

The Fingal Coastal Way

Feasibility and Options Assessment - Stage 1 Report

Fingal County Council

April 2021



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Executive Summary

The Fingal Coastal Way is a proposed coastal greenway extending along the Fingal Coast from Newbridge Demesne to the Meath Border.

The scheme is a long-standing objective of Fingal County Council and this is further reflected in the current 2017-2023 Fingal Development Plan (FDP).

The scope of the project is to deliver a safe, attractive, first class coastal pedestrian and cycle route between Newbridge Demesne in Donabate and the County Boundary North of Balbriggan. The Fingal Coastal Way is envisaged to be a flagship scheme for tourism in the county with the potential to promote and enhance the local tourist economy.

This report covers Stage 1 of the Feasibility and Options Assessment process which has been developed to show the initial development and assessment of the long list of route options. Large numbers of viable routes were identified in each sub-section and compared using a multi-criteria analysis. The preliminary routes were created following investigation of the study area and feedback received during the public engagement event held in November 2019. The route options were cognisant of local constraints and opportunities to provide a best of class scheme.

The criteria used in the multi-criteria analysis are Engineering, Environment and Economy. These are identified as the most appropriate criteria for us in the initial stages of the route assessment process as set out in the TII Project Appraisal Guidelines. Sub criteria were developed by Atkins with reference to these headings and with particular attention given to the scheme Vision Statement and Project Objectives. These are as follows:

- **Usability**
- **User Experience**
- **Buildability**
- **Ecology and Other Natural Factors**
- **Built Heritage and Archaeology**
- **Material Assets**
- **Costs**
- **Benefits**

The Stage 1 assessment process compared each route using the above criteria in order to identify a short list of feasible options that can deliver the project objectives.

In Summary:

- Five routes will progress within Sub-Section 1A, namely Routes SS.1A.2, 3, 4, 9 and 11;
- Five routes will progress within Sub-Section 1C, namely Routes SS.1C.5, 7, 9, 11 and 14;
- Three routes will progress within Sub-Section 1D, namely Routes SS.1D.6, 7 and 8;
- Four routes will progress within Sub-Section 2A, namely Routes SS.2A.2, 3, 4 and 6;
- Three routes will progress within Sub-Section 2B, namely Routes SS.2B.1, 2 and 4;
- Six routes will progress within Sub-Section 2C, namely Routes SS.2C.2, 4, 5, 6, 7 and 13;
- Four routes will progress within Sub-Section 2D, namely Routes SS.2D.3, 5, 6 and 8;

These remaining routes will be brought forward to Stage 2 where a further, more detailed multi-criteria assessment will then be carried out to determine a final Emerging Preferred Route.

1. Introduction

1.1. Scheme Context

The Fingal Coastal Way (the Project) is a proposed coastal greenway extending along the Fingal Coast from Newbridge Demesne to the Meath Border.

The scheme is a long-standing objective of Fingal County Council and this is further reflected in the current 2017-2023 Fingal Development Plan (FDP). The Development Plan outlines numerous policies and objectives to plan and develop a route that integrates a coastal pedestrian and cycle route with sensitive natural and built heritage sites whilst achieving a balance between conservation of such sites and public uses such as leisure, recreation and tourism. Further details on the relevant FDP are available in 3.1.4 of this report.

The scheme is also an objective on a wider regional and national scale. It is identified within the Greater Dublin Area Cycle Network Plan where it will form part of the overall route FG1/N5. The indicative route for FG1/N5 is outlined in the Greater Dublin Area Cycle Network Plan on Drawing Sheet No. RN1. However, the route of the Fingal Coastal Way scheme is not restricted to the outlined indicative route. This report outlines the study undertaken for the Stage 1 assessment process which includes identification of a long list of feasible routes and an initial multi-criteria analysis to reduce this to a short-list of routes to be carried forward to a more detailed, Stage 2 assessment.

The overall length of the scheme is envisaged to be approximately 32km, depending on the final route selected.

1.2. Project Scope

The scope of the project is to deliver a safe, attractive, first class coastal pedestrian and cycle route between Newbridge Demesne in Donabate and the County Boundary North of Balbriggan. The Fingal Coastal Way is envisaged to be a flagship scheme for tourism in the county with the potential to promote and enhance the local tourist economy.

The scheme would improve connectivity between the urban centres along the route and a number of schools and tourist attractions in the area, thereby providing an attractive option for cyclists that will help promote modal shift and sustainable travel choices. The route is envisaged to be predominantly a leisure and tourist amenity but will also serve as a local commuter route.

Further detail on the project vision and objectives is provided in Section 1.6 of this report.

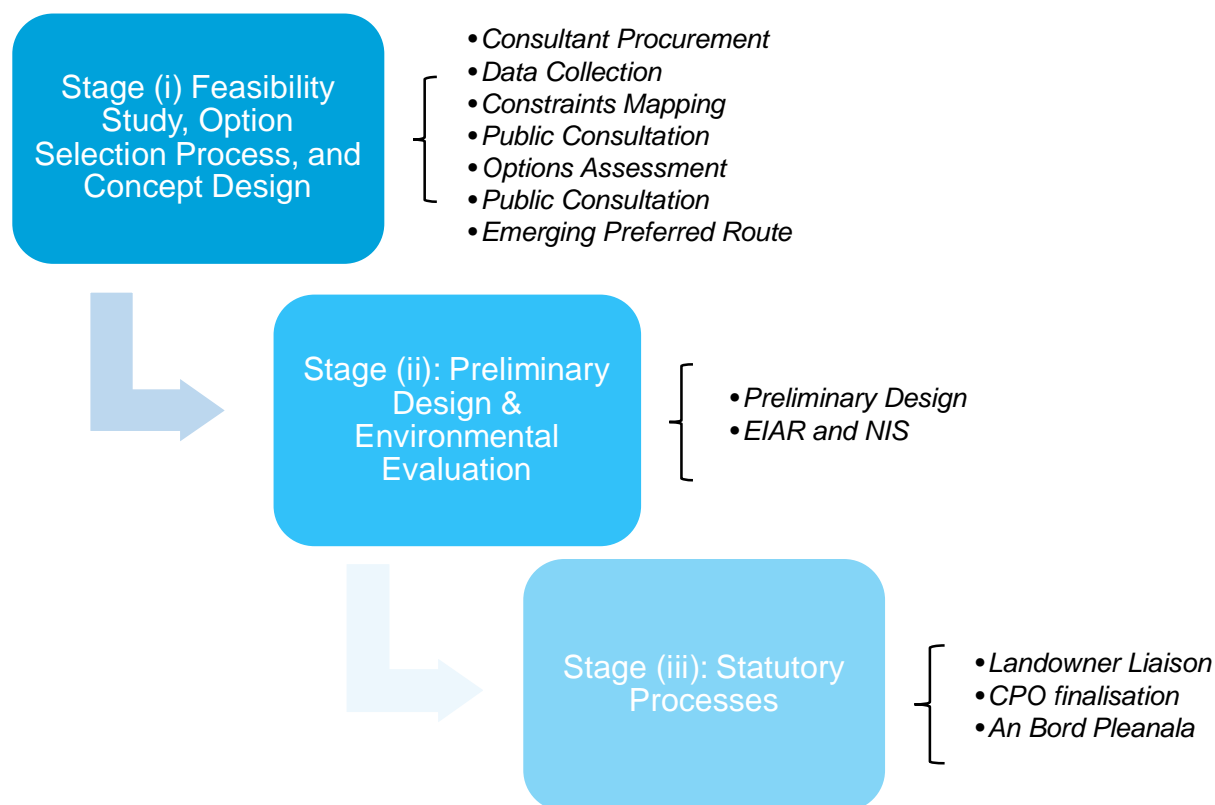
1.3. Project Stages

The project, in accordance with the brief, will comprise of the following stages:

- Stage (i) Feasibility Study, Option Selection Process, and Concept Design.
- Stage (ii): Preliminary Design & Environmental Evaluation.
- Stage (iii): Statutory Processes.

This report sits within Stage (i) of the project brief and outlines Stage 1 of the route feasibility and assessment process with the Stage 2 assessment and identification of the Emerging Preferred Route to follow. The following graphic illustrates the process and details the key tasks associated with each Project Stage.

Figure 1-1 - Project Stages



1.4. Scheme Extents and Study Area

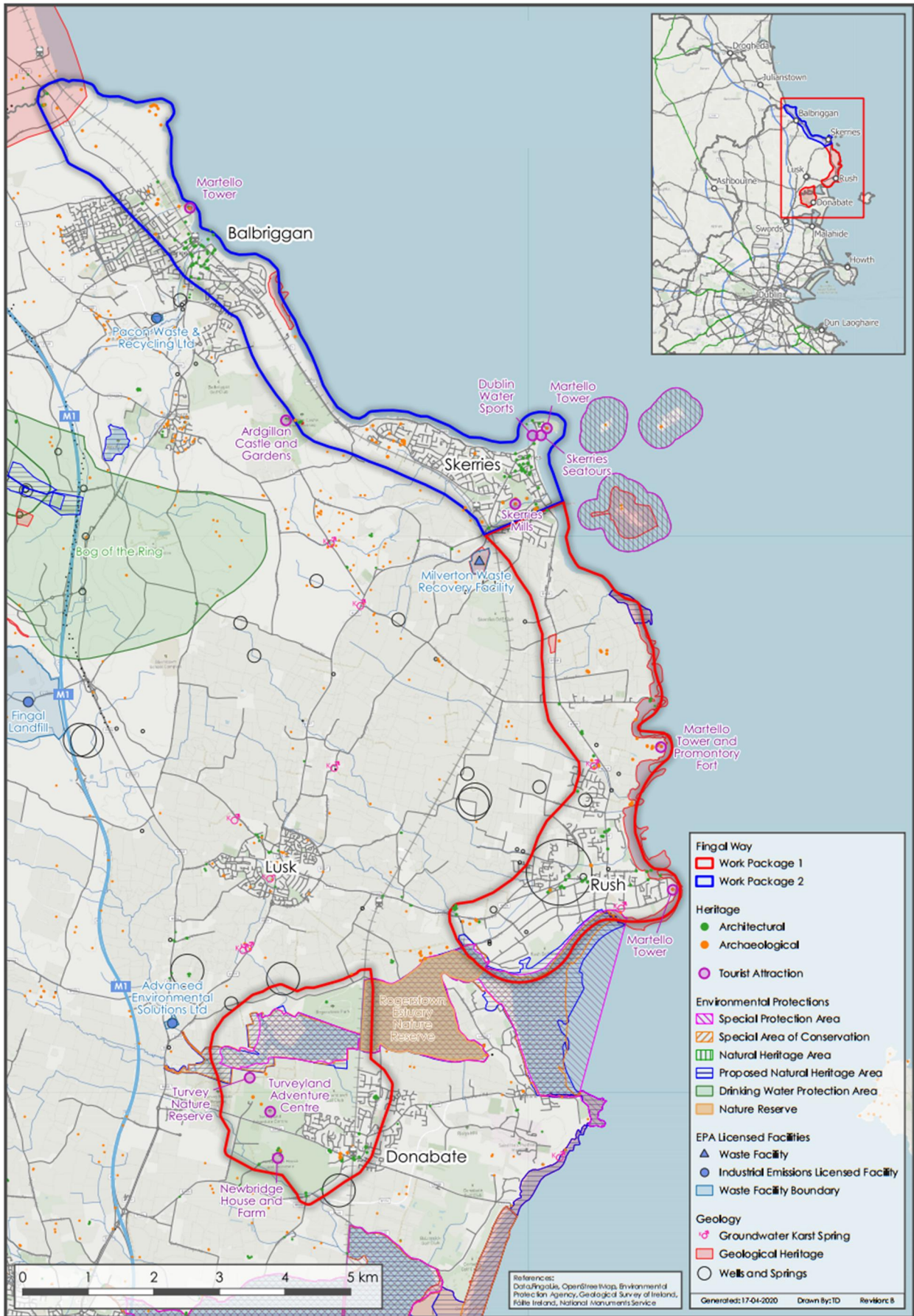
The Fingal Coastal Way is proposed to commence at Newbridge Demesne, and will tie-into the proposed Broadmeadow Way greenway at this location (which is being undertaken as a separate project).

The scheme will then terminate at or near to the boundary with County Meath, at/adjacent to the R124 Road just south of the Delvin River.

The study area will include the key towns of Donabate, Rush, Skerries and Balbriggan but will also incorporate important areas such as Newbridge Demesne, Rogerstown, Drumanagh, Loughshinny, Ardgillan and Bremore.

As shown in Figure 1-2 below, the project will be in the order of 32km long depending on the final route selected.

Figure 1-2 - Scheme Extents and Study Area



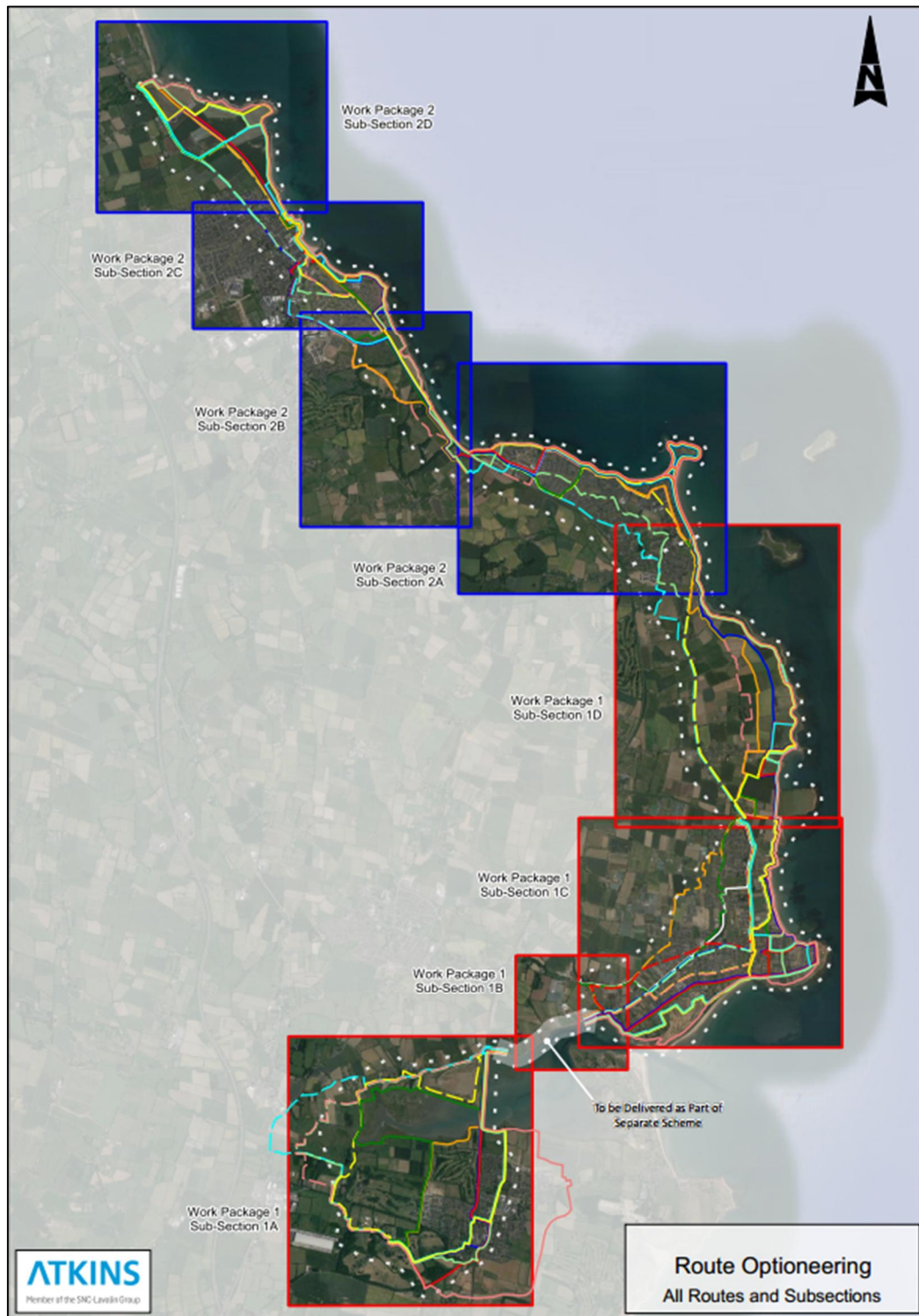
1.5. Work Packages

The scheme is divided into two separate Work Packages with each Work package containing a number of Sub-Sections as follows:

- Work Package 1 (WP1): Donabate (Newbridge Demesne) to Skerries (North Beach). Within WP1 there are 3 no. Sub-Sections.
- Work Package 2 (WP2): Skerries (North Beach) to the County Boundary with Meath (South of the Delvin River at/near the R132 road). Within WP2 there are 4 no. Sub-Sections.

The identified Work Packages and Sub-Sections are illustrated below.

Figure 1-3 - Work Packages and Sub-Sections



It should be noted that Sub-Section 1B does not form part of this study as it will be completed as part of other schemes currently being developed by Fingal County Council in relation to access to Rogerstown Park and flooding at Rogerstown Estuary.

The route in this Sub-Section will be subject to its own separate assessment process as a result but will tie into the overall route at either end.

1.6. Scheme Vision and Objectives

The Scheme Vision and Objectives have been determined through consultation with the Project Steering Group and are set as follows:

1.6.1. Vision Statement

The following statement encapsulates the ultimate vision of the completed scheme:

The vision for the Fingal Coastal Way is to create a safe, attractive and environmentally sympathetic coastal walking and cycling route between Newbridge Demesne in Donabate and the County Boundary to the North of Balbriggan.

The completed scheme will provide the highest feasible level of service for both pedestrians and cyclists and will improve connectivity between the major towns on the North County Dublin coastline.

The Fingal Coastal Way will be a flagship tourism scheme for the county and will serve both destination and local leisure trips along with commuter trips between towns.

1.6.2. Scheme Objectives

For a scheme of this nature, it is required that the Common Appraisal Framework guidelines are used to carry out the assessment process. The Scheme Objectives focus on the key criteria indicated within the Common Appraisal Framework guidelines and it is envisaged that this will ensure that an all-encompassing and broad range of objectives are identified which can then correlate naturally back into the option assessment process through a relevant and definable range of measurable evaluation criteria.

The Scheme Objectives are as follows:

Table 1-1 - Project Objectives

CAF Criteria	Specific Objectives
Economy	<ul style="list-style-type: none"> To facilitate the promotion and branding of Fingal County as a great place to visit and do business. To maximise viable long-term economic benefits that are evenly distributed among existing businesses and attractions and to facilitate the potential for future green start-ups. To minimise economic impact to landowners through a partnership approach during both the scheme developmental and operational stages. To deliver a project which is cost effective through its whole life cycle.
Environment	<ul style="list-style-type: none"> To optimise and manage connectivity to natural and artificial tourism attractions in a manner that is controlled and sympathetic to ecological habitats and heritage sites. To deliver a project of exemplar sustainability in relation to material choice, material sourcing and construction practices. To ensure that the end product has taken due consideration of both climate and coastal change.

CAF Criteria	Specific Objectives
Safety	<ul style="list-style-type: none"> • To ensure that the scheme aligns with the hierarchy of users wherein the needs of pedestrians are considered first, followed by the cyclist. • To maximise user safety by providing a traffic free route that is segregated from vehicles wherever practicable. • To consider users perception of safety and implement measures that enhance the sense of safety along the route. • To ensure that due consideration is given to the variable coastal, rural and urban route contexts and that relevant measures are reasonably implemented to protect the safety of users. • To ensure that the scheme design takes into account full consideration of safety towards both residents and landowners.
Accessibility and Social Inclusion	<ul style="list-style-type: none"> • To ensure that universal access is a core consideration in the design of the scheme. • To embrace public input during the development and operational stages so as to enhance community ownership of the scheme. • To consider appropriate locations along the scheme where the place function of the route can be enhanced.
Integration	<ul style="list-style-type: none"> • To ensure that the scheme aligns with key national, regional and local policy. • To facilitate wayfinding for the scheme to local train stations and amenity centres. • To consider multi-modal transport support at key origins and destinations. • To take advantage of smart technology where practicable.
Physical Activity	<ul style="list-style-type: none"> • To improve the health and general wellbeing of users. • To promote active lifestyles through facilitating connectivity to local recreational activity centres. • To support other sporting and health initiatives in Fingal.

1.7. Purpose of the Feasibility Study and Options Assessment Report

The purpose behind this Feasibility Study and Options Assessment report is to outline the process involved in identifying a long list of viable routes and carrying out a Stage 1 preliminary options assessment to determine suitable routes for the more detailed Stage 2 assessment process. In carrying out the preliminary options assessment, the following steps were undertaken:

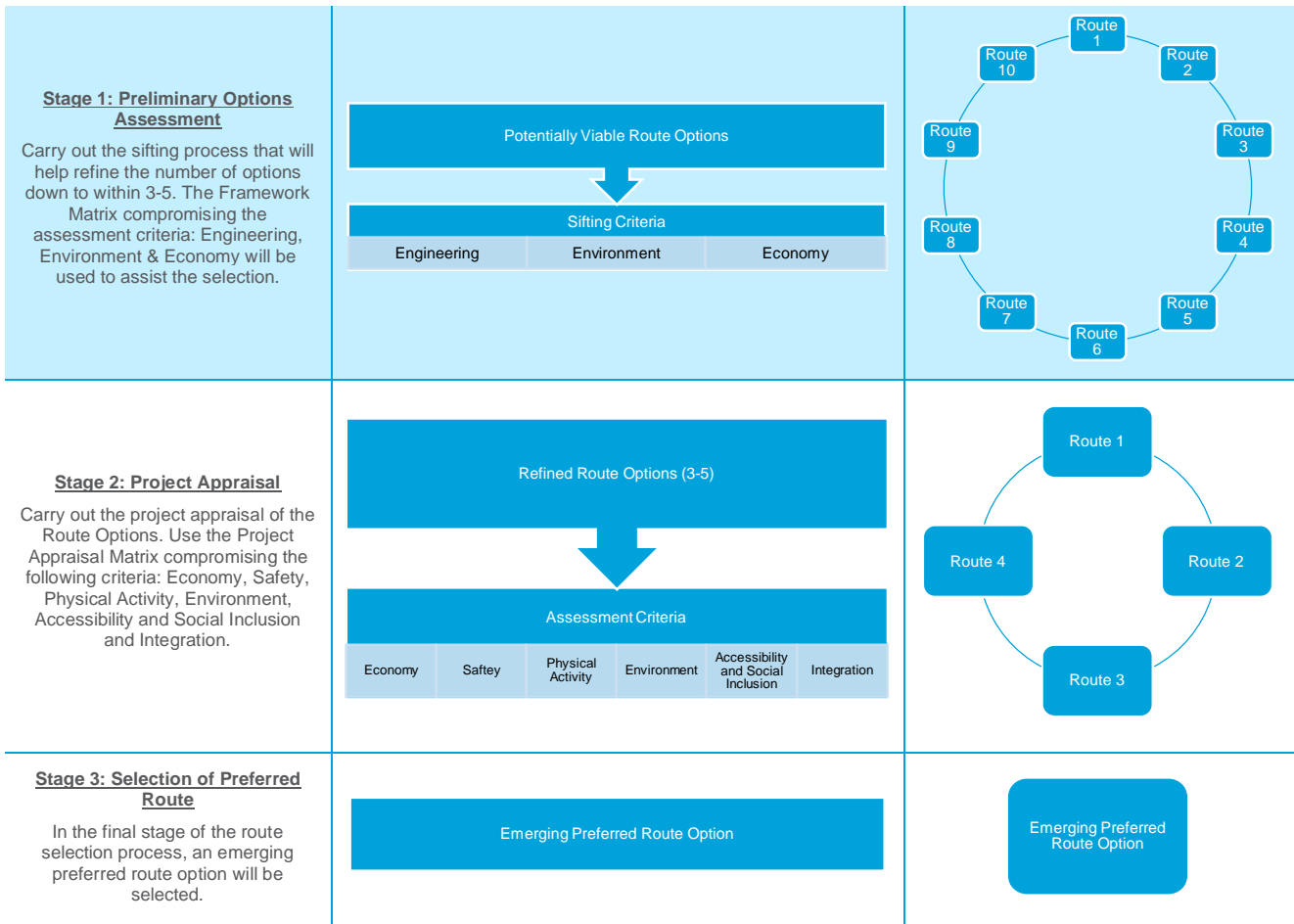
- Confirm study area extents.
- Identify key constraints within the study area (desktop study, site inspections, mapping of identified constraints, utility information, traffic surveys, review of flood maps)
- Develop a long list of potentially viable route options.
- Undertake a multi-criteria sifting process based on high-level criteria to identify a short list of feasible options that can deliver the project objectives.

1.8. Route Selection Methodology

The general requirements which inform the preparation of a Feasibility Study Options Assessment Report are outlined in the TII's 2019 Project Management Guidelines and the current Project Appraisal Guidelines. This report pertains to the Stage 1 assessment only, highlighted in the figure below.

The general process and methodology utilised is as illustrated below.

Figure 1-4 - 3 Stages of the Route Selection Process



2. Stakeholder Consultation

2.1. Opportunities and Constraints Public Engagement

The Opportunities and Constraints Public Engagement exercise was held via three mediums as follows:

- An Online Survey Questionnaire (including Registration Form)
- Public Submissions (via website, email, post, etc.)
- Public Engagement Events

The Online Survey Questionnaire was live for a 4-week period from the 19th of November 2019 through to the 19th December 2019 and was hosted on the Fingal Consult website.

Public Submissions could also be made through the Fingal Consult website over the same 4-week period, with the last date for submissions being the 19th December 2019.

The Opportunities and Constraints Public Engagement Events were held over three consecutive evenings as follows:

- Rush Library on Tuesday 26th November between 5.00pm-8.00pm
- Bracken Court Hotel Balbriggan on Wednesday 27th November between 5.00pm-8.00pm
- Skerries Sailing Club on Thursday 28th November between 5.00pm-8.00pm

All three Public Engagement Events were advertised through a local newspaper, the Fingal Consult website, social media posts, the Public Participation Network (PPN), newsletters, a Fingal County Council Press Release, the 'Our Balbriggan' website and through emails sent to Councillors, residents, cycle advocacy groups and other project stakeholders identified at this stage.

Event material including a brochure, local area maps and overview maps were made available over the duration of the 19th November to the 19th December 2019, through download from the Fingal Consult website and were also available to view in hard copy on each of the event evenings.

A hard copy of the same Survey Questionnaire placed online, was also made available for completion on the evening by all attendees of the Public Engagement Events, if preferred over the online version. All of this event material is presented in the Appendices of this report.

Figure 2-1 - Public Engagement Event



The key findings of the Opportunities and Constraint Public Engagement exercise indicate that there is overwhelming positive support for the Fingal Coastal Way. There are concerns expressed with regards to existing safety for pedestrians and cyclists and the need to provide best practice facilities. Concerns are also raised and acknowledged in terms of local impacts on residents and landholdings.

The concerns raised will be thoroughly reviewed with reference to their alignment with local and national policy and the scheme project objectives and this will form a core consideration in the progression of the Option Development and Assessment process leading to the identification of the Emerging Preferred Route.

The findings of this consultation process will also be utilised in the preparation process of the next and subsequent Public Engagement exercises.

2.2. Key Stakeholder Consultation

As part of the general consultation associated with the scheme, numerous consultation meetings and workshops have been undertaken with key stakeholder groups in order to discuss strategic and specific elements of the scheme feasibility. This consultation has assisted in guiding particular technical and strategic elements of the scheme. The consultation undertaken to date will continue over the duration of the project with further parties being contacted in due course.

3. Identification of Need

3.1. Strategic Fit and Priority

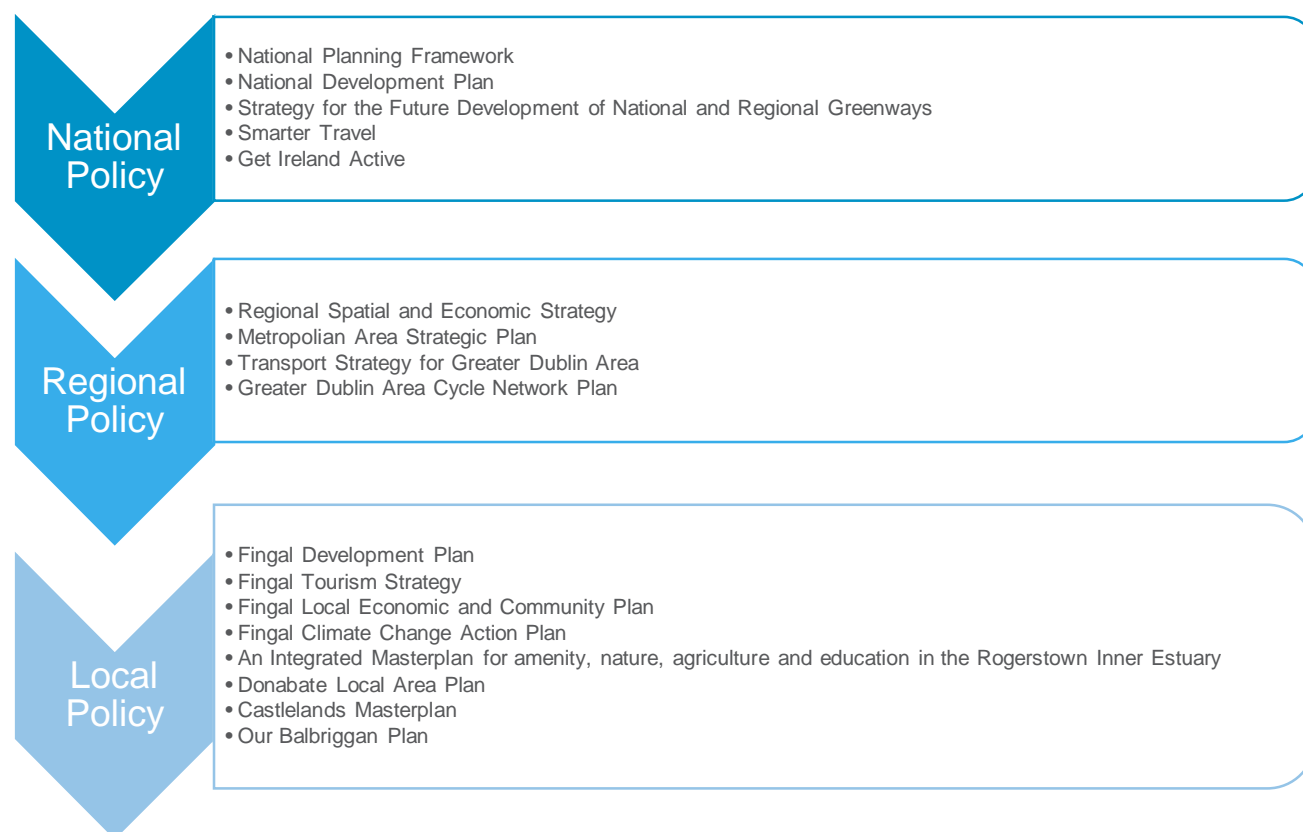
3.1.1. Policy Overview

The Fingal Coastal Way is anticipated to deliver transport infrastructure which supports active lifestyles and provides a sustainable and cleaner alternative to the car, alleviating congestion and therefore supporting sustainable growth. The scheme will facilitate recreational use by providing a safe, high quality greenway which and will provide economic benefits to the surrounding environs by increasing footfall and user interaction with local amenities.

Cycle infrastructure has the potential to deliver significant economic, health, social and environmental benefits and therefore, the development of the Fingal Coastal Way is anticipated to meet a variety of national, regional and local policies.

The policy review provides a summary of the key policy documents and specific policies which will be supported by the Fingal Coastal Way. Figure 3-1 presents the key national, regional and local policy aligned to the Greenway scheme.

Figure 3-1 - Key Policy Documents



3.1.2. National Policy

3.1.2.1. National Planning Framework

The National Planning Framework (NPF) is the Government's high-level strategic plan for shaping the future growth and development of Ireland to 2040.

By 2040 there will be roughly an extra one million people living in Ireland, it is imperative that the NPF is able to manage such growth to ensure that the population increase enhances the entire country. The NPF has been

developed to guide public and private investment, to create and promote opportunities for people across the country, and to protect and enhance the environment - from villages to cities.

As the NPF states, it is important that communities are designed to encourage active travel which supports improved public health creating a variety of economic and social benefits.

“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”

The NPF has a variety of national objectives with those aligned to the Fingal Coastal Way presented below:

- National Policy Objective 4 - Ensure the creation of attractive, liveable, well designed, high quality urban places that are home to diverse and integrated communities that enjoy a high quality of life and well-being.
- National Policy Objective 6 - Regenerate and rejuvenate cities, towns and villages of all types and scale as environmental assets, that can accommodate changing roles and functions, increased residential population and employment activity and enhanced levels of amenity and design quality, in order to sustainably influence and support their surrounding area.
- National Policy Objective 22 - 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.
- National Policy Objective 27 - Ensure the integration of safe and convenient alternatives to the car into the design of our communities, by prioritising walking and cycling accessibility to both existing and proposed developments and integrating physical activity facilities for all ages.

The Fingal Coastal Way will ensure that Fingal is a more attractive and prosperous place to live and visit, creating an integrated community through increased options for travelling on foot or by bike.

Improving connectivity through cycle infrastructure supports the aspiration for a higher quality of life and wellbeing by rejuvenating local communities. The Coastal Way will create employment opportunities as well as linking employment sites to local residential zones, thus supporting accessibility.

3.1.2.2. National Development Plan

The National Development Plan (NDP) sets out the investment priorities that will underpin the successful implementation of the NPF. The NDP will steer planning policy as well as guide investment decisions at a national, regional and local level.

As stated in the NDP, the performance of the Irish economy and the Government’s ability to realise its full growth potential in a sustainable way are all inextricably linked and critically dependent on the quality of spatial planning.

A key aspect of spatial planning is sustainable mobility, providing sustainable transport options will enable growth by facilitating the increasing demand on the transport network, allowing for further development.

Active travel also contributes to the governments low-carbon economy aspirations. The NDP states the importance of cycle and walking infrastructure and the opportunity to align to public transport:

“provision of safe alternative active travel options such as segregated cycling and walking facilities can also help alleviate congestion and meet climate action objectives by providing viable alternatives and connectivity with existing public transport infrastructure”.

The NDP states that a number of sustainable transport projects (including cycle infrastructure) will be delivered across the five cities of Dublin, Cork, Limerick, Galway and Waterford to provide additional sustainable travel options for users. Cycle infrastructure will be complimented by traffic management, bus priority and improved public transport provision.

The NDP and the NPF outline the importance of compact growth, where more compact urban and rural settlements are supported by jobs, houses and local services.

Compact settlements will increase the amount of short distance journeys, travelling by active modes is the most convenient form of travel if the provision is suitable.

The Fingal Coastal Way has the opportunity to support more compact development, by linking existing and proposed development by encourage active travel journeys.

The scheme will offer an opportunity to provide additional transport options for commuters and visitors to the area. It will also provide exciting opportunities for businesses, the local community and tourists, providing a real benefit to the local economy.

3.1.2.3. Strategy for the Future Development of National and Regional Greenways (2018)

The Department of Transport, Tourism and Sport recognises the benefits that can arise from the further development of Greenways in Ireland, as a tourism product with significant potential to attract overseas visitors, for local communities in terms of economic benefits, and for all users as an amenity for physical activity and a contributor to health and wellbeing. This strategy aligns with recent Government strategies and policy documents, including the National Planning Framework which supports the role of Greenways as part of Ireland’s tourism product and its contribution to rural development.

The objective of this Strategy is to assist in the strategic development of nationally and regionally significant Greenways in appropriate locations constructed to an appropriate standard in order to deliver a quality experience for all Greenways users. It also aims to increase the number and geographical spread of Greenways of scale and quality around the country over the next 10 years with a consequent significant increase in the number of people using Greenways as a visitor experience and as a recreational amenity. It sets out guidance to project promoters on matters including strategic nature, length, design standards, accommodation works and early consultation with communities and land owners along proposed routes.

3.1.2.4. Smarter Travel – A Sustainable Transport Future

As the population increases, it is imperative that the dominance of the motorised vehicle is reduced to ensure more sustainable journeys are undertaken. Increasing the number of sustainable journeys will ensure that the increasing population does not have a detrimental impact on the potential for economic growth as well as air quality.

The Smarter Travel publication acknowledges the wide-ranging benefits that can be realised including the potential for cycling to contribute to the economy including to tourism in Ireland. The government also acknowledges the benefits of developing a culture of walking in Ireland with walking a key tourism asset:

“The bicycle will be the transport mode of choice for all ages and will both improve the health, and reduce obesity levels, of the general population and build social capital. We will gain economically as cycling helps in easing congestion and providing us with a fitter and more alert workforce. The cycling culture will also enhance our tourism industry by attracting many visitors to cycle in Ireland.”

As part of consultation undertaken as part of Smarter Travel, there was significant interest in making cycling a more popular travel option and the need for investment, included safe cycleways, secure parking facilities and public bike rental schemes.

For pedestrians, the need to ensure safe and well-lit walking routes attracted most attention.

Through consultation, key trends have been grouped into five key policy goals which form the basis of the Smarter Travel policy document.

Four of the policy goals have the potential to be supported by the Fingal Coastal Way. Table 3-1 presents how the Fingal Coastal Way will support Smarter Travel policy.

Table 3-1 - Smarter Travel Policy

Smarter Travel Policy	How Fingal Coastal Way will Support Policy
Improve quality of life and accessibility to transport for all and, in particular, for people with reduced mobility and those who may experience isolation due to lack of transport.	The Fingal Coastal Way will provide significant accessibility benefits, providing increased transport options for all. Improving the provision of cycling and walking can benefit those who do not have access to a car, reducing the potential for social isolation and improving access to employment and other key services.
Improve economic competitiveness through maximising the efficiency of the transport system and alleviating congestion and infrastructural bottlenecks.	The scheme has the opportunity to create significant economic benefits including <ul style="list-style-type: none"> • Increased tourism to the area, supporting local businesses • Reducing congestion in peak periods as commuters have increased transport options. Journey reliability will be improved therefore creating economic benefits.

Smarter Travel Policy	How Fingal Coastal Way will Support Policy
Minimise the negative impacts of transport on the local and global environment through reducing localised air pollutants and greenhouse gas emissions.	Increasing the amount of cycle and walking journeys is anticipated to reduce the demand on the motorised vehicle. Active travel is the cleanest form of travel therefore, improving cycle and walking provision will support national and international policy to reduce air pollutants including carbon dioxide.
Reduce overall travel demand and commuting distances travelled by the private car.	Improving cycle and walking provision in the local area has the potential to create local employment opportunities through cycle tourism.

3.1.2.5. Get Ireland Active

Healthy Ireland, A Framework for Improved Health and Wellbeing 2013-2051 is the national framework for seeking to improve the health and wellbeing of people living in Ireland. The Framework identifies a number of broad inter-sectoral actions, one of which commits to the development of a plan to promote increased physical activity levels.

Get Ireland Active aim is to increase physical activity levels across the entire population thereby helping to improve health and wellbeing. Get Ireland Active has developed a plan which will seek to ensure that no group is disadvantaged and recognises that targeted interventions are required to address and overcome barriers to participation which are experienced by some people.

Get Ireland Active acknowledges the role that cycling and walking can play in achieving physical activity targets. The plan highlights the importance of good planning to promote the use of cycling and walking, stating that the layout of the environment has a significant impact on the levels of physical activity undertaken across age groups.

“The built environment is an important determinant of physical activity behaviour. The way the built environment is designed, planned and built can also act as a barrier to being active and can reinforce sedentary behaviour and car dependence.

Walking or cycling for transport or leisure is a form of physical activity that can easily be incorporated in to the daily activities for many people. Supportive environments for walking, cycling and recreational and outdoor physical activity have many benefits beyond the immediate physical activity gains”

The Fingal Coastal Way is a positive example of how the built environment can be developed to promote physical activity, improving the health and wellbeing of those that choose to travel by bike or on foot. The Fingal Coastal Way will be used for a variety of journey purposes including travelling to work, travelling to work on foot or bike is an ideal opportunity to increase physical activity through everyday journeys.

3.1.3. Regional Policy

3.1.3.1. Regional Spatial and Economic Strategy (RSES) & Metropolitan Area Strategic Plan (MASP) (2019)

The new regional strategy for the region sets out a long-term strategic planning and investment strategy for the Dublin area and surrounding counties and Midlands area to 2031.

Chapter 6 ‘Economy and Employment’ and specifically sub-section ‘Natural and Cultural Tourism Assets’ recognises the Region’s varied and rich tourism offering from its cultural assets of the capital city to the natural landscapes and amenities along the east coast. Failte Ireland has identified that landscape and heritage are the key drivers for the promotion of Ireland’s tourism. In this regard, the regional strategy seeks to increase access to the countryside and coastal areas in collaboration with relevant stakeholders whilst having regard to the environmental sensitivities of the surrounding area.

Chapter 7 ‘Environment & Climate’ of the strategy promotes the development of a network of strategic greenways as a unique alternative for tourists and visitors to access and enjoy the natural and built heritage assets of the Region whilst having regard to the environmental sensitivities of the area. The strategy promotes a number of flagship greenways in the Region including, the East Coast Trail and Ireland’s Ancient East.

- RPO7.23 seeks to, Promote the development of a sustainable Strategic Greenway Network of national and regional routes, with a number of high capacity flagship routes that can be extended and/or linked with local

Greenways and other cycling and walking infrastructure, notwithstanding that capacity of a greenway is limited to what is ecologically sustainable.

- RPO 7.24 seeks to, Support Local Authorities and state agencies in the delivery of sustainable strategic greenways, blueways and peatway projects in the Region under the Strategy for the Future Development of National and Regional Greenways.

Chapter 8 ‘Connectivity’ of the strategy promotes the importance of the integration of land use and transport which prioritises the development of lands which are, or will be, most accessible by walking, cycling and public transport, including infill and brownfield sites. Furthermore, the strategy promotes a shift to more efficient modes, i.e. active travel modes and public transport, including walking and cycling to reduce car dependency. In this regard, the following cycling and walking objectives are promoted:

- Delivery of the cycle network set out in the Greater Dublin Area Cycle Network Plan inclusive of key commute routes and urban greenways on the canal, river and coastal corridors.
- Delivery of the National Cycle Plan within the Region inclusive of the Greenway and Blueway Projects.
- Provide safe cycling routes in towns and villages across the Region.
- Enhance pedestrian facilities in all urban areas in the Region.

Section 5.6 of the MASP identifies cycling and walking as a key element in promoting and creating healthier places, mitigating climate change and facilitating tourism and metropolitan scaled amenities such as strategic cycling networks having regard to the NTA Greater Dublin Area Cycle Network Plan. Specifically, the MASP promotes the development of a Metropolitan Greenway Network, a strategic network of connected greenways for cycling and walking to enable access to key environmental assets within the Metropolitan area, including coastal areas, while having regard to the environmental sensitivities of the area. Specifically, the strategy promotes a number of greenways of strategic value that will form part of a connected Strategic Metropolitan Greenway Network and including the East Coast Route from Sutton to Sandymount linking to the Fingal Coastal Way with potential to create a wider East Coast Trail from Rosslare to Northern Ireland.

- RPO 5.3 seeks, Future development in the Dublin Metropolitan area shall be planned and designed in a manner that facilitates sustainable travel patterns, with a particular focus on increasing the share of active modes (walking and cycling) and public transport use and creating a safe and attractive street environment for pedestrians and cyclists.
- RPO 5.8 seeks to, Support the promotion and development of greenway infrastructure and facilities in the Dublin metropolitan area and to support the expansion and connections between key strategic cycle routes and greenways as set out in the NTA Greater Dublin Area Cycle Network Plan.

3.1.3.2. Transport Strategy for the Greater Dublin Area

The Transport Strategy for the Greater Dublin Area (GDA) provides a framework for the development and delivery of transport infrastructure and services in the Greater Dublin Area (GDA) over the next two decades. The purpose of the strategy is to:

“Contribute to the economic, social and cultural progress of the Greater Dublin Area by providing for the efficient, effective and sustainable movement of people and goods”

Through the development of the transport strategy, a number of shortcomings were identified which must be addressed over the coming years to ensure that Dublin is seen as a vibrant economic, social and cultural city. Shortcomings identified included:

- Congestion on the strategic road network;
- Severe local congestion in certain locations;
- Substandard – and in places dangerous – cycling environment; and
- Substandard provision for pedestrians, particularly in central areas.

Such shortcomings demonstrate the need for a new transport system that caters for the private car but has an increasing emphasis on more sustainable modes of travel.

It is imperative that the GDA provides users with improved public transport and active travel provision, addressing congestion concerns on the local network but also ensuring we live in vibrant and active communities.

The GDA transport strategy acknowledges the need for change and identifies the following considerations:

- The zoning and development of land needs to be carried out in a manner which promotes walking, cycling and public transport for all trips and reduces the need for commuting by private car;
- Cyclists must be provided with a safe and convenient metropolitan cycle network; and
- The collapse in the use of sustainable modes for school travel is a critical cross-sectoral concern, which can only be partially addressed by transport.

Whilst the strategy acknowledges the current inadequate provision for cycling and the importance of providing an improved cycle network, as outlined in the strategy, there has been a significant increase and appetite for cycling in Dublin in recent years.

A combination of factors, including the Bike to Work Tax Saver Scheme, enhanced network provision for cyclists, and the implementation of the Dublin Bikes rental scheme have led to a dramatic, sustained increase in the numbers of people cycling.

The GDA Transport Strategy identifies that Greenways will play a key component of the Cycle Network Plan (further detail found within 3.3) The strategy identifies that Greenways will perform a vital commuter function and will effectively form a significant part of the primary network. Due to the location of the Fingal Coastal Way, it is anticipated that the scheme will cater for a variety of journey purposes and will be a key route within the local network.

3.1.3.3. Greater Dublin Area Cycle Network Plan

The GDA Cycle Network Plan is the cycle infrastructure delivery component of the National Cycle Policy Framework (NCPF) and the GDA Transport Strategy.

The NCPF has set out a range of objectives with those most relative to the Fingal Coastal Way outlined below:

- Support the planning, development and design of towns and cities in a cycling and pedestrian friendly way;
- Provide designated rural cycle networks especially for visitors and recreational cycling;
- Provide cycling-friendly routes to all schools, adequate cycling parking facilities within schools, and cycling training to all school pupils;
- Ensure that all cycling networks - both urban and rural - are signposted to an agreed standard.

The NCPF requires that cycle-friendly planning principles be incorporated in all key planning documents from national to the local level.

In order to ensure that investments within the GDA are focused in an efficient manner and help to achieve significant modal shift, the NTA and GDA local authorities need to know existing levels of cycle provision and, the interventions required to make cycling a more attractive and convenient option.

The Cycle Network Plan has been developed to identify and determine in a consistent, clear and logical manner the following cycle networks within the GDA:

- The Urban Cycle Network at the Primary, Secondary and Feeder level;
- The Inter-Urban Cycle Network linking the relevant sections of the Urban Network and including the elements of the National Cycle Network within the GDA. It shall also include linkages to key transport locations outside of urban areas such as airports and ports; and
- The Green Route Network being cycle routes developed predominately for tourist, recreational and leisure purposes.

The strategic significance of Greenways has been identified within the Cycle Network Plan and are anticipated to play a key role within the Green Route Network (GRN) The network plan identifies the GRN as “cycle routes developed predominately for tourist, recreational and leisure purposes but may also carry elements of the utility cycle route network.”

The Fingal Coastal Way has an opportunity to play a key part of the Green Route Network as well as the overall GDA cycle network.

At a local level, the route will support the local transport network by providing an alternative to the car, alleviating congestion issues.

At a GDA level, the Fingal Coastal Way provides an ideal opportunity to promote Fingal as a tourism hotspot, with the greenway the most convenient and attractive form of travel.

3.1.4. Local Policy

3.1.4.1. Fingal Development Plan

The Fingal Development Plan 2017-2023 sets out Fingal County Council proposed policies and objectives for the development of the County up to 2023.

The Development Plan seeks to develop and improve, in a sustainable manner, the social, economic, environmental and cultural assets of the County.

The county of Fingal covers over 450 square kilometres and includes 88km of scenic coastline which the Fingal Coastal Way seeks to utilise. Fingal has the youngest population in the State (total population, 296,214 in 2016 Census), which is a key characteristic of the County as it accommodates an expanding Dublin population.

The young population of the county is an important factor in the propensity for cycling within Fingal. The County has a diverse character including both urban and rural areas, the coast, river valleys and upland areas.

The Fingal Development Plan sets out to promote and facilitate movement within and to the County through the integration of land use with a sustainable transport system. Priority is given to public transport, walking and cycling. There is a dedicated section in Chapter 7 of the Development Plan that deals with Cycling and Walking. The emphasis in the Development Plan is on the promotion and facilitation of sustainable forms of transport, of which cycling is a key component.

The Strategic Vision specifically includes for the promotion of walking and cycling in the following statement:

“Promote active and healthy lifestyles through increased opportunities for walking, cycling and active sport and recreation”.

Cycling and walking are promoted in the Fingal Development Plan as a significant form of leisure and are noted as a key attractor for tourism in the area. Chapter 5 - Rural Fingal, includes the following relevant objectives:

- Objective RF113 - Promote informal recreation, particularly walking, through the development and expansion of a network of safe walking trails within towns and villages and their environs. Such routes can link with existing way marked trails, Slí na Sláinte walks and of the Green Infrastructure Network and other local resources, such as existing or new rights of way.
- Objective RF114 - Support the provision of proposed long-distance walking trails that provide access to scenic uplands, riverine and coastal features, subject to Screening for Appropriate Assessment

Chapter 7 deals with Transportation and sets out a policy of:

“Promote and facilitate movement, to, from and within the County of Fingal, by integrating land use with a high quality, sustainable transport system that prioritises walking, cycling and public transport”.

The following objectives set out Fingal County Council’s commitment to promoting sustainable walking and cycling modes.

- Objective MT13 – Promote walking and cycling as efficient, healthy and environmentally-friendly modes of transport by securing the development of a network of direct comfortable, convenient and safe cycle routes and footpaths, particularly in urban areas.
- Objective MT14 – The Council will work in cooperation with the NTA and adjoining Local Authorities to implement the Greater Dublin Area Cycle Network Plan subject to detailed engineering design and mitigation measures presented in the SEA and Natura Impact Statement accompanying the NTA plan.

Green Infrastructure is detailed in Chapter 8 of the Development Plan and incorporates the objectives to provide safe, attractive and sustainable routes linking key parks and open spaces and other foci such as cultural sites and heritage assets as an integral part of new green infrastructure provision while ensuring the environment is protected.

A number of relevant green infrastructure objectives are listed below:

- Objective GI07 – Ensure green infrastructure protection and provision promotes pedestrian access, cycling and public transport in preference to the car, as appropriate.
- Objective GI08 – Integrate the provision of green infrastructure with infrastructure provision and replacement, including walking and cycling routes, as appropriate, while protecting biodiversity and other landscape resources.
- Objective GI28 – Provide attractive and safe routes linking key green space sites, parks and open spaces and other foci such as cultural sites and heritage assets as an integral part of new green infrastructure provision, where appropriate and feasible.
- Objective GI30 – Develop a Cycle/Pedestrian Network Strategy for Fingal that encompasses the Fingal Way and other proposed routes which will be screened for Appropriate Assessment and Strategic Environmental Assessment.

To achieve objectives based around active travel, Fingal County Council aims to:

“Promote and facilitate movement to, from, and within the County of Fingal, by integrating land use with a high quality, sustainable transport system that prioritises walking, cycling and public transport.”

The Development Plan identifies the Fingal Coastal Way as a key cycle route to be developed within the county:

“A long standing objective of the Fingal Development Plan is the development of the ‘Fingal Coastal Way’ a strategic greenway for pedestrians and cyclists along the coastal corridor from Howth to Balbriggan.”

The Fingal Coastal Way will provide the local community and visitors to Fingal with a high-quality cycling and walking route, providing a more active and healthier alternative to the car.

The Coastal Way will provide a significant opportunity for local businesses and provide a boost to the local economy (as demonstrated across Ireland) through increased tourism.

Greenway routes are a perfect example of catering for the local community and visitors, providing high quality active travel provision to increase physical activity and improve health and wellbeing.

3.1.4.2. Fingal Tourism Strategy

The Fingal Tourism Strategy 2015 – 2018 was developed to provide the “definitive pathway to tourism development in Fingal”. The objective moving forward for tourism in Fingal was to develop a comprehensive strategy for the development of tourism with support and buy-in of relevant public, private and community tourism stakeholders. A work programme has been developed up to 2022 to ensure that the overall aim of the tourism strategy is delivered. The vision for Fingal tourism is:

“An attractive, vibrant and sustainable tourism destination delivering a distinctive experience for local residents, domestic and international visitors”.

As outlined within the county tourism strategy, tourism is returning to strong growth and continues to play a hugely influential role in Fingal’s economic success. Appropriately one of the three core objectives of the Fingal County Council Corporate Plan 2015-2019 are to strengthen the proposition and marketing of tourism in Fingal through its tourism plan and ensure regular engagement with key stakeholders

The core objectives of the Fingal Tourism Strategy are:

- Optimise and expand existing visitor experience – The primary appeals and motivations to visit the County are embedded in its built heritage, its coastline, and its urban/rural balance of living culture and festival experiences.

- Adopt a new place marketing strategy aligned with, and leveraging, the Grow Dublin Tourism Alliance.
- Develop new ways of working in partnership with stakeholders.

The Fingal Coastal Way is a showcase example of promoting and utilising the natural environment to deliver high quality sustainable tourism. The Greenway will provide Fingal with a new tourism offering allowing visitors to experience the unique coastal characteristics of the area. It will be imperative that the scheme is developed in partnership with local stakeholder, providing opportunities for closer working relationships moving forward.

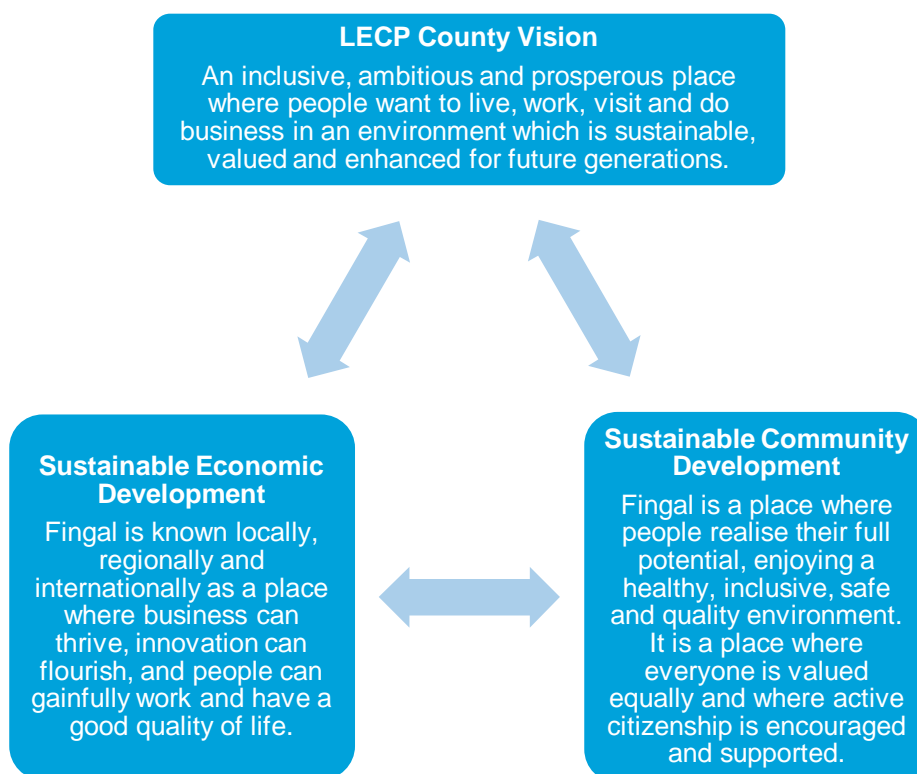
3.1.4.3. Fingal Local Economic and Community Plan

The Fingal Local Economic and Community Plan (LECP) is the first policy document to integrate economic and community development within the county. Sustainable development is at the heart of the first LECP

“The plan is built upon the understanding that economic, local and community development are mutually supportive in building sustainable communities with strong local economies. The plan promotes a collaborative leadership approach across a broad range of publicly funded agencies and civil society stakeholders to achieve improved outcomes and impacts for citizens, businesses and communities.”

The Fingal LECP is based on a county vision as well as sustainable economic and community development statements as presented below.

Figure 3-2 - Fingal LECP Vision Statements



The LCEP acknowledges the role of transport (particularly sustainable transport) in delivering the overall county vision and supporting economic and community development. A range of key strategic goals have been identified with those aligned to cycling (and the Fingal Coastal Way) presented below:

- Maximise job creation opportunities by activating the potential within local communities. This will provide for an enhanced equality of access to job opportunities for hard to reach communities;
- Increase participation in social cultural and economic activities to improve, well-being and quality of life. Increased community participation levels in health, social, cultural and economic activities will act as a vehicle for improving the quality of life for all;
- More coherent services that connect people and places, more active and empowered communities of place and interest;

- Protect and enhance the environment and heritage of Fingal. This goal recognises that the effective sustainable management of the environment and heritage will be enhanced by increased community awareness;
- Create distinct visitor attractions by sensitively optimising the natural assets of the county, and building an enterprise and community infrastructure to drive and expand the visitor potential;
- Re-generate towns and villages, and increase the resilience of the local economy; and
- Support the sustainability of rural communities through the development of a resilient economy

A key objective relating to ‘Increase participation in social cultural and economic activities to improve, well-being and quality of life’ is to provide facilities and support services that enable a healthier lifestyle. An action to improve facilities to enable such health styles is the creation of cycling and walking trails within the county

“Develop linked walking and cycling trails, marked by clear directional signage and branding; investigate the potential for natural, cultural and historical information signs, community participation and employment and enterprise opportunities such as low-level guiding”

The Fingal Coastal Way has the potential to a best practice example of how to create distinct visitor attractions by maximising the local environment through sustainable growth, creating job opportunities, connecting people and places and developing more active and empowered communities

3.1.4.4. Fingal Climate Change Action Plan

Fingal County Council’s Climate Change Action Plan sets out how the Council will improve energy efficiency and reduce greenhouse gas emissions in its own buildings and operations, while making Fingal a more climate resilient region, with engaged and informed citizens. This will be achieved by a range of ongoing and planned actions in five key areas (Energy & Building, Transport, Flood Resilience, Nature-Based Solutions and Resource Management) which will be continuously monitored, evaluated and updated to 2030 and beyond.

This plan concentrates on the two approaches required to tackle climate change. The first, mitigation, consists of actions that will reduce current and future GHG emissions. The second approach, adaptation, consists of actions that will reduce the impacts that are already happening now from our changing climate and those that are projected to happen in the future. Examples of mitigation measures include reductions in energy use, switching to renewable energy sources and enhancement of carbon sinks. Part of this measures implies active travel such as walking and cycling.

Transport contributes to a significant amount of GHG emissions within the Fingal area. Walking, cycling and public transport currently accounts for just 38.6% of all journeys, and the target is to increase this figure to 50%. Therefore, through its own development plan strategy and policies, FCC promotes the integration of land use and transportation, and works with a range of stakeholders to improve transportation in Fingal and encourage modal shift away from private cars to more sustainable alternatives, in order to achieve this target. Encouraging people to walk or cycle will help FCC to respond to climate change. Moreover, promotion of active travel will improve the health of citizens. Of the transportation modes that FCC can influence and shape, cycling has been the predominant focus.

To encourage the uptake of cycling and walking, the Council is actively advancing a number of specific cycle facilities across the county including the Fingal Coastal Way, the Broadmeadow Way, the Harry Reynolds Road Cycle Route and the Royal Canal Urban Greenway.

3.1.4.5. An Integrated Masterplan for amenity, nature, agriculture and education in the Rogerstown Inner Estuary

In 2001 the Parks Division of Fingal County Council prepared the Rogerstown Estuary Study which was adopted by the Fingal County Council on the 13th September 2001. This study identified a number of management objectives relating to the protection and enhancement of the unique flora, fauna and habitats of the Rogerstown Estuary and the improvement of the accessibility to the high amenity lands. In this regard, the study committed the Parks Division to prepare a detailed masterplan to devise a coherent strategy to manage the rehabilitation of

the landfill and estuary, provide for the recreation of the future residents of the area and achieve the management objectives of the Rogerstown Estuary Study.

The landscape surrounding Rogerstown Estuary provides an attractive rural setting for amenity use. The study noted the possibility to develop the recreation and education potential of the lands of the inner estuary without negatively impacting on the ecologically sensitive areas. Key elements included:

- Increased access to the high amenity lands;
- Creating a buffer zone between the ecologically sensitive areas and the recreational elements;
- Pedestrian links to Lusk, Donabate, Newbridge and the Fingal Coastal Way, relocate and upgrade the allotments;
- Provide interpretative materials.

Some of the key elements of the masterplan's visions are: improve accessibility to and within Turvey, maintain and improve views on the estuary, provide recreational facilities for public and provide pedestrian link between inner Estuary and surrounding areas.

The study suggested that a looped path system surfaced to provide access for wheelchairs and children's buggies could form the main circulation route. A secondary system of mown grassed paths will provide seasonal access to other areas.

Figure 13 of the masterplan outlines the potential paths through the estuary including the pedestrian links to Lusk, Rush, Donabate, Newbridge and Fingal Coastal Way.

3.1.4.6. Donabate Local Area Plan (LAP)

The vision of the LAP is to 'provide for the structured development of the identified new residential areas of Donabate such that they integrate into the established village and support the continued growth of a vibrant and attractive town for existing and future residents.'

In support of this vision for the area, the LAP is underpinned by a series of strategic aims which support the sustainable principles. The relevant sustainable principle of relevance to the development of the Fingal Coastal Way is as follows:

- Protect and enhance the existing natural amenities of Donabate and improve access to established local amenity areas through the creation of a network of designated green routes

The key objectives outlined within the Donabate LAP that relate to the Fingal Coastal Way are outlined below.

- OBJECTIVE 4.1 Support the completion of pedestrian / cycle routes (greenways) at Turvey / Newbridge Loop, Rahillion / St Ita's Loop and the Fingal Coastal Way in tandem with the phased delivery of development of LAP lands.
- OBJECTIVE 4.3 Develop a suitable link from the proposed Broadmeadow Way through the LAP lands at Corballis and linking through to Donabate Village.
- OBJECTIVE 4.4 Promote and develop a combined greenway for walking and cycling along the Peninsula coastline and complete an inter-connected network of looped green paths (walking and cycling) through the LAP lands at Rahillion, Corballis and Turvey, as well as Donabate Village, existing and proposed residential areas, schools, Turvey Nature Reserve & Allotments, Newbridge Demesne, Estuaries and the beaches. The walkways shall be designed and sited to reflect and integrate with their setting subject to Appropriate Assessment and detailed design assessment.
- OBJECTIVE 4.5 Provide, as part of the Fingal Coastal Way, an agreed and appropriately designed combined pedestrian and cycle route, with linkages to the proposed GDA Cycle Network, minimizing access points and signage to avoid disturbance to ecologically sensitive locations and ensuring the integrity of the protected habitats and species within Rogerstown and Malahide Estuaries and the ecological buffer zones within the plan lands.
- OBJECTIVE 4.10 Provide an integrated network of open spaces, pocket parks and pedestrian / cycle routes through the implementation of the Open Space Strategy outlined in the LAP.
- OBJECTIVE 4.14 Undertake an early assessment (beginning in 2016), including appropriate assessment, of the walking and cycling routes proposed near Rogerstown and Malahide Estuaries, including the crossing points of the estuaries, to establish viable routes and design options.
- OBJECTIVE 6.9 Facilitate the development of appropriate new recreation, leisure, tourism and service facilities and ensure access for all groups of the community.

- OBJECTIVE 6.10 Promote and facilitate the development of the Fingal Coastal Way as a local and tourist amenity, promoting the archaeological and cultural heritage of the area and associated events in appropriate locations, subject to screening for Appropriate Assessment.

The LAP also restates elements of both the Fingal Tourism Strategy and the Fingal Local Economic Plan. In this regard it is noted:

- The Fingal Coastal Way is envisaged as a greenway, carrying day trippers / tourists along the Fingal coastal corridor in an eco-friendly way, offering an opportunity to showcase the beauty and heritage of the area whilst providing important economic-related development and employment.
- The Fingal Coastal Way will provide many opportunities for the development of the tourism product in the County and within each of the coastal compartments that it traverses:
- It is envisaged that, with the development, sustainable management and promotion of a Fingal Coastal Way the environmental and economic benefit to Fingal would be very significant and would generate significant economic activity and create employment through festivals and cultural events.

3.1.4.7. Castlelands Masterplan

The Vision for the Castlelands Masterplan is to *'promote the development of a distinctive quality new residential quarter within Balbriggan, through the development of a sustainable residential community comprising a choice of high quality new homes with a mix of dwelling types, size and tenure; appropriate local, community, recreational and educational facilities for both existing and future residents; the integration of existing and new open space areas and recreational amenities, all within an identifiable and accessible environment which promotes sustainable development based around strong public transport and walking and cycling links.'*

The Masterplan seeks to provide an integrated network of continuous and safe pedestrian and cyclist links through the lands that will connect with external infrastructure. This includes the provision of a separate footbridge for pedestrians and cyclists that will directly link the green infrastructure spine with the Fingal Coastal Way along the Skerries Road (R127), as required by Local Objective L02 in the Development Plan.

With regard to cycling the NTA GDA Cycle Network Plan includes the implementation of secondary and feeder routes to the Balbriggan cycle network. The development of the proposed Fingal Coastal Way as provided for in the Fingal Development Plan along the Skerries Road (R127) will provide a pedestrian and walking facility connecting the Masterplan lands to the Town Centre, Train Station and Skerries. Provision is made for connection with this greenway through the R127/Link Road Traffic Signals Junction which will facilitate safe access to this proposed off-road cycle route

3.1.4.8. Our Balbriggan Plan

Balbriggan has witnessed rapid expansion of new housing areas and a retail centre outside the traditional town core during the 2000s. It is now the youngest and one of the most ethnically diverse towns in Ireland (Census, 2016). Amenities have not kept pace with population growth, the local economy and main street have struggled, perception of place is poor, and previous plans have failed to be implemented.

The 'Our Balbriggan Plan' seeks to address these issues and the *'need for a sustained focus on rejuvenating the original town centre and main street and how they relate to the expanded town, with a view to creating a more attractive, connected place that people want to live and spend time in for work, shopping or recreational purposes.'*

The plan outlines an objective to develop a Castle (Bremore) to Castle (Ardgillan) Coastal Cycle Way incorporating pedestrian facilities and upgrades to connecting residential areas, expanding northwards to Gormanstown and south to Skerries.

3.2. Receiving Environment

The majority of the study area consists of Rural, Open Space and High Amenity objectives, with High Amenity zones generally located along the coastline. The areas around the towns are generally zoned as Residential or Town Centres. In addition, almost the entire study area is designated as being Highly Sensitive Landscape. The following sections provide a brief description of some of the key areas within or adjacent the study area extents.

3.2.1. Newbridge Demesne

The starting point of the proposed route is Newbridge Demesne located to the immediate west of Donabate, a small coastal town located between the two major estuaries of Malahide to the south and Rogerstown to the north.

3.2.2. Donabate

Donabate has a population of approximately 7,500 inhabitants and is served by a number of schools and amenity facilities as well as its own train station. Key regional road through Donabate is the R126.

3.2.3. Rogerstown Park (Balleally Park)

Further north the route continues towards Rush passing by Rogerstown Park. Rogerstown Park represents a newly opened park on the site of the former Balleally Landfill.

3.2.4. Rush

Rush is a small seaside town with population of approximately 10,000 no. inhabitants and has its own harbour. It lies to the east of Lusk and south of Skerries and is served by a number of schools and amenity facilities. Rush/Lusk train station is located some 3km west of Rush town centre. Key regional road through Rush is the R128.

3.2.5. Drumanagh

Drumanagh is a headland just south of Loughshinny which features an early 19th-century Martello tower and a large Iron Age promontory fort.

3.2.6. Loughshinny

To the north of Rush, Loughshinny is a small seaside village with its own harbour between Rush and Skerries with a population of around 700 no. inhabitants.

3.2.7. Skerries

Skerries is a coastal town which historically was an active fishing port. Skerries has a population of around 10,000 no. inhabitants and is served by a number of schools and amenity facilities as well as its own train station and harbour.

Key regional roads through Skerries are the R127 and R128. There are two Martello towers in Skerries, at Red Island and Shenick Island which are part of a chain of towers constructed in the early 19th Century

3.2.8. Ardgillan Demesne

Further north between Skerries and Balbriggan is located Ardgillan Demesne. The Demesne consists of 200 acres of rolling open grassland, mixed woodland and gardens, overlooking the Irish Sea with views of Mourne Mountains to the north and Lambay to the south-east.

3.2.9. Balbriggan

The biggest town in study area is Balbriggan with population of about 21,700 no. inhabitants and is served by a number of schools and amenity facilities as well as its own train station and harbour. Key regional roads through Balbriggan are the R122, R128 and R132.

3.2.10. Meath Border

The completion of the route is planned to be at or near to the boundary with County Meath, at/adjacent to the R124 Road South of the Delvin River.

3.3. Need for the Scheme

3.3.1. Economy

Within Ireland the healthcare system is currently under significant pressure. This is presented through long waiting lists for consultants and specialist services, overcrowded emergency services and healthcare professionals under severe time and workload pressures. There is real need to do all that can be reasonably undertaken to ease these pressures.

The provision of any infrastructure that can encourage physical activity and improve the general health of the population, in terms of both physical and mental well-being and thereby reduce the pressure on the healthcare service resulting in an economical benefit to the region and state.

Whilst it is not a problem, there is huge potential for the proposed Fingal coastal way to promote Fingal as a Tourism destination for national and international visitors.

This potential is further enhanced due to Fingal's rich historical significance which is represented by many built heritage, archaeology and architectural sites, most notably at Drumanagh.

The proposed Coastal Way project has the potential to have a significant and positive impact on tourism and general economic activity in County Fingal.

The topic of the economic benefits of greenways in Ireland has been explored in several reports. Below is a series of examples:

- The Department of Transport Tourism and Sport's 'Strategy for the Future Development of Greenways' paper, greenways can act as significant economic drivers in the areas that they serve by attracting cycling visitors to the area. In 2010, 168,000 overseas tourists engaged in cycling while staying in Ireland spending approximately €180 million; this increased further to 175,000 in 2011 and an estimated €200 million spend. Notably, these increases occurred at a time when overall visitor numbers were declining. In 2015, Fáilte Ireland estimated that this had increased to 355,000 representing 7% of the overall overseas market.
- The Fitzpatrick's report commissioned by Fáilte Ireland on the economic impact of the Mayo Greenway notes: "Estimates derived from the study suggest that all direct expenditure associated with the Greenway would contribute to a projected €7.2 million in spend in the local economy over a full year in 2011".
- Waterford City & County Council procured the undertaking of an intercept study of users of the Waterford Greenway. The study determined the following: "A majority of visitors from outside Waterford (80%) paid for accommodation while in Waterford and almost one in five visitors stayed four night or more".

With reference to the findings above from similar Irish greenways, the Fingal Coastal Way is well equipped to reap the rewards of tourism and provide stimulus into the local economy of the adjoining towns and businesses.

3.3.2. Environment

An absence of traffic free active travel routes within the study area results in most recreational and leisure-based cycling trips being undertaken on the regional and local road network.

This contributes to an impact on human beings in the form of harmful noise and emission pollutants, such as nitrogen dioxide, being breathed in by active travel patrons wishing to improve their physical wellbeing. Such pollutants are a contributing factor to health issues such as asthma, emphysema and other respiratory issues.

Whilst the Fingal Coastal Way will strongly facilitate leisure and recreational trip purposes, it is also intended that it will serve a dual function as a commuter route. As such it is considered that there is potential for a modal shift in key commuter trips between the adjoining towns of the proposed greenway. The greenway would encourage walking and cycling to schools and train stations with opportunities for additional linkages in the future.

With reference to TII's Project Appraisal Guidelines it is possible that in reducing trips by motorised modes, particularly reducing private car travel, there will be an improvement in air quality, noise reduction and overall positive impacts on climate change.

3.3.3. Safety

In general, throughout the rural sections of the study area facilities for pedestrians, cyclists and other vulnerable road users are poor.

Moderate to high traffic volumes and inappropriate vehicles speed dominate the regional roads making for a particularly unpleasant environment for active transport users.

Facilities within the urban towns and villages improve somewhat for pedestrians, however there is a lack of cycling facilities available.

Traffic volumes, speeds and the prevalence of other competing needs with the urban centres such as parking, loading, access and egress all contribute to unsafe conditions for active and vulnerable transport users.

The Fingal Coastal Way will improve this significantly for leisure, recreational and commuter users by providing a safe and comfortable route that achieves the highest feasible level of service.

Throughout the process of developing and assessing the proposed routes, the safety of residents and landowners along the route will be considered.

3.3.4. Accessibility and Social Inclusion

Within the study area there is a lack of accessible routes that link to key services and amenities that could be considered appropriate to encourage active travel for people with impairments and disabilities.

With 13% of the population of Fingal aged 60 or over and 11% of the population considered to have a disability, with those figures likely to rise, it is strategically important to ensure that our built environments are accessible and inclusive to a full range of people, including cyclists.

Whilst there are many walking routes, and sports clubs and societies of different codes located throughout the study area, it is noted that there is a lack of dedicated high quality recreational and leisure walking and cycling routes that facilitate users of all abilities which would encourage physical activity that could provide social benefits, such as increased social interaction that helps to build community networks, reduce isolation and exclusion and build social cohesion.

The Fingal Coastal Way will improve this significantly for leisure, recreational and commuter users by providing a safe and comfortable route linking key services, facilities, amenities and attractions as route progresses through each town as much as possible without losing the vital proximity to the coast and its associated scenery and views.

There are a number of areas within the study area where flooding issues are currently experienced. These will be considered throughout the development and assessment process with risk of flooding to form part of the detailed multi-criteria analysis at the appropriate stage.

3.3.5. Integration

The Fingal Coastal Way will form part of a national greenway route along the east coast of Ireland spanning from Dundalk to Wexford which will connect with a strategic national greenway network.

To the north, the Fingal Coastal Way commences on the grounds of Newbridge demesne and terminates at the Meath border. Meath County Council will have the opportunity to work in conjunction with Fingal County Council and Louth County Council in relation to joint proposals to develop a cycle route between Newgrange and Newbridge House. Meath County Council already has progressed with the part of this scheme between Drogheda and Mornington which is in feasibility phase. On a national level this will form wider cycle network connections onto Dundalk and Northern Ireland and to the west to Navan and Trim and in turn connecting onto the Dublin to Galway Greenway.

To the south, the Broadmeadow Greenway, a 6km greenway joining Malahide demesne and Newbridge demesne, which recently received an approval from An Bord Pleanála, connects the Fingal Coastal Way to the adjoining Sutton to Malahide greenway. Part of this greenway from Baldoyle to Portmarnock, approximately 1.8 km long, has been completed and opened in June 2020. This then will connect with the Sutton to Sandycove scheme. Ultimately, the route along the east coast will extend south as far as Wexford where it will connect with a western route towards the Waterford Greenway.

In terms of a local integration perspective, the scheme will serve the towns of Donabate, Rush, Skerries and Balbriggan directly. The route will encompass large population catchment areas, including urban areas which are less well off than others and rural areas which are currently more isolated, and in doing so, local schools, playing fields and other amenities will become more accessible. All of the urban centres have noteworthy populations with numerous services and amenities such as schools, shopping areas, community centres, parks, tourism attractions, playing pitches and train stations.

There is a significant lack of connectivity and integration between these services and amenities for active transport users at present. The possibility of connection of these amenities to nearby train stations and bus facilities is a significant benefit that the Fingal Coastal Way could bring to the local area.

Care will be taken during the Stage 2 assessment process to determine social inclusion of the greenway and efforts have been implemented to promote connectivity to economically disadvantaged, rural and isolated housing.

3.3.6. Physical Activity

According to The National Physical Activity Plan a large number of Irish people are not meeting the levels of physical activity recommended in the National Guidelines and this is evident from a range of surveys which have been conducted over the last number of years. On an international level, the European Charter on Counteracting Obesity includes the “promotion of cycling and walking by better design and transport policies”, thereby improving public health and reducing the associated costs.

Research indicates that the percentage of people who are highly active in Ireland (2013 data) is just 31.3%.

In relation to children, research undertaken as part of the Plan indicates that:

- Only 19% of primary and 12% of post-primary school children met the physical activity recommendations and these proportions have not improved since 2004
- Girls were less likely than boys to meet the physical activity recommendations
- The likelihood of meeting the physical activity recommendations decreased with increasing age
- One in four children was unfit, overweight or obese and had elevated blood pressure

Physical inactivity or sedentary behaviour is one of the leading risk factors for poor health and is now identified by the World Health Organization (WHO) as the fourth leading risk factor for global mortality.

With reference to TII's Project Appraisal Guidelines: for cyclists, an average increase in physical activity of 41.8 minutes per work day should equate to a risk of all-cause mortality of 0.79 times the normal figure (CAF 2016).

For new pedestrians, the risk of all-cause mortality should be 0.89 times the normal figure (so a smaller benefit than for cycling). This should correspond to physical activity levels of 38 minutes walking per weekday.

An increase in physical activity has been shown to have a beneficial effect on work absenteeism; this is an additional benefit to employers on top of the aforementioned health benefits. This reduction in short-term sick leave increases productivity in the economy.

3.3.7. Overall Need for the Scheme

The proposed study area is one of immense scenic beauty and amenity value rich with heritage and archaeological attractions.

There is huge potential to deliver a scenic coastal greenway, designed to high quality user safety and comfort standards, that can deliver a tourism product with significant potential to attract overseas visitors.

This would benefit the economy of the adjacent local communities, contribute significantly to health and wellbeing of all users as an amenity for physical activity and facilitate short to medium local commuter journeys thereby encouraging modal shift to active and sustainable transport alternatives.

4. Constraints

4.1. Constraints Study

The proposed scheme would ideally be located as close to the coast as possible, albeit set back to lessen the impact due to coastal erosion. However, there is potential for alternative options such as along adjacent field boundaries and or adjacent to the exiting local / regional road network and combinations of the above.

However, there are several potential constraints and opportunities that have a significant influence on the final routing of the proposed scheme. These have been identified through the completion of a Constraints Study.

The Constraints Study, (document reference: 5188509DG0006) was carried out incorporating guidance set out in Transport Infrastructure Ireland's (TII) Project Management Guidelines, (2019). The purpose of the study was to document and map the nature and extent of known constraints within the defined Study Area for the scheme so that as much information as possible was available to inform the subsequent feasible option identification and selection process. The constraints are divided into three principal categories, namely:

- Natural Constraints which include naturally occurring landscapes and features, including underground features. The key items identified under this heading include:
 - Ecology
 - Soils and Geology
 - Hydrology and Hydrogeology
 - Flooding
- Artificial Constraints which include features forming part of the built environment including underground features such as disused landfills etc. The key items identified under this heading include:
 - Engineering and Infrastructure
 - Archaeology, Architectural and Cultural Heritage
 - Agricultural assets
 - Planning applications, Local Area Plans, Masterplans etc.
 - Built environment including utilities, sports clubs, schools etc.
- External Parameters which include design standards, policy, procedural, financial and legal issues. The key items identified under this heading include:
 - Funding and Scope
 - Construction Phasing
 - Procedural and Legal Requirements including national and local policy
 - Technical Standards

The full details of all identified constraints are included in the Constraints Study including all physical constraints mapped and identified on Drawing Nos. 5188509/ZZ/HTR/GIS/000 – 0068 as included in Appendix A of that document.

In addition to the above, high quality aerial mapping and associated topographical information was collected for the entire study area. This allowed for a digital terrain model to be developed with imaging overlaid, allowing for calculation of gradients and identification of locations where structures etc. may be required.

5. Do Nothing and Do Minimum Alternatives

This chapter of the Feasibility Study Options Assessment Report assesses the feasibility of the 'Do-Nothing' and 'Do-Minimum' alternatives.

5.1. Do Minimum Consideration

With reference to TII PAG Unit 4.0 Consideration of Alternatives and Options, it is necessary to consider a Do Minimum Option in order to provide a baseline for establishing the economic, integration, safety, environmental and accessibility impacts of all options.

The Do Minimum is essentially maintaining the existing infrastructure and constructing any projects that are committed.

If there are no committed projects, then Do Minimum is essentially Do Nothing.

5.2. Fingal Coastal Way Do Nothing Scenario

The 'do nothing' scenario for the Fingal Coastal Way is that pedestrians and cyclists will continue to walk and cycle country roads and high volume / high speed regional roads with limited or in most cases no facilities, resulting in an environment that is not safe, not comfortable and not attractive. The latent commuter and recreational user demand will continue to be suppressed by the existing poor walking and cycling environment within the study area.

In the context of human health, the benefits of walking and cycling are well documented and include improved cardiovascular fitness, chronic disease prevention, improved mental health wellbeing, strengthened immune system and a reduced risk of cancer, obesity and coronary heart disease. These benefits to Fingal County and its people will not be realised in the 'do nothing' scenario.

If the proposed greenway is not constructed, the additional economic benefit which could be derived from the project will not be realised. This benefit can be estimated in basic terms by reference to the Department of Public Expenditure and Reforms 'Public Capital Programme 2016 to 2021: Labour Intensity of Public Investment' report which estimates that approximately 12 construction jobs will be created for every €1 million of capital investment and that the tourism sector supports 29 jobs for every €1 million of capital investment.

In the 'do nothing' scenario, the long-standing objectives of the Fingal Development Plan to deliver the Fingal Coastal Way will not be realised.

Based on the reasons outline above, the 'do nothing' scenario will essentially result in a lost opportunity.

6. Stage 1 Preliminary Options Assessment

6.1. Stage 1 Preliminary Options Assessment Criteria

6.1.1. Development of Criteria

In order to identify a short list of options to be brought through to Stage 2 Detailed Options Assessment, a Stage 1 Preliminary Options Assessment has been undertaken on the initial route options.

The main assessment criteria utilised for the Stage 1 Preliminary Options Assessment are Engineering, Environment and Economy as referenced in TII's Project Appraisal Guidelines Unit 7.0 Multi Criteria Analysis.

Sub criteria have been developed by Atkins with reference to PAG Unit 7.0 and with particular attention given to the scheme Vision Statement and Project Objectives, which have been identified through a collaborative workshop with key Local Authority Stakeholders, ensuring that the criteria can appropriately measure the achievement of these objectives by each identified route option.

It should be noted that sub criteria at this stage are developed to facilitate the efficient assessment of a large number of routes, against significant constraints and opportunities that could clearly influence the potential feasibility of a route option. Thus, the objective of the Stage 1 Preliminary Options Assessment is to reduce the number of feasible route options to a general minimum of three and a maximum of five which will then be subjected to a more rigorous assessment at Stage 2.

All constraints have been avoided where possible and comments from external parties have been considered. All options have been developed in accordance with the relevant standards including Design Manual for Urban Roads and Streets (DMURS), the National Cycle Manual (NCM) and TII Rural Cycle Design (DN-GEO-03047) to provide the highest feasible level of service possible.

The following table outlines the main assessment criteria and associated sub criteria to be utilised during the Stage 1 – Preliminary Options Assessment process.

Table 6-1 - Stage 1 - Preliminary Options Assessment Criteria

Criteria	Sub Criteria	Considerations
Engineering	Usability	Gradients
		Flooding
		Safety - Real & Perceived
	User Experience	Connectivity – Heritage Sites, Amenities, Public Transport etc.
		Scenery - Landscape & Views
	Buildability	Ground Conditions
		Complex Structures
		Construction Access
		Traffic Management
		Interdependence on Adjacent Scheme(s)
Environment	Ecology and other Natural Factors	SACs, SPAs
		Vulnerable Rocks & Soils
		Vulnerable Aquifers & Wells
		Watercourses & Water Supplies
		Landscape & Views
	Built Heritage and Archaeology	Recorded Monuments & Places
		Areas of Archaeological Potential
	Material Assets	Material Assets - Dwellings, Land Severance, Amenities, Utilities, Roads, Junctions, Railways etc.

Criteria	Sub Criteria	Considerations
Economy	Costs	Extensive Structures
		Protection of Investment
	Benefits	Impacts on Agricultural Operations
		Impacts on Businesses
		Propensity to Walk / Cycle - Population, Connectivity

6.1.2. Scoring Procedure

Each option is assessed relative to one another against the Stage 1 Preliminary Options Assessment Sub Criteria set out above using a three-point ranking scale.

Route options have been assessed in terms of having ‘some advantages over other options’, ‘comparable to other options’ or ‘some disadvantages over other options’. The table below presents the colour coding utilised in the Stage 1 Preliminary Assessment process.

Table 6-2 - Scoring Scale

Colour Coding	Rank Description
	Some advantages over other options
	Comparable to all other options
	Some disadvantages over other options

6.2. Stage 1 Route Options

As noted in Section 1.5, the overall study area has been split into two Work Packages, each consisting of a number of Sub-Sections. A general description of the Work Packages and Sub-Section contained therein as defined by this study along with the number of routes identified for Stage 1 Assessment is presented below. Maps illustrating the long list of route options are contained within Appendix A.

6.2.1. Work Package 1

6.2.1.1. Sub-Section 1A: Newbridge Demesne to Rogerstown

Sub-Section 1A generally covers the areas of Newbridge Demesne, Donabate and the western area of Rogerstown Estuary. There is a total of twelve separate routes identified within this sub-section. Map S1-WP1-SS1A shows the location and indicative alignment of the proposed routes within Sub-Section 1A and can be found in Appendix A.

6.2.1.2. Sub-Section 1B: Rogerstown

Sub-Section 1B consists mainly of the northern shoreline to Rogerstown Estuary. This sub-section is not included within the brief for the proposed scheme and is being delivered by others in tandem with a flood protection scheme. It has, therefore, not been considered further as part of this study.

6.2.1.3. Sub-Section 1C: Rush

Sub-Section 1C generally covers the area of Rush, extending from the eastern side of Rogerstown Estuary to the south of Drumanagh. There is a total of seventeen separate routes identified within this sub-section. Map S1-WP1-SS1C shows the location and indicative alignment of the proposed routes within Sub-Section 1C and can be found in Appendix A.

6.2.1.4. Sub-Section 1D: Rush to Skerries

Sub-Section 1D generally covers the area between Drumanagh and Skerries and includes Loughshinny. There is a total of twelve separate routes identified within this sub-section. Map S1-WP1-SS1D shows the location and indicative alignment of the proposed routes within Sub-Section 1D and can be found in Appendix A.

6.2.2. Work Package 2

6.2.2.1. Sub-Section 2A: Skerries

Sub-Section 2A generally covers the area of Skerries commencing just north of Skerries Rugby Football Club and extending north to Barnageeragh. There is a total of twelve separate routes identified within this sub-section. Map S1-WP2-SS2A shows the location and indicative alignment of the proposed routes within Sub-Section 2A and can be found in Appendix A.

6.2.2.2. Sub-Section 2B: Skerries to Balbriggan

Sub-Section 2B generally covers the area between the key towns of Skerries and Balbriggan and includes the grounds of Ardgillan Castle. There is a total of nine separate routes identified within this sub-section. Map S1-WP2-SS2B shows the location and indicative alignment of the proposed routes within Sub-Section 2B and can be found in Appendix A.

6.2.2.3. Sub-Section 2C: Balbriggan

Sub-Section 2C generally covers the area of Balbriggan commencing at Castlelands and extending to just north of Bremore Castle. There is a total of fourteen separate routes identified within this sub-section. Map S1-WP2-SS2C shows the location and indicative alignment of the proposed routes within Sub-Section 2C and can be found in Appendix A.

6.2.2.4. Sub-Section 2D: Balbriggan to Meath Border

Sub-Section 2D generally covers the area between Balbriggan and the Meath Border, terminating at the River Delvin. There is a total of twelve separate routes running through this sub-section. Map S1-WP2-SS2D shows the location and indicative alignment of the proposed routes within Sub-Section 2D and can be found in Appendix A.

6.3. Stage 1 Preliminary Options Assessment

6.3.1. Work Package 1

6.3.1.1. Sub-Section 1A: Newbridge Demesne to Rogerstown

The sifting process for Sub-Section 1A has identified 5 no. routes for progression to the Stage 2 Detailed Assessment. These are Routes SS.1A.2, 3, 4, 9 and 11. These routes are shown on the Map S1-WP1-SS1A and can be found in Appendix A.

For this section, the routes can be categorised into two distinct groups, i.e. ones which travel east out of Newbridge and ones which travel west.

For the group that travels east, Routes SS.1A.2, 3 and 4 have a number of benefits over the other alternatives. They provide good coastal views from the estuary side while also linking directly to Donabate town centre. This will ensure that the routes will be attractive to tourists and will benefit the local economy, while the directness of the routes will allow them to perform as commuter routes also. These routes avoid large amounts of CPO being necessary and also avoid pinch points within Donabate town itself. They are, therefore, the preferred routes to the east of Newbridge.

For the group of routes that travel west from Newbridge, Routes SS.1A.9 and 11 are the most advantageous. These routes would have the smallest impact on the pNHA/SPA/SAC area at Rogerstown Estuary while minimising the need for large areas of landtake. They also require less complicated construction methods and less structures, leading these to be the most beneficial routes in the western group.

Table 6-3 below outlines the assessment results.

Table 6-3 - Sub-Section 1A Preliminary Options Assessment

Criteria	Sub-Criteria	SS.1A.1	SS.1A.2	SS.1A.3	SS.1A.4	SS.1A.5	SS.1A.6	SS.1A.7	SS.1A.8	SS.1A.9	SS.1A.10	SS.1A.11	SS.1A.12
Engineering	Usability	Green	Green	Green	Green	Green	Yellow	Yellow	Green	Green	Yellow	Green	Yellow
	User Experience	Yellow	Green	Green	Green	Green	Green	Green	Green	Yellow	Yellow	Yellow	Yellow
	Buildability	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Yellow	Green	Yellow
Environment	Ecology	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Green
	Built Heritage	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Green	Green
	Material Assets	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Yellow	Green	Green	Green	Yellow
Economy	Costs	Green	Green	Green	Green	Yellow	Yellow	Yellow	Yellow	Green	Yellow	Yellow	Green
	Benefits	Yellow	Green	Green	Green	Green	Green	Yellow	Green	Yellow	Yellow	Yellow	Yellow
Progress to Stage 2 (Yes / No)		N	Y	Y	Y	N	N	N	N	Y	N	Y	N

6.3.1.2. Sub-Section 1C: Rush

The sifting process for Sub-Section 1C has identified 5 no. routes for progression to the Stage 2 Detailed Assessment. These are Routes SS.1C.5, 7, 9, 11 and 14. These routes are shown on the Map S1-WP1-SS1C and can be found in Appendix A.

These routes all have benefits over others in the key areas of user experience and benefits as they all provide good scenic views in their northern section while also offering direct links into the town centre of Rush. As a result, they will offer an excellent tourism product and will help to improve the local economy in the area.

Additionally, all of these routes are off-road greenways to the north which improves usability and attractiveness of the route while minimising land take requirements and environmental impacts.

Table 6-4 below outlines the assessment results.

Table 6-4 - Sub-Section 1C Preliminary Options Assessment

Criteria	Sub-Criteria	SS.1C.1	SS.1C.2	SS.1C.3	SS.1C.4	SS.1C.5	SS.1C.6	SS.1C.7	SS.1C.8	SS.1C.9	SS.1C.10	SS.1C.11	SS.1C.12	SS.1C.13	SS.1C.14	SS.1C.15	SS.1C.16	SS.1C.17
Engineering	Usability	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
	User Experience	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
	Buildability	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Environment	Ecology	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
	Built Heritage	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
	Material Assets	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Economy	Costs	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
	Benefits	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Progress to Stage 2 (Yes / No)		N	N	N	N	Y	N	Y	N	Y	N	Y	N	N	Y	N	N	N

6.3.1.3. Sub-Section 1D: Rush to Skerries

The sifting process for Sub-Section 1D has identified 3 no. routes for progression to the Stage 2 Detailed Assessment. These are Routes SS.1D.6, 7 and 8. These routes are shown on the Map S1-WP1-SS1D and can be found in Appendix A.

These routes generally provide good coastal views throughout the section, ensuring that they are attractive for tourism. They are all predominantly off-road in greenfield sites, limiting construction costs and facilitating a pleasant environment for users.

Each of these routes follows existing field boundaries, limiting the amount of CPO required and minimising the impacts to the environment and built heritage which makes these more beneficial than the routes that run directly along the coastline. This limits CPO requirements and as a result will have the least impact on agricultural assets and on the local and regional road network.

Table 6-5 below outlines the assessment results.

Table 6-5 - Sub-Section 1D Preliminary Options Assessment

Criteria	Sub-Criteria	SS.1D.1	SS.1D.2	SS.1D.3	SS.1D.4	SS.1D.5	SS.1D.6	SS.1D.7	SS.1D.8	SS.1D.9	SS.1D.10	SS.1D.11	SS.1D.12
Engineering	Usability	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	User Experience	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Buildability	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Environment	Ecology	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Built Heritage	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Material Assets	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Economy	Costs	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Benefits	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Progress to Stage 2 (Yes / No)		N	N	N	N	N	Y	Y	Y	N	N	N	N

6.3.2. Work Package 2

6.3.2.1. Sub-Section 2A: Skerries

The sifting process for Sub-Section 2A has identified 4 no. routes for progression to the Stage 2 Detailed Assessment. These are Routes SS.2A.2, 3, 4 and 6. These routes are shown on the Map S1-WP2-SS2A and can be found in Appendix A.

The main advantages that these options have over other options are their exposure to an excellent coastal experience and associated views, linkage to noteworthy heritage sites at Skerries head, accessibility to the town centre, and minimal impact on the natural and built environment. They also offer minimal impact on the operation of the town centre and the ACA, minimal use of less attractive distributor and regional road network and overall provision of a good tourism product with an excellent ability to attract visitors and thus benefit the local and regional economy.

Table 6-6 below outlines the assessment results.

Table 6-6 - Sub-Section 2A Preliminary Options Assessment

Criteria	Sub-Criteria	SS.2A.1	SS.2A.2	SS.2A.3	SS.2A.4	SS.2A.5	SS.2A.6	SS.2A.7	SS.2A.8	SS.2A.9	SS.2A.10	SS.2A.11	SS.2A.12
Engineering	Usability												
	User Experience												
	Buildability												
Environment	Ecology												
	Built Heritage												
	Material Assets												
Economy	Costs												
	Benefits												
Progress to Stage 2 (Yes / No)		N	Y	Y	Y	N	Y	N	N	N	N	N	N

6.3.2.2. Sub-Section 2B: Skerries to Balbriggan

The sifting process for Sub-Section 2B has identified 3 no. routes for progression to the Stage 2 Detailed Assessment. These are Routes SS.2A1, 2, and 4. These routes are shown on the Map S1-WP2-SS2B and can be found in Appendix A.

The main advantages that these options have over other options are their exposure to an excellent coastal experience and associated views, their directness and attractiveness to support inter-commuting between Balbriggan and Skerries and retention of indirect link to Ardgillan Castle grounds. They also offer minimal impact on the natural environment such as the woodlands associated with Ardgillan Castle grounds, and overall provision of a good tourism product with an excellent ability to attract visitors and thus benefit the local and regional economy.

Table 6-7 below outlines the assessment results.

Table 6-7 - Sub-Section 2B Preliminary Options Assessment

Criteria	Sub-Criteria	SS.2B.1	SS.2B.2	SS.2B.3	SS.2B.4	SS.2B.5	SS.2B.6	SS.2B.7	SS.2B.8	SS.2B.9
Engineering	Usability	Green	Green	Orange	Green	Orange	Orange	Orange	Orange	Orange
	User Experience	Green	Green	Orange	Green	Orange	Orange	Orange	Orange	Orange
	Buildability	Orange	Orange	Green	Orange	Green	Green	Green	Green	Green
Environment	Ecology	Green	Green	Orange	Green	Orange	Orange	Orange	Orange	Orange
	Built Heritage	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
	Material Assets	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Economy	Costs	Orange	Orange	Orange	Orange	Orange	Orange	Green	Green	Green
	Benefits	Green	Green	Orange	Green	Orange	Orange	Orange	Orange	Orange
Progress to Stage 2 (Yes / No)		Y	Y	N	Y	N	N	N	N	N

6.3.2.3. Sub-Section 2C: Balbriggan

The sifting process for Sub-Section 2C has identified 6 no. routes for progression to the Stage 2 Detailed Assessment. These are Routes SS.2C.2, 4, 5, 6, 7 and 13. These routes are shown on the Map S1-WP2-SS2C and can be found in Appendix A.

The main advantages that Routes SS.2C.2, 4, 5 and 6 have over other options are their exposure to an excellent coastal experience and associated views, linkage to noteworthy heritage sites such as the Martello Tower and Bremore Castle, accessibility to the town centre and Balbriggan Train Station and set back from extensive sea cliffs that are prone to coastal erosion. They also offer minimal impact on the operation of the town centre and the ACA, minimal use of regional road network and overall provision of a good tourism product with an excellent ability to attract visitors and thus benefit the local and regional economy.

Route SS.2C.7 provides a more direct route along the regional road network and whilst not availing directly of the coastal experience and associated scenery and views as much as other options that have progressed to Stage 2 Detailed Assessment, it does facilitate good accessibility to key attractions and the town centre.

Route SS.2C.13 takes a more inland path than the other routes to progress to Stage 2, however its advantages include its accessibility to the town centre and train station, its buildability, minimal impact on the natural and built environment, linkage to Mill Pond Park and reasonable cost of delivery.

Table 6-8 below outlines the assessment results.

Table 6-8 - Sub-Section 2C Preliminary Options Assessment

Criteria	Sub-Criteria	SS.2C.1	SS.2C.2	SS.2C.3	SS.2C.4	SS.2C.5	SS.2C.6	SS.2C.7	SS.2C.8	SS.2C.9	SS.2C.10	SS.2C.11	SS.2C.12	SS.2C.13	SS.2C.14
Engineering	Usability	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
	User Experience	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
	Buildability	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Environment	Ecology	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
	Built Heritage	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
	Material Assets	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Economy	Costs	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
	Benefits	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Progress to Stage 2 (Yes / No)		N	Y	N	Y	Y	Y	Y	N	N	N	N	N	Y	N

6.3.2.4. Sub-Section 2D: Balbriggan to Meath Border

The sifting process for Sub-Section 2D has identified 4 no. routes for progression to the Stage 2 Detailed Assessment. These are Routes SS.2D.3, 5, 6 and 8. These routes are shown on the Map S1-WP2-SS2D and can be found in Appendix A.

The main advantages that these options have over other options are their reduced impact on dune habitats and heritage sites, reduced impact on agricultural land in terms of operation and acquisition, and reduced impact on private dwellings and associated front gardens.

In terms of Route SS.2D.3, it has an added advantage of also providing exceptional coastal experience and associated views and thus offers an overall good tourism product with an excellent ability to attract visitors and thus benefit the local and regional economy. Routes SS.2D.5 and 6 also offer good coastal views and also have the advantage in that they are direct and thus attractive to commuters, as is Route SS.2D.8.

Table 6-9 below outlines the assessment results.

Table 6-9 - Sub-Section 2D Preliminary Options Assessment

Criteria	Sub-Criteria	SS.2D.1	SS.2D.2	SS.2D.3	SS.2D.4	SS.2D.5	SS.2D.6	SS.2D.7	SS.2D.8	SS.2D.9	SS.2D.10	SS.2D.11	SS.2D.12
Engineering	Usability	Green	Orange	Green	Orange	Green	Orange	Orange	Green	Orange	Orange	Green	Orange
	User Experience	Green	Green	Green	Orange	Green	Green	Orange	Orange	Orange	Orange	Orange	Orange
	Buildability	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Environment	Ecology	Orange	Green	Green	Green	Green	Green	Green	Green	Green	Green	Orange	Green
	Built Heritage	Orange	Orange	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
	Material Assets	Orange	Orange	Orange	Orange	Green	Green	Green	Green	Green	Green	Orange	Orange
Economy	Costs	Orange	Orange	Green	Orange	Green	Orange	Orange	Green	Orange	Orange	Orange	Orange
	Benefits	Green	Green	Green	Orange	Green	Green	Orange	Orange	Orange	Orange	Orange	Orange
Progress to Stage 2 (Yes / No)		N	N	Y	N	Y	Y	N	Y	N	N	N	N

7. Routes to Progress to Stage 2

7.1. Stage 1 Assessment Summary

Table 7-1 summarises the outcome of the Stage 1 Preliminary Options Assessment process.

Table 7-1 - Stage 1 Assessment Summary

Route		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		
Sub-Sections	Work Package 1	1A	N	Y	Y	Y	N	N	N	N	Y	N	Y	N	N/A	N/A	N/A	N/A	N/A	
		1B	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		1C	N	N	N	N	Y	N	Y	N	Y	N	Y	N	N	Y	N	N	N	N
		1D	N	N	N	N	N	Y	Y	Y	N	N	N	N	N/A	N/A	N/A	N/A	N/A	N/A
	Work Package 2	2A	N	Y	Y	Y	N	Y	N	N	N	N	N	N	N/A	N/A	N/A	N/A	N/A	N/A
		2B	Y	Y	N	Y	N	N	N	N	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		2C	N	Y	N	Y	Y	Y	Y	N	N	N	N	N	Y	N	N/A	N/A	N/A	N/A
		2D	N	N	Y	N	Y	Y	N	Y	N	N	N	N	N/A	N/A	N/A	N/A	N/A	N/A

In Summary:

- Five routes will progress within Sub-Section 1A, namely Routes SS.1A.2, 3, 4, 9 & 11;
- Five routes will progress within Sub-Section 1C, namely Routes SS.1C.5, 7, 9, 11 and 14;
- Three routes will progress within Sub-Section 1D, namely Routes SS.1D.6, 7 and 8;
- Four routes will progress within Sub-Section 2A, namely Routes SS.2A.2, 3, 4 and 6;
- Three routes will progress within Sub-Section 2B, namely Routes SS.2B.1, 2 and 4;
- Six routes will progress within Sub-Section 2C, namely Routes SS.2C.2, 4, 5, 6, 7 and 13;
- Four routes will progress within Sub-Section 2D, namely Routes SS.2D.3, 5, 6 and 8;

7.2. Routes Stage 2 Assessment

The routes identified above will be brought forward to the more detailed Stage 2 assessment where they will be analysed further using multi-criteria analysis. For ease of identification, the route naming convention for Stage 2 has been simplified with the corresponding references in Stage 1 and Stage 2 shown in the table below. The maps identifying the routes for Stage 2 assessment are included in Appendix B.

Table 7-2 – Stage 2 Route Identification

Work Package	Sub Section	Stage 1 Route ID	Stage 2 Route ID
WP 1	SS1A	SS.1A.2	Red
		SS.1A.3	Green
		SS.1A.4	Blue
		SS.1A.9	Yellow
		SS.1A.11	Orange
	SS1C	SS.1C.5	Red
		SS.1C.7	Green
		SS.1C.11	Yellow

Work Package	Sub Section	Stage 1 Route ID	Stage 2 Route ID
WP 2	SS1D	SS.1C.14	Orange
		SS.1D.6	Red
		SS.1D.7	Green
		SS.1D.8	Blue
	SS2A	SS.2A.2	Red
		SS.2A.3	Green
		SS.2A.4	Blue
		SS.2A.6	Yellow
	SS2B	SS.2B.1	Red
		SS.2B.2	Green
		SS.2B.4	Blue
	SS2C	SS.2C.2	Red
		SS.2C.4	Green
		SS.2C.5	Blue
		SS.2C.6	Yellow
		SS.2C.7	Orange
		SS.2C.13	Pink
SS2D	SS.2D.3	Red	
	SS.2D.5	Green	
	SS.2D.6	Blue	
	SS.2D.8	Yellow	

8. Conclusion

In order to identify a short list of options to be brought through to Stage 2 Detailed Options Assessment, a Stage 1 Preliminary Options Assessment has been undertaken on the initial route options.

The main assessment criteria utilised for this Stage 1 Preliminary Options Assessment are Engineering, Environment and Economy as referenced in TII's Project Appraisal Guidelines Unit 7.0 Multi Criteria Analysis.

Sub criteria have been developed by Atkins with reference to PAG Unit 7.0 and with particular attention given to the scheme Vision Statement and Project Objectives, which have been identified through a collaborative workshop with key Local Authority Stakeholders, ensuring that the criteria can appropriately measure the achievement of these objectives by each identified route option.

A Stage 1 assessment process was employed to compare the performance of each option considered in terms of cost, safety and capacity. The high level Stage 1 assessment process was used to identify a short list of feasible options that can potentially deliver the project objectives.

In Summary:

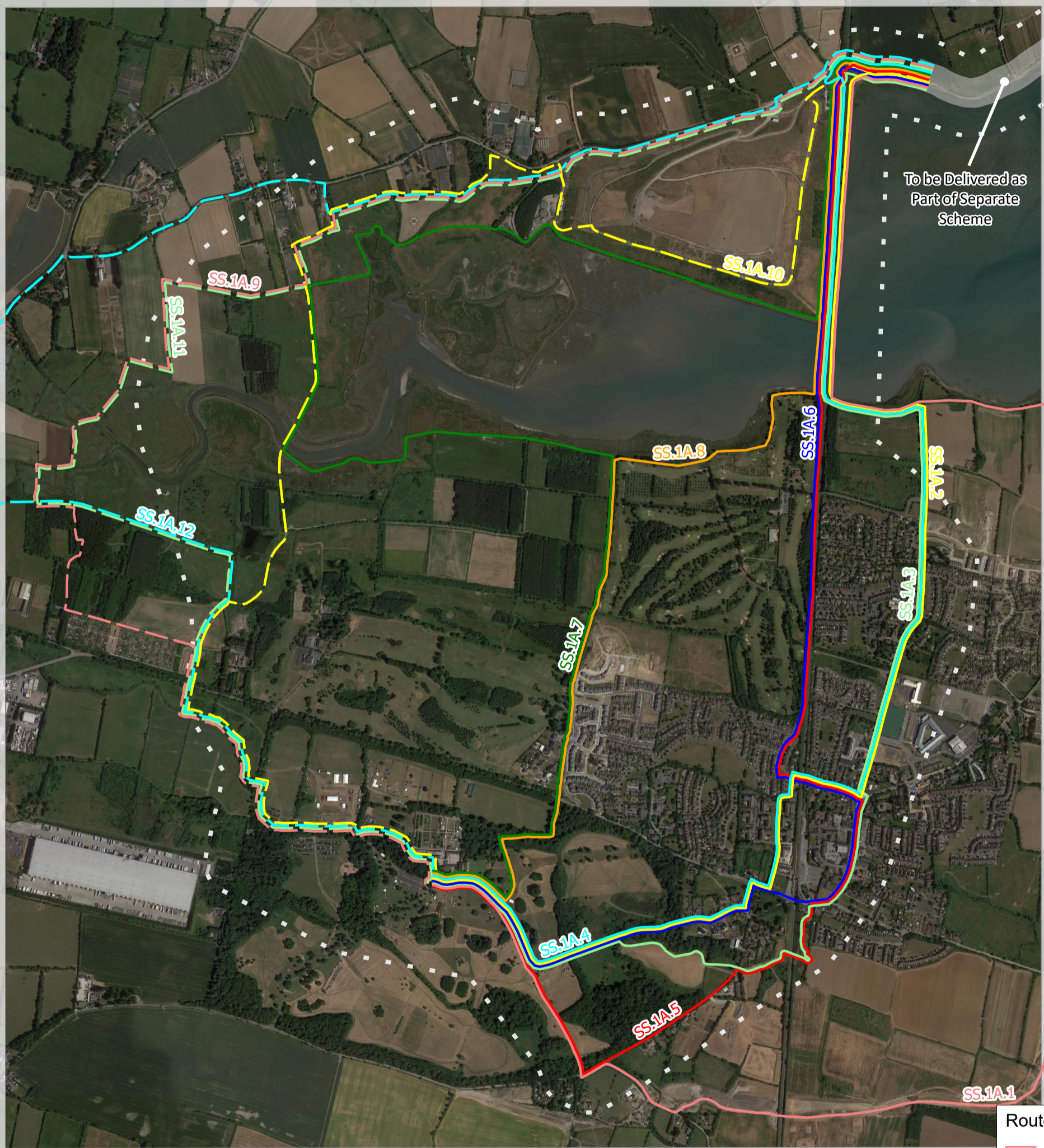
- Five routes will progress within Sub-Section 1A, namely Routes SS.1A.2, 3, 4, 9 and 11;
- Five routes will progress within Sub-Section 1C, namely Routes SS.1C.5, 7, 9, 11 and 14;
- Three routes will progress within Sub-Section 1D, namely Routes SS.1D.6, 7 and 8;
- Four routes will progress within Sub-Section 2A, namely Routes SS.2A.2, 3, 4 and 6;
- Three routes will progress within Sub-Section 2B, namely Routes SS.2B.1, 2 and 4;
- Six routes will progress within Sub-Section 2C, namely Routes SS.2C.2, 4, 5, 6, 7 and 13;
- Four routes will progress within Sub-Section 2D, namely Routes SS.2D.3, 5, 6 and 8;

These remaining routes will be brought forward to Stage 2 where a more detailed multi-criteria assessment of each route will then be carried out to determine a final Emerging Preferred Route

Appendices



Appendix A. Stage 1 Preliminary Assessment Route Option Maps



- Route Options
- SS.1A.1
 - SS.1A.2
 - SS.1A.3
 - SS.1A.4
 - SS.1A.5
 - SS.1A.6
 - SS.1A.7
 - SS.1A.8
 - SS.1A.9
 - SS.1A.10
 - SS.1A.11
 - SS.1A.12



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To be Delivered
 as Part of
 Separate Scheme

To be Delivered as Part of
 Separate Scheme

- Route Options
- SS.1C.1
 - SS.1C.2
 - SS.1C.3
 - SS.1C.4
 - SS.1C.5
 - SS.1C.6
 - SS.1C.7
 - SS.1C.8
 - SS.1C.9
 - SS.1C.10
 - SS.1C.11
 - SS.1C.12
 - SS.1C.13
 - SS.1C.14
 - SS.1C.15
 - SS.1C.16
 - SS.1C.17



- Route Options
- SS.1D.1
 - SS.1D.2
 - SS.1D.3
 - SS.1D.4
 - SS.1D.5
 - SS.1D.6
 - SS.1D.7
 - SS.1D.8
 - SS.1D.9
 - SS.1D.10
 - SS.1D.11
 - SS.1D.12



- Route Options
- SS.2A.1
 - SS.2A.2
 - SS.2A.3
 - SS.2A.4
 - SS.2A.5
 - SS.2A.6
 - SS.2A.7
 - SS.2A.8
 - SS.2A.9
 - SS.2A.10
 - SS.2A.11
 - SS.2A.12



- Route Options
- SS.2B.1
 - SS.2B.2
 - SS.2B.3
 - SS.2B.4
 - SS.2B.5
 - SS.2B.6
 - SS.2B.7
 - SS.2B.8
 - SS.2B.9

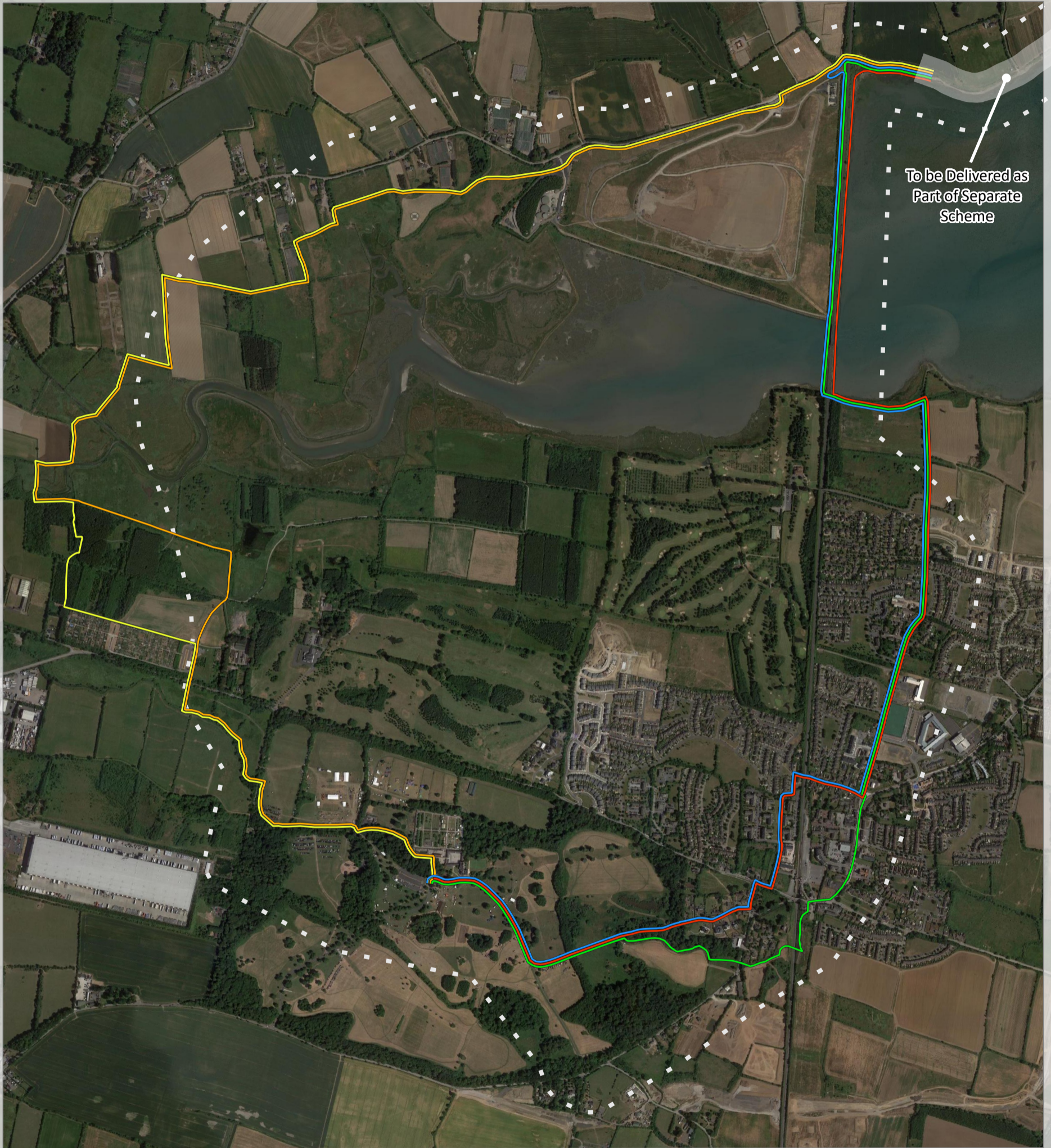


- Route Options
- SS.2C.1
 - SS.2C.2
 - SS.2C.3
 - SS.2C.4
 - SS.2C.5
 - SS.2C.6
 - SS.2C.7
 - SS.2C.8
 - SS.2C.9
 - SS.2C.10
 - SS.2C.11
 - SS.2C.12
 - SS.2C.13
 - SS.2C.14



- Route Options
- SS.2D.1
 - SS.2D.2
 - SS.2D.3
 - SS.2D.4
 - SS.2D.5
 - SS.2D.6
 - SS.2D.7
 - SS.2D.8
 - SS.2D.9
 - SS.2D.10
 - SS.2D.11
 - SS.2D.12

Appendix B. Stage 2 Detailed Assessment Maps



To be Delivered as
 Part of Separate
 Scheme

Stage 1 Route ID	Stage 2 Route ID
SS.1A.2	Red
SS.1A.3	Green
SS.1A.4	Blue
SS.1A.9	Yellow
SS.1A.11	Orange



To be Delivered as Part of
Separate Scheme

Stage 1 Route ID	Stage 2 Route ID
SS.1C.5	Red
SS.1C.7	Green
SS.1C.9	Blue
SS.1C.11	Yellow
SS.1C.14	Orange





Stage 1 Route ID	Stage 2 Route ID
SS.2A.2	Red
SS.2A.3	Green
SS.2A.4	Blue
SS.2A.6	Yellow



Stage 1 Route ID	Stage 2 Route ID
SS.2B.1	Red
SS.2B.2	Green
SS.2B.4	Blue



Stage 1 Route ID	Stage 2 Route ID
SS.2C.2	Red
SS.2C.4	Green
SS.2C.5	Blue
SS.2C.6	Yellow
SS.2C.7	Orange
SS.2C.13	Pink



Stage 1 Route ID	Stage 2 Route ID
SS.2D.3	Red
SS.2D.5	Green
SS.2D.6	Blue
SS.2D.8	Yellow

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