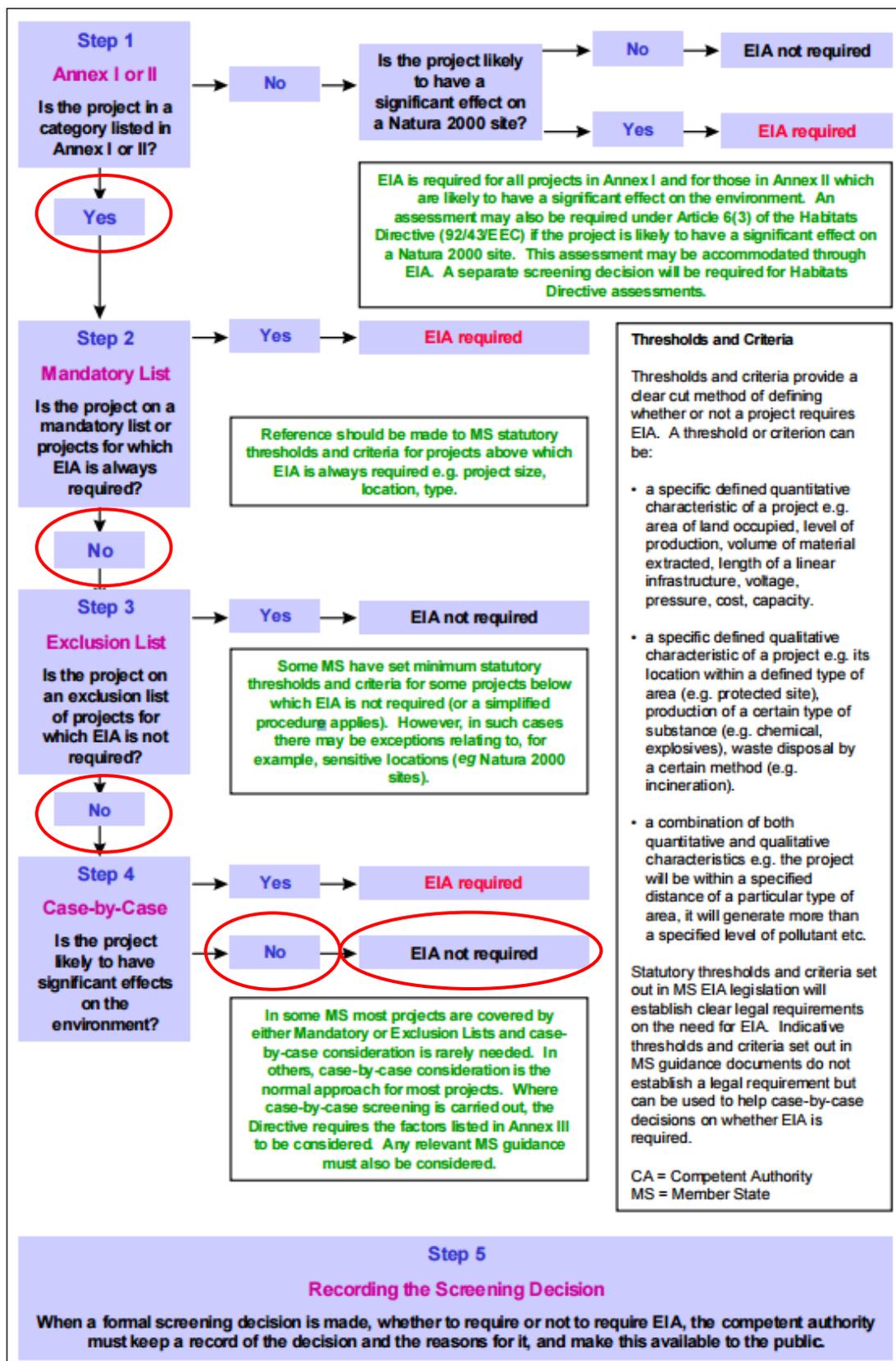


Figure 4.1 The Screening Process (Source: European Commission Guidelines on EIA Screening (June 2001))

4.5 Sub-Threshold Development

Where a decision is being made on whether a proposed development would or would not be likely to have significant effects on the environment, regard must be given to the criteria specified for the purposes of Article 27 of the European Communities (Environmental Impact Assessment) Regulations, 1989 (as amended).

The Article 27 screening criteria are grouped into three categories:

- (i) Characteristics of the Proposed Development,
- (ii) Location of the Proposed Development and,
- (iii) Characteristics of Potential Impacts.

Additionally, the screening process can be aided using the European Commission publication, Guidance on EIA Screening (June 2001) checklists, particularly the “*Screening Checklist*” and the “*Checklist of Criteria for Evaluating the Significance of Environmental Effects*”. A detailed Screening Checklist was completed for the proposed development and is contained within Appendix A.

The criteria associated with each category, (i.e. the criteria that must be taken into account when making screening decisions on a case by case basis) is presented in Table 4.1 (below). This has then been considered in the context of the proposed Greenway, and a description of the aspects of the environment likely to be significantly affected by the project are outlined in Sections 4.6, 4.7 and 4.8.

Table 4.1 Article 27 Screening Criteria for Determining Likely Significant Effects

<p>1.Characteristics of proposed development</p> <p>The characteristics of proposed development, in particular:</p> <ul style="list-style-type: none"> • the size of the proposed development, • the cumulation with other proposed development, • the use of natural resources, • the production of waste, • pollution and nuisances, • the risk of accidents, having regard to substances or technologies used.
<p>2. Location of proposed development</p> <ul style="list-style-type: none"> • The environmental sensitivity of geographical areas likely to be affected by proposed development, having regard in particular to: • the existing land use, • the relative abundance, quality and regenerative capacity of natural resources in the area, • the absorption capacity of the natural environment, paying particular attention to the following areas: <ul style="list-style-type: none"> (a) wetlands, (b) coastal zones, (c) mountain and forest areas, (d) nature reserves and parks, (e) areas classified or protected under legislation, including special protection areas designated pursuant to Directives 79/409/EEC and 92/43/EEC, (f) areas in which the environmental quality standards laid down in legislation of the EU have already been exceeded, (g) densely populated areas, (h) landscapes of historical, cultural or archaeological significance.
<p>3. Characteristics of potential impacts</p> <p>The potential significant effects of proposed development in relation to criteria set out under paragraphs 1 and 2 above, and having regard in particular to:</p> <ul style="list-style-type: none"> • the extent of the impact (geographical area and size of the affected population), • the transfrontier nature of the impact, • the magnitude and complexity of the impact, • the probability of the impact, • the duration, frequency and reversibility of the impact.

4.6 Characteristics of the Proposed Development

4.6.1 Size of the Project

The nature of the proposed Greenway Link development generally requires widening works to an existing road, which limits the extent of works proposed to be carried out. The proposed cantilevered structure locations have been limited to locations where engineering solutions incorporate less intrusive designs avoiding and reducing potential impacts on the receiving environment.

4.6.2 Cumulation with Other Projects

A number of searches in relation to plans and projects that may have the potential to result in cumulative impacts have been undertaken. Data sources included the following:

- An Bord Pleanála Website (Planning Searches);
- Waterford City & County Council Online Planning Search.

For the purposes of this cumulative assessment small scale and domestic developments were not considered given the sub-urban/urbanised nature of the route, and the fact that these developments would be subject to the stringent planning controls of the relevant local authorities.

A summary of relevant developments considered in the cumulative assessment are given below.

Planning Application No. 14500067 (Granted)

Extension of the duration of a previous permission under Planning Ref. 09/500006 was granted in 2014 and will be valid until 2019. The development consists of the construction of 22 No. semi-detached homes to replace 18 No. detached houses on site numbers 58 -75 granted under Planning Permission No. 04/500131, minor adjustments to the approved road layout and all associated site works. The proposed development is located to the south of the proposed greenway link. Owing to the nature and scale of this development and its distance from the River Suir, there will be no adverse effects in combination with the Project

Planning Application No. 17222 (Granted)

An extension in duration of the planning application 12/500066 was granted in May 2017. The development comprises building 36 No. houses consisting 3- and 4- bedroom detached and semi-detached 2-storey and/or dormer-style 3-storey houses. Estate entrances are provided from Gracedieu Road and Quarry Road and together with all associated site development works and all associated services installation. The site is located 1.7 km upstream of the Project, adjacent to the Bilberry Industrial Estate. Owing to the nature and scale of this development and its distance from the River Suir, there will be no adverse effects in combination with the Project.

Planning Application No. 17780 (Granted): The demolition of an existing dwelling and construction of 9 no. dwelling houses comprising 6 no. semi-detached three storey 4 bed units, 2 no. semi-detached two storey 3 bed units and 1 no. detached two storey 3 bed unit together with a 2m high boundary wall/railing and all associated site works. An AA Screening was carried out for this development and it was concluded that the proposed development will not have an adverse effect on the integrity of the Lower River Suir SAC or any other Natura 2000 sites.

Planning Application No. 18727 (Granted - Conditional): Reduce height of 2 No. Gas Boiler Chimney Stacks by 8.8m each. The proposed development is within the curtilage of Protected Structures, however, it does not alter or affect these structures.

Planning Application No. 18804 (Decision Due 30/04/2019): A change in density in an increase to 46 houses from 36 houses and also planning permission for a change of house type to three and four bed roomed, two storey, detached (6 units) and semi-detached (40 units) houses from that as granted planning permission under Planning Ref. No. 12/500066 (extended under Planning Ref. 17/722). All public works of roads, paths, public lighting, foul drainage, stormwater drainage and watermain elements will be built in accordance with the detail and terms of the previous planning permission granted under planning ref 12/500066. An AA screening was carried out for this development which concluded that the

proposed works would not result in impacts on the integrity of the Lower River Suir SAC or any other Natura 2000 sites.

Waterford Greenway Cycle and Pedestrian Route – Kilmeaden to Bilberry

A 9.6km Greenway between Kilmeaden and Bilberry, Waterford, 600 m upstream of the Project, on the south side of the River Suir, is open to the public. The route forms part of the Waterford to Dungarvan “Déise Greenway”. The proposed project will result in this extension of the eastern end of this greenway into Waterford City centre. All works associated with the existing greenway have been completed and did not give rise to negative effects to the Lower River Suir SAC. The operation phase of the existing greenway does not pose a risk of negative effects to the SAC. As there are no ongoing effects associated with this existing project, it will not combine with the proposed project to result in negative in combination with the Project.

Waterford Flood Alleviation Scheme Phase

Flood protection works were completed in 2014 along the River Suir upstream at its confluence with John's River at Scotch's Quay/George's Quay along the length of the South Quay to Rice Bridge and on John's River from its confluence with the River Suir at Scotch Quay/George's Quay. The flood protection works are in immediate proximity to the Project. These works have been completed and did not give rise to adverse effects. As there are no ongoing or future effects, there will be no negative effects in combination with the Project.

Waterford North Quays Strategic Development Zone Planning Scheme (Adopted 2018)

The Government designated the lands at the North Quays as an SDZ and specified Waterford City and County Council (WCCC) as the Development Agency (SI No 30 of 2016) in January 2016. The Planning Scheme was adopted in 2018 must be prepared not later than two years after the making of an order. It was accompanied by a Strategic Environmental Assessment (SEA) Environmental Report and an Appropriate Assessment (AA) Report. The AA examined, analysed and evaluated the implications of the Draft Planning Scheme for European sites, specifically the Lower River Suir SAC and the River Barrow and River Nore SAC, in order to assist Waterford City & County Council, as the competent authority, in undertaking the Appropriate Assessment (AA)(NIR). This NIR has determined that, given the full and proper implementation of the mitigation contained in the Planning Scheme, there will be no adverse effect on the integrity of Natura 2000 sites arising from the adoption and implementation of the Planning Scheme, either individually or in combination with other plans or projects.

River Suir Sustainable Transport Bridge (Lodged with An Bord Pleanala 20/12/2018)

The proposed development comprises a sustainable transport bridge crossing the River Suir in Waterford City and includes a paved and landscaped plaza at the landing point on the South Quay, in direct proximity to the Clock Tower. It is anticipated that the proposed bridge will provide a new pedestrian, cycle and courtesy electric bus link between the North Quays and South Quays, promoting the further development of Waterford City and facilitating the development of the North Quays Strategic Development Zone (SDZ) lands. The proposed development is termed a ‘Sustainable Transport Bridge’ as it will support sustainable modes of transport including pedestrians, cyclists and electric bus users. The bridge will be approximately 207m in length and will allow the extension of the retail spine from Waterford City across to the North Quays SDZ. On the South Quay the proposed bridge will land in the vicinity of the Clock Tower on Meagher's Quays. The North Quays at present comprise an assembly of wharves consisting of disused open spaces following the demolition of disused industrial buildings in 2016 and the Hennebique grain store building in July 2018. The Rosslare to Waterford (via Belview) rail line terminates to the east of the North Quay landing point. The AA NIS concludes that the Project, either individually or in combination with other plans or projects, will not adversely affect the integrity of the Lower River Suir SAC, the River Barrow and River Nore SAC or any other European site.

WCCC Flood Defences Project

The aim of this future project is to provide flood protection to the west of Rice Bridge. This project will be developed between Irish Rail, the Office of Public Works and WCCC and is currently at preliminary discussion stage. In the absence of any design or even design options, an assessment of cumulative effects with this project cannot be undertaken at this stage. Once developed, this project will be required to undertake the appropriate assessments including EIA Screening and AA Screening and consider the cumulative effects resulting from all other projects, as appropriate. Owing to the nature and scale of this

project, its proximity to the River Suir, and the absence of any design information at this stage the potential for it to result in likely significant effects to the Lower River Suir SAC cannot be ruled out. Construction works associated with the proposed greenway link are planned to be completed well in advance of the commencement of any works associated with this project. As such there will be no potential for cumulative construction related impacts to the SAC. The operation phase of the proposed greenway will not in itself result in negative impacts to the SAC and it is not predicted to have the potential to combine with any proposed flood defence works to result in cumulative negative effects to the SAC. As noted a Screening for Appropriate Assessment and where necessary an Appropriate Assessment for the proposed flood defence project, once formulated, will be required to give consideration to cumulative effects with the proposed greenway link and other projects in the surrounding vicinity.

Conclusion

Construction activities associated with the development of each of the projects listed above will result in some impacts on the River Suir and its environs, mainly through permanent habitats loss, temporary habitat disturbance and modification during the construction phases. The in-stream works taking place as part of the River Suir Sustainable Transport Project pose the most significant risk to water quality, spread of invasive alien plant species and disturbance to protected fauna however; the works undertaken by Waterford City & County Council (WCCC) are subject to strict site controls which are designed to mitigate potential impacts.

Having considered the anticipated overall potential impact with respect to each of these developments, it is considered that there are no likely significant effects on the environment when considered in combination with each other. It is therefore considered that the cumulative impact of the Greenway Link in combination with existing baseline actions (the approved projects listed above) is not significantly worse than any of the individual impacts associated with site preparation, construction and subsequent maintenance of the Greenway Link.

4.6.3 Use of Natural Resources

Whilst exact quantities of materials required have not been determined at this stage, the amount of aggregates that will be required during the construction phase is likely to be relatively minor. All excavated suitable material will be reused onsite in embankments and enhancements proposed along the corridor.

4.6.4 Production of Waste

Small quantities of unsuitable material will be excavated and although every effort will be made to reuse this on site, it may have to be disposed of off-site. Whilst the exact amount of this unsuitable material has not been evaluated, the Contractor will be required to prepare a Construction and Demolition Waste Management Plan, and any waste produced as part of the Project will be dealt with in accordance with all relevant waste management legislation and guidance.

4.6.5 Pollution and Nuisances

During construction, polluting material has the potential to cause environmental effects, however, the likelihood and severity of these effects will be minimised through compliance with best practice construction management practices. During the construction stage, temporary impacts will be experienced by those property owners adjacent to the proposed Greenway Link and road users on the existing network. It is anticipated, however, that these increases will be offset by the reduction in noise and air pollution from the long term modal shift from cars to cycling and walking through provision of enhanced Greenway facilities.

During the operational phase, it is not predicted that there will be any increase in noise and vibration levels or air quality emissions along the route.

4.6.6 Risk of Accidents

The risk of accidents associated with this development would not cause unusual, significant or adverse effects of a type that would, in themselves, require an EIA.

During the construction phase measures will be provided to ensure that run-off from the works is contained and sediment removed prior to discharge into the watercourses. The works will be carried out in accordance with *Guidelines for Crossing Watercourses during the Construction of National Road Schemes (TII, 2008)*; Inland Fisheries Ireland document *Guidelines On Protection Of Fisheries During Construction Works In And Adjacent To Waters* (IFI, 2016) and the CIRIA – Guideline Document C532 *Control of Water Pollution from Construction Sites* (CIRIA, 2001).

Additionally, a Traffic Management Plan will assess the risk of road traffic accidents during the construction phase. It is expected that the risk of accidents would be low during the construction of the Project considering standard construction practices would be used, the scale of the Project would be small and no unusual substances or technologies would be used. The proposed development would provide a safer and more accessible facility for cyclists and pedestrians by reducing conflict with motorised vehicles.

4.7 Location of Projects

The second criterion included in Annex II of the EIA Directive relates to the environmental sensitivity of geographical areas likely to be affected by the proposed development, having regard in particular to;

- The existing land use;
- The relative abundance, quality and regenerative capacity of natural resources in the area; and
- The absorptive capacity of the natural environment.

The following sections address each of the above points.

4.7.1 Existing Land Use

The footprint of the proposed route is largely along existing roads, footpaths and cycletracks which will be upgraded and widened. The existing land use along the route is a mix of brownfield zoned land, agricultural land zoned for housing, industrial, residential, retail and car parking. A small portion of the route is proposed as a cantilevered boardwalk over the River Suir itself.

4.7.2 Abundance, Quality and Regenerative Capacity of Natural Resources

The proposed Greenway will have minimum impact on the quality and regenerative capacity of natural resources in the area. Much of the proposed route is along existing roads with only widening or realignment proposed and, therefore, there will be a minimal loss of vegetation. In addition, sensitive landscape design will be incorporated into the overall project design, which will assist in replacing any vegetation loss and avoid, or reduce, potential impacts where possible. A number of ecological enhancements areas will be identified to provide opportunities for additional planting and general biodiversity enhancement measures. An ecological survey of the River Suir was carried out and sensitive habitats mapped. Areas which have been identified as being of specific nature conservation importance have been identified and an appropriate design which minimises impacts is proposed at all feasible locations.

4.7.3 The Absorption Capacity of the Natural Environment

4.7.3.1 Overview

The River Suir at Rice Bridge has an average salinity of about 10‰ fluctuating from about 2‰ to 20‰. Water Quality (Neill, 2001 and 2005) has probably improved in recent years since all the raw sewage previously discharged from the City of Waterford to the Suir in this reach has been piped for full secondary treatment to the WWTP near Belview. The current quality is eminently suitable for the passage of all Annex II species. Due to its position along the estuary, the channel is visibly turbid within the study reach, which is more evident during low tides and high flows in the river.

Soil data sourced from the EPA shows that the majority of the soils underlying the site of the proposed scheme are peaty gleys. The proposed scheme overlaps the former Waterford Stanley site (old foundry site) which may have areas of localised shallow soil contamination. The majority of the footprint of the proposed scheme is in an area of made ground. Fissured bedrock outcrop also occurs sporadically in

the area. This bedrock is located at height above the Bilberry Road (Bilberry Rock) and also on the site of the former Waterford Stanley Foundry. The widening works from Rice Bridge to the junction of Bilberry Road and Quarry Road are entirely within an area of made ground. During the construction phase, due to potential pollution incidences, measures must be put in place to protect affected water bodies and to maintain or improve the water quality status. In particular the water quality status of the River Suir should not be degraded further.

Storm water runoff from the proposed development will be treated in a detention pond, and a petrol interceptor will be provided at any outfalls. In some urbanised areas of the route, low points may be connected to adjacent storm water drains where required. The additional volume of runoff will be relatively low due to the fact that much of the route will be utilised by pedestrians and cyclists and, in this regard, the quality of any storm water runoff from paved areas will be of a very high standard with very low sediment content. In this regard any additional runoff generated from extended paved areas is not anticipated to cause any appreciable degradation in water quality either in the River Suir.

4.7.3.2 Watercourses

A small stretch of the proposed Greenway Link (approximately 250m) is located either inside the river floodplain. Due to the limited additional hard surfaces which are proposed, it is not anticipated that the scheme will contribute to flooding along the Suir. Temporary flooding of the route is not known to occur at present, however, should it occur when extreme rainfall events coincide with high tides alternative routes will be available to pedestrians and cyclists during these periods. Watercourses can be sensitive to pollution, particularly to the potential increased levels of suspended solids during the construction stage. Suspended solids (silt) affect aquatic life particularly larger animals such as fish, most critically when it settles in spawning areas. Other potential impacts include:

- physical obstructions to upstream and downstream migration both during and after construction;
- disturbance of spawning beds during construction - timing of works is critical; and,
- point source pollution incidents during construction.

Cantilever structures are proposed at two pinch point locations and, therefore, no in-stream works are anticipated. The foundations for these structures will be bored piles in the existing Bilberry Road carriageway.

4.7.3.3 Coastal Zones

The proposed Greenway Link is located along the lower reach of the River Suir which is tidal. It is not anticipated that the proposed works will have any impact on any coastal waterbody.

4.7.3.4 Mountain and Forest Areas

There are no mountains or forested areas affected by the proposed development, however, the route does require the removal of some existing mature trees.

4.7.3.5 Nature Reserves and Parks

There are no nature reserves affected by the proposed development.

4.7.3.6 Nationally Designated Sites

There are no nationally designated sites affected by the proposed development.

4.7.3.7 European Sites

The following are a list of European sites in the zone of influence to the proposed development:

- Lower River Suir SAC (Site code: 001209)

A Screening for Appropriate Assessment has been carried out for the proposed Greenway Link and following a detailed analysis of the Project and the potential relationships with Natura 2000 Sites within the likely zone of impact, it was objectively concluded that there will be no likely significant effects on any Natura 2000 site(s) either alone or in-combination with other plans or projects.

4.7.3.8 *Environmental Quality Standards*

There are no known areas in which the environmental quality standards shall be exceeded.

4.7.3.9 *Densely Populated Areas*

The proposed route passes through some urbanised areas which are densely populated. It is anticipated that the proposed development will have a positive impact on these adjoining areas due to the high amenity value of the Greenway. There may be temporary local impacts in these areas relating to noise and traffic management impacts during the construction phase, however these impacts will be temporary and limited. In addition portions of existing walking routes may be temporarily closed and diverted while works take place causing inconvenience for users – again this will be a localised and temporary impact. During the operational phase, adjoining densely populated areas are expected to benefit from improved environmental conditions as a result of the improved leisure facilities. Densely populated areas may also benefit from a decrease in vehicular traffic with commuters switching to cycling or walking.

4.7.3.10 *Landscapes of Historical, Cultural or Archaeological Significance*

The proposed works will allow the Greenway walking and cycle route which runs along the converted former railway track between Dungarvan and Waterford to continue into the city centre of Waterford, following it from the current parking spot north west of the Water's Gate development at the Bilberry/Quarry Road junction. For the most part, the upgrade of the roadway takes place outside the zone of archaeological potential (Fig's 1 & 15). Its impact on the archaeology is assessed with the general conclusion that the impact will be low, with high benefit to the appreciation of the cultural assets of the city.

4.7.3.11 *Designated Focal Points/ Views*

There are no specific protected views or focal points listed along the proposed development route.

Given the nature of the proposed development, it is anticipated that there will be minimal impacts on the existing landscape as a result of the scheme. The proposed route design will be visually integrated into the existing landscape through careful design and landscaping as much as possible. The proposed Greenway Link will not detract from existing views along the river particularly given that many of the proposed pathways are already in place and will only be widened as part of this development. In addition, the proposed reconstruction of existing boundaries has the potential to improve the visual amenity of the route.

4.8 *Characteristics of the Potential Impact*

4.8.1 *Extent of the Impact*

The proposed development is approximately 2km in length from the Greenway car park in Bilberry to the South Quay Plaza in the city centre, and is 4m in width. The footprint of the proposed development may be larger in some areas to include for earthworks to accommodate level differences and cantilevered structures, and locally in some areas to provide landscaping and biodiversity measures.

Given the scale and nature of the works, which are located predominately in public parks, the extent of impacts will be limited.

4.8.2 *Transfrontier Nature of the Impact*

There are no transfrontier impacts associated with the Project.

4.8.3 *Magnitude and Complexity of the Impact*

Population and Human Health: During construction, temporary negative impacts are predicted due to noise, dust, visual and traffic impacts. These impacts will be short term in nature and are not considered to be significant. Community severance and land and property acquisition will be minimal or absent as the project is almost entirely along a public road. Access to existing roads will be maintained to the public.

During the operational phase the overall effect on the population and human health will be positive as it provides a high quality pedestrian and cycle link.

Biodiversity: The Transport Infrastructure Ireland (TII) Environmental Assessment and Construction Guidelines (EACG) and the Inland Fisheries Ireland (IFI) Guidelines on Protection of Fisheries during Construction Works in and Adjacent to Waters (2016) will be followed to avoid and minimise impacts where possible, and specific mitigation measures will be adhered to during the construction of the proposed Greenway Link. A detailed Ecological Impact Assessment (EclA) is being undertaken for the proposed Greenway Link, which will contain mitigation and all necessary controls and ecological enhancement measures. These will be developed in consultation with the relevant WCCC Departments, IFI and the NPWS to maintain and enhance biodiversity along the Suir corridor.

The contractor will be required to prepare a Construction Environmental Management Plan (CEMP) to the satisfaction of the Client and ensure compliance with TII and IFI construction guidelines.

Lands, Soils and Geology: Small amounts of natural material, construction and general waste will be generated during works. However, given the scale and size of the project, this is not considered to be significant. Any waste produced as part of the project will be dealt with in a sustainable manner, and in accordance with all relevant environmental guidance and policy documents, and the Contractors approved Construction and Demolition Waste Management Plan. The production of any waste associated with the development will not cause unusual, significant or adverse effects of a type that would, singly or in combination, require an Environmental Impact Assessment.

Water: Effects to surface water quality in the River Suir and groundwater quality in the underlying aquifer will be minimal. Best practice construction management will be applied in accordance with TII and IFI guidelines and mitigation measures will be adhered to in order to avoid impacts on water quality in the River Suir.

The River Suir runs along the Bilberry Road as it enters Waterford City. This river floods during the storm events. It is modelled that the river floods during a 1 in 10 year flood event, the 1 in 100 year flood event and the most extreme flood event, the 1 in 1000 year event. Within the scheme extents, flooding is modelled to occur within the Fastnet Shipping site and on Bilberry road outside this site. The implementation of SUDs through the incorporation of engineered attenuation ponds and controlled discharges at all outfalls will control storm runoff rates to Greenfield runoff rates so as not to exacerbate flooding and flood risk in the receiving watercourses. With these measures in place the project will have an imperceptible residual impact on flooding in receiving watercourses.

Air and Climate: No significant impact is anticipated to air and climate as there will no vehicular traffic on the Greenway Link.

Noise and Vibration: During the construction there will be temporary disruption to existing traffic and to local property owners and users of the existing paths. However, this will be minimised and will be subject to a Traffic Management Plan that will be prepared by the contractor for agreement with the Local Authorities. The contractor will be required to comply with the noise and vibration levels as stipulated in the TII/NRA document *Guidelines for the Treatment of Noise and Vibration in National Road Schemes* (NRA, 2004).

There will be no increase in noise or vibration emissions during the operational phase of the proposed Greenway. There will be some minor increased emissions during the construction stage which will be subject to the normal controls; these emissions will, however, be temporary in nature.

Landscape: The proposed development generally follows the route of existing roads. There are no specific listed scenic views along the proposed route and therefore there will be no negative impact on the surrounding landscape. Any negative effects through loss of vegetation will be offset by the habitat enhancements and landscape planting along the corridor.

Archaeology, Architecture and Cultural Heritage: There is no significant risk of negative impacts on archaeological, architectural and cultural heritage as the majority of works will be minor in nature and

focussed on existing roads. Increased access for pedestrians and cyclists along the Greenway Link corridor will provide an opportunity for a positive effect on the area due to increased access for the general public to the Waterford Greenway.

Material Assets: The existing land use is a combination of sub-urban residential, commercial and agricultural land. In the Waterford City Development Plan, the lands bounding the site are zoned for Undeveloped Residential, Open Space, Industrial, Opportunity Sites and City Centre Commercial (Map A City Extent). In addition, a Proposed Cycle Lane is shown for Bilberry Road.

There will be some landtake for a number of land owners, however, landtake is minimal and along site boundaries, and remaining sites are all of a size and shape that are suitable for future use. The scheme will result in no land severance. The scheme does not impact on any existing buildings. The scheme results in a reduction in car parking in the quays in Waterford City.

Existing utilities foul and surface water sewers, gas mains, water mains, ESBN services and telecommunications. The construction activities on a proposed road development may result in the disturbance of existing land drainage and the potential interruption of supply for utilities such as water, power, phone, broadband, etc. The magnitude of impact will be influenced by the type of disturbance and the duration involved. These impacts are generally of a temporary to short term duration being limited to the extent of construction works.

The proposed development involves upgrading of existing carriageway, shared footpath & cycle track, drainage and utilities. Construction related vehicles used during the construction stage is expected to have slight and short term impact to the traffic in the affected areas. The proposed development also involves upgrading of existing junctions and carriageway to the current standard in order to improve the road safety for the road users.

The likely impact on all material assets will be imperceptible.

Traffic: A traffic assessment was carried out for proposed changes to the traffic signals at Rice Bridge. A base model was created to assess the current scenario using data from traffic surveys that were conducted in February of this year. This showed the junction to operate with a degree of saturation of 78.2% in the AM Peak and 74.3% in the PM Peak. The proposed layout for Rice Bridge is that same as the existing except for the removal of the left filter from Bilberry Road. This is replaced with a left turn lane. This allows additional space to accommodate a toucan crossing for Greenway users, and removes a staggered crossing on this arm of the junction. Traffic modelling for this scenario shows a degree of saturation of 79.2% in the AM Peak and 92.2% in the PM Peak. While there is some increase in delay, particularly in the PM Peak, the junction still operates within capacity.

The scheme will have an overall positive traffic and transport impact through the provision of a high quality, safe cycle and pedestrian facility, without significant negative impact on motorised traffic.

Interactions: No significant impacts on the surrounding environment have been identified from the interactions between the above environmental factors.

Overall: It is anticipated that with the adoption of best practice construction management techniques, sensitive detailed design of the proposed bridges, and consultation with the National Parks and Wildlife Service, Inland Fisheries Ireland, and other key stakeholders, there will be no likely significant effects on the receiving environment or neighbouring areas of environmental significance.

4.8.4 Probability of the Impact

The TII EACG and IFI Construction guidelines, along with any specific mitigation measures identified in the Ecological Impact Assessment and Planning Report, will be adhered to during the development of the Project in order to reduce the probability of impacts on the surrounding natural environment.

The probability of any environmental impacts is negligible. The magnitude of any impact is considered minor and temporary in nature. There is no long-term adverse environmental impact.

4.8.5 Duration, Frequency and Reversibility of the Impact

The majority of the impacts are associated with the construction phase and are temporary in nature. The loss of habitat is the only exception to this. However, loss of habitat has been minimised through sensitive design of the Greenway Link at difficult locations, whilst additional landscaping and ecological enhancements will also be proposed as part of the development.

5. Conclusion

Through this Screening process, it is concluded that the proposed Greenway Link does not exceed any of the thresholds that trigger the mandatory requirement for Environmental Impact Assessment. As the proposed development is sub-threshold, it has, therefore, been assessed on a case-by-case basis in accordance with the Criteria for Determining Whether or Not a Development Would or Would Not be Likely to have Significant Effects on the Environment as specified in Article 27 of the European Communities (Environmental Impact Assessment) Regulations, 1989.

Having regard to the Article 27 and the guidance contained in the Department's *Environmental Impact Assessment Guidance for Consent Authorities regarding Sub-Threshold Development* (2003), and in particular: -

- The location of the project;
- The scale and extent of the project;
- The characteristics of the potential impacts; and
- The inherent measures to be adopted by the Council in the construction and operation of the proposal with regard to surface water runoff and management of construction.

It is considered that the environmental effects arising from the project will generally be localised, minor in nature and occur principally during the construction phase.

Recommendation to Waterford City & County Council

Based on the information gathered during this study, Clifton Scannell Emerson Associates Consulting Engineers recommends that Waterford City & County Council determine that the proposed Greenway Link development would not be likely to have significant effects on the environment, and that the project does not require an Environmental Impact Assessment.

Formal Determination by Waterford City & County Council

In accordance with Section 2 of '*Environmental Impact Assessment of National Road Schemes – A Practical Guide*' (TII, 2008), which outlines the process for sub-threshold schemes, the findings of this screening process shall be referred to the Local Authority to determine whether an Environmental Impact Statement is required for the development.

Project Number: 18_200

Project: Bilberry to City Centre Waterford Greenway Link

Title: 18_200 EIA Screening Report



Appendix A

Questions to be Considered For further guidance on factors to be considered see the more detailed questions listed in the Scoping Guidance	Yes / No / ? Briefly Describe	Is this likely to result in a significant effect? Yes/No/? – Why?
1. Will construction, operation or decommissioning of the Project involve actions which will cause physical changes in the locality (topography, land use, changes in waterbodies, etc)?	Yes. The proposed route utilises existing road along the majority of the route with widening works generally proposed. A number of cantilevered structures are proposed over the River Suir.	No. With the exception of proposed new cantilevered structures the landscape will remain largely as per existing. Habitat enhancement and landscape planting will be incorporated sensitively to enhance the corridor.
2. Will construction or operation of the Project use natural resources such as land, water, materials or energy, especially any resources which are non-renewable or in short supply?	Yes. Concrete, steel, hardcore (stone) and bituminous material will be required.	No. Relatively small amounts of material will be required for the widening/construction of the footpath/cycletrack, however, excavations will be limited. The cantilevered structures will require the importation of materials such as concrete and steel, but these are relatively simple structures, and the amounts of material, which will be developed at Detailed Design stage, are not considered to be significant.
3. Will the Project involve use, storage, transport, handling or production of substances or materials which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health?	Yes. Concrete, bitumen, oils, etc will be used during construction.	No. Best practice construction management techniques and guidance will be followed during the construction of the proposed Greenway. The quantity of materials required is limited.
4. Will the Project produce solid wastes during construction or operation or decommissioning?	Yes. Soil and hard material (existing pavements and concrete) may be removed to facilitate construction in some locations.	No. The quantity of solid waste which will be produced will be small given the scale of the proposed works.

Questions to be Considered For further guidance on factors to be considered see the more detailed questions listed in the Scoping Guidance	Yes / No / ? Briefly Describe	Is this likely to result in a significant effect? Yes/No/? – Why?
5. Will the Project release pollutants or any hazardous, toxic or noxious substances to air?	Yes. The construction phase will produce limited air pollutants.	No. Construction related activities and construction traffic levels are not anticipated to create air pollution that will exceed permitted thresholds. Best practice construction management techniques and guidance will be followed during the construction of the proposed Greenway Link.
6. Will the Project cause noise and vibration or release of light, heat energy or electromagnetic radiation?	Yes. The construction phase will create limited noise and vibration.	No. The construction works proposed are limited and therefore traffic levels are not anticipated to create noise and vibration levels that will exceed permitted thresholds.
7. Will the Project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater, coastal waters or the sea?	Yes. The construction phases will have risk of pollutants entering surface and groundwaters, however, the operational phase will not.	No. The proposed Greenway Link development will be constructed in accordance with best practice guidelines, which will ensure no release of contaminants into adjacent lands or waterbodies.
8. Will there be any risk of accidents during construction or operation of the Project which could affect human health or the environment?	Yes. The construction phase will have a risk of accidents leading to pollutants entering surface and groundwaters.	No. The proposed Greenway Link development will be constructed in accordance with best practice guidelines which will ensure no release of contaminants into adjacent lands or waterbodies.
9. Will the Project result in social changes, for example, in demography, traditional lifestyles, employment?	Yes. It is anticipated that the project will increase local employment and promote a healthier lifestyle.	No.
10. Are there any other factors which should be considered such as consequential development which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality	No.	No. There is potential for additional cycle / leisure related businesses, however, any future applications will be required to be compliant with the relevant planning standards and policies.

Questions to be Considered For further guidance on factors to be considered see the more detailed questions listed in the Scoping Guidance	Yes / No / ? Briefly Describe	Is this likely to result in a significant effect? Yes/No/? – Why?
11. Are there any areas on or around the location which are protected under international or national or local legislation for their ecological, landscape, cultural or other value, which could be affected by the project?	Yes. There is one European Site, the River Suir SAC, adjacent the proposed Greenway Link.	No. A Screening for Appropriate Assessment has been carried out and following a detailed analysis of the Project and the potential relationships with Natura 2000 Sites within the likely zone of impact, it was objectively concluded that there will be no likely significant effects on any Natura 2000 site(s) either alone or in-combination with other plans or projects.
12. Are there any other areas on or around the location which are important or sensitive for reasons of their ecology e.g. wetlands, watercourses or other waterbodies, the coastal zone, mountains, forests or woodlands, which could be affected by the project?	No.	No.
13. Are there any areas on or around the location which are used by protected, important or sensitive species of fauna or flora e.g. for breeding, nesting, foraging, resting, overwintering, migration, which could be affected by the project?	Yes. The habitats within the corridor are suitable for use by species such as atlantic salmon, twaite shad, lamprey species and otters.	No. Interventions at locations of sensitive sites (i.e. otter breeding areas) will be minimised. The nature of the proposed Greenway Link development generally requires widening works to existing roads which limits the extent of works being carried out. The proposed cantilevered structures have potential to create disturbance during construction however the Contractor will be required to undertake works in accordance with best practice guidelines (TII/NRA and IFI) which will afford protection to the surrounding environment.

Questions to be Considered For further guidance on factors to be considered see the more detailed questions listed in the Scoping Guidance	Yes / No / ? Briefly Describe	Is this likely to result in a significant effect? Yes/No/? – Why?
14. Are there any inland, coastal, marine or underground waters on or around the location which could be affected by the project?	Yes The proposed project runs adjacent to the River Suir.	No. The nature of the proposed Greenway development generally requires widening works to existing roads which limits the extent of works carried out. The proposed Greenway development will be constructed in accordance with best practice guidelines which will ensure no release of contaminants into adjacent lands or waterbodies.
15. Are there any areas or features of high landscape or scenic value on or around the location which could be affected by the project?	Yes. The route is largely along existing road. The introduction of new cantilevered structures will alter the landscape along the River Suir.	No. The proposed cantilevered structure locations have been minimised. The detailed design will be developed to fit with the receiving environment in consultation with the relevant WCCC Departments and other relevant bodies.
16. Are there any routes or facilities on or around the location which are used by the public for access to recreation or other facilities, which could be affected by the project?	Yes. The project will increase access to recreational facilities, particularly by cyclists. It will also connect existing walking and cycling routes.	No.
17. Are there any transport routes on or around the location which are susceptible to congestion or which cause environmental problems, which could be affected by the project?	Yes. The junction with Rice Bridge is subject to congestion, however, the proposed development will have limited impact on these conditions.	No. Traffic modelling of the existing and proposed scenarios at Rice Bridge show some decrease in capacity for motorised vehicles at this junction, however, the junction remains performing within capacity.

Questions to be Considered For further guidance on factors to be considered see the more detailed questions listed in the Scoping Guidance	Yes / No / ? Briefly Describe	Is this likely to result in a significant effect? Yes/No/? – Why?
18. Is the project in a location where it is likely to be highly visible to many people?	Yes.	No. The proposed cantilevered structure locations have been minimised and have been selected to be sympathetic with the receiving environment. The detailed design will be developed to fit with the receiving environment in consultation with the relevant WCCC Departments and other relevant bodies.
19. Are there any areas or features of historic or cultural importance on or around the location which could be affected by the project?	No.	No. The proposed Greenway route has been designed to limit potential impacts on any of these features. The development would improve accessibility to this amenity and has the potential to provide significant benefits to potential users of the route.
20. Is the project located in a previously undeveloped area where there will be loss of greenfield land?	No. The project largely consists of widening of existing roads within parks and use of sections of public road.	No.
21. Are there existing land uses on or around the location e.g. homes, gardens, other private property, industry, commerce, recreation, public open space, community facilities, agriculture, forestry, tourism, mining or quarrying which could be affected by the project?	Yes. The project will involve widening of existing footpaths through privately owned lands, the existing road network and some urban areas.	No. The proposed development will generally follow an existing road with a number of cantilevered structures providing greater connectivity along the Greenway Link corridor.
22. Are there any plans for future land uses on or around the location which could be affected by the project?	Yes.	No. The proposed development has the opportunity to enhance the frontages of a number of sites that are zoned for housing or opportunity.

Questions to be Considered For further guidance on factors to be considered see the more detailed questions listed in the Scoping Guidance	Yes / No / ? Briefly Describe	Is this likely to result in a significant effect? Yes/No/? – Why?
23. Are there any areas on or around the location which are densely populated or built-up, which could be affected by the project?	Yes. The project will involve widening of existing footpaths, cycle lanes and shared paths through the urban city centre.	No. The proposed development will generally follow existing roads, cyclelanes and footpaths.
24. Are there any areas on or around the location which are occupied by sensitive land uses e.g. hospitals, schools, places of worship, community facilities, which could be affected by the project?	No.	No.
25. Are there any areas on or around the location which contain important, high quality or scarce resources e.g. groundwater, surface waters, forestry, agriculture, fisheries, tourism, minerals, which could be affected by the project?	Yes. The River Suir is crossed a number of times by proposed cantilevered structures on the Greenway Link. The Suir River is a sensitive watercourse.	No. The cantilevered structure locations have been limited and have been selected to be sympathetic with the receiving environment. Cantilevered structures are proposed which removes the need for in-stream works. The proposed development will be constructed in accordance with best practice guidelines which will ensure no release of contaminants into adjacent lands or waterbodies.
26. Are there any areas on or around the location which are already subject to pollution or environmental damage e.g. where existing legal environmental standards are exceeded, which could be affected by the project?	No.	No.
27. Is the project location susceptible to earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions e.g. temperature inversions, fogs, severe winds, which could cause the project to present environmental problems?	Yes. The River Suir is shown to flood in CFRAMS flood mapping.	No. The proposed development will have a neutral effect on flooding with only limited increases in hardstanding areas. Runoff will generally discharge through infiltration to grassed verges or swales.

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