Waterford to New Ross Greenway

Environmental Impact Assessment (EIA) Screening Report

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LEADER

Waterford to New Ross Greenway

EIA Screening Report

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1. EXECUTIVE SUMMARY

1.1 Introduction

Roughan & O'Donovan (ROD) commissioned by Kilkenny County Council have undertaken this Environmental Impact Assessment (EIA) Screening Report to inform a Part VIII application for the proposed Waterford to New Ross Greenway. The purpose of this Screening for Environmental Impact Assessment is to determine whether an EIS is required for the proposed Waterford to New Ross Greenway, hereafter referred to as "the proposed Greenway".

The findings of the EIA screening assessment are presented in this report.

1.2 Proposed Development

The Irish Government policy entitled 'Smarter Travel: A Sustainable Transport Future' which runs from 2009 to 2020 identifies certain key goals and objectives to be met in order to introduce a national sustainable transport network. A National Cycle Policy (NCP) was implemented in conjunction with the 'Smarter Travel: A Sustainable Transport Future' policy. The NCP mission aims to *'create a strong cycling culture in Ireland'* while also *'encouraging recreational cycling'*. The NCP also outlines the importance of the National Cycle Network in attracting overseas tourists if the project is implemented.

The proposed Greenway will provide a safe recreational facility for tourists and local users to cycle from Waterford to New Ross along the old disused railway. The proposed Greenway aims to feed into the local and national tourism strategy and complement the existing natural, cultural and built heritage along the route. The proposed Greenway does not form part of the National Cycling Plan Wexford to Tralee – Corridor No.3, outlined in the Scoping Study of the same name in 2010; however, the proposed Greenway has the potential to link to this corridor and join with other proposed cycle and walking schemes such as the proposed Red Bridge Walking and Cycling Trail, which loops from New Ross to Redbridge in County Wexford. The proposed Greenway will for the majority of its length be segregated from vehicular traffic and will provide a safe alternative for cyclists compared to the N25 national road, which carries significant amounts of traffic.

1.3 Methodology

A preliminary site visit was carried out in September 2015 by ROD ecologists to complete a baseline ecological survey in order to examine any possible connectivity between the proposed Greenway and any designated Natura 2000 sites in the surrounding area. Due to the overgrown nature of the site, a definitive habitat and species assessment could not be completed. It was concluded that a further site walkover was required, during which a protected mammal survey should be carried out, paying particular attention to physical and natural features with potential to support protected mammals (i.e Bats, Badgers and Otters). Additionally, an invasive species survey should be undertaken concomitantly to determine presence and extent of infestation along the railway corridor. Bat surveys were completed in July 2016 and Badger Surveys were completed in October 2016. An Ecological Impact Assessment (EcIA) was carried out and accompanies this document. This assessment has had 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); and

- *The European Commission Guidelines on EIA Screening* (European Commission, 2001).

1.4 Screening Conclusions

The Project does not meet the thresholds for which the preparation of an EIS is a mandatory requirement (Refer to Table 4.1).

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. The screening criteria categories include:

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

The proposed Greenway intersects with a European site, namely the River Barrow and River Nore Special Area of Conservation (SAC) – Site Code 002162 in two places. The Lower River Suir SAC – Site Code 002137 is located approximately 100m to the south of the western terminus of the proposed Greenway. The route is also located within 50 metres of two sites of historical interest, namely a Dominican Friars Religious House and a Fulacht Fia in Abbeylands.

The proposed development will be designed in accordance with the National Transport Authority (NTA) National Cycle Manual, the TII/NRA Environmental Assessment and Construction Guidelines (EACG), Inland Fisheries Ireland Guidelines on Protection of Fisheries During Construction Works in and Adjacent to Waters 2016 and other best practice guidelines. Adherence to these guidelines will ensure that the probability of significant environmental effects will be minimised.

In accordance with the Roads Act 1993, as amended, it is considered that the proposed Greenway is not likely to have significant adverse effects on the environment and therefore an EIS is not required.

2. PROJECT BRIEF

Tourism
The proposed Greenway is predominantly targeted at tourists and local users, while also playing a role in supporting the national sustainable transport network, connecting up with other local schemes such as the Deise Greenway and proposed schemes such as the Red Bridge Walking and Cycling Trail, which loops from New Ross to Redbridge in County Wexford.

Health
Locals and tourists using the proposed Greenway for recreational use are the key target of the project, together with commuters to and from Waterford City and New Ross Town. Due to major traffic delays in New Ross town at peak hours, the proposed Greenway will also encourage commuters to cycle to work on the cycleway. The proposed Greenway will provide a safe route for tourists to travel between towns, and for locals to exercise in a safe and clean environment.

Economy
The proposed Greenway will provide economic benefits not only during the construction period but will also stimulate the local economy by providing a link between two culturally rich towns and neighbouring counties. Recent figures on cycle tourism in Ireland concluded that 280,000 holidaymakers/visitors engaged in cycling while in Ireland in 2011, spending €200 million. With only a small portion of these tourists visiting the south-east region, the proposed Greenway in conjunction with other local cycling and walking routes has the potential to attract a lot more tourists to the area, generating income for the area.

Safety
The project will aspire to provide a "premium" cycle route that will offer the highest level of comfort and security for users in line with the best international practice. Cyclists and walkers will have a 3m wide surfaced path along the entire length of the existing Waterford to New Ross disused railway line. The route itself is for the majority segregated from live traffic which greatly improves the safety for pedestrians and cyclists, while a number of at grade road crossings will be fitted with traffic calming works to provide safe crossing points for all users of the proposed Greenway. The existing bridges along the route will also be upgraded to a sufficient standard.

3. DESCRIPTION OF THE PROPOSED DEVELOPMENT

3.1 Overview

The proposed Greenway will be located along the disused railway line between Waterford City and the bridge crossing in New Ross town. The route of the disused railway runs east from Waterford city in Ferrybank which is a residential area on the edge of the city and then into open agricultural land. The route passes over and under several roadways, including the N29, after which it follows a northerly direction parallel to the N25 for *c*.3km veering north east towards the River Barrow and the town land of Carrigcloney. The railway line passes through the River Barrow and River Nore SAC for *c*.1km where it bridges the Glenmore River. The route then continues north-west back towards the N25 running parallel until it emerges near the O' Hanrahan bridge in New Ross town (see Figure 3.1).

The existing railway tracks will be removed, and a 3m wide bituminous surface will be constructed in its place for the entire length, with several at grade road crossings.

3.2 Construction Methodology

The railway corridor was constructed in 1904 to accommodate a single track. This track is generally located in the centre of the 6-7m wide corridor but does move in position on approaches to bends in the alignment. It is proposed to remove the railway track and locate the proposed Greenway in its place. The proposed Greenway is to be 3m wide, made up of 40mm bituminous surface laid on 150mm of Clause 804 (laid using a paver to provide a smooth surface for the bituminous material) on a base of 20mm of graded crushed rock or standard graded stone which is placed on a geotextile as shown in Photo 3.1.

A number of existing bridges where the disused railway passes over local roads will require a full structural survey to be carried out to determine the condition of each bridge deck and bridge parapet. The works to upgrade bridge decks will include routine maintenance and/or the provision of a new a concrete deck. Additional works such as parapets, fencing and other ancillary works will be required to bring the existing bridges up to a sufficient standard to accommodate the proposed Greenway. An example of a similar project in Co. Westmeath, The Old Rail Trail which opened in October 2015 is outlined in photos below. The Old Rail Trail is located on the disused Mullingar to Athlone Railway which is wider than the Waterford to New Ross line as it was designed to accommodate twin tracks. The project was able to retain significant stretches of the old track as a result.

Photo 3.1: Geotextile laid under the Greenway foundation

Photo 3.2: Bituminous layer placed using a paver

Photo 3.3: Example of new bridge deck placed over existing bridge abutments

Photo 3.4: New parapet railing placed in front of low bridge parapet

Photo 3.5: New parapet railing provided where there was no existing masonry parapet

The 40km long Old Rail Trail in Co. Westmeath is also on a disused railway line and following a review of the over 40 structures it was found that the majority of them were in good condition and were structurally sound following a structural survey. As outlined above a similar survey will be required to identify any issues with any of the structures. As the bridges were originally designed to accommodate heavy railway traffic it is anticipated that the majority of the structures will be able to accommodate a walkway and cycleway with light vehicular maintenance traffic without difficulty. A number of new bridge decks were required where the existing bridge deck was missing, a replacement deck was provided as shown in Photo 3.3 above. The provision of similar short span bridge decks may be required following the structural survey of the masonry bridges.

A number of at grade road crossings exist along the proposed route which will require traffic calming works to provide a safe crossing point for all users of the Greenway. Proposed works will include additional road markings, signage and other traffic calming requirements on the local road. The level of traffic calming will depend on the level of vehicular traffic on these local roads which are to be crossed, as well as visibility at the crossing. Signage and access controls will also be required on the proposed Greenway itself to warn cyclists of the upcoming road crossing. An example of road crossings used on the Old Rail Trail in Co. Westmeath which will be similar to the Waterford to New Ross project is outlined in photos 3.6 – 3.8 below.

Photo 3.6 & 3.7: Old Rail Trail crossing of a public road

Photo 3.8: Old Rail Trail road crossing public road

Site works for the proposed Greenway at the location where it intersects the River Barrow and River Nore SAC will be limited to lightweight construction to avoid any potential adverse impact on the SAC. It is proposed to use the existing steel structure bridge at the Glenmore River within the SAC as part of the proposed Greenway. To be suitable for cyclists and walkers, the retrofitting of this bridge with lightweight decking will be required; however, a detailed structural assessment of the bridge will determine if a retrofit is possible. An alternative construction approach will be needed if the assessment shows that the bridge is not structurally sound for the retrofit of a lightweight boardwalk. This would result in a different scheme and a revised EIA Screening would be required if that is the case. Other works such as the provision of an improved parapet and routine maintenance works will also be required at this location.

Photo 3.9: Example of a light weight boardwalk/structure (recycled plastic)

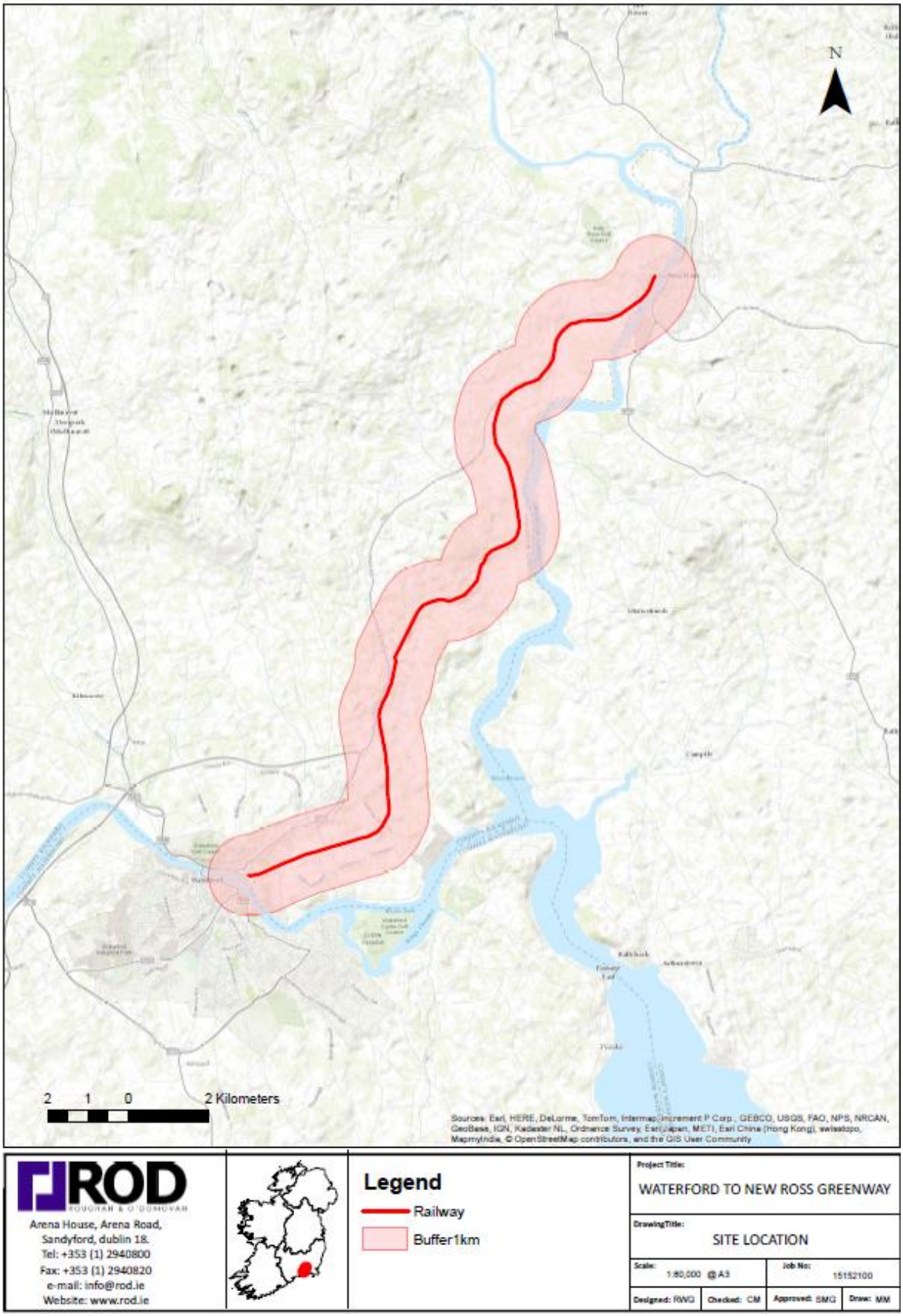

Figure 3.1 – Site Location of the proposed Greenway

3.3 Drainage

The existing drainage paths which are located along the railway are to be retained as much as possible. A proposed cross fall of 2% will direct runoff towards the existing drainage ditch adjacent to the disused railway. Drainage ditches adjoining the SAC will be maintained in their present condition. As the runoff from the proposed Greenway will be limited, the existing drainage ditches will be more than capable of providing sufficient drainage capacity for the 3m wide built surface. In some cases, sections will have to be piped where the proposed Greenway traverses over any existing ditch or where there is insufficient room to locate a ditch.

4. EIA SCREENING PROCESS

4.1 Introduction

This EIA Screening Report has been prepared by ROD on behalf of the Kilkenny County Council with the aim of documenting the significant environmental effects which the proposed Greenway is likely to have on the receiving environment. Furthermore, this report has been prepared 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); and
- The European Commission Guidelines on EIA Screening (European Commission, 2001).

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).

4.1.1 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).

4.2 Methodology

EIA Screening is the process of deciding whether a development requires an EIA. The mandatory and discretionary provisions within the Roads Act 1993, as amended, allow the requirement for an EIA to be determined.

All roads 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 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.

In the case of this proposed road development it has been determined as sub-threshold and will be determined on a case-by-case basis, outlined below in Table 4.2.

4.3 Mandatory EIA

The proposed road development 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 Section 50 of the Roads Act 1993, as amended, and in Article 8 of the Roads Regulations, 1994. An overview of these legislative requirements and their applicability to this road project are provided in Table 4.1.

Table 4.1 Screening Matrix for Mandatory EIA

Mandatory Threshold	Regulatory Reference	Response
Construction of a Motorway	S. 50(1)(a) of the Roads Act, 1993, as substituted by S. 9(1)(d)(i) of the Roads Act, 2007	The Waterford to New Ross Shared Cycleway & Footway is not a Motorway. **Mandatory Threshold Trigger not reached.**
Construction of a Busway	S. 50(1)(a) of the Roads Act, 1993, as substituted by S. 9(1)(d)(i) of the Roads Act, 2007	The Waterford to New Ross Shared Cycleway & Footway is not a Busway. **Mandatory Threshold Trigger not reached.**
Construction of a Service Area	S. 50(1)(a) of the Roads Act, 1993, as substituted by S. 9(1)(d)(i) of the Roads Act, 2007	The Waterford to New Ross Shared Cycleway & Footway is not a Service Area. **Mandatory Threshold Trigger not reached.**
Prescribed type of proposed road development • *The construction of a new road of four or more lanes, or the realignment or widening of an existing road so as to provide four or more lanes, where such new, realigned or widened road would be eight kilometres or more in length in a rural area, or 500 metres or more in length in an urban area* • *The construction of a new bridge or tunnel which would be 100 metres or more in length*	Article 8 of the Roads Regulations, 1994 (Road development prescribed for the purposes of S. 50(1)(a) of the Roads Act, 1993	The Waterford to New Ross Shared Cycleway & Footway does not involve the provision of four or more lanes anywhere throughout its length. **Mandatory Threshold Trigger not reached.** The Waterford to New Ross Shared Cycleway & Footway does not involve the construction of a bridge or tunnel. **Mandatory Threshold Trigger not reached.**

Table 4.2 Screening Matrix for Sub-Threshold Developments

Sub-Threshold Requirements	Regulatory Reference	Response
Where An Bord Pleanála (ABP) considers that a proposed road development would be likely to have significant effects on the environment, it shall direct the road authority to prepare an EIS.	S. 50(1)(b) of the Roads Act, 1993.	An Bord Pleanála has not directed the Road Authority to prepare an EIS.
Where a road authority considers that a proposed road development would be likely to have significant effects on the environment, it shall inform ABP in writing and where ABP concurs, it shall direct the road authority to prepare an EIS.	S. 50(1)(c) of the Roads Act, 1993.	Kilkenny County Council does not consider the proposed Greenway would be likely to have significant effects on the environment.
Where a proposed road development would be located on certain environmental sites the road authority shall decide whether the proposed development would be likely to have significant effects on the environment. The sites concerned are: i. a European Site, meaning (a) a candidate site of Community importance, (b) a site of Community importance, (c) a candidate special area of conservation, (d) a special area of conservation, (e) a candidate special protection area, or (f) a special protection area ii. land established or recognised as a nature reserve within the meaning of section 15 or 16 of the Wildlife Act, 1976 (No. 39 of 1976), iii. land designated as a refuge for fauna under section 17 of the Wildlife Act, 1976 (No. 39 of 1976), The road authority concerned shall decide whether the proposed road development would or would not be likely to have significant effects on the environment, and if the authority decides that the proposed road development would be likely to have such effects, paragraph (c) shall apply accordingly.	S. 50(1)(d) of the Roads Act, 1993, as amended by reg. 56(7) of the European Communities (Birds and Natural Habitats) Regulations 2011).	Kilkenny County Council decided that the proposed Greenway would not be likely to have significant effects on the environment (see the following paragraphs and the Screening Checklist included in Appendix 1).

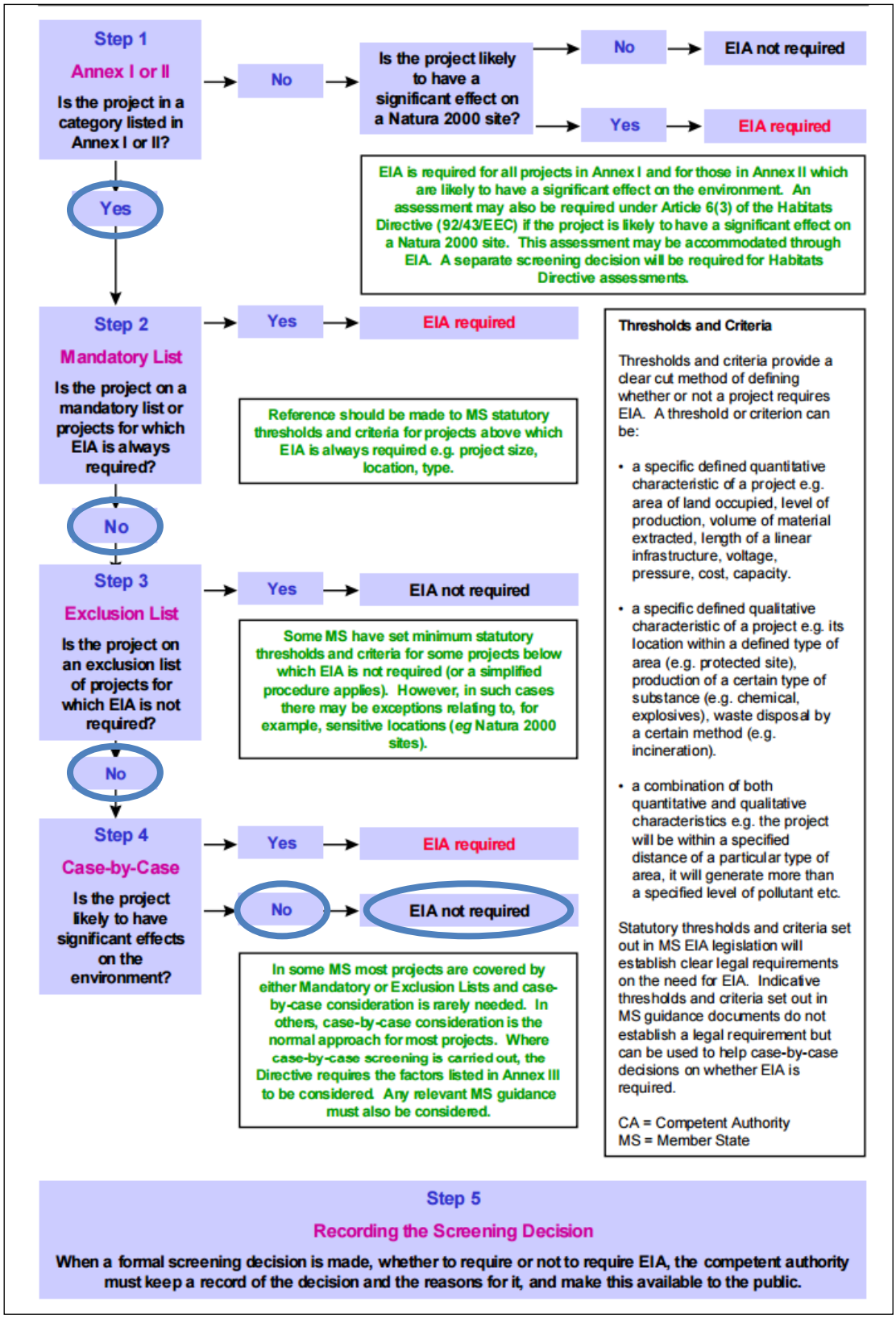

Figure 4.1 Flow Diagram of the Screening Process (Source: European Commission Guidelines on EIA Screening, June 2001)

4.4 Sub-Threshold Development

Where a decision is being made on whether a proposed road 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, (which reflects the criteria in Annex III of the EIA Directive 2011/92/EU).

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 EIA screening process can be aided using the checklists contained within the European Commission publication Guidance on EIA Screening (June 2001), in particular the "Screening Checklist" and the "Checklist of Criteria for Evaluating the Significance of Environmental Effects". The Screening Checklist was completed to inform the Article 27 screening process and is included in Appendix 1 of this report.

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) are presented in Table 4.3. These criteria have been considered in the context of the proposed road development and a description of the aspects of the environment with potential to be significantly affected by the project are outlined in Section 5.

Table 4.3 Article 27 Screening Criteria for Determining Likely Significant Effects

1. Characteristics of proposed development The characteristics of proposed development, in particular: • The size of the proposed development; • The cumulation with other proposed development; • The use of natural resources; • The production of waste; • Pollution and nuisances; and • The risk of accidents, having regard to substances or technologies used.
2. Location of proposed development 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 absorption capacity of the natural environment, paying particular attention to the following areas: (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.
3. Characteristics of potential impacts The potential significant effects of the proposed development in relation to criteria set out under paragraphs 1 and 2 above, and having regard in particular to: • 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; and • The duration, frequency and reversibility of the impact.

5. RECEIVING ENVIRONMENT

5.1 Nature Conservation Designations

The proposed Greenway intersects with one European designated site (Natura 200 site), namely the River Barrow and River Nore Special Area of Conservation (SAC) [Site Code 002162] at two locations. The first occurs near Carrickcloney, where the railway line extends *c*.1km through the SAC and bridges the narrow tributary (Glenmore River) which flows south east to the confluence of the River Barrow. The second location intersects the northern edge of the SAC close to the N25.

The Lower River Suir SAC [Site Code 002137] is situated 100 metres to the south of the start point of the proposed Greenway.

River Barrow and River Nore SAC

This site consists of the freshwater stretches of the Barrow and Nore River catchments as far upstream as the Slieve Bloom Mountains, and it also includes the tidal elements and estuary as far downstream as Creadun Head in Waterford. The SAC travels through eight counties and is selected for a number of habitats including Estuaries [1130], Tidal Mudflats and Sandflats [1140], Reefs [1170], Salicornia Mud [1310], Atlantic Salt Meadows [1330] Mediterranean Salt Meadows [1410] and two priority habitats namely Petrifying Springs [7220] and Alluvial Forests [91E0]. Carrickcloney is home to some of the larger areas of salt meadow, where Atlantic and Mediterranean sub types are generally intermixed. The SAC is also selected for eight protected species.

Lower River Suir SAC

Lower River Suir SAC consists of the freshwater stretches of the River Suir immediately south of Thurles and the tidal stretches as far as the confluence with the Barrow/Nore immediately east of Cheekpoint in Co. Waterford. The site is a Special Area of Conservation (SAC) selected for the following habitats: Atlantic Salt Meadows [1330], Mediterranean Salt Meadows [1410], Old Oak Woodlands [91A0] and two priority habitats namely Alluvial Forests [91E0] and Yew Woodlands [91J0]. The SAC is also selected for eight protected species.

5.2 Cultural Heritage

The old Railway Line is of cultural heritage importance. The railway line from Macmine Junction to New Ross opened in 1887, followed by the New Ross to Waterford railway line in 1904 with an intermediate station at Glenmore. The line from Macmine Junction closed in 1963 and the track was removed while the New Ross to

Waterford line was closed to the public but remained open to transport fertilizer from the Albatros factory. Today the railway line remains in situ for the most part, although it is very much derelict and overgrown. Additional cultural heritage within the study area is sparse with only one Recorded Protected Structure (RPS) namely a Religious House and one archeologically important site within 50m of the site. Both Waterford City and New Ross Town are culturally rich however with attractions such as Reginald's Tower and Christ Church Cathedral in Waterford and The Dunbrody Famine Ship and JFK Memorial in New Ross.

5.3 Landscape

The route follows the old railway line in a north-east direction from Waterford Quays to New Ross town. The landscape of the railway line between Waterford Quays and New Ross is relatively flat. The route is overgrown with vantage points covered with scrub. The railway line travels through a residential area while exiting Waterford and also runs parallel to the N25 National Road for sections of the route. The route also travels through the SAC, providing views of the River Barrow for users to enjoy. The railway travels over and under some historic and interesting bridges which add to the historic and visual amenity of the route.

5.4 Characteristics of the Proposed Development

5.4.1 Size of the Project

The proposed route travels through both rural and urban areas. The mandatory threshold for prescribed types of road development in an urban area is 500m of four or more lanes (dual carriageway). The proposed Greenway development is approximately 22km in length and 3m in width. Although this area is greater than the mandatory threshold which triggers an EIS, the proposed development will be a Greenway and therefore does not meet the mandatory threshold.

5.4.2 Cumulation with other projects

An initial review of plans and projects that may have the potential to result in cumulative impacts has been undertaken. This section considers plans and projects in Co. Kilkenny that were considered. Data sources included the following:

- Kilkenny County Council website (planning and roads sections);
- An Bord Pleanála website (planning searches);
- Web search for major infrastructure projects in Co. Kilkenny;
- Kilkenny County Development Plan 2011 – 2017;

A review was also undertaken of plans and projects along the River Barrow. The following projects have been identified:

- National Route No.3
- New Ross By-Pass Development
- Kilkenny County Development Plan 2008-2014
- New Ross Town Development Plan 2011-2017
- Unlocking the River Barrow
- Proposed Red Bridge Walking and Cycling Trail
- Development of Cycle and Pedestrian Greenway from Dungarvan to Kilmeaden Part VIII Planning Report (January 2014)
- Proposed Barrow Blueway
- Waterford North Quays Strategic Development Zone

National Route No.3
As stated previously the proposed Greenway does not form any part of the National Cycle Network's Wexford to Tralee (Corridor no. 3). National Route No. 3 - Wexford to Tralee is to be approximately 286km in length. At present there are no Appropriate Assessments carried out for any section of Route No. 3, however, future development of sections of this route will be able to utilise the results of this Screening report when considering in-combination impacts.

New Ross By-Pass Development
The largest of these projects is the 'Proposed New Ross by-pass' which cuts through a section of the disused railway line. A new over-bridge for the proposed Greenway will be constructed as part of this development to ensure that the railway route will not be severed by the new by-pass. The proposed railway over-bridge will be located in the area of Ballyverneen which is situated outside both SACs, with the boundary of the nearest, the River Barrow and River Nore SAC approximately 800metres to the south. The By-pass and its associated works were subject to a Stage 2 Appropriate Assessment under the Habitats Directive and the overall conclusion of the Natura Impact Statement (NIS) demonstrated no adverse impact on site integrity as a result of the scheme. Where significant impacts were identified these were addressed using mitigation measures that were incorporated into the project design and construction method statements. As a result, no-incombination impacts between the New Ross By-Pass Development are expected.

Kilkenny County Development Plan 2008-2014
The Appropriate Assessment for the Kilkenny County Development Plan (CDP) 2008-2014 has also been examined for in-combination effects with the proposed Greenway. No adverse impacts on the site integrity of either SACs listed above were identified as part of the assessment. The Plan contains several policies that relate to the development and promotion of cycle trails within the county (listed below) though none are location specific:

- *RTA4 To investigate funding opportunities for the development of flagship tourism products; suggested products for development would include ..... walking cycling trails development.*
- *RTA11 The Council shall investigate the potential of and opportunities for the funding of walking and cycling trails in the county; and for the development of linkages between existing trails and others in adjoining counties; and support national trail development policy including the Irish Trails Strategy*.
- *RTA12 Encourage and promote cycling-based tourism in the city and county and to support Fáilte Ireland's Strategy for the Development of Irish Cycle Tourism, South East Regional Report*

The Plan did contain one policy which was included to ensure the preservation of the footprint of the Waterford to News Ross railway, as follows:

- *IE17 To protect and reserve free from development the line of the Waterford –New Ross railway.*

The AA carried out for the Plan at the time did not identify any likely significant effects as a result of this policy. Therefore no in-combination effects between this and the current proposed Greenway are expected.

Riverside Development is discussed under section 7.2.4.1 of the County Development Plan. This section states that '*the Council will seek to ensure that proposals along the Rivers Nore, Suir and Barrow will achieve an appropriate balance of uses commensurate with the sensitivity of the natural environment. Factors that will be taken into account when considering proposals affecting the rivers include:*
1) Any landscape or nature designation for the area;
2) Any proposals to increase the extent of public access;
3) The extent of any environmental improvements to the water environment and its surroundings;
4) The nature of any recreation use proposed; and
5) Any conflict or compliance with proposals for walking or cycling routes.

No residual impacts were identified as part of the AA for the Kilkenny County CDP 2009-2014 and following assessment of the above policies no in-combination impacts between the CDP and the proposed Greenway were identified.

New Ross Town Development Plan 2011-2017

The policies and objectives of the New Ross Town Development Plan were also examined for any in-combination effects that may occur in conjunction with the proposed development.
One particular key objective of the Plan listed in section 3.2.1 of the Town plan states:

- *Encourage a modal shift from private modes of transport, to public transport, cycling and walking, in particular, encourage the re-opening of the New Ross-Waterford railway and support the expansion of bus services to/from New Ross.*

Two other polices were also identified that promote the idea of developing a Greenway for the area:

- *Policy TM10 Encourage and facilitate the reopening of the existing railway line. Development which would prejudice the reopening of this line will be prohibited, however temporary uses may be considered where appropriate*
- *Objective TM13 To improve cycling facilities in the town to enable New Ross to be linked to the National Cycle Network.*

The conclusion of the NIS identified certain likely significant effects on the River Barrow and River Nore SAC as a result of the plan objectives and policies, however it was concluded that, once mitigation measures (Section 5 of the NIS) were incorporated into the Draft Plan, no significant negative effects on the SAC were likely to arise as a result of the implementation of the New Ross Town and Environs Development Plan 2011-2017.

No residual or in-combination impacts with this plan have been identified as a result of the proposed Greenway. There are no other planned developments in proximity to the River Barrow & River Nore identified within the New Ross Town

Development Plan or any National Plans that may potentially result in an in-combination impact.

Unlocking the River Barrow – *Releasing the economic potential of Ireland's second longest navigable river* (February 2013)
This study identifies the engineering feasibility and the costs and benefits of options for removing or ameliorating key constraints to navigation on the Barrow Navigation Channel in the interest of maximising its potential to the economy. The Barrow Navigation leads from Athy in Co. Laois to St Mullins in Co. Carlow. The Barrow has at present, the only known sizeable spawning population of Twaite Shad in Ireland.

A total of eight options are presented in the report, four in relation to St. Mullins, three in relation to Carlow Town and one in relation to Inistioge. No in-combination impacts between this proposed scheme and the proposed Greenway are expected. Construction of the proposed Greenway will not impact on the population of Twaite Shad that may be impacted by the proposed Barrow scheme. Also the area of the Barrow in nearest proximity that may be potentially impacted by the Barrow Navigation Channel is located several kilometres upstream in St. Mullins, therefore no direct or indirect cumulative impacts from the proposed Greenway development are expected.

Proposed Red Bridge Walking and Cycling Trail
If developed the proposed Greenway may have potential to link with the proposed Red Bridge Walking and Cycling Trail. As part of this scheme New Ross Town Council aims to develop a community amenity in the form of a looped dual walking and cycling trail adjacent to the town. Red Bridge is a local name for the bridge that spans the Upper Barrow Nore Estuary north of New Ross town. From New Ross the proposed looped trail crosses the Upper Barrow Nore Estuary via O'Hanrahan Bridge (the road bridge in the town), runs north along the route of a now disused and dismantled former railway line, crosses Red Bridge and returns to the town via the public roads and roadside footpaths.

An Appropriate Assessment Screening Report was completed for this project in March 2013, this concluded that subject to certain conditions, the proposed development would not be likely to have a significant effect on any of the qualifying interests, structure, function, integrity, conservation objectives or long-term survival of the River Barrow and River Nore SAC. No part of the Natura 2000 site will be fundamentally and irreversibly compromised as a result project. As no residual impacts were identified in the report it can be concluded that no in-combination impacts are likely with the proposed Red Bridge Walking and Cycling Trail.

Cycle and Pedestrian Greenway from Dungarvan to Kilmeaden
A similar project to the Waterford to New Ross Greenway is under construction in County Waterford where a 4 metre wide cycle and pedestrian corridor along 31km of an existing disused railway line from Dungarvan town to the railway station at Kilmeaden.

The AA Screening Report for the Dungarvan to Kilmeaden Cycle and Pedestrian Greenway concluded that no significant effects on the Natura 2000 network were anticipated from the proposed development, therefore no further assessment was required.

Based on the conclusion above, as no likely significant impacts on any of the Natura 2000 sites present have been identified, nor no residual impacts, it can also be objectively concluded that no in-combination effects are likely as a result of Waterford to New Ross proposed Greenway on the Dungarvan to Kilmeaden Greenway project.

Proposed Barrow Blueway

The proposed Barrow Blueway project proposes to construct a 112km long shared cycleway & footway along the route of the Barrow Way connecting Lowtown in Co. Kildare to St. Mullins in Co. Carlow, travelling through Lowtown, Rathangan, Monasterevin, Athy, Carlow, Leighlinbridge, Bagenalstown, Goresbridge, Graiguenamanagh and St Mullins.

An Environmental Impact Statement and an Appropriate Assessment is currently being prepared by Waterways Ireland who are aiming to submit a planning application for this project in Quarter 1 2017. As the planning documents have not yet been submitted it is not possible to consider the cumulative effects of the proposed Barrow Blueway on this scheme. However once this project is lodged for planning all environmental assessments and planning documents including the Screening for Appropriate Assessment and this EIA Screening Report will be issued to Waterways Ireland for their cumulative impact assessment.

Waterford North Quays Strategic Development Zone

The Waterford North Quays comprise 8.23 hectares and was designated by Government Order as a Strategic Development Zone on 19 January 2016. Where land is designated as an SDZ, the first draft Planning Scheme, in respect of all or any part of the site, must be prepared not later than 2 years after the making of the Order by the Development Agency before any development can be permitted in the SDZ Area, under SDZ legislation. Waterford City and County Council is currently developing a draft Planning Scheme, Strategic Environmental Assessment (SEA) and Appropriate Assessment Screening for the SDZ. Once the draft planning scheme for the SDZ is made, separate planning applications will be submitted for the development of the SDZ which will include an assessment of cumulative impacts which will include, if approved, an assessment of the Waterford to New Ross shared cycleway and walkway.
Additionally, as part of the redevelopment of the North Quays it is the Councils policy to develop a pedestrian and/or cycle bridge which will connect the redeveloped North Quays with the existing City Centre. Similarly, the development of the bridge will be subject to a planning application and Environmental Impact Assessment which will include detailed environmental assessments which will include cumulative impact assessment including, if approved an assessment of this project.

However, having considered the likely cumulative effect of these developments in combination with the Waterford to New Ross shared cycleway and walkway, it is anticipated the cumulative effect is likely to result in long-term positive effect on future planning and land use patterns in the area, local populations, tourists and local road users. Additionally, these developments are supported in principle by national, regional and local planning policies and will be subject to detailed environmental assessments to avoid, reduce and mitigate any adverse impacts on the environment.

Ferrybank – Belview Local Area Plan 2009
The Ferrybank – Belview Local Area Plan 2009 contains the objective

- *Objective T12 - Keep the disused railway line free from development and reserve 6 metres either side so as to facilitate the long term development of either a commuter rail service or local tram service, should future demand warrant it.*
- *Policy TP7 - Facilitate the long term re-opening of the disused railway through the promotion of increased residential densities along the rail corridor route, and explore means of financing such a service.*

The LAP also states that with regard to future plans for rail, there are no plans by CIÉ to bring the Waterford to New Ross railway line into re-use in the short term. In order for this line to receive investment by CIÉ, the area would have to demonstrate commuter potential and would have to possess a sufficient 'critical mass' of population and residential development to make the scheme viable.

It is also an objective of this plan to create dedicated lanes and paths for pedestrians and cyclists. The provision of cycle and walking networks between neighbourhoods and neighbourhood centres will be encouraged, specifically through the open space network.

- *T9 Increase the provision of cycle paths in the plan area, particularly through the open space links.*

This LAP is currently under review and the Draft Ferrybank-Bellview LAP 2016 was due to be published for public consultation in October 2016.

5.4.3 Use of Natural Resources

Aggregates will be imported to the site for use during construction as the proposed Greenway is to be 3m wide, made up of 40mm bituminous surface laid on 150 – 200mm base of Clause 804 (graded crushed rock or standard graded stone) with some locations requiring an additional 200mm of sub-formation (capping material) in certain areas where levels dictate. The level of aggregates required is not considered to be significant.

5.4.4 Production of Waste

There will be a small extent of waste material from the construction of the proposed Greenway as the railway tracks will be removed before the surface is laid down. However, it is anticipated that the tracks can be recycled and the railway sleepers which are in good condition will be retained to be recycled or used in the project as signs posts or fencing etc which will limit the production of waste. Depending on the level of upgrading works for the existing bridges along the track, there may be further waste if existing structures are to be replaced or updated.

5.4.5 Pollution and Nuisances

One of the most sensitive environmental receptors within the study area is the River Barrow and River Nore SAC. The proposed development traverses the SAC between Carrickcloney and Ballyverneen. 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 the NRA/TII Environmental and Construction Guidelines, IFI Guidelines 2016 and the employment of construction management best practice. During operation, the proposed Greenway will reduce air

pollutant emission levels in the area through encouraging the switch from the use of cars to the use of bicycle and walking facilities.

5.4.6 Risk of Accidents

During the construction stage, the likelihood of an accidental spillage of construction materials into the aquatic environment will be managed through the adoption of strict best practice construction management.

5.5 Location of Proposed Development

5.5.1 Existing Land Use

Land uses along the length of the proposed Greenway development comprise mainly agricultural, while also residential and industrial. The route traverses the European designated ecological site, the River Barrow and River Nore SAC. The route has many at grade road crossings.

5.5.2 Abundance, Quality and Regenerative Capacity of Natural Resources

All construction material including bitumen and grit will be imported for the construction of the proposed development.

5.5.3 The Absorption Capacity of the Natural Environment

5.5.3.1 Overview

During the construction phase, due to potential pollution incidences, measures must be put in place to protect, maintain or improve the water quality status of the River Barrow and River Nore SAC, the Lower River Suir SAC and all surrounding watercourses.

5.5.3.2 Watercourses

The River Barrow and River Nore SAC intersects with the route of the proposed Greenway. The proposed Greenway crosses two tributaries of the River Barrow, namely the Glenmore Tiver and the Oaklands River. Additionally the Lower River Suir SAC is located 100m south of the start point of the proposed Greenway. There are wetlands habitats located within the area of the River Barrow and River Nore SAC. 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 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

Avoidance and control measures will be implemented during and after construction in order to reduce the risk of these impacts.

5.5.3.3 Coastal Zones

There are no coastal zones affected by the proposed development.

5.5.3.4 Mountain and Forest Areas

There are no mountain ranges within the study area. Furthermore there are no forest areas along the proposed route.

5.5.3.5 Nature Reserves and Parks

There are no nature reserves or parks affected by the proposed Greenway.

5.5.3.6 Nationally Designated Sites

There are no nationally designated sites within the study area.

5.5.3.7 European Sites

The River Barrow and River Nore SAC traverses the proposed Greenway location, while the Lower River Suir SAC is located 100m south of the start of the proposed Greenway. The Screening for Appropriate Assessment has identified if the proposed Greenway on its own or in combination with other plans and projects is likely to have a significant effect upon any European site, in view of best scientific knowledge and the sites conservation objectives. In parallel with the Screening for Appropriate Assessment, an Ecological Impact Assessment (EcIA) was requested in a response from the Department of Arts, Heritage, Rural, Regional and Gaeltacht Affairs (DAHRRGA).

5.5.3.8 Environmental Quality Standards

From the information available at this stage of the process there are no known areas in which the environmental quality standards have already been exceeded. All relevant environmental quality standards will be adhered to during construction.

5.5.3.9 Densely Populated Areas

As the proposed route exits Waterford City, it passes through the densely populated residential area of Abbeylands, following which dwellings are sparsely located along route for the rest of its duration. These residential areas will benefit from a Greenway by providing a safe link between the two urban areas which can be used by cyclist commuters and recreational users.

5.5.3.10 Landscapes of Historical, Cultural or Archaeological Significance

The following Landscapes of Historical, Cultural or Archaeological significance were identified within a 100m boundary either side of the proposed route, through the National Inventory of Architectural Heritage and the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs Historic Environment Viewer.

Architectural

- Gate Lodge - Reg. No. 22900906
- Holmwood (House) – Reg. No. 15605262
- House, Rosbercon – Reg. No. 15605261
- House, Rosbercon – Reg. No. 15605260

Archaeological

- Fulacht fia – Abbeylands - Reg. No. KK046-012
- Fulacht fia – Abbeylands – Reg. No. KK046-011
- Castle Tower House – Carrickcloney – Reg. No. KK041-032
- Religious House – Dominican Friars - Reg. No.WX029-013007
- Bridge, New Ross, Rosbercon – Reg.No. WX029-013071

These constraints have been identified within the study area and will be taken into consideration. During the design development, liaison will be undertaken with the National Monuments Service and other groups with interest in historical, cultural and archaeological resources in the area.

5.5.3.11 Designated Focal Points/Views

The following protected view has been identified within the Kilkenny County Development Plan 2014 - 2020:

- V9. View to the South East over the Barrow Valley, south of New Ross on the LS7512 between the junctions with road numbers LP3432 and the N25

Due to the small scale of the proposed works, this protected view is not expected to be impacted significantly and therefore, a detailed landscape and visual assessment is not required due to the construction and operation of the proposed development.

5.6 Probability of the Impact

5.6.1. Extent of the Impact

The proposed Greenway consists of a 3m wide, paved corridor of approximately 22km in length.

5.6.2. Transfrontier Nature of the Impact

There are no transfrontier impacts associated with the proposed Greenway development.

5.6.3. Magnitude and Complexity of the Impact

Air Quality and Climate: The proposed Greenway involves the design and construction of a high quality cycling and pedestrian facility along the length of the disused railway line between the two towns. The objective of the project is to provide a facility for cyclists and pedestrians thus having no significant operational impact on air quality and climate. The construction phase of development aims to provide a bound surface 3m in width for 22km. It is considered that the level of construction traffic required for a project of this scale will not have a significant impact on the local air quality or climate; neither will a construction project of this scale result in any significant generation of dust.

Noise and Vibration: The proposed Greenway will largely be active in daytime hours only. At operation an increase in the number of cyclists or pedestrians will have negligible impact on noise or vibration in the local environment. It is also considered that the level of construction traffic and construction operations required for a project of this scale will be short term and will not result in the creation of any significant levels of noise or vibration. Furthermore works will be carried out in compliance with BS5228: Part 1 and the European Communities (Noise Emission by Equipment for Use Outdoors) Regulations, 2001 which will ensure a controlled level of noise during construction phase.

Human Beings: The development of the route will pose minor noise and visual impacts to residents living along the railway line during construction. During the operational stage, the proposed Greenway should have negligible adverse effects on

human beings living along the route and will provide a high quality amenity for the local residents.

Ecology: The route intersects with the River Barrow and River Nore SAC at two locations. The first occurs where the railway line extends *c*.1km through the SAC and bridges the narrow tributary (Glenmore river) which flows south east to the confluence of the River Barrow. The second location intersects the northern edge of the SAC close to the N25. The Lower River Suir SAC is also located 100m south of the start of the route. A Habitats Directive Screening for Appropriate Assessment (AA) has been carried out for the proposed development in order to address the potential impact on Natura 2000 Sites (SAC, SPA). This Assessment addresses the potential impact the project may have on the Qualifying Interests (Habitats and Species) of the designated sites and the conservation objectives for same. The AA Screening Report was carried out in October 2015, followed by an Ecological Impact Assessment (EcIA).

Qualifying Interests of the River Barrow and River Nore SAC (Site Code 002162) include Estuaries, Mudflats and Sandflats, Atlantic Salt Meadows (*Glauco-Puccinellietalia maritimae*), Mediterranean salt meadows (*Juncetalia maritimi*) and *Salicornia* and other annuals colonizing mud and sand. Species such as Sea Lamprey (*Petromyzon marinus),* Brook Lamprey (*Lampetra planeri*) River Lamprey (*Lampetra fluviatilis*) , Twaite Shad (*Alosa fallax*), Atlantic Salmon *(Salmo salar)* and European Otter (*Lutra lutra*) are also included in the QIs of the SAC. The AA Screening concluded that although potential pathways of risk between the proposed Greenway works and these QIs do exist, no Likely Significant Effects will occur as a result of the works.

The Lower River Suir SAC (Site Code 002137) has qualifying interests including Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) and Mediterranean salt meadows (*Juncetalia maritimi*). Qualifying interests for the site also include species such as European Otter (*Lutra lutra*), Sea Lamprey (Petromyzon marinus), River lamprey (Lampetra fluviatilis), Twaite Shad (Alosa fallax) and European Otter (Lutra lutra).

The AA Screening concluded that although potential pathways of risk exist between the proposed Greenway and some of the Qualifying Interests of the Lower River Suir SAC, no likely significant effects will occur as a result of the works. Further surveys were undertaken for the EcIA including watercourse assessments and protected mammal surveys. The EcIA concluded that with the implementation of specific mitigation measures the proposed Greenway does not have the potential to result in significant impacts on identified Key Ecological Receptors (KERS), notably Badgers, Otters, Bats and Invasive Alien Species (IAS). The Ecological surveys established that Badger setts occur within the derogation limit of construction works and disturbance licences would be required. Supporting documentation and licence applications to the statutory conservation authority are included in the EcIA Appendices. Mitigation measures are outlined in Section 7 of the EcIA. A comprehensive Invasive Alien Plant Species Management Plan has been developed for the proposed Greenway.

Soils and Geology: Due to the scale of the project and the minimal nature of excavation required it is not anticipated that there will be any significant impacts to soils and geology as a consequence of the construction or operation of the scheme.

Hydrology: The principal potential impacts to surface water are associated with discharges to the receiving watercourses – in this case the River Barrow and the

River Suir. It is anticipated that there will be no impact to hydrology or water quality during the operational phase. The proposed Greenway will not create traffic pollutants impacting on the water system. During construction there is the potential for pollution of the SAC from sediment loading and associated anthropogenic polluting substances as a result of surface water run-off or spills on site. It is considered that the enforcement of industry best practice pollution prevention measures will prevent the occurrence of a pollution event (for example CIRIA Guideline Document C532 *Control of Water Pollution from Construction Sites* and *C648 Control of water pollution from linear construction projects).*

Hydrogeology: Hydro-geological assessment addresses the potential impact of the proposed project on groundwater features and groundwater flow regime. As the proposed Greenway will be largely on the existing towpath and there will be no requirement for any significant cut or fill, it is considered that there will be no significant impact on the groundwater regime during either construction or operation.

Landscape and Visual: The nature of the proposed Greenway being principally an overlay on the existing towpath is unlikely to have any significant impact on the landscape of the area. The existence of the old railway allows the incorporation of the proposed Greenway into an already altered environment. In addition at operation the proposed Greenway will not detract from existing views or views to or from any heritage features present. In fact the project has the potential to have a positive landscape and visual impact through the provision of additional views and interpretation of the area and its heritage.

During construction the presence of plant and machinery will detract from certain views. However this is considered to be a slight impact which is short term in nature and which is easily offset by the benefits accrued at the operational stage.

Archaeology, Architecture and Cultural Heritage: The area is not particularly rich in cultural heritage, possessing a small number of recorded monuments and protected structures. As a result of this it is considered that the proposed Greenway project will not have a likely significant effect on any monuments or structures.

Socio-economic: The objective of any socio-economic assessment is to examine the potential impact of the construction and operation of the proposed development on the local community and business activities in the local area. The opening of the proposed Greenway will have beneficial impacts as it will attract people to the area thereby having a knock on positive economic effect with respect to hotels, guesthouses, B&Bs, recreational tourism, restaurants, etc. Similarly during construction the influx of construction workers will have a short term benefit on the local economy.

Resource and Waste Management: The key phase with regard to resource and waste management is the construction phase. As the proposed Greenway is largely an overlay there will be no requirement for any significant cut or fill. It is therefore considered that there will not be a significant amount of waste generated from the construction of the scheme. Efforts will be made to reuse material on site where possible such as the sleepers as mentioned in Section 5.4.4, thus minimising waste.

Interactions: Interaction will occur between the water environment and ecological receptors. However, the likely impacts on these environmental aspects are minimal and will not result in significant environmental effects.

Overall: Any environmental impacts associated with the proposed Greenway development will be minimal and therefore, significant environmental effects can be ruled out without further surveys, investigations and assessments.

5.7 Duration, Frequency and Reversibility of the Impact

The potential impacts during the development will be associated with the construction stage. These impacts will be temporary, reversible and one-off.

6. CONCLUSION

6.1 Introduction

This screening report has been carried out in accordance with a methodology that is based on *Environmental Impact Assessment (EIA), Guidance for Consent Authorities regarding Sub-threshold Development (DEHLG, 2003),* Environmental Impact Assessment of National Road Schemes – A Practical Guide (NRA, 2008) and *The European Commission Guidelines on EIA Screening (June 2001).*

6.2 Mandatory EIA

The proposed Waterford to New Ross Cycleway & Walkway does not exceed any of the thresholds outlined in the Roads Act 1993, as amended, that would trigger a mandatory requirement to prepare an EIS.

6.3 Sub-Threshold EIA

The proposed development is sub-threshold and therefore is assessed in accordance with Article 27 of the European Communities (EIA) Regulations, 1989.

7. CONCLUSION AND RECOMMENDATIONS

Under Section 50 (1) (c) of the Roads Act, 1993 Kilkenny County Council considers that the proposed Greenway development does not have potential to have significant effects on the environment for those reasons listed in the previous sections and, as such, it is not recommended that an EIS is required.

Appendix 1

EIA Screening Checklist

Questions to be Considered	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** Construction of approximately 22km of Greenway in urban and rural environments along a disused railway corridor.	**No** Resurfacing of former transportation 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** Land and natural resources will be required.	**No** The volume of materials required will not be large enough to result in a significant effect
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** Bitumen, oils, etc will be used during construction.	**No** Construction best practice and guidance will be followed in the construction of the proposed Greenway. Any refuelling will be carried out in controlled areas with bunds to prevent any spillage entering the drainage channels.
4. Will the Project produce solid wastes during construction or operation or decommissioning?	**Yes** Small quantities of unsuitable material will be excavated during construction.	**No** A Construction and Demolition Waste Management Plan will be prepared by the Contractor in order to deal with all materials in accordance with current waste management legislation.
5. Will the Project release pollutants or any hazardous, toxic or noxious substances to air?	**Yes** The construction phase will produce air pollutants.	**No** Air pollution levels are not anticipated to exceed permitted thresholds.
6. Will the Project cause noise and vibration or release of light, heat energy or electromagnetic radiation?	**Yes** The construction phase will create low levels of noise and vibration over a short period.	**No** The extent of construction works will not be of a large enough scale to result in significant effects.

Questions to be Considered	Yes / No / ? Briefly Describe	Is this likely to result in a significant effect? Yes/No/? – Why?
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** Both the construction and operation phases will have risk of pollutants entering surface water and groundwater.	**No** The proposed development will be designed and constructed in accordance with the TII/NRA Environmental Assessment and Construction Guidelines (EACG) and other best practice guidelines.
8. Will there be any risk of accidents during construction or operation of the Project which could affect human health or the environment?	**Yes** Both the construction and operation phases will have risk of accidents which could affect human health or the environment.	**No** The proposed development will be designed and constructed in accordance with the NRA/TII EACG and other best practice guidelines.
9. Will the Project result in social changes, for example, in demography, traditional lifestyles, employment?	**Yes** The provision of pedestrian/cycle facilities will assist in people moving to more sustainable forms of transport. Additional benefits of the proposed development include the increase in employment which will result from the construction stage and economic benefits during operation.	**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	**Yes** The New Ross By-Pass Development and the Barrow Blueway are considered with regards to their cumulative impacts due to their proximity and connection with the proposed development.	**No** Having considered the anticipated overall potential impact with respect to related developments, it is considered that the effect of these two projects will not result in cumulative impacts. There is potential for some tourist development. All will be subject to separate planning applications.

Questions to be Considered	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** The River Barrow and Nore is a SAC which supports qualifying interests such as estuaries, Atlantic salt meadows, Mediterranean salt meadows, and Freshwater Pearl Mussel. Additionally, the Lower River Suir SAC is located 100m south of the start of the proposed Greenway with similar qualifying interests.	**No** The proposed Greenway will be designed and constructed in accordance with best practice guidelines and the extent of works will not be of sufficient scale to result in significant impacts.
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?	**Yes** The River Barrow and River Nore SAC supports wetland habitats including mudflats and sandflats.	**No** The proposed Greenway will be designed and constructed in accordance with best practice guidelines and the extent of works will not be large enough to result in significant impacts.
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 River Barrow and River Nore SAC and the Lower River Suir SAC both have species included in their qualifying interests.	**No** The proposed Greenway will be designed and constructed in accordance with best practice guidelines and the extent of works will not be large enough to result in significant impacts. Surveys for protected species showed no significant impacts.
14. Are there any inland, coastal, marine or underground waters on or around the location which could be affected by the project?	**Yes** Two tributaries of the River Barrow intersect with the proposed Greenway and the River Suir is within close proximity.	**No** The extent of works associated with the proposed Greenway is not large enough to result in impacts to the River Barrow or the River Suir.

Questions to be Considered	Yes / No / ? Briefly Describe	Is this likely to result in a significant effect? Yes/No/? – Why?
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** There is a protected view identified in the County Development Plan.	**No** The extent of works associated with the proposed Greenway is not of a sufficient scale to result in impacts to the surrounding landscape. The proposed Greenway will be designed to fit with the receiving environment.
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 River Barrow is used for recreational activities including boating and fishing.	**No** The extent of works associated with the proposed Greenway is not not of a sufficient scale to result in impacts to recreational activities within the River Barrow.
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?	**No**	**No**
18. Is the project in a location where it is likely to be highly visible to many people?	**Yes** The proposed Greenway traverses one built-up area, while there are also frequent dwellings located along the route.	**No** The extent of works associated with the proposed Greenway is not of a sufficient scale to result in impacts to surrounding populations.
19. Are there any areas or features of historic or cultural importance on or around the location which could be affected by the project?	**Yes** 4 RPS and 5 archaeological sites were identified within 100m of the site.	**No** These sites will be considered in the design. The extent of the works is not considered to be of sufficient scale to create any likely significant effects.
20. Is the project located in a previously undeveloped area where there will be loss of greenfield land?	**No** The proposed Greenway is along an existing disused railway line.	**No**

Questions to be Considered	Yes / No / ? Briefly Describe	Is this likely to result in a significant effect? Yes/No/? – Why?
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?	**No** The project will not involve the acquisition of land or property.	**No**
22. Are there any plans for future land uses on or around the location which could be affected by the project?	**No**	**No**
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 proposed development crosses in close proximity to the built-up area of Abbeylands.	**No** The extent of works associated with the proposed Greenway is not of sufficient scale to result in impacts to surrounding populations.
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 proposed Greenway intersects with the Barrow River.	**No** Best practice standards and guidelines will be adhered to in order to ensure that the Barrow River is not impacted by the proposed Greenway.
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**

Questions to be Considered	Yes / No / ? Briefly Describe	Is this likely to result in a significant effect? Yes/No/? – Why?
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?	**No**	**No**