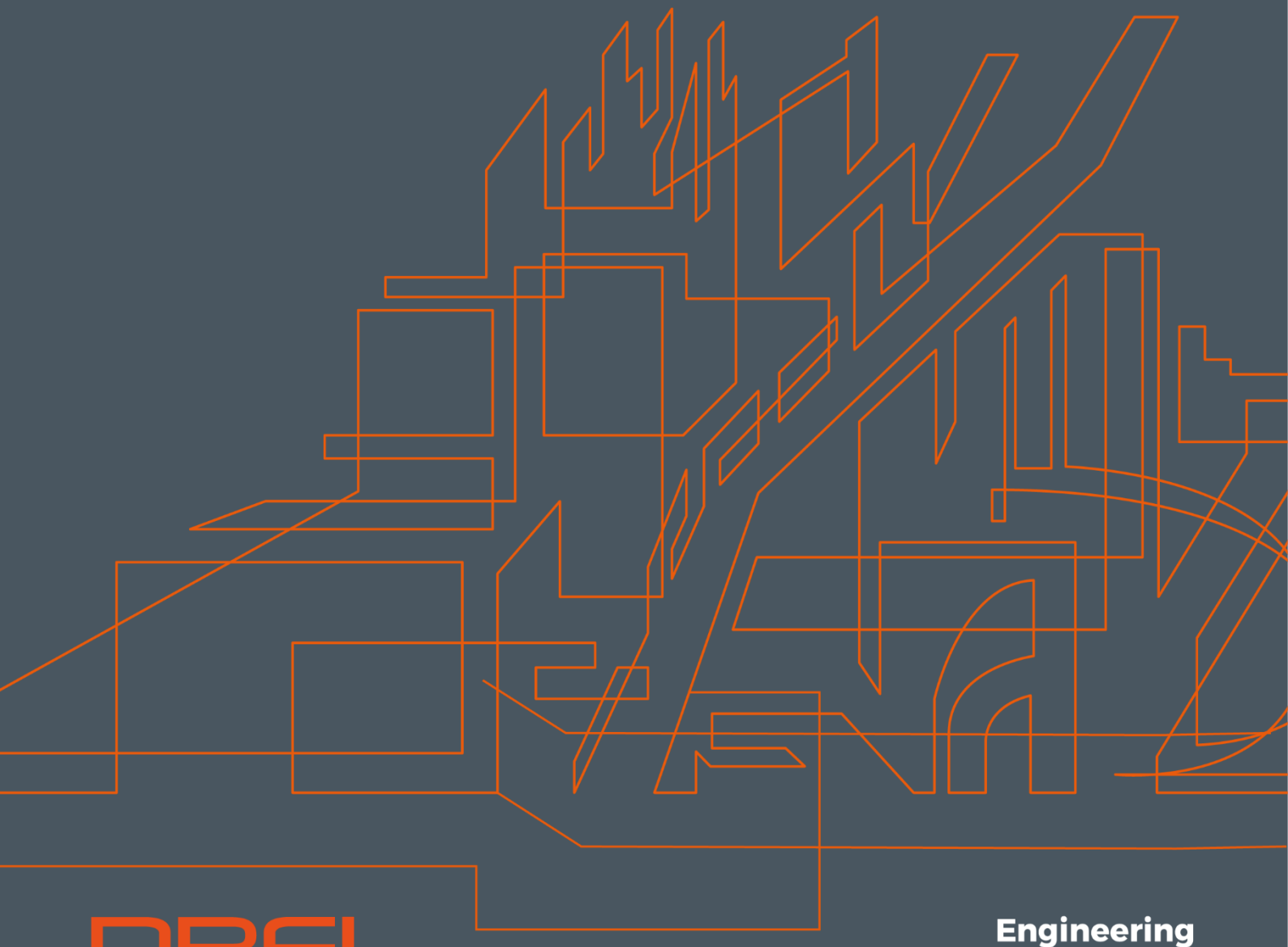
Cabinteely Greenway

Part 8 & Preliminary Design Report

230119-DBFL-TR-XX-RP-C-011

October 2025



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Executive Summary

DBFL Consulting Engineers (DBFL) have been commissioned by Dún Laoghaire-Rathdown County Council (DLRCC) to provide consulting engineering services for the design and development of the Cabinteely Greenway scheme.

The proposed Cabinteely Greenway scheme seeks to provide a safe, high-quality route which improves connectivity for pedestrians and cyclists travelling between local schools, services, amenities and surrounding residential areas.

The proposed scheme extents commence at the Bray Road / Cornelscourt Hill Road junction in Cornelscourt Village, then continues along Glen Lawn Drive, Cabinteely Park, Clonkeen Road, Brennanstown Road and Cherrywood Green Routes. The full scheme is approximately 2.3km in length. The route consists of four distinct sections:

- Section A will run from Cornelscourt Village to Glen Lawn Drive
- Section B will extend along Glen Lawn Drive up to Cabinteely Park
- Section C will pass through Cabinteely Park and also includes a connection north to the N11 via Clonkeen Road
- Finally, Section D will extend from Brennanstown Road to Cherrywood connecting to the Cherrywood Green Routes.

The proposal aligns with Government Policy at both national and local government level in its commitment to ensure that active travel is appropriately provided for as part of an interconnected network of cycle and pedestrian routes. This route forms an important part in the DLR (Dún Laoghaire-Rathdown) Cycle Network and is a strategic north-west / south-east link.

The proposed scheme is currently identified within the 2022 GDA Cycle Network Plan as a Greenway Utility / Leisure route and also within the DLR Cycle Network Plan as a 'pedestrian/cycle route suitable for all users'.

A feasibility and options selection assessment was undertaken for the scheme, whereby several options were considered, accompanied by extensive public consultation and engagement. A Multi-Criteria Analysis (MCA) was conducted based on a range of criteria outlined by the Department of Transport. From this assessment, a preferred option emerged, which has now been advanced to the preliminary design stage as part of this scheme and the Part 8 application.

Along Section A, the preliminary design comprises a 4.0m wide shared path on the eastern side of Cornelscourt Hill Road. At the Cornelscourt Hill Road / Bray Road junction, it is proposed to upgrade the junction as per TL506 Signal-Controlled Junction standards, incorporating Toucan Crossings as outlined in the Cycle Design Manual (CDM). A new Toucan crossing on Cornelscourt Hill Road (north of the Kerrymount Green junction) is also proposed to facilitate safe connections to and from the route. The route continues south-eastwards with a short localised narrowing to 3.0m to avoid impacting an existing mature tree. The path widens back to 4.0m as it continues onto Glen Lawn Drive.

In Section B, the preliminary design comprises a 4.0m wide shared path along the southern side of Glen Lawn Drive. Two-way traffic will be maintained on Glen Lawn Drive. The preliminary design also proposes adjustments to the Glen Drive roundabout geometry to help reduce vehicle speeds and prioritise pedestrians and cyclists with raised crossings over each arm. The proposed new crossing on the southern arm will create a safe and direct connection to the proposed new Cabinteely Park entrance.

In Section C, the existing park entrance on Glen Drive will be closed. A new entrance to Cabinteely Park will be established on the north side of the stream (adjacent the Glen Drive roundabout), along with another new entrance on Glen Drive adjacent the Old Bray Road junction. The preliminary design for this section includes a new path that largely follows the existing path alignment along the northern side of the park and provides a new connection to Brennanstown Road. This will be a 5.0m wide segregated path (2.0m footpath and 3.0m two-way cycle track). This section of the route also includes a connection out to the N11 via the new park entrance and Clonkeen Road.

The preliminary design for Section D includes a new entrance to the park on Brennanstown Road. Where the route crosses Brennanstown Road, a one-lane two-way shuttle system is introduced for vehicular traffic. This facilitates a safe crossing point for pedestrians and cyclists. The route continues as a shared path to the south of the Carraig Glen estate. The shared path will be 3.0m wide at the entrance to this woodland area, widening back to 4.0m once it passes through the ecologically sensitive zone. This proposed path will run along the eastern side of the Cabinteely Stream, with a new combined zebra crossing over Brennanstown Avenue. A new pedestrian / cyclist bridge is proposed to cross over to the western side of the Cabinteely Stream facilitating a direct connection to Cherrywood Green Routes network.

A landscape design proposal has been developed for the scheme. The design prioritises environmental sensitivity, incorporating significant public realm improvements through soft landscaping and sustainable, nature-based drainage systems. The proposal maximises opportunities to incorporate nature-based solutions into the project. Where feasible, stormwater runoff from adjoining roads and cycle tracks will be directed to rain gardens. The rain gardens are shallow, gently sloped depressions in soft landscape verges and pockets of green space. These rain gardens can store the runoff, allowing it to evaporate into the atmosphere and percolate into the soil. Stormwater that percolates through the soil will be filtered of suspended particles and contaminants. These elements not only enhance the aesthetic appeal of the area but also contribute to ecological sustainability, promoting a healthier environment for both the community and local wildlife.

An AA and EIAR Screening assessment has been undertaken as part of this scheme design. In terms of the EIAR screening, the report recommended that an EIAR is not required. In terms of the AA screening, the report concludes that an Appropriate Assessment is not required.

A Site Specific Flood Risk Assessment (SSFRA) has been undertaken for the Cabinteely Greenway scheme. The flood risk identification indicated that the site is susceptible to fluvial flooding, classified as 'Water Compatible.' The initial flood assessment categorized the project in Flood Zone A, with no further justification needed. The detailed flood risk assessment regarding the proposed bridge over Cabinteely Stream stated that as long as the underside of the bridge deck is at least 1m above the top of the water level, it is unlikely to be submerged, even during significant storm events.

An Ecological Impact Assessment (EcIA) has been undertaken as part of this scheme design. The results of this report outline that the proposed development will not cause any significant negative impacts on designated sites, habitats, legally protected species, or any other features of ecological importance. The EcIA outlines a number of mitigation measures to be implemented as part of the scheme to address potential impacts.

A Heritage Appraisal report was undertaken for the scheme. The report concluded that the proposed scheme is not expected to have a significant impact on protected structures in the area, and therefore a full Architectural Heritage Impact Assessment is not necessary.

1 Introduction

1.1 Background

DBFL Consulting Engineers (DBFL) have been commissioned by Dún Laoghaire-Rathdown County Council (DLRCC) to provide consulting engineering services for the design and development of the Cabinteely Greenway Scheme.

The proposed Cabinteely Greenway scheme seeks to provide a safe, high-quality route which improves connectivity for pedestrians and cyclists travelling between local schools, services, amenities and surrounding residential areas.

The purpose of this report is to provide detailed information about the proposed Cabinteely Greenway Scheme. It offers a comprehensive overview of the project, including its aims and objectives, relevant policy context, existing conditions, and the preferred route and preliminary design.

1.2 Overview

The overall purpose of the project is to enhance connectivity between Bray Road, Cornelscourt to the Cherrywood Greenway for people walking, wheeling and cycling by providing approximately 2.3 km of safe, high-quality greenway infrastructure.

The proposal aligns with Government Policy at both national and local government level in its commitment to ensure that active travel is appropriately provided for as part of an interconnected network of cycle and pedestrian routes. This route forms an important part in the DLR (Dún Laoghaire-Rathdown) Cycle Network and is a strategic north-west / south-east link.

1.3 Project Aims & Objectives

The principle aims and objectives of the scheme, in accordance with the overarching purpose and scope, are to:

- Provide enhanced connectivity between Cornelscourt and Cherrywood for pedestrians and cyclists to encourage increased walking and cycling trips.
- Improve safety for pedestrians and cyclists on routes within 1km of the local primary schools by maximising segregation of pedestrians/cyclists from vehicular traffic.

- Upgrade junctions where facilities for pedestrians and cyclists are limited or non-existent.
- Improve safety for pedestrians and cyclists in accordance with the Design Manual for Urban Roads & Streets (DMURS) and the National Transport Authority's (NTA) Cycle Design Manual (CDM).
- Reduce reliance on car trips by providing sustainable alternative for trips within a 5km catchment.
- Contribute to the achievement of climate action targets by catering for increased travel by walking and cycling.
- Improve accessibility to public transport by walking and cycling.
- Deliver a proposal that is holistic in its approach, focusing on Nature Based Solutions and sustainability where possible.
- To produce a design that is sympathetic to all environmental issues.

1.4 Location and Land Use

The proposed scheme area commences at the Bray Road / Cornelscourt Hill Road junction in Cornelscourt Village, then continues along Glen Lawn Drive, Cabinteely Park, Brennanstown Road to Cherrywood Green Routes. The scheme from end to end is approximately 2.3km in length and the route will consist of four distinct sections:

Section A: Cornelscourt Village to Glen Lawn Drive

Section B: Glen Lawn Drive to Cabinteely Park

Section C: Cabinteely Park

Section D: Brennanstown Road to Cherrywood

The overall route, as indicated in the Greater Dublin Area (GDA) Cycle Network Plan (2022) and the DLR Cycle Network Map, and location of key junctions is illustrated in **Figure 1-1** below.

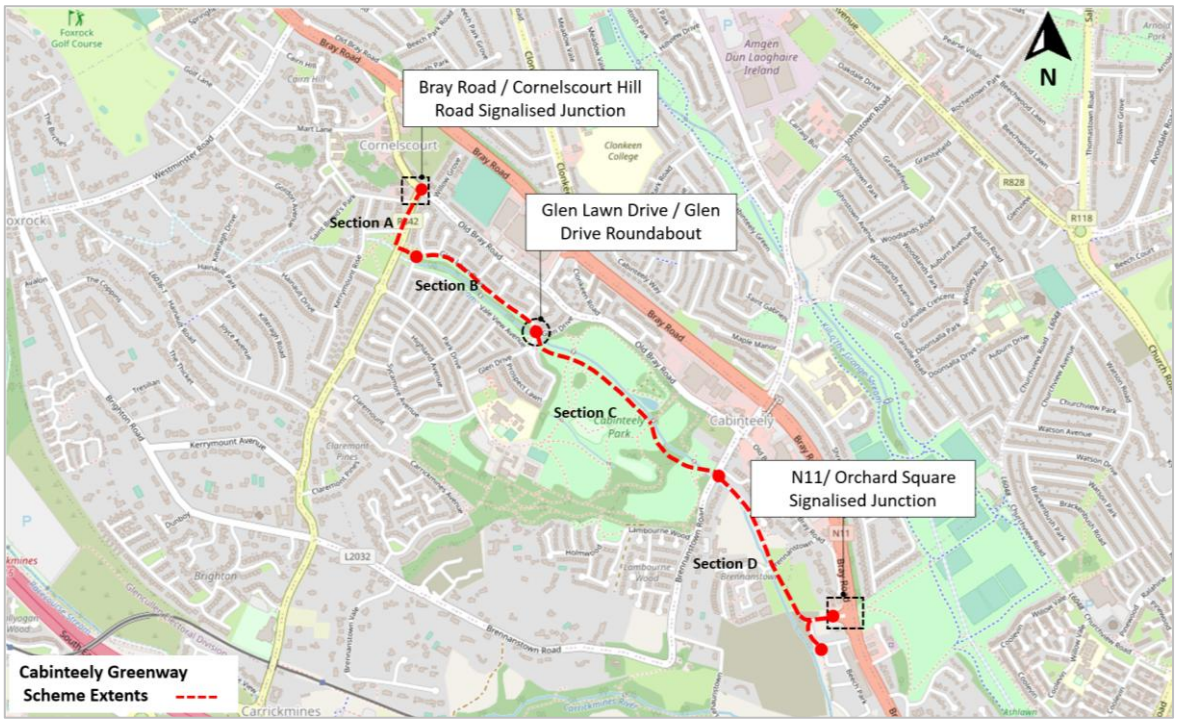


Figure 1-1: Study Area Location and Extents in Wider Context (Source: Open Street Maps)

The scheme is located close to a number of existing residential and commercial developments and under Dún Laoghaire-Rathdown County Development Plan (2022-2028) zoning maps, the scheme passes through or is adjacent a number of land uses which fall within the following zoning objectives;

Objective NC: "*To protect, provide for and-or improve mixed-use neighbourhoods centre facilities".*

Objective A: "*To provide residential development improve residential amenity while protecting the existing residential amenities".*

Objective F: *"To preserve and provide for open space with ancillary active recreational amenities".*

Objective E*:" To provide for economic development and employment".*

Objective DC*: "To protect, provide for and-or improve mixed-use district centre facilities".*

There is also an Objective within the Development Plan "*To protect and preserve Trees and Woodlands*" as denoted on the Land Zoning Map by tree symbols.

Within Cabinteely Park it should also be noted that there are several protected structures (as denoted in orange on the Land Zoning Map). These include Cabinteely House and Stable Complex (RPS No. 1683 and 2062), the Gate Lodge (RPS No. 1980), the Gateway (RPS No. 2101) and the Brennanstown House Gate Lodge (RPS No. 2017).

The alignment of the route (as per the GDA Cycle Network Plan 2022 and DLR Cycle Network Plan) in the context of the DLR County Development Plan 2022-2028 land use zoning objectives is shown in **Figure 1-2** and **Figure 1-3.**

Figure 1-2: Subject Scheme in Context of DLR County Development Plan Land Zoning Objectives (Section A, B and C)

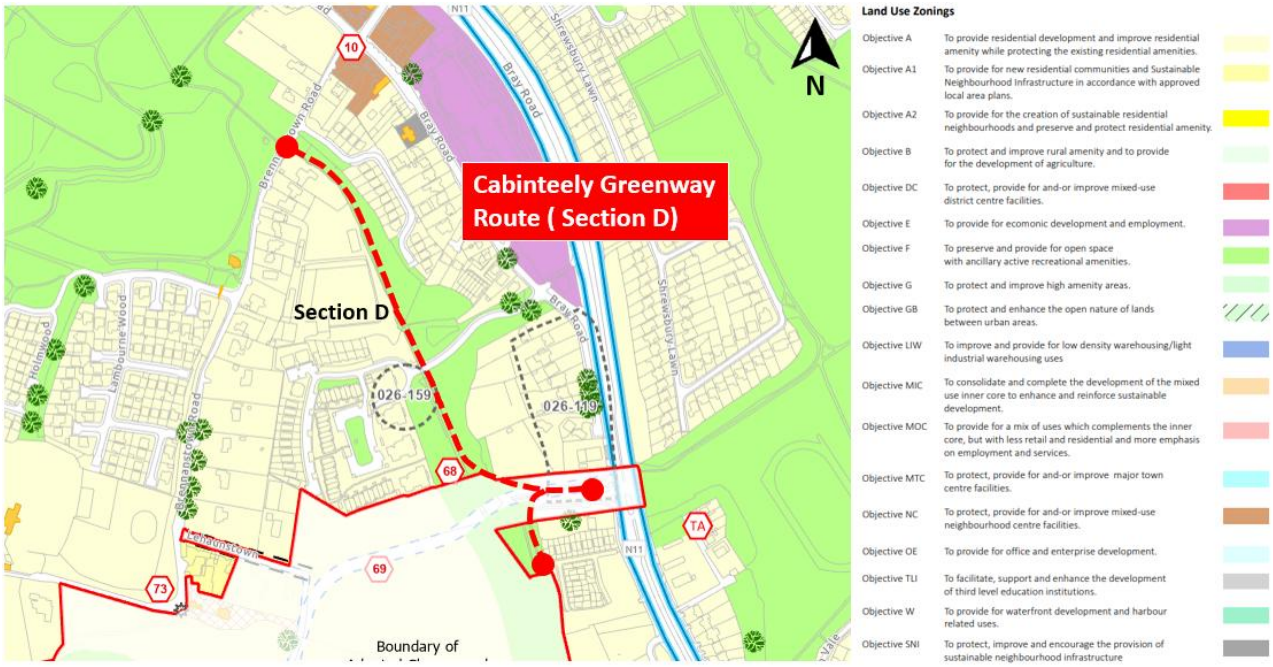


Figure 1-3: Subject Scheme in Context of DLR County Development Plan Land Zoning Objectives (Section D)

The proposed scheme is located within a highly populated urban area. There are several local amenities and services along the route as well as schools and sports facilities. Local amenities either directly on the route or in the vicinity include for example, Cabinteely Park and Cabinteely Library. Primary schools in the immediate vicinity of the route include for example, St. Brigid's Boys' National School and St. Brigid's Girls School. Located on Glen Drive, just south of the proposed route is Park Academy Childcare Cabinteely.

Sports clubs located in close proximity to the proposed route, include Geraldine P. Moran's GAA Club and the Park Celtic pitches. Other amenities and services can be found in Cornelscourt and Cabinteely villages including supermarkets, banks, cafes and restaurants.

The locations of notable local amenities and key attractors are shown in **Figure 1-4.**

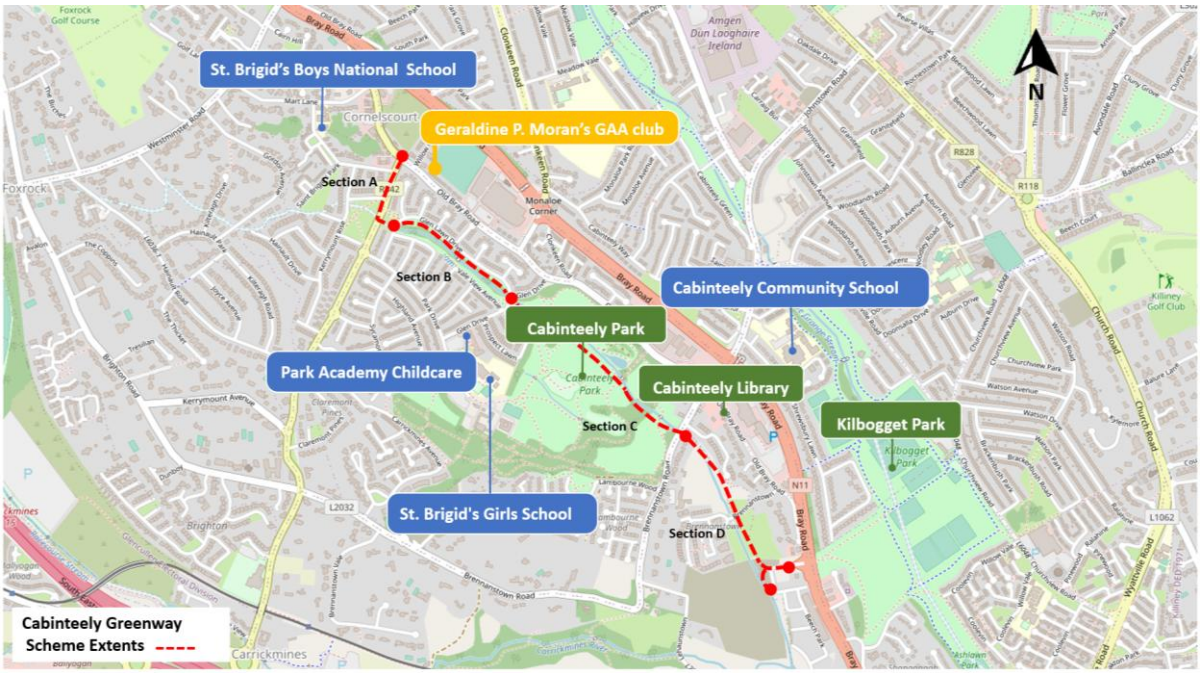


Figure 1-4: Locations of Key Local Amenities and Attractors Along Route

1.5 Pre-Planning Consultation

Pre-planning consultation was undertaken internally within the various relevant sections of Dún Laoghaire-Rathdown County Council (DLRCC) as well as the National Transport Authority (NTA). The proposals were circulated to internal departments, and the comments from the departments are included in this report.

1.6 Report Structure

The following outlines the structure of the remainder of this report:

- **Section 2** of this report provides a review of the relevant local, regional and national transportation policies.
- **Section 3** sets out the design guidance and principles that have influenced the development of options, the design and appraisal of the scheme.
- **Section 4** describes the existing conditions along each of the sections of the route, including junctions and crossing points which have been determined following a series of site visits conducted during 2023 / 2024.
- **Section 5** sets out a brief overview of the considerations of alternatives and options developed for Cabinteely Greenway scheme.
- **Section 6** provides a brief overview of the public consultation and engagement process, which served as a crucial pre-statutory consultation phase.
- **Section 7** provides an overview of the preliminary design for the scheme.
- **Section 8** sets out the surface water drainage strategy
- **Section 9** This section will present comments and feedback from various internal departments of Dún Laoghaire-Rathdown County Council (DLRCC) regarding the proposed preliminary design for the Cabinteely Greenway.
- **Section 10** This section provides a summary of the EIA and AA Screening reports undertaken separately for this scheme. This section also provides a summary of the Ecological Impact Assessment, heritage appraisal report and Crime Prevention Through Environmental Design review undertaken separately as part of this scheme.
- **Section 11** This section provides the report conclusion.

.

2 Policy Context

2.1 Introduction

It is important that a review of current national, regional and local policy is undertaken and used to inform the development of the options considered for the Cabinteely Greenway Scheme. As **Table 1** shows, there is a strong national, and local policy basis for this scheme.

If implemented, the scheme would directly and indirectly achieve a range of policy objectives, including investment in low-carbon and sustainable transport, development of a network of national and local cycle routes, encouraging increased levels of physical activity across the population, attracting tourism and investment, and improving safety for vulnerable road users.

Level	Policy
National Policy	• Project Ireland 2040 – National Planning Framework • National Investment Framework for Transport in Ireland (2040) • Climate Action Plan (2025) • National Sustainable Mobility Policy (2022) • Strategy for the Future Development of National and Regional Greenways (2018) • Road Safety Authority Road Safety Strategy 2021-2030 • Every Move Counts – National Physical Activity and Sedentary Behaviour Guidelines for Ireland (2024) • Building for Everyone: A Universal Design Approach 2012
Regional and Local Policy	• Regional Spatial and Economic Strategy (RSES) 2019-2031 and Metropolitan Area Strategic Plan (MASP) (2019) • Greater Dublin Area Transport Strategy (2022-2042) • BusConnects • Greater Dublin Area Cycle Network Plan (2022) • DLR County Development Plan (2022-2028) • DLRCC Climate Change Action Plan (2024-2029) • Active Travel – Safe Walking and Cycling Routes • Dún Laoghaire-Rathdown Age Friendly Strategy 2022-2026 • Dún Laoghaire-Rathdown Cycle Network Plan (2012) • DLRCC Cycling Policy 2010 • The DLR County Biodiversity Action Plan 2021-2025 • Planning for Watercourses in the Urban Environment • Guidelines on Protection of Fisheries During Construction Works in and Adjacent to Waters 2016

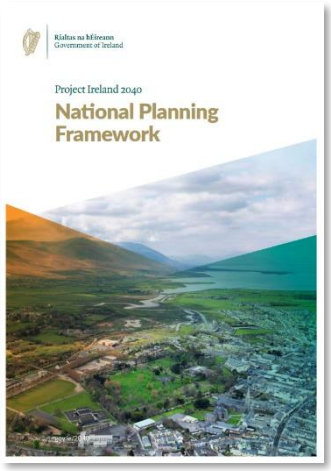
Table 1: Relevant Policy for Cabinteely Greenway Scheme

In addition to the revisions mentioned, international policies have also been reviewed. More details about these policies can be found in the Project Feasibility & Options Selection Report. The following sections outline these key planning strategy and policy documents influencing the study area extents and surrounding area, including the proposals and plans which govern the

development of key infrastructure facilities for all types of traffic including pedestrians and cyclists, public transport and motor vehicles.

National Policy

2.2 'Project Ireland 2040' - National Planning Framework



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

According to the NPF, the National Strategic Outcomes (including Compact Growth and Sustainable Mobility) are supported by Strategic Investment Priorities where Housing and Sustainable Urban Development and National Road Networks are the first and second priorities (see **Figure 2-1** below). These concepts are central to the proposed scheme.

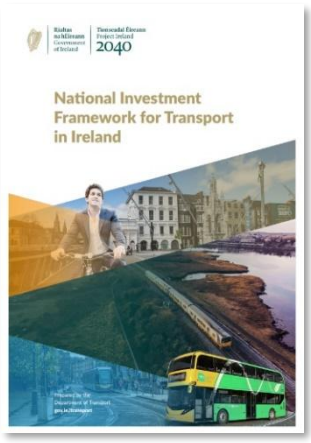
Figure 2-1: NPF Strategic Investment Priorities for Ireland (Source: www.NPF.ie)

Table 2 sets out the National Strategic Outcomes and actions which the Cabinteely Greenway scheme closely aligns with:

NSO	Action
1. Compact Growth	Ensure transition to more sustainable modes of travel (walking, cycling, public transport) and energy consumption (efficiency, renewables) within an urban context
2. Enhanced Regional Accessibility	Enabling more effective traffic management within and around cities and re-allocation of inner city road-space in favour of bus-based public transport services and walking/cycling facilities
4. Sustainable Mobility	Develop a comprehensive network of safe cycling routes in metropolitan areas to address travel needs and to provide similar facilities in towns and villages where appropriate
7. Enhanced Amenities and Heritage	Implementation of planning and transport strategies for the five cities and other urban areas will be progressed with a major focus on improving walking and cycling routes, including continuous greenway networks and targeted measures to enhance permeability and connectivity

Table 2:Cabinteely Greenway Alignment with National Strategic Outcomes (NSOs)

2.3 National Investment Framework for Transport in Ireland (2040)



The National Investment Framework for Transport in Ireland (NIFTI) is the framework created by the Department of Transport for prioritising future investment in the land transport network. This is done to support the delivery of the National Strategic Outcomes. The Framework aims to contribute to Ireland's decarbonisation effort, support vibrant and successful communities, deliver a high performing transport system, and promote a strong and balanced economy.

In an effort to cater for rising travel demand as well as decarbonising the transport sector, there will be a significant investment in sustainable mobility. This includes major public transport schemes, improved access to sustainable mobility in our towns and rural areas, and major investment in cycling and pedestrian infrastructure. There are four Investment Priorities for the NIFTI:

- Decarbonisation
- Protections & Renewal
- Mobility of people and goods in urban areas

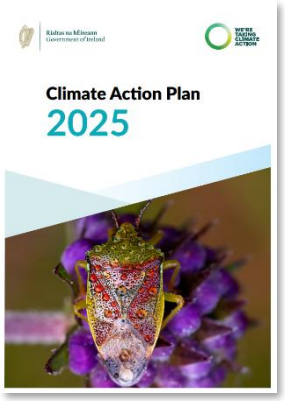
- Enhanced regional and rural connectivity.

The Framework also includes a Modal Hierarchy and Intervention Hierarchy for the maintenance and implementation of physical infrastructure.

Figure 2-2: NIFTI Modal Hierarchy (Source Department of Transport)

Figure 2-3: NIFTI Intervention Hierarchy (Source: Department of Transport)

2.4 Climate Action Plans (2025)



The Climate Action Plan 2025 (CAP25) is the third statutory annual update to Ireland's Climate Action Plan under the Climate Action and Low Carbon Development (Amendment) Act 2021. The Climate Action Plan sets out a major programme for change in response to reducing Ireland's greenhouse gas emissions. The proposals outlined in the Plan are aimed at achieving a net zero carbon energy system within Ireland and it is envisaged that these proposals will also have associated positive economic and societal benefits, including cleaner air, warmer homes, and a more sustainable economy in the longer term.

Ireland's transport system plays a critical role in realising the ambitious targets of the Climate Action Plan. Consequently, to make growth less transport intensive a number of key policies are identified, including the expansion of walking, cycling and public transport to promote a mode shift. The measures to deliver on the transport related targets set out in the Climate Action Plan cover the following:

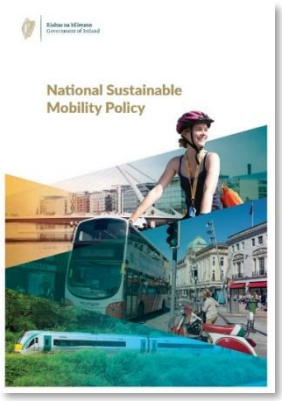
- Mode Shift;
- Conversion of Public Fleets;
- Incentives and Regulation;
- EV Charging Network;
- Use of Biofuels;
- CNG Network; and
- Emerging Technologies. The Climate Action Plan makes a commitment to delivering a modal shift, encompassing a range of behavioural change and sustainable transport measures; the following targets are set out within the plan to be achieved by 2030:
- An additional 125,000 sustainable journeys;
- 50% increase in daily active travel journeys;
- 130% increase in daily public transport journeys; and
- 25% reduction in daily car journeys.

Key actions arising from the Climate Action Plan 2025 include the following:

- **TR/25/7:** Advance roll-out of walking/cycling infrastructure in line with National Cycle Network and CycleConnects plans

The delivery of the proposed Cabinteely Greenway Scheme will help to fulfil the transport targets outlined above by enhancing connectivity to local schools, services and amenities, and surrounding residential estates by sustainable modes. The scheme will also complement and integrate with several other ongoing/planned projects in the wider locality including the Cherrywood Greenway network.

2.5 National Sustainable Mobility Policy (2022)



The National Sustainable Mobility Policy sets out a strategic framework to 2030 for active travel (walking and cycling) and public transport journeys to help Ireland meet its climate obligations. It is accompanied by an action plan to 2025 which contains actions to improve and expand sustainable mobility options across the country by providing safe, green, accessible, and efficient alternatives to car journeys.

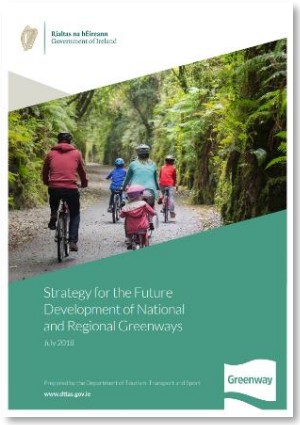
It also includes demand management and behavioural change measures to manage daily travel demand more efficiently and to reduce the journeys taken by private car.

The policy aligns with the targets of the Climate Action Plan 2021 by aiming to deliver at least 500,000 additional daily active travel and public transport journeys by 2030 and a 10% reduction in the number of kilometres driven by fossil fuelled cars. **Table 3** sets out the National Strategic Outcomes which the Cabinteely Greenway Scheme closely aligns:

Core Actions
Goal 1: Improve mobility safety
4. Continue to protect and renew road infrastructure for all road users including sustainable mobility users
Goal 3: Expand availability of sustainable mobility in metropolitan areas
19. Deliver additional cycling infrastructure projects in the five cities
Goal 6: Take whole of journey approach to mobility, promoting inclusive access for all
48. Promote the principle of 'Access for All' across sustainable mobility services through; - Expansion of wheelchair accessible bus stops suitable for coach lifts
Goal 7: Design Infrastructure according to Universal Design Principles and Hierarchy of Road Users Model
56. Fund local authorities to upgrade existing active travel infrastructure to meet safety, permeability and design standards

Table 3: Relevant Actions from the National Sustainable Mobility Policy Action Plan 2022-2025

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



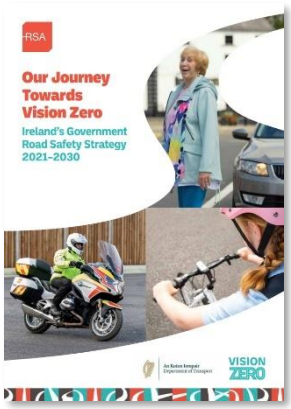
The objective of this document is to assist in the strategic development of nationally and regionally significant Greenways in appropriate locations and constructed to appropriate standards. It also aims to increase the number and geographical spread of Greenways of scale and quality around the country 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.

The purpose of the strategy is to develop Greenways that relate to the development of Greenways of scale i.e., for new developments or extension of existing Greenways that are more than 20k or shorter distances where it is proposed to join a number of existing Greenways to form longer, more strategic routes. The Strategy objectives comprise:

- A Strategic Greenway network of national and regional routes, with a number of high-capacity flagship routes that can be extended and/or link with local Greenways and other cycling and walking infrastructure;
- Greenways of scale and appropriate standard that have significant potential to deliver an increase in activity tourism to Ireland and are regularly used by overseas visitors, domestic visitors and locals thereby contributing to a healthier society through increased physical activity;
- Greenways that provide a substantially segregated off road experience linking places of interest, recreation and leisure in areas with beautiful scenery of different types with plenty to see and do; and
- Greenways that provide opportunities for the development of local businesses and economies; and
- Greenways that are developed with all relevant stakeholders in line with an agreed code of practice.

The Strategy for the Future Development of National and Regional Greenways document outlines the '*Five S Criteria*' that the designers shall take cognisance of whilst undertaking project appraisal in line with TII Publications (Standards and Technical). However, these are not headline project appraisal criteria. The '*Five S criteria*' are: "*Scenic, Sustainable, Substantially Segregated & Shared Use, Strategic and Offer Lots to See and Do*".

2.7 Ireland's Government Road Safety Strategy 2021-2030



The Road Safety Authority (RSA) published their Road Safety Strategy in 2021. The Strategy adopts the Safe Systems approach to road safety and underpins Ireland's long-term goal of achieving Vision Zero by 2050.

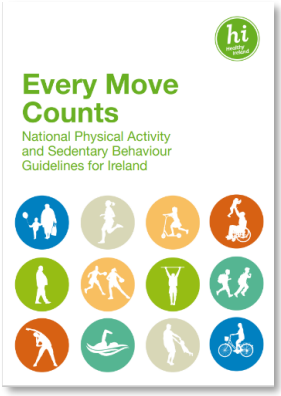
To ensure the long-term goal is achieved, a target has been set to reduce road deaths and serious injuries by 50% by 2030. The actions within the Strategy include several relating to safe and healthy modes of travel, including:

- Develop a National Cycle Network plan for interurban rural cycling and walking, providing connections to active travel networks and Greenways. Develop an implementation plan for delivery in Phases 2 & 3 of the Road Safety Strategy.
- Continue to implement an active travel infrastructure scheme where Local Authorities can apply for funding to develop improved active travel infrastructure.
- Encourage modal shift to support environmental, safety and health objectives by promoting the use of sustainable and active modes of travel.
- Promote and support an expanded Cycle Right training programme which includes online theory and practical skills for children and adults.
- Conduct a review of road traffic policy and legislation to prioritise the safety of walking and cycling.
- Conduct a case study of countries that have adopted mechanisms to reduce traffic (for example car free streets in urban areas) to enhance the safety of other road users and make recommendations for Ireland.

The key safety performance indicators cover several active travel related measures including the following:

- **KSPI 3:** % of high-risk KSI rural and urban junctions treated to operate within Safe System limits.
- **KSPI 7:** Proportion of extra cycle and pedestrian infrastructure developed to make urban and interurban mobility healthy and sustainable.

2.8 Every Move Counts – National Physical Activity and Sedentary Behaviour Guidelines for Ireland (2024)



This document produced by the Department for Health, draws upon guidance from the World Health Organisation. It provides the guidelines for physical activity and sedentary behaviour for all ages groups and abilities. Inadequate infrastructure for physical activity is highlighted as a factor which may inhibit people's ability and capacity to be physically active. Redistributing space allocated for motorised transport to active travel was designated as a key message.

Safe routes for walking and cycling were specifically mentioned as provisions which may encourage people to reach the target level of physical activity each day/week. Accessible and universally designed spaces give further opportunity to participating in activity outdoors.

Regular physical activity provides significant assistance in increasing people's mental and physical health. This activity can take the form of "*walking, wheeling or cycling, dancing, doing sport or playing with your kids*". The recommended activity guidelines are outlined in **Figure 2-4** below.

Figure 2-4: Recommended Physical Activity Guidelines
(Source: Every Move Counts National Physical Activity and Sedentary Behaviour Guidelines for Ireland)

2.9 Building for Everyone: A Universal Design Approach (2012)

The "Building for Everyone: A Universal Design Approach" provides comprehensive best practice guidance on how to design, build and manage buildings and spaces so that they can be readily accessed and used by everyone, regardless of age, size ability or disability. It aims to:

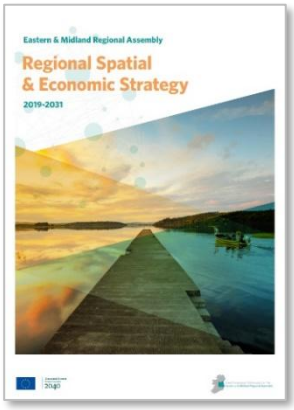
- Identify and promote best practice with regard to universal design of the built and external environment
- Provide best practice guidelines while recognising existing regulations in Ireland
- Provide guidelines that are usable by and accessible to the target audience and
- Promote the achievement of universal design in Ireland

The guidance comprises 10 booklets, the most relevant to this project being Booklet 1 – External environment and approach and Booklet 10 – Planning and Policy.

Regional and Local Policy

2.10 Regional Spatial and Economic Strategy (RSES) 2019-2031 and Metropolitan Area Strategic Plan (MASP) (2019)

The regional strategy sets out a long-term strategic planning and investment strategy for the Dublin area, surrounding counties and Midlands area to 2031. The strategy is authored by the Eastern and Midland Regional Assembly and co-funded by the Irish Government and European Union. Chapter 6 'Economy and Employment' and specifically sub-section 'Retail' recognises Cornelscourt as a Level 3 District Centre. As such the proposed scheme provides a key route for a number of neighbourhoods to reach these retail centres via active travel.



Chapter 8 'Connectivity' of the strategy promotes the importance of the integration of land use and transport, prioritising 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) to reduce car dependency. A number of guiding principles on the Integration of Land Use and Transport are outlined to inform future projects in the region at all levels, including:

- *"The management of space in town and village centres should deliver a high level of priority and permeability for walking, cycling and public transport modes to create accessible, attractive,*

vibrant, and safe, places to work, live, shop, and engage in community life. Accessibility by car does need to be provided for."

- *"Planning at the local level should prioritise walking, cycling and public transport by maximising the number of people living within walking and cycling distance of their neighbourhood or district centres, public transport services, and other services at the local level such as schools."*
- *"Support the '10 minute' settlement concept, whereby a range of community facilities and services are accessible in short walking and cycling timeframes from homes or accessible by high quality public transport to these services in larger settlements. "*
- *"The retrospective implementation of walking and cycling facilities should be undertaken in existing neighbourhoods, in order to a give competitive advantage to these modes. Where possible, developments shall provide for filtered permeability."*
- *"Support investment in infrastructure and behavioural change interventions to encourage and support a shift to sustainable modes of transport and support the use of design solutions and innovative approaches to reduce car dependency."*
- *"Where additional road capacity is provided within or around any town which has an objective to cater for traffic that currently uses the road network in central areas and their immediate environs, that this additional capacity would be used for the improvement of public transport, walking and cycling networks through the reallocation of road space to these modes."*

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:

- **RPO 5.3** seeks that 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.

2.11 Greater Dublin Area Transport Strategy (2022 - 2042)

The GDA Transport Strategy sets out the framework for transport across the Greater Dublin Area up to 2042 and has been updated to ensure consistency with current spatial planning policies and objectives, including national policies based on sustainability as set out in climate action plans.

The overall aim of the Transport Strategy *is "To provide a sustainable, accessible and effective transport system for the Greater Dublin Area which meets the regions climate change requirements, serves the needs of urban and rural communities and supports economic growth".*

The Transport Strategy also recognises the challenge presented by poor urban environments in the Metropolitan towns which are dominated by vehicles and the disproportionate adverse impacts this can have, particularly on persons with disabilities, the elderly and the socially. One of new aspects of the Transport Strategy is the emphasis placed on the urban design and placemaking as part of better street design in urban areas. As part of the implementation of the Transport Strategy, the following key relevant measures are set out:

Measure PLAN15 – Urban Design in Walking and Cycling Projects

In the design, planning and prioritisation of walking and cycling schemes, the NTA and the local authorities will ensure the incorporation of urban design and placemaking considerations, taking into account architectural heritage, and will consider how greater biodiversity could be fostered.

Measure PLAN16 – Reallocation of Road Space

The NTA, in conjunction with the local authorities, will seek the reallocation of road space in Dublin City Centre, Metropolitan towns and villages, and towns and villages across the GDA to prioritise walking, cycling and public transport use and prioritise the placemaking functions of the urban street network.

Furthermore, the Transport Strategy refers to the importance of access to local services and the concept of the '15 – Minute City' and a 'Town Centres First' approach whereby people should be able to meet most of their needs within a short walking or cycling distance of their home.

2.12 BusConnects

BusConnects is a strategic transport plan transforming and revamping the current bus system by building the "next generation" of bus corridors on the busiest routes and redesigning routes with the aim to offer, fast predictable and reliable bus journeys.

The revised bus network proposals, shown in **Figure 2-5**, indicate that the proposed scheme will be well served by a number of interconnecting city bound and local routes further supplemented by a Core Bus Corridor (CBC) route enabling a high frequency service to the City Centre. With regards to the subject scheme, the following key points are noted (frequency below is shown for weekdays):

- Local Route **L26**: Kilternan – Cabinteely - Deansgrange – Blackrock (30 mins)
- Local Route **L27**: Ballyyogan – Cabinteely – NRH – Dún Laoghaire (30 mins)
- Peak- Only Route **X1**: Kilcoole – Southern Cross – City Centre (12 services / day)
- Peak- Only Route **X2**: Newcastle – kilcoole – Southern Cross – City Centre (6 services/day)
- Spine Route **E1**: Northwood – City Centre – Kimmage (8-10 mins)

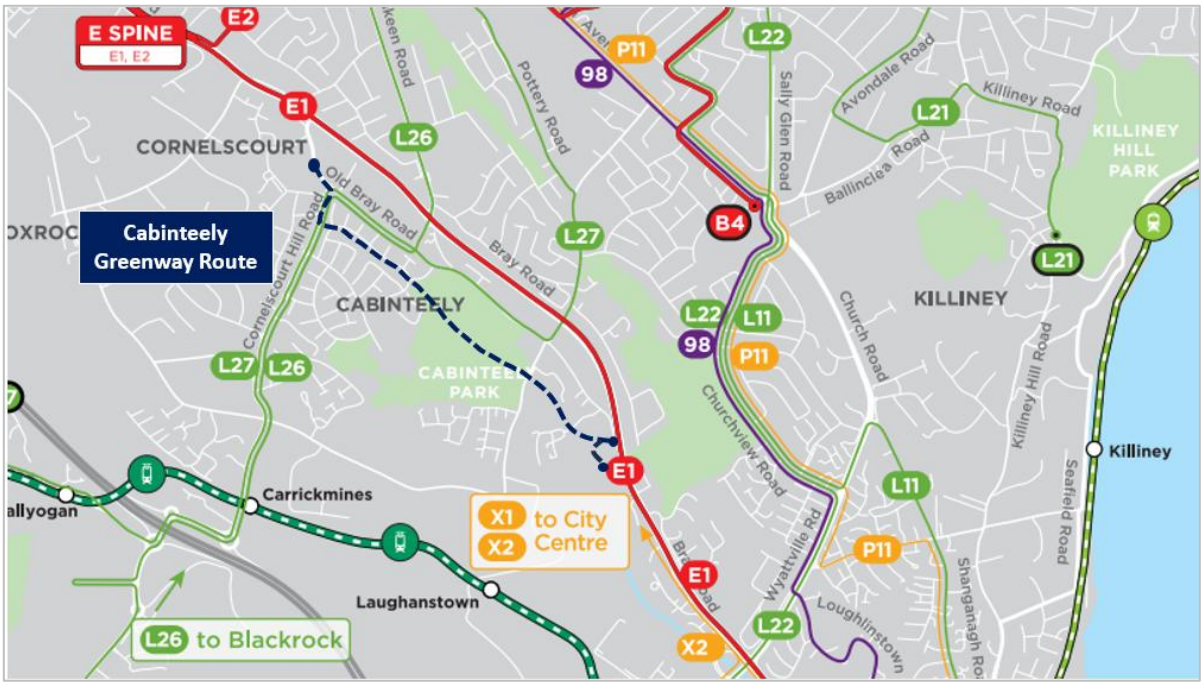
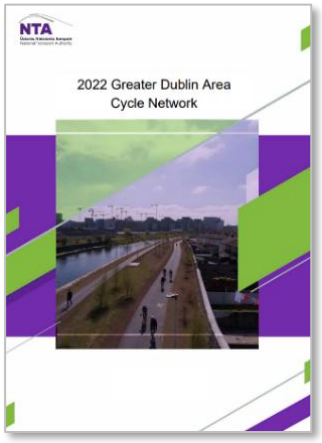


Figure 2-5: Proposed BusConnects Network in the vicinity of the Cabinteely Greenway Scheme

The focus of the BusConnects Dublin Core Bus Corridor aspect is the delivery of the core bus network and associated bus infrastructure that is needed to make the bus system operate efficiently and reliably. The intention of the proposals is to develop the bus corridors so that each will have a continuous bus priority, in other words, a continuous bus lane in each direction, along with segregated cycle lanes where practicable.

2.13 Greater Dublin Area Cycle Network Plan (2022)



This updated plan provides a substantial update and expanse of the previous 2013 GDA Cycle Network Plan. Whereas the 2013 GDA Cycle Network Plan focused on identifying the links necessary for providing an adequate network for the cyclists, the 2022 GDA Cycle Network Plan aims to strengthen access and local permeability within Dublin and the GDA towns and cycling connectivity between them.

The updated Cycle Network Plan map is shown in **Figure 2-6**Figure 2-6 below. The subject scheme section A is classified as a 'Secondary' route across its full length. The subject scheme section B and C is classified as a "Greenway – Leisure" route. Section D of the subject scheme is classified as a "Greenway – Utility".

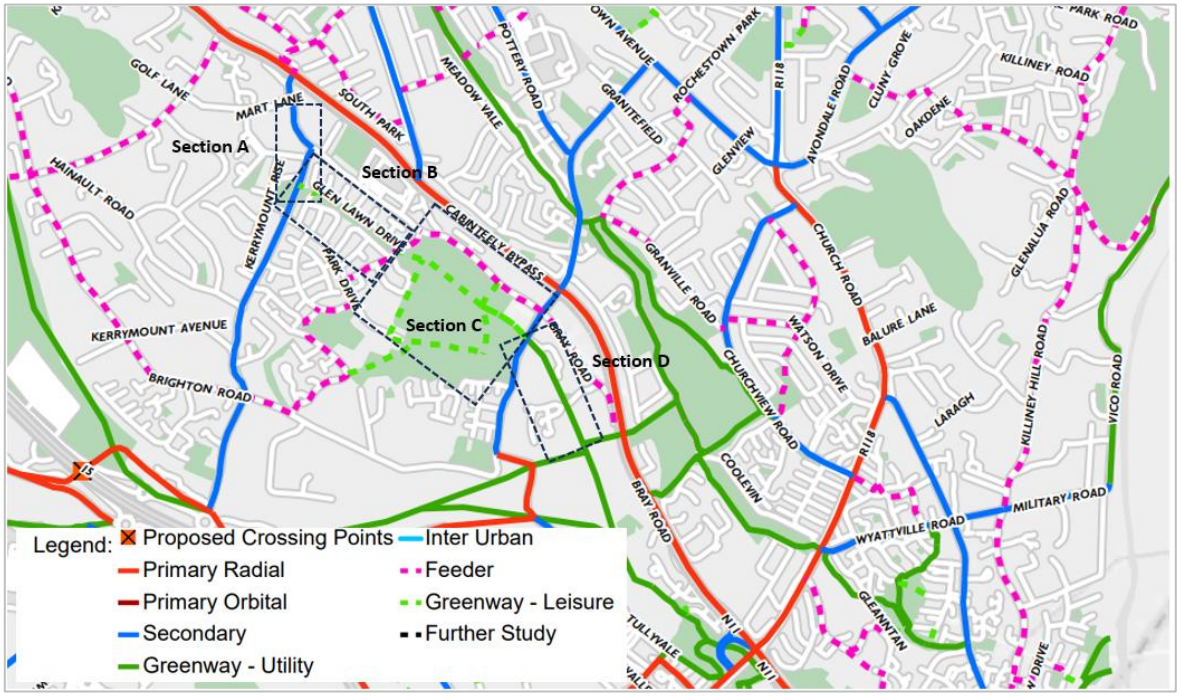
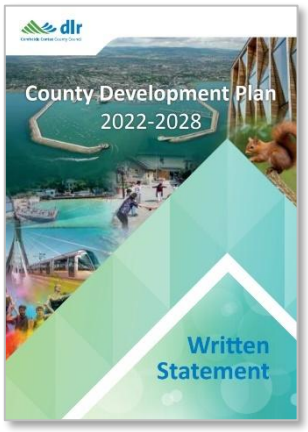


Figure 2-6: 2021 GDA Cycle Network Plan
(Source: 2022 GDA Cycle Network Plan – Dublin Southeast)

2.14 DLR County Development Plan (2022 - 2028)



The DLR County Development Plan (2022 – 2028) sets out the vision for Dún Laoghaire-Rathdown and policy objectives and overall strategy for proper planning and sustainable development within the County over the lifespan of the Development Plan.

The development plan's Core Strategy outlines the county's population projections in line with the RSES and the NPF. **Table 4** within the development plan projects an average annual population growth between 2016 – 2028 in the region of 2,594 – 3,177.

Dún Laoghaire-Rathdown	2016	2026 (Low to High)	Q1 2028 (Low to High)	Total Pop Growth 2016 – Q1 2028	Average Annual Pop Growth 2016 - 2028
	218,000	246,750 – 252,375	249,125 – 256,125	31,125 – 38,125	2,594 – 3,177

Table 4: DLR Core Strategy – Population Projections
(Source: DLR County Development Plan)

The plan's Development Management chapter states that the standards "*take into account the increasing availability of options for travel other than by car and the need to encourage non car modes by limiting car parking supply.*" As such, a growing DLRCC population with no proportional increase in car parking supply will be result in a shift to active travel modes. With respect to the subject scheme there is a **Specific Local Objective (SLO 68)** within the County Development Plan 2022-2028 "*To create a linear park along the Loughlinstown river incorporating a pedestrian route and cycleway (greenway), which will link Cabinteely Park to the sea at Rathsallagh*".

In the context of the subject scheme, the following other relevant transport and development objectives are set out within Plan:

Policy Objective T4: Development of Sustainable Travel and Transport - *It is a Policy Objective to promote, facilitate and cooperate with other transport agencies in securing the implementation of the transport strategy for the County and the wider Metropolitan Area as set out in Department of Transport's 'Smarter Travel, A Sustainable Transport Future 2009 –2020' and subsequent updates and the NTA's 'Transport Strategy for the Greater Dublin Area 2016-2035.*

Policy Objective T11: Walking and Cycling - *It is a Policy Objective to secure the development of a high quality, fully connected and inclusive walking and cycling network across the County and integration of walking, cycling and physical activity with placemaking including public realm improvements.*

Policy Objective T12: Footways and Pedestrian Routes - *It is a Policy Objective to maintain and expand the footway and pedestrian route network to provide for accessible, safe pedestrian routes within the County in accordance with best accessibility practice.*

Policy Objective T13: County Cycle Network - *It is a Policy Objective to secure improvements to the County Cycle Network in accordance with the Dún Laoghaire-Rathdown Cycle Network Review whilst supporting the NTA on the development and implementation of the Greater Dublin Area Cycle Network Plan 2013 and subsequent revisions, subject to environmental assessment and route feasibility.*

Policy Objective T23: Roads and Streets - *It is a Policy Objective, in conjunction and co-operation with other transport bodies and authorities such as the TII and the NTA, to secure improvements to the County road network – including improved pedestrian and cycle facilities, subject to the outcome of environmental assessment (SEA, EIA and AA), flood risk assessment and the planning process.*

Policy Objective T31: Accessibility - *It is a Policy Objective to support suitable access for people with disabilities, including improvements to transport, streets and public spaces. Accessibility primarily concerns people with reduced mobility, persons with disabilities, older persons and children.*

Policy Objective T32: Personal Safety - *It is a Policy Objective to provide and support initiatives that will promote the personal safety of women and vulnerable users who are using all forms of public transport as well as motorists, cyclists and pedestrians. This would include all Luas, DART and bus stops, carparks, cycle parking facilities, laneways and other areas of common use. Initiatives could include well lit surroundings, use of CCTV. There would also be an emphasis on placing entrances/exits to public transport and cycle facilities close to busy built up areas.*

Policy Objective PHP40: Shared Space Layouts - *It is a Policy Objective to promote safer and more attractive streets and public realm for all road users throughout the County by proactively engaging with, and adhering to, the 'shared space' concept and guidance set out in the 'Design Manual for Urban Roads and Streets' (2013).*

Policy Objective OSR5: Public Health, Open Space and Healthy Placemaking - *It is a Policy Objective to support the objectives of public health policy including Healthy Ireland and the National Physical Activity Plan (NPAP) 2016, to increase physical activity levels across the whole population thus creating a society, which facilities people whether at home, at work or at play to lead a more active way of life.*

Policy Objective OSR8: Greenways and Blueways Network - *It is a Policy Objective to develop a comprehensive network of County Greenways linking parks and public open spaces and to liaise with*

adjoining local authorities and other stakeholders to achieve and improve wider external linkages and corridors, to enable enhanced connectivity to wider strategic networks, and to allow for the long-term strategic expansion of urban areas (consistent with NPO 62 of the NPF).

Furthermore, the County Development Plan in Section 9.3.1.4 states that *"in order to ensure careful planning, design and management of greenways at a County level, the Council will:*

- *Avoid impacts on the integrity of European Conservation Sites (SACs and SPAs), and nationally designated sites (NHAs), which includes taking account of protected species or qualifying interests that may occur/use areas outside designated sites.*
- *Support the objectives of the National Biodiversity Action Plan, 2017 – 2023 and the forthcoming DLR County Biodiversity Action Plan, 2020- 2025.*
- *Avoid and/or minimise impacts on locally important biodiversity in DLR.*
- *Ensure suitable buffer zones of at least 5m are in place on any proposed routes (including associated infrastructure) that may be likely to have a potential impact on habitats or species along rivers, riparian areas, coastal areas, or mountain paths.*
- *Protect existing hedgerows, important treelines, and individual trees against unnecessary damage during planning, design, and the development of each greenway route.*
- *Avoid the accidental introduction and the spread of Invasive Alien Species (IAS) such as Japanese Knotweed and Giant Hogweed during the development and maintenance of the greenway route.*
- *Carry out IAS surveys, and where necessary, develop an IAS Management Plan for proposed greenway routes. The Greenway projects will comply with the requirements and objectives of the Habitats Directive and are in line with the Strategic Environment Assessment (SEA) Objectives of the Greater Dublin Area Cycle Network Plan (and subsequent revisions)."*

Policy Objective PHP14: Age Friendly Strategy - *It is a Policy Objective to support and facilitate the implementation of the Dún Laoghaire Rathdown Age Friendly Strategy 2016-2020.*

PHP35: Healthy Placemaking *- It is a Policy Objective to:*

- *Ensure that all development is of high quality design with a focus on healthy placemaking consistent with NPO 4, 26 and 27 of the NPF, and RPO 6.1, 6.12, 9.10 and 9.11 of the RSES.*
- *Promote the guidance principles set out in the 'Urban Design Manual – A Best Practice Guide' (2009), and in the 'Design Manual for Urban Roads and Streets' (2013).*
- *Ensure that development proposals are cognisant of the need for proper consideration of context, connectivity, inclusivity, variety, efficiency, distinctiveness, layout, public realm, adaptability, privacy and amenity, parking, wayfinding and detailed design.*

PHP36: Inclusive Design & Universal Access *- It is a Policy Objective to promote and support the principles of universal design ensuring that all environments are inclusive and can be used to the fullest extent possible by all users regardless of age, ability or disability consistent with RPO 9.12 and 9.13 of the RSES.*

Policy Objective GIB24: Rivers and Waterways *- It is a Policy Objective to maintain and protect the natural character and ecological value of the river and stream corridors in the County and where possible to enhance existing channels and to encourage diversity of habitat and nature-based solutions that incorporate biodiversity features. It is also policy (subject to the sensitivity of the riverside habitat), to provide public access to riparian corridors, to promote improved passive recreational activities.*

Policy Objective HER26: Historic Demesnes and Gardens - *It is a Policy Objective that historic demesnes and gardens should be identified and protected to reflect and acknowledge their significance as part of our National Heritage. The following houses and gardens are listed: Cabinteely House, Marlay House, Fernhill and Old Conna.*

Policy Objective PO GIB1: Green Infrastructure Strategy - *it is a Policy Objective to continue to implement, and update, the DLR Green Infrastructure (GI) Strategy, to protect existing green infrastructure and encourage and facilitate, in consultation with relevant stakeholders, the development, design and management of high quality natural and semi-natural areas. This recognises the ecosystems approach and the synergies that can be achieved with regard to sustainable transport, provision of open space, sustainable management of water, protection and enhancement of biodiversity.*

The Cabinteely Greenway will strengthen Corridor 4 Dún Laoghaire to the Mountains (**Figure 2-7**) and also Corridor 5 Intra Urban of the Green Infrastructure Strategy (**Figure 2-8**) as set out in Appendix 14 of the of the Dún Laoghaire-Rathdown County Development Plan 2022-2028.

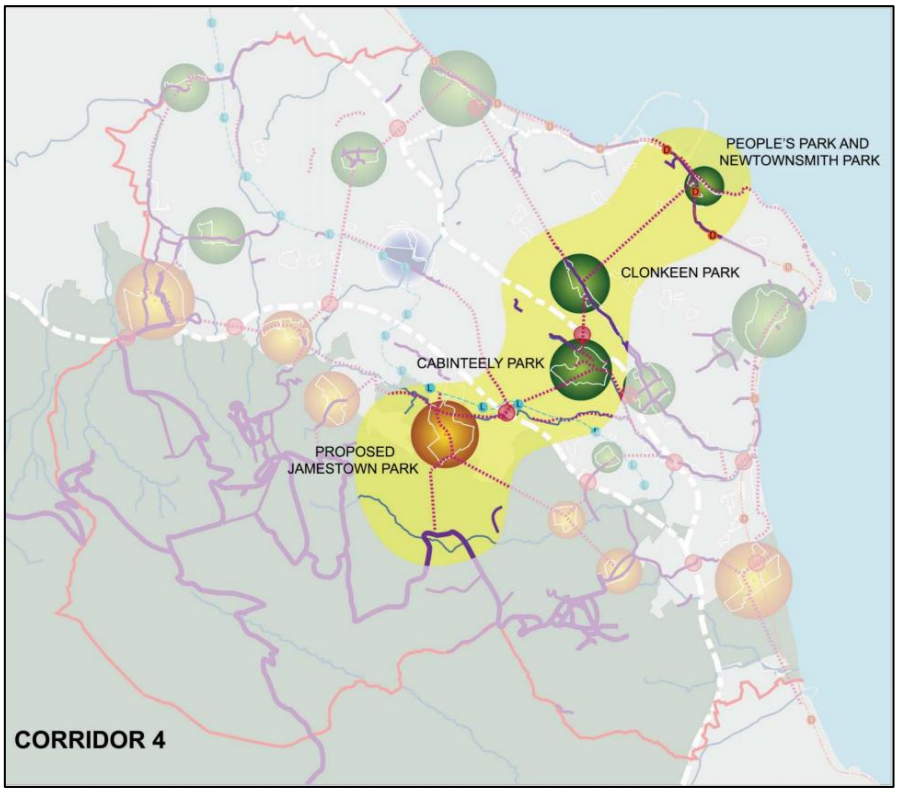


Figure 2-7: Corridor 4 - Dún Laoghaire to the Mountains
(Source: DLR County Development Plan 2022 – 2028)

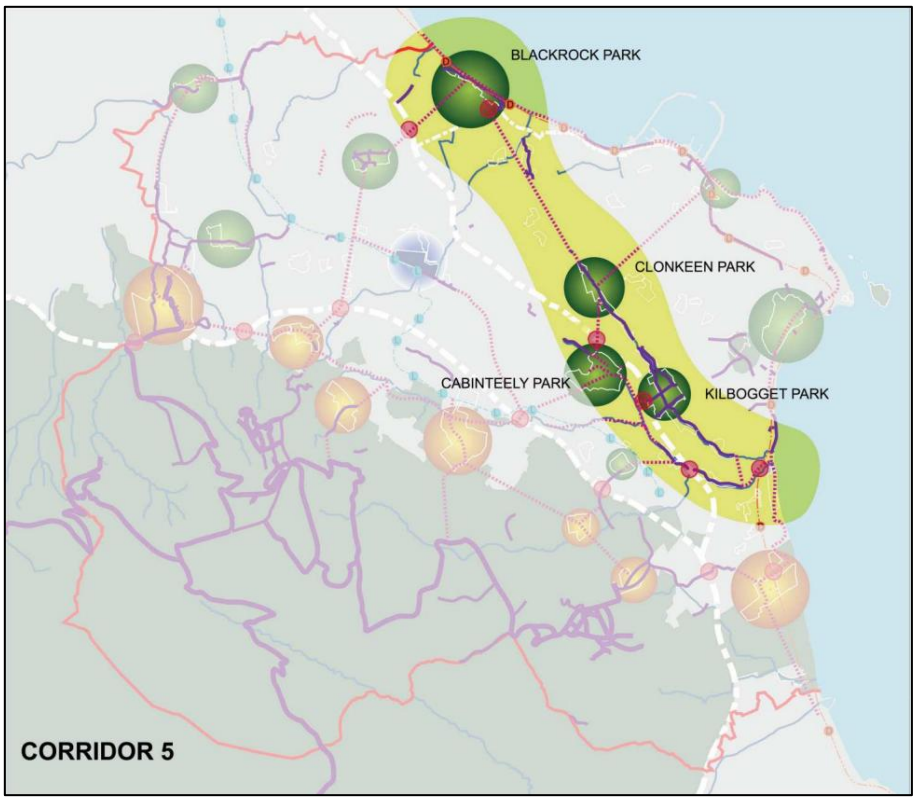
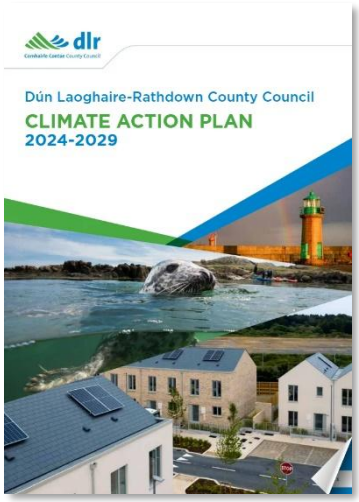


Figure 2-8: Corridor 5 – Intra Urban
(Source: DLR County Development Plan 2022 – 2028)

2.15 DLRCC Climate Change Action Plan (2024 - 2029)



The Climate Change Action Plan (2024 – 2029) sets out DLRCC's process to improve energy efficiency and reduce greenhouse gas emissions, while making the County a more climate-resilient region. This will be achieved by a range of ongoing and planned actions in six thematic areas: Energy and Buildings, Transport, Flood Resilience, Nature-Based Solutions, Circular Economy and Resource Management and Community Engagement. The actions set out address the four targets of the plan which are as follows;

- 50% improvement in dlr's energy efficiency by 2030
- 51% reduction in dlr's greenhouse gas emissions by 2030
- To make Dublin a climate resilient region, by reducing the impacts of future climate change-related events, and
- To actively engage and inform our communities on climate action.

The plan acknowledges that by improving public transport and cycling networks, congestion and pollution is reduced, air quality is improved and noise impacts are reduced. Also by encouraging cycling and walking, the health of local communities can be improved. As part of the Strategic Priorities set out in the plan, active travel (walking and cycling) and public transport solutions will be prioritised, including consideration of reallocation of road space to these modes of travel, and accessibility. Supporting this, the '10 Minute Neighbourhoods' concept is a key priority to address carbon emissions, congestion and air quality issues in the Dún Laoghaire-Rathdown area.

Key transport actions identified in the Climate Action Plan relevant to the subject scheme include:

- **T1** – Deliver a safe and active travel network for people of all ages and abilities by implementing the County and Greater Dublin Area Cycle Network
- **T8** – Reallocate road space to provide for sustainable travel alternatives
- **T9** – Identify opportunities to implement permeability and connectivity in the planning process
- **T17** – Expand the number of controlled crossings and zebra crossings
- **T23** – Explore the use of sustainable methods of road surfacing that minimises the use of raw materials

2.16 Active School Travel – Safe Walking and Cycling Routes

DLRCC's main aims of the active school travel scheme is to provide students and parents with safe, direct and comfortable walking and cycling routes to schools. The project aims to also to provide an alternative for families who do not or cannot drive, may not be able to avail of public transport or who wish to travel to school on foot or by bike. The COVID-19 pandemic, in part, initiated this project which was first proposed in August 2020.

The plan seeks to help avoid traffic congestion at school entrances, as well as encouraging a shift away from the use of the private car, particularly for short journeys. This initiative is also aligned with the Council's wider climate action agenda, including objectives of the County Development Plan and the Council's Climate Change Action Plan, and is in line with national policy on enabling and promoting sustainable transport. Three routes proposed as par to the plan include:

- **Sea to Mountains**: *will link east to west across the County. Starting at Blackrock Dart Station, crossing the N11 to Deerpark. It will then continue south linking to the Sandyford Cycle Route and Kilmacud Luas Stop and on to the Slang River Greenway and Wicklow Way.*
- **Park to Park**: *will link north to south across the county. Starting at the coast at Blackrock Dart Station then joining to the existing pathways in Rockfield Park. From there it will continue south along Deansgrange Road linking to the Loughlinstown to Deansgrange Greenway and ending by linking south to the coast.*
- **Mountains to Metals**: *will link east west across the county. Starting at the Sandyford Cycle Route, linking to the Sea to Mountains Route, the route also links up to the Park to Park route, north through residential areas and new developments and on to the Metals.*

The location of the subject Cabinteely Greenway scheme relative to the three schemes noted above, is shown in **Figure 2-9** below.

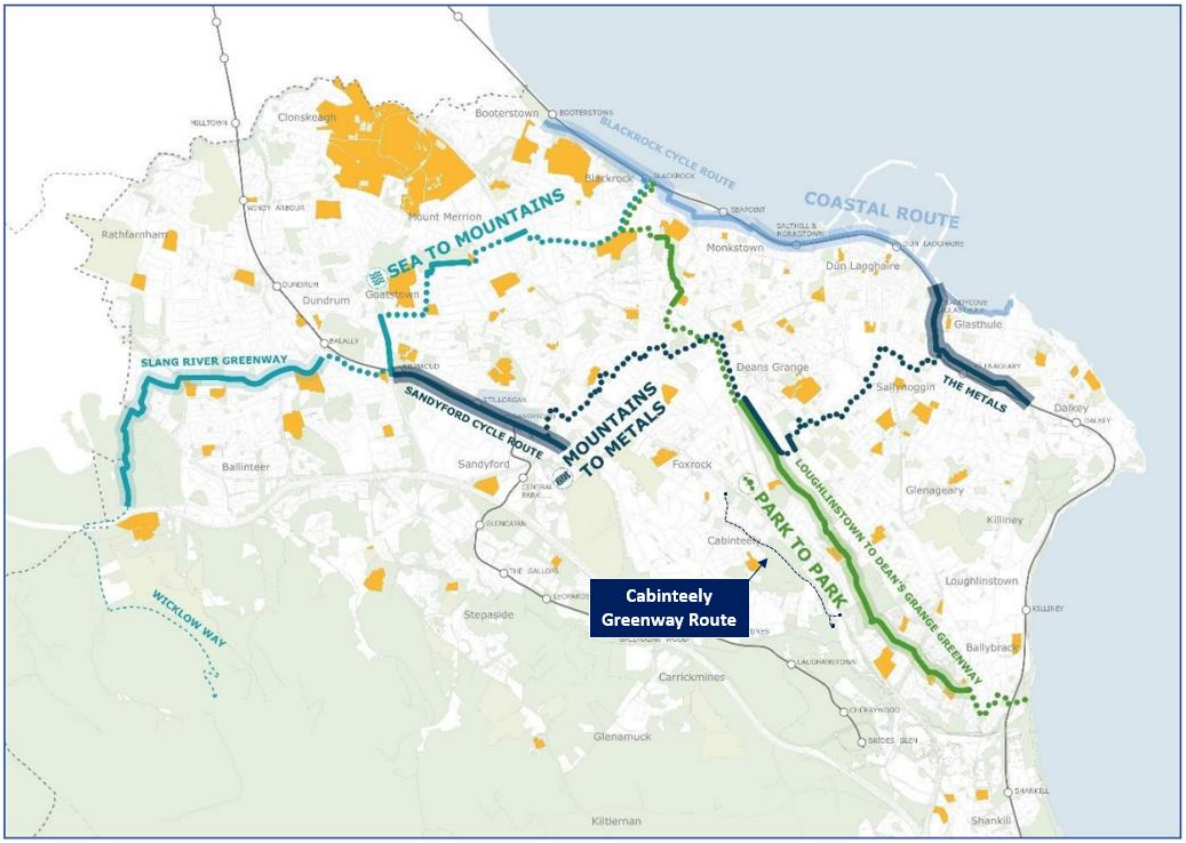


Figure 2-9: Safe Walking and Cycling Routes
(Source: Active School Travel - Project Update December 2021)

2.17 Dún Laoghaire-Rathdown Age Friendly Strategy 2022-2026

The DLR Age-Friendly Strategy (2022 – 2026) sets out four strategic priorities, these include the Physical Environment, Shared Services, the Social Environment and Working Together. With regards to the Physical Environment, one of the key objectives (Objective 1.2) is to '*Influence the provision of safe and accessible transport and infrastructure to enable older people engage actively within their communities*'.

The Strategy notes that to achieve this the following is required:

- 1.2.4: Enhance pedestrian facilities in the County for the widest range of users. KPIs for this include number of pedestrian crossing facilities improved and length of footpaths upgraded.
- 1.2.5: Carry out improvements to the cycle network. KPIs for this include length of cycle track improved and accessible for all cycling abilities and number of cycle schemes at various stages of development.

2.18 Dún Laoghaire-Rathdown Cycle Network Plan (2012)

Within the DLR Cycle Network Plan, Section A of the scheme is designated as a '*busy traffic route*', Section B, C and D are designated as a '*pedestrian/cycle routes suitable for all users*'. The proposed scheme will complement and integrate with several other ongoing / planned facilities in the wider locality including the Cherrywood Green Routes Network.

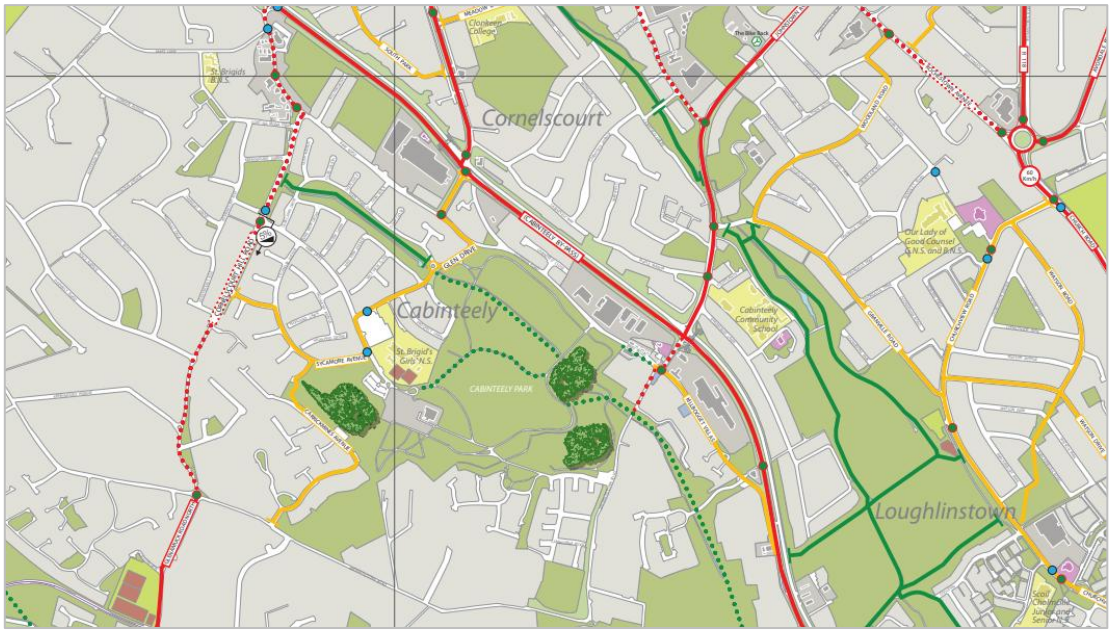
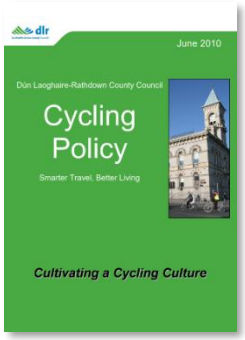


Figure 2-10: DLRCC Cycle Network Plan (Source: DLRCC)

2.19 Dún-Laoghaire-Rathdown Cycling Policy (2010)

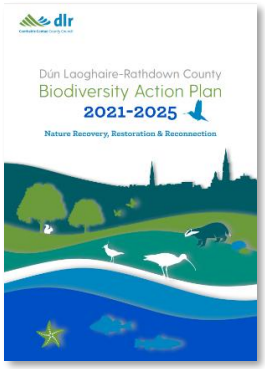


The vision of the DLR Cycling Policy is to "*cultivate a cycling culture, through the implementation of appropriate infrastructure and promotional measures, that positively encourages all members of the community to cycle at all life stages and abilities as a mode of sustainable transport that delivers environmental, health and economic benefits to both the individual and the community*".

The Policy states that in order to contribute to achieving local and national goals, it focuses its attention on the provision of infrastructure, promotion and marketing on the following activities:

- Trips to school
- Trips to work
- Trips to and from public transport interchanges as part of onward journeys to work
- Other utility trips i.e. trips to shops, leisure facilities etc.
- Recreational and tourism trips, including countryside access
- Long distance and rural routes

2.20 The DLR County Biodiversity Action Plan 2021-2025 (Dún Laoghaire-Rathdown)



The DLR County Biodiversity Action Plan is a five year plan with targeted actions to protect biodiversity for the benefit of future generations. The plan designates Cabinteely Park as a locally important biodiversity site (LIBS05 Cabinteely Park), which means that it contributes to the biodiversity of Dún Laoghaire outside of formal conservation.

The greenway also passes through the Leopardstown to N11 Biodiversity Corridor. Biodiversity corridors contain areas of varied ecological importance which link habitats together. It is noted that development is not precluded in these areas, but they need to be subject to appropriate ecological assessment. **Figure 2-11** below shows the County-wide Ecological Network map.

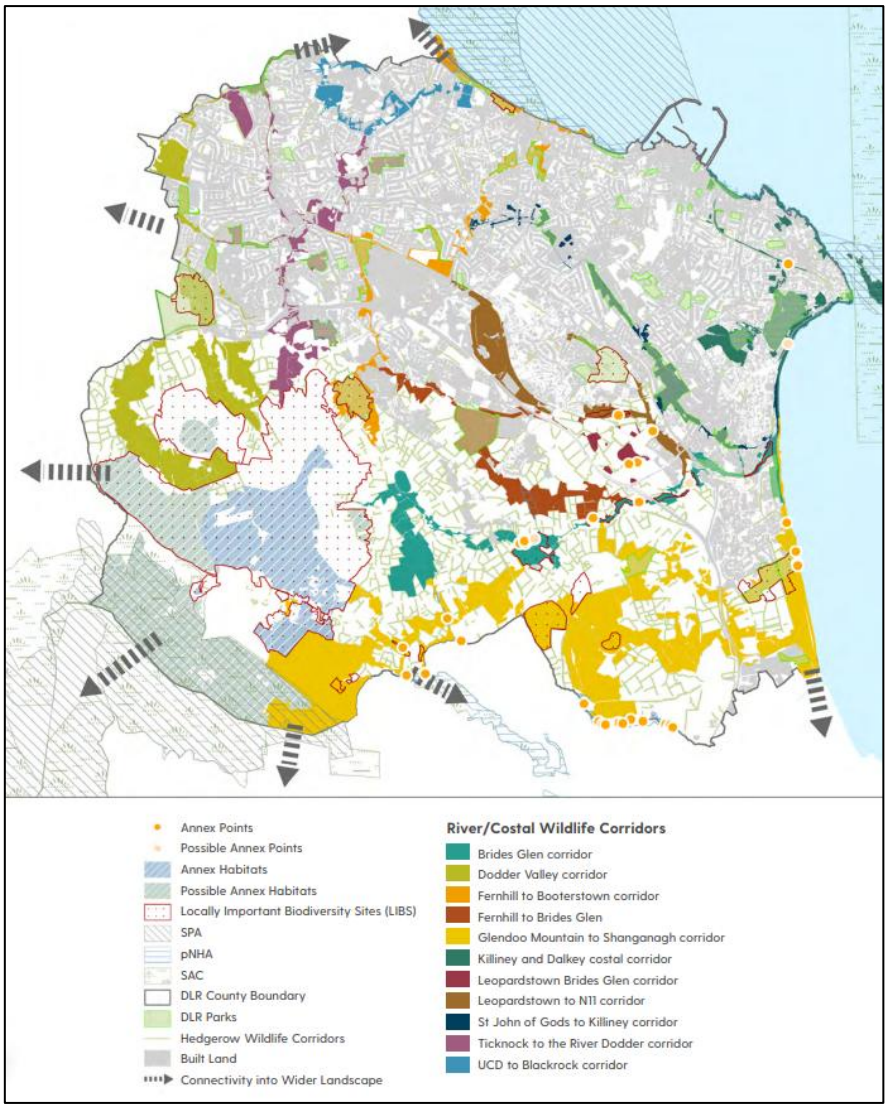
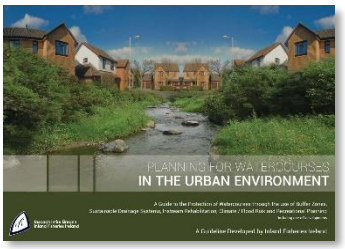


Figure 2-11: DLR County-wide Ecological Network (DLR County Biodiversity Action Plan 2021-2025)

The design team includes an ecologist, ensuring that ecological considerations will inform the design of the Cabinteely Greenway scheme. A separate assessment is provided in **Appendix G**, offering a detailed analysis of potential impacts and mitigation measures to safeguard the local environment as part of the scheme.

2.21 Planning for Watercourses in the Urban Environment



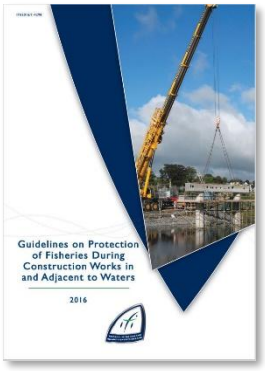
The Planning for Watercourses in the Urban Environment is a guideline document that presents an integrated strategy for watercourse protection. This strategy was developed by Inland Fisheries Ireland in consultation with a broad range of experts in the field. The goal of implementing this strategy is not only to protect watercourses and their surrounding riparian zones in urban areas, but also to deliver additional benefits that contribute to the well-being of nearby residents.

The four major steps in the strategy are :

- **Step 1**: Protect the Streamside Riparian zone
- **Step 2**: Create a middle riparian zone – can include amenity infrastructure, e.g. footpaths.
- **Step 3**: Create an outer zone to incorporate sustainable urban drainage systems.
- **Step 4**: Rehabilitate the river itself to recreate diversity of instream features found in natural channels

The recommended buffer zone width for larger river channels (>10m) is between 35m and 60m, while for smaller channels, the width should be determined based on site-specific conditions, such as the river reach or lakeshore characteristics. It is essential that the buffer zone is wide enough to protect the ecological integrity of the river, including emergent, marginal, and bankside vegetation, while also considering the area's human history. In urban environments, wider buffer zones, if well-managed and interconnected, can provide multifunctional benefits to the broader community.

2.22 Guidelines on Protection of Fisheries During Construction Works in and Adjacent to Waters – 2016



The Guidelines on Protection of Fisheries During Construction Works in and Adjacent to Waters (2016) aim to ensure the protection of aquatic environments, particularly the fisheries resources in Ireland, including rivers, lakes, and streams. The guidelines emphasize sustainable practices and the preservation of fish habitats by managing potential disturbances during construction activities near water bodies. These activities, such as the installation of structures or channel alterations, can impact fish species, especially during sensitive life stages like spawning.

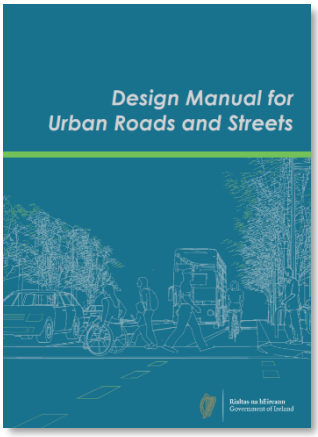
The Inland Fisheries Ireland (IFI) is responsible for overseeing the protection and sustainable management of over 70,000 kilometers of waterways and 144,000 hectares of water bodies. They work to mitigate threats like habitat loss, pollution, and barriers to fish movement, which can harm fish populations and reduce biodiversity.

During construction, especially when altering river courses or installing infrastructure like bridges, culverts, and pipelines, it is crucial to follow these guidelines. They ensure minimal disruption to aquatic life by requiring the incorporation of fish-friendly design features and the application of best practices for habitat preservation. The guidelines stress the importance of consultation with IFI throughout the planning and construction stages to avoid potential harm to water quality, fish migration, and spawning habitats.

In addition to focusing on the physical impacts of construction, the guidelines also address the need for environmental monitoring to ensure compliance with regulations and to prevent long-term damage to fish populations. Ultimately, the goal is to maintain healthy fish stocks and preserve the ecological balance of aquatic ecosystems.

3 Design Guidance

3.1 Design Manual for Urban Roads and Streets (2019)



The Design Manual for Urban Roads and Streets (DMURS) (May 2019) provides guidance relating to the design of urban roads and streets. It presents a series of principles, approaches and standards that are necessary to achieve balanced, best practice design outcomes with regard to street networks and individual streets.

The manual places a significant emphasis on car dominance in Ireland and the implications this has had regarding the pedestrian and cycle environment. The four key design principles of DMURS include:

Design Principle 1: *Support the creation of integrated street networks which promote higher levels of permeability and legibility for all road users, and in particular more sustainable forms of transport.*

Design Principle 2: *The promotion of multi-cultural, place-based streets that balance the needs of all users within a self-regulating environment.*

Design Principle 3: *The quality of the street is measured by the quality of the pedestrian environment.*

Design Principle 4: *Greater communication and co-operation between design professionals through the promotion of a plan-led, multidisciplinary approach to design.*

The document encourages more sustainable travel patterns and safer streets by proposing a hierarchy for user priorities, with pedestrians at the top indicating that walking is the most sustainable form of transport. Second in the hierarchy are cyclists with public transport third in the hierarchy and private motor vehicles at the bottom. By placing private vehicles at the bottom of the hierarchy, the document indicates that there should be a balance on street networks and cars should no longer take priority over the needs of other users.

DMURS acknowledges the challenges in retrofitting permeability to existing built up areas, whereby the dendritic nature of some street patterns makes it difficult to retrofit as there are very little connection opportunities. A number of processes and design principles are suggested by DMURS to assist in successfully retrofitting permeability to existing built up areas, including:

- Rather than seeking to retrofit a fully permeable network, focus on key desire lines where maximum gain can be achieved throughout the minimum amount of intervention;
- Ensure any plan highlights reductions in journey times, walking distances etc.;

- Identify potential reduction in private vehicle use or increases in cycling and walking;
- Ensure links are short, overlooked, have clear sight lines, and are well lit to mitigate antisocial behaviour. Longer links should be limited to those which go through areas of open space;
- Implement a package of landscape improvements that will directly add to the attractiveness of an area; and
- Where possible focus on formalising routes which are currently used by more able pedestrians but due to barriers are not suitable for use by the mobility impaired and disabled.

The focus of the manual is to promote an integrated approach towards creating and designing street networks which are simpler in structure, with higher levels of connectivity to reduce travel distances on foot or by bike, but which also incorporate elements of urban design and landscaping to help manage behaviours and provide high quality street environments.

3.2 Cycle Design Manual (2023)

The Cycle Design Manual (CDM) has recently been published by the National Transport Authority (NTA) and overseen by the Department of Transport. The Cycle Design Manual replaces the previous National Cycle Manual, published by NTA in 2011.

The new Cycle Design Manual provides guidance on the design of both on-road and off-road cycle facilities for both urban and rural locations. The manual sets out five main requirements for cycle-friendly infrastructure, comprising: ***Safety***, ***Coherence, Comfort, Directness*** and ***Attractiveness***. Section 4.2.7 and TL106 of the CDM outlines the key design considerations in relation to Greenways and Shared Active Travel Facilities including the following:

- Plan and design for all kinds of users - the facility should be multi-access;
- Incorporate safe systems principles and meet the requirements for cyclists;
- Protect users from motor traffic;
- Separate users (people, cycling, walking and wheeling) where necessary;
- Making intuitive and clear which space is allocated to different users;
- Reduce the need to slow down/stop; and
- Design with maintenance in mind.

With regards to segregation, it is noted that shared-use facilities are often suitable where:

- The density of users is low meaning less interactions and potential conflict;
- There is low speed differential between users (e.g. area with high place function or at road crossings);
- Where segregation results in facilities that are too narrow for cyclists and pedestrians; and
- Where segregation may make the layout too confusing and result in users straying into each other's space, increasing potential conflict.

Segregated facilities can be considered where significant flows of pedestrians and/or cyclists exist, as indicated in **Table 5** below which provides recommended arrangements depending on the density of pedestrians using the facility.

Density of Pedestrians (users/hr/m)	Recommended Arrangement
<100	Shared-use usually appropriate
101-199	Segregation may be considered
>200	Segregation should be considered

Table 5: Pedestrian Densities
(Source: Cycle Design Manual, Table 4.14)

With regards to appropriate widths for Greenways and Shared Active Travel Facilities, the CDM notes that Greenways in urban areas will generally be busier than in rural areas. All routes should meet the absolute minimum widths set out in **Table 6** to be able to "*comfortably accommodate larger cycles and mobility scooters and designers should also consider the current, forecast and any target increase in users. A width greater than the minimum will increase the level of service, enable sociable (side by side) cycling and walking, and help minimise conflicts between users*".

Location	Desirable Minimum Width	Absolute Minimum Width
Urban areas	4.0m	3.0m
Rural areas	3.0m	2.5m

Table 6: Shared Active Travel Facility and Greenway Widths
(Source: Cycle Design Manual, Table 4.15)

Further guidance is provided in the CDM in relation to other key design elements including the use of speed control measures and access controls. Notably the CDM states that shared facilities between pedestrians and cyclists adjacent to carriageways generally result in a reduced quality of

service for both modes and should not be considered as a first option. However, shared facilities may be acceptable in the following situations if well-designed and implemented:

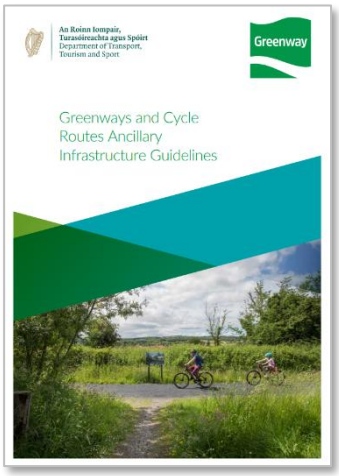
- At heavily constrained junctions where the space does not exist to maintain segregation between pedestrians and cyclists;
- Where a length of shared use may be the only practical way of achieving a continuous cycle route; and
- Where high cycle and high pedestrian flows occur at different times.

Recommended minimum widths for shared facilities carrying up to 300 pedestrians per hour are given in **Table 7**. Wherever possible, and where pedestrian flows are higher, it is stated that greater widths should be used to reduce conflict.

Flow	Desirable Minimum Width	Absolute Minimum Width at Pinch Points
≤ 300 pedestrians and ≤ 300 cyclists per hour	4.0m	3.0m
≤ 300 pedestrians and > 300 cyclists per hour	4.5m	4.5m

Table 7: Recommended Minimum Widths for Shared Paths (Source: Cycle Design Manual, Table 4.16)

3.3 Greenways and Cycle Routes Ancillary Infrastructure Guidelines (2022)



The Greenways and Cycle Routes Ancillary Infrastructure Guidelines was published by the Department of Transport in partnership with Sport Ireland in July 2018, subsequently updated in January 2022.

It provides guidance on the installation and creation of ancillary infrastructure intended to bring routes to life and make it an attractive and enjoyable experience for users.

This document supports the national Strategy for the Future Development of National and Regional Greenways published by the Department of Transport Tourism and Sport. The guidelines place significant emphasis on user expectations, and establishes five key outcomes from a well-planned and managed route, including:

- Be safe and perceived to be safe.
- Offer an attractive pleasant experience: with aesthetic Route design, good scenery integrating with its surrounding, and opportunities to visit local attractions and include places for resting, refreshment and stopping off.
- Be accessible via public transport at critical points, and convenient to use, with due consideration given for the needs of individuals with disabilities.
- Be part of a coherent trail or network with signposted routes and destinations and be continuous and recognisable with consistent standards.
- Be appropriate, in that it is easy to use, well maintained and addresses user recreation and/or their commuting expectations.

A table presented in section 1.3.1. of the document and shown in **Figure 3-1** below, provides a summary of the needs and expectations of different types of cyclists who are likely to use the routes.

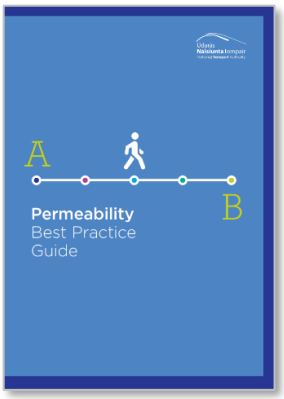
Route User Type Requirements			
	Leisure Cyclists	Cycle Tourists	Commuter Cyclists
Characteristics	Vary greatly in age, skill and fitness, and include families	Large skill variation, often heavily equipped and may travel in groups	Various ages, skills
Main Locations	Close to settlements – up to 50km approximately	Scenic, attractive areas, designated destinations	In and between urban, educational, and employment areas
Route-Layout	Off-road and low gradients for families - varies for road cyclists	Generally off-road, although experienced cyclists tend to prefer on-road	Direct, safe Route
Route-Selection	- Cycle loops - Regular resting areas - Opportunities to buy food and drink - Integration with public transport and car parking	- Scenic and interesting Routes connecting tourist attractions - Linking settlements - Food and drink and accommodation - Integration with public transport	- High-quality surface - Low traffic or none - Integration with public transport

Figure 3-1: Road User Type Requirements
(Source: Greenway and Cycle Routes Ancillary Infrastructure Guidelines).

The document emphasises that the design and management of routes, should provide a safe, attractive, accessible, coherent, and appropriate experience whilst not undermining the local environment.

It also noted that the personality or theme of the route should ideally reflect the nature of the community's history and the land that is traverses, by acknowledging the legacy of its setting along with the use of appropriate local materials.

3.4 Permeability Best Practice Guide (2015)



In 2015 the National Transport Authority (NTA) published the Permeability Best Practice Guide which provides the basis for delivering choice in existing built-up areas by promoting permeability for pedestrians and cyclists.

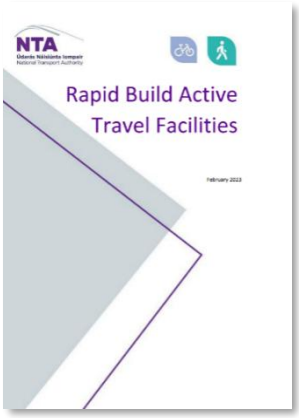
A key element of this is addressing the legacy of severance built into the expansions of towns and cities over recent years. The guide emphasises the importance of creating permeable neighbourhoods, where people can walk / cycle through areas safely and conveniently. This in turn confers a competitive advantage to active modes over the private car.

The benefits of creating permeable networks are broadly categorised into the following four areas:

- **Local Economic Well Being**: by creating neighbourhoods where people can easily access local shops and businesses by walking or cycling.
- **Public Transport**: making it easier and quicker to access public transport thereby encouraging increased use of public transport. It may also result in reduced journey times and financial savings for users compared to private car travel.
- **Health**: 'Designing in' opportunities for walking and cycling to support healthy activity and instil healthy travel patterns into people's daily lives.
- **Community Development and Social Capital**: Creating connected, lively, and usable spaces in the local community generates opportunities for day-to-day social interactions, which in turn contribute to a greater sense of community.

The concept of filtered permeability is the common theme running throughout the guide. Whereby any trip in a built-up environment should be most direct by walking and cycling, not necessarily by private car. By minimising the distance and time it takes people to walk, and cycle encourages travel by these modes instead of the private car.

3.5 Rapid Build Active Travel Facilities (2023)



The purpose of the advice note, published by the NTA in February 2023, is to give guidance on the options available to deliver high quality walking and cycling infrastructure using rapid build, cost-effective methods in order to reduce car-dependency and to favour sustainable modes over the private car, and as a means of achieving reductions in carbon emissions. Rapid Build Infrastructure is infrastructure that can generally be accommodated within the existing carriageway or verge and has limited drainage impacts. This may include:

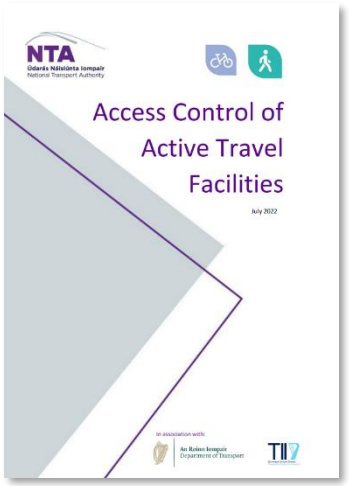
- Road markings/traffic restrictions;
- Narrowing/converting general traffic lanes to active travel facilities;
- Converting on-street parking to active travel facilities;
- Creating Traffic Free streets; and
- Redesigning junctions to provide greater capacity for walking, cycling and public transport.

The approach has been set out by the NTA in order to align with both the Climate Action Plan 2023 and the Intervention Hierarchy set out in NIFTI which prioritises maintaining, optimisation, and improving over new construction.

A separate report was prepared by DBFL which examined the feasibility and appropriateness of potential rapid build options for the Cabinteely Greenway scheme. The Rapid Build Options Report concluded that rapid build construction methods are feasible along Section A (Cornelscourt Hill Road) and Section B (Glen Lawn Drive), however rapid build is not considered appropriate along Section C (Cabinteely Park) and Section D (Brennanstown Road to tie into the Cherrywood Green Routes Network).

Whilst rapid build options are feasible on Sections A and B, when they are considered in the context of the full scheme, they are unlikely to reach the full potential of the scheme in terms of offering a consistent, legible and attractive overall route. By implementing rapid build on these sections, it may compromise the entirety of the route, given that high-quality traditional build methods will need to be implemented within Cabinteely Park and Brennanstown Avenue sections. Therefore, in order to achieve the project objectives and align with relevant national and local policy, it was recommended that full upgrade traditional build methods are considered for the full route.

3.6 Access Control of Active Travel Facilities (2022)



The purpose of the advice note, published by the NTA in July 2022, is to provide guidance for suitable access controls that may be provided only where necessary to prevent inappropriate vehicular access to pedestrian and cycling facilities, including shared greenways and segregated cycleways, to achieve consistent universal access to all such active travel facilities.

Where access control is required, the note states that bollards may be used to demark the entry point to a pedestrian or cyclist facility with a minimum clear width of 1.5m to accommodate the full range of mobility vehicles and those using cargo bikes. Guidance regarding the implementation of access gates, barriers and walls is also provided, noting that any access controls should maintain the free flow of cyclists through obstructions.

4 Existing Conditions

4.1 Introduction

The scheme, which has been identified as a strategic north-west / south-east link, commences at the Bray Road / Cornelscourt Hill Road signalised junction and extends approximately 2.3 km, passing through Cabinteely Park and ties into the Cherrywood Green Routes Network.

The scheme passes through predominantly residential areas, although there are also a number of local services and amenities, such as Cabinteely Park, adjacent to the route as well as a number of local schools. The following sections examine the current characteristics of the study area in terms of physical features, opportunities and constraints which currently exist, as well as the current pedestrian, cyclist and traffic environment. For the purposes of this review, the route has been split into four distinct sections:

- **Section A:** Cornelscourt (Bray Road / Cornelscourt Hill Road Junction) to Glen Lawn Drive
- **Section B:** Glen Lawn Drive to Cabinteely Park
- **Section C:** Cabinteely Park
- **Section D:** Brennanstown Road to Cherrywood Green Routes

The overall route and the four distinct sections are illustrated in **Figure 4-1** below.

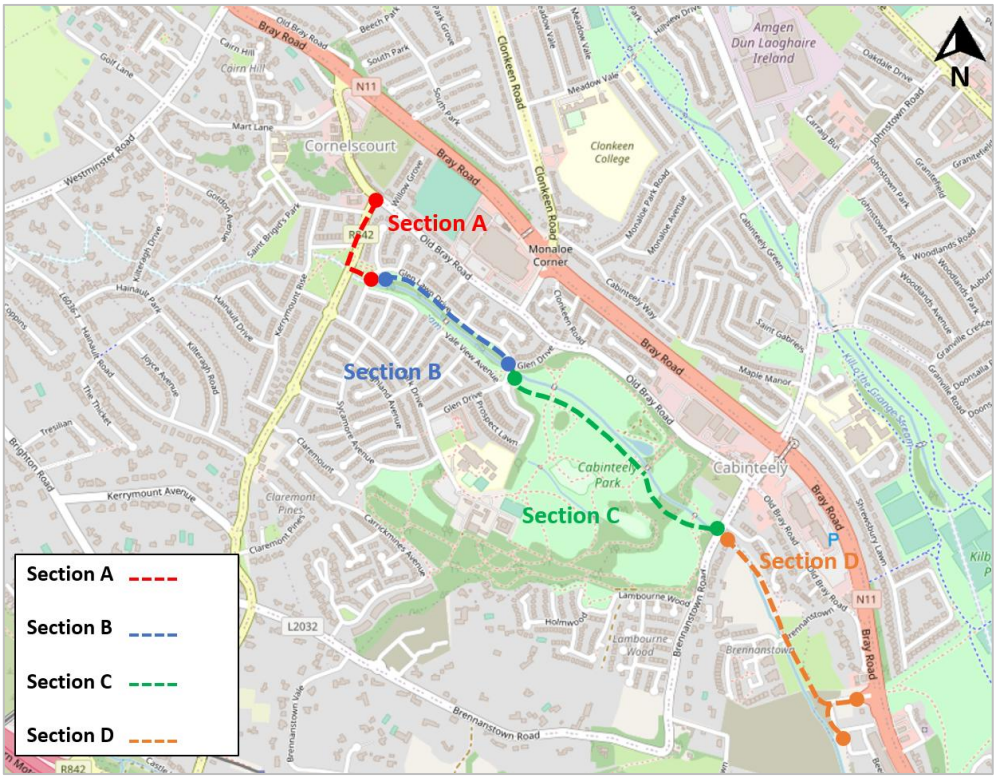


Figure 4-1: Scheme Overview

4.2 Section A: Cornelscourt to Glen Lawn Drive

Existing Pedestrian & Cyclist Facilities

Bray Road and Cornelscourt Hill Road form a three-arm signalised junction. At this junction controlled pedestrian crossings with dropped kerbs and tactile paving are provided on all arms of the junction. It is noted that the footpath on the northern side of the junction is interrupted by two driveways, as shown in **Figure 4-2**. Advanced stop lines (ASLs) are provided for cyclists on the western and southern approaches to the junction. However, there are no other dedicated facilities for cyclists travelling through this junction.

Figure 4-2: View Looking South at the Bray Road / Cornelscourt Hill Road Signalised Junction

Footpaths are provided on both sides of Cornelscourt Hill Road, although these are relatively narrow being c. 1.5m wide. Street lighting is provided on both sides of the road. Cyclists are required to travel on-road along Cornelscourt Hill Road and share the road with motor traffic.

Figure 4-3: View Looking South on Cornelscourt Hill Road

Existing Public Transport Facilities

There are regular bus services along Cornelscourt Hill Road. North and southbound bus stops are located on Cornelscourt Hill Road serving the No. 63 bus route operated by GoAhead which connects Dún Laoghaire to Kilternan with a frequency of approximately 30 minutes in the peak hours (Mondays to Fridays). **Figure 4-4** below shows the southbound bus stop located approximately 86m south of the Bray Road / Cornelscourt Hill Road junction.

Figure 4-4: Existing Bus Stop (Stop ID: 3309) on Cornelscourt Hill Road

Existing Road Network

Old Bray Road is a two-way single lane carriageway that is subject to a posted speed limit of 50km/h. On-street car parking is facilitated on the northern side of Old Bray Road on approach to the signalised junction with Cornelscourt Hill Road. Cornelscourt Hill Road is also a two-way single lane carriageway subject to a posted speed limit of 50km/h with traffic lane widths between 4.0m–4.5m. It also includes an additional lane for separate left and right turns from Cornelscourt Hill to Bray Road. Cornelscourt Road forms priority junctions with Gort Na Mona Drive, Kerrymount Green to the west. The general layout of Cornelscourt Hill Road is shown in **Figure 4-5**.

Figure 4-5: View Looking South on Bray Road

4.3 Section B: Glen Lawn Drive to Cabinteely Park

Existing Pedestrian & Cyclist Facilities

Along Glen Lawn Drive a footpath is available on the northern side of the road. Dropped kerbs are provided at the side road junctions, although no tactile paving is provided. Public street lighting is located on the southern side of the road within the green space area as shown in **Figure 4-6.** Cyclists are required to travel on-road along Glen Lawn Drive and have to share the road space with motorised vehicles.

Figure 4-6: View Looking East on Glen Lawn Drive

At the eastern end of Glen Lawn Drive is a three-arm roundabout with Glen Drive. There are footpaths available on both sides of each arm of the roundabout. Informal crossings comprising dropped kerbs, but no tactile paving, are provided on the northern and southern arms.

Figure 4-7: Poor Pedestrian Facilities at Glen Lawn Drive / Glen Drive Roundabout

Existing Road Network

Following the recent changes to speed limit byelaws implemented in November 2024, Glen Lawn Drive is now subject to a 30km/h speed limit. It provides access to residential properties within the Glen Lawn area. There are six priority junctions along the northern side of Glen Lawn Drive providing access to residential cul-de-sacs. Some on-street car parking occurs along Glen Lawn Drive, predominantly on the northern side. At its eastern end, Glen Lawn Drive forms a three-arm roundabout with Glen Drive, as show in **Figure 4-8** with a 17m Inscribed Circle Diameter (ICD) and single lane approach/departure lanes on all arms.

Figure 4-8: View Looking North Towards Glen Lawn Drive / Glen Drive Roundabout

4.4 Section C: Cabinteely Park

Existing Pedestrian & Cyclist Facilities

At present there is a network of paths throughout Cabinteely Park, with pedestrian access points located on Glen Drive, Bray Road, Carrickmines Avenue and Park Drive. Footpaths through the park are c.2.0m – 3.0m wide and it is noted that there is no public lighting within the park. At present, cyclists are not permitted within the park area, except cycling by children under 8 supervised by an adult.

Entrances to the park are closed at nighttime, with closing times varying between 5pm – 10:30pm depending on the time of year. The park opens at 8am every morning throughout the year. Some informal paths are mown in the grassed areas through the park as shown in **Figure 4-9**.

Figure 4-9: Existing Informal Grassed Paths Through Cabinteely Park

Clonkeen Road

Clonkeen Road is a two-way, single-lane carriageway. Following the recent changes to the speed limit byelaws, Clonkeen Road is now subject to a 30 km/h speed limit. The carriageway width ranges from 6.0m to 8.0m. Clonkeen Road, forms a three-arm priority junction with Old Bray Road. It also provides a pedestrian/cycle connection to the N11.

There are footpaths available on both sides of Clonkeen Road, and street lighting is provided along the length of the road. Clonkeen Road is a lightly trafficked no-through road serving a relatively small number of residential properties. The general layout of Clonkeen Road is shown in **Figure 4-10**.

Figure 4-10: View Looking South on Clonkeen Road

4.5 Section D: Brennanstown Road to Cherrywood Green Routes

Existing Pedestrian & Cyclist Facilities

Pedestrian facilities on Brennanstown Road are poor, with an existing narrow 1.2m wide footpath provided on the western side of the road only, as shown in **Figure 4-11**. While a footpath is provided on the northern side of Carraig Glen, there are no pedestrian crossing facilities connecting to the footpath on the western side of Brennanstown Road.

Figure 4-11: View Looking South on Brennanstown Road

To the south of the Carraig Glen / Brennanstown Road junction, is a dense wooded area. Observations on site indicated an informal path through this area, as shown in **Figure 4-12**, which appears to be well used as a short cut through to Brennanstown Avenue.

Figure 4-12: Informal Path Through Wooded Area Off Brennanstown Road

At the end of the Carraig Glen cul-de-sac is a footpath which continues southwards connecting to Brennanstown Avenue, as shown in **Figure 4-13**. There are no dedicated facilities for cyclists travelling on Brennanstown Road, Carraig Glen or Brennanstown Avenue, cyclists are required to share the road with motor vehicles.

Figure 4-13: View Looking South Towards Brennanstown Avenue

Existing Road Network

Brennanstown Road is subject to 50km/h speed limit and is a single lane two-way 6.0m wide carriageway (traffic lanes of 3.0m width in both directions). Street lighting is provided along the western section of the road.

Figure 4-14: View Looking North on Brennanstown Road

Brennanstown Road forms a priority junction with Carraig Glen. Carraig Glen is subject to a 30km/h speed limit and is a cul-de-sac serving a small number of residential properties. The carriageway is c. 6.5m wide. On street parking is restricted along part of Carraig Glen by double yellow line road markings.

Brennanstown Avenue, which is accessed via the Old Bray Road, provides access to the Brennanstown Square residential area. It is c.7.0m wide and has a number of speed humps in place to aid the reduction of vehicle speeds. The general layout of Brennanstown Avenue is shown in **Figure 4-15** below.

Figure 4-15: View Looking South on Brennanstown Avenue

4.6 Road Safety Review

As part of this assessment, the Road Safety Authority (RSA) collision database was reviewed in order to ascertain the safety record along the proposed scheme route. The data reviewed on the website covers a 12-year period from 2005 – 2016 inclusive and indicates basic information on all reported incidents. **Figure 4-16** below indicates the locations and severity of the collisions recorded along the scheme extents.

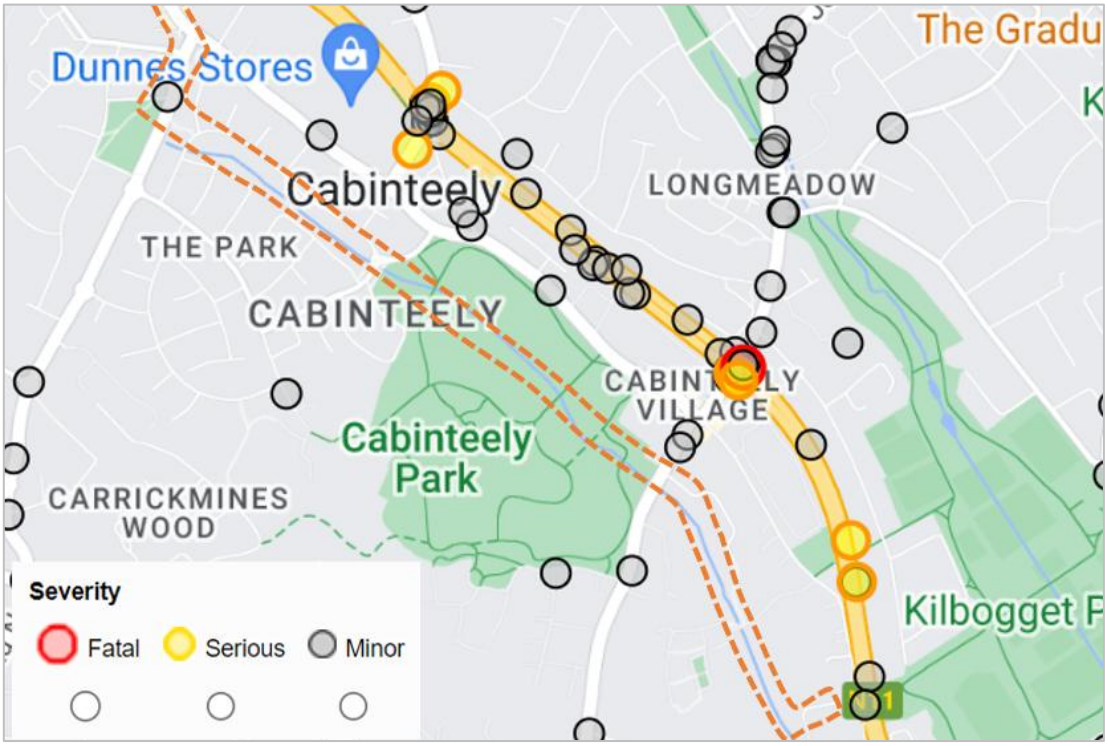


Figure 4-16: Collision Database along the route extent (Source: RSA)

For the years assessed, as shown in the figure above, there has been a total of 1 incident recorded along the route and this collision was minor in nature. This incident occurred in 2006 and involved a motorcycle and pedestrian. The subject route extents are predominantly off road, hence why the number of recorded collisions is low.

However, examining the existing available parallel route along the N11, a significant number of collisions are recorded, including six serious and one fatal collision. Further detail regarding the categories of road users involved in these collisions was not available. Nonetheless, the aim of the scheme is to improve safety for vulnerable road users, by providing a dedicated, safe and attractive route for people walking, wheeling and cycling. The proposed route would offer these users an alternative to using the heavily trafficked N11 route where there are a significant number of recorded collisions, thereby helping to minimise risks to road users.

4.7 Summary

The preceding sections highlight the existing road conditions of the study extents. Overall, there is poor connectivity for pedestrians or cyclists wishing to travel from Cornelscourt through to the wider Cherrywood area. At present, the most direct route for pedestrians / cyclists wishing to travel between these areas is to use the N11 which is a heavily trafficked, high speed, car dominant route. Alternatively, pedestrians and cyclists could use the existing network through the residential areas or along the Old Bray Road, although it is noted that the Old Bray Road is relatively constrained at certain sections and requires cyclists to travel on road. Pedestrians can travel through the park area, although cyclists are not currently permitted to travel through the park.

However, provision for those travelling on foot through these areas is disjointed and safe crossing points are generally lacking. The existing network does not cater for desire lines. Similarly, existing cycling infrastructure is greatly lacking, with cyclists required to share the road with motorised traffic.

In summary, the existing environment offers poor connectivity for people walking, wheeling or cycling. The current network infrastructure is unattractive for younger, less confident or older cyclists and unlikely to support any future aspirations for achieving a greater sustainable transport mode share.

5 Consideration of Alternatives and Options

5.1 Alternative Options Considered

As the Cabinteely Greenway is part of the broader 2022 GDA Cycle Network Plan as a Greenway Utility / Leisure route and also within the DLR Cycle Network Plan as a 'pedestrian/cycle route suitable for all users, the route alternatives were limited to the predetermined alignments identified in these plans. These plans underwent detailed route selection processes to ensure that the network addresses key destinations and traffic flows, resulting in the chosen route's strategic importance.

Accordingly, this project seeks to consider and develop the more specific design details for the route relating to its precise alignment, cross section, junction/crossing arrangements, materials, environmental considerations etc.

An assessment of potential options for the scheme was carried out to identify the possible options to be brough forward for detailed consideration and the Multi-Criteria Analysis (MCA). The Multi-Criteria Analysis (MCA) has been undertaken based on a number of criteria set out by the Department of Transport.

The findings of this assessment and the details of the route options considered for the project can be found in Section 5 of the 'Project Feasibility & Options Selection Report,' which is included in **Appendix A**.

5.2 Assessment of Options

The assessment of options followed the guidelines set out in the National Transport Authority's Simplified Project Approval Process for Minor Works (July 2021). The options were first sifted against the objectives for the scheme, followed by a Multi-Criteria Analysis (MCA) of the options that passed the initial screening.

Each section was assessed individually, considering various design options, and appraised to determine the optimal layout for people walking, wheeling, and cycling.

The findings of this assessment, along with the details of the Multi-Criteria Analysis (MCA) for the project, can be found in Section 6 of the 'Project Feasibility & Options Selection Report,' which is included in **Appendix A**.

6 Consultation

6.1 Public Consultation & Stakeholder Engagement

To ensure that the Cabinteely Greenway scheme meets the needs and aspirations of the community, a thorough public consultation and stakeholder engagement process was carried out from November 2023 to July 2024. This process, led by Dún Laoghaire-Rathdown County Council (DLR) in collaboration with DBFL Consulting Engineers, was a key pre-statutory consultation phase.

This process enabled the design team to gather input from the local community and incorporate that feedback, which directly influenced the development of the preferred route for the project. During the consultation period, a series of tailored workshops and public events were organized to ensure the diverse local community was represented.

6.2 Methodology

The consultation was divided into two phases:

- **Phase 1:** Involved workshops with key stakeholders, featuring customized activities to meet each group's specific needs and interests. The goal was to uncover what excites, surprises, and concerns residents about the potential greenway development. In this phase, workshops were conducted with specific community groups, including residents, businesses, schools, and disability advocacy groups.
- **Phase 2:** Built on the findings from Phase 1, this second round of engagement included on-site walkthroughs of specific route sections with representatives from the Brennanstown and The Park Residents Associations. Additional events focused on engaging the broader community to collaboratively identify key themes for further exploration in the greenway's development. This phase included Public Events and a Public Webinar.

6.3 Conclusion

The total number of participants across all activities was 436 community members. The high level of engagement from the local community underscores the interest in the proposed project. There is no single consensus on the project, with different community members having diverse hopes, concerns and needs from the project. The project team carefully analysed the extensive feedback from various stakeholders and has sought to balance this diversity of views in developing a scheme which benefits the community as a whole. The full Stakeholder Consultation Report can be found in **Appendix I**.

7 Preliminary Design

7.1 The Proposed Scheme

After conducting a detailed options assessment along with a public engagement process, a preferred route for the scheme was identified and a preliminary design developed.

The purpose of the preliminary design is to further develop and refine the preferred scheme. This process involves a thorough examination of the constraints and impacts along the route, as well as the preparation of a preliminary cost estimate. The preliminary design also aims to assess key factors such as environmental considerations, user safety, and community integration, ensuring that the scheme aligns with project objectives and addresses stakeholder concerns. Additionally, it serves as a foundation for future detailed design phases, facilitating effective project implementation and funding applications.

The preliminary design serves as the foundation for the planning consent process for the scheme. At this stage, it presents detailed information on key aspects of the design, including lighting, environmental mitigation measures, sustainable drainage systems (SuDS), drainage requirements, and proposals for the public realm and landscaping. The extent of the scheme is shown in **Figure 7-1** below. The preliminary design for each section of the scheme is presented in the following sections.

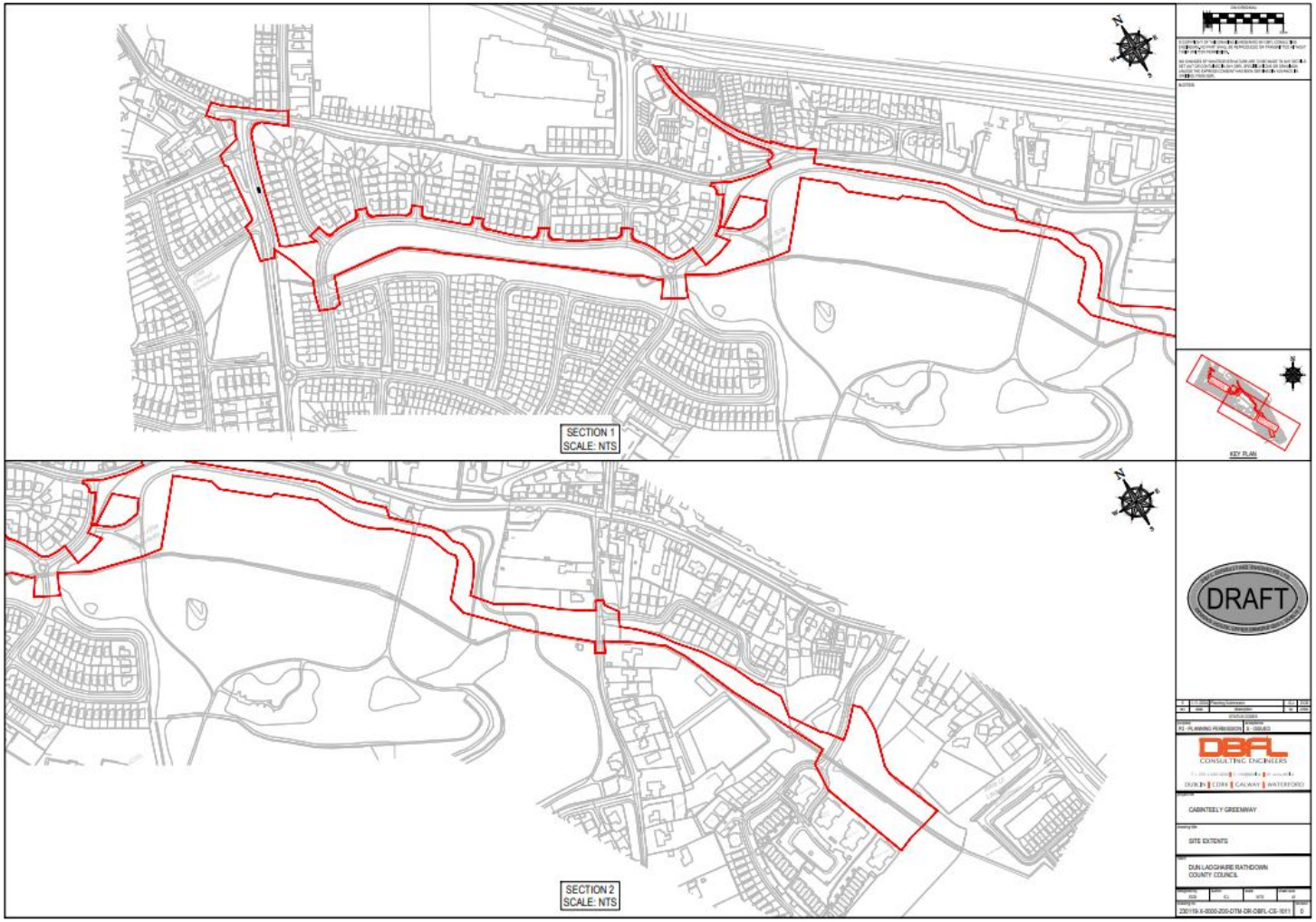


Figure 7-1: Cabinteely Greenway Site Extents
[DBFL Drawing No 230119-X-0000-Z00-DTM-DR-DBFL-CE-1011 Site Extents]

7.2 Section A: Cornelscourt to Glen Lawn Drive

The proposed scheme starts at the Cornelscourt Hill Road / Bray Road junction. A 4.0m wide shared path is proposed on the eastern side of Cornelscourt Hill Road as shown below in **Figure 7-2.**

It is proposed to upgrade the Cornelscourt Hill Road/Bray Road junction in accordance with TL506 Signal-Controlled Junction standards, incorporating 4m wide Toucan crossings on all arms, as per the Cycle Design Manual.

A Traffic Impact Assessment (TIA) report was prepared to assess the potential impacts on the junctions resulting from the proposed changes. The report concludes that, since no changes are proposed to traffic management or allowed turning movements at the Cornelscourt Hill Road/Bray Road junction, no significant impact on the junction's functionality or traffic flow is expected, when compared to the existing conditions. The complete Traffic Impact Assessment report is provided in detail in **Appendix B.**

The existing southbound bus stop will be upgraded to an island bus stop arrangement in accordance with the Cycle Design Manual(CDM). A Toucan crossing will be provided to the north of the Cornelscourt Hill Road / Kerrymount Green junction to facilitate safe connections to and from the route. The route will continue through the green space area, linking to Glen Lawn Drive. To minimize the impact on the green space and trees, there will be localized narrowing of the path to 3.0m where necessary.

Figure 7-2: Proposed Route - Section A
[DBFL Drawing No 230119-X-0100-Z00-DTM-DR-DBFL-CE-1201 General Arrangement - Sheet 1]

A typical cross section for Cornelscourt Hill Road is shown in **Figure 7-3** below.

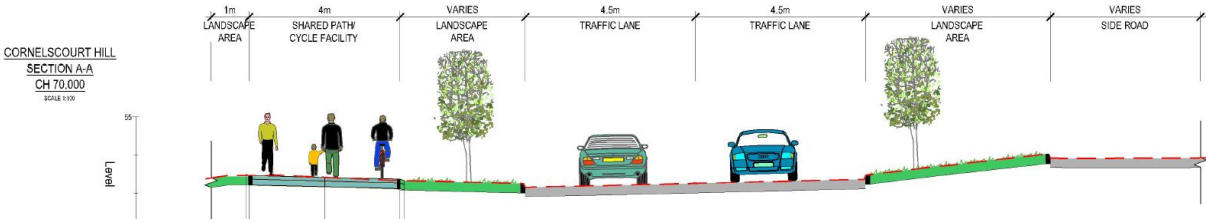


Figure 7-3: Cross Section for proposals on Cabinteely Greenway in Section A

7.3 Section B: Glen Lawn Drive to Cabinteely Park

The proposal includes the creation of a 4.0m wide shared path along the southern edge of Glen Lawn Drive. At the western end of Glen Lawn Drive, a new raised combined zebra crossing will be implemented, providing a safe crossing location for pedestrians and cyclists. The raised crossing will also act as a traffic calming measure, helping to keep vehicle speeds low.

There are no changes proposed to the existing carriageway along Glen Lawn Drive. Accordingly, traffic flow along Glen Lawn Drive will remain two-way.

The Glen Lawn Drive / Glen Drive roundabout will be reconfigured to include raised zebra crossings on all arms of the roundabout and adjustments to its geometry, designed to reduce vehicle speeds and reinforce priority for pedestrians and cyclists.

The new crossing on the southern arm of the roundabout will facilitate a safe and direct connection into Cabinteely Park, promoting access to green spaces. The proposals within Section B are detailed below and illustrated in **Figure 7-4** and **Figure 7-5.**

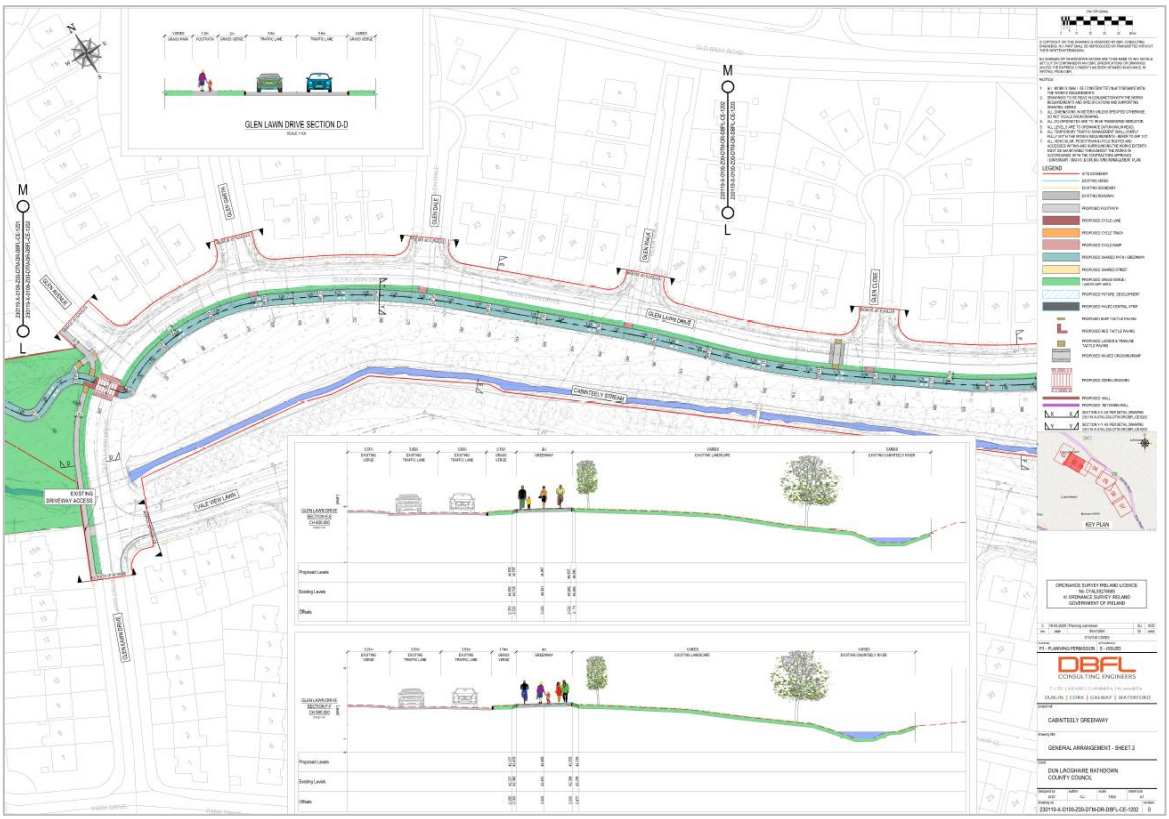


Figure 7-4: Proposed Route - Section B
[DBFL Drawing No 230119-X-0100-Z00-DTM-DR-DBFL-CE-1202 General Arrangement - Sheet 2]

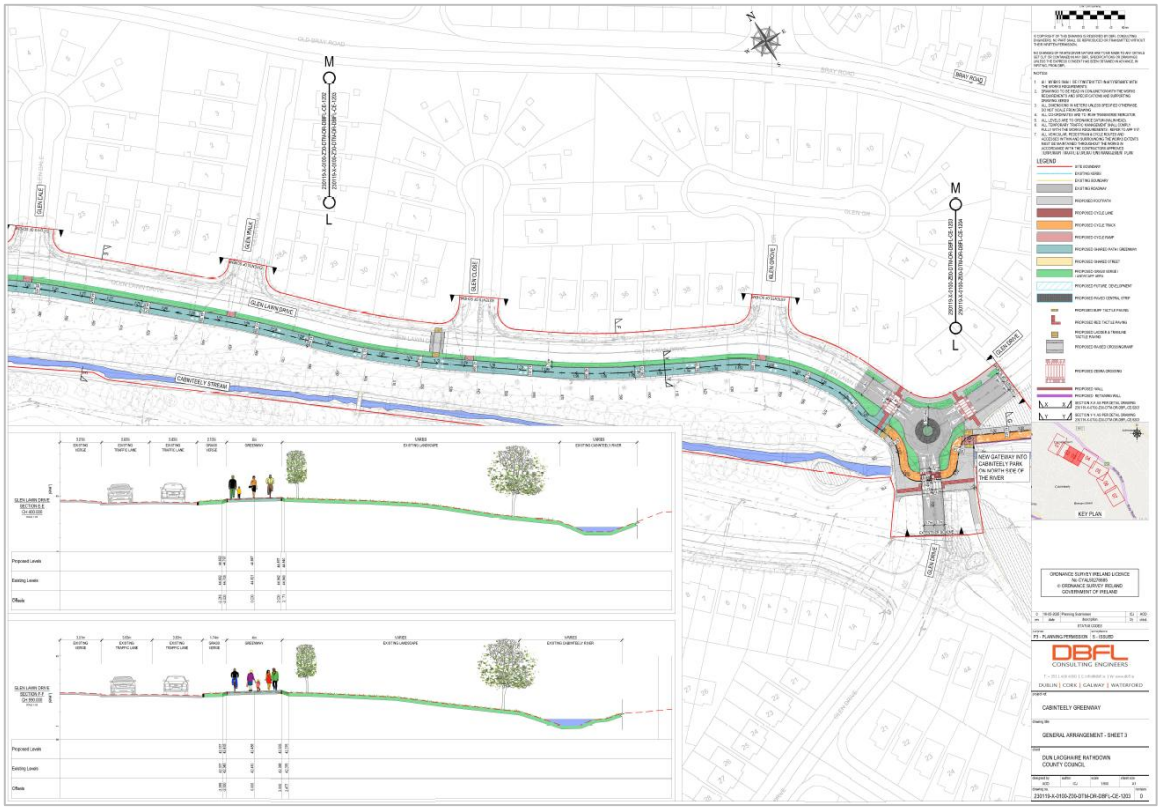


Figure 7-5: Proposed Route - Section B
[DBFL Drawing No 230119-X-0100-Z00-DTM-DR-DBFL-CE-1203 General Arrangement - Sheet 3]

A typical cross section of Glen Lawn Drive at one of the proposed landscaped buildouts is shown in **Figure 7-6**.

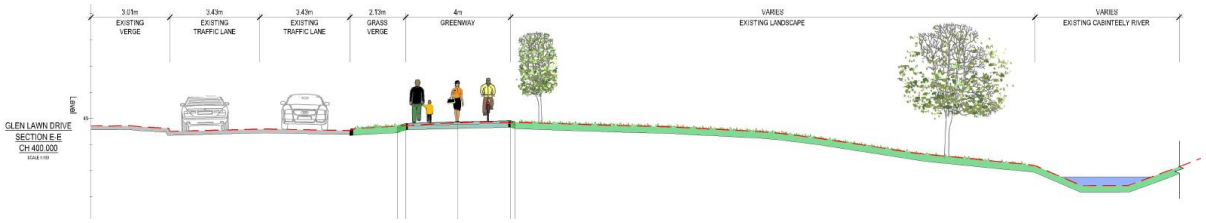


Figure 7-6: Cross Section for proposals on Cabinteely Greenway in Section B

7.4 Section C: Cabinteely Park

A 5.0m wide segregated route will be created through the park, featuring a 2.0m wide pedestrian path and a 3.0m wide two-way cycle track. This segregated path will largely follow the alignment of the existing path network along the northern side of the park. The route will run along the northern edge of the pitches and a low-level hedgerow is proposed at selected pinch points to minimise potential conflicts between activity on the pitches and people travelling along the segregated route.

The proposed reconfiguration of access to Cabinteely Park includes the closure of the existing entrance on Glen Drive. In its place, two new entrances will be created: one located on the north side of the stream adjacent the Glen Drive roundabout and the second adjacent the Old Bray Road junction.

A connection from the Greenway to the N11 will be created via the new entrance at the Old Bray Road junction and Clonkeen Road. As Clonkeen Road is lightly trafficked, it is proposed to convert it to a shared street, whereby cyclists will share the carriageway with vehicular traffic. Additionally, the existing modal filter connection to the N11 will be upgraded, with enhanced cycle facilities incorporated as part of the BusConnects scheme to be delivered along the N11.

The proposals within the Cabinteely Park and Clonkeen Road are detailed below and illustrated in **Figure 7-7** and **Figure 7-8**.

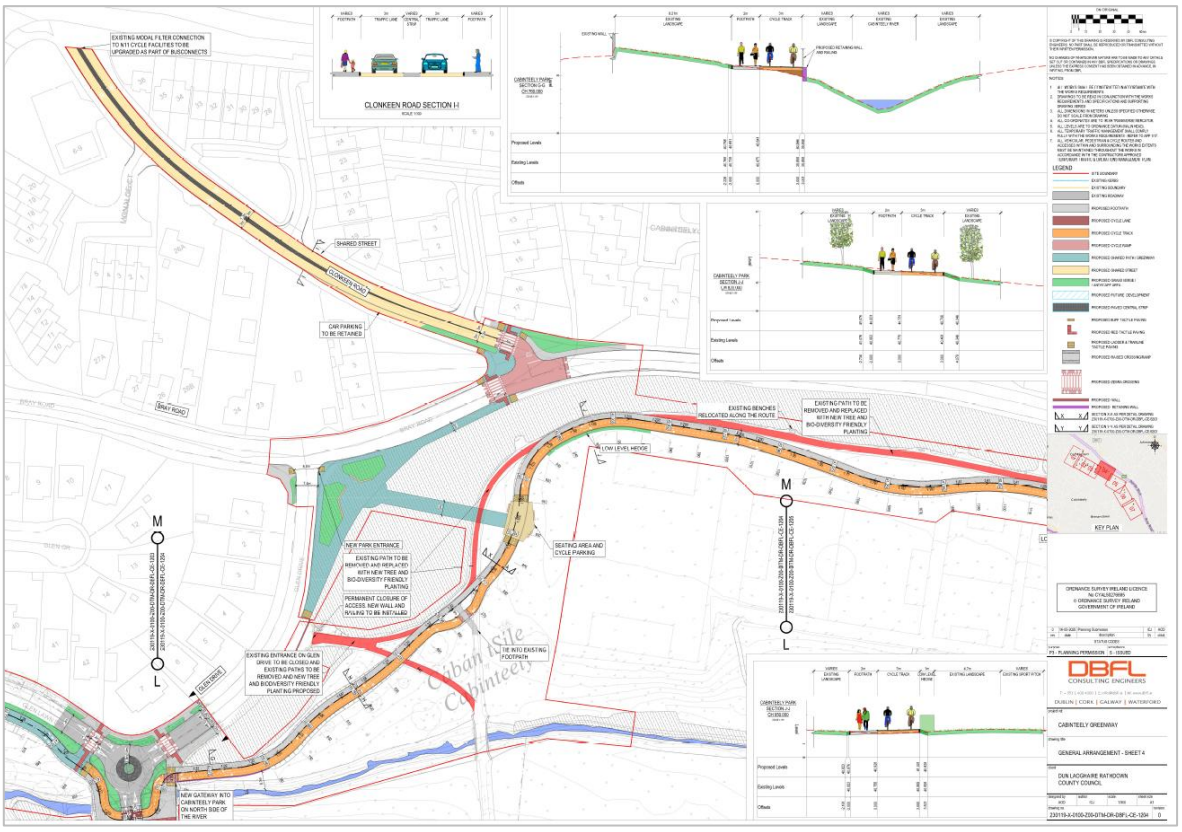


Figure 7-7: Proposed Route - Section C
[DBFL Drawing No 230119-X-0100-Z00-DTM-DR-DBFL-CE-1204 General Arrangement - Sheet 4]

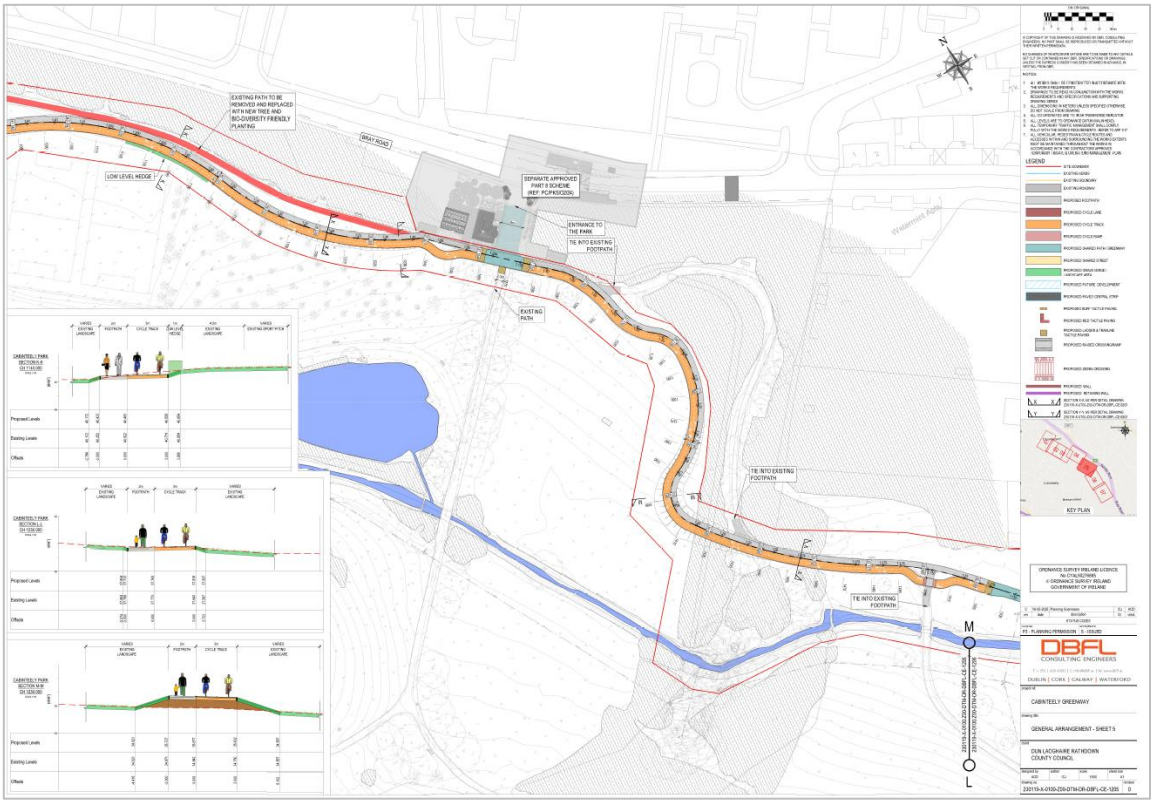


Figure 7-8: Proposed Route Section C
[DBFL Drawing No 230119-X-0100-Z00-DTM-DR-DBFL-CE-1205 General Arrangement - Sheet 5]

At the entrance to the existing sports pavilion (**Figure 7-9**), the route alignment is designed specifically to encourage cyclists to slow down as they approach the park entrance and the pavilion. To note the works to the pavilion and the crossing on Old Bray Road here are part of a separate permitted scheme being delivered by DLRCC.

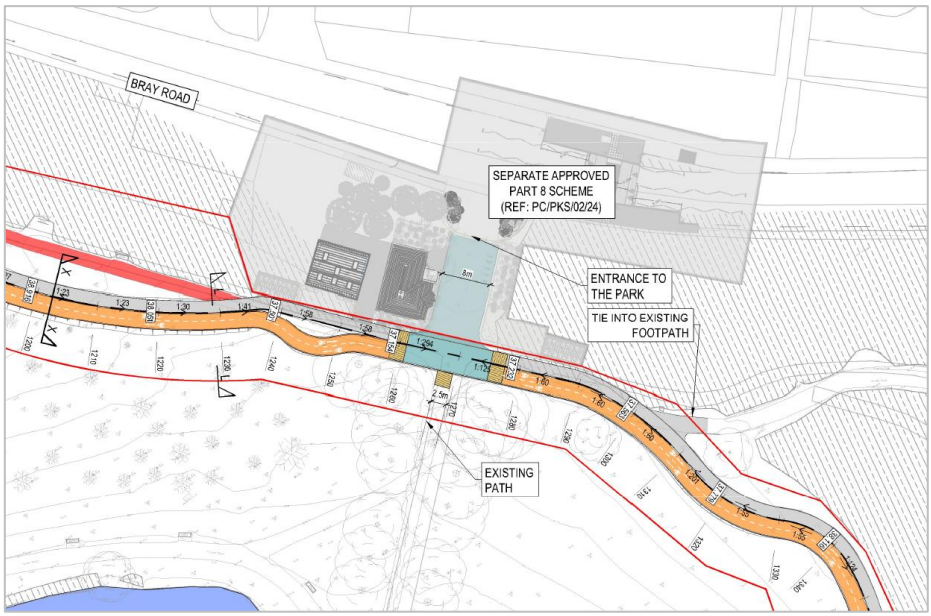


Figure 7-9: Existing sports pavilion entrance

A typical cross-section of the proposed greenway through Cabinteely Park is illustrated in **Figure 7-10** below.

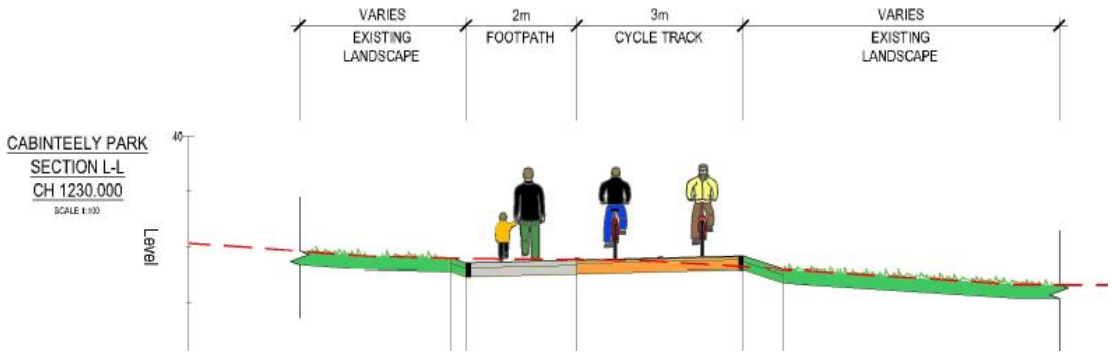


Figure 7-10: Cross Section for proposals on Cabinteely Greenway in Section C

Towards the eastern end of this section, the route alignment passes along the edge of the existing woodland area. This is to minimise any impacts on the existing trees in this area. The route continues east up to the existing park boundary on Brennanstown Road, where another new entrance will be created into the park.

Within this section, the proposed route will be below the minimum 10m separation distance of the stream at the point where the new entrance is created adjacent the Glen Drive roundabout.

7.5 Section D: Brennanstown Road to Cherrywood

Where the path meets Brennanstown Road a new zebra crossing will be provided. To facilitate this safe crossing facility, it is proposed to reconfigure this short section of Brennanstown Road to provide a one-lane two-way shuttle system for traffic. This give-take traffic management arrangement will require motorist to yield to traffic from the opposite direction which has right of way and also yield to crossing pedestrians and cyclists. The section which is reduced to one lane will also be raised, further forcing motorists to reduce their speed as they pass through this crossing point.

At Brennanstown Road the path reverts to a shared path arrangement and extends south-eastwards to the rear of the Carraig Glen properties. At its entry point into the woodland area behind Carraig Glen, the path reduces to 3.0m wide to minimise impacts to this ecologically sensitive area. It then widens back to 4.0m upon exiting the woodland area.

The proposed route passes close to the stone wall located along the southern boundary of the Carraig Glen housing estate. The wall is initially freestanding, adjacent to Brennanstown Road, and transitions into a retaining wall as it extends eastward. Parts of this wall have collapsed and have been damaged by tree roots. It is proposed to reconstruct the wall on a like-for-like basis in a traditional manner following stabilisation of the ground. Details of the assessment of the wall and the proposed mitigation measures are provided in the Heritage Appraisal report, in **Appendix H**.

The path continues along the eastern side of the Cabinteely Stream up to Brennanstown Avenue, where a new combined zebra crossing will be provided. The path proceeds south along the eastern bank of the stream, with a new pedestrian / cyclist bridge planned to facilitate crossing to the western side where it will tie into the Cherrywood Green Routes which extends beneath the Druids Glen road bridge into the Tudor Homes residential scheme, linking to the wider network. The proposals within Section D are detailed below and illustrated in **Figure 7-11** and **Figure 7-12**.

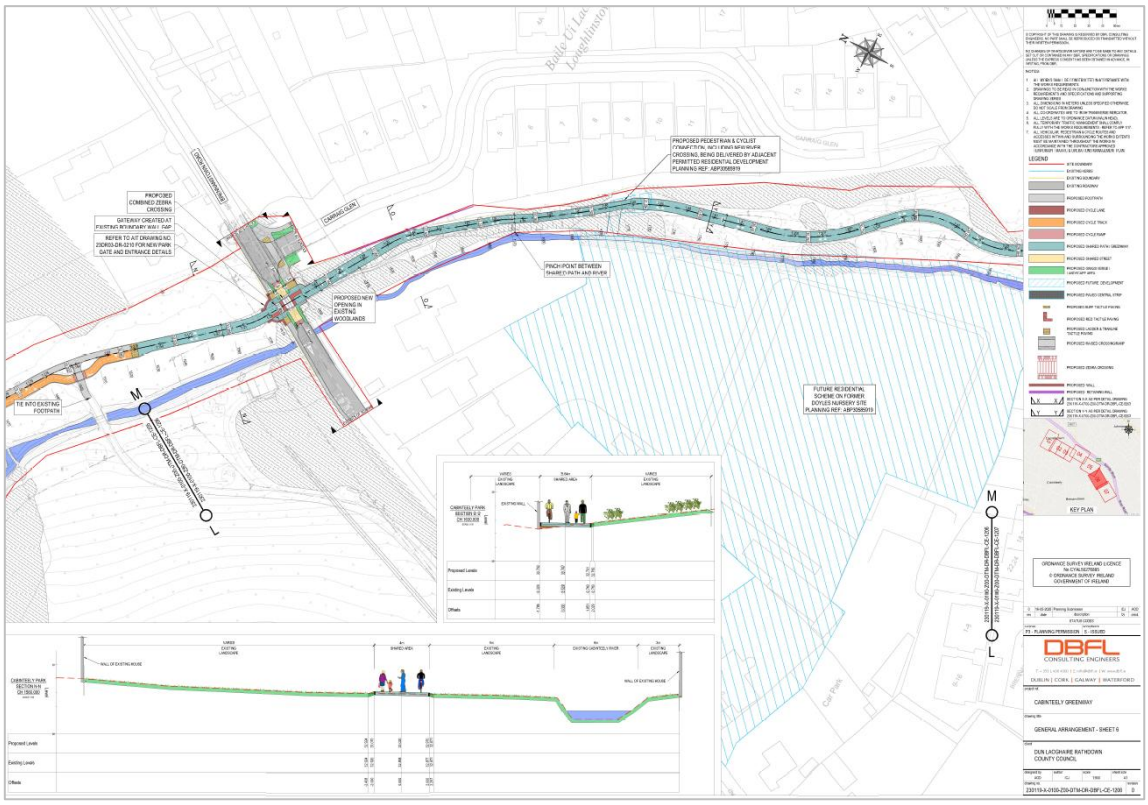


Figure 7-11: Proposed Route - Section D
[DBFL Drawing No 230119-X-0100-Z00-DTM-DR-DBFL-CE-1206 General Arrangement - Sheet 6]

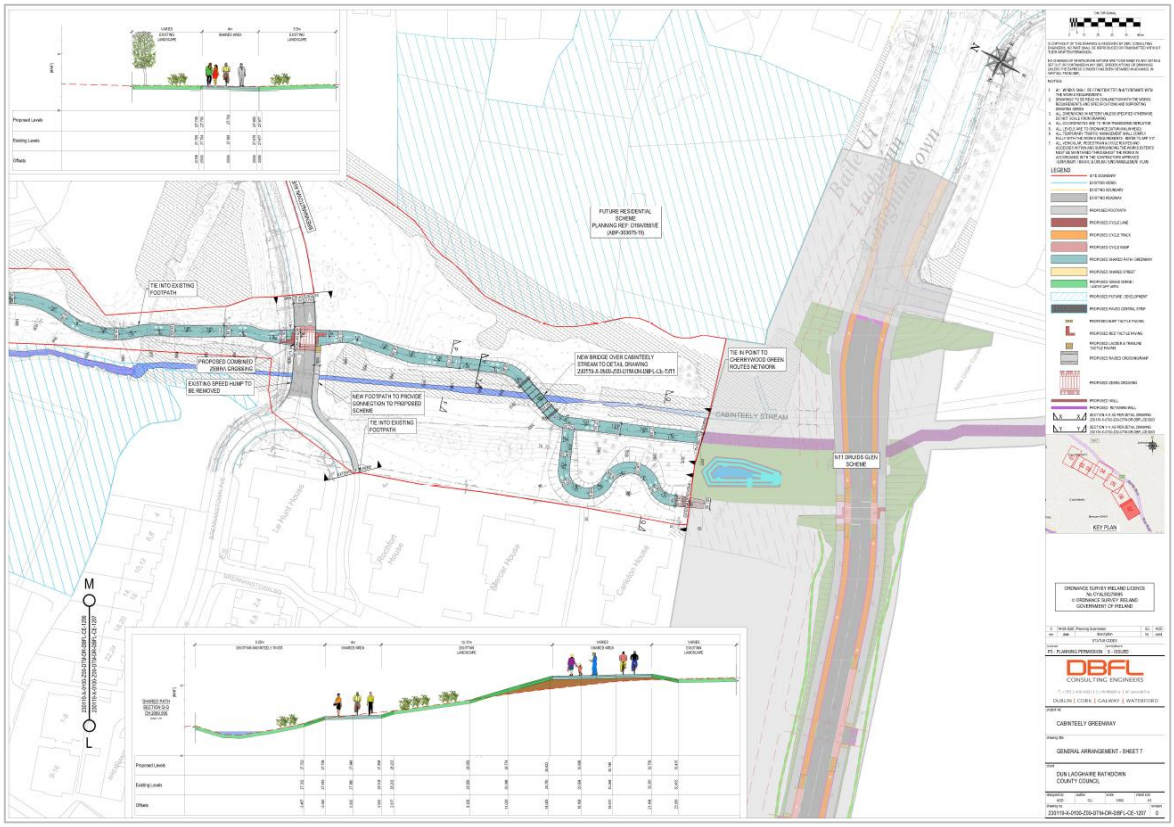


Figure 7-12: Proposed Route - Section D
[DBFL Drawing No. 230119-X-0100-Z00-DTM-DR-DBFL-CE-1207 General Arrangement - Sheet 7]

A typical cross section of the proposals in this section is shown in **Figure 7-13** below.

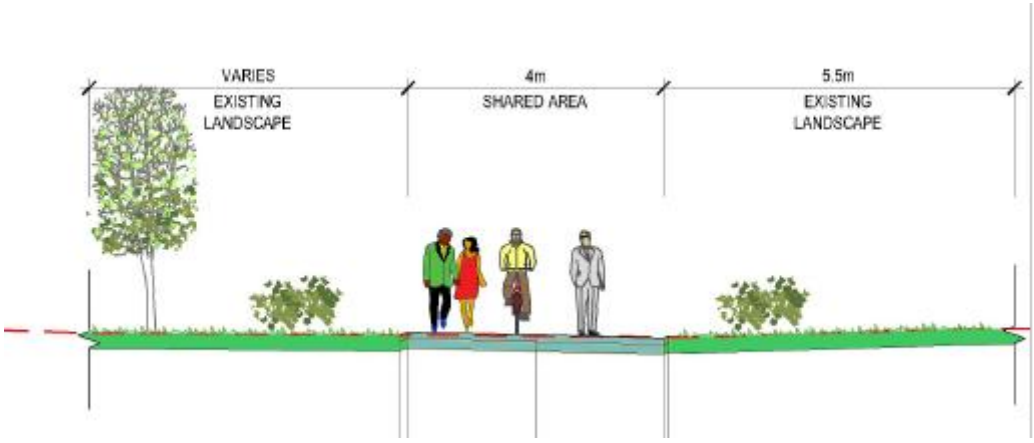


Figure 7-13: Cross Section for proposals on Cabinteely Greenway in Section D

7.6 Horizontal & Vertical Alignment

The vertical alignment of the roads within the scheme area will generally remain consistent with the existing road layout. While the overall horizontal alignment will also generally remain the same, specific adjustments will be made to accommodate the new pedestrian/cyclist infrastructure including dedicated crossing points to enhance safety for vulnerable road users.

The shared path facility in Section A will begin at the junction of Cornelscourt Hill Road and Bray Road, which will be upgraded in accordance with TL506 Signal-Controlled Junction standards. The main change being the provision of upgraded Toucan crossing facilities on each arm of the junction.

Along Glen Lawn Drive the road width and existing kerbline will remain as existing. The Glen Lawn Drive / Glen Drive roundabout has its geometry tightened to help reduce vehicle speeds, with priority for pedestrians and cyclists reinforced through raised crossings.

Clonkeen Road will be converted to a shared street arrangement. This will be achieved through changes to surfacing / markings and therefore existing horizontal and vertical alignment is unchanged. A raised table will be provided at the junction of Clonkeen Road / Bray Road to aid traffic calming and facilitate two zebra crossings.

Where the route crosses Brennanstown Road, the proposed one-lane two-way shuttle system will reduce the carriageway down to 3.0m wide. The length of the shuttle arrangement will also be ramped to promote lower vehicle speeds and further highlight the presence of crossing pedestrians and cyclists.

7.7 Public Lighting

Public lighting along Section A (Cornelscourt Hill Road) will generally remain as existing, whereby existing lighting columns will be located within the verge area between the shared path and carriageway.

Similarly, along Section B (Glen Lawn Drive) it is proposed to generally retain the existing public lighting locations along the southern side of Glen Lawn Drive whereby the lighting columns will be located within the landscaped buffer between the carriageway and the shared path. The existing location of some lighting columns do not provide for adequate spacings, therefore, some columns will be required to be relocated from their original location in order to adhere to and meet the recommended lighting standard.

For Section C (Cabinteely Park), public lighting will be provided along the proposed new segregated path within the park. The proposed lighting design within the park has taken into consideration the sensitive nature of the surrounding park area and has been designed to efficiently mitigate against flora and fauna interference. To minimize potential impacts, wildlife-sensitive lighting techniques have been integrated into the lighting design including the use of a 'warm' LED tone and measures to prevent light-spill outside of the cycle path.

The park will continue to be closed at nighttime, as is currently the situation. Therefore, it is proposed that public lighting along the Cabinteely Park section of the route will be turned off when the park is closed. This will further mitigate any impacts to sensitive flora and fauna within the park area.

All mitigation measures related to public lighting along the Cabinteely Park are detailed in the EcIA report, as presented in **Appendix G.**

Public lighting will also be provided along the shared path in Section D, between Brennanstown Road and Brennanstown Avenue, which runs along the rear of the Carraig Glen properties. The lighting design for this section was carefully planned, taking into account the area's ecological sensitivity. The aim is to minimize light spill, protecting the surrounding habitats, particularly wildlife and the stream. Lighting between chainage 1590 – 1700 will be switched off from 10pm-6am in response to the ecologically sensitive nature along that section. The public lighting proposals continue along the proposed route up to where the route connects to the wider Cherrywood Green Routes Network.

The public lighting proposals and the associated lighting report, prepared by Sabre, for the Cabinteely Greenway scheme are provided in **Appendix J**.

7.8 Landscape and Public Realm

A landscape plan was created as part of the scheme proposals. The project focuses on active mobility while respecting suburban, parkland, and riparian landscape. The project also seeks to enrich the public realm, support local ecology and enhance biodiversity.

The key principles which guided the development of the landscape proposals included the creation of nodal spaces along the route for rest and community benefit, minimising the removal of existing trees, developing nature-based solutions for stormwater management, and adopting a biodiversity-friendly approach to landscape design.

Proposed nodal spaces include resting areas on Cornelscourt Hill Road, a green space between Cornelscourt Hill Road and Glen Lawn Drive, an entrance to Cabinteely Park featuring rain gardens, and a space at the end of the Greenway with benches and a meadow, which preserves existing plantings and supports local biodiversity.

Non-invasive excavation methods will be implemented to protect roots while using load-bearing soil to support long-term root health. Additionally, nature-based solutions are integrated into the design, directing stormwater runoff from the greenway to rain gardens that filter pollutants and enhance water quality.

The planting design has been developed in consultation with project ecologists to ensure it is biodiversity friendly. This includes the planting of native tree species and pollinator-friendly non-native trees, establishing native hedging, riparian planting and sowing rain gardens with seed collected from the established Cabinteely Park meadows. Soft verges will feature spring bulbs to benefit pollinators and promote longer grass management. Certain areas will be maintained as wildflower meadows, while pollinator-friendly ground cover will be implemented in key nodal spaces along the route.

In summary, the proposed landscape design will incorporate various elements that promote accessibility, aesthetic appeal, and ecological sustainability. The public realm will be designed to be accessible for all users, including those with mobility challenges, ensuring that everyone can enjoy the space. The Landscape plans and the Landscape Report prepared by ÁIT Urbanism + Landscape can be found in **Appendix K**.

8 Surface Water Drainage Strategy

8.1 Existing Drainage

The site has a slight gradient falling from northwest to southeast. There is an existing surface water network with several road gullies that drain the existing roads and paths. **Figure 8-1** below shows existing network around site extents.

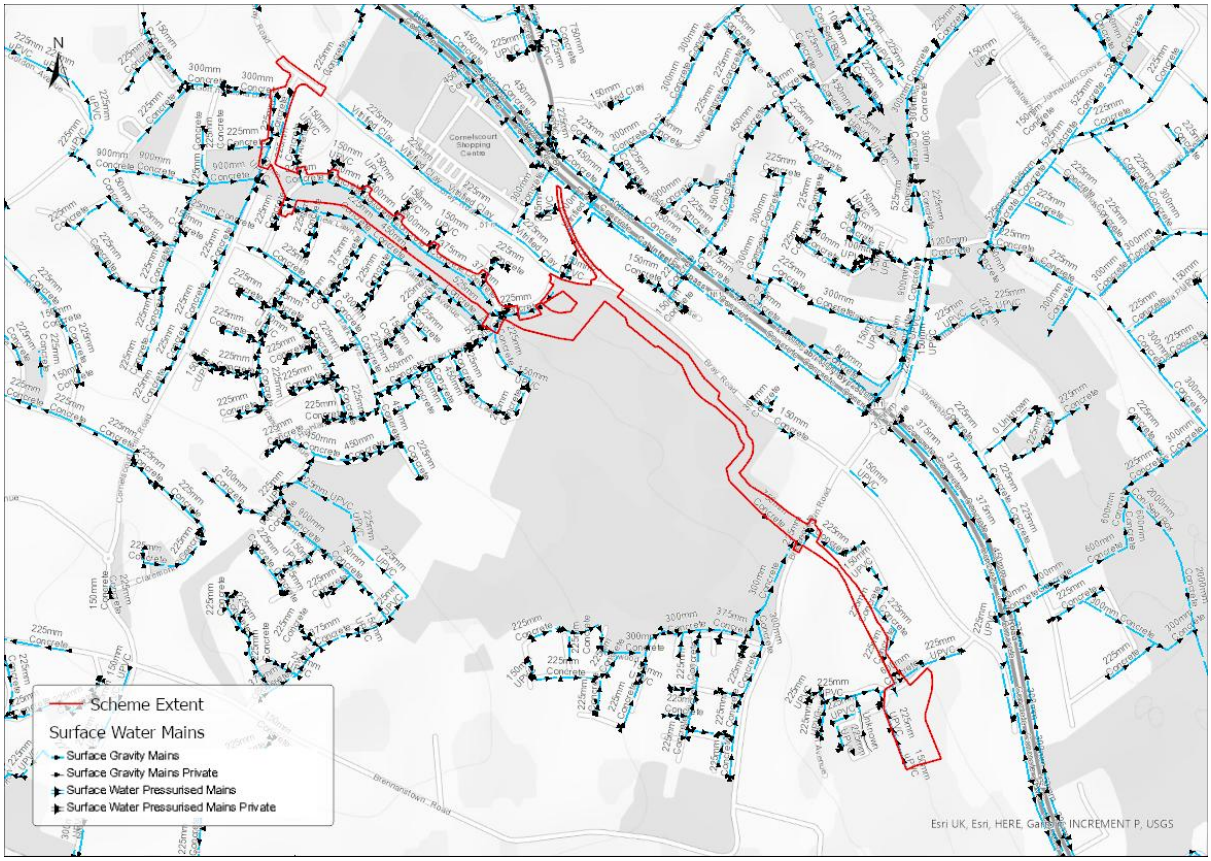


Figure 8-1: Existing Surface Water Network Surrounding the Site

An existing stream runs through Cabinteely Park from northwest to southeast. This stream varies in width and gradient but is the primary source of draining surface water in the park. This steam drains southerly into Loughlinstown river and then eventually Shanganagh river before discharging into the Irish sea.

The proposed works part of this application will not contribute to additional runoff into the existing stormwater network. All drainage proposals are based on natural infiltration.

8.2 SuDS Features

In accordance with the GDSDS it is proposed to use Sustainable Drainage Systems (SuDS) for managing stormwater for the proposed development. The aim of the SuDS strategy for the site will be to;

- Reduce storm-water runoff.
- Reduce pollution impact.
- Replicate the natural characteristics of rainfall runoff for the site.
- Recharge the groundwater profile

The Surface Water Management Plan agreed with DLRCC includes several potential SuDS features to be implemented within the proposed greenway route. The following SuDS features are incorporated into the design for the subject site:

Bioretention Areas/ Rain Gardens

Where possible, Bioretention / Rain Gardens have been implemented into the design where challenging gradients are presented within Cabinteely Park, this is to slow down the surface water runoff and is used as an attenuation method.

The Bioretention/ Rain Gardens are implemented as an additional precautionary measure which can also create a habitat to wildlife in surrounding areas. Surface water generated from the adjacent roads and footpaths will discharge directly to these SuDS features and surrounding landscape.

Water Quality - Surface water runoff from the adjacent roads/paths is conveyed to the bioretention area which routes any surface water that has not infiltrated naturally into the ground or absorbed by the vegetation, to the surface water pipe network to be attenuated in the regional attenuation basins.

The build-up of the bioretention consists of a filter medium, a transition layer and a drainage layer. The filter medium will filter out pollutants and provides natural surface water flow control. The transition layer prevents fine filter medium from entering the drainage layer. The drainage layer then infiltrates into the ground.

Water Quantity - The bioretention area build-up contributes to the local surface water storage volume, serving as a natural surface water source control.

Biodiversity - The bioretention areas will contribute to the biodiversity of the proposed development by adding habitat for wildlife. See the landscape architect drawings for further details on specific plants proposed in the bioretention areas.

Amenity - The bioretention areas are generally proposed along roads and paths to receive runoff from adjacent roads/paths and will contribute to aesthetics of the streetscape. Local bioretention areas are also proposed within the detention basins to receive surface water runoff from nearby roads to create local "wet" areas. This will encourage the growth of plants proposed in these areas, further adding to the biodiversity of the development and create enjoyable and aesthetically pleasing public open space areas.

Climate Change

Rainfall values for the proposed development are sourced from Met Eireann to calculate the FSR input hydrograph for the drainage design as required by the GDSDS. The design rainfall intensities were increased by a factor of 20% to take account of climate change, as required by the GDSDS.

8.3 Flood Risk Assessment

This section summarizes the flood risk assessment conducted for the Cabinteely Greenway project. The Stage 1 Flood Risk Identification found that the site is likely to be affected by fluvial flooding, as noted in the DLRCC SFRA and County Development Plan. Based on "The Planning System and Flood Risk Management," a vulnerability classification of 'Water Compatible' was assigned.

In Stage 2, the Initial Flood Assessment categorized the proposed project as Flood Zone A, confirming that no further justification was needed after the successful classification in Stage 1.

Stage 3 involved a Detailed Flood Risk Assessment for the proposed bridge, which demonstrated that if the underside of the bridge deck (28.4 m) is at least 1 m above the water level (27.34 m), the likelihood of flooding is minimal, even during severe storm events. The full Flood Risk Assessment can be found in **Appendix D**.

9 Internal DLRCC Department Consultation

9.1 Introduction

This section of the report presents the comments and feedback received from various internal departments within Dún Laoghaire-Rathdown County Council (DLRCC) regarding the proposed preliminary design for the Cabinteely Greenway Scheme.

As part of the internal consultation process, the departments listed below were contacted and given the opportunity to review and provide technical observations. The responses received are compiled and summarised below, reflecting the considerations and recommendations identified by each consulted department.

9.2 Department Consultation Feedback

The following departments were consulted as part of this scheme:

- Architects Department
- Biodiversity Officer
- Capital Projects
- Community Climate Action Officer
- Community Development & Social Inclusion
- Climate Action Officer
- Environment & Climate Change
- Finance
- Forward Planning Infrastructure
- Housing
- Infrastructure & Climate Change
- Parks
- Planning Department
- Panning Secretariat
- Property Management
- Road Maintenance /Public Lighting / Cleansing
- Traffic
- Transportation Planning
- Water & Drainage
- Environmental Enforcement
- Development Agency Project Team (DAPT -Cherrywood)

9.2.1 Architects Department

No Objections from Architects Department.

9.2.2 Biodiversity Officer

Comment: Permanent fencing will be provided along the riparian edge of the stream to protect it from disturbance. The location, design and details of the fencing will be submitted at least 3 weeks prior to the commencement of the development or enabling works, for agreement with DLR Biodiversity Officer and DLR Parks section and will give sufficient distance from the route for the riparian area to remain undisturbed as per best practice.

Response: Noted. The location, design and details of the fencing will be discussed and agreed with the DLR Biodiversity Officer and Parks department during detailed design stage.

Comment: A site-specific Construction and Environmental Management Plan (CEMP) will be submitted for agreement with DLR Biodiversity Officer, at least 5 weeks prior to the commencement of the proposed project including enabling works. It is requested that the details of all biodiversity measures including drawings and site-specific details, are included in the CEMP, with input by a suitably qualified ecologist.

Response: Noted.

Comment: The CEMP will include the following role for an Ecological Clerk of Works (EcOW). This role will be undertaken by a suitably qualified ecologist, to monitor the construction phase:

The primary responsibilities of the EcOW shall be to:

- Act as the contact for DLR/DLR Active Travel and agree the frequency and number of site inspections and monitoring programme for the implementation of the biodiversity related mitigation of the Biodiversity Mitigation and Monitoring Programme as per item 3 above, for agreement with DLR Biodiversity Officer
- Ensure compliance with all biodiversity related measures outlined in all of the Part 8 documents and the Biodiversity Mitigation and Monitoring Programme
- Request relevant records and documentation from the Site Manager (SM) where necessary
- Attend routine meetings with the Site Manager (SM)
- Keep detailed records of any ecological incidents and the remedies required and implemented. Report these to the SM, DLR Biodiversity Officer and if relevant to NPWS

- The EcOW shall produce the staged monitoring reports in agreement with DLR on the implementation of all biodiversity related measures outlined in the Part 8 and the Biodiversity Mitigation and Monitoring Programme; The EcOW shall submit these directly to DLR/DLR Active Travel and DLR Biodiversity Officer. Any remedies required to be undertaken by DLR/DLR Active Travel or their contractor, as a result of monitoring and advice of the ecologist or specialist/s will be implemented and reported to the planning authority
- The EcOW shall also act as overall technical advisor to the SM regarding the implementation of all biodiversity related measures outlined in the Part 8 and a Biodiversity Mitigation and Monitoring Programme.
-

Response: Noted. The CEMP at construction stage will include the requirement to provide an Ecological Clerk of Works (EcOW) fulfilling the above functions.

Comment: An Invasive species plan will be developed including a treatment programme, biosecurity protocols and any other requirements for the project. This plan which will be completed by an invasive specialist will be submitted at least 5 weeks prior to the commencement of the proposed project including enabling works, to DLR Biodiversity Officer, Parks and Active Travel sections. This plan will also be incorporated into the CEMP where relevant including biosecurity measures.

Response: The requirement for the Invasive Species Plan, will contain the requirement for a competent invasive specialist, detailing the requirement for treatment programme, biosecurity protocols and any additional works required. The plan will be shared with DLR Biodiversity Officer, Parks and Active Travel sections at least 5 weeks before the commencement of works.
Once the plan is issue and agreed, the final version of the plan will form part of the CEMP.

Comment: A monitoring programme and report will be provided from the specialist/s to the DLR Biodiversity Officer, after the installation of the lighting, at the proposed development, confirming that it is operating according to their satisfaction and specification including the timing of the lighting, as outlined in the EcIA and Lighting Plan.

Response: Noted. A monitoring programme and report will be provided from the specialist/s to the DLR Biodiversity Officer, after the installation of the public lighting.

Comment: No vegetation clearance will take place during the bird breeding season (March 1st to August 31st).

Response: Noted.

Comment: A Fisheries Management Plan for agreement with Inland Fisheries will be submitted and will be incorporated into the CEMP where relevant.

Response: A Fisheries Management Plan will be submitted to Inland Fisheries and incorporated into the CEMP prior to construction.

Comment: It is requested that this DLR Cabinteely Greenway project funds the development of a fish barrier mitigation study by a fisheries specialist and at least one barrier mitigation project, for the Cabinteely stream in consultation with DLR Biodiversity Officer, Parks and Inland Fisheries.

Response: A fish barrier mitigation study and at least one barrier mitigation project will be incorporated into the project in consultation with the DLR Biodiversity Officer.

Comment: Details will be provided, of how the route along the stream will be constructed to ensure the water permeability and to allow infiltration of rainwater and stormwater to ground and groundwater that feeds the stream during Operation Phase.

Response: Noted. Specification of design and construction methods will be discussed and agreed with the DLR Biodiversity Officer during detailed design stage.

Comment: Prior to the commencement of development, the contractor or DLR Active Travel, shall engage the services of a suitably qualified ecologist as the Project Ecologist on behalf of DLR, from the commencement of construction and for the duration of the project including monitoring requirements. The appointment and the name of the Project Ecologist will be provided by the contractor to DLR, for agreement with DLR Biodiversity Officer, at least 3 weeks prior to the commencement of the development or enabling works. The Project Ecologist shall ensure the implementation of the biodiversity related mitigation measures and recommendations in the submitted Part 8 documents including the EcIA and measures, if any, arising from the comments above. It is also required that specialist ecologists are retained as identified above for specific roles in relation to protected species and/or as requested by DLR Biodiversity Officer. The Project Ecologist is required to cover all aspects and phases of the project including enabling works, site clearances, construction and operational phases relevant to biodiversity.

Response: Noted. A Project Ecologist will be appointed in agreement with the DLR Biodiversity Officer prior to construction.

Comment: A Biodiversity Mitigation and Monitoring Programme will be provided by the contractor or DLR Active Travel at least 3 weeks prior to the commencement of the development or enabling works, on behalf of DLR including for all phases of the project including the Construction Environment Management Plan (CEMP) for agreement with the DLR Biodiversity Officer.

The Biodiversity Mitigation and Monitoring Programme will outline all of the biodiversity related mitigation measures for all phases of the development including clearance works, construction and operation of the development and will include all biodiversity measures of the EcIA, the CEMP (to be submitted), IAS Plan (to be submitted), Landscape Plan and Part 8 documents and measures, if any, arising from Items above. The programme will detail the persons responsible for each biodiversity mitigation measure, timelines of implementation and reporting, by a suitably qualified ecologist directly to DLR Biodiversity Officer and DLR Active Travel.

Response: Noted. A Biodiversity Mitigation and Monitoring Programme will be prepared and submitted to the DLR Biodiversity Officer prior to the commencement of construction.

9.2.3 Capital Projects

Comment: Increased pitch use has put pressure on parking and facilities. Suggest restricting football activity, adding low fencing to stop stray balls, and more yellow lines to control parking.

Response: The scheme aims to reduce car dependency by improving walking and cycling access to recreational facilities, which will lower parking demand in the area. A low-level hedgerow will be installed at key points to minimise potential conflicts between pitch activity and users of the segregated route within the park.

Comment: Suggested Toucan Crossing at Glen Drive Roundabout to improve pedestrian and cyclist access to the Greenway.

Response: The proposed design is in accordance with the Cycle Design Manual, the roundabout will be redesigned with raised zebra crossings on all arms and geometry changes to reduce vehicle speeds and reinforce priority for pedestrians and cyclists.

Comment: Suggested Toucan Crossing at Brennanstown Road.

Response: The proposed zebra crossing is in accordance with the Cycle Design Manual requirements, based on the forecast number of users and traffic volumes and speeds on Brennanstown Road. The zebra crossing with a one-lane, two-way shuttle system at the Brennanstown Road crossing will slow traffic and prioritise pedestrian and cyclist safety, whilst maintaining the efficient two-way flow for vehicles.

Comment: Concerns about security if the park is open 24 hours.

Response: The park will continue to be closed at nighttime, as is currently the situation. All existing / new entrance points will have gates to ensure the park can be securely closed.

9.2.4 Community Climate Action Officer

Comment: Suggest involving local community groups in tree and biodiversity planting outside the direct SuDS components.

Response: The suggestion to involve local community groups in the planting scheme is noted and will be incorporated into the construction phase.

9.2.5 Community Development & Social Inclusion

No Objections from Community Development & Social Inclusion Department.

9.2.6 Climate Action Officer

No Objections from Climate Action Officer.

9.2.7 Environment & Climate Change

No Objections from Environment & Climate Change Department.

9.2.8 Finance

No Objections from Finance Department.

9.2.9 Forward Planning Infrastructure

No Objections from Planning Infrastructure Department.

9.2.10 Housing

No Objections from Housing Department.

9.2.11 Infrastructure & Climate Change

No Objections from Infrastructural & Climate Change Department.

9.2.12 Parks

Comment: Observed that new banks and built-up ground must be gently graded into the park landscape, with a maximum slope of 1:4.

Response: Noted.

Comment: All excavation or trenching work for public lighting ducts must be closely supervised in the presence of an Arborist.

Response: Noted.

Comment: The 5m wide pedestrian/cycle path is to be finished with the same resin-bound aggregate surface as Blackrock Park.

Response: Specification of exact materials and finishes will be discussed and agreed with Parks department at detailed design stage, but noted that the same resin-bound aggregate surface for the section through Cabinteely Park should be consistent with that used in Blackrock Park.

Comment: Noted that all metalwork in the park and along the boundary (gates, railings, seating, bike stands, signage, bollards, lighting columns) is to be finished in RAL 5014.

Response: Noted. Specification of exact materials and finishes will be discussed and agreed with the Parks department during detailed design stage.

Comment: All entrances will be gated and closed at night – exact detail of same to be agreed at detail design and prior to commencement.

Response: The park will continue to be closed at nighttime, as is currently the situation. All new / existing entrances will be gated. Specification of exact details will be discussed and agreed with the Parks department during detailed design.

Comment: Tree planting species, specifications, and final planting design are to be agreed with DLR Parks.

Response: Noted. Specification of exact details will be discussed and agreed with the Parks department during detailed design.

Comment: Noted that Cellweb is to be used extensively throughout the scheme, all planting is to be agreed during the detailed design stage and prior to commencement, and an Arborist is to be retained for the full duration of the scheme, including regular site visits during construction to

ensure proper tree root protection, oversee excavation close to trees, and monitor the correct installation of the Cellweb.

Response: Noted. Planting will be discussed and agreed during detailed design stage and Arborist will be retained for construction phase.

Comment: Each bench location is to provide a 1m adjacent space to accommodate a wheelchair or buggy.

Response: Adjacent space will be provided at each bench location to accommodate a wheelchair or buggy.

Comment: At the main entrance (Bray Road/Glen Drive), larger granite paving will be used in thoroughfare areas with granite setts at thresholds and landings. To be agreed before commencement.

Response: Noted. Specification of exact materials and finishes will be discussed and agreed with Parks department at detail design stage.

Comment: New route to the east of the main park entrance snakes around the existing woodland. It is noted that an embankment and more extensive earthworks will be required to achieve the correct falls. All banks and built-up ground to be graded gently into park landscape to eliminate any abrupt changes in the park topography.

Response: Noted.

Comment: There is a path created by walkers from Brenanstown open space (culmination of the greenway) along river - Giant Hogweed has recently been treated in this open space at this point - This will need to be monitored/treated in the site if it comes back.

Response: Noted.

9.2.13 Planning Department

Comment: Suggestion to include clear statement in the Planning Report on how the proposal meets Zoning Objective F, noting it may be considered ancillary to open space provision.

Response: Statement has been included in the Planning Report.

9.2.14 Planning Secretariat

Same comment and response as above.

9.2.15 Property Management

No Objections from Property Management Department.

9.2.16 Road Maintenance / Public Lighting / Cleansing

Comment: Suggested adding another gully on Old Bray Road at the Cornelscourt Hill junction, between the two proposed gullies, as the distance shown on the drawing seems excessive.

Response: An additional gully will be considered and incorporated as required during the detailed design stage.

9.2.17 Traffic

Comment: Requires that, prior to construction, traffic signal design, the road signage and marking design (noting potential legislative changes), and the Construction Traffic Management Plan to be agreed with the Traffic and Road Safety Section.

Response: Noted. The necessary details will be submitted to and agreed with the Traffic and Road Safety Section prior to construction.

Comments on the General Arrangement Drawings:

(1) **Bray Road** – Consider providing protected merges where cyclists transition from off-road to on-road.

Response: Marked cycle lanes are provided at the points where cyclists transition from the segregated, off-road facilities back on road. Given the physical space constraints, there is not sufficient room to provide fully protected merges. Nonetheless, the marked cycle lanes will highlight the presence of cyclists merging to motorists.

(2) **Cornelscourt Hill** – Consider reducing the 4.5 m-wide traffic lanes, possibly with the installation of painted central islands (*ghost islands*).

Response: Approaching the junction of Cornelscourt Hill and Bray Road, it is proposed to reduce the traffic lane widths to 3.25 m and to introduce a painted central island (ghost island) to improve road layout and safety. Further south on Cornelscourt Hill Road, the central ghost island is extended as far as feasible, providing 4.0m wide traffic lanes.

(3) **Cornelscourt Hill**: Consider a radius for northbound cyclist to get to the Toucan crossing.

Response: Radius increased for northbound cyclists using short cycle track to access the Toucan crossing.

(4) **Cornelscourt Hill:** A high wall next to the greenway creates a potential conflict with pedestrians; low planting could help reduce this risk.

Response: The alignment of the path adjacent the wall where it turns towards Glen Lawn Drive is restricted by the existing boundary wall on the north side and existing trees / tree root protection areas to the south side. Appropriate signing and marking will be implemented to encourage users to keep to the left and thereby minimise potential conflicts with oncoming users.

(5) **Glen Lawn Drive**: Query on the location of the courtesy crossing at Glen Lawn Drive, noting it aligns with the Glen Close junction radius.

Response: The junction radius at Glen Close has been reduced to improve alignment and deliver a safe, accessible crossing linking the north and south sides of Glen Lawn Drive for pedestrians.

(6) **Glen Lawn Drive**: There is no continuous footpath connection beyond the Cabinteely stream bridge to Vale View Avenue.

Response: A footpath linking the scheme to the Cabinteely stream bridge and Vale View Avenue is not proposed in response to concerns from the local community regarding impacts to the existing green space, wooded area and stream.

(7) **Glen Lawn Drive Roundabout**: Suggested extending the mini-roundabout shared area to enable Greenway access from Glen Drive (northwest approach).

Response: Layout has been updated to include shared area on the northeast corner as suggested.

(8) **Clonkeen Road**: Clarification required regarding creation of 'Shared Street' on Clonkeen Road, noting that it appears to function more as a 'Slow Zone' than as a shared street.

Response: There 'Shared Street' term applied is the same as a cycle street or mixed street in accordance with the Cycle Design Manual. In this context, the shared street allows cyclists to share the carriageway with motor traffic, with cyclists having priority, while retaining footpaths for pedestrians. The design complies with the recommended layout, dimensions, and safety provisions described in the manual.

(9) **Cabinteely Park New Entrance:** Query regarding closing the Glen Drive entrance to Cabinteely Park and opening a new one at Bray Road junction, would another (smaller) entrance at Clonkeen Road be useful to improve visibility and accessibility of the Park.

Response: The creation of a new park entrance directly opposite, or closer to the Clonkeen Road junction, was investigated. However, the high solid stone park boundary wall along here is

protected, therefore to minimise impacts, the new entrance was proposed further west adjacent the Old Bray Road / Glen Drive junction where the wall is much shorter.

(10) **Cabinteely Park:** The chicane at Ch1240-1250 is to slow bikes down on approach to the shared area, is it possible to get a similar chicane in the opposite direction at Ch1290-1280).

Response: It is not possible to include another chicane in the opposite direction at this location without impacting at least two large mature trees. Nevertheless, cyclists travelling in this direction will be coming from an uphill direction which would naturally help to reduce cyclist speeds.

(11) **Brennanstown road**: The Brennanstown Road crossing is the element of the design which would have the greatest impact on motorised traffic. The analysis in the Traffic Impact Assessment is convincing for current traffic flows, consideration should be given to traffic from future residential development. Options of keeping two-way traffic and signalising the Greenway crossing are suggested for consideration.

Response: In terms of the analysis and assessment for future development on Brennanstown Road which may increase traffic flows in the area, it is noted that DLR are currently undertaking a study of the wider Brennanstown Road and developing suitable measures to improve facilities for vulnerable road users as well as maintaining suitable provision for motorised traffic. The proposed shuttle system and zebra crossing facility will be incorporated into this study and subsequent scheme.

In terms of retaining two way flow of vehicles at this location while providing a controlled crossing, this was considered as part of the options development. However, to provide the required visibility splays at the crossing point would have resulted in removing substantial sections of the existing park boundary wall which is protected. By narrowing the road to one lane, enables the crossing to come out from the boundary wall and the required visibility splays be provided without impacting the wall.

Similarly, a controlled Toucan crossing was considered as part of the options development however the combined zebra is in accordance with the Cycle Design Manual requirements considering that vehicle speeds will be reduced at this point as the shuttle / crossing is raised and also the vehicle volumes going through the crossing will be low at any given time as it is reduced to one lane.

Furthermore, the zebra crossing enables a more efficient operation of the shuttle system for traffic. If the crossing was to be signalised, then it would mean bringing the whole shuttle system,

including Carrig Glen, into a signalised junction operation. This would increase delays for all road users compared to the proposed arrangement. The zebra crossing means that traffic will be able to proceed through the shuttle without delay if there is no one crossing or opposing traffic. Whereas under traffic signal operation, traffic would have to wait for a green signal even if there was no traffic or people using the crossing.

9.2.18 Transportation Planning

Comment: Transportation Planning has no objection, provided that:

(1) Coordination with Transport Planning takes place regarding early-stage proposals for Brennanstown Road and surrounding connections.

(2) Along Section B, dishings allow cyclists to access the shared path onto Glen Lawn Drive, but the verge restricts access elsewhere except at these points and the priority crossing. It is suggested to consider provisions for pedestrians as well, with slight adjustments to locations and the addition of tactile paving to accommodate all users.

Response: A raised courtesy crossing is provided at the junction of Glen Close and Glen Lawn Drive to provide suitable access to the proposed shared path half way along Glen Lawn Drive. There are also connections either end of Glen Lawn Drive in the form of raised zebra crossings which all connect to the footpath on the northern side. The design includes tactile paving at all new crossing locations to accommodate pedestrians and ensure accessibility for all users.

9.2.19 Water and Drainage

Comment: Drainage Planning has no objection, provided that: (1) detailed construction drawings of the headwall are submitted for approval before works begin; and (2) construction accounts for the location of existing surface water and foul drainage networks, ensuring no negative impact on these assets.

Response: Noted. Detailed construction drawings of the relevant details will be submitted to and agreed with the Drainage team prior to construction.

9.2.20 Environment Enforcement

Comment: If planning permission is sought, Construction Management Plans should be submitted in line with the County Development Plan 2022–2028.

Response: The Construction Management Plan will be prepared at detailed design stage and submitted for approval prior to commencing construction.

Comment: Provision should be made for additional public bins due to increased pedestrian and cyclist traffic, and the environmental impact of future developments should be considered, particularly around Bride's Glen Road, which contains many greenfield sites.

Response: Noted. To be addressed at detailed design stage.

9.2.21 Development Agency Project Team (DAPT- Cherrywood)

Comment: To remove the path detailed outside the project red line boundary from the Part 8 drawings and to consider the possibility of stepped access to the north of the Druid's Glen Road.

Response: The path outside of the project Red Line boundary has been removed from the Part 8 drawings. The stepped access to the north of the Druid's Glen Road was investigated and was deemed undesirable.

10 Environmental Assessment & Planning Report

10.1 Introduction

This section of the report provides a summary of the independent reports and assessments undertaken with regard to Ecology, Environmental and Heritage conditions, a Crime Prevention Through Environmental Design (CPTED) review undertaken by An Garda Síochána on the proposed scheme and a Planning Report.

The external reports are provided in full in the appendices of this report with the EIA and AA Screening Report in **Appendix E** and **Appendix F** respectively, the EcIA (Ecological Impact Assessment Report) in **Appendix G** and the Heritage Appraisal Report in **Appendix H.** The CPTED Report is Confidential but a summary of the key recommendations are provided in this section of the report.

The Planning Report is provided in **Appendix L**. Additionally, the Arboricultural Assessment and Tree Survey is provided in **Appendix C**. The Road Safety Audit carried out on the proposed scheme is provided in **Appendix M** and the Section 50 Grant from the OPW in relation to the proposed bridge construction is provided in **Appendix N**.

10.2 Summary of EIA & AA Screening Report

10.2.1 EIA Screening

The Environmental Impact Assessment (EIA) screening report has been prepared by MacCabe Durney Barnes on behalf of Dún Laoghaire-Rathdown County Council (the applicant) in relation to the Cabinteely Greenway Scheme. The aim of the EIA screening report is to assess the potential environmental impacts of the proposed scheme. The EIA screening assesses the proposed scheme with reference to the relevant EIA legislation including the EIA Directive, Planning and Development Regulations, the Roads Act and Regulations. The methodology has particular regard to the '3-Step' assessment process set out in the Office of the Planning Regulator (OPR) Environmental Impact Assessment Screening Practice Note PN02 (June 2021). Regard is also had to European and National guidance documents.

The consideration of potential impacts covers all significant direct, indirect and secondary impacts as relevant having regard to the criteria for determining whether development listed in part 2 of schedule 5 should be subject to an environmental impact assessment under Schedule 7 of the Planning and Development Regulations, 2001 to 2021.

Having regard to the proposed development which is considered not of a nature specified in either Part 1 or Part 2 of Schedule 5 or considered as a development type subject to mandatory EIAR under the Roads Acts,[1] the criteria in Schedule 7, the information provided in accordance with Schedule 7A of the Planning and Development Regulations 2001, as amended, and the following:

- The scale, nature and location of the proposed impacts
- The potential impacts and proposed mitigation measures
- The results of the any other relevant assessments of the effects on the environment

The conclusions of the EIA indicate that the construction stage of the proposed scheme is unlikely to cause significant environmental impacts. During the operational phase, the impacts on visual and landscape characteristics are considered positive, and the environmental effects are neutral to positive. However, the EIA Screening Report noted that the expected increase in route usage could result in a slight negative impact, particularly in terms of noise.

It is considered that the proposed development, by itself or in combination with other projects, would not be likely to have significant effects on the environment and it is recommended that an **Environmental Impact Assessment Report is not required.**

10.2.2 AA Screening

The Screening for Appropriate Assessment report has been prepared by Flynn Furney Environmental Consultants on behalf of Dún Laoghaire-Rathdown County Council (DLRCC, the applicant), regarding the Cabinteely Greenway Scheme.

Screening for AA is required under Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive). The AA Screening Report was prepared in accordance with the European Commission's Assessment of Plans and Projects Significantly affecting Natura 2000 Sites: Methodological Guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC (EC, 2021) and Managing Natura 2000 Sites: the provisions of Article 6 of the Habitats Directive 92/43/EEC (EC, 2018) as well as the Department of the Environment's Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (DoEHLG, 2010).

It was concluded that the proposed development, either individually or in combination with other plans or projects, and without relying on any mitigation measures, is not likely to have a significant effect on any European Sites, in view of each sites' conservation objectives, and thus that a **Stage Two Appropriate Assessment is not required**.

10.3 Summary of Ecological Impact Assessment Report

The Ecological Impact Assessment (EcIA) has been prepared by Flynn Furney Environmental Consultants on behalf of Dún Laoghaire-Rathdown County Council (the applicant), in relation to the Cabinteely Greenway Scheme. The EcIA investigated the potential impacts of the development on key ecological features, including Annex I habitats and Annex II species un the EU Habitats Directive, Annex I bird species under the EU Birds Directive and ecological corridors or "stepping stones" as outlined in Annex 10 of the Habitats Directive. Locally important habitats and species were also considered.

A number of appropriate mitigating and enhancement measures are identified in the EcIA to counteract any minor effects on biodiversity as a result of the proposed development. Furthermore, the Construction Environmental Management Plan (CEMP) for the sheme will include provisions for an Ecological Clerk of Works (EcOW). The full EcIA report, including the mitigation measures for habitats and fauna, is provided in **Appendix G**.

10.4 Summary of Heritage Appraisal Report

The Heritage Appraisal report has been prepared by John McLaughlin Architects on behalf of DLRCC. The report examines the potential impact on the archaeological, architectural, and historical resources related to the proposed Cabinteely Greenway.

The greenway crosses the lands that were formerly part of the Cabinteely House demesne and the lands to the south of the demesne. Today, the western part of the Cabinteely House Demesne is an established residential area with the stream forming part of its open space. Cabinteely House, its gate lodge and entrances remain as focal points in Cabinteely Park that retains much of its character as a designed landscape. The lands to the south of Cabinteely Park have an informal wooded character and have no historic structures of note.

The proposed greenway development is considerate of the heritage of the area and has been designed to avoid potential negative impact on historic walls and mature trees which form part of the character of the Castle Park Demesne. The proposed relocation of the eastern entrance of the demesne involves alterations to the boundary wall constructed at the end of the 20th century and has the potential to enhance its character through good quality materials and new railings.

The greenway extending south of Brennanstown Road requires removal and reconstruction of a section of stone wall which has some heritage value in its materials and traditional method of

construction. Mitigation measures to counteract the negative impact of the removal of this wall are described in this Heritage Assessment report within **Appendix H**.

Elsewhere, the greenway will be a low impact intervention, following the routes of existing roads and paths. The greenway will encourage the use of Cabinteely Park as an active travel route for the wider area and will enhance the long-term use of the park as a public amenity. This is considered to be a significant positive impact of the proposals on the character of Cabinteely House.

In general, the proposed scheme is not expected to have a significant impact on protected structures in the area. For this reason, the Heritage Assessment report concluded that a full **Architectural Heritage Impact Assessment is not necessary**.

10.5 Crime Prevention Through Environmental Design (CPTED) Review

A review of the proposed scheme was undertaken by the Crime Prevention Officer from An Garda Síochána. The recommendations made following the review are based on best practice standards as applied internationally pertaining to security infrastructure. The seven attributes of sustainable communities that are particularly relevant to crime prevention are set out below:

- **Access and movement:** places with well-defined routes, spaces and entrances that provide for convenient movement without compromising security.
- **Structure:** places that are structured so that different uses do not cause conflict.
- **Surveillance:** places where all publicly accessible spaces are overlooked.
- **Ownership:** places that promote a sense of ownership, respect, territorial responsibility and community.
- **Physical protection:** places that include necessary, well-designed security features.
- **Management and maintenance:** places that are designed with management and maintenance in mind to discourage crime in the present and the future.
- **Activity:** places where the level of human activity is appropriate to the location and creates a reduced risk of crime and a sense of safety at all times.

The recommendations contained with the report are summarised below. These seek to support the creation of a safe and secure environment for members of the public who will use the greenway.

1. **Natural Surveillance:**

Natural surveillance focuses on using the physical environment to enhance visibility which creates a sense of being watched. There should be clear sightlines throughout the Cabinteely Greenway where possible and users of the Greenway should have views of any potential hazard on the route. Landscaping also plays an important part of natural surveillance and vegetation should not obstruct or restrict views. Any route maps or signage should not block the views of the users on the Greenway alternatively the signage / maps etc should be designed so that a person cannot hide behind them. Any potential offenders are less likely to commit crimes in areas where they are likely to be seen or caught. Increased natural surveillance can create a safer environment for all users.

2. **Territoriality:**

   The level of crime and anti-social behaviour in an area can be influenced by the degree of psychological control the residents and users can exert over the area.

   Having clear boundaries which define public and private spaces increases the sense of ownership and can enhance the safety within communities. The Greenway route travels through both housing estates and public parks. Having the Greenway clearly identifiable will create a sense of ownership and responsibility among users of the Greenway. A well-maintained and clearly defined space can deter criminal activity. Users are more likely to take care of an area, in this case the Greenway, if they feel invested in it.

3. **Rest Areas:**

   Rest areas should be located at popular / busy spots along the route. Bike stands should be located adjacent to seating areas. The seats should face the route. All street furniture including seating should be sufficiently robust, fit for purpose and ideally vandal proof. All seating should be set permanently into the ground.

4. **Signage:**

   There should be clear signage along the Greenway informing users of the route. All signage should be conspicuous, legible, coherent and functional. As mentioned earlier all signs and maps should not restrict the views of the Greenway.

   Speed signs should also be considered to inform users of the appropriate speed on the Greenway.

5. **Lighting:**

   Consideration should be given to lighting along parts of the Greenway. Good lighting can have a positive impact on anti-social behaviour. Some areas of the Cabinteely Greenway go through wooded areas, while landscaping will be factored into the design of the

Greenway, there are areas that will be dark, especially during the winter months. Good quality anti-vandal lighting is recommended.

6. **CCTV:**

   A CCTV System should be considered along certain parts of the route to prevent and detect crime

The recommendations set out in the CPTED report have been used to inform the final proposed preliminary design of the scheme.

10.6 Part 8 Planning Report

The Part 8 Planning Report, prepared by MacCabe Durney Barnes, seeks to address the likely consequences for the proper planning a sustainable development of the area. The report assessed the relevant project and environmental criteria including a description of the site, surrounding area and proposed development as well as planning policy. With regard to the assessment of the likely consequences for proper planning and sustainable development, the report concluded the following:

- The proposed scheme would provide an attractive amenity walkway/cycleway in the suburban area between Cornelscourt, Cabinteely and Cherrywood in a mixture of suburban neighbourhoods and off-road active parkland setting. This will be of benefit for journeys to work, school as well as amenity activity.
- The proposal would support the NPF National Policy Objective 37 – '*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 proposal would support the NPF National Sustainable Outcome (NSO) 4 Sustainable Mobility, which aims to reduce our car usage to the extent possible, and increasing the number of journeys taken by sustainable modes of transport, namely walking, cycling and public shared transport.
- The proposal would support the implementation of the National Cycle Network Plan. It will deliver safer cycling infrastructure and public realm improvements thereby promoting cycling as an attractive mode of transport.
- The scheme is consistent with the Eastern and Midland Regional Assembly (EMRA) Regional Spatial Economic Strategy for the Eastern and Midland Region 2019 – 2031

Regional Strategic Objectives RPO 5.3, 5.8, 8.1 and 9.10. Additionally stated in the strategy are the following relevant walking and cycling objectives guiding investment in the EMRA.

- The scheme is consistent with Transport Strategy for the Greater Dublin Area 2022-2042 (Priorities 1, 2 and 3) and Measures CYC1 – GDA Cycle Network and CYC2 Cycle Infrastructure Design.
- The proposed project supports the delivery of the Greater Dublin Area Cycle Network Plan 2022 (Dublin South East). It will deliver a greenway route that forms part of the designated GDA Cycle Network Plan.
- 'Greenway – Utility' and 'Greenway – Leisure'. A small portion of the route on the western end of the proposed scheme along the Cornelscourt Hill Road is also designated as a Secondary Route.
- The proposal would support the strategic objective of the Dún Laoghaire-Rathdown County Development Plan 2022-2028 including Policy Objective T11 Walking and Cycling; Policy Objective T12 Footways and Pedestrian Routes, Policy Objective T13 County Cycle Network and Policy Objective T31 Accessibility.
- The proposed scheme would provide active travel links to existing neighbourhoods, communities, schools, businesses and retail. It also integrates planned residential developments along the route and with the Cherrywood Greenway to the south as well Kilbogget Park to the east of the N11.
- The proposed development would not give rise to any negative impact on protected structures or the built heritage of the locality.
- The proposed scheme has been designed so as to complement natural features along the route corridor and minimise interactions or with the Cabinteely Stream. The AA Screening Report finds that the scheme will not have any direct impact on a Natura 2000 site.

It concluded that the proposed active travel greenway would provide an attractive amenity and mobility feature that is consistent with the objectives of the Dún Laoghaire-Rathdown County Development Plan 2022-2028 and the proper planning and sustainable development of the area. The full Part 8 Planning Report is contained in **Appendix L**.

11 Conclusion

This report supports a Part 8 Planning Application for the proposed Cabinteely Greenway Active Travel scheme. The proposed development will provide a safe, high-quality route which will improve connectivity for pedestrians and cyclists travelling between local schools, services, amenities and surrounding residential areas.

The proposed scheme aligns with government policy at both national and local levels in its commitment to ensuring that active travel is appropriately provided as part of an interconnected network of cycle and pedestrian routes.

A feasibility and options selection assessment was undertaken for the scheme, whereby several options were considered, accompanied by extensive public consultation and engagement. A Multi-Criteria Analysis (MCA) was conducted based on a range of criteria outlined by the Department of Transport. From this assessment, a preferred option emerged, which has now been advanced to the preliminary design stage as part of this scheme and the Part 8 application.

A comprehensive review and assessment of potential impacts, including environmental ones, resulting from the scheme has been conducted.

The EIAR screening assessment concluded that an EIAR is not required, while the AA screening assessment determined that an Appropriate Assessment is also unnecessary.

The Site-Specific Flood Risk Assessment (SSFRA) identified the site as susceptible to fluvial flooding, classifying it as 'Water Compatible.' The initial flood assessment placed the project in Flood Zone A, requiring no further justification. A detailed flood risk assessment for the proposed bridge over Cabinteely Stream confirmed that if the underside of the bridge deck is at least 1m above the water level, it is unlikely to be submerged, even during significant storm events.

The Ecological Impact Assessment (EcIA) found that the proposed development will not cause significant negative impacts on designated sites, habitats, legally protected species, or other ecologically important features. A number of mitigation and enhancement measures were identified as part of the EcIA to be implemented as part of the development.

The Heritage Appraisal concluded that the proposed scheme is not expected to significantly impact protected structures, thereby eliminating the need for a full Architectural Heritage Impact Assessment.

Appendix A : Project Feasibility & Options Selection Report

Appendix B : Traffic Impact Assessment

Appendix C : Arboricultural Assessment & Tree Survey

Appendix D : Flood Risk Assessment

Appendix E : EIA Screening Report

Appendix F : AA Screening Report

Appendix G : Ecological Impact Assessment Report

Appendix H : Heritage Appraisal Report

Appendix I : Stakeholder Consultation Report

Appendix J: Public Lighting Proposals

Appendix K: Landscape Proposals

Appendix L: Planning Report

Appendix M: Road Safety Audit

Appendix N: OPW Section 50

ENVIRONMENT
ISO 14001:2015
NSAI Certified

HEALTH
& SAFETY
ISO 45001:2018
NSAI Certified

QUALITY
I.S. EN ISO 9001:2015
NSAI Certified

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