ENVIRONMENTAL IMPACT ASSESSMENT REPORT

SCREENING

Proposed Boyne Greenway Route from Drogheda to Mornington.

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EIAR SCREENING

TABLE OF CONTENTS

1.0 INTRODUCTION AND BACKGROUND ................................................................. 1
   1.1 Introduction ....................................................................................................... 1

2.0 DESCRIPTION OF THE PROPOSED DEVELOPMENT ................................................. 2
   2.1 Overview ......................................................................................................... 2
   2.2 Policy Context ................................................................................................ 4
   2.3 Meath County Development Plan ..................................................................... 4
   2.4 Development of the Project ............................................................................. 7

3.0 RECEIVING ENVIRONMENT ................................................................................. 10
   3.1 Human Beings, population and Human Health .................................................. 10
   3.2 Biodiversity (flora and fauna) .......................................................................... 11
   3.3 Land and Soil .................................................................................................. 13
   3.4 Water ................................................................................................................ 13
   3.5 Air and Climate ............................................................................................... 15
   3.6 Noise and Vibration ....................................................................................... 15
   3.7 Material Assets, Cultural Heritage and Archaeology ....................................... 20
   3.8 Landscape ....................................................................................................... 20
   3.9 Interrelationships between Environmental topics ............................................ 20

4.0 EIAR SCREENING PROCESS .................................................................................. 21
   4.1 Environmental Impact Assessment .................................................................... 21
   4.2 Nature of the Development for EIAR Screening .............................................. 21
   4.3 EIAR Screening ............................................................................................... 23
   4.5 Mandatory EIAR ............................................................................................ 24

5.0 SUB-THRESHOLD DEVELOPMENT SCREENING ................................................. 25
   5.1 Sub-Threshold Screening Exercise ................................................................... 25

6.0 SCREENING CONCLUSIONS & RECOMMENDATIONS ....................................... 39
# DOCUMENT CONTROL SHEET

<table>
<thead>
<tr>
<th>Client</th>
<th>Meath County Council</th>
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<tbody>
<tr>
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<tr>
<td>Document Title</td>
<td>Environmental Impact Assessment Report Screening</td>
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<th>Status</th>
<th>Author</th>
<th>Reviewed by</th>
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1.0 INTRODUCTION AND BACKGROUND

1.1 Introduction

Meath County Council proposes to undertake a planning application for works relating to the construction of a Boyne Greenway walking and cycling route east of Drogheda Town from Ship Street/railway viaduct (Belfast – Dublin line) to the Tower Road / Crook Road Junction east of Mornington Village.

The proposed greenway route would provide a safe, traffic-free environment for tourists and local users to cycle or walk adjacent to the Boyne estuary and coast by providing a maximum 4m wide cycle and pedestrian path in a west to east direction between Drogheda railway station and Mornington. The route travels along the edge of the Boyne Valley estuary and generally follows adjacent to the R150 and R151 Roadways.

The proposed Greenway development has been the subject of public consultation in 2019 and following this process and discussions with relevant stakeholders (e.g., Department of Culture, Heritage and the Gaeltacht) a preferred route consisting of two main sections has been identified.

This Environmental Impact Assessment Screening Report (EIASR) has been prepared by JRE Ltd. to assess if the proposed development meets the criteria for a full Environmental Impact Assessment Report to be completed. Below is a list of reports which have informed the content and findings of this EIAR Screening exercise:

- Archaeological and Built Heritage Assessment of the Proposed Boyne Greenway: Drogheda to Mornington, 2020
2.0 DESCRIPTION OF THE PROPOSED DEVELOPMENT

2.1 Overview

The proposed cycle route aims to provide a safe environment for tourists and local users to cycle adjacent to the Boyne estuary and coast by providing a cycle and pedestrian path of a maximum width of 4m in a west to east direction between Drogheda railway station viaduct and the junction of Tower Road / Crook Road approximately 1.9km east of Mornington Bridge. The preferred route for the Boyne Greenway, between Drogheda East and the junction of Tower Road / Crook Road, generally follows the northern side of the existing R150/R151 Regional Roads. The route moves away from the R150 road at Drogheda Grammar School providing views to the Boyne Estuary. For the majority of the route from Mornington Bridge to Tower Road the greenway will be adjacent to the R151, as either a boardwalk structure or kerbed bituminous surface. The preferred route selected for the Greenway is outlined in Figure 1. The preferred route for the Boyne Greenway is approximately 5.9 km in length with approximately 4.1 km of the route directly alongside or close to the Regional Road and approximately 1.8km boardwalk slightly away from the Road. Based on a route options assessment the proposed Greenway preferred route would be developed in two main sections, these are outlined below.

- Section 1 extends east of Drogheda from the railway viaduct (Belfast Dublin line) to the Old Golf Range on approach to Mornington Village via the existing R150 Road.

- Section 2 extends east from Mornington Road/Old Golf Road access road through Mornington Village, along the R151 Road to the Tower Road/Crook Road junction.
Figure 1 – Boyne Greenway Preferred Route Option
2.2 Policy Context

2.2.1 National Policy

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 to run alongside the main ‘Smarter Travel: A Sustainable Transport Future’ document. The NCP mission states that it wants 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.

2.2.2 Strategy for the Development of Irish Cycle Tourism (Fáilte Ireland 2007)

The strategy notes the need to create world-class traffic-free routes to cater for touring cyclists leaving the cities to discover the countryside. Cyclists, particularly less experienced and young cyclists, like to be away from traffic whenever possible as this enables them to enjoy the sounds and sights of the countryside without the noise and other distraction of cycling in traffic. Greenways are always shared with pedestrians and sometimes with horses. Disused railway lines are plentiful in Ireland and these can provide excellent greenways. Strategic greenways will become tourist attractions in their own rights, as is the case throughout Europe. Generally due to high traffic levels and high speeds we wish to avoid cycling on N or R-roads. On unavoidable sections, it may be desirable to provide wide, well surfaced, hard shoulders – these can provide a safe, wide, corridor for cyclists out of the path of faster moving vehicles.

2.2.3 Strategy for the Future Development of National and Regional Greenways

The Strategy sets out how National and Regional Greenways in Ireland should be planned, suitable locations and constructed to an appropriate standard. It also aims to increase the number and geographical spread of Greenways and quality around the country. It also sets out the importance of early and widespread consultation with landowners and communities along and adjacent to proposed Greenway routes. The Strategy emphasises the need to minimise the impact on landholdings by minimising severance as far as possible and providing accommodation works such as fencing and underpasses where required and sets out the importance of access to Scenery and things to See and Do in order to attract tourists.

2.3 Meath County Development Plan

2.3.1 Development Plan 2013 – 2019

The Meath County Development Plan 2013-2019 was produced to create a framework for the coordinated and sustainable economic, social, cultural and environmental development of the County. Within the County Development Plan there were a number of key objectives and policies that relate to developments similar in nature to the proposed greenway between Drogheda Town and Mornington, including;
Objectives

**ED OBJ 11** - To explore the provision of sustainable medium and long-distance walking routes.

**TRAN OBJ 8 (i)** - To explore the feasibility of developing former disused transportation corridors for cycle / greenways.

**TRAN OBJ 8 (iii)** - To provide for the development of the Trim – Navan – Slane – Drogheda cycle / greenway along the River Boyne subject to obtaining the necessary statutory planning consent, the carrying out of Appropriate Assessment, landowner cooperation and the securing of the necessary funding.

**TRAN OBJ 8 (iv)** - To develop a system of cycle / greenways, subject to the availability of resources, along the banks of the Boyne and Blackwater Rivers, in such a manner so as not to significantly negatively impact on the conservation status of the Natura 2000 site either alone or in combination with other objectives in this or other plans.

**TRAN OBJ 9** - To encourage pedestrian access to certain areas of Natura 2000 sites for their appreciation and in a manner so as not to impact negatively on the sites’ integrity or long term conservation status.

Strategic Policies

**TRAN SP 2** - To promote the sustainable development of walking, cycling, public transport and other more sustainable forms of transport as an alternative to the private car, together with the development of the necessary infrastructure and promotion of the initiatives contained within ‘Smarter Travel, A Sustainable Transport Future 2009 – 2020’.

**TRAN POL 15** - To identify and seek to implement a strategic, coherent and high-quality cycle and walking network across the county that is integrated with public transport and interconnected with cultural, recreational, retail, educational and employment destinations and attractions.

2.3.2 Draft Meath County Development Plan – 2020-2026

The Draft Meath County Development Plan 2020-2026 is currently at Stage 2 public consultation process and sets out the policies and objectives and the overall strategy for the development of the County between 2020 and 2026. Within the Draft County Development Plan there are a number of key objectives and policies that relate to developments similar in nature to the proposed greenway between Drogheda Town and Mornington, including;

Draft Objectives

**MOV OBJ 30** - To continue the development of a network of Greenways in the County in accordance with the Department of Transport, Tourism and Sport Strategy for Future Development of Greenways.

**ED OBJ 75** - To explore the provision of sustainable medium and long distance walking routes.

**MOV OBJ 25** - To implement, in conjunction with the NTA, the recommendations of the NTA strategy with regard to walking and cycling infrastructure.
Draft Strategic Policies

ED POL 39 - To encourage new and high quality investment in the tourism industry in the County with specific reference to leisure activities (including walking, cycling, angling, equestrian and family focused activities) and accommodation in terms of choice, location and quality of product.

MOV POL 17 - To identify and seek to implement a strategic, coherent and high quality cycle and walking network across the County that is integrated with public transport and interconnected with cultural, recreational, retail, educational and employment destinations and attractions.

ED POL 55 - To support developments which will enable and encourage countryside recreation and an increased appreciation of the natural environment, through facilitating the development of community walks, off road trails / rural trail developments, parks and other outdoor amenities and recreational infrastructure. All proposals will require screening to determine if a full Appropriate Assessment of the likely significant effects on Natura 2000 sites is required.

MOV POL 18 - To support the provision of a long distance inter-connecting walking / cycling route(s) between the Irish Republic and Northern Ireland.
2.4 Development of the Project

This Greenway, coupled with the East Coast Trail and Dublin to Galway routes, would be the basis for increasing cycling tourism in the mid-east region of the country. The creation of quality cycle routes along the east coast and within the midlands region as part of a national cycle network would clearly create the potential for increased cycling tourism in Ireland with the opportunity for tourists to start or complete their holiday on the east coast. The Boyne Greenway would offer a significant incentive for tourists in this regard. It is hoped that the proposed Greenway will link with the Dublin North section of the East Coast Trail in future.

The subject section of the proposal entails the construction of a route which will run from Ship Street/railway viaduct (Belfast – Dublin line) and travel eastbound mainly adjacent to the R150 and R151 Roadways to the junction of Tower Road / Crook Road approximately 1.9km east of Mornington Bridge. The proposed route will form part of the National Cycle Route 5 ‘East Coast Trail’. The construction methods to be used are outlined in the “Construction Methodology” document developed by DBFL (civil engineers) that will be submitted with the planning application. A synopsis of the construction methods to be employed (as outlined in the DBFL document) is outlined below.

2.4.1 Surfacing

Bound Surface

Where the proposed greenway will be constructed alongside the road or very close to the road edge the preferred option is for bituminous construction in accordance with the recommendations of the TII Design Manual for Roads and Bridges (TII DMRB), see example in Figure 2.1. This would result in clearing verge vegetation with limited additional excavation. The trail will be formed by placing imported granular subbase material on a geotextile separator and finished with approximately 100mm of bituminous surfacing in accordance with the TII DMRB. The width of the greenway will be limited to 4metres and restrained on each side with a kerb.

Figure 2.1: Example of Bituminous Track Surface
**Elevated Boardwalk**

There is approximately 1.8km of the proposed greenway located within the SPA/SAC areas with approximately 610 metres of this within the intertidal zone. In these areas it is proposed that the greenway would be elevated onto a boardwalk structure to minimise potential impacts on habitats and provide a year round pathway above the tidal flooding elevation. A lightweight recycled plastic composite boardwalk structure (see Figure 2.2) would be instated in locations where no solid base exists (e.g., on rocky shoreline and intertidal areas) and where crossing of mudflats or streams is required. The width of the boardwalk will be limited to 4metres (maximum).

**Figure 2.2: Example of Lightweight Recycled Plastic Composite Boardwalk**

**Bridges**

There are two areas where bridging of water features would be required. The first is at Mornington bridge and would consist of a prefabricated steel arch bridge placed on precast concrete cross-beams, on precast concrete piles that would limit impact on the existing stone arch bridge structure and would not visually detract from Mornington Bridge. The second bridging is for crossing a surface water drain and is not in an area as visually sensitive as the Mornington Bridge crossing. The drain crossing would consist of a pre-stressed precast concrete beam resting on a precast concrete ground beam on precast concrete piles. The deck will be partially precast with in-situ finished surface.

**2.4.2 Construction Methodology**

Construction materials could be transported from stockpiled areas along the existing public road in appropriately sized Dumpers or Trucks for construction of the Greenway. At present there is no detailed construction methodology identifying access points for construction equipment to access various phases of the proposed trail or the setback distances of the trail or any stockpiled material for construction or surface dressing.

Any excavation would be minor and would be completed using mini diggers and would be avoided where possible, to ensure minimum disruption to the Estuary foreshore. Any levelling of surface materials would be completed using mini excavators in restricted areas. Any excavated soils would be reused, where possible, for the reinstatement of the edges of the new pathway and to reduce the risk of the introduction of invasive species. It is envisaged that the majority of excavation works would be clearing of scrub areas and levelling areas where hardcore surfaces would be instated.
Other sections of the proposed route (e.g., along the rocky foreshore and sections spanning stream confluences and mudflat areas) may consist of a lightweight recycled plastic boardwalk construction. The supports of the boardwalk would need to be piled into the base of the estuary foreshore and/or mudflat to provide a stable foundation for the boardwalk structure. The installation of the base piles would require using specialist percussion equipment for the piling process. Once in place the lightweight plastic boardwalk structure would be attached and fixed in place. At locations where the boardwalk may cross freshwater confluences with the estuary (e.g., at Mornington Bridge) there may be a requirements to ensure a solid screen from the surface to approximately 90 centimetres high to reduce potential disturbance on wading birds feeding in these areas from the movement of feet and wheels.
3.0 RECEIVING ENVIRONMENT

In order to inform screening evaluation, consideration was firstly given to environmental sensitivities in the area and to the potential for impacts on particular aspects of the environment. This section describes the aspects of the environment likely to be significantly impacted by the project and has regard to the Environmental Topics as set out in the EIA Directive 2014/52/EU as follows:

- Human beings, Population, and Human Health,
- Biodiversity (flora and fauna),
- Land and Soil,
- Water,
- Air and Climate,
- Noise and Vibration
- Material Assets, Landscape and Cultural heritage, including architectural and archaeological aspects, and
- The interrelationship between the environmental topics.

3.1 Human beings, Population, and Human Health

It is expected that the proposed greenway will have a positive impact on human beings, population and human health by improving road safety along the R150 and R151, by making the countryside and ecological diversity along the Boyne Estuary more accessible and by providing a safe pedestrian and Greenway link between Drogheda Town and Mornington and the schools located along the Regional Road that currently could not be safely used by cyclists or pedestrians, and by providing employment opportunities during construction and bringing increased opportunities for existing businesses from the use of the greenway by tourists and visitors.

Greenways are used for active outdoor recreational purposes and as a means of travelling between areas in a manner that is beneficial to human health and wellbeing (i.e., cycling and walking). This proposed development would also help sustain and create employment opportunities in the tourism and leisure related industries (e.g., bicycle rentals) with spin off benefits for the wider economy. Localized traffic impact is likely to be generated at trail head locations and may require limited traffic management.

The preferred route of the proposed greenway development runs along the northern side of the Regional Road (i.e., estuary side). The majority of residential properties between Drogheda and the western edge of Mornington are on the southern side of the R150 and R151 and so the preferred route reduces the potential for negative impact on residential amenity.

Potential exists, particularly at the construction stage for a limited amount of nuisance associated with localised traffic disruption and noise. However, for the most part construction works related to this project are likely to be ‘low-key’ and similar in nature to road improvement works (tarmacadam surfacing). Any such impacts would also be temporary in nature and would only take place during daytime hours. Significant negative impacts on Human Beings, Population or Human Health have not been reported from the operation of other existing greenways and are unlikely to arise in this instance.
3.2 Biodiversity (flora and fauna)

For sections, the proposed Boyne Greenway route between Drogheda and Mornington is located within the boundaries of two NATURA 2000 sites; the Boyne Coast and Estuary SAC and the Boyne Estuary SPA. Details of both NATURA 2000 sites are included in the Ecological Impact Assessment (EcIA) and the Natura Impact Statement (NIS) completed as part of the planning application. Outlines of the protected areas are outlined below.

3.2.1 Boyne Coast and Estuary SAC (Site Code 1957)

Boyne Coast and Estuary SAC is a coastal site which includes most of the tidal sections of the River Boyne, intertidal sand and mudflats, saltmarshes, marginal grassland, and the stretch of coast from Bettystown to Termonfeckin that includes the Mornington and Baltray sand dune systems. The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive:

- [1130] Estuaries
- [1140] Tidal Mudflats and Sandflats
- [1210] Annual vegetation of drift lines
- [1310] Salicornia Mud
- [1330] Atlantic Salt Meadows

(* = priority; numbers in brackets are Natura 2000 codes)

3.2.2 Boyne Estuary SPA (Site Code 4080)

This moderately-sized coastal site is situated west of Drogheda on the border of Counties Louth and Meath. The site comprises most of the estuary of the Boyne River, a substantial river which drains a large catchment. Apart from one section which is over 1 km wide, its width is mostly less than 500 m. The river channel, which is navigable and dredged, is defined by training walls, these being breached in places. Intertidal flats occur along the sides of the channelled river. The sediments vary from fine muds in the sheltered areas to sandy muds or sands towards the river mouth. The linear stretches of intertidal flats to the north and south of the river mouth are mainly composed of sand. One or more species of Eelgrass (*Zostera* spp.) occur in the estuary and although none was noted on the day of the site walkover its presence should be assessed in more detail as part of any future assessment (e.g., Natura Impact Assessment). Parts of the intertidal areas are fringed by salt marshes, most of which are of the Atlantic type, and dominated by Sea-purslane (*Halimione portulacoides*). Other species present include Common Saltmarsh-grass (*Puccinellia maritima*), Sea Plantain (*Plantago maritima*), Lax-flowered Sea-lavender (*Limonium humile*) and Glasswort (*Salicornia* spp.). Common Cord-grass (*Spartina anglica*) occurs frequently on the flats and salt marshes.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Shelduck, Oystercatcher, Golden Plover, Grey Plover, Lapwing, Knot, Sanderling, Black-tailed Godwit, Redshank, Turnstone and Little Tern. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds.
3.2.3 Habitats of Importance

The Boyne River from Drogheda to the sea at Mornington Beach can be defined as an estuary and the proposed Greenway broadly follows the river from Drogheda town to Mornington. While the proposed Greenway would not directly impact on the river itself, it would impact on some of the associated habitats such as muddy flats at low tide and rocky shore. Tidal mudflats and sandflats are an Annex I habitat under the EU Habitats Directive and refers to mudflats and sandflats exposed at low tide. The proposed Greenway would impact upon this habitat in some areas where tributaries of the Boyne River join the main river.

The habitats identified along the proposed greenway route are described according to Fossitts “A Guide to habitats in Ireland, 2000” which sets out a standard system for identifying, describing and classifying wildlife habitats in Ireland and covers natural, semi-natural and artificial habitats of terrestrial and freshwater environments, of inshore marine waters, and of urban and rural areas. The terrestrial habitats identified within the route corridor of the proposed greenway are outlined in Table 3-1 below:

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<tr>
<td>Treeline</td>
<td>WL 2</td>
</tr>
<tr>
<td>Earth Banks</td>
<td>BL2</td>
</tr>
<tr>
<td>Arable crops</td>
<td>BC1</td>
</tr>
<tr>
<td>Flower beds and borders</td>
<td>BC4</td>
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<td>Buildings and artificial surfaces</td>
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<tr>
<td>Amenity grassland</td>
<td>GA2</td>
</tr>
<tr>
<td>Lower salt marsh</td>
<td>CM1</td>
</tr>
<tr>
<td>Upper salt marsh</td>
<td>CM2</td>
</tr>
<tr>
<td>Recolonising bare ground</td>
<td>ED3</td>
</tr>
<tr>
<td>Improved agricultural grassland</td>
<td>GA1</td>
</tr>
<tr>
<td>Amenity grassland</td>
<td>GA2</td>
</tr>
<tr>
<td>Ornamental/non-native shrub</td>
<td>WS3</td>
</tr>
<tr>
<td>Dry meadows and grassy verges</td>
<td>GS2</td>
</tr>
<tr>
<td>Muddy Shore</td>
<td>LSA</td>
</tr>
<tr>
<td>Mixed (broadleaved) woodland</td>
<td>WD1</td>
</tr>
<tr>
<td>Scattered trees/parkland</td>
<td>WD5</td>
</tr>
<tr>
<td>Scrub</td>
<td>WS1</td>
</tr>
<tr>
<td>Reeds and large sedge swamps</td>
<td>FS1</td>
</tr>
</tbody>
</table>

These habitats are further assessed in section 4.1.2 of the EcIA report completed as part of the planning application submission. The mitigation measures outlined in sections 5.1.2 and 5.1.6 of the EcIA report and section 6.2.3 of the NIS report accompanying the planning application provide for controlling and managing impacts to a level whereby they would not significantly impact on important habitats.
3.3 Land and Soil

The proposed development would require a limited land take (i.e., 4 metres) along the majority of the greenway extent but there would be no demolition of any property. The lands which form part of this proposal are in the ownership of Drogheda Port and Meath and Louth County Councils and some sections are in private ownership that would require to be purchased to accommodate the proposed development. The proposed use is compatible with the land use zoning objectives for the area. Based on a review of the databases maintained by the Geological Survey of Ireland (GSI) the soils for the greenway section between Drogheda and Mornington Bridge (i.e., adjacent to R150) comprises of a mix of undifferentiated alluvium material, manmade ground, estuarine sediments (silts and clays) and sands and gravels. From Mornington Bridge along the R151 comprise mainly of manmade ground, sands and gravels and estuarine sediments (silts and clays). Where there is a required land take for the development of the greenway it would be assessed by a qualified ecologist to ensure that the development does not result in significant impacts on protected habitat. Where there is limited shallow excavation of soils there will be opportunities for re-use of any surplus soil elsewhere within the proposed development.

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 proposed Greenway scheme.

3.4 Water

3.4.1 Surface Water

The Water Framework Directive (WFD) requires measures to ensure that waters achieve at least “Good Status” by 2015 and that the current status does not deteriorate. The objectives for particular watercourses are based on Pressure and Impact assessments of human activity, including point sources (e.g., wastewater treatment plants) and diffuse sources (e.g., runoff), landuse (e.g. quarrying, mining and turf harvesting) and morphological conditions (e.g., river depth, width, substrate of river bed etc.) on surface waters to identify those water bodies that are at risk of failing to meet the WFD objectives. Based on the data used to assess the WFD Status between 2013 and 2018 (EPA Geoportal), the Boyne Estuary has a WFD Status of ‘Moderate’ and the transitional water body has a WFD risk status of ‘at risk’

The principal potential impacts to surface water are associated with discharges to the receiving watercourses. The River Boyne runs adjacent to the proposed development route. The only identified watercourse that intersects the proposed development is the Stagrennan Stream (EPA geoportal) that flows to the estuary at Mornington Bridge.

The Boyne Coast and Estuary SAC and the Boyne Estuary SPA runs adjacent with the route of the proposed Greenway. There are salt marshland habitats located within the area of the River Boyne. 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. There is also the potential for the disturbance of wintering birds during feeding along the foreshore and mudflats and ground roosting above the high tide mark. The main impacts include:
Physical obstructions to upstream and downstream migration both during and after construction;

Impacts on wintering birds feeding and roosting areas during construction and operational phases. Construction works should be completed in late Spring and Summer to avoid impacts on wintering birds using the Boyne valley SAC area.

Disturbance of spawning beds during construction – care must be taken to ensure that no spawning grounds are disturbed and that works are not completed during spawning (i.e., typically between November and January).

Potential impacts on dolphins and porpoises from impact percussion vibration during piling activities; and

Point source pollution incidents during construction

During construction there is the potential for impacts to the Boyne River/Estuary and Stagrennan Stream 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). If appropriate controls are put in place it is anticipated that there will be no impact to hydrology or water quality during the construction or operational phase. It is considered that the operation of the greenway will not create any significant impacts on surface water quality or on the surface water system. Mitigation measures proposed to protect fisheries and aquatic biodiversity is included in section 5.1.3 (construction phase) and 5.1.6 (operational phase) of the EcIA document prepared as part of the planning submission. These measures will mitigate the potential for significant impacts from the proposed development on the water receptors

3.4.2 Groundwater

The local geological and hydrogeological conditions were established from a review of databases maintained by the Geological Survey of Ireland (GSI). The soils for the greenway section between Drogheda and Mornington Bridge (i.e., adjacent to R150) comprises of a mix of undifferentiated alluvium material, manmade ground, estuarine sediments (silts and clays) and sands and gravels. From Mornington Bridge along the R151 comprise mainly of manmade ground, sands and gravels and estuarine sediments (silts and clays).

In Ireland, aquifer potential is divided into three broad categories, including: Regionally Important, Locally Important, and Poor. Based on the GSI Guidelines on Aquifer Classification and Vulnerability, the bedrock aquifer beneath the proposed development extent is considered to be a Locally Important Aquifer, Bedrock which is Generally Moderately Productive (Lm). The Water Framework Directive (WFD) Groundwater Status for the Area along the extent of the proposed Greenway based on results 2013-2018 is Good (EPA Geoportal).

The groundwater vulnerability along the initial extent of the proposed greenway (i.e., from Drogheda Railway Bridge to approximately 200m west of Drogheda Grammer School is classified as being between low and moderate.
One area located immediately to the west of Drogheda Grammer School has a high to extreme groundwater vulnerability and may be due to the shallow bedrock depth in that area. From Drogheda Grammer School to the eastern extent of the proposed greenway the groundwater vulnerability is classified as being between low and high.

During construction operations there should be controls in place to reduce potential for impacts on groundwater (e.g., CIRIA Guideline Document C532 Control of Water Pollution from Construction Sites and C648 Control of water pollution from linear construction projects). It is not considered that the operation of the greenway would have any significant impact on groundwater quality.

As the Greenway will be mainly located on the surface with minimal excavation works (i.e., only clearing of vegetation and levelling of path) 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 at these locations. Where piling works for boardwalk areas along the foreshore area required, any impact would not be expected to impact on the local hydrogeology but that may be dependent on the depth of piling required during construction.

### 3.4.3 Flood Risk

A flood risk assessment was completed as part of the planning submission and areas of possible tidal flooding were identified. The construction of a boardwalk in the inter-tidal zone will be at a minimum level defined within the flood risk assessment report (i.e., 3.54m Above Ordnance Datum). This is approximately 1.5 metre above the present day highest astronomical tide level and will mitigate the risk of flood throughout the design.

### 3.5 Air & Climate

The Drogheda to Mornington Greenway involves the construction of a high quality cycling and pedestrian facility along the length of the bank of the River Boyne Estuary to Mornington. The objective of the project is to provide a facility for cyclists and pedestrians that in its operational phase will have no significant impact on air quality and climate. The construction phase of the development aims to provide a series of bound surface and boardwalk sections of 3 - 4m in width for approximately 5.8km. It is considered that the level of construction traffic required for a project of this scale will have no impact on the local air quality or climate; neither will a construction project of this scale result in any significant generation of dust. The operation of the Greenway will have no impact on Air Quality in the area as it will be used by cyclists and pedestrians only.

A proposal of this nature has minimal potential for air and climate related impacts. Overall it is considered that this proposal is likely to have a long term beneficial impact on air and climatic factors as a consequence of facilitating sustainable modes of transport (cycling and walking). This proposal will offer an alternative, more sustainable means of movement between Drogheda and Mornington other than by private car and the associated potential air emissions associated with the use of cars (e.g., CO\textsubscript{2}, NO\textsubscript{x}, SO\textsubscript{x} and PM\textsubscript{10}).

### 3.6 Noise and Vibration

The proposed greenway will largely be active in daytime hours only. During operation there will be an increase in the number of cyclists or pedestrians in the area but these are expected to have a negligible impact on noise or vibration in the local environment.
The proposed greenway will be adjacent to the R150 and R151 roads for large sections and it is not anticipated that the operation of the Greenway would significantly increase the baseline noise and vibration levels currently experienced along the proposed route.

All construction 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 aim to control levels of noise and vibration during the construction phase. It is considered that the level of construction traffic required for a project of this scale will not result in the creation of any significant levels of noise or vibration. Furthermore any construction operations, such as piling, which have the potential to cause noise and vibration will not be carried out at times which are considered to be noise sensitive such as early in the morning or late in the evening or during seasons where wintering birds are migrating to the area. It may also be prudent to consider potential impacts on dolphins and porpoises that may be affected by vibration from piling works. Mitigation measures proposed to reduce noise and vibration impacts on wildlife and local residents is included in section 5.1.2 (construction phase) and 5.1.5 (operational phase) of the EcIA document prepared as part of the planning submission. There are also suggested measures to reduce potential noise impact included in section 6.2.3.1 of the NIS report included as part of the planning submission. These measures will mitigate the potential for significant impacts from the proposed development on wildlife and local residents.

3.7 Material Assets, Cultural Heritage and Archaeology

County Meath is renowned for its history and wealth of cultural heritage resources. The study area contains several recorded sites and monuments, the intention of this section is to map the potential constraints and highlight those historical features which could be integrated into the scheme. A limited desk-based screening assessment was completed to identify potential cultural and/or archaeological features that may exist in the vicinity of the proposed greenway route. In addition to this desk based assessment a detailed Archaeological and Built Heritage Assessment was completed as part of the planning submission process which included site visits and more detail of features along the proposed route. The screening exercise utilised a number of sources including the Record of Monuments and Places, and documentary and cartographic sources. The resources that were utilised included the Record of Monuments and Places, the County Development Plan (Record of Protected Structures), historic OS Mapping, aerial photography and www.excavations.ie. These are further discussed below.

3.7.1 Record of Monuments and Places

The Record of Monuments and Places (RMP) is a statutory list of all recorded archaeological monuments from the results of the Archaeological Survey of Ireland under the National Monuments Act, 1994 - 2004, sites that are recorded on the Record of Monuments and Places all receive statutory protection. The RMP was consulted through the Department of Arts, Heritage and Gaeltacht’s database (www.archaeology.ie).

3.7.2 Meath County Development Plan (2013 – 2019)

The development plan includes policy objectives for the protection of the County’s cultural heritage and lists items of special interest within its functional area. It lists Architectural Conservation Areas and also contains a Record of Protected Structures which includes every structure which is of special architectural, archaeological, artistic, cultural, scientific, social or technical interest within the county boundaries.
3.7.3 Meath Industrial Heritage Survey (August 2010)

Within the study area there are a number of features of industrial heritage interest most of which are Corn Mills located to the south of the existing R151 and R150. A windmill also exists in this area and three small quarry pits. The Dublin to Drogheda railway line is located on the western edge of the study area, as well as the Boyne Viaduct.

In addition to those features of industrial heritage interest noted above, the area also contains several archaeological sites (e.g., Maidens Tower and Ladies Finger) in Figure 3.1. The approximate locations of the Recorded Monuments, Protected Structures and Industrial Heritage Sites are displayed in Figures 3.1, 3.2 and 3.3.

A number of the identified features, as identified on the ArcGIS viewer on www.archaeology.ie, along with their zone of notification may fall within the study area. Most notable of these protected structures are the Church and graveyard ruins close to the estuary at Mornington and Mornington Bridge. Other features included in the Sites and Monuments Record (SMR) from the Archaeological Survey of Ireland (ASI) are for features that pre-date 1700 AD, these are included in Table 3.1

Table 3.1 – Sites and Monuments Records Features

<table>
<thead>
<tr>
<th>SMR No</th>
<th>Class</th>
<th>Townland</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME021-003--</td>
<td>Monumental structure - Masonry circular column (H c. 6m) on square base</td>
<td>Mornington</td>
</tr>
<tr>
<td>ME021-004</td>
<td>Watchtower - Square tower with spiral staircase (H c. 16m), tapering towards top. Access to parapet through barrel-vault at top of stairs.</td>
<td>Mornington</td>
</tr>
<tr>
<td>ME021-001001/2/3</td>
<td>Church - W gable and part of N wall of large church. Cooper (Price 1942, 106) describes a chancel arch and an altar tomb of which there is no evidence now.</td>
<td>Mornington</td>
</tr>
<tr>
<td>ME021-001---</td>
<td>Settlement deserted – medieval</td>
<td>Mornington</td>
</tr>
<tr>
<td>ME021-002</td>
<td>House – 17th Century</td>
<td>Mornington</td>
</tr>
</tbody>
</table>

The Zone of Notification indicates the area around the monument where the Department of Arts, Heritage and Gaeltacht (DAHG) would need to be notified in advance of any works. As with all medieval church and graveyard sites, the current boundary may not indicate the former extent of the site though because of the shoreline it is unlikely it extended much further north.

Figure 3.1 – Archaeological Features in Surrounding Area
### Table 3.2 – Protected Structures

<table>
<thead>
<tr>
<th>RPS ID No.</th>
<th>Structure</th>
<th>Townland</th>
<th>Building Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>MH021118</td>
<td>Cottage</td>
<td>Mornington</td>
<td>House</td>
</tr>
<tr>
<td>MH021120</td>
<td>Drogheda North Lighthouse</td>
<td>Mornington</td>
<td>Lighthouse</td>
</tr>
<tr>
<td>MH021121</td>
<td>Ladies Finger</td>
<td>Mornington</td>
<td>Monument</td>
</tr>
<tr>
<td>MH021123</td>
<td>The Boat House</td>
<td>Mornington</td>
<td>Boathouse</td>
</tr>
<tr>
<td>MH021124</td>
<td>Maiden Tower</td>
<td>Mornington</td>
<td>Tower</td>
</tr>
<tr>
<td>DB-148</td>
<td>St James House</td>
<td>Lagavooren</td>
<td>House</td>
</tr>
<tr>
<td>DB-149</td>
<td>Weirhope House</td>
<td>Lagavooren</td>
<td>House</td>
</tr>
<tr>
<td>DB-395</td>
<td>Railway Station Engine Shed</td>
<td>Newtown</td>
<td>Shed Building</td>
</tr>
<tr>
<td>MH021200</td>
<td>Mornington Bridge</td>
<td>Mornington</td>
<td>Bridge (road)</td>
</tr>
<tr>
<td>MH021201</td>
<td>Milestone</td>
<td>Church Street, Mornington</td>
<td>Milestone</td>
</tr>
<tr>
<td>MH021202</td>
<td>Pump</td>
<td>Church Street, Mornington</td>
<td>Pump</td>
</tr>
<tr>
<td>MH021203</td>
<td>Star of the Sea Church of Ireland Church</td>
<td>Mornington</td>
<td>Church (C of I)</td>
</tr>
<tr>
<td>MH021204</td>
<td>House</td>
<td>Church Street, Mornington</td>
<td>House</td>
</tr>
<tr>
<td>MH021100</td>
<td>Eden View – The Grammar School</td>
<td>Stameen</td>
<td>School (former house)</td>
</tr>
<tr>
<td>MH021101</td>
<td>Bay View</td>
<td>Stameen</td>
<td>Country House, Gates and out buildings</td>
</tr>
<tr>
<td>DB-184</td>
<td>The Boyne Viaduct</td>
<td>Yellowbatter</td>
<td>Rail viaduct</td>
</tr>
<tr>
<td>DB-345</td>
<td>Stone Marker</td>
<td>Newtown</td>
<td>Marker</td>
</tr>
</tbody>
</table>

A more detailed assessment of identified protected structures has been completed as part of the Archaeological and Built Environment Assessment report completed as part of the planning application process.
The combination of both the presence of the church and graveyard and the estuarine location of the site, would indicate a high archaeological potential. A detailed Archaeological and Built Heritage Assessment report has been completed as part of the planning submission process to address areas of archaeological sensitivity and provides mitigation measures where considered necessary (see Section 5 of the Archaeological and Built Heritage Assessment report).
It is possible that archaeological mitigation may be required along this stretch of the proposed route that may include a geophysical survey prior to excavation and at a minimum may require archaeological monitoring during excavation of the route pathway.

An Archaeological Impact Assessment has been completed as part of the planning application and provides detailed information on features and mitigation measures that would be implemented as part of the construction phase of works to protect cultural and archaeological features.

3.8 Landscape

The landscape character of the proposed study is defined as coastal plain bounded to the north by the Boyne River estuary and the east by the Irish Sea. It is characterised by scrubby rolling lowland near the coast with the estuary, back from the coast, being a steep sided river plain bound by attractive mixed woodland.

Built development is concentrated within Mornington and Donacarney. However there is significant ribbon development along the R150 and R151 regional roads as well as along the local road network. A significant amount of land is zoned for future housing, transport corridors and heavy industrial uses within the study area.

The proposed greenway route runs along a River Corridor / Estuary landscape area. The route is located within Landscape Character Area 5 (LCA5) that consists of the Boyne Valley. Any development in the Boyne Valley should be completed so that the character of the valley is maintained and should “Have regard to the fact that the entire River corridor is designated as an SAC ….. Development should not conflict with the reasons for which these designations have been made”. As such the low impact design of the greenway and the implementation of mitigation measures included in the EcIA, NIS and Archaeological and Built Environment Assessment reports would help ensure that the greenway will be constructed and operated with these criteria in mind.

3.9 Interrelationships between Environmental topics

The greater the number of different aspects of the environment which are likely to be affected and the greater the links between the effects, the more likely significant effects may occur. Impact inter-relationships/interactions relate to the reactions between impacts within a project and the inter-relationship between impacts identified under one topic with impacts identified under another topic.

The consideration of impact inter-relationships and interactions provides an opportunity to consider the overall impacts of a development that might not be immediately apparent. All above receptors contribute to the distinctive character of the area. As part of the proposed development, potential water quality impacts, loss of land area within the SAC/SPA and noise associated with the construction phase have potential to interact with and impact on aquatic receptors, flora and fauna. However, based on the mitigation measures that have been put forward in section 5 of the EcIA and section 6 of the NIS report prepared as part of the planning application any impacts are not likely to have significant impacts on the receiving environment.
4.0 EIAR Screening Process

4.1 Environmental Impact Assessment

Environmental Impact Assessment (EIA) is the process of examining the anticipated environmental effects of a proposed project from consideration of environmental aspects at design stage, through consultation and preparation of an Environmental Impact Assessment Report (EIAR), evaluation of the EIAR by a competent authority, the subsequent decision as to whether the project should be permitted to proceed.

The EIAR is a report or statement of the effects, if any, which the proposed project, if carried out, would have on the environment. It is prepared by the applicant to inform the EIA process. Directive 2014/52/EU amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment, was transposed into national planning law on the 2 September 2018 through the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018). Projects which require EIA are listed in Annex I and Annex II of the EIA Directive, as amended.

National EIA provisions in relation to planning development consents are contained in the Planning and Development Act 2000, as amended and in the Planning and Development Regulations 2001, as amended. The requirements of Annex I and Annex II of the EIA Directive have been transposed into Schedule 5 (Parts 1 and 2 respectively) of the Planning and Development Regulations 2001.

Projects listed in Schedule 5 Part 1 require EIAR if the stated threshold set therein has been met or exceeded, or where no thresholds are set.

Schedule 5 Part 2 projects meeting or exceeding the stated national thresholds set out therein, or where no thresholds are set, also require EIAR. Projects that do not meet the stated threshold may still require ‘sub-threshold EIA’ if there is a real likelihood of significant effects on the environment arising from the proposed development.

4.2 Nature of the Development for EIAR Screening

Based on the type of development proposed (i.e., Greenway cycle path and pedestrian walkway) a determination of the legal context of the development was completed to determine how it should be assessed for EIAR screening.

4.2.1 Determination of Road Development

The legal requirements for Environmental Impact Assessment of a road development are defined in the Roads Act (1993) as amended by the Planning and Development Acts (2000 – 2011) and the Roads Act (2007), and by Regulations made under the Roads Acts, The European Communities (Environmental Impact Assessment) (Amendment) Regulations 1989 – 2001 and the EC Directives 85/337/EC and 97/11/EC. The proposed development falls under the requirements of the Roads Act as “Road” is defined within the Act to include:
(a) any street, lane, footpath, square, court, alley or passage,
(b) any bridge, viaduct, underpass, subway, tunnel, overpass, overbridge flyover, carriageway whether single or multiple, pavement or footway,
(c) any weighbridge or other facility for the weighting or inspection of vehicles, toll plaza or other facility for the collection of tolls, services area, emergency, telephone, first aid post, culvert, arch, gulley, railing, fence, wall, barrier, guardrail, margin, kerb, lay-by, hard shoulder, island, pedestrian refuge, median, central reserve

Furthermore cycleway is referred to in Section 68 of the 1993 Act as follows:

68 (1) In this section “cycleway” means a public road or proposed public road reserved for the exclusive use of pedal cyclists or pedal cyclists and pedestrians.

(2) (a) A road authority may construct (or otherwise provide) and maintain a cycleway.

(b) Where a road authority constructs or otherwise provides a cycleway it shall by order declare either –

(i) the cycleway is for the exclusive use of pedal cyclists, or
(ii) that the cycleway is for the exclusive use of pedal cyclists and pedestrians.

(c) any person who uses a cycleway in contravention of an order under paragraph (b) shall be guilty of an offence.

Therefore, under Section 68 of the 1993 Act the proposed development is considered to be a public road as outlined in the above description.

4.2.2 EIAR for Public Road Projects

A summary of the relevant provisions of the Roads Acts in relation to Environmental Impact Assessment Reports for a public road development is set out below.

Section 50 (1) of the Roads Act, 1993, as amended states:

(a) A road authority or the Authority shall prepare a statement of the likely effects on the environment (‘environmental impact statement’) of any proposed road development it proposes consisting of—

I. the construction of a motorway,
II. the construction of a busway,
III. the construction of a service area, or
IV. Any prescribed type of proposed road development consisting of the construction of a proposed public road or the improvement of an existing public road.
(b) If An Bord Pleanála considers that any road development proposed (other than development to which paragraph (a) applies) consisting of the construction of a proposed public road or the improvement of an existing public road would be likely to have significant effects on the environment it shall direct that the development be subject to an environmental impact assessment.

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

4.3 EIAR Screening

This EIA Screening Report (EIASR) was prepared to assess if the proposed Boyne Greenway in totality, or if specific sections of the proposed Boyne Greenway, are likely to have significant effects on the environment that would require a full EIAR to be completed for the proposed development. This report has been prepared having regard to the following documents:

- EU Directives (85/337/EEC, 2011/92/EU (codified) and 2014/52/EU);
- the Planning and Development Act, 2000 (as amended), particularly Part X;
- the Planning and Development Regulations, 2001 (as amended) (the 2001 Regulations), particularly Part 10 and Schedules 5 and 7A;
- European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018;
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (August 2018); and
- 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 2014 Directive introduces new requirements in relation to screening for EIAR, including issuing determinations as to whether sub-threshold development requires EIAR. There have not been any changes to the list of projects contained in Schedule 5 of the 2001 Regulations, which derives from Annex I and II of the 2011 Directive. The provisions of the 2014 Directive have been transposed into Irish planning law by the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 and these Regulations introduced a mandatory process for screening of all sub-threshold developments. The 2018 EIA Regulations defines sub-threshold development as:

‘sub-threshold development’ means development of a type set out in Part 2 of Schedule 5 which does not equal or exceed, as the case may be, a quantity, area or other limit specified in that Schedule in respect of the relevant class of development;
4.4 Mandatory EIAR

The legislative requirements which deem whether an EIAR is mandatory for a road 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 3.1.

**Table 3.1: Screening Matrix for Mandatory EIAR**

<table>
<thead>
<tr>
<th>Mandatory Threshold</th>
<th>Regulatory Reference</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction of a Motorway</td>
<td>S. 50(1)(a) of the Roads Act, 1993, as substituted by S. 9(1)(d)(i) of the Roads Act, 2007</td>
<td>The Greenway Proposal is not a Motorway - Threshold Trigger for Mandatory EIAR is not reached.</td>
</tr>
<tr>
<td>Construction of a Service Area</td>
<td>S. 50(1)(a) of the Roads Act, 1993, as substituted by S. 9(1)(d)(i) of the Roads Act, 2007</td>
<td>The Greenway Proposal is not a Service Area - Threshold Trigger for Mandatory EIAR is not reached.</td>
</tr>
</tbody>
</table>
| Prescribed type of proposed road development | Article 8 of the Roads Regulations, 1994 (Road development prescribed for the purposes of S. 50(1)(a) of the Roads Act, 1993 | • The Boyne Greenway Proposal does not involve the construction of a road with four or more lanes or any other criteria (e.g., realignment or widening). Although ABP may consider the Greenway a Public Road under S50 of the Roads Act, the width and length (5.9 km) is less than the 8km criteria - Threshold Trigger for Mandatory EIAR is not reached.  
• The Greenway Proposal does not involve the construction of a bridge or tunnel that would be 100m or greater - Threshold Trigger for Mandatory EIAR is not reached. |

Based on the size and criteria of the proposed Boyne Greenway proposal, the proposed development does not meet the thresholds that require a mandatory EIAR under Section 50 of the Roads Act 1993, as amended.
5.0 SUB-THRESHOLD DEVELOPMENT SCREENING

The European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 introduced a mandatory process for screening of all sub-threshold developments. The 2018 EIA Regulations defines sub-threshold development as:

‘sus-threshold development’ means development of a type set out in Part 2 of Schedule 5 which does not equal or exceed, as the case may be, a quantity, area or other limit specified in that Schedule in respect of the relevant class of development;

In accordance with Article 120 of the 2001 Planning and Development Regulations, as amended, a screening was undertaken to establish if the proposed development would be likely to have significant effects on the environment by virtue of its nature, size or location. As there was ‘realistic doubt’ with regard to the likelihood of significant effects on the environment arising from the proposed development, particularly noting its sensitive estuarine location and proximity to a Special Protection Area (SPA) and Special Area of Conservation (SAC), it was held that a Screening Determination would be required in accordance with Article 120(1)(ii) of the 2001 Regulations.

As the proposed Boyne Greenway Project is a Local Authority development, this preliminary examination was carried out in accordance with the provisions of Article 120 of the 2001 Planning and Development Regulations, as amended and having regard to:

➢ Schedule 7: Criteria for Determining whether development listed in Part 2 of Schedule 5 should be subject to an Environmental Impact Assessment, and

➢ Schedule 7A: Information to be provided by the Applicant for the purposes of Screening Sub-threshold development for Environmental Impact Assessment.

5.1 Sub-Threshold Screening Exercise

Where a proposed road development would be located on certain environmental sites (see Table 5-1), the road authority shall decide whether the proposed road development would be likely to have significant effects on the environment. The main issues, in the context of the possible need for EIAR of sub-threshold development, is whether or not such development is likely to have significant effects on the environment.
Table 5-1: Environmental Sites

<table>
<thead>
<tr>
<th>Sub-Threshold Road Development</th>
<th>Regulatory Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>If An Bord Pleanála considers that any road development proposed (other than development to which paragraph (a) applies) consisting of the construction of a proposed public road or the improvement of an existing public road would be likely to have significant effects on the environment it shall direct that the development be subject to an environmental impact assessment.</td>
<td>Section 50.—(1) (b) of the Roads Act, 1993, as amended</td>
</tr>
<tr>
<td>Where a road authority or, as the case may be, the Authority considers that a road development that it proposes (other than development to which paragraph (a) applies) consisting of the construction of a proposed public road or the improvement of an existing public road would be likely to have significant effects on the environment, it shall inform An Bord Pleanála in writing prior to making any application to the Bord for an approval referred to in section 51(1) in respect of the development.</td>
<td>Section 50.—(1) (c) of the Roads Act, 1993, as amended</td>
</tr>
<tr>
<td>Where a proposed road development (other than development to which mandatory requirement applies) consisting of the construction of a proposed public road or the improvement of an existing public road would be located on certain environmental sites, the road authority concerned shall decide whether the proposed road development would or would not be likely to have significant effects on the environment. The sites concerned are: (i) a European Site, meaning (ii) a candidate site of Community Importance, (iii) a site of Community Importance, (iv) a candidate Special Area of Conservation, (v) a Special Area of Conservation, (vi) a candidate Special Protection Area, or (vii) a Special Protection Area (viii) 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) (ix) Land designated as a refuge for fauna under section 17 of the Wildlife Act, 1976 (No. 39 of 1976)</td>
<td>Section 50.—(1) (d) of the Roads Act, 1993 as amended</td>
</tr>
</tbody>
</table>

5.1.1 Schedule 7 Criteria for Sub-Threshold Development Screening

Directive 2014/52/EU contains guidance for Member States in terms of deciding whether or not a development is likely to have “significant effects on the environment”. The guidance is provided by way of criteria set out in Annex III of the Directive. The criteria set out in Annex III are included in Schedule 7 of the Planning and Development Regulations, 2001 as amended, under the heading: Criteria for Determining whether development listed in Part 2 of Schedule 5 should be subject to an Environmental Impact Assessment, and are grouped under three headings and are outlined in Table 5-2 and are further discussed below.
Table 5-2 – Schedule 7 Screening Criteria for Determining Likely Significant Effects

**Characteristics of Proposed Development**
The characteristics of proposed development, in particular:

- (a) the size and design of the whole of the proposed development,
- (b) cumulation with other existing development and/or development the subject of a consent for proposed development for the purposes of section 172(1A)(b) of the Act and/or development of any development consent for the purposes of the Environmental Impact assessment Directive by or under any enactment,
- (c) the nature of any associated demolition works,
- (d) the use of natural resources, in particular land, soil water and biodiversity,
- (e) the production of waste,
- (f) pollution and nuisance;
- (g) the risk of major accidents, and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge; and
- (h) the risk to human health (for example, due to water contamination or air pollution)

**Location of Proposed Development**
The environmental sensitivity of geographical areas likely to be affected by the proposed development, with particular regard to:

- (a) the existing and approved land use,
- (b) the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and it’s underground;
- (c) the absorption capacity of the natural environment, paying particular attention to the following areas:
  - (i) wetlands, riparian areas, river mouths;
  - (ii) coastal zones and the marine environment;
  - (iii) mountain and forest areas,
  - (iv) nature reserves and parks,
  - (v) areas classified or protected under legislation, including Natura 2000 areas designated pursuant to the Habitats Directive and the Birds Directive; and
  - (vi) areas in which there has already been failure to meet the environmental quality standards laid down in legislation of the European Union and relevant to the project, or in which it is considered that there is such a failure;
  - (vii) densely populated areas,
  - (viii) landscapes and sites of historical, cultural or archaeological significance.

**Types and Characteristics of Potential Impacts**
The likely significant effects on the environment of proposed development in relation to criteria set out under paragraphs 1 and 2, with regard to the impact of the project on the factors specified in paragraph (b)(i)(l) to (V) of the definition of ‘environmental impact assessment report’ in section 171a of the Act, taking into account:

- (a) the magnitude and spatial extent of the impact (for example, geographical area and size of the population likely to be affected;
- (b) the nature of the impact,
- (c) the transboundary nature of the impact,
- (d) the intensity and complexity of the impact;
- (e) the probability of the impact;
- (f) the expected onset, duration, frequency and reversibility of the impact,
- (g) the cumulation of the impact with the impact of other existing and or development the subject of a consent for proposed development for the purposes of section 172(1A)(b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment, and
- (h) The possibility of effectively reducing the impact
5.1.1.1 Characteristics of the Proposed Development

(a) The size and design of the Proposed Development

The project design is set out in detail within the ‘Construction Methodology’ Document and in section 2 of this report. The proposed route starts in the eastern suburban area of Drogheda Town, travels through both rural and suburban areas and ends at the Tower / Crook Road Junction east of Mornington Village. The proposed Greenway development is approximately 5.9km in length and 3-4m in width. Approximately 4.1 km of the Greenway route is located directly alongside the R150 Regional Road and The R151 Regional Road, and 1.8km of the Greenway is away from the Regional Roads to ensure both a safe continuation of the route and the retention of the views across the Boyne Estuary. The proposed development will be a cycleway and pedestrian route (Greenway) and does not meet the mandatory threshold for EIAR.

The 4.1km section of the proposed greenway to be constructed alongside or very close to the road edge would consist of bituminous construction in accordance with the recommendations of the TII Design Manual for Roads and Bridges (TII DMRB). Vegetation on the verge would be cleared with limited excavation. The paved surface consist of imported granular subbase material on a geotextile separator and finished with approximately 100mm of bituminous surfacing. The width of the paved sections of the greenway will be limited to 4 metres and be bounded on either side with a kerb.

The 1.8 km section of the proposed greenway to be constructed away from the road is located within the Boyne Estuary SPA and Boyne Coast and Estuary SAC area. It is proposed that this section of the greenway will be elevated on a boardwalk construction to minimise impacts on habitat within the Boyne Estuary SPA and Boyne Coast and Estuary SAC areas and reduce the use of natural resources within the Boyne Estuary SPA and Boyne Coast and Estuary SAC areas (i.e., soil, land and habitat). The boardwalk will be limited to a maximum width of 4 metres be constructed using propriety recycled plastic elements. The boardwalk construction would be based on mini piles (i.e., 100mm x 100mm) that will be piled into the underlying ground (depth will depend on geological conditions to provide a solid base). The recycled plastics have been used in previous Greenway developments and are robust and long-lasting.

It is envisaged that the project will include the following general works:-

- Removal of some verge vegetation from the road verges to allow for the greenway along the edges of the Regional Roads
- Surface improvement - consistent bound surface with tarmacadam surface finish. The width of the Greenway will be circa 4m.
- Bridge / culvert installation at Mornington Bridge and at existing surface water drain
- Drainage works (provision of drainage channels etc.)
- Crossing point works
- Boundary treatment
- Signage
- Installing Mini Piles in Mudflat and flood plain areas to allow for the installation of a raised boardwalk.
(b) **Cumulation with other existing and/or approved projects**

The proposed development will be a low energy and low impact development that would not be considered to have significant impacts even in cumulation with other developments in the area (e.g., schools, residential properties and Regional Roads) as long as the mitigation measures outlined in the EcIA, NIS and Archaeological and Built Environment Assessment reports are implemented in the construction and operational phases.

(c) **Nature of any associated demolition works**

There are no demolition works associated with the proposed greenway development.

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

The use of natural resources for the construction of the greenway would involve the shallow excavation of soil along the verges of the Regional Roads for the bound surface sections and would also involve the loss of vegetation along the verges of the Regional Roads. An Ecological Impact Assessment (EcIA) of the preferred greenway route, which will be submitted with the application indicated the loss of vegetation loss to the proposed development and the mitigation measures that would be put in place to minimise impacts (section 4.1.2.1 of EcIA). There may also be the loss of trees and hedging as part of the proposed development. A detailed Arboricultural Assessment, Arboricultural Impact and Tree Protection Strategy Report of the preferred greenway route was also completed and has outlined the trees that could be impacted and removed as part of the proposed development and has put forward mitigation measures (Section 9) and a tree protection strategy (Section 10) to minimise potential impacts. There would also be a requirement for imported base material and bitumen for the bound greenway sections. Some natural resources will be required for the construction, such as crushed stone, however the reuse of excavated soil will reduce the need to import soil. There is no perceived requirement for water abstraction for the proposed development.

The installation of a raised boardwalk on piles (100mm x 100mm) would reduce any potential loss of biodiversity within the SAC/SPA areas. The boardwalk will be raised above ground to preserve grasses and vegetation and mudflat areas and will result only in a loss of a negligible amount of habitat where the piles are installed. These would be completed under strict supervision of an ecological clerk of works with the authorisation to stop works as outlined in section 5.1.2 of the EcIA.

(e) **The production of waste**

There will be a small volume of waste material from the construction of the proposed Greenway. All waste produced during the construction phase will be stored appropriately before being moved from site by a licenced contractor for recycling, or disposal depending on the type of waste.

(f) **Pollution and nuisance**

The most sensitive environmental receptors within the study area are the Boyne Coast and Estuary SAC and the Boyne Estuary SPA. 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. Disruption to existing traffic and to local land owners/tenants and property owners/tenants can be expected as may constitute a degree of nuisance during the construction stage.
(g) **Risk of Major Accidents**

The risk of accidents associated with the development is limited mainly to potential hydrocarbon spillages or an uncontrolled release of sediment during construction. No other risks of major accidents and/or disasters which are relevant to the project concerned, including those caused by climate change have been identified. As part of this the potential for landslides, flood risk and wildfires has been taken into account. A flood risk assessment has been completed for the proposed greenway development (and will be submitted with the planning application) and indicates that the proposed development, although within a flood zone for short sections, will be constructed at an elevation above the flood zone (i.e., raised boardwalk) in these areas.

No hazardous activities are proposed which would pose a significant risk to habitats or the environment during construction. Any works that are located within sensitive areas (SAC/SPA) would be completed under strict supervision of an ecological overseer as outlined in 5.1.2 of the EcIA to mitigate any significant impacts. During the operational phase it is anticipated that the risk of road traffic accidents and associated pollution risks will be reduced due to the provision of an off-road transport corridor. 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.

(h) **Risk to Human Health**

Any drinking water abstraction points serving one-off developments in the area should not be negatively impacted if the CIRIA Guideline Document C532 *Control of Water Pollution from Construction Sites* and C648 *Control of water pollution from linear construction projects* are followed.

Positive impacts on human health are likely to arise at operational stage through the provision and use of an off-road transport and amenity corridor. Standard health and safety precautions will be required at design, construction and operation stages.

5.1.1.2 Location of Proposed Development

(a) **The existing and approved land use.**

Land uses along the length of the proposed Greenway development comprise mainly of grass verge along the northern side of the R150 and R151 Regional Roads (i.e., approximately 4.1 km in length with a limited section (i.e., 1.8 km) of the Greenway is away from the Regional Road and within the southern boundary of the Boyne Coast and Estuary SAC and the Boyne Estuary SPA. There are areas of coastal plain bounded to the north by the Boyne River estuary and the east by the Irish Sea. It is characterised by scrubby rolling lowland near the coast with the estuary, back from the coast, being a steep sided river plain bound by attractive mixed woodland. Built development is concentrated within Mornington and Donacarney. There is also significant ribbon development along the R150 and R151 regional roads as well as along the local road network. A significant amount of land to the south of the R150 and R151 is zoned for future housing.
(b) The relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground.

The proposed development is adjacent to, and close to the existing Regional Roads for large sections and would only require limited shallow excavation that would be generally limited to the width of the greenway trail only (i.e., approximately 4.5m to allow for the 4 m wide greenway surface with minor allowance either side for construction works purposes). It is intended that any excavated soils would be reused at other sections of the development were possible and that an ecological clerk of works would ensure that the route would not remove or disturb natural resources that would impact the abundance, quality and regenerative capacity of natural resources in the area. Due to the low impact nature of the proposed development once construction has been completed it is not considered that the proposed development would any significant impact.

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

(i) wetlands, riparian areas, river mouths;

The Boyne Coast and Estuary SAC and the Boyne Estuary SPA runs adjacent with the route of the proposed Greenway. There are salt marshland habitats located within the area of the River Boyne. Watercourses that can be sensitive to pollution, particularly to the potential increased levels of suspended solids during the construction stage. Suspended solids (silt) affects aquatic life particularly larger animals such as fish, most critically when it settles in spawning areas. There is also the potential for the disturbance of wintering birds during feeding along the foreshore and mudflats and ground roosting above the high tide mark. The main impacts include:

- Physical obstructions to upstream and downstream migration both during and after construction;
- Impacts on wintering birds feeding and roosting areas during construction and operational phases. Construction works should be completed in late Spring and Summer to avoid impacts on wintering birds using the Boyne valley SAC area.
- Disturbance of spawning beds during construction – care must be taken to ensure that no spawning grounds are disturbed and that works are not completed during spawning (i.e., typically between November and January).
- Potential impacts on dolphins and porpoises from impact percussion vibration during piling activities; 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 and are included in Sections 5.1.2 through 5.1.6 of the EcIA accompanying the planning application.

(ii) coastal zones and the marine environment;

The proposed greenway development will end at the junction of Tower Road / Crook Road east of Mornington and therefore will not extend into the coastal zone of Mornington Beach and will not have any direct impact on coastal zones and the marine environment. There may be activities related to construction works along the estuary that could result in indirect impacts, including; siltation from sediment loss during excavation, fuel leaks and potential piling vibration impacts on marine fauna (e.g., dolphins).
It is envisioned that there will be no significant impact on coastal zones and the marine environment during construction works if the mitigation measures outlined in section 5 of the EcIA and section 6.2.3 of the NIS are implemented.

(i) mountain and forest areas;
There are no mountain ranges within the study area. Furthermore there are no forest areas along the proposed route.

(iv) nature reserves and parks;
There are no nature reserves or parks affected by the proposed Greenway.

(v) areas classified or protected under legislation; including Natura 2000 areas designated pursuant to the Habitats Directive and Birds Directive;
The Boyne Coast and Estuary SAC and the Boyne Estuary SPA are located adjacent to the proposed Greenway location for large sections. An Ecological Impact Assessment (EcIA) and Natura Impact Statement (NIS) was completed as part of the design phase of the proposed greenway and will accompany the planning application. Within the EcIA and NIS documents are a number of suggested design and control measures that would mitigate potential impacts. Section 6 of the EcIA indicates that the residual impacts from the construction and operation of the proposed Greenway would not be significant. Similarly, the conclusions in section 7 of the NIS report also indicate that the proposed development would not have significant impacts on any of the European sites if mitigation measures were employed as part of the construction and operational phases.

(vi) areas in which there has already been a failure to meet the environmental quality standards, laid down in legislation of the European Union and relevant to the project, or in which it is considered that there is such a failure;
From the available information there are no known areas on the proposed development in which the environmental quality standards have already been exceeded. All relevant environmental quality standards must be adhered to during construction works.

(vii) densely populated areas;
The proposed route is located on the eastern suburbs of Drogheda town for the initial section of the proposed Greenway (i.e., Drogheda Railway Station). After the FLO Gas yard travelling east towards Mornington, the area becomes more rural in nature and dwellings are sparsely located along route for the rest of its duration. These residential areas will benefit from a Greenway by providing a safe cycleway and pedestrian link between Mornington and Drogheda town that can be used by cyclist commuters and recreational users. The greenway would also provide connections to schools along the route (i.e., Le Cheile Educate Together, Bhradain Feasa Primary School and Drogheda Grammar Schools). None of the sections of the greenway are located within densely populated areas.

(viii) landscapes and sites of historical, cultural or archaeological significance.
The nature of the proposed Greenway along the Estuary foreshore, with areas of hardcore pathway, piling and boardwalk, is unlikely to have any significant impact on the landscape of the area. During the construction phase the presence of plant and machinery will detract from certain views. However this is considered to be only a temporary impact which is easily offset by the benefits accrued at the operational stage.
As part of the planning application works an Archaeological and Built Heritage Assessment was completed and shows that the area is relatively rich in cultural heritage possessing a number of recorded monuments and protected and proposed protected structures. However, it is considered that the Greenway will have no direct negative impact on any monuments or structures. The proposed project, with the correct archaeological and architectural heritage supervision during construction, would serve to enhance heritage sites through improved access and interpretation. The identification of all heritage features and appropriate mitigation measures are included in section 5 and Appendix 7 of the archaeological and built heritage assessment report that will accompany the Planning submission.

5.1.1.3 Types and Characteristics of Potential Impacts

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

The proposed Greenway consists of a 3-4m wide, paved and boardwalk corridor of approximately 5.9km in length. With approximately 4.1 km of the route directly alongside the Regional Road, and 1.8km away from the route of the road to ensure both a safe continuation of the route and the retention of the views across the Boyne Estuary. The preparation of an Ecological Impact Assessment and Natura Impact Statement as part of the planning process have addressed the potential impacts from the construction and operation of the greenway and provide mitigation measures to ensure that there are no significant impacts from the proposed development.

(b) the nature of the impact

Human Beings, Population and Human Health - Temporary construction stage related nuisance associated with traffic disruption and noise. On completion, development is likely to have positive implications for the population of the wider area (driver for employment). Facilitation of walking and cycling is likely to impact positively on human health.

Biodiversity. Flora and Fauna & Water - The route of the proposed greenway would result in the loss of some habitat due to shallow excavation works required for the construction of the bound surface sections of the greenway within the SAC/SPA areas. There may also be some initial impact with the installation of the mini piles for the construction of the raised boardwalk sections of the greenway and if trees need to be removed there may be an impact on bat roosts in the area. Water impacts may come from discharges of sediment and anthropogenic inputs to the River Boyne and Stagrennan Stream during construction.

Noise Impacts - The works associated with the construction of the proposed development (i.e., mechanical excavation and mini piling works) would be the main noise impacts. These would be mainly during the construction phase. During the operational phase there may be disruption related to the use of the greenway and dogs barking while being walked.

Landscape – The main sections of the greenway would be immediately beside or close to the existing Regional Roads and would therefore not have any visual or landscape impact in the area. Where the greenway bitumen route diverts away from the Road it is understood that the area around the trail would be allowed to grow naturally so that the trail would blend into the environment.
The boardwalk sections would have some initial impact but would consist of natural colours so as to blend into the existing area as much as possible.

Archaeology and Cultural Heritage - The area is relatively rich in cultural heritage possessing a number of recorded monuments and protected and proposed protected structures.

*(c) the transboundary nature of the impact*

There are no identified transboundary impacts associated with the proposed Greenway development.

*(d) the intensity and complexity of the impact*

Air Quality and Climate

The Drogheda to Mornington Greenway involves the construction of a high quality cycling and pedestrian facility along the length of the bank of the River Boyne Estuary to Mornington Beach. The objective of the project is to provide a facility for cyclists and pedestrians thus in its operational phase it will have no significant impact on air quality and climate. The construction phase of the development aims to provide a series of bound surface and boardwalk 4m in width for approximately 5.9km. It is considered that the level of construction traffic required for a project of this scale will have no impact on the local air quality or climate; neither will a construction project of this scale result in any significant generation of dust. The operation of the Greenway will have no impact on Air Quality in the area as it will be used by cyclists and pedestrians only.

Noise and Vibration

The proposed greenway will largely be active in daytime hours only. During operation there will be an increase in the number of cyclists or pedestrians in the area but these are expected to have a negligible impact on noise or vibration in the local environment. The proposed greenway will be adjacent to the R150 road for large sections and it is not anticipated that the operation of the Greenway would significantly increase the baseline noise and vibration levels currently experienced along the proposed route.

All construction 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 aim to control levels of noise and vibration during the construction phase. It is considered that the level of construction traffic required for a project of this scale will not result in the creation of any significant levels of noise or vibration. Furthermore any construction operations, such as piling, which have the potential to cause noise and vibration will not be carried out at times which are considered to be noise sensitive such as early in the morning or late in the evening or during seasons where wintering birds are migrating to the area. It may also be prudent to consider potential impacts on dolphins and porpoises that may be affected by vibration from piling works. Mitigation measures proposed to reduce noise and vibration impacts on wildlife and local residents is included in section 5.1.2 (construction phase) and 5.1.5 (operational phase) of the EcIA document prepared as part of the planning submission. There are also suggested measures to reduce potential noise impact included in section 6.2.3.1 of the NIS report included as part of the planning submission. These measures will mitigate the potential for significant impacts from the proposed development on wildlife and local residents.
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 proposed Greenway scheme.

Hydrology
The principal potential impacts to surface water are associated with discharges to the receiving watercourses. The River Boyne runs adjacent to the proposed development route and the Stagrennan Stream. During construction there is the potential for pollution of the Boyne Estuary and Stagrennan Stream 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). If appropriate controls are put in place it is anticipated that there will be no impact to hydrology or water quality during the construction or operational phase. The greenway will not create any traffic pollutants impacting on the water system.

Hydrogeology
Hydro-geological assessment addresses the potential impact of the proposed project on groundwater features and groundwater flow regime. As the Greenway will be mainly located on the surface with minimal excavation works (i.e., only clearing of vegetation and levelling of path) 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 at these locations. Where piling works for boardwalk areas along the foreshore area required, any impact would not be expected to impact on the local hydrogeology but that may be dependent on the depth of piling required during construction.

Ecology (Flora and Fauna)
The route lies alongside the Boyne Coast and Estuary SAC and the Boyne Estuary SPA, which are areas of ecological significance. As part of the planning application an EcIA, Arboricultural Assessment, Arboricultural Impact and Tree Protection Strategy Report (Arboricultural Assessment) and NIS were prepared for the proposed development. The reports put forward a number of mitigation measures to protect ecological receptors and if these are employed the EcIA, Arboricultural Assessment and NIS documents conclude that there would not be a significant impact from the proposed development.

Archaeology, Architecture and Cultural Heritage
The area is relatively rich in cultural heritage possessing a number of recorded monuments and protected and proposed protected structures. However, it is considered that the Greenway project will have no direct negative impact on any monuments or structures. The proposed project, with the correct archaeological and architectural heritage supervision, will serve to enhance heritage sites through improved access and interpretation. Identification of all heritage features and appropriate mitigation measures (e.g., archaeological monitoring, in particular along the area close to Mornington Church and Mornington Bridge) should be included as part of any planning submission. The conclusions of the Archaeological and Built Heritage Assessment completed as part of the planning application indicate that the proposed greenway is considered to be low impact in nature, due to the limited requirement for groundworks. The implementation of the mitigation strategy outlined in section 5 of the Archaeological Assessment would further ensure that impacts were minimised.
**Landscape and Visual Amenity**
The landscape character of the proposed development is defined as coastal plain bounded to the north by the Boyne River estuary and the east by the Irish Sea. It is characterised by scrubby rolling lowland near the coast with the estuary, back from the coast, being a steep sided river plain bound by attractive mixed woodland.

The nature of the proposed Greenway along the Estuary foreshore, with potential areas of bitumen pathway, piling and boardwalk, is unlikely to have any significant impact on the landscape of the area. During the construction phase the presence of plant and machinery will detract from certain views. However this is considered to be only a temporary impact which is easily offset by the benefits accrued at the operational phase.

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 for users.

**Socio-economic**
The operation of the Greenway would have beneficial impacts as it will attract people to the area thereby having a knock-on economic effect with respect to hotels, guesthouses, B+Bs, recreational tourism, restaurants, etc. Similarly during construction the project the employment of construction workers would benefit the local economy.

**Resource and Waste Management**
The main phase of the Greenway proposal with regard to resource and waste management is during construction. The Greenway is a mix of vegetation removal and levelling of natural benches along the edge of the Estuary (i.e., between the estuary and the R150 Road) and may require some minor cut and fill work. It would be anticipated that the removed vegetation would be transferred to a green waste composting facility for re-use and any soils would be reused along the edges of the proposed development. Areas where boardwalk type structures are constructed will require little or no cut and fill work and would not be expected to produce a large volume of waste. It is considered that there will not be a significant amount of waste generated from the construction of the scheme and efforts should be made to reuse material on site where possible thus minimising waste production.

(e) **Probability of Impact**
A number of mitigation measures have been put forward in the EcIA, NIS and Archaeological Impact Assessment reports prepared as part of the planning application. If these mitigation and monitoring measures are put in place during the construction phase (e.g., protection of SAC/SPA receptors from siltation or noise/vibration impacts) and operational phase (e.g., solids footings on certain sections of the boardwalk around freshwater confluences to the estuary where wintering birds may feed) of the proposed Greenway development, then the probability of impacts are considered to not be significant.

(f) **The expected onset, duration, frequency and reversibility of the impact**
Any potential impacts during the proposed Greenway development will be mainly associated with the construction phase of the proposal. These impacts would be expected to be temporary, reversible and one-off.
(g) the cumulation of the impact with the impact of other existing and or development the subject of a consent for proposed development for the purposes of section 172(1A)(b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment

Other projects and activities in the area in addition to climate change related weather patterns have the potential to impact on water quality downstream of the development site. The proposed development will be a low energy and low impact development that would not be considered to have significant impacts even in cumulation with other developments in the area (e.g., schools, residential properties and Regional Roads) as long as the mitigation measures outlined in the EcIA, NIS and Archaeological and Built Environment Assessment reports are implemented in the construction and operational phases.

(h) The possibility of effectively reducing the impact

Within the EcIA and NIS reports prepared for the proposed development there are a number of mitigation measures put forward to minimise impacts on the environment and ecology (i.e., sections 5 of EcIA and 6.2.3 of NIS) and these would also reduce impacts on people and water resources in the area. Standard traffic and construction management would effectively reduce any negative impacts relate to traffic impacts during the construction phase.

The implementation of the mitigation strategy outlined in section 5 of the Archaeological and Built Environment Assessment would ensure that impacts to cultural heritage features were minimised.

(i) The interrelationship between the environmental topics

The mitigation measures put forward in the EcIA, NIS and Archaeological and Built Environment Assessment reports would effectively reduce impact interrelationships.

5.1.2 Schedule 7A Information Required for Screening Sub-Threshold Developments

Directive 2014/52/EU contains guidance for Member States in terms of the information that should provided by developers and applicants for the purposes of screening sub-threshold developments for EIAR. The guidance is provided by way of criteria set out in Annex III of the Directive and are included in Schedule 7A of the Planning and Development Regulations, 2001 as amended, under the heading: ‘Information to be provided by the applicant or developer for the purposes of screening sub-threshold development for Environmental Impact assessment’ and are grouped under four headings and are outlined in Table 5-3.
Table 5-3 – Schedule 7A Screening Information

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

When assessing the proposed development with relation to Schedule 7A criteria it was noted that all aspects were already covered in the information provided under Schedule 7 and as such no additional assessment under Schedule 7A was considered necessary.
6.0 SCREENING CONCLUSIONS & RECOMMENDATIONS

The screening for the proposed Boyne Greenway between Drogheda and Mornington indicated that it is below the mandatory thresholds for EIAR but is located in an environmentally sensitive area, with biodiversity, water and cultural heritage interests.

It is anticipated that the Greenway would have negligible impact during the operational phase and it is considered that potential negative environmental effects arising from the construction phase would be mainly minor and short term. The sub-threshold screening completed indicated that if the mitigation and control measures put forward in the EcIA, NIS, the Archeological and Built Environment Assessment report and the Arboricultural Assessment, Arboricultural Impact and Tree Protection Strategy Report are implemented then the proposed development would not have a significant environmental impact.

Based on the findings of the screening assessment it is not considered that a full EIAR is required for the proposed Greenway development.