



DBFL CONSULTING ENGINEERS

Constraints & Preliminary Design Report

THE BOYNE GREENWAY

Drogheda to Mornington




comhairle chontae na mí
meath county council



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THE BOYNE GREENWAY

INTRODUCTION




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1.0 INTRODUCTION

1.1 BACKGROUND

- 1.1.1 Meath County Council appointed DBFL Consulting Engineers (DBFL) to provide consulting engineering services for the Boyne Greenway - Drogheda to Mornington Scheme. This report documents the constraints and preliminary design for the proposed Boyne Greenway - Drogheda to Mornington Scheme.

1.2 STRUCTURE OF THE REPORT

- 1.2.1 The following outlines the structure of the Constraints & Preliminary Design report:
- Section 1 – Subsequent parts of this section provides an introduction to the Boyne Greenway and the report structure.
 - Section 2 – Outlines the relevant transportation policies that influence the design of the Boyne Greenway.
 - Section 3 – Provides information on the proposed scheme and the overall objectives of the Boyne Greenway.
 - Section 4 – Describes the Primary Design of the route and details of the scheme construction types, bridge types, junction layouts and route alignment.
 - Section 5 – Outlines the Environmental Constraints along the scheme, summarising findings from the Natura Impact Statement, Ecological Impact Assessment, Flood Risk Assessment and Tree Survey.
 - Section 6 – Outlines the Conservation, Traffic and Planning Constraints along the scheme.
 - Section 7 – Summaries the screening process of assessing the requirement of the project to be subject to Environment Impact Assessment Report (EIAR).
 - Section 8 – Summaries the Non-Statutory Public Consultation process and outlines the main issues raised in the submissions and amendments to the scheme preliminary design following the consultation.
 - Section 9 – Provides an overall summary of the proposed scheme.



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THE BOYNE GREENWAY POLICY CONTEXT




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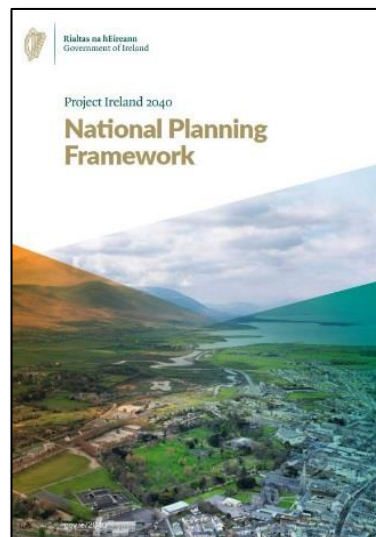


2.0 POLICY CONTEXT

2.1 POLICY BACKGROUND – NATIONAL POLICY

National Planning Framework 2040

2.1.1 The National Planning Framework 2040 (NPF) was published in February 2018 and now sets the strategic vision for the spatial development of Ireland for the period from 2018-2040. On foot of the completion of the NPF the Eastern and Midlands Regional Assembly has prepared their own strategy in accordance with the Framework set by the NPF. This was adopted in June 2019 and is known as a Regional Spatial and Economic Strategy.



2.1.2 According to the NPF, the National Strategic Outcomes (including Compact Growth and Sustainable Mobility) are supported by Strategic Investment Priorities where Housing and Sustainable Urban Development and National Road Networks are the first and second priorities (see **Figure 2.1** below). These concepts are central to the proposed scheme.



Figure 2.1: Strategic Investment Priorities for Ireland according to the NPF
(Source: www.NPF.ie)

2.1.3 Section 1.3 of the NPF describes these two **National Strategic Outcomes** as follows:

2.1.4 **Enhanced Amenities and Heritage:** *This will ensure that our cities, towns and villages are attractive and can offer a good quality of life. It will require investment in well-designed public realm, which includes public spaces, parks and streets, as well as recreational infrastructure. It also includes amenities in rural areas, such as national and forest parks, activity-based tourism and trails such as greenways, blueways and peatways. This is linked to and must integrate with our built, cultural and natural heritage, which has intrinsic value in defining the character of urban and rural areas and adding to their attractiveness and sense of place.*

2.1.5 Key future planning and development and place-making policy priorities for the Eastern and Midland Region include:

Building on the progress made in developing an integrated network of greenways, blueways and peatways, that will support the diversification of rural and regional economies and promote more sustainable forms of travel and activity based recreation utilising canal and former rail and other routes.

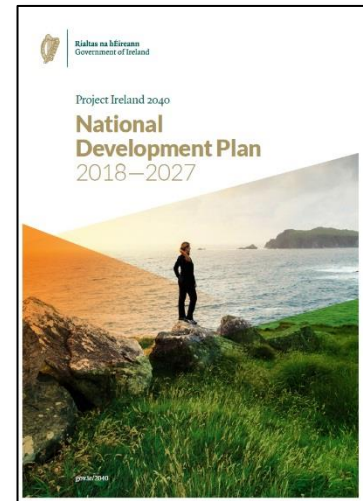
2.1.6 In terms of healthy communities, the new NPF outlines that: *Communities that are designed in a way that supports physical activity, e.g. generously sized footpaths, safe cycle lanes, safe attractive stairways and accessible recreation areas, all encourage residents to make healthy choices and live healthier lives. Countries with extensive cycle infrastructure report higher levels of cycling and lower rates of obesity. Healthy places in turn create economic value by appealing to a skilled workforce and attracting innovative companies.*

2.1.7 Section 9.0 of the NPF highlights the commitment to **Environmental and Sustainability Goals**. **National Policy Objective 52** encapsulates this stating:

“The planning system will be responsive to our national environmental challenges and ensure that development occurs within environmental limits, having regard to the requirements of all relevant environmental legislation and the sustainable management of our natural capital”.

National Development Plan 2018-2027

- 2.1.8 The National Development Plan sets out the investment priorities that will underpin the successful implementation of the new National Planning Framework (NPF). This will guide national, regional and local planning and investment decisions in Ireland over the next two decades to cater for an expected population increase of over 1 million people.
- 2.1.9 The National Development Plan demonstrates the Government's commitment to meeting Ireland's infrastructure and investment needs over the next ten years, through a total investment estimated at €116 billion over the period.
- 2.1.10 The Rural Regeneration and Development Fund proposed the Recreation Infrastructure Scheme, which supports the development and necessary maintenance, enhancement or promotion of recreational infrastructure throughout Ireland in light of the huge potential to develop the economic value of Activity and Recreational Tourism by Local Authorities, State Agencies and communities. Initiatives funded covered a broad spectrum and range from walking trails to greenways and blueways.
- 2.1.11 Investment in activity based tourism, including greenways, will be a priority over the period of the National Development Plan.
- 2.1.12 **The National Policy Objective 22**, outlines that Ireland 2040 will 'Facilitate tourism development and in particular a National Greenways, Blueways and Peatways Strategy, which prioritises projects on the basis of achieving maximum impact and connectivity at national and regional level'.



Strategy for The Future Development of National and Regional Greenways

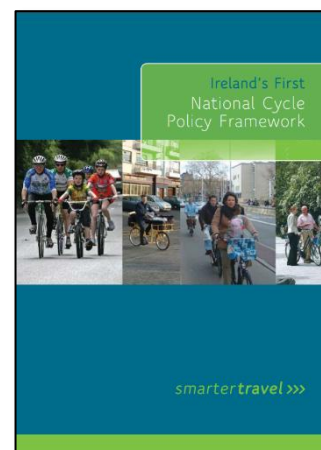
2.1.13 The Strategy sets out how National and Regional Greenways in Ireland should be planned, suitable locations and constructed to an appropriate standard. It also aims to increase the number and geographical spread of Greenways and quality around the country.

2.1.14 The Strategy sets out the importance of early and widespread consultation with landowners and communities along and adjacent to proposed Greenway routes. The Strategy also 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. The Strategy also sets out the importance of access to Scenery and things to See and Do in order to attract tourists.



National Cycle Policy Framework

2.1.15 The mission of the National Cycle Policy Framework is to create a strong cycling culture in Ireland. The vision is that all cities, towns, villages and rural areas will be bicycle friendly. Cycling will be a normal way to get about, especially for short trips. Cycling contributes to improved quality of life and quality of the public realm, a stronger economy and business environment, and an enhanced environment. The NCPF outlines 19 high level objectives and details the 109 individual but integrated actions, which aim to ensure that a strong cycling culture is developed in Ireland so that by 2020 10% of all journeys will be by bike. They are listed as follows:

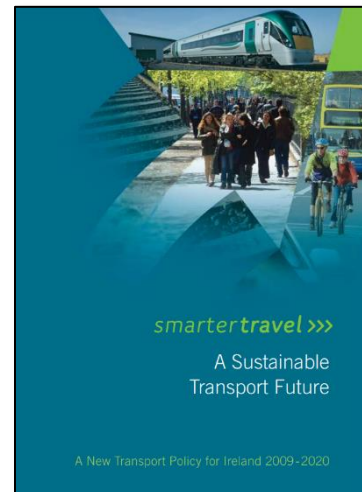


1. *Support the planning, development and design of towns and cities in a cycling and pedestrian friendly way.*
2. *Ensure that the urban road infrastructure (with the exception of motorways) is designed / retrofitted so as to be cyclist-friendly and that traffic management measures are also cyclist friendly.*

- 3. Provide designated rural cycle networks especially for visitors and recreational cycling.*
- 4. Provide cycling-friendly routes to all schools, adequate cycling parking facilities within schools, and cycling training to all school pupils.*
- 5. Ensure that all of the surfaces used by cyclists are maintained to a high standard and are well lit.*
- 6. Ensure that all cycling networks - both urban and rural - are signposted to an agreed standard.*
- 7. Provide secure parking for bikes.*
- 8. Ensure proper integration between cycling and public transport.*
- 9. Provide public bikes in cities.*
- 10. Improve the image of cycling and promote cycling using "soft interventions" such as promotional campaigns, events etc.*
- 11. Improve cyclists' cycling standards and behaviour on the roads.*
- 12. Improve driver education and driving standards so that there is a greater appreciation for the safety needs of cyclists.*
- 13. Support the provision of fiscal incentives to cycle.*
- 14. Provide appropriate levels of, and timely, financial resources towards implementing the NCPF.*
- 15. Introduce changes to legislation to improve cyclist safety.*
- 16. Improve enforcement of traffic laws to enhance cyclist safety and respect for cyclists.*
- 17. Develop a structure that can coordinate the implementation of activities across the many Government Departments, Agencies and NGO's.*

Smarter Travel – A Sustainable Transport Future

2.1.16 Smarter Travel was published in 2009 by the Department of Transport which represents the national policy documentation outlining a broad vision for the future and establishes objectives and targets for transport. The document examines past trends in population and economic growth and transport concluding that these trends are unsustainable into the future.



2.1.17 In order to address the unsustainable nature of current travel behaviour, Smarter Travel sets down a number of key goals and targets for 2020 - including:

- Total vehicle km travelled by car will not significantly increase;
- Work-related commuting by car will be reduced from 65% to 45%;
- 10% of all trips will be by cycling;
- The efficiency of the transport system will be significantly improved.

2.1.18 The document recognises that these are ambitious targets, and outlines a suite of 49 actions required to achieve these targets – summarised under the following four main headings:

- Actions aimed at reducing distances travelled by car and the use of fiscal measures to discourage use of the car;
- Actions aimed at ensuring that alternatives to the car are more widely available;
- Actions aimed at improving fuel efficiency of motorised travel; and
- Actions aimed at strengthening institutional arrangements to deliver the targets.

Rural Cycleway Design (Offline) TII Publications DN-GEO-03047 (2017)

- 2.1.19 The National Cycle Policy Framework 2009-2020 (NCPF) identified the requirement to develop and implement the National Cycle Network to promote cycling as a transport mode, leisure activity and tourist activity in Ireland. Transport Infrastructure Ireland published the National Cycle Network Scoping Study in August 2010, which identified a core network of corridors between the larger towns and cities, and through the regions of greatest interest for tourist and recreational cycling. This Design Standard will assist in the delivery of the National Cycle Network and will ensure a consistent approach is applied to the design of cycle schemes in rural areas.
- 2.1.20 In order to develop appropriate design standards for rural cycling facilities, there are a number of core design principles that need to be implemented. The principles include Coherence, Convenience, Directness, Safety, Comfort, Attractiveness and Access.



National Cycle Manual 2011

- 2.1.21 The National Cycle Manual was published by the National Transport Authority in 2011.
- 2.1.22 It embraces the Principles of Sustainable Safety which aims to create a safe traffic environment for all road users including cyclists.
- 2.1.23 The Manual challenges planners and engineers to incorporate cycling within transport networks more proactively than before.
- 2.1.24 It identifies 5 primary needs of cyclists which should be considered when any infrastructure incorporating cyclists is being developed, these are:
- Road Safety;
 - Coherence;
 - Directness;



- Attractiveness; and
- Comfort.

2.2 POLICY BACKGROUND – REGIONAL POLICY

Transport Strategy for the Greater Dublin Area 2016-2035

2.2.1 The Transport Strategy for the Greater Dublin Area 2016-2035 as compiled by the National Transport Authority sets out the Strategic Transport Plan for the Greater Dublin Area for the period up to 2035.

2.2.2 The purpose of the NTA's Strategy is to:

"provide a framework for the planning and delivery of transport infrastructure and services in the Greater Dublin Area (GDA) over the next two decades. It also provides a transport planning policy around which other agencies involved in land use planning, environmental protection, and delivery of other infrastructure such as housing, water and power, can align their investment priorities"



2.2.3 The Strategy sets out a clear hierarchy of transport users, commencing with the sustainable modes of travel such as walking, cycling and public transport users at the very top of the hierarchy. The Strategy adopts the general principle that these users should have their safety and convenience needs considered first and that the hierarchy is applied where a large share of travel is (or could be) made by walking, cycling and public transport.

2.2.4 In addition to guiding the development of specific Strategy measures, the NTA encourages that the "transport user hierarchy should guide engineers, planners and urban designers on the order in which the needs of transport users should be considered in designing new developments or traffic schemes in the Greater Dublin Area."

Greater Dublin Area Cycle Network Plan

2.2.5 In August 2013, the NTA published the Greater Dublin Area Cycle Network Plan. Following a period of consultation with the public and various stakeholders it was officially adopted and published in early 2014. The plan undertook a review of

existing cycle facilities in the GDA and sets out the strategy for the development of an integrated cycle network for the future.

- 2.2.6 The Greater Dublin Area Cycle Network Plan proposes to expand the urban cycle network to over 1,485 kilometres in length and will provide over 1,300 kilometres of new connections between towns in the rural areas of the GDA. The network is intended to provide a quality of service sufficient to attract new cyclists, as well as catering for the increasing numbers of existing cyclists.
- 2.2.7 The plan proposes a number of Greenways – fully segregated off-road routes along canals, rivers and disused railway lines. In the case of the built-up area, these Greenways will also perform a vital commuter function and will effectively form a significant part of the primary network.
- 2.2.8 The full details of the proposed cycle network across the region are set out in the Greater Dublin Area Cycle Network Plan. As part of the Strategy it is intended to implement this network in full, delivering safe, high quality cycle facilities, which will be designed and constructed in accordance with the principles set out in the National Cycle Manual.
- 2.2.9 The proposed Boyne Greenway; Drogheda to Mornington Greenway is shown in **Figure 2.2** below. Proposed Cycle Network East Meath Sheet RN2.

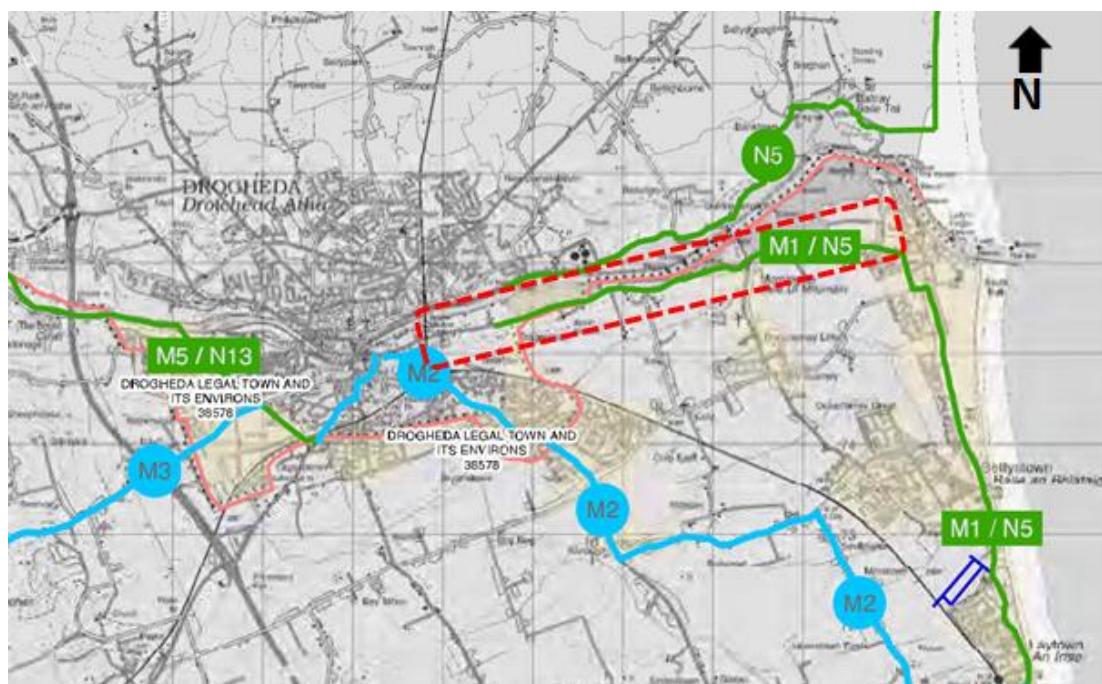


Figure 2.2 – Proposed Inter-Urban Cycle Routes East Meath (Source: GDA Cycle Network Plan 2013)

2.3 POLICY BACKGROUND – LOCAL POLICY

MEATH COUNTY DEVELOPMENT PLAN – 2013-2019

2.3.1 The aim of the Meath County Development Plan 2013-2019 is to advance the present-day evolution of the county and to create a framework for the coordinated and sustainable economic, social, cultural and environmental development of County Meath.

2.3.2 Some relevant objectives of Meath County Council:

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

2.3.3 Some relevant policies of Meath County Council:

- *To co-operate with the NTA on the development of a cycle network for the Greater Dublin Area and to promote, enhance and provide the development of cycling and walking facilities in the County in accordance with relevant national policy and guidelines.*
- *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.*

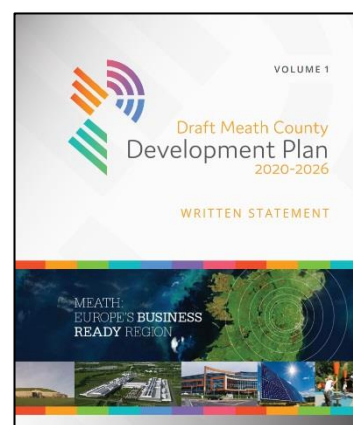
- *To encourage, where appropriate, the incorporation of safe and efficient cycleways, accessible footpaths and pedestrian routes into the design schemes for town centres/neighbourhood centres, residential, educational, employment, recreational developments and other uses.*
- *To improve facilities for pedestrians and access facilities for people with special mobility needs in line with the aims of the European Charter of Pedestrian Rights.*
- *To prioritise the movement of pedestrians and cyclists in proximity to public transport nodes.*
- *To ensure, where possible, that cycleways and footpaths are effectively delineated from major vehicular carriageways.*

2.3.4 The Development Plan states that an essential element of any integrated transport system is to provide for the needs of cyclists and pedestrians. The provision of safer facilities for pedestrians is identified as a key action in the Government's 'Sustainable Development – A Strategy for Ireland'.

Draft Meath County Development Plan – 2020-2026

2.3.5 The Draft Meath County Development Plan 2020-2026 sets out the policies and objectives and the overall strategy for the development of the County over the plan period 2020-2026.

2.3.6 This Plan provides a positive vision for Meath which will enable the county to continue to make a significant contribution to national economic recovery by promoting sustainable development and facilitating stable economic growth thus delivering long term benefits for the citizens of the county.



2.3.7 Some relevant objectives of Meath County Development Plan:

- *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.*

- *To explore the provision of sustainable medium and long distance walking routes.*
- *To implement, in conjunction with the NTA, the recommendations of the NTA strategy with regard to walking and cycling infrastructure*

2.3.8 Some relevant policies of Meath County Council include:

- *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.*
- *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.*
- *To support the creation of healthy and sustainable communities that encourages and facilitates walking and cycling and general physical activity through the implementation of best practices in urban design that promotes permeability and interconnecting spaces.*

Louth County Council Development Plan 2015-2021

2.3.9 The Louth County Development Plan 2015-2021 sets out the long-term vision for the development of the County up to 2021 employing the principles of sustainable development in the policies and objectives set out therein.

2.3.10 It is a strategic objective of this Development Plan:

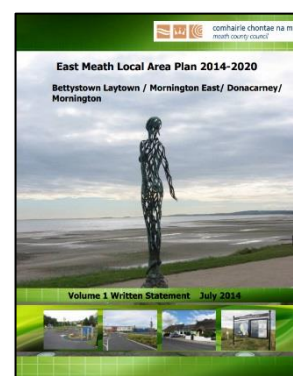
- To ensure a more sustainable and integrated concept of development with regard to transportation.
- To provide a framework for sustainable development through increased use of sustainable transport modes.

2.3.11 The Development Plan seeks to achieve and support the aims of national policy; aims of which include maximizing the efficient use of the transport network and improving accessibility to transport.

- 2.3.12 Pedestrian and cycle routes provide for a range and choice of transport alternatives and are sustainable modes of transport which promote active and healthy lifestyles within the community.
- 2.3.13 According to the Plan, good quality and safe cycling and walking facilities and their use, particularly in urban areas, can make a valuable contribution to the reduction in traffic congestion and can encourage a shift away from dependency on the use of the private car.
- 2.3.14 Other Policy objectives of the Development Plan of relevance include:
- *To provide where possible, traffic free pedestrian and cyclist routes especially where they would facilitate more direct, safer and pleasant alternative routes to those of the private car.*
 - *To incorporate, where feasible, provision for cycle and pedestrian paths within new road proposals and improvement schemes.*
 - *To investigate the possibility of developing additional linear cycle routes utilizing existing natural corridors such as riversides.*
 - *To promote the development of cycling by the provision of cycle routes in both rural and urban areas.*
 - *To investigate the possibility of developing additional linear cycle routes utilizing existing natural or manmade corridors such as riversides and abandoned road and rail infrastructure.*

East Meath Local Area Plan (2014 – 2020)

- 2.3.15 This LAP was drawn up to provide a framework for the future advancement and evolution of Bettystown-Laytown-Mornington East-Donacarney-Mornington. The ambition of the LAP is to help guide development of these towns and villages in a stable and viable fashion.
- 2.3.16 A key consideration of this LAP is the promotion of walking & cycling and broader Smarter Travel initiatives to reduce car dependency, recognising that challenges exist in addressing deficiencies in the existing pedestrian/cycling network.



2.3.17 The LAP states that the Boyne region has the potential to become one of the main development areas for cycling tourism with its numerous tourist attractions.

2.3.18 Some key aims of the LAP for transportation and Movement include:

- 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.
- To work with stakeholders to progress the Boyne Greenway, subject to proposals being screened for their potential impacts on the Boyne SAC and SPA.
- To promote and facilitate the provision of the necessary transport infrastructure to fully accommodate existing and future population needs as well as the demand for economic development in an environmentally sustainable manner.
- To recognise and investigate the use of river corridors as natural amenity corridors, connecting the different parts of the plan area and linking up with established amenity areas whilst ensuring that the qualifying interests of the Natura 2000 sites are protected. This would include potential amenity walks along the River Nanny and the proposed Boyne Greenway extension to Mornington. Protection of the natural environment and adherence to GI POL 7 will be prioritised during the preparation of design and implementation of proposals.
- To support for the development of the Boyne Greenway extension to Mornington along the River Boyne subject to carrying out a routing study and any necessary statutory planning consent, the carrying out of an AA screening, landowner cooperation and the securing of necessary funding.

2.4 POLICY CONCLUSION

2.4.1 The various studies discussed in the preceding sub-sections set out the transport planning policy context and need to promote the sustainable development of walking, cycling, and other more sustainable forms of transport as an alternative to the private car and to facilitate the provision of the necessary transport infrastructure to fully accommodate existing and future population needs as well as the demand for economic development in an environmentally sustainable manner.



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3. THE PROPOSED SCHEME

THE BOYNE GREENWAY

THE PROPOSED SCHEME




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3.0 THE PROPOSED SCHEME

3.1 THE PROPOSED SCHEME

- 3.1.1 The Boyne Greenway - Drogheda to Mornington scheme follows the southern edge of the River Boyne, east of Drogheda from Ship Street, which is located adjacent to the railway viaduct (Belfast Dublin line) to Mornington Town, generally follow the existing Marsh Road (R150) and Mornington Road (R151).
- 3.1.2 The overall objective of the proposed Boyne Greenway is to provide a dedicated pedestrian and cycle route from Drogheda Town to Mornington Village while also providing connections to schools along the route i.e. Le Chéile Educate Together, Bhradain Feasa Primary School and Drogheda Grammar Schools. The overall length of the Drogheda to Mornington section of the route is approximately 5.9km
- 3.1.3 The Boyne Greenway has also been identified as a route which will form part of the National Cycle Network (corridor 5 & 15) linking the East Coast Trail to the international cross-country EuroVelo Route 2 from Galway to Dublin southwest of Trim. Once developed the Boyne Greenway will be a world class tourist facility creating significant economic opportunities for business and communities along the length of the valley and its surrounds.
- 3.1.4 The proposed route for the Boyne Greenway scheme, between Drogheda East from the railway viaduct (Belfast Dublin line) to Mornington is illustrated in **Figure 1.1**.

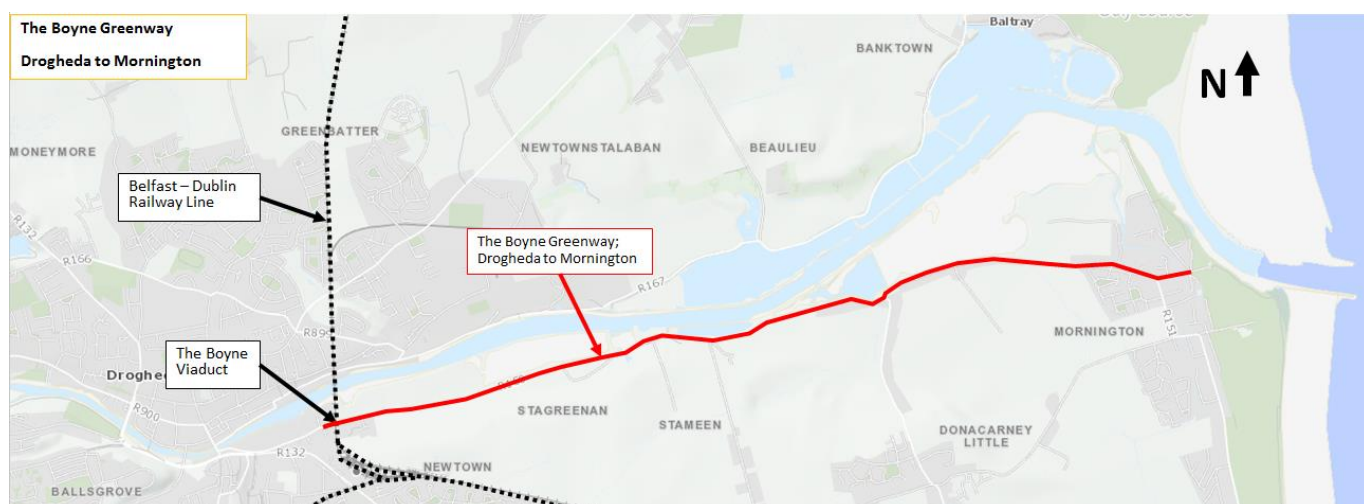


Figure 1.1 Site Location.

- 3.1.5 Once developed the Boyne Greenway will be a world class tourist facility creating significant economic opportunities for businesses and communities along the length of the valley and its surrounds. The proposed route will also help to link up existing

tourist attractions at Mellifont Abbey, the Bridge of Peace, the Battle of The Boyne site at Oldcastle and Brú Na Bóinne at Newgrange.

- 3.1.6 The proposed greenway between Ship Street/railway viaduct (Belfast Dublin line) and Mornington, generally follows the existing Marsh Road (R150)/Mornington Road (R151), moving away from the road due to levels, lack of space, or to ensure that open views to the Boyne Estuary are retained where possible and maximising the benefits of the greenway.
- 3.1.7 The provisional route for this section of the Boyne Greenway is approximately 5.9 km in length with approximately 4.1 km of the route directly alongside the Regional Road and approximately 1.8km slightly away from the route of the road to ensure both a safe continuation of the greenway and to provide high amenity value through enhanced interaction with the Boyne Estuary.
- 3.1.8 Although it would be preferable to have the greenway completely away from the road, this approach balances the reduced impact on the SPA/SAC with access and functionality yet still providing high amenity value through enhanced interaction with the Boyne Estuary.
- 3.1.9 The greenway has been developed in a holistic manner whereby the scheme proposals are respectful of existing environmental constraints in terms of sensitive habitats and areas of built heritage.
- 3.1.10 The scheme has been designed to current standards including the TII Publication "Rural Cycleway Design", the DTTAS 'Strategy for the Future Development of National and Regional Greenways' and Design Manual for Urban Roads and Streets (DMURS) and in accordance with national Smarter Travel Objectives.
- 3.1.11 Further details on the scheme are provided in **Section 2** while the scheme drawings can be found in the planning application package.

Boyne Greenway Objectives

- 3.1.12 The main objective for the Boyne Greenway between Drogheda to Mornington is to provide a cycle and pedestrian route from Drogheda Town to the residential settlement in Mornington, with links to the schools along the route and to provide a leisure route of national interest that will attract both leisure cyclists and walkers alike to visit the area thus ensuring the continued prosperity of the historical town of

Drogheda and surrounding hinterland. The proposed route will also provide viewing opportunities for the natural fauna and flora along the Boyne Estuary.

3.1.13 Having regard to the findings of the transport context for the proposed Greenway and using the Brief provided by MCC, the following objectives have been established for the Boyne Greenway, between Drogheda and Mornington:

- *Provide a cycle and pedestrian route from Drogheda in County Louth to Mornington in County Meath.*
- *Create a first class cycling facility and tourist attraction which can contribute to the economic development of County Meath and County Louth;*
- *Provide a greenway while respecting the existing environment along the route, including the designated European sites, the Boyne Coast and Estuary SAC and the Boyne Estuary SPA.*
- *Increase access to the locality and raise the profile of Counties Meath & Louth and the Boyne Valley by creating a facility which is recognised locally, nationally and internationally as a first-rate tourist attraction.*
- *Encourage use of a sustainable mode of transport, and interlink with existing public transport;*
- *Raise the profile of cycling and inspire people to cycle;*
- *Increased cyclist and pedestrian safety;*
- *Enhanced cyclist and pedestrian accessibility, including access to existing schools within Drogheda;*
- *Tackle obesity and promote activity and create a better quality of life;*
- *Reduce congestion and the number of motorised vehicle trips;*
- *Traffic calming;*
- *Reduced carbon emissions;*
- *To deliver a greenway which respects the environmental, conservation and heritage sensitivities within the study area.*
- *To meet the requirements of Meath County Council and Louth County Council Departments listed in the project brief, National Parks & Wildlife Services and other key stakeholders.*

3.2 PRE-PLANNING CONSULTATION

Elected representatives of the Laytown-Bettystown Municipal District

3.2.1 Consultation has been carried out with elected representatives of the Laytown-Bettystown Municipal District on a number of occasions to inform the development of the preliminary design for the scheme including the following dates:

- 16th November 2016
- 13th March 2017
- 10th July 2017
- 15th November 2018
- 12th March 2019
- 11th July 2019

National Parks and Wildlife Service (NPWS)

3.2.2 Consultation has been carried out with National Parks and Wildlife Service (NPWS) on the following dates:

- 27th September 2018
- 18th December 2019

3.2.3 Following consultation with NPWS in December 2019, the section of greenway route through the dunes by Mornington Beach has been removed, due to NPWS concerns of potential environmental impacts on a European site. A summary of the amendments to the preliminary design following the consultation are provided in Section 8 of this report, while meeting minutes with NPWS are provided in the Ecological Impact Assessment Report (Appendix B) submitted as part of this planning application.

Boyneside Trails walking group

3.2.4 Consultation has also been carried out with Boyneside Trails walking group to inform the development of the preliminary design for the scheme.

Non-Statutory Public Consultation

3.2.5 In an effort to inform landowners, members of the public and interested parties in relation to the proposed route and progress on the project to date, a Non-Statutory Public Consultation was held from 30th August to 11th October 2019.

- 3.2.6 Details of the Emerging Preferred Scheme were on display in:
1. The Meath County Council Head Office, Buvinda House, Dublin Road, Navan, Co Meath; and
 2. The Meath County Council Civic Offices & Library, Duleek, Co Meath.
- 3.2.7 Additionally, all of the consultation material was made available on the Meath County Council online Consultation Portal.
- 3.2.8 Through this process, members of the public and interested parties were invited to view details of the scheme and, if desired, provide feedback on the project, and its emerging preferred route.
- 3.2.9 Submissions could either be made by post, or by using an on-line submission portal facility on the Meath County Council website.
- 3.2.10 A summary of the submissions received and a list of the amendments to the preliminary design, following the consultation process, are provided in Section 8, while the Non-Statutory Public Consultation Report can be found in **Appendix A**.



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4. PRELIMINARY
DESIGN

THE BOYNE GREENWAY PRELIMINARY DESIGN




comhairle chontae na mí
meath county council



Comhairle Contae Lú
Louth County Council


NTA
Údarás Náisiúnta Iompair
National Transport Authority



Tionscadal Éireann
Project Ireland
2040



4.0 PRELIMINARY DESIGN

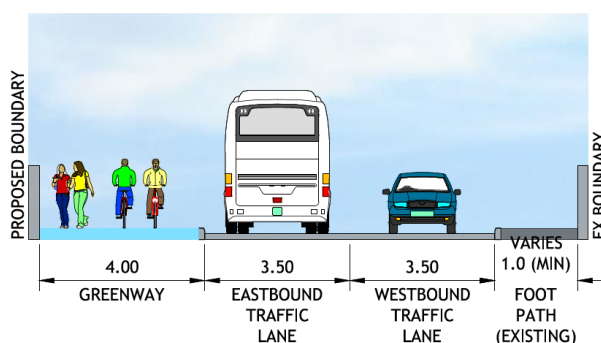
4.1 THE SCHEME

- 4.1.1 The Boyne Greenway - Drogheda to Mornington route from the Ship Street/railway viaduct to Mornington is approximately 5.9 km 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. For ease of description the route has been divided into 5 sections, these are described below. The scheme Alignment drawings are provided in the planning application package and should be read in conjunction with this section to illustrate the preliminary design.

Section 1 – Ship Street/railway viaduct to Drogheda Wastewater Treatment Plant along Marsh Road (Ch. 0 – 980)

- 4.1.2 The initial section of the proposed Greenway from Ship Street/railway viaduct to the Drogheda Wastewater Treatment Plant on Marsh Road comprises of a shared pedestrian/cycle facility, 4m wide, on a flexible pavement segregated by a kerb from the adjacent carriageway Marsh Road (R150) for approximately 1km. The greenway will be constructed by using an existing disused verge area on the north side of the Marsh Road (R150).

TYPICAL CROSS SECTION TYPE A-1 (CH 0 TO 600)



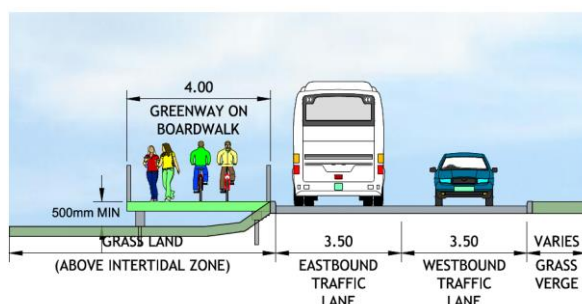
- 4.1.3 Within this initial section of the proposed Greenway there are a number of proposed traffic management measures on the R150 and other works required to facilitate pedestrian and cyclist access to the Greenway, these include:

- Zebra crossings to be installed at the railway station car park to facilitate access to the Greenway (Ch. 40).
- A raised table on R150 at the junction between Weirhope and R150 to facilitate access to Greenway (Ch. 250).
- A raised table on R150 at the junction between the Water Treatment Works Yard and R150 to facilitate access to Greenway (Ch. 980).
- Upgrades to the bus stop on approach to Marsh Road/Weirhope junction (Ch. 235).

Section 2 – Drogheda Wastewater Treatment Plant to Le Chéile Educate Together National School on Marsh Road (Ch. 980 – 2250)

- 4.1.4 This section of the proposed Greenway from Drogheda Wastewater Treatment Plant to Le Chéile Educate Together National School comprises of a shared pedestrian/cycle facility, 4m wide, on a flexible pavement segregated by a kerb from the adjacent carriageway Marsh Road (R150) for approximately 1.2km. The greenway will be constructed by using an existing disused verge area on the north side of the Marsh Road (R150).
- 4.1.5 On the west side of the Drogheda Port offices the surface to the north of the road is not considered wide enough to support a bitumen pavement, there is no longer a verge present and there would be a need to install an elevated boardwalk construction for approximately 60m for that short section (Ch. 1810-1870).

TYPICAL CROSS SECTION TYPE D-1 (CH 1810-1870)



- 4.1.6 The width of the boardwalk will be limited to 4 metres (maximum). Following a review of the options, and in consultation with the ecological consultant, it has been agreed that the elevated boardwalk will be formed using propriety recycled plastic elements. Similar greenway sections have already been constructed in Co. Meath using this

form. It involves installing recycled plastic components much like forming a similar timber structure.

4.1.7 The route then transitions back to a bitumen flexible pavement greenway, segregated by a kerb, along the northern edge of the R150 for a further 130m (Ch. 1870-2000) and then moves back to an elevated boardwalk again for approximately 1.1km that brings the route to the Drogheda Port offices entrance. The section immediately east of the Drogheda Port Offices comprises of a bitumen pavement construction along the northern edge of the R150 for approximately 140m (Ch 2110-2250) to the proposed raised pedestrian crossing at Le Chéile Educate Together National School.

4.1.8 Within this section of the proposed Greenway there are a number of proposed traffic management measures on the R150 and other works required to facilitate for pedestrian and cyclist access to the Greenway, these include:

- A raised table on R150 at the junction between Local Road to the south and R150 to facilitate access to Greenway (Ch. 1600).
- A raised table on R150 at the junction between Local Road to the south and R150 (west of Drogheda Port offices) to facilitate access to Greenway (Ch. 1930).
- Entry treatment at entrance to Drogheda Port offices to accommodate the greenway traffic. (Ch. 2110)
- A raised table on R150 with controlled pedestrian crossing before the junction between Drogheda Grammar School and R150 to facilitate access to Greenway (Ch. 2215).

Section 3 – Le Chéile Educate Together National School to Mornington Bridge (Ch. 2250 – 3720)

- 4.1.9 The third section of the proposed Greenway extends from Le Chéile Educate Together National School to Mornington Bridge. The section immediately east of Le Chéile Educate Together National School comprises of a shared pedestrian/cycle facility, 4m wide, on a flexible pavement segregated by a kerb from the adjacent carriageway Marsh Road (R150) for approximately 20m and then the pavement diverts north, away from the roadside for a further 90m (Ch. 2270-2360). The Greenway then transitions to elevated boardwalk along the edge of a man-made inlet area and along the rock shore of the estuary boundary for approximately 540m. There is a proposed raised boardwalk entry point from the R150 to the Greenway at the Mill Road junction. Approximately 300m east of Mill Road junction the route transitions into a bitumen pavement for approximately 200m (Ch. 2900-3100) along an existing parking area. The route then transitions to elevated boardwalk construction for approximately 630m along the rocky shore of the estuary to Mornington Bridge. The proposed bridge will be a prefabricated steel arch bridge placed on precast concrete cross beams on precast concrete piles. This construction form was agreed through discussions with the architectural heritage department of Meath County Council to limit impact on the existing stone arch bridge structure and not detract from the bridge visually.
- 4.1.10 Within this section of the proposed Greenway there are a number of proposed traffic management measures on the R150 and other works required to facilitate for pedestrian and cyclist access to the Greenway, these include:
- Entry treatment on Mill Road at junction between R150 and Mill Road (Ch. 2590).
 - Possible controlled crossing at the junction between Mill Road and R150 to facilitate access to Greenway (Ch. 2615).
 - A raised table at the proposed Emergency/maintenance access to Greenway (Ch. 2900).
 - A raised table on east side of Mornington Bridge at junction with between R150, R151 and Church Road with zebra crossings to facilitate access to Greenway (Ch. 3745).

Section 4 – Mornington Bridge to West of Mornington Court (Ch. 3730 – 5100)

- 4.1.11 The fourth section of the proposed Greenway extends from Mornington Bridge to approximately 240m west of Mornington Court (Ch. 3730 – 5100). The section immediately following the bridge structure comprises of an elevated boardwalk construction along the edge of the Mornington Road (R151) and the estuary for approximately 700m and the greenway then transitions to bitumen pavement and diverts north away from the R151 and follows the edge of the estuary for approximately 150m and then diverts south again towards the R151. The bitumen greenway then continues parallel to, but away from, the R151 for approximately 100m where it then transitions to a prefabricated bridge for approximately 20m that transverses a stream. The Greenway then transitions back to bitumen flexible pavement greenway, segregated by a kerb, along the northern edge of the R151 for approximately 360m to approximately 110m west of the entrance to Mornington Court (Ch. 4740 - 5100).
- 4.1.12 Within this section of the proposed Greenway there are two proposed traffic management measures on the R151 to facilitate pedestrian and cyclist access to the Greenway, the proposed traffic management measure is:
- A raised table on junction with R151 and High Road with crossing to facilitate access to Greenway (Ch. 4040).
 - A ramp/traffic calming on entry to Mornington including Gateway Signage (Ch. 5070).

Section 5 – West of Mornington Court to Crook Road/Tower Road junction (Ch. 5100 – 5870)

- 4.1.13 This section extends from approximately 240m west of the entrance to Mornington Court to Mornington Beach (Ch. 5100 – 5870). This section of the Greenway will continue as a bitumen flexible pavement greenway, segregated by a kerb, along the northern edge of the R151 for approximately 240m to the entrance to Mornington Court and then continue for approximately 310m to Tower Road where it transitions into a shared space road for 220m to the entrance to Crook Road/Tower Road junction.
- 4.1.14 The proposed route has restricted space along the edges of Mornington Road (R151) and would require land acquisition from privately-owned properties through Mornington Town. Revised entrance/boundary treatment is to be provided to residents affected by land acquisition on both sides of the Mornington Road in Mornington Town. The boundary treatment provided will likely be as per original façade e.g. a clad wall (to be agreed with landowner) and will be positioned at the back of the greenway or offset from the edge on the permanent land-take line. The typical domestic entrance treatments are illustrated in drawings 170029-2700 & 170029-2701 in **Appendix B**.
- 4.1.15 Widening of the carriageway along the southern side of Mornington Road, to cater for the greenway, will impact on the Mornington Court Boundary Wall. This wall will be relocated to the back of the new footpath and the boundary treatment provided will be as per original façade.
- 4.1.16 Within this section of the proposed Greenway there are two proposed traffic management measures on the R151 to facilitate pedestrian and cyclist access to the Greenway, the proposed traffic management measure is:
- A raised table on R151 with zebra crossing at the junction between Mornington Court entrance and R151 to facilitate access to Greenway (Ch. 5340).
 - A raised table on R150 junction between Tower Road and R150 to provide traffic calming at the bend and to facilitate access to Greenway (Ch. 5650).

4.2 SCHEME CONSTRUCTION TYPES

- 4.2.1 The provisional route for this section of the Boyne Greenway is approximately 5.9 km 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 to ensure both a safe continuation of the greenway and to provide high amenity value through enhanced interaction with the Boyne Estuary.

Bituminous flexible pavement

- 4.2.2 There is approximately 4.1km of bituminous flexible pavement greenway for the scheme which will be alongside or very close to the road edge. This will comprise of a shared pedestrian/cycle facility, 4m wide, on a flexible pavement segregated by a kerb from the adjacent carriageway. The proposed greenway will be bituminous alongside or close to Marsh Road (R150) for the majority of the route from Chainage 0 to 2360 and Chainage 2900 to 3100. Bituminous paved greenway is also proposed slightly away from Mornington Road (R151) from Chainage 4430 to 4720 and adjacent to Mornington Road on approach and through Mornington town from Chainage 4740 to 5650.



Figure 4.1 - Photomontage of the proposed greenway (bituminous pavement) at Le Cheile Educate Together National School & Drogheda Grammer School (Ch.2150 – 2250).

Boardwalk Greenway Construction

- 4.2.3 There is approximately 2.4km of proposed greenway within the SPA/SAC areas with approximately 610 metres of this within the intertidal zone. In these areas it is proposed that the greenway be elevated onto a boardwalk structure to minimise impact as agreed provisionally with the ecological consultant. The boardwalk will be constructed at a minimum level defined within the flood risk assessment report (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 life of the boardwalk section of greenway. The width of the boardwalk will be limited to 4 metres (maximum). The boardwalk will be located adjacent to Marsh Road (R150), at chainage 1810 to 1870 and Chainage 2000 to 2100, due to width constraints. The remainder of the boardwalk sections are from Chainage 2360 to 2900 and Chainage 3100 to 34430 which are within SPA/SAC areas or within the intertidal zone.
- 4.2.4 Following a review of the options, and in consultation with the ecological consultant, it has been agreed that the elevated boardwalk will be formed using proprietary recycled plastic elements. Similar greenway sections have already been constructed in Co. Meath using this form.



Figure 4.2 - Photomontage of the proposed greenway (boardwalk) adjacent to Mornington Road (R151) at Ch. 4070 – 4110.

Greenway Construction Bridge Section

- 4.2.5 Bridge sections will be required at two locations along the route of the greenway to provide 20 metre clear spans. The first between chainage 3705 and 3725 (Mornington Bridge) and the second between chainage 4720 and 4740. The bridging sections are over a stream and surface water outfall respectively.
- 4.2.6 The proposed bridge at chainage 3705 to 3725 will be a prefabricated steel arch bridge placed on precast concrete cross beams on precast concrete piles. This construction approach was agreed through discussions with the architectural heritage department of Meath County Council to limit impact on the existing stone arch bridge structure and not detract from the bridge visually.



**Figure 4.3 - Photomontage of the proposed arch bridge at Mornington Bridge
(Ch. 3705 to 3725).**

- 4.2.7 The architectural heritage assessment undertaken as part of this planning package, noted that there will be no direct impacts on the existing Mornington Bridge (RPS MH021-200) as a result of the proposed new arched bridge. The proposed bridge may result in an indirect visual impact on Mornington Bridge, however, the design is sympathetic to the existing structure, allowing the main elements of the northern elevation to remain visible.

- 4.2.8 The proposed bridge at chainage 4720 to 4740 will be a simpler option formed by providing a prestressed 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.



Typical Precast Concrete Bridges

- 4.2.9 The scheme cross sections at different segments along the scheme to which their locations and individual cross section elements are described can be seen in drawings 170029-2200 to 170029-2240 in the planning application package.

4.3 HORIZONTAL & VERTICAL ALIGNMENT

- 4.3.1 By its nature a greenway is a low-key and low impact feature. It will consist of 4 metre wide pathway and will follow the natural topography as much as possible with little earthworks for cuttings and embankments. The proposed greenway complies with the TII Publication "Rural Cycleway Design", which outlines the suitable curvature for cyclists is 25m radius for a maximum speed of 30km/h or lower where appropriate, with a minimum radius of 4m at 10km/h. The gradients will preferably not exceed 3% but may be relaxed to 5%, or an absolute maximum of 10%.
- 4.3.2 The greenway vertical alignment will generally match the existing ground level of road level (R151 or R150) except for the boardwalk sections which will be constructed at a minimum level of ~3.54m AOD. This is approximately 1.5 metre above the present day highest astronomical tide level and will mitigate the risk of flood throughout the design life of the section of greenway

4.4 JUNCTION LAYOUTS

4.4.1 Junction layouts have been designed in accordance TII Guidelines, Design Manual for Urban Roads and Streets, National Cycle Manual and existing road constraints. The proposed scheme includes upgrades to 8 no. junctions. Three junctions have been designed to include raised tables for traffic calming. These junctions are as follows:

- Marsh Road (R150) / Weirhope (Ch. 250);
- Marsh Road (R150) / the Water Treatment Plant (Ch. 980);
- Marsh Road (R150) / local road to the south (Ch. 1600);
- Marsh Road (R150) / local road to the south (west of Drogheda Port Office) (Ch. 1930);
- Marsh Road (R150) / Mornington Road (R151) / Church Road (Ch. 3745);
- Mornington Road (R151) / High Road (Ch. 4040);
- Mornington Road (R151) / Mornington Court (Ch. 5340);
- Mornington Road (R151) / Tower Road (Ch. 5650);

And entry treatment at:

- Marsh Road / Drogheda Port Building junction (Ch. 2110);
- Marsh Road (R150) / Mill Road (Ch. 2590);
- Ramp/traffic calming on entry to Mornington Village;

New pedestrian crossing facilities at locations including:

- Zebra crossings to be installed at the railway station car park to allow access to the Greenway (Ch. 40).
- Controlled pedestrian crossing before the junction between Drogheda Grammar School and R150 to allow access to Greenway (Ch. 2215).
- Possible controlled crossing at the junction between Mill Road and R150 to allow access to Greenway (Ch. 2615).
- Zebra crossing at the junction between Mornington Court entrance and R151 to allow access to Greenway (Ch. 5340).

4.5 ROAD LIGHTING

- 4.5.1 No lighting is proposed for the Greenway as a whole, as it will likely be used during daylight hours in the main. Existing lighting associated with the road corridor and existing amenity lands will be maintained. At locations where, additional operational lighting is required for security and safety, it is proposed to install LED lights to avoid emission of UV light with cowlings directed away from estuarine habitats. Lighting design will specify no light spillage outside of the boardwalk corridor, in line with Best Practice for bats and birds. Low energy LED luminaires incorporating a solar power source and motion detectors will be specified. Furthermore, to minimise the requirement for lighting all access features, such as bollards and gates, shall have reflector strips in line with Best Practice guidance. Bird sensitive lighting or no lighting may be provided where birds forage within 50 metres of the Greenway to avoid any disturbance, however the use of lighting will be subject to health and safety requirements. Bird sensitive lighting design will be required where the route passes over, adjacent or within 50 metres of mudflat habitat, these sections approximately occur from chainage 1810 to 1870, 2000 to 2100, 2360 to 2900 and chainage 3100 to 4720. Final lighting locations, if required, will be selected following consultation with the project Ecologist.

4.6 SURFACE WATER DRAINAGE

- 4.6.1 Surface water runoff from the proposed bituminous flexible pavement section of the greenway (3.6km) will run over the edge and soak naturally to the underlying soil. While, the 1.9km of proposed Boardwalk will drain straight through the boardwalk to the underlying river or soil. Further information on the surface water drainage for the scheme can be found in the Flood Risk Assessment Report within the planning application package.

4.7 BOUNDARY TREATMENT

- 4.7.1 Boundary treatment is to be provided to residents affect by land acquisition on both sides of the Mornington Road in Mornington Town. The boundary treatment provided will likely be as per original façade e.g. a clad wall (to be agreed with landowner) and will be positioned at the back of the greenway or offset from the edge on the permanent land-take line.
- 4.7.2 Boundary treatment is to be provided to non-residential properties affect by land acquisition on the northern side of Marsh Road (R150)/Mornington Road (R151). The boundary treatment provided will likely be as per original façade e.g. fence, stone wall etc (to be agreed with landowner) and will be positioned at the back of the greenway or offset from the edge on the permanent land-take line.
- 4.7.3 The typical domestic entrance treatments are illustrated in drawings 170029-2700 & 170029-2701 in **Appendix B**.



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5. ENVIRONMENTAL CONSTRAINTS

THE BOYNE GREENWAY ENVIRONMENTAL CONSTRAINTS




comhairle chontae na mí
meath county council



Comhairle Contae Lú
Louth County Council


NTA
Údarás Náisiúnta Iompair
National Transport Authority



Tionscadal Éireann
Project Ireland
2040



5.0 ENVIRONMENTAL CONSTRAINTS

5.1 ECOLOGICAL IMPACT ASSESSMENT (EcIA) REPORT & APPROPRIATE ASSESSMENT: STAGE 1 SCREENING REPORT

- 5.1.1 INIS Environmental Consultants Ltd. was commissioned to carry out the Ecological Impact Assessment (EcIA) for this scheme. The EcIA Report is provided in the planning application package.
- 5.1.2 The report is presented in the context of the works required to deliver the project; evaluated in the context of baseline ecological survey data collected by Inis ecologists and desk study information. The potential impacts arising from the construction of the project, as well as during the operational phase has been assessed with regard to key biodiversity receptors identified as likely to occur within the immediate footprint of the works and within the wider study area; i.e. the zone of influence (ZoI). Where required, mitigation measures have been proposed to avoid, reduce or remediate potential impacts in order to avoid significant impacts on sensitive ecological receptors.
- 5.1.3 Sections of the proposed Greenway route overlap or run adjacent to the boundaries of the Boyne Estuary Special Protection Area (SPA). The Boyne Estuary in general is the second most important estuary for wintering birds on the Louth-Meath coastline. Black-tailed Godwit occurs here in internationally important numbers and a further nine species of wintering water birds have populations of national importance (i.e. Shelduck, Oystercatcher, Golden Plover, Grey Plover, Lapwing, Knot, Sanderling, Redshank and Turnstone). Of particular significance is that three species that regularly occur, Golden Plover, Bar-tailed Godwit and Little Tern are listed on Annex I of the E.U. Birds Directive. Part of the Boyne Estuary SPA is a Wildfowl Sanctuary. The estuary provides both feeding and high-tide roost areas for these birds.
- 5.1.4 Sections of the proposed Greenway route also overlap or run adjacent to the boundaries of the Boyne Coast and Estuary Special Area of Conservation (SAC), 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 designated due to the presence of the following habitats;

Estuaries, Tidal Mudflats and Sandflats, Annual vegetation of drift lines, Salicornia Mud, Atlantic Salt Meadows, Embryonic Shifting Dunes, Marram Dunes (White Dunes), Fixed Dunes (Grey Dunes).

- 5.1.5 The western portion of the proposed Greenway lies due south and within close proximity of the River Boyne and River Blackwater SAC. This designated site includes a number of habitats and species listed on Annex I/II of the EU Habitats Directive, including; alkaline fens, alluvial forests, river lamprey, Atlantic salmon and otter.
- 5.1.6 The Ecological Impact Assessment found that with mitigation measures in place, **no significant negative impacts** to the biodiversity are likely to arise as a result of the scheme. These mitigations measures are described below.

Construction Phase Mitigation

- 5.1.7 The proposed design has incorporated intrinsic avoidance measures aimed at lessening the impact of the proposed cycle and pedestrian infrastructure on the key biodiversity receptors within the study area, including the ecological sensitivities of the Boyne Estuary Special Protection Area and the Boyne Coast and Estuary Special Area of Conservation. Design measures have accounted for both construction and long-term operational stages. The efficacy of the intrinsic design measures will be monitored during construction and post construction for 3 years by a suitably qualified Ecologist.
- 5.1.8 Monitoring during construction will be completed by a suitably qualified Ecological Clerk of Works, (ECoW) with a 'Stop Works' authority. This Ecologist/ECoW will have previous experience and extensive knowledge of working on construction programmes within SAC and SPA areas with significant bird populations. The construction works will be compliant with:
1. The majority of construction work within certain work sections will be restricted to outside the period of October – March at all sensitive sites where disturbance is an issue i.e. within the intertidal habitats of the SAC/SPA or immediately adjacent. Therefore, all works will be undertaken between March and September when all wintering birds are absent. The timing restriction will not apply to public road sections;

2. Construction works will be limited to daylight hours to avoid effects on bats, birds and otters. The use of construction lighting will be limited to absolute minimums. Where it is necessary, all lighting will be cowled away from sensitive habitats, with no light spillage, in line with Best Practice for bats. Only existing municipal compound areas will be utilised and security lighting will be sensor based only at these locations.
3. The timing of the works and the measures intrinsic to the design, outlined above, will be sufficient to avoid significant effects. Camouflage netting will be utilised on all roadside works outside the period March to September to minimise noise transfer, as a matter of course.
4. Regular monitoring of the works will be provided by a suitably qualified ECoW with authority to 'Stop the Works'. The representative will have knowledge of working on construction programmes within SAC and SPA areas where significant bird populations exist.

Strategic timing of works to protect breeding and wintering birds.

- 5.1.9 In order to reduce impact on breeding birds, the removal of hedgerows and trees should this be required, will be outside of the bird breeding season, which runs from 1st of March to the 31st of August. The majority of construction work within certain work sections will be restricted to outside the period of October – March at all sensitive sites where disturbance is an issue i.e. within the intertidal habitats of the SAC/SPA or immediately adjacent. Therefore, all works will be undertaken between March and September at times when wintering birds (i.e. the Special Conservation Interests of the SPA) are absent. The timing restriction will not apply to public road sections where disturbance is constant.

Specific measure for the avoidance of transfer of invasive species to the site

- 5.1.10 One invasive species listed on Third Schedule of the Birds and Natural Habitats Regulations (2011) was found during the survey of the site of the proposed development. Furthermore, construction works are a potential vector for the transfer of invasive species from other areas into the site. A site-specific Invasive Species Management Plan will be delivered by the appointed contractor, as a requirement in the Contract Documents. This plan will be adopted for the protection of habitats and the prevention of spread of invasive species and will be managed by a suitably qualified Ecologist with experience in dealing with Third Schedule invasive species.

Appointment of a suitably qualified Ecological Clerk of Works

- 5.1.11 Appointment of a suitably qualified Ecological Clerk of Works to oversee environmental protection measures during the construction phase of the proposed road upgrade works will be a contractual obligation to ensure compliance to environmental protection measures.

Visual inspection of mature trees for roosting bats within footprint of development

- 5.1.12 Prior to the commencement of works a survey of existing trees proposed to be removed or trimmed back, within the construction area will be carried out by a suitably qualified ecologist. Consideration will be given to the loss of commuting and foraging bat habitat and mitigation measure explored e.g. reinstating treelines at the edges of new embankments to compensate for this loss of habitat.

Fisheries and Aquatic Biodiversity

- 5.1.13 The study area is located in the Boyne River catchment. Considering the hydrological connectivity of the study area to the River Boyne and River Blackwater SAC, a site designated for a number of aquatic species (e.g. River Lamprey *Lampetra fluviatilis* and Atlantic Salmon *Salmo salar*), and the Boyne Coast and Estuary SAC, designated for a number of habitats (e.g. mudflats and sandflats), it would be prudent to apply safeguards to prevent siltation and other contamination of surface and groundwaters. There are a number of river crossings along the proposed route, particular care should be taken at these locations. All mitigation measures will be in line with industry Best Practice, such as CIRIA Guidance (Murnane et al., 2006) and will be reviewed by the appointed ECoW.

Operational Phase Mitigation

- 5.1.14 The Greenway during operation is evaluated as having a negligible impact on the fauna and flora in the long term as it will be assimilated into the existing baseline environment; characterised by suburban lands influenced by ongoing traffic disturbance, amenity access and disturbed ground. To limit impact, the following measures are proposed:
1. No lighting is proposed for the Boyne Greenway as a whole, as it will likely be used during daylight hours. Existing lighting associated with the road corridor

and existing amenity lands will be maintained. At locations where additional operational lighting is required for security and safety, it is proposed to install LED lights to avoid emission of UV light, with cowlings directed away from estuarine habitats. Lighting design will specify no light spillage outside of the boardwalk corridor, in line with Best Practice for bats and birds. Low energy LED luminaires incorporating a solar power source and motion detectors will be specified. Furthermore, to minimise the requirement for lighting all access features, such as bollards and gates, shall have reflector strips in line with Best Practice guidance. Bird sensitive lighting, or no lighting, will be provided where birds forage within 50 metres of the Boyne Greenway to avoid any disturbance. However, the use of lighting will be subject to health and safety requirements. Bird sensitive lighting design will be required where the Boyne Greenway route passes over, adjacent or within 50 metres of mudflat habitat. Final lighting locations, if required, will be selected following consultation with the project Ecologist.

2. To counteract impact from dogs particularly and avoid noise transfer to birds and other species which may occur on the outward side of the Greenway route the boardwalk barrier will be screened to half height (~600 mm) with full height (~1200 mm) an option in particularly sensitive locations. The screening will be provided by fixing boardwalk running boards to the fence posts.
3. Signage supporting a code of conduct with respect to the maintenance of dogs on leashes at all times will be implemented. There is precedent for this on other Greenway projects.

Fisheries and Aquatic Biodiversity

- 5.1.15 No operational mitigation is required for fisheries and aquatic biodiversity receptors, as there are no pathways for operational impacts identified with regard to key receptors. There are no direct or indirect emissions or inputs arising from the proposal which require avoidance, reduction or remediation.
- 5.1.16 There is a total of six European sites located within the 15km zone of consideration:
 1. River Boyne and River Blackwater SPA (site code: 004232)
 2. Boyne Coast and Estuary SAC (site code: 001957)
 3. Clogher Head SAC (site code: 001459)

4. Boyne Estuary SPA (site code: 004080)
5. River Nanny Estuary and Shore SPA (site code: 004158)
6. River Boyne and River Blackwater SAC (site code: 002299)

5.1.17 Implementation of the proposed intrinsic design submitted in the planning application as contractual obligations, in addition to the implementation in full of the proposed mitigation measures set out above, will effectively avoid and, where appropriate, reduce the potential for any significant impacts on the ecological interests identified as key biodiversity receptors within the ZoI of the proposed development. Therefore, there are no significant residual impacts identified at construction stage with regard to biodiversity. This evaluation is summarised in Table 6.1 in the EcIA report.

5.1.18 The operational phase of the Greenway, which considers the utilisation of the amenity feature by the public, is limited in its potential for impact primarily due to the nature of the scheme. Taking account of the sensitive design, and with the implementation in full of the proposed mitigation measures set out above, there are no significant residual impacts identified at operation stage with regard to biodiversity. This evaluation is summarised in Table 6.1 in the EcIA report.

5.2 APPROPRIATE ASSESSMENT: STAGE 2 NATURA IMPACT STATEMENT (NIS)

- 5.2.1 A Natura Impact Statement (NIS) Report has been prepared by Inis Environmental Consultants to inform the Appropriate Assessment (AA) process required for the proposed Boyne Greenway project from Drogheda East to Mornington.
- 5.2.2 The document comprises the Screening for Appropriate Assessment (Stage 1) which screens and evaluates likely significant effects of the updated proposed works upon designated European sites. In the current context, where significant effects are considered likely, in view of the qualifying interests or special conservation interests and the respective conservation objectives of any European site, the Screening identifies that Appropriate Assessment is required. Therefore, the NIS report provides mitigation to avoid adverse effects on European site integrity.
- 5.2.3 Appropriate Assessment Stage One Screening of all European sites identified within a 15km radius of the proposed development evaluated that the potential for significant effects on the Qualifying Interests and/or Special Conservation Interests of the Boyne Coast and Estuary SAC, River Boyne and River Blackwater SAC and Boyne Estuary SPA could not be excluded. In particular, potential effects responsible for habitat loss and noise and disturbance on wintering birds and indirect effects via a deterioration in water quality. Thus, the above elements were brought forward for further critical examination in the Natura Impact Statement Report to inform the Appropriate Assessment process.
- 5.2.4 The report has been prepared in order to evaluate the significance of potential effects on European sites from the proposed development of the proposed Boyne Greenway (Drogheda to Mornington) Project, alone and in combination with other developments.
- 5.2.5 Following examination and analysis and taking account of the protective measures proposed during the construction and operation phases, the potential for significant effects during construction and operation were found not to be significant.

- 5.2.6 The provisions of Article 6 of the 'Habitats' Directive 92/43/EC (2000) defines integrity as the 'coherence of the sites ecological structure and function, across its whole area, or the habitats, complex of habitats and/or population of species for which the site is classified'. It is clear that, given the application of prescribed protective measures for the avoidance of impacts and the implementation of the required mitigation measures, the proposed development will not give rise to significant effects on the integrity of any of the identified European sites evaluated herein.
- 5.2.7 The Appropriate Assessment: Stage 2 Natura Impact Statement Environmental Impact Screening Report is provided in the planning application package.

5.3 FLOODING CONSTRAINTS

- 5.3.1 In order to ascertain whether flooding and drainage is a critical issue within the study area, DBFL undertook a Flood Risk Assessment (FRA). The Flood Risk Assessment (FRA) Report is provided in the planning application package.
- 5.3.2 The objective of the report is to inform the planning authority regarding flood risk for the proposed Boyne Greenway. The report assesses the proposed greenway route in accordance with the requirements of "The Planning System and Flood Risk Management Guidelines for Planning Authorities". The report clarifies the flood zone category throughout the route and presents information which would facilitate an informed decision of the planning application in the context of flood risk and level of vulnerability.
- 5.3.3 Based on a thorough review and assessment of the flood risks associated with the proposed greenway the following conclusions can be drawn:
1. The proposed greenway can be classified both as less vulnerable when considered as a local transport link and water compatible when considered as a leisure-based amenity. Therefore, where possible the route should be kept above Flood Zone A (in Flood Zone B or C) when not constrained by existing physical infrastructure.
 2. The most prominent flood risk associated with the greenway route is coastal flooding which is a reoccurring problem on the Marsh Road and R150/R151 generally. To reduce the impact on the existing road-based infrastructure would necessitate significant works in the form of flood defences or by raising the existing road by more than 1 metre in places. This is considered beyond the study requirements for the proposed greenway.
 3. A substantial portion of the existing road-based infrastructure, where the proposed greenway route follows, is currently within Flood Zone A. It would therefore be impractical, commercially restrictive, and visually obtrusive to increase the greenway height to meet the required flood zone. (as much as 1.2 metres above the road level in places)

4. Approximately 48% of the proposed greenway route is within an appropriate flood zone for the more conservative local transport link infrastructure (i.e. Flood Zone B or C). The greenway route will be kept above Flood Zone A (i.e. Flood Zone B or C) when not constrained by being directly alongside the road. This ensures that the 'Avoid principle' has been applied in accordance with The Planning System and Flood Risk Management Guidelines Sequential Approach.
5. Where the greenway is within Flood Zone A, it is directly alongside a road that is constraining any increase in level. This ensures that the 'Justification principle' has been applied in accordance with The Planning System and Flood Risk Management Guidelines Sequential Approach.
6. The construction forms, irrespective of location, will be robust and resilient requiring limited maintenance following a flood event. This ensures that the 'Mitigation principle' has been applied in accordance with The Planning System and Flood Risk Management Guidelines Sequential Approach.
7. A further detailed Site-Specific Flood Risk Assessment is not required.

5.4 TREE SURVEY

- 5.4.1 CMK Hort + Arb Ltd. were commissioned to undertake an arboricultural assessment of trees along the north side of the R150/R151, a 6.4km roadside area located between Drogheda and Mornington Bay Beach. The fieldwork was undertaken between the 5th of October and the 18th of December 2019. The full Arboricultural Assessment report and drawings are provided in the planning application package.
- 5.4.2 The survey methodology, supporting drawings and documentation follow the recommendations contained within BS 5837 (2012). The analysis of the trees was undertaken using the VTA methodology as developed by Mattheck and Breloer (1994). The full Arboricultural assessment report and drawings are provided in the planning application package.

General description of trees

- 5.4.3 A total of 269 trees were assessed within the subject site with a detailed analysis of individual trees within section 8 of the report. The locations of trees are shown on drawings TBOY001 101 to TBOY001 105 within the planning package. The condition of the trees is generally moderate to poor with a relatively high spread within categories B and C. The surveyed trees are a broad mixture of native/naturalised species (chiefly including Sycamore *Acer pseudoplatanus* and Ash *Fraxinus excelsior*) that are located in roadside strips, many of which acted as former agricultural boundaries (see chart 2 for species breakdown).
- 5.4.4 In the western section, for the first 130 meters of the survey area, a group of 61 Leyland cypress *Cupressus × leylandii* form a screen planting to former industrial grounds north. These trees are of moderate landscape value and may have limited long-term potential due to poor root conditions from construction activity.
- 5.4.5 Located opposite Drogheda Grammar School in a dense roadside grouping are a mixture of mature horse-chestnut *Aesculus hippocastanum* and Sycamore *Acer pseudoplatanus* and younger self-seeded native/naturalised species Wych Elm *Ulmus glabra*, Sycamore *Acer pseudoplatanus* and Beech *Fagus Sylvatica*. Trees in this area constitute the greatest concentration of higher value specimens, in terms of variety, venerability and landscape value.

- 5.4.6 Along the central section of the surveyed area trees are located in close proximity (less than one metre) from the R150 roadside. The average quality of these trees are moderate to poor (B-C) with many being of drawn up form due to local competition.
- 5.4.7 In the residential area of Mornington, garden hedges with tree plantings were surveyed along a 750 metre long section. These chiefly consist of well-maintained Green Privet *Ligustrum Ovalifolium* and Griselinia *Griselinia littoralis*.

Arboricultural Impact

- 5.4.8 A total of 154 trees and six private hedges are to be removed to facilitate works. Eight of these trees are within private residential lands. A further two category U trees (#533, #540) are recommended to fell. While these are not within the proposed route, they have a risk of failure and are within a hazardous distance of the R150 roadway. The potential impact of the propose greenway on surrounding trees are illustrated in drawings TBOY001 106-110 within the planning application package.
- 5.4.9 The proposed greenway route would have a marked arboricultural impact, with the necessary removal of a total of 54.7% of wooded vegetation within the proximity of the works on the north side of the R150/151. However, the impact on moderate value trees is minimal, with just 24% of 94 "B" classified trees being affected, thus retaining the majority of the higher value trees.

Mitigation

- 5.4.10 The most pronounced impact is on category C trees. These have largely been unmanaged and are poorly located. Proposed works offer an opportunity to remove these before they present fail hazards and opens possibilities for new, more suitable, plantings.
- 5.4.11 A Tree Protection Strategy is provided as part of the arboricultural element of the submission with the aim of ensuring retained trees are maintained for the duration of the construction stage of the development free of negative construction related impacts. Tree protection details and locations are shown on drawings TBOY003 111-115 within the planning application package.



DBFL CONSULTING ENGINEERS

6. CONSERVATION, TRAFFIC & PLANNING CONSTRAINTS

THE BOYNE GREENWAY CONSERVATION, TRAFFIC & PLANNING CONSTRAINTS




comhairle chontae na mí
meath county council



Comhairle Contae Lú
Louth County Council


NTA
Údarás Náisiúnta Iompair
National Transport Authority



Tionscadal Éireann
Project Ireland
2040



6.0 CONSERVATION, TRAFFIC AND PLANNING CONSTRAINTS

6.1 ARCHAEOLOGICAL & BUILT HERITAGE CONSTRAINTS

- 6.1.1 The Archaeological and Built Heritage Assessment of the study area was completed by Irish Archaeology Consultancy Ltd. in April 2020. The assessment was undertaken in two phases. The first phase comprised a paper survey of all available archaeological, historical and cartographic sources. The second phase involved a field inspection of the site, with the aim to identify any previously unrecorded features of archaeological or historical interest. The report outlines findings in the vicinity of the proposed scheme. The full Archaeological and Built Heritage Assessment Report is provided in the planning application package.

Archaeology

- 6.1.2 The assessment noted that there are a number of recorded monuments within the area surrounding the proposed scheme. The closest is the zone of archaeological notification associated with the former medieval settlement at Mornington (RMP ME021-001). The proposed scheme will pass through this area. Three further monuments are located within the immediate vicinity of the proposed greenway, Mornington church, graveyard, and a chest tomb (ME021-001001-3; Ch. 3820-3900).
- 6.1.3 The proposed scheme is considered to be low impact in nature, due to the limited requirement for groundworks. No adverse impacts are predicted in relation to where the scheme passes in close proximity to the four recorded monuments. It is possible that ground works associated with the construction of the scheme across greenfield areas may have an adverse impact on previously unrecorded archaeological remains (Ch. 2270-2360, Ch. 2970-3090 and Ch. 4430-4620).
- 6.1.4 Sections of the proposed greenway will travel across marginal estuarine areas via a board walk or elevation platform (Ch. 2000-2090, Ch. 2360-2900, Ch.3100-4430 and Ch. 4430-4620). It is possible that ground disturbances associated with the construction of the board walk may have an adverse impact on archaeological features or deposits that have the potential to survive within these portions of the landscape. Estuarine areas are considered to possess high archaeological potential. Estuarine and beach areas are considered to possess high archaeological potential. It is recommended that prior to construction that an archaeological intertidal survey/

wade survey be carried out along the proposed greenway, where it crosses the estuarine area via a board walk. This should be performed by an underwater archaeologist under licence to the National Monuments Service. The survey will include metal detection. Dependant on the results of the survey, further archaeological mitigation may be required, such as preservation in-situ or by record and/or archaeological monitoring.

- 6.1.5 It is possible that the construction of a new bridge structure at Mornington Bridge may have an adverse impact on archaeological features or deposits that have the potential to survive within the river channel that the bridge crosses. It is recommended that prior to construction (and post any grant of planning) that an archaeological wade survey be carried out at the site of the proposed new bridge at Mornington. This should be performed by an underwater archaeologist under licence to the National Monuments Service. The survey will include metal detection. Dependant on the results of the survey, further archaeological mitigation may be required, such as preservation in-situ or by record and/or archaeological monitoring.

Built Heritage

- 6.1.6 There is a total of 17 protected structures located within the study area of the proposed scheme, along with 14 structures included on the NIAH Survey and 13 features included in the Meath Industrial Heritage Survey. The closest protected structures consist of Mornington Bridge (RPS MH021-200; Ch. 3690-3730), Here a new bridge will be constructed to the north of the existing bridge, with the scheme also passing beneath the Boyne Viaduct (RPS DB-184, Ch. 70-100) at the western end of the scheme. A number of demesne walls directly associated with protected structures border the proposed greenway directly. These include walls associated with St James (RPS DB-148; Ch. 150-160) and Weirhope House (RPS DB-149 Ch.390-430). Several smaller items of street furniture, including milestones and water pumps, are also located within the immediate vicinity of the scheme.
- 6.1.7 Many of the above structures are included in the NIAH built heritage survey for County Meath, including Mornington Bridge. Whilst there are a number of demesne landscapes located within the study area of the proposed scheme, the NIAH garden survey just lists Mornington House demesne, which is situated a considerable distance from the proposed scheme and now no longer intact. The proposed scheme

will travel through the northern section of a demesne associated with Stagreenan House (via a realigned section of road; Ch. 1330-1360) and to the north of demesnes associated with St James (RPS DB-148; Ch. 150-160) and Weirhope House (RPS DB-149; Ch. 390-430).

- 6.1.8 Mornington Bridge is a protected structure (RPS MH021-200; Ch. 3690-3730). As part of the proposed greenway, a new bridge will be constructed to the north of the existing bridge. There will be no direct impacts on the existing bridge as a result of the development. However, the new bridge will result in an indirect visual impact. This has been minimised with the design of the new bridge as the arches will remain visible beneath the new structure and the parapet walls will be visible through the spans of the new bridge. Whilst the proposed development will result in an indirect impact on Mornington Bridge, the design is sympathetic to the existing structure, allowing the main elements of the northern elevation to remain visible.
- 6.1.9 It is recommended that as part of the detailed design for the scheme, that a Conservation Architect/ Engineer be appointed to advise on the design of the new structure at Mornington Bridge (RPS MH021-200). Design works should be carried out in order to minimise any direct impacts on the existing fabric and to create a structure that complements the existing bridge, rather than detracting from its existing character.
- 6.1.10 The milestone and water pump (RPS MH021-201/2) at the junction of Church Street and the R151 are valuable architectural features of the street furniture. The milestone harkens back to the great coaching era of Ireland. The raised table and bollards proposed at this junction may have an adverse effect on the protected structures. It is recommended that if these features have to be moved during works at the junction, that they be reinstated following the completion of the project. The items should be stored safely off site during the course of works.
- 6.1.11 No adverse impacts are predicted upon the remaining protected structures or associated curtilage features.
- 6.1.12 The Halpin and Moran Memorial borders the footpath on Marsh Road. While this is not a protected structure it does constitute a feature of architectural and cultural

heritage interest. The proposed scheme will negative impact on the enclosing wall of the memorial. It is recommended that the Halpin and Moran Memorial is subject to a written and photographic record prior to works commencing. Alterations to the enclosing wall or memorial should be sympathetically undertaken by appropriately qualified masonry experts.

6.2 PLANNING

- 6.2.1 The Meath County Development Plan 2013-2019, the Draft Meath County Development Plan 2020-2026 and the Louth County Council Development Plan 2015-2021 identified a number of objectives for the Study Area under their Plans as previously mentioned in **Section 1.2**. The Drogheda Borough Council Development Plan 2011-2017 and East Meath LAP 2014-2020 illustrates the Land Use Zoning Objectives for Drogheda, Donacarney and Mornington Town (**Figure 3.2 - 3.4**).
- 6.2.2 Marsh Road (R150) and Mornington Road (R151) are designated as a proposed Greenway route (**Figure 3.5**) as outlined within the National Transport Authority's Greater Dublin Area Cycle Network Plan (2013).

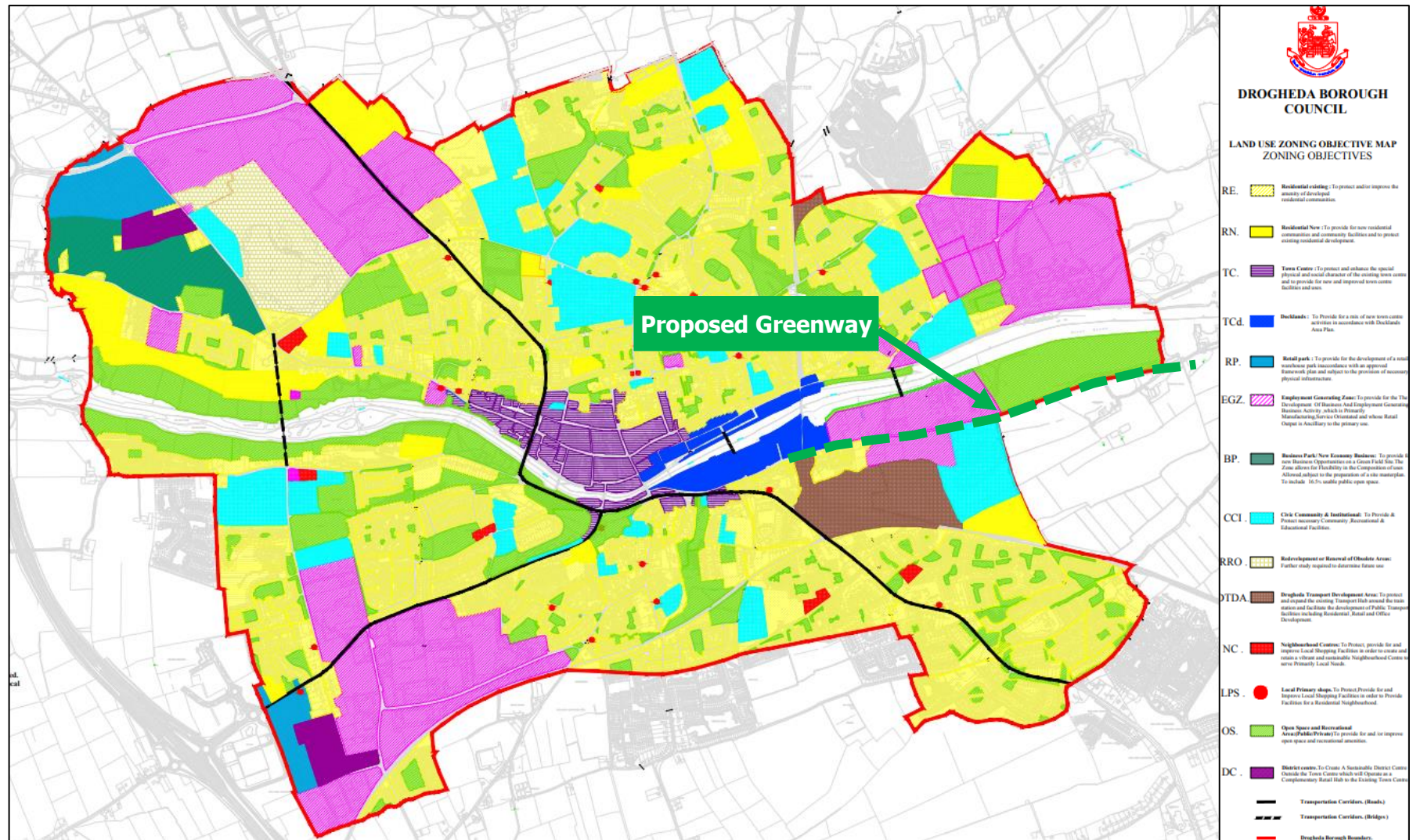


Figure 3.2 – Drogheda Borough Council Development Plan 2011 – 2017 Land Use Zoning Objectives Map

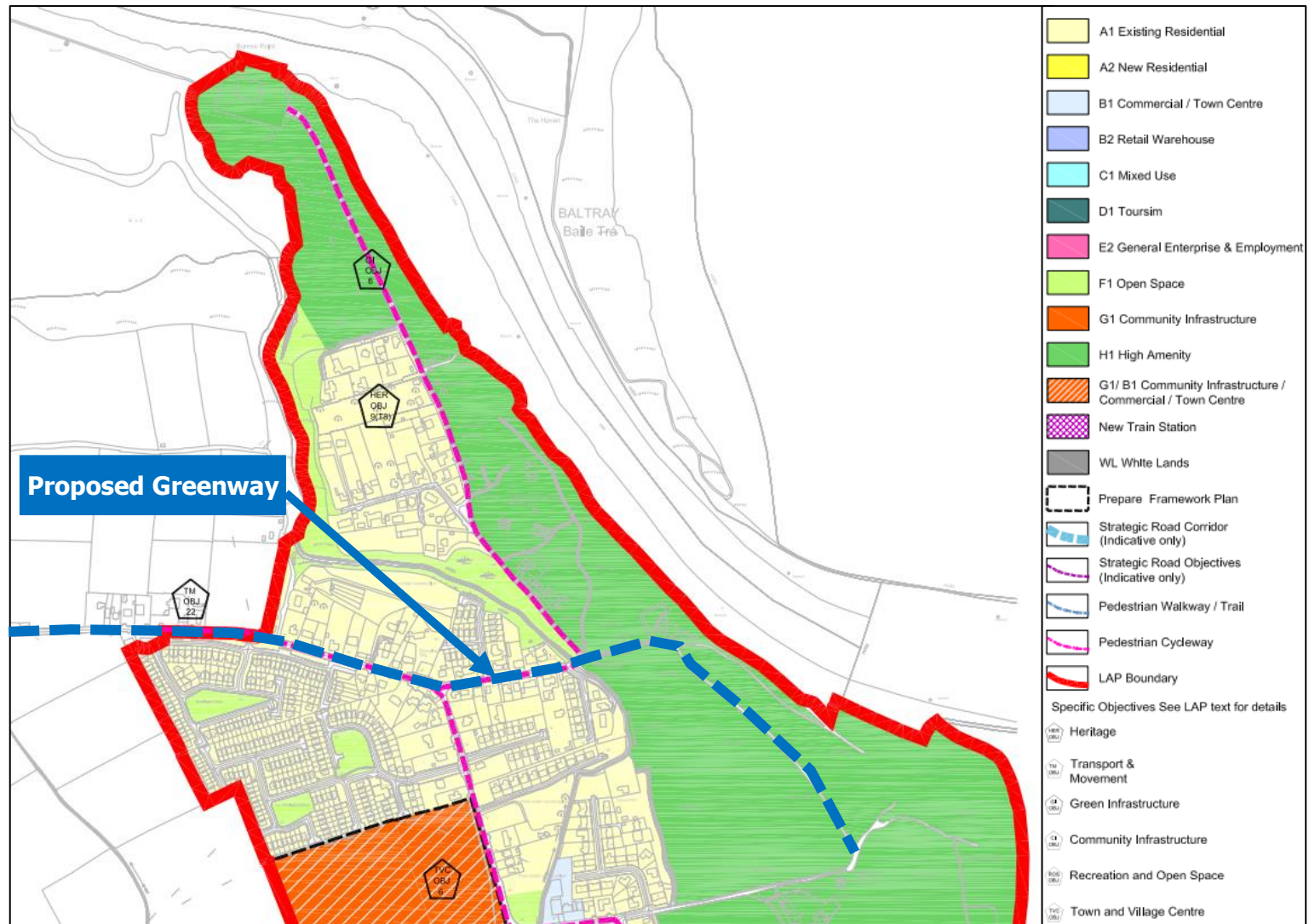


Figure 3.3 – East Meath LAP 2014-2020 Zoning & Objectives Map No. 1 (Mornington Town)

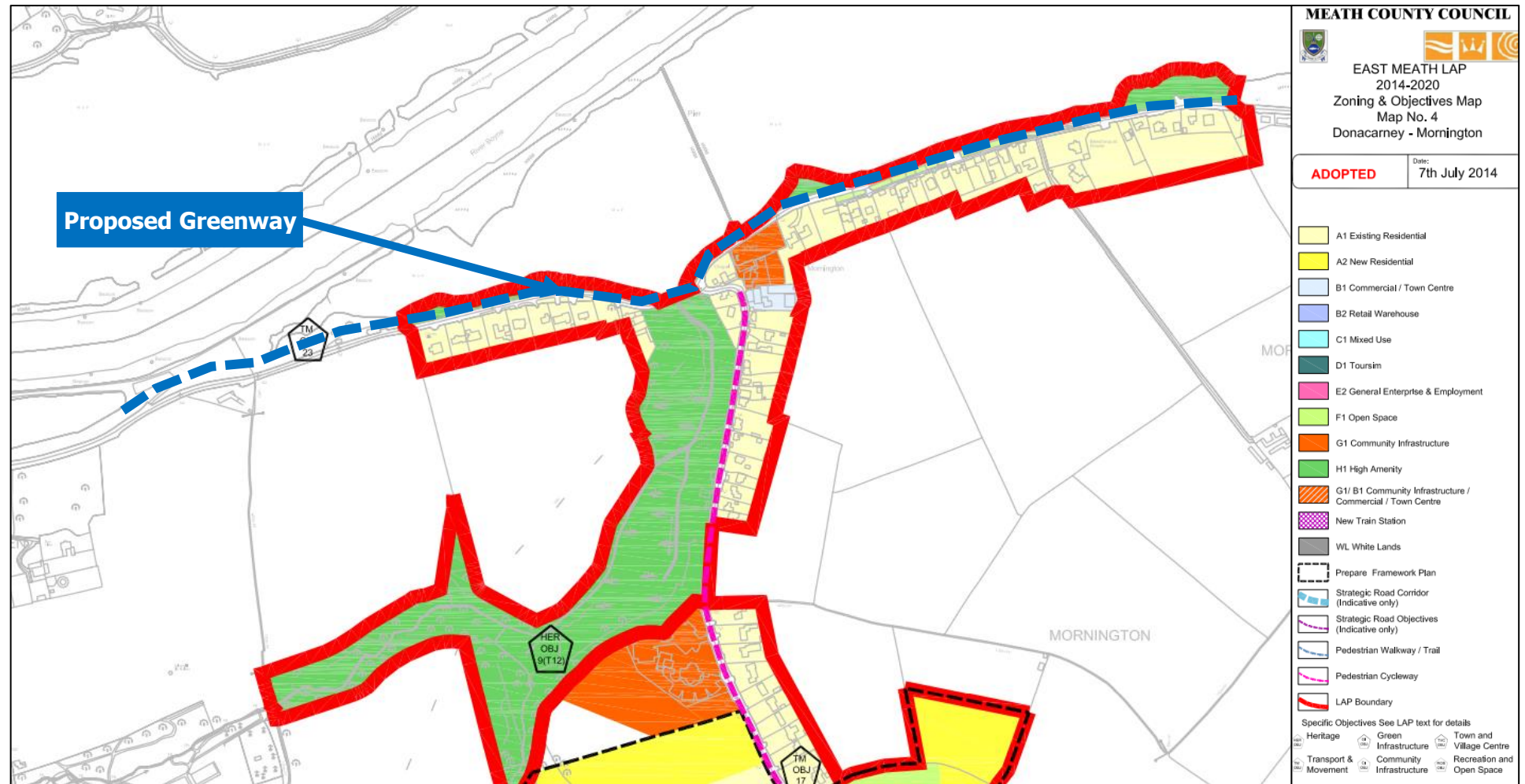


Figure 3.4 – East Meath LAP 2014-2020 Zoning & Objectives Map No. 4 (Marsh Road/Church Road/Mornington Road junction)

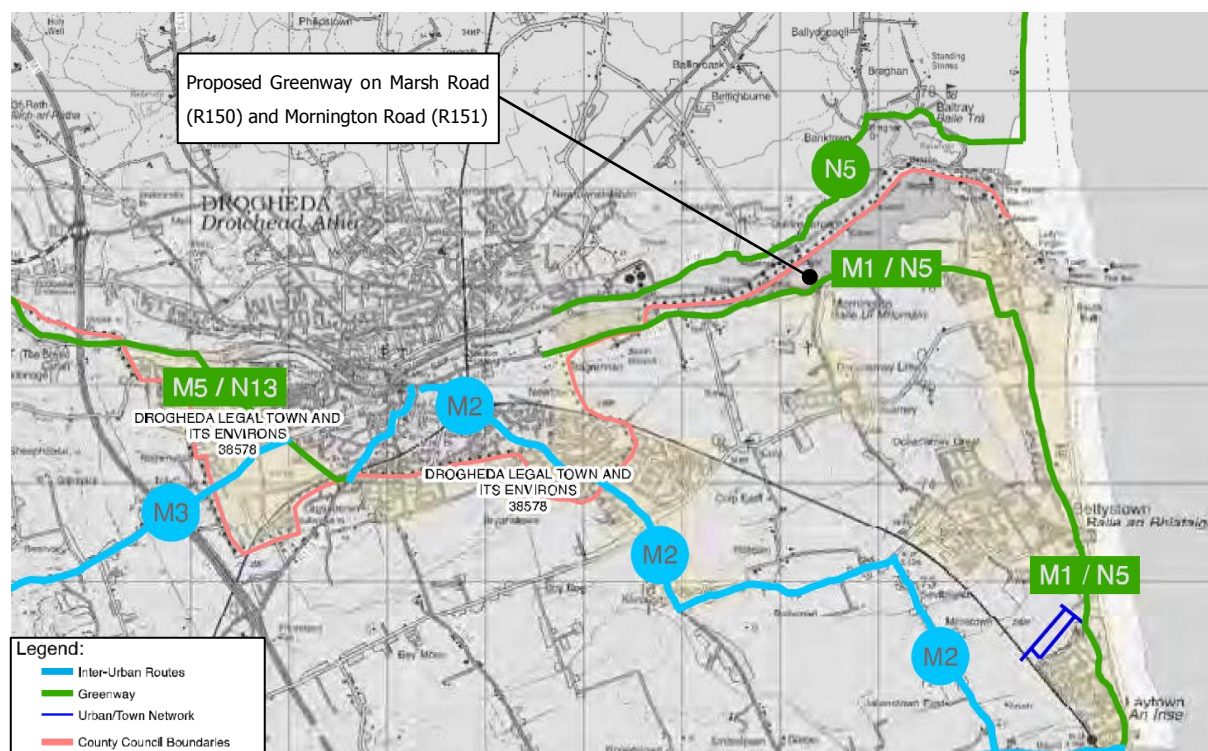


Figure 3.5 – Proposed Inter-Urban Cycle Routes East Meath (Source: GDA Cycle Network Plan, 2013, NTA)

6.3 TRAFFIC

6.3.1 The existing traffic conditions along Marsh Road (R150) and Mornington Road (R151) are subject to a number of prevailing safety issues such as:

- Poor pedestrian footpaths and crossing facilities;
- No dedicated cycle facilities;
- High vehicular speeds; and
- Generally, a poor pedestrian and cyclist environment

6.3.2 There is an 80km/hr speed limit on sections of the R150 (Ch. 410 – 2170) and generally a 60km/hr (Ch. 2590 – 5850) speed limit along other sections with a 50km/hr speed limit adjacent to Drogheda Grammar School (Ch. 2170 – 2590) and at the start of the greenway at the outskirts of Drogheda town.

6.3.3 In addition to numerous site visits undertaken by the design team, a separate desktop investigation on the Road Safety Authority's Collision Statistics database found for the period between 2005 to 2016 there were two serious collisions and one fatal collision (single vehicle collision) (**Figures 3.6-3.9**). There were three minor collisions in 2006, 2007 and 2013. All collisions involved single vehicles only.

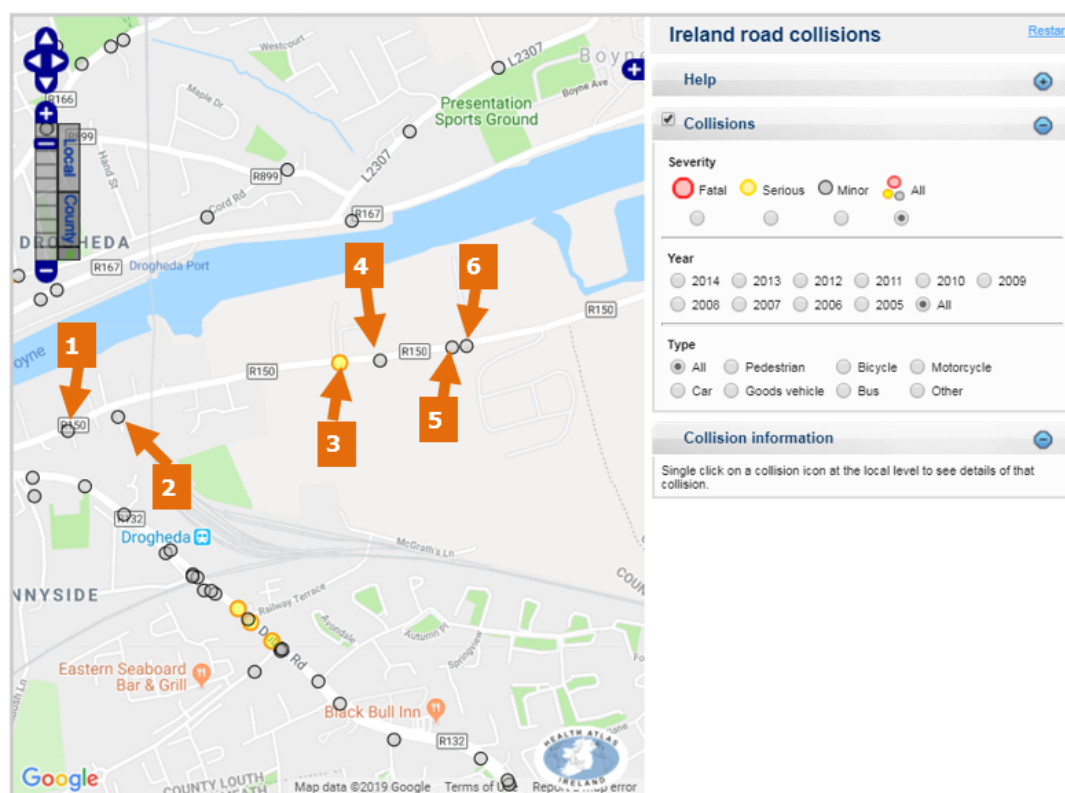


Figure 3.6: Accident Locations within Scheme (Source: Road Safety Authority)

Ref	Year	Vehicle	Circumstances	Day	Time	Severity	Total Casualties
1	2009	Car	Pedestrian	Thur	07:00-10:00	Minor	1
2	2006	Car	Angle, both straight	Tues	19:00-23:00	Minor	1
3	2012	Car	Single vehicle only	Fri	19:00-23:00	Serious	1 serious, 2 minor
4	2007	Car	Single vehicle only	Mon	23:00-03:00	Minor	1
5	2007	Bicycle	Other	Thur	10:00-16:00	Minor	1
6	2007	Car	Unknown	Sun	03:00-07:00	Minor	1

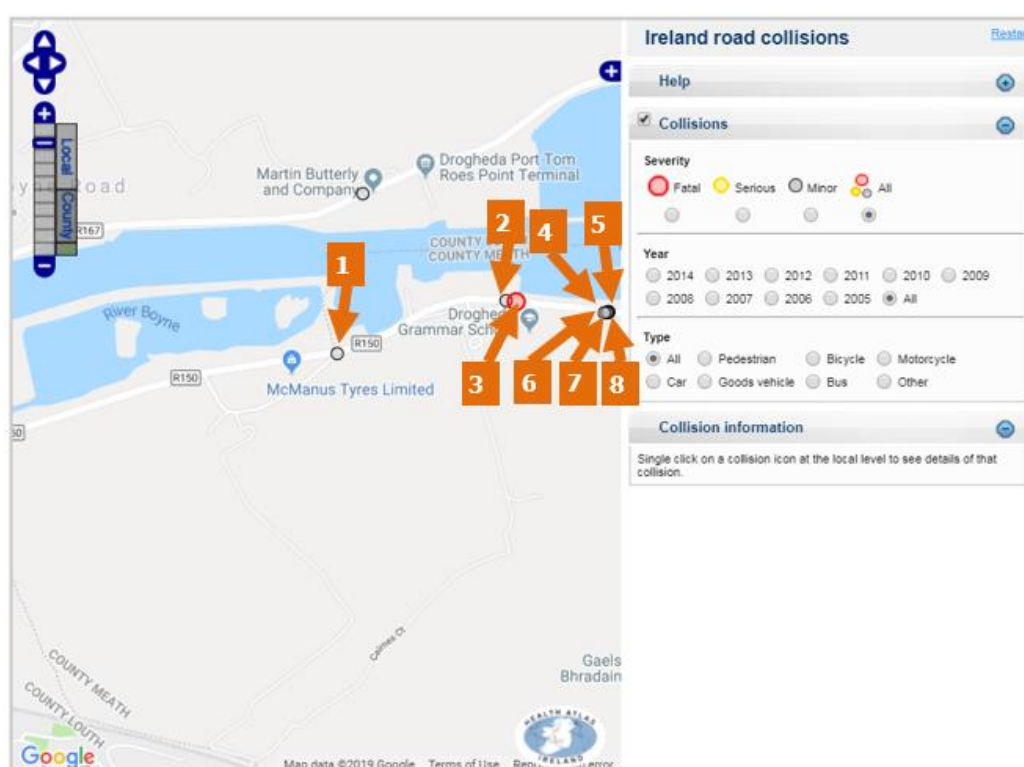


Figure 3.7: Accident Locations within Scheme (Source: Road Safety Authority)

Ref	Year	Vehicle	Circumstances	Day	Time	Severity	Total Casualties
1	2009	Car	Rear end, straight	Sun	19:00-23:00	Minor	3
2	2009	Car	Rear end, straight	Mon	10:00-16:00	Minor	1
3	2008	Car	Single vehicle only	Mon	19:00-23:00	Fatal	1
4	2010	Car	Other	Sat	19:00-23:00	Minor	2
5	2011	Car	Head-on conflict	Wed	19:00-23:00	Minor	4
6	2012	Car	Other	Mon	19:00-23:00	Minor	3
7	2009	Car	Other	Tues	07:00-10:00	Minor	1
8	2008	Car	Other	Wed	16:00-19:00	Minor	2

- 6.3.4 There is a cluster of minor vehicular collision at Mill/Marsh Road junction (5 incidents in total, involving cars), two of the incident circumstances were 'rear end, straight' and two were 'Pedestrian'. For the majority of the incidents the collision circumstances have been described a 'Other'.

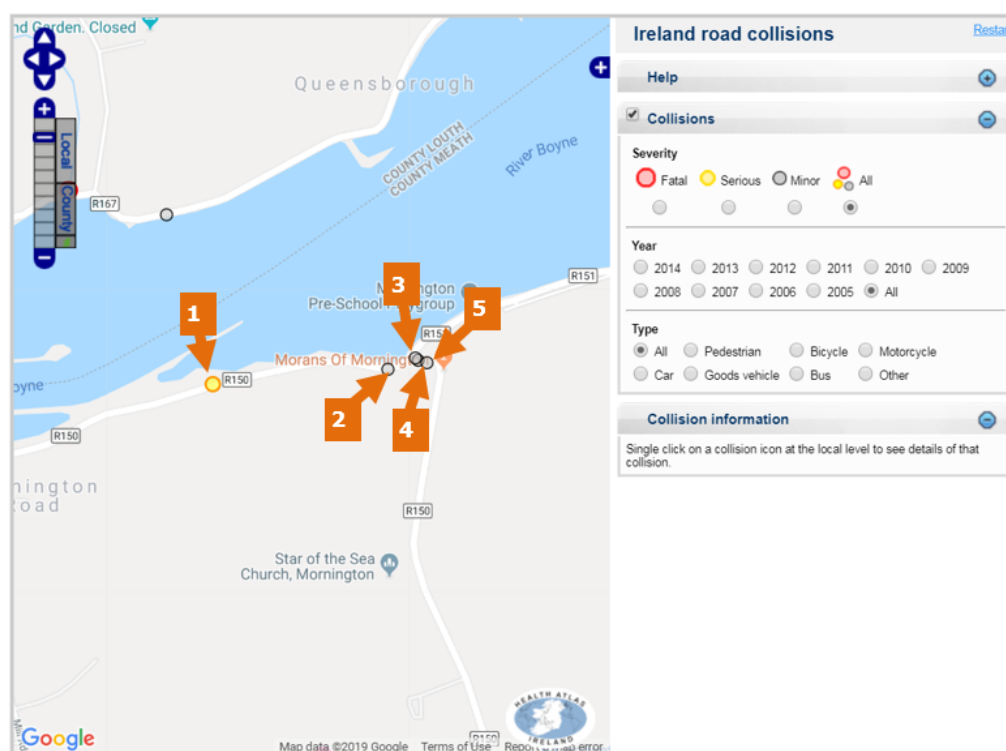


Figure 3.8: Accident Locations within Scheme (Source: Road Safety Authority)

Ref	Year	Vehicle	Circumstances	Day	Time	Severity	Total Casualties
1	2012	Car	Head-on conflict	Mon	16:00-19:00	Serious	2
2	2011	Bus	Head-on conflict	Fri	10:00-16:00	Minor	1
3	2005	Car	Head-on conflict	Thur	03:00-07:00	Minor	1
4	2013	Car	Single vehicle only	Thur	07:00-10:00	Minor	2
5	2010	Car	Single vehicle only	Sun	23:00-03:00	Minor	1

- 6.3.5 All the minor incidents on the R150 approaching the Church Road junction were either 'Head-on conflict' or 'Single vehicle only.' It is believed that the speed at which vehicles are approaching the Mornington Bridge/Church Street junction, may be a contributory factor in these recorded Head-on Single vehicle conflicts.
- 6.3.6 It has been noted that Yellow Bar road markings have been provided on approach to the Bridge to reduce vehicle speeds.

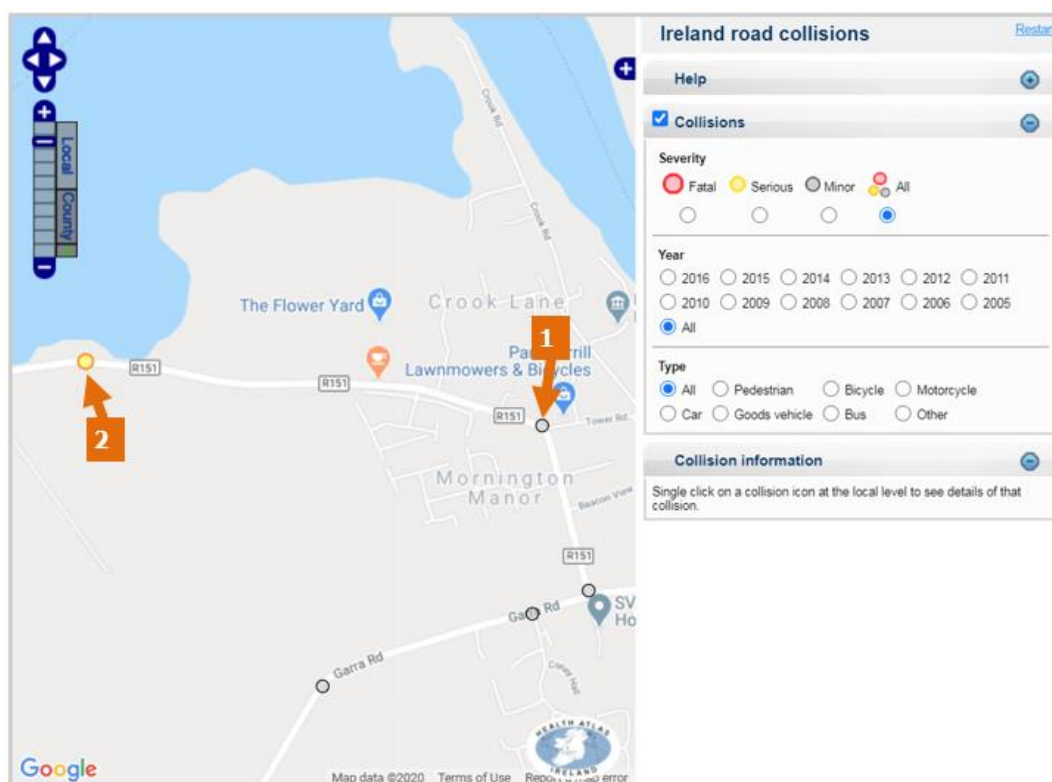


Figure 3.9: Accident Locations within Scheme (Source: Road Safety Authority)

Ref	Year	Vehicle	Circumstances	Day	Time	Severity	Total Casualties
1	2006	Car	Single vehicle only	Wed	10:00-16:00	Minor	1
2	2015	Car	Pedestrian	Sun	10:00-16:00	Serious	1

- 6.3.7 As mention previously, there is an 80km/hr speed limit on sections of the R150 and generally a 60km/hr speed limit along other sections with a 50km/hr speed limit adjacent to Drogheda Grammar School and at the start of the greenway at the outskirts of Drogheda town.
- 6.3.8 The traffic surveys summary found that at ATC1, which was located approx. 300m east of Flogas Ireland (Ch. 1160), has an 85th percentile speed in the eastbound direction of 90kph and 74kph in the westbound direction toward Drogheda.
- 6.3.9 The traffic surveys summary found that at ATC2, which was located approx. 800m east of Mornington Bridge (Ch. 4650), has an 85th percentile speed in the eastbound direction of 64kph and 75kph in the westbound direction toward Mornington Bridge.



- 6.3.10 It was also found the traffic peaks for Marsh Road (R150) at ATC1 were at 08:00-09:00 in the morning peak and 17:00-18:00 in the evening peak. Typically, 92% of vehicles travelling along Marsh Road are Private cars. This is followed by 2 axle Van/Lorry or bus at 4.4% and 3-6 axle vehicles at 2.4%. Bicycles accounted for 0.6% of total traffic along Marsh Road and there were 0.6% motorcycles. Typical AADT ranges from 5,500 - 6,000 vehicles.
- 6.3.11 It was also found the traffic peaks for Mornington Road (R151) at ATC2 were at 09:00-10:00 in the morning peak and 17:00-18:00 in the evening peak. Typically, 93.5% of vehicles travelling along Marsh Road are Private cars. This is followed by 2 axle Van/Lorry or bus at 3.4% and 3-6 axle vehicles at 1.7%. Bicycles accounted for 1.0% of total traffic along Marsh Road and there were 0.4% motorcycles. Typical AADT ranges from 4,500 - 5,000 vehicles.
- 6.3.12 Currently there is no dedicated cycle facilities or pedestrian facilities for the majority of the Marsh Road and Mornington Road. The Boyne Greenway will provide a greenway segregated from vehicular traffic for the majority of the route to ensure both a safe continuation of the route and the retention of the views across the Boyne Estuary. This scheme also proposed to provide junction improvements along the R150 and R151, including traffic calming in the form of raised tables and raised pedestrian crossing (signalised pedestrian crossings and zebra crossings).
- 6.3.13 The proposed greenway, as well as providing a walking and cycle route for tourists, will provide a safe walking and cycle route between Drogheda and Mornington for local people and also provide a safe route for school children walking or cycling to the schools from Mornington or Drogheda.
- 6.3.14 The proposed design was subject to a Stage 1 Road Safe Audit (RSA) by an independent consultant. The recommendations made by the RSA team were incorporated into the final preliminary design for the scheme.



DBFL CONSULTING ENGINEERS

THE BOYNE GREENWAY ENVIRONMENTAL IMPACT ASSESSMENT SCREENING REPORT




comhairle chontae na mí
meath county council



Comhairle Contae Lú
Louth County Council


NTA
Údarás Náisiúnta Iompair
National Transport Authority



Tionscadal Éireann
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7.0 ENVIRONMENTAL IMPACT ASSESSMENT SCREENING REPORT

7.1 EIAR REQUIREMENTS

- 7.1.1 Screening is the process of assessing the requirement of a project to be subject to Environment Impact Assessment Report (EIAR), based on the project type, scale and on the significance or environmental sensitivity of receiving environment. JRE Ltd has prepared the Environmental Impact Screening Report which can be viewed in Full in the planning application package.
- 7.1.2 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.
- 7.1.3 Based on the type of development proposed (i.e., Greenway, cycle and pedestrian route) a determination of the legal context of the development was completed to determine how it should be assessed for EIAR screening.
- 7.1.4 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 vehicle, toll plaza or other facility for the collection of tolls, services area, emergence, telephone, first aid post, culvert, arch, gully, railing, fence, wall, barrier, guardrail, margin, kerb, lay-by, hard shoulder, island, pedestrian refuge, median, central reserve.

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

- 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.

7.2 SUMMARY OF LEGISLATIVE REQUIREMENTS FOR EIA SCREENING

- 7.2.1 The proposed development for the construction of the Boyne Greenway along the Boyne Estuary between Ship Street/Railway Viaduct and Mornington does not fall within any category within Schedule 5 of the Planning and Development Regulations, 2001 and as such a mandatory EIAR is not required under the 2001 Regulations.
- 7.2.2 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 4.1**.

Mandatory		Comparative Assessment	EIAR Required
Construction of a motorway		The proposed scheme is not a motorway	No
Construction of a busway		The proposed scheme is not a busway	No
Construction of a service area		The proposed scheme does not contain a service area.	No
Any prescribed type of proposed road development	The construction of a new road of four or more lanes, or the realignment or widening of an existing road so as to provide four or more lanes, where such new, realigned or widened road would be eight kilometres or more in length in a rural area, or 500 metres or more in an urban area;	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.	No
	The construction of a new bridge or tunnel which would be 100 metres or more in length.	The Greenway Proposal does not involve the construction of a bridge or tunnel that would be 100m or greater.	No

Table 4.1: Summary of Legislative Requirements for EIAR Screening

Mandatory EIAR

- 7.2.3 The proposed Boyne Greenway scheme between the Drogheda Railway viaduct and Mornington Beach does not exceed any of the thresholds outlined in the Roads Act 1993. Therefore, there is no mandatory requirement to prepare an EIAR.

Sub-Threshold EIAR

- 7.2.4 The proposed Boyne Greenway development is a sub-threshold development and the criteria of Annex III of Directive 2014/52/EU was taken into account to assess if the likely effects of the development are significant as set out in Schedule 7 of the Planning & Development Regulations 2001.

7.3 EIAR SCREENING CONCLUSION

- 7.3.1 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.
- 7.3.2 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 and the Archaeological and Built Environment Assessment reports are implemented then the proposed development would not have a significant environmental impact.
- 7.3.3 Based on the findings of the screening assessment it is not considered that a full EIAR is required for the proposed Greenway development.



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8. NON-STATUTORY
PUBLIC CONSULTATION

THE BOYNE GREENWAY NON-STATUTORY PUBLIC CONSULTATION




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8.0 NON-STATUTORY PUBLIC CONSULTATION

8.1 NON-STATUTORY PUBLIC CONSULTATION

- 8.1.1 In an effort to inform landowners, members of the public and interested parties in relation to the proposed route and progress on the project to date, a Non-Statutory Public Consultation was held from 30th August to 11th October 2019. Through the process, members of the public and interested parties were invited to view details of the scheme and, if desired, provide feedback on the project, and its emerging preferred route. Submissions could either be made by post, or by using an on-line submission portal facility on the Meath County Council website. The Non-Statutory Public Consultation Report is provided in **Appendix A**.

Outcome of the Non-Statutory Public Consultation Process

- 8.1.2 A total of 2,723 submissions, representing 2,768 individuals, were received by Meath County Council and the issues raised were categorised, summarised, and analysed. Of this number, the vast majority of the submissions, a total of 2,614 submissions (representing 2,653 individuals), were determined to be supportive of the proposed scheme.
- 40 No. of the submissions (representing 40 individuals) received highlighted concerns with the proposed scheme.
 - 70 No. submissions representing (75 individuals) were received noting objections to the proposed.

Summary of Issues Raised in the Submissions

- 8.1.3 A total of 22 No. core issues were identified during the review process. Of the submissions received highlighting concerns or objections, a high proportion were from residents living in the Mornington Court housing estate, and were primarily concentrated on issues directly affecting the proposed section of works immediately adjacent to Mornington Court estate and the proposed loss of green space/area to the estate. The remaining smaller proportion of objections were associated with other issues along the preferred route or concerns relating to the overall scheme concept.
- 8.1.4 In terms of the issues/concerns that were raised most frequently, the highest number of instances (42 times/60%) related to issues/concerns over the potential loss of private lands, gardens or open green spaces as a result of the implementation of the

proposed scheme, mainly due to the realignment of roads and footpaths in the vicinity of Mornington Court housing estate.

- 8.1.5 The second highest proportion of issues/concerns raised (40 times/57%) were related to perceived issues/concerns that the proposed works would adversely affect the River Boyne Special Area of Conservation (SAC) and/or its designated Special Protection Area (SPA).
- 8.1.6 The third highest proportion of issues raised (39 times/56%) were related to perceived issues/concerns that the proposed Greenway would have a negative impact on the local roads network, and in particular the potential for the proposed scheme to cause excessive traffic problems along the preferred route.

Amendments to Design following Consultation

- 8.1.7 A final preliminary scheme design has been completed, taking on board feedback from the public consultation process where practical. The following changes have been undertaken:
- **Chainage 2290 – 2280 (sheets 16-20)**, the greenway has been lowered to just above 3.54m (above Flood Zone A), when not constrained by existing physical infrastructure, with a maximum gradient of 1:20 maintained. On **sheet 18**, the greenway will be maintained at the lower level (3.54m) while a separate ramp is now provided to tie into Mill/Marsh Road junction (controlled crossing).
 - **Chainage 2290 – 2280 (sheets 16-20)**, the greenway has been lowered to just above 3.54m (above Flood Zone A), when not constrained by existing physical infrastructure, with a maximum gradient of 1:20 maintained. On **sheet 18**, the greenway will be maintained at the lower level (3.54m) while a separate ramp is now provided to tie into Mill/Marsh Road junction (controlled crossing).
 - **Chainage 3705 - 3725 (sheet 25)**, the proposed pedestrian/cycle bridge will be a prefabricated steel arch bridge placed on precast concrete cross beams on precast concrete piles. There will be a clear separation of 2m between the proposed bridge and Mornington Bridge, therefore, there will be no direct impacts on the protected structure.

- **Chainage 4360 – 4720 (sheets 30-32)**, the boardwalk type construction has been replaced with bituminous surfacing to prevent possible severance between residential properties and the estuary.
- **Chainage 5410 – 5520 (sheet 37)**, car parking spaces within the Mornington Court green area have been relocated back to the creche and the existing parking arrangement has been updated due to widening of the carriageway at this location.
- **Chainage 5890 – 6100**, the greenway will not continue towards Mornington Beach along timber matting through the dunes. The greenway will now terminate at Tower Road/Crook Road junction at Ch. 5890.

8.1.8 The Preliminary Design drawings illustrating the aforementioned amendments are provided in the planning application pack.



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THE BOYNE GREENWAY SUMMARY




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9.0 SUMMARY

9.1.1 In summary, this proposed scheme, the Boyne Greenway; Drogheda to Mornington route from the railway viaduct to Mornington is approximately 5.9km in length with approximately 4.1 km of the route directly alongside the Regional Road and approximately 1.8km slightly 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.

9.1.2 The scheme includes provisions for the following:

- Segregated Pedestrian/Cycle facilities in the form of a Greenway (Bituminous surface, Elevated Boardwalk, and provisions of pedestrian footpaths at particular locations with minimum widths for:
 - Greenway of 4m
 - Footways of 1.8m;
- 8 No. junction improvements including traffic calming in the form of raised tables at:
 - Marsh Road (R150) / Weirhope (Ch. 250);
 - Marsh Road (R150) / the Water Treatment Plant (Ch. 980);
 - Marsh Road (R150) / local road to the south (Ch. 1600);
 - Marsh Road (R150) / local road to the south (west of Drogheda Port Office) (Ch. 1930);
 - Marsh Road (R150) / Mornington Road (R151) / Church Road (Ch. 3745);
 - Mornington Road (R151) / High Road (Ch. 4040);
 - Mornington Road (R151) / Mornington Court (Ch. 5340);
 - Mornington Road (R151) / Tower Road (Ch. 5650);

And entry treatment at:

- Marsh Road / Drogheda Port Building junction (Ch. 2110);
 - Marsh Road (R150) / Mill Road (Ch. 2585);
 - Ramp/traffic calming on entry to Mornington Village;
- New pedestrian crossing facilities at locations including:
 - Zebra crossings to be installed at the railway station car park to allow access to the Greenway (Ch. 40).

- Controlled pedestrian crossing before the junction between Drogheda Grammar School and R150 to allow access to Greenway (Ch. 2215).
 - Possible controlled crossing at the junction between Mill Road and R150 to allow access to Greenway (Ch. 2585).
 - Zebra crossing at the junction between Mornington Court entrance and R151 to allow access to Greenway (Ch. 5340).
- Bridge sections will be required at two locations along the route of the greenway to provide 20 metre clear spans. The first between chainage 3705 and 3725 and the second between chainage 4720 and 4740. The bridging sections are over a stream and surface water outfall respectively; and
- Improvements to the Tower Road including the installation of a footpath.



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THE BOYNE GREENWAY

Non-Statutory Public Consultation Report




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Boyne Greenway Project

Non-Statutory Public Consultation Report

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3 – Outcome of the Non-Statutory Public Consultation Process	5
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1 – Introduction

Meath County Council, with the support of the National Transport Authority, is undertaking design works on a cycle and pedestrian route, the proposed Boyne Greenway – Drogheda to Mornington, which commences at Ship Street in Drogheda Town and terminates at Mornington in County Meath. In an effort to inform landowners, members of the public and interested parties in relation to the proposed route and progress on the project to date, a non-statutory public consultation was held from 30th August to 11th October 2019. Through this process, members of the public and interested parties were invited to view details of the scheme and, if desired, provide feedback on the project, and its emerging preferred route. Submissions could either be made by post, or by using an on-line submission portal facility on the Meath County Council website.

1.1 Overview of the Boyne Greenway

The overall objective of the proposed Boyne Greenway is to provide a cycle and pedestrian route to connect Drogheda Town, via the R150 Mornington Road, with the residential settlement in Mornington Village, and to provide for connection links to the Le Cheile Educate Together National School and Drogheda Grammar School.

The proposed Boyne Greenway –Drogheda to Mornington forms part of a cycle route (Route M1/N5) identified by the National Transport Authority's Cycle Network outlined in the Greater Dublin Area Cycle Network. Please refer to Figure 1 below.

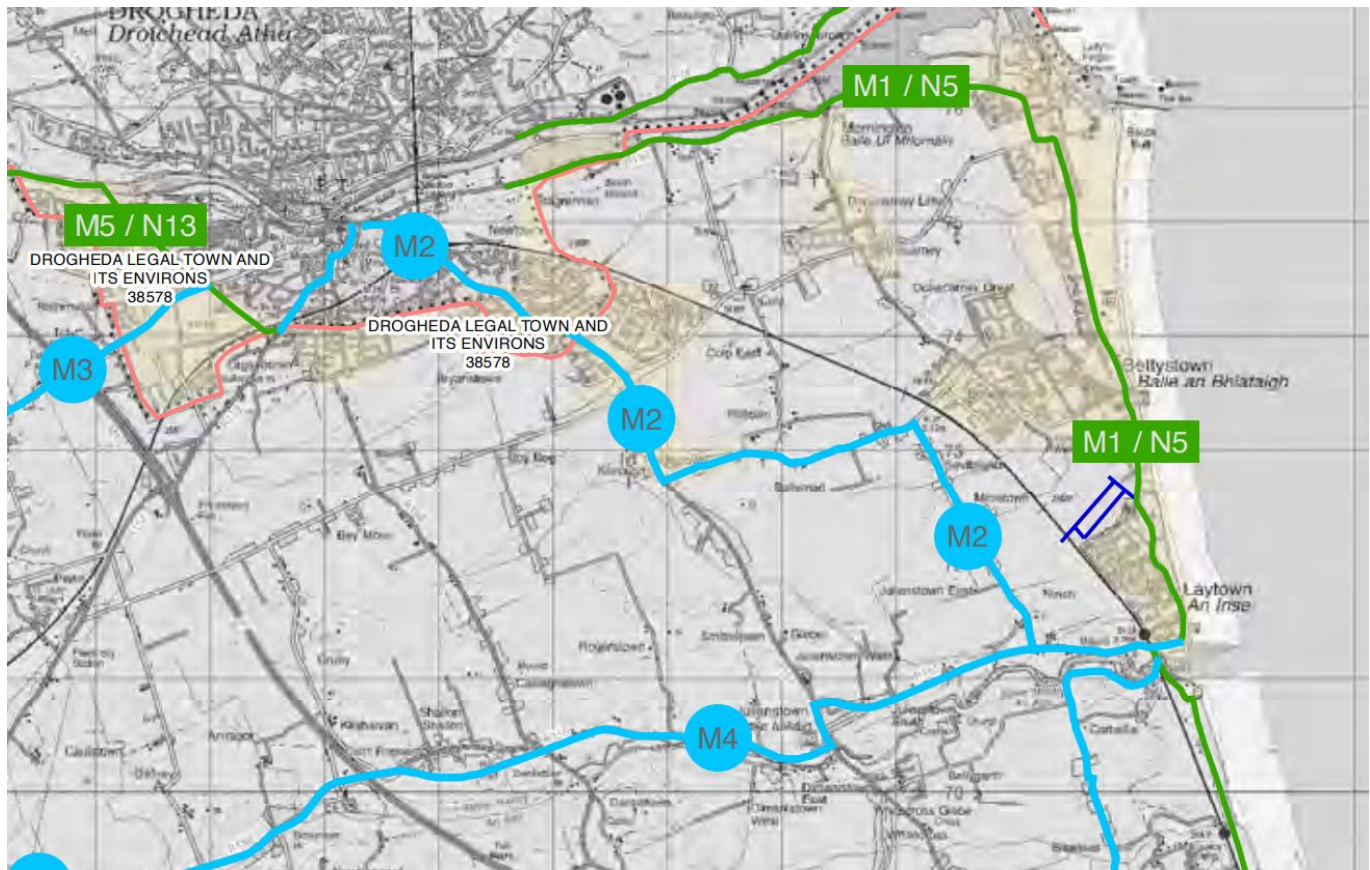


Figure 1: Extract from NTA GDA Cycle Network Map - Sheet RN2

2 – Outline of the Non-Statutory Public Consultation Process

Details of the Emerging Preferred Scheme for the ‘Boyne Greenway: Drogheda to Mornington’ were placed on display during normal office hours each weekday from Friday 30th August to Friday 11th October 2019 in the following two locations:

- Meath County Council Head Office, Buvinda House, Dublin Road, Navan, Co Meath; and
- Meath County Council Civic Offices & Library, Duleek, Co Meath.

These locations were advertised in the following local newspapers;

- The Drogheda Independent, 20th August 2019, and
- The Meath Chronicle, 24th August 2019

Additionally, all of the consultation material was made available on the Meath County Council online Consultation Portal, located at the following URL:

<https://consult.meath.ie/en/consultation/boyne-greenway-%E2%80%93drogheda-mornington>

Submissions were required to be made by 4pm on Friday 25th of October and to be submitted through the Council’s website (www.meath.ie or <https://consult.meath.ie>) or by email to transport@meathcoco.ie. Alternatively, submissions could also be made by post to:

Drogheda to Mornington Consultation,
Transportation Department, Meath County Council,
Buvinda House, Dublin Road, Navan, County Meath, C15 Y291

3 – Outcome of the Non-Statutory Public Consultation Process

A total of 2,723 submissions, representing 2,768 individuals, were received by Meath County Council and the issues raised were categorised, summarised, and analysed. Of this number, the vast majority of the submissions, a total of 2,614 submissions (representing 2,653 individuals), were determined to be supportive of the proposed scheme.

40 No. of the submissions (representing 40 individuals) received highlighted concerns with the proposed scheme.

70 No. submissions representing (75 individuals) were received noting objections to the proposed.

It was noted that the topics raised in the submissions which highlighting concerns followed a similar pattern to those listed in the objections received category. In addition, the majority of the objections received included multiple headings. Please refer to Figure 1 below.

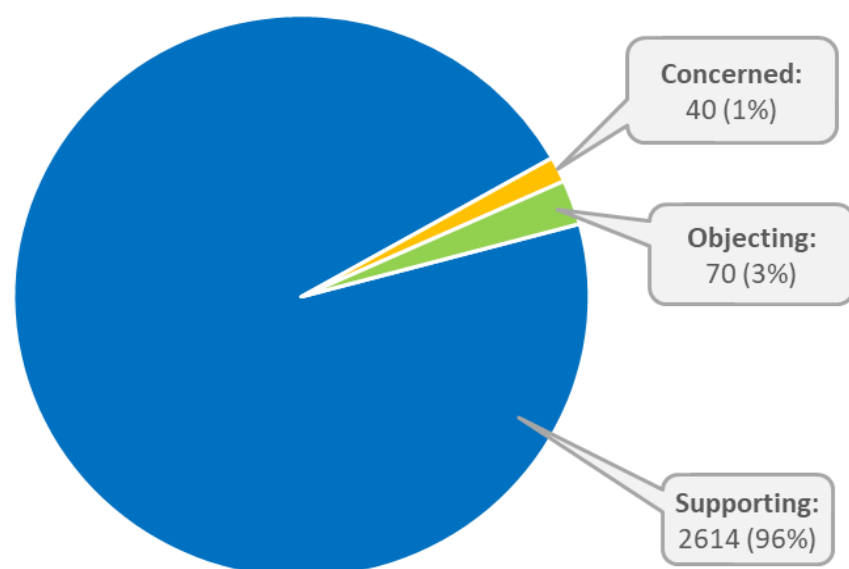


Figure 1: Percentage Summary of Submissions Received

3.1 Summary of Issues Raised in the Submissions

A total of 22 No. core issues were identified during this review process. The main category headings, and the number of times the issues were raised under each category heading, are summarised in Table 1 below.

Of the submissions received highlighting concerns or objections, a high proportion were from residents living in the Mornington Court housing estate, and were primarily concentrated on issues directly affecting the proposed section of works immediately adjacent to Mornington Court estate and the proposed loss of green space/area to the estate. The remaining smaller proportion of objections were associated with other issues along the preferred route or concerns relating to the overall scheme concept.

In terms of the issues/concerns that were raised most frequently, the highest number of instances (42 times/60%) related to issues/concerns over the potential loss of private lands, gardens or open green spaces as a result of the implementation of the proposed scheme, mainly due to the realignment of roads and footpaths in the vicinity of Mornington Court housing estate.

The second highest proportion of issues/concerns raised (40 times/57%) were related to perceived issues/concerns that the proposed works would adversely affect the River Boyne Special Area of Conservation (SAC) and/or its designated Special Protection Area (SPA).

The third highest proportion of issues raised (39 times/56%) were related to perceived issues/concerns that that the proposed Greenway would have a negative impact on the local roads network, and in particular the potential for the proposed scheme to cause excessive traffic problems along the preferred route.

	Category Headings	Times raised	Percent raised
	Localised Issues		
1	Loss of private lands / private gardens	42	60%
2	Increase in people in area	27	39%
3	Potential increase in antisocial behaviour	23	33%
4	Loss of existing parking	18	26%
5	Potential increase in litter	16	23%
6	Disruption to local people	11	16%
7	Loss of property value	10	14%
8	Loss of privacy	8	11%
9	Loss of views	1	1%
	Environmental Issues		
10	Loss of, or damage to, the SAC &/ the SPA	40	57%
11	Potential damage to existing wildlife / birds	35	50%
12	Loss of light, additional fumes, increased noise	16	23%
13	Climate change	2	3%
	Engineering Issues		
14	Increase in traffic	39	56%
15	Road safety	23	33%
16	Effects on public transport infrastructure	17	24%
17	Concerns over flooding	6	9%
18	Emergency access	2	3%
	Procedural Issues		
19	Procedure / public involvement / fairness of process	25	36%
20	Route selection / lack of infrastructure on proposed route	22	31%
21	Better use of public funding	10	14%
22	Other: General Objection, no supporting information supplied	2	3%

Table 1: Summary of Issues Raised

Note: The above issues were contained within the 70 objections received, out of the overall 2,723 submissions made, representing a total responding group of 2,768 individuals.

3.2 Details of Submissions Received

This sub-section sets out the details of the main comments raised under the various submission categories. This is not an exhaustive summary of all the issues raised but aims to provide a fair and reasonable summary representation of the content received. Please refer to Figure 2 below.

Localised Concerns

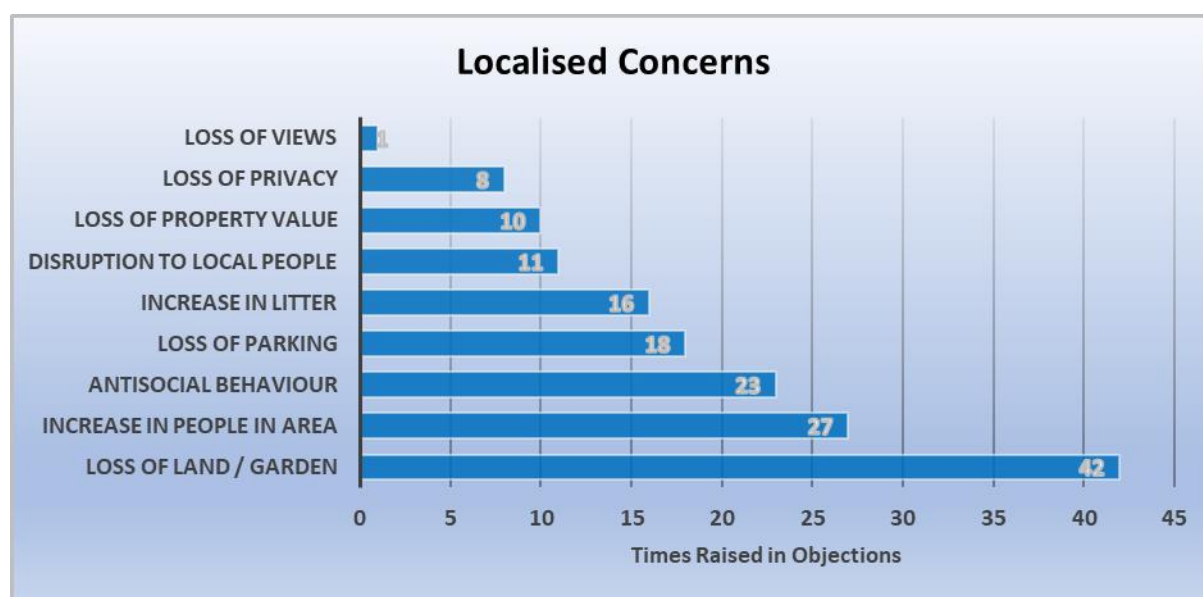


Figure 2: Distribution of Localised Concerns Raised

1 – Loss of private lands / private gardens

- a. Concerns relating to the potential purchase, or acquisition of private lands, especially mature private gardens;
- b. Concerns over the potential removal of sections of existing green open spaces within the Mornington Towers housing estate; and
- c. Concerns that the preferred route will remove part of the green open space areas, a particular concern of residents in Mornington Towers Housing Estate, which are currently viewed as safe play area used by children.

2 – Increase in people in area

- a. The potential to bring additional people to an area, noting that the area as limited existing amenities;
- b. The potential of an increase to non-resident parking within the Mornington Towers housing estate; and
- c. Safety/security concerns in relation to a potential increase in non-resident members of the public walking through/around the area.

3 – Potential increase in antisocial behaviour

- a. The creation of ‘out-of-sight’ areas, removed from the local footpath and road infrastructure, which may attract antisocial behaviour; and
- b. The potential for damage to, or vandalism of the Greenway infrastructure, in addition to existing local assets.

4 – Loss of existing parking

- a. The removal or reduction to the exiting parking area within the Mornington Towers housing estate; and
- b. Concerns those alterations to, and the relocation of, the existing parking facilities adjacent to the Creche will cause disruption to its patrons and staff.

5 – Potential increase in litter

- a. The increase in people using the area will increase the potential for littering.

6 – Disruption to local people

- a. The existing community with be disrupted by the Greenway bringing additional traffic and people to the area;
- b. Additional traffic will contribute to already busy roads and junctions;
- c. Additional people will overload/cause capacity issues for the existing local public transport services;
- d. Potential disruption to residents within the Mornington Towers housing estate caused by patrons of the Creche, following the relocating of the existing Creche parking facilities.

7 – Loss of property value

- a. The alterations to the green area within the Mornington Towers housing estate will result in a devaluation of people’s homes and properties; and
- b. The loss of private gardens and the close proximity of the Greenway to residents’ properties, along the route will result in a devaluation of people’s homes and properties.

8 – Loss of privacy

- a. Concerns that properties will be overlooked by users of the Greenway; and
- b. Concerns that the proximity of the Greenway route to private dwellings will result in a loss of privacy.

9 – Loss of views

- a. The relocation of boundary walls and fences following the purchase of sections of gardens may result of existing views from private domestic dwellings being compromised.

Environmental Concerns

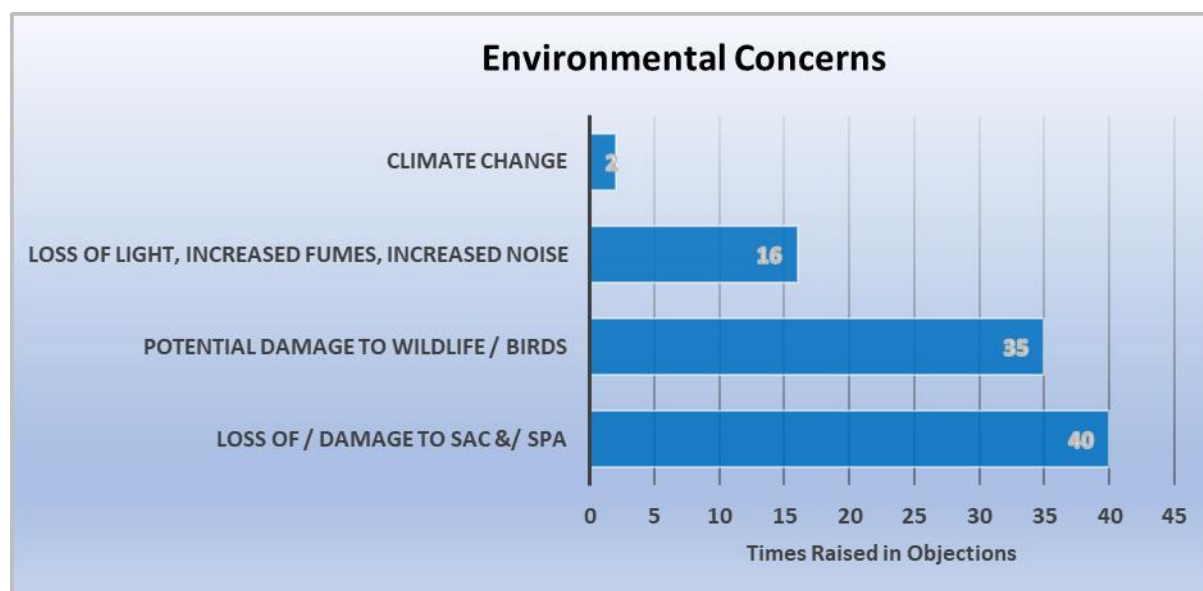


Figure 3: Distribution of Environmental Concerns Raised

10 – Loss of, or damage to, the SAC &/ the SPA

- a. Concern in relation to the preservation and protection of the Boyne estuary SPA (Special Protection Area) and SAC (Special Area of Conservation); and
- b. Disruption caused to the SAC/SPA by the physical construction of the Greenway

11 – Potential damage to existing wildlife / birds

- a. Potential damage to nesting grounds and known habitats
- b. Disruption to the local ecosystem

12 – Loss of light, additional fumes, increased noise

- a. The relocation of boundary walls and fences closer to residents' homes to accommodate the proposed cycle and pedestrian facility on Mornington Road will result in a loss of light;
- b. The increase in traffic levels generated by people travelling to use the proposed cycle and pedestrian facility will result in increased vehicle fumes and deterioration in local air quality;
- c. The relocated boundary will bring traffic and pedestrians closer to domestic homes, resulting in an increase in local ambient noise levels.

13 – Climate change

- a. The proposed Greenway beside the Boyne estuary risks causing more threats to biodiversity in the area and does little to support possible measures to mitigate the future effects of climate change i.e. raised sea and estuary water levels.

Engineering Concerns

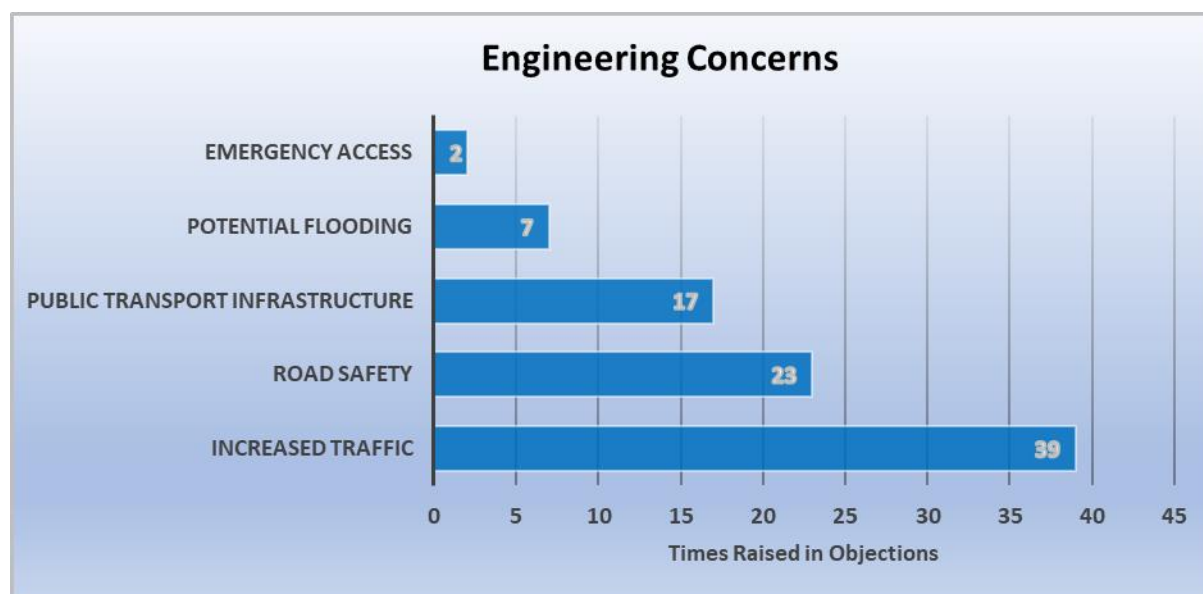


Figure 4: Distribution of Engineering Concerns Raised

14 – Increase in traffic

- a. The construction of the Greenway as proposed will result in an increase in the existing traffic volumes on small local roads; and
- b. The increase in traffic levels will result in traffic delays at junctions, and make it more difficult to get in and out of existing driveways.

15 – Road safety

- a. The additional vehicular and pedestrian traffic will increase the likelihood of accidents and incidents occurring; and
- b. The close proximity of the Greenway to people's residential driveways will also increase the likelihood of incidents.

16 – Effects on public transport infrastructure

- a. The potential loss of, or relocation of, the existing bus stops along the route; and
- b. The potential increase to the commuters using the existing services.

17 – Concerns over flooding

- a. Concerns that the scheme as proposed is to be built in an area with a known flood risk issue; and
- b. Concerns that existing flood water can rise to exceed the existing road levels, this would result in the greenway and road being flooded, and possibly damaged.

18 – Emergency access

- a. The proposed Greenway will include a limited number of access points from the public road, which will limit the ability of emergency services to respond to in the case of emergencies such as fires, medical emergency, etc.

Procedural Concerns

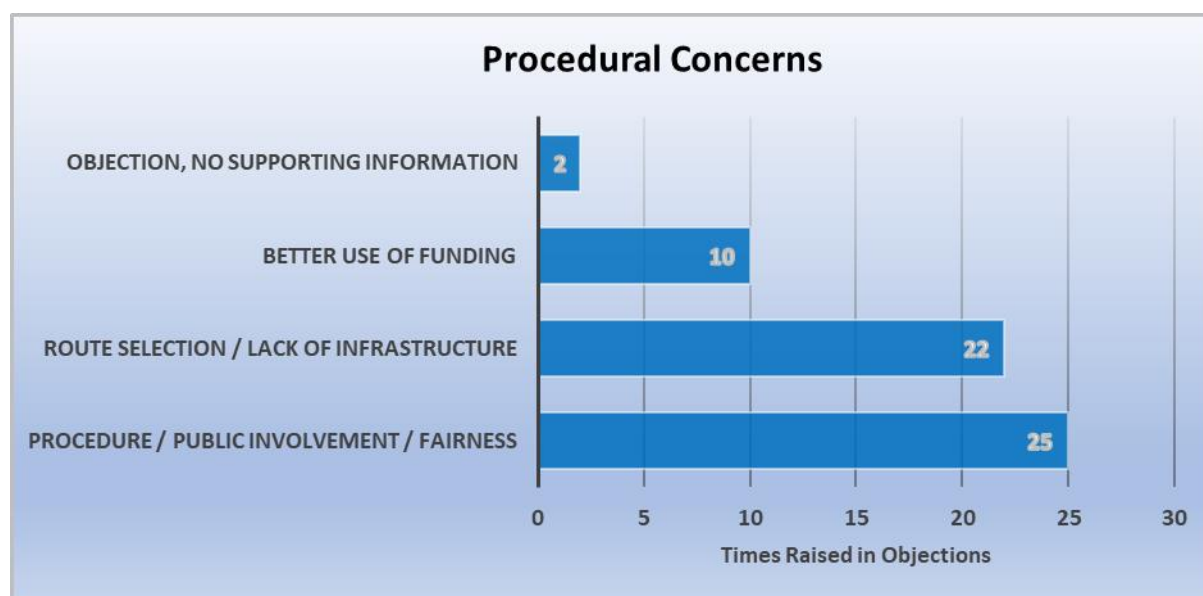


Figure 5: Distribution of Procedural Concerns Raised

19 – Procedure / public involvement / fairness of process

- a. The process has had limited involvement from the public;
- b. The presentation of the report could have been made easier for the reader; and
- c. Some objections note that did not believe they were provided any opportunity to raise concerns, noting the scheme proposers had no consultation, communication or collaboration with the local community.

20 – Route selection / lack of infrastructure on proposed route

- a. Route does not have any interesting features along it, and should be routed differently, in order to take in more of the local landscape;
- b. The Greenway will, for sections, travel through a suburban district, as opposed to routing through the natural environment;
- c. There is a general lack of public infrastructure along the proposed route; no shops, public toilet facilities, insufficient car parking spaces;
- d. The route ends abruptly on a beach, with no obvious end point feature or natural continuation; and
- e. The route selected is more expensive to construct than an alternate cross-country route.

21 – *Better use of public funding*

- a. Concerns that at a time of limited availability of public funds, other more worthy projects may lose out to funding due to the advancement of this project; and
- b. Concerns that this project doesn't serve the residents of Mornington, and that funding should be used to support and advance Mornington centric community projects instead.

22 – *Other: Objection, no supporting information supplied*

In addition to the objections categorised above, two further submissions were received during the non-statutory public consultation process which did not elect to state anything further than their objection to the scheme as a whole.

4 Next Steps

The purpose of this public consultation process was to present the Proposed Scheme for the Boyne Greenway – Drogheda to Mornington route and to elicit the views of the public and interested parties.

A final preliminary scheme design will be completed, taking on board feedback from the public consultation process where practical, to confirm a preferred scheme for the Boyne Greenway – Drogheda to Mornington, including land requirements where necessary.

An application for planning approval for the Boyne Greenway – Drogheda to Mornington Scheme is expected to be made to An Bord Pleanála in 2020. As part of that application process, a statutory public consultation process will be undertaken at that stage.

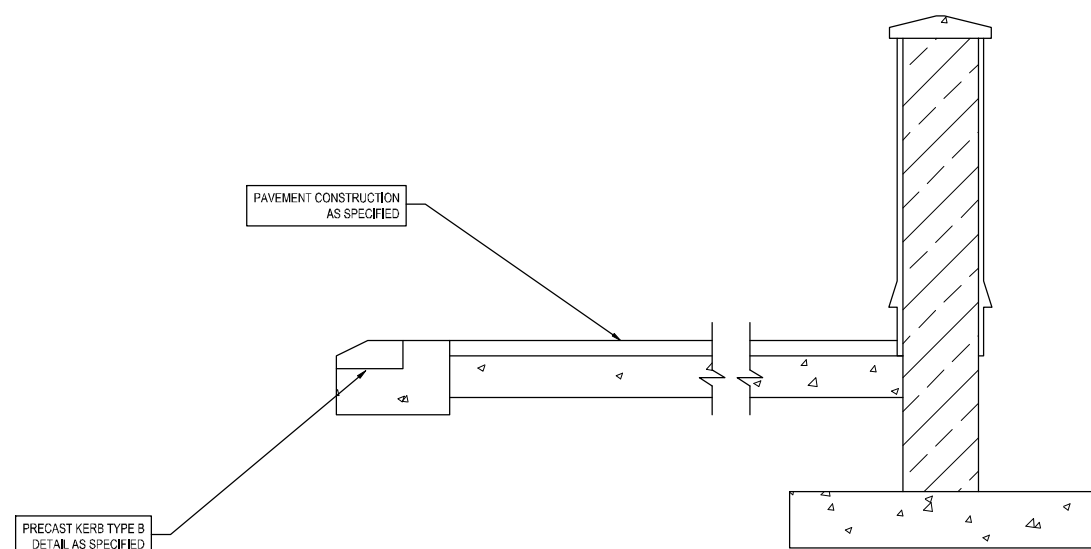
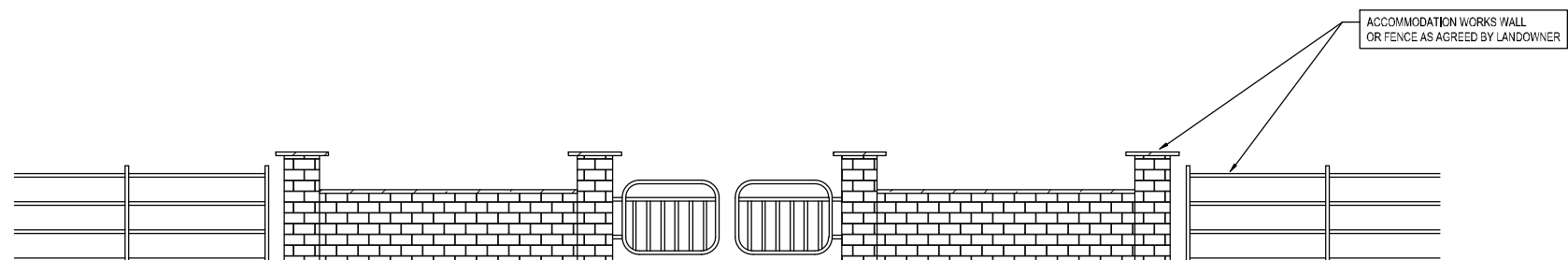
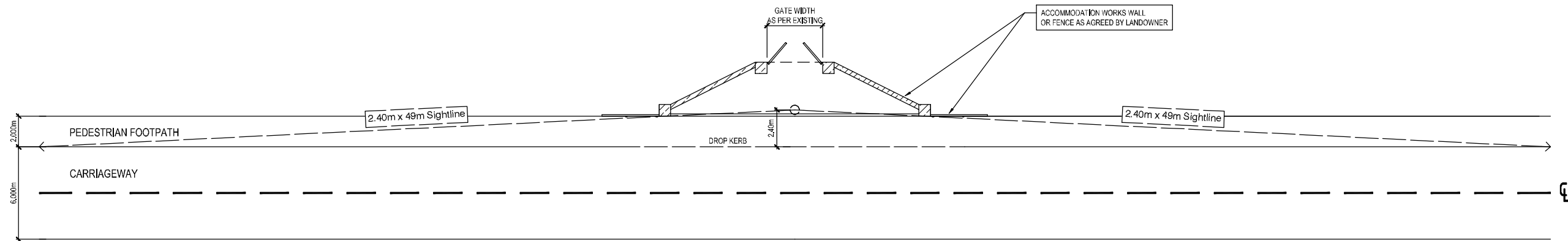
Subsequent to the planning stage and confirmation of funding availability, it is envisaged the detailed scheme design will be finalised and tender documents will be prepared. In addition, discussions will be entered into with affected landowners with regard to permissive access and land transfer/acquisition, where necessary.

Subject to funding approval and resolution of any land access/ land transfer requirements, the preferred scheme could then proceed to procurement and construction stages. It is currently anticipated that the construction period would be eighteen to twenty four months approximately (depending on constraints).

THE BOYNE GREENWAY

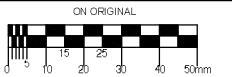
Domestic Entrance Typical Standard Construction Detail Drawings





SECTION AA
SCALE = 1:50

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NOTES:

- GENERAL NOTES:
1. ALL CO-ORDINATES ARE TO IRISH NATIONAL GRID (BASED ON OS MAPPING)
 2. ALL LEVELS ARE TO ORDNANCE DATUM MAIN HEAD (BASED ON LIDAR SURVEY INFORMATION)
 3. ALL DIMENSIONS IN METRES UNLESS SPECIFIED OTHERWISE

P1 10-07-20 PLANNING POC MPK

REV DATE DESCRIPTION BY CHKD

STATUTORY PUBLIC CONSULTATION

DESIGNED MK PREPARED JJP

DATE FEB 2019 CHECKED FIK



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PROJECT

BOYNE GREENWAY

DROGHEDA TO MORNINGTON



DRG TITLE

DOMESTIC ENTRANCE TYPICAL

CONSTRUCTION DETAIL

FOOTPATH ADJACENT

CLIENT

comhairle chontae na míneath county council



SCALE AS SHOWN @A1 FILE REF: 170029-2700

DRG NO. 170029-2701

P1