# (15) Blackrock to Merrion Draft Preferred Route Options Report

November 2020



BUS CONNECTS SUSTAINABLE TRANSPORT FOR A BETTER CITY.

## Contents

			Page
Glo	ssary of Te	chnical Terms	1
Exe	cutive Sum	nmary	2
1 Introduction and Background		luction and Background	5
	1.1	Introduction	5
	1.2	Background	6
	1.3	Approach for this Report	8
	1.4	Report Structure	8
2	Planni	ing and Policy Context	10
	2.1	Transport Strategy for the Greater Dublin Area, 2016 -	2035
			10
	2.2	Greater Dublin Area Cycle Network Plan	11
	2.3	Development Plan, Local Area Plans and Strategic Development Zones	11
	2.4	The Aim of the Bus Connects Core Bus Corridor	
		Infrastructure Works	14
	2.5	The Core Bus Corridor Scheme Objectives	14
3	Backg	round and Public Consultation Summary	15
	3.1	Feasibility and Options Report and Emerging Preferred	Route 15
	3.2	First Non-Statutory Public Consultation – Emerging Pre-	eferred
		Route Option	15
	3.3	Draft Preferred Route Option	16
	3.4	Second Non-Statutory Public Consultation – Draft Prefe Route Option	erred 16
4	Study	•	18
4			
	4.1	Introduction Study, Area Sections	18
	4.2 4.3	Study Area Sections Physical Constraints and Opportunities	19 19
77	4.3 4.4	Integration with Existing and Proposed Public Transpor	
	4.4	Network	20
	4.5	Integration with Other Road Users	22
5		w of the 'Dún Laoghaire to City Centre Core Bus Corri ns Study – Feasibility and Options Assessment Report'	dor 24
	5.1	Introduction	24
	5.2	Assessment Methodology	24
	5.3	Section 1: Nutley Lane to Booterstown Avenue	30

 $\langle$ 

6

	5.4	Section 2: Booterstown Avenue to Stradbrook Road	31
	5.5	Summary	32
	Draft Pı	referred Route Option	33
	6.1	Introduction	33
	6.2	Draft Preferred Route Option Description	33
	6.3	Draft Preferred Route Option Scheme Design Description	34
	6.4	Summary	36
	Next Ste	eps	39
nen	dices	65	
•	dix A	00	
date	d Concent	Scheme Drawings	

#### 7 **Next Steps**

#### Appendices

#### Appendix A

Updated Concept Scheme Drawings

#### Appendix **B**

Dún Laoghaire to City Centre Core Bus Corridor Options Study - Feasibility and **Options Assessment Report** 

#### Appendix C

Blackrock to Merrion Core Bus Corridor - Emerging Preferred Route Information Brochure

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# **Glossary of Technical Terms**

**Signal Controlled Bus Priority** - refers to where traffic signals are used to give buses priority over general traffic where both buses and general traffic will utilise the same traffic lanes. These signals can be located at a junction or to enforce queue relocation. Queue relocation refers to a system whereby general traffic queues are held upstream with traffic signals when a downstream queue (within a defined length of road) has been maximised ahead of a shared traffic lane at a pinch point on the route. This enables the shared stretch of road to remain 'queue free' and available for any buses that arrive.

**Bus Gate** – refers to stretches of roads which restrict access to private cars at one or both ends. Bus Gates may be controlled by signage only (i.e. no traffic signals) or may have signals.

**Cycle Lane** – refers to an on-road lane, with a painted white line acting as the only segregation between the cycle lane and the general traffic lane or bus lane. Generally applicable to one-way cycle movement. Examples are with-flow cycle lanes sharing the carriageway (with vehicles) adjacent to the kerb and cycle lanes crossing through a junction at grade.

**Cycle Track** – refers to a segregated track which is physically segregated from the adjacent general traffic lane and/or bus lane horizontally and/or vertically. This can apply to one or two-way cycle movement. Examples are raised-adjacent cycle tracks (vertical segregation) or two-way cycle tracks at grade (horizontal segregation) – e.g. Grand Canal Cycleway.

**Virtual Bus Priority** – this refers to cases where physical bus priority (i.e. bus lanes) is not provided, and instead, bus priority is provided within the general traffic lane through the use of signal-controlled priority or bus gates to control the movements of general traffic.

# **Executive Summary**

## Introduction

The purpose of this report is to present an overview of the Draft Preferred Route Option (PRO) for the 'Blackrock to Merrion' Core Bus Corridor (CBC) as well as describing the options assessed, and changes made to the scheme since the public consultation in early 2019.

The aim of delivering the Blackrock to Merrion CBC is to provide enhanced walking, cycling and bus infrastructure on this key access corridor in the Dublin region, which will enable and deliver efficient, safe, and integrated sustainable transport movement along the corridor.

The objectives are to:

- Enhance the capacity and potential of the public transport system by improving bus speeds, reliability and punctuality through the provision of bus lanes and other measures to provide priority to bus movement over general traffic movements;
- Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable;
- Support the delivery of an efficient, low carbon and climate resilient public transport service, which supports the achievement of Ireland's emission reduction targets;
- Enable compact growth, regeneration opportunities and more effective use of land in Dublin, for present and future generations, through the provision of safe and efficient sustainable transport networks;
- Improve accessibility to jobs, education and other social and economic opportunities through the provision of improved sustainable connectivity and integration with other public transport services; and
- Ensure that the public realm is carefully considered in the design and development of the transport infrastructure and seek to enhance key urban focal points where appropriate and feasible.

## Scheme Overview & Assessment Process

The Blackrock to Merrion CBC commences on the R118 Merrion Road at its junction with Nutley Lane. Buses are proposed to be routed along Rock Road joining the N31 at the Mount Merrion Avenue junction. The proposed scheme terminates at the junction of Temple Hill/ Monkstown Road and Stradbrook Road. Priority for buses and cyclists is provided along the entire route, consisting primarily of dedicated bus lanes in each direction, and continuous segregated cycle tracks.

The Blackrock to Merrion CBC connects to the route of the UCD Ballsbridge to City Centre CBC at the junction of Merrion Road and Nutley Lane, providing a continuous route from Blackrock to the City Centre.

Where substantial revisions have been made to the design since the publication of the Emerging Preferred Route (EPR) Option, options have been assessed using a Multi-Criteria Assessment (MCA) to determine the preferred option. The methodology used is consistent with that carried out during the initial route optioneering work which informed the EPR Option. This additional assessment does not supersede work done during earlier stages but rather complements it and is a direct response to issues raised by the public during the public consultation process. This assessment has also been carried out in the context of more detailed information now available, including topographical survey.

The following list highlights the material scheme changes between the published Emerging Preferred Route (EPR) Option and the draft Preferred Route Option (PRO) proposals:

- The cross section in front of St. Vincent's Hospital and Estate Avenue has been reduced generally with a reduction in land take.
- The cross-section from Elm Court to Merrion Gates junction has been reduced to a 3-lane arrangement with 2 no. general traffic lanes and an outbound only bus lane;
- The Merrion Gates junction has been significantly altered to a consolidated Tjunction with improved cycle facilities;
- At the junction of the Elm Park Development on Merrion Road, the arrangement has been revised to remove the proposed traffic island on the inbound arm, which has removed the need for land take onto Landaff Terrace to the south;
- The new right-turn lane from Rock Road to Booterstown DART station is no longer being proposed;
- Land acquisition from residential properties and Blackrock College has been reduced along the Rock Road;
- The gates, railings, and piers forming the existing entrance to Blackrock College are to be rotated on the westernmost pier to accommodate the realigning of the adjacent boundary while preserving the symmetry of the protected entrance;
- The new right-turn lanes from Rock Road to Blackrock Clinic and Seafort Parade are no longer being proposed;
- The access and egress arrangements to the Frascati Centre have been amended in the design to reflect the existing, newly-constructed, arrangement;
- The junction of the Rock Road and Mount Merrion Avenue has been reconfigured with the removal of the left-turn slip lanes and improved cycle facilities;
- A number of bus stops along the route have been redesigned as island bus stops where space allows; and

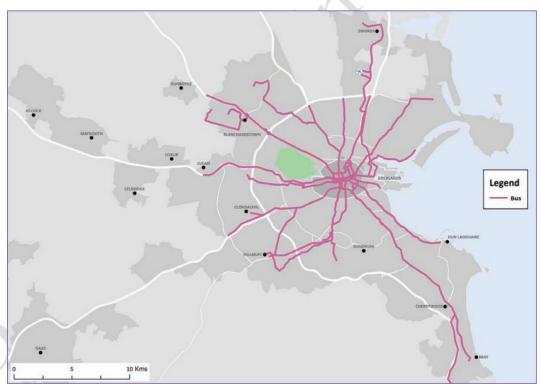
• Bus stop locations have been modified in this revised proposal – some bus stops have been relocated or removed to achieve a better spacing between stops, while also ensuring that each stop is sited in the best location to serve surrounding neighbourhoods. These proposals will also ensure a more efficient bus network operation. In a number of locations, separate bus stop laybys have been provided which are envisaged to accommodate private coaches.

# 1 Introduction and Background

## **1.1** Introduction

The BusConnects Dublin - Core Bus Corridors Infrastructure Works (herein after called **the CBC Infrastructure Works**) involves the development of continuous bus priority infrastructure and improved pedestrian & cycling facilities on sixteen radial core corridors in the Greater Dublin Area, across the local authority jurisdictions of Dublin City Council, South Dublin County Council, Dún Laoghaire-Rathdown County Council, Fingal County Council, and Wicklow County Council. Overall the CBC Infrastructure Works encompasses the delivery of approximately 230km of dedicated bus lanes and 200kms of cycle tracks along 16 of the busiest corridors in Dublin.

The Transport Strategy for the Greater Dublin Area 2016 - 2035 sets out a network of the bus corridors forming the "Core Bus Network" for the Dublin region. Sixteen indicative radial core bus corridors were initially identified for redevelopment. This is shown in **Figure 1.1** below (extract from Transport Strategy for the Greater Dublin Area 2016-2035).



#### Figure 1.1: 2035 Core Bus Network – Radial Corridors

These corridors had dedicated bus lanes along only less than one third of their lengths which meant that for most of the journey, buses and cyclists were competing for space with general traffic and were negatively affected by the increasing levels of congestion. This resulted in delayed buses and unreliable journey times for passengers. Following the completion of feasibility and options

studies, the sixteen radial corridors are being progressed, as the following 16 Core Bus Corridors:

- Clongriffin to City Centre Core Bus Corridor;
- Swords to City Centre Core Bus Corridor;
- Ballymun to City Centre Core Bus Corridor;
- Finglas to Phibsborough Core Bus Corridor;
- Blanchardstown to City Centre Core Bus Corridor;
- Lucan to City Centre Core Bus Corridor;
- Liffey Valley to City Centre Core Bus Corridor;
- Clondalkin to Drimnagh Core Bus Corridor;
- Greenhills to City Centre Core Bus Corridor;
- Tallaght to Terenure Core Bus Corridor;
- Kimmage to City Centre Core Bus Corridor;
- Rathfarnham to City Centre Core Bus Corridor;
- Bray to City Centre Core Bus Corridor;
- UCD Ballsbridge to City Centre Core Bus Corridor;
- Blackrock to Merrion Core Bus Corridor; and
- Ringsend to City Centre Core Bus Corridor

## 1.2 Background

The aim of the CBC Infrastructure Works is to provide enhanced walking, cycling and bus infrastructure on key access corridors in the Dublin region, which will enable and deliver efficient, safe, and integrated sustainable transport movement along these corridors.

The objectives are to:

- Enhance the capacity and potential of the public transport system by improving bus speeds, reliability and punctuality through the provision of bus lanes and other measures to provide priority to bus movement over general traffic movements;
- Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable;
- Support the delivery of an efficient, low carbon and climate resilient public transport service, which supports the achievement of Ireland's emission reduction targets;
- Enable compact growth, regeneration opportunities and more effective use of land in Dublin, for present and future generations, through the provision of safe and efficient sustainable transport networks;

- Improve accessibility to jobs, education and other social and economic opportunities through the provision of improved sustainable connectivity and integration with other public transport services; and
- Ensure that the public realm is carefully considered in the design and development of the transport infrastructure and seek to enhance key urban focal points where appropriate and feasible.

In June 2018, the National Transport Authority (NTA) published the Core Bus Corridors Project Report. The report was a discussion document outlining proposals for the delivery of a CBC network across Dublin. The 'Blackrock to Merrion Core Bus Corridor' is identified in this document as forming part of the radial Core Bus Network, designated as 'Route 15'. The BusConnects radial CBC network is shown in **Figure 1.2**.

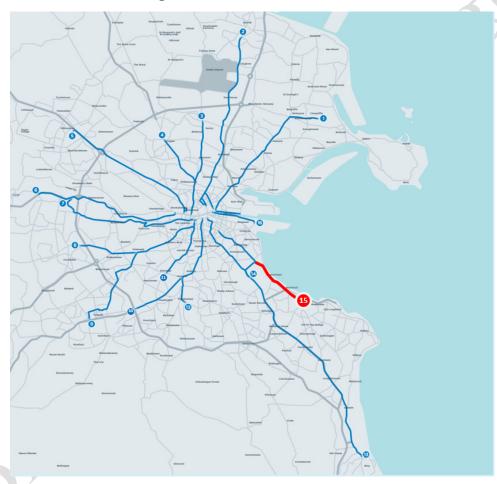


Figure 1.2: BusConnects Radial CBC Network (the CBC highlighted)

Following this, a public consultation for the sixteen radial core bus corridors took place on a phased basis from November 2018 until May 2019. As part of this process the 'Dún Laoghaire to City Centre Core Bus Corridor Options Study – Feasibility and Options Assessment Report' was published, which identified feasible options along the corridor, assessed these options and arrived at an Emerging Preferred Route (EPR) Option. Submissions were invited from the public to provide comment on the EPR proposals and to inform subsequent design stages. From May 2019, a comprehensive review of feedback received during the public consultation for the EPR Options has been undertaken. Based on this review, as well as availability of new information (e.g. topographical survey), alternative options have been considered in a number of areas along the Blackrock to Merrion CBC which seek to address issues of public concern, as well as general refinements to the scheme to reduce the overall impact of the proposals, while still achieving the objectives of the scheme. This report presents a summary of the issues raised in the public consultation and details the alternative options considered in order to identify a draft Preferred Route Option (PRO).

#### **1.3** Approach for this Report

This 'Draft Preferred Route Option Report' has been prepared for the Blackrock to Merrion CBC (the CBC), which will build on the 'Dún Laoghaire to City Centre Core Bus Corridor Options Study – Feasibility and Options Assessment Report'. This report, along with the associated appendices as published, is included in Appendix B.

The Study Area Analysis and Multi Criteria Assessment (MCA) for the previously proposed feasible route options are considered to still be valid unless otherwise detailed and updated in this Draft PRO Report. Any additional design work or optioneering has been assessed against the previously identified EPR Option in order to determine the draft PRO. Additional design development and the resulting draft PRO referenced in this report have been based on:

- Updated topographical survey information;
- Output from engagement and consultation activities on the EPR Option and draft Preferred Route Option Proposals;
- Clarifications to the previous assessment in the EPR Feasibility Study and Options Assessment Report;
- Further design development and options assessment; and
- Change in the extent of the scheme.

## **1.4 Report Structure**

The structure for the remainder of this report is set out as follows:

- Chapter 2: Planning and Policy Context This chapter outlines the general background information to the CBC Infrastructure Works. It also outlines the policy context in which the CBC was developed and presents the concept of the CBC network as outlined in the Transport Strategy for the Greater Dublin Area 2016-2035 (NTA 2015) and the CBC Infrastructure Works.
- Chapter 3: Background and Public Consultation This chapter outlines the summary of the non-statutory public consultation process.
- Chapter 4: Study Area and Route Options In this chapter, the study area for the Blackrock to Merrion CBC is detailed. Scheme specific constraints and opportunities are discussed. The integration of the scheme with existing and

planned transport networks is considered, along with considerations of the scheme for other road users.

- Chapter 5: Review of the 'Dún Laoghaire to City Centre Core Bus Corridor Options Study – Feasibility and Options Assessment Report' – This chapter is a summary of the options assessment that was previously carried out in each section of the 'Dún Laoghaire to City Centre Core Bus Corridor Options Study – Feasibility and Options Assessment Report'. An assessment has been made on the previous options assessment and the emerging preferred route and outlines the issues and material changes in each section resulting from the design development as explained in section 1.2.
- Chapter 6: Draft Preferred Route Option This chapter gives the overall conclusions of the options assessment process and describes the draft PRO proposal.
- Chapter 7: Next Steps This chapter details the "next steps" in the delivery of the CBC.

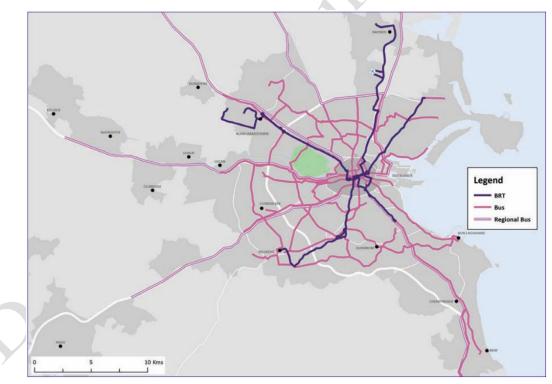
# 2 Planning and Policy Context

This chapter summarises a review of transport and planning policy which is relevant to the route selection process for the CBC.

# 2.1 Transport Strategy for the Greater Dublin Area, 2016 - 2035

The CBC Infrastructure Works has evolved from and is a key component of the 'Transport Strategy for the Greater Dublin Area 2016-2035' (the 'GDA Transport Strategy'), the purpose of which is *"to contribute to the economic, social and cultural progress of the Greater Dublin Area by providing for the efficient, effective and sustainable movement of people and goods"*.

The strategy identifies a "Core Bus Network", representing the most important bus routes within the Greater Dublin Area, generally characterised by high passenger volumes, frequent services and significant trip attractors along the routes. The identified core network comprises sixteen radial bus corridors, three orbital bus corridors and six regional bus corridors. This core bus network is shown in **Figure 2.1**.



#### Figure 2.1: GDA Transport Strategy Overall Core Bus Network

The GDA Transport Strategy states that it is intended to provide continuous bus priority, as far as is practicable, along the CBCs.

This will result in a more efficient and reliable bus service with lower journey times, increasing the attractiveness of public transport in these areas and facilitating a shift to more sustainable modes of transport.

The Blackrock to Merrion CBC (the CBC) is identified as an enabling project as part of the CBC Infrastructure Works.

## 2.2 Greater Dublin Area Cycle Network Plan

The Greater Dublin Area Cycle Network Plan was adopted by the NTA in early 2014 following a period of consultation with the public and various stakeholders. This plan forms the strategy for the implementation of a high quality, integrated cycle network for the Greater Dublin Area.

There is a primary cycle route (Route 13) which runs along the length of the CBC and a number of secondary cycle routes which intersect with the corridor (including Routes SO6, 13E, SO4 9B). In addition, a proposed greenway (N5 East Coast Trail) is identified running parallel to a section of the corridor.

During the earlier assessment process which identified the EPR Option, the provision of these cycle routes was considered at all stages.

Therefore, as part of the options assessment process, any upgrading of infrastructure to provide bus priority also needs to consider and provide for the required cycling infrastructure, where practicable, to the appropriate level and quality of service (as defined by the NTA National Cycle Manual) required for primary and secondary cycle routes.

## 2.3 Development Plan, Local Area Plans and Strategic Development Zones

#### Dublin City Council Development Plan (2016 – 2022)

The current Development Plan for Dublin City Council (DCC) came into effect on 21<sup>st</sup> October 2016. The DCC Development Plan recognises the challenge that Transport has in making an important contribution to make towards achieving a sustainable city. These key challenges for the City are outlined as follows:

- Effective integration of land-use and transportation, and the management of access and mobility.
- *Pro-active engagement and collaboration with communities to bring about further modal shift and effective mobility management.*
- The expansion of the strategic cycle network along all major water bodies including the River Liffey and the canals.
- Improving the city centre environment for pedestrians through public realm enhancements and through improvement of the strategic pedestrian network.
- Ensuring maximum benefits are achieved from public transport improvements including Luas cross-city and the anticipated Bus Rapid Transit network.

- Managing city centre road-space to best address the competing needs of public transport, pedestrians, cyclists, and the private car.
- Increasing significantly the existing mode share for active modes, i.e. walking and cycling, and supporting the forthcoming National Policy Framework for Alternative Fuels Infrastructure.

Therefore, sustainable forms of transport such as public transport, walking, and cycling are strongly promoted in this plan, which takes a pro-active approach to influencing travel behavior and effective traffic management. Relevant policies are outlined in **Table 2.1** and **Table 2.2**.

# Table 2.1: DCC Development Plan Policies for Modal Change and Active Travel aligned with the proposed development

Movement and Transport: Promoting Modal Change and Active Travel			
MT2	Whilst having regard to the necessity for private car usage and the economic benefit to the city centre retail core as well as the city and national economy, to continue to promote modal shift from private car use towards increased use of more sustainable forms of transport such as cycling, walking and public transport, and to co-operate with the NTA, Transport Infrastructure Ireland (TII) and other transport agencies in progressing an integrated set of transport objectives. Initiatives contained in the government's 'Smarter Travel' document and in the NTA's draft transport strategy are key elements of this approach.		

# Table 2.2: DCC Development Plan Policies for Public Transport aligned with the proposed development

Movement and Transport: Public Transport			
MT3	To support and facilitate the development of an integrated public transport network with efficient interchange between transport modes, serving the existing and future needs of the city in association with relevant transport providers, agencies and stakeholders.		
MT4	To promote and facilitate the provision of Metro, all heavy elements of the DART Expansion Programme including DART Underground (rail interconnector), the electrification of existing lines, the expansion of Luas, and improvements to the bus network in order to achieve strategic transport objectives.		
MT5	To work with the relevant transport providers, agencies and stakeholders to facilitate the integration of active travel (walking, cycling etc.) with public transport, thereby making it easier for people to access and use the public transport system.		
MT6 (i)	To work with Iarnród Eireann, the NTA, Transport Infrastructure Ireland (TII) and other operators to progress a coordinated approach to improving the rail network, integrated with other public transport modes to ensure maximum public benefit and promoting sustainable transport and improved connectivity.		

#### Dún Laoghaire-Rathdown County Council Development Plan (2016 – 2022)

The current Development Plan for South Dublin County Council (SDCC) came into effect on  $17^{\text{th}}$  February 2016. The vision of the development plan is '*To* 

continue to facilitate appropriate levels of sustainable development predicated on the delivery of high quality community, employment and recreational environments - allied to the promotion of sustainable transportation and travel patterns - but all the while protecting Dún Laoghaire–Rathdown's unique landscape, natural heritage and physical fabric, to ensure the needs of those living and working in the County can thrive in a socially, economically, environmentally sustainable and equitable manner.'

The Development Plan contains a Sustainable Communities Strategy which acknowledge the role sustainable travel and transport has in meeting the vision of the Development Plan. This Strategy *'recognises that the current trends in transportation, in particular the domination of the private car as the preferred mode choice – are unsustainable'*. The Strategy identifies a number of Policies which align with this development. Some of these policies are set out below in **Table 2.3**.

	Sustainable Travel and Transportation Policies
ST3	It is Council policy to promote, facilitate and cooperate with other transport agencies in securing the implementation of the transportation strategy for the County and the wider Dublin Region as set out in Department of Transport's 'Smarter Travel, A Sustainable Transport Future 2009 –2020' and the NTA's 'Greater Dublin Area Draft Transport Strategy 2016-2035'. Effecting a modal shift from the private car to more sustainable modes of transport will be a paramount objective to be realised in the implementation of this policy.
ST4	It is Council policy to support suitable access for people with disabilities, including improvements to buildings, streets and public spaces.
ST5	It is Council Policy to secure the development of a high quality walking and cycling network across the County in accordance with relevant Council and National policy and guidelines.
ST11	It is Council policy to secure improvements to the public transport system as set out in 'Smarter Travel, A Sustainable Transport Future 2009-2020' and the NTA's 'Greater Dublin Area Draft Transport Strategy 2016-2035' by optimising existing or proposed transport corridors and interchanges and by developing new Park and Ride and taxi rank facilities at appropriate locations.
ST12	It is Council policy to co-operate with the NTA and other relevant agencies to facilitate the implementation of the Bus Network measures as set out in the NTA's 'Greater Dublin Area Draft Transport 2016-2035' and to extend the bus network to other areas where appropriate subject to design, public consultation, approval, finance and resources.
ST14	It is Council policy to co-operate with the NTA and other relevant agencies to facilitate the introduction of Bus Rapid Transit measures as set out in the NTA's 'Greater Dublin Area Draft Transport Strategy 2016- 2035' where appropriate subject to design, public consultation, approval, finance and resources.
ST30	It is Council policy to introduce traffic management schemes on particular roads and in appropriate areas throughout the County to reduce vehicle speeds to an acceptable level and to reduce the potential for traffic congestion and associated vehicular emissions in urban areas.

 Table 2.3: DLRCC Development Plan Policies for Sustainable Travel and

 Transportation

## 2.4 The Aim of the Bus Connects Core Bus Corridor Infrastructure Works

The aim of the CBC Infrastructure Works is to provide enhanced walking, cycling and bus infrastructure on key access corridors in the Dublin region, which will enable and deliver efficient, safe, and integrated sustainable transport movement along these corridors.

This project is fundamental to addressing the congestion issues in the Dublin region with the population due to grow by 25% by 2040, bringing it to almost 1.55 million people.

Across Dublin, 67% of public transport journeys each day are made by bus, carrying three and four times the number of passengers that travel on the Luas or DART and commuter rail. The popularity of cycling to work has also increased in popularity, up by 43% since 2011. Through the development of continuous bus priority and segregated cycle tracks we can meet the growing demand for fast, reliable, punctual and convenient bus journeys in and out of the city centre, and safe cycling facilities for this growing numbers of cyclists.

## **2.5 The Core Bus Corridor Scheme Objectives**

The objectives are to:

- Enhance the capacity and potential of the public transport system by improving bus speeds, reliability and punctuality through the provision of bus lanes and other measures to provide priority to bus movement over general traffic movements;
- Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable;
- Support the delivery of an efficient, low carbon and climate resilient public transport service, which supports the achievement of Ireland's emission reduction targets;
- Enable compact growth, regeneration opportunities and more effective use of land in Dublin, for present and future generations, through the provision of safe and efficient sustainable transport networks;
- Improve accessibility to jobs, education and other social and economic opportunities through the provision of improved sustainable connectivity and integration with other public transport services; and
- Ensure that the public realm is carefully considered in the design and development of the transport infrastructure and seek to enhance key urban focal points where appropriate and feasible.

# 3 Background and Public Consultation Summary

## 3.1 Feasibility and Options Report and Emerging Preferred Route

In early 2016, the NTA initiated plans to develop the network of CBCs identified in the GDA Transport Strategy. As part of this body of work, the 'Dún Laoghaire to City Centre Core Bus Corridor Options Study – Feasibility and Options Assessment Report' was prepared, which identified feasible options along the corridor, assessed these options and arrived at an EPR Option. These proposals formed the basis for the first Non-Statutory Public Consultation on the CBC.

## 3.2 First Non-Statutory Public Consultation – Emerging Preferred Route Option

The first non-statutory public consultation on the BusConnects CBCs took place on a phased basis. The first phase of consultation occurred from 14th November 2018 to 29th March 2019. The second phase ran from 23rd January 2019 to the 30th April 2019 and the final phase ran from 26th February 2019 until the 31st May 2019. The Blackrock to Merrion CBC EPR Option formed part of the final phase of consultation, which closed on the 31st of May 2019. The Information Brochure published as part of this consultation is included in Appendix C.

There were 84 submissions received for the Blackrock to Merrion CBC. These submissions ranged from personal submissions sent in by residents, landowners and local representatives, to detailed proposals from various associations and private sector businesses.

A brief summary of the feedback received on the Blackrock to Merrion CBC during the EPR Option public consultation is presented in this section of the report.

While a variety of matters were raised in the submissions, the key issues emerging from the consultation were as follows:

- 1. Loss of Parking;
- 2. Inadequacies in Consultation Process;
- 3. Traffic Issues Associated with Proposed Traffic Management Measures;
- 4. Removal of Trees;
- 5. The Potential Impact on Protected Structures;
- 6. Pedestrian Safety;
- 7. Rationalisation of Bus Service;
- 8. Vehicular Access to Property;

- 9. Devaluation of Property;
- 10. Cyclist Safety / Inadequate Provision for Cyclists;
- 11. Cyclist Segregation;
- 12. Loss of Access to Local Amenities;
- 13. Increased Air and Noise Pollution;
- 14. Proposed Land Acquisition;
- 15. Integration with Sutton to Sandycove Promenade Scheme;
- 16. Duration of Bus-lane Operation;
- 17. Project Splitting.

Further details on these issues can be found in the Blackrock to Merrion Core Bus Corridor Emerging Preferred Route First Non-Statutory Public Consultation Report (March 2020).

## 3.3 Draft Preferred Route Option

Following the first non-statutory public consultation, a review was undertaken of the scheme proposals along the route based on the following new information which was available for consideration:

- Detailed topographical survey along the route corridor;
- Submissions received during the first non-statutory public consultation; and
- Issues raised during meetings with community fora, resident groups and oneon-one meetings with directly impacted landowners.

As part of this review, a methodology was developed to facilitate new options for consideration in specific areas if issues were identified. These new options would then be subject to further options assessment to identify the draft PRO. The selected draft PRO identified formed the basis for the second non-statutory public consultation in March / April 2020.

## 3.4 Second Non-Statutory Public Consultation – Draft Preferred Route Option

The draft PRO was published in March 2020 and a second round of public consultation commenced on 4<sup>th</sup> March 2020 to the 17<sup>th</sup> of April 2020.

Due to Covid 19 restrictions being imposed by Government in mid-March the planned Public Information Events were impacted. Consequently, there were **31** submissions received for the Blackrock to Merrion CBC (compared to 84 submissions following the First Public Consultation). These submissions ranged from personal submissions sent in by residents, commuters, landowners and local representatives, to detailed proposals from public bodies, various associations and private sector businesses.

A brief summary of the feedback received on the Blackrock to Merrion CBC during the public consultation is presented in this section of the report.

While a variety of matters were raised in the submissions, the key issues emerging from the consultation were as follows:

- 1. Cyclist Safety;
- 2. Pedestrian Safety;
- 3. Supportive of the Scheme;
- 4. Vehicular Access to Properties;
- 5. Removal of Trees;
- 6. Increased Air & Noise Pollution;
- 7. Devaluation of Property;
- 8. Protected Structures;
- 9. Loss of Parking; and
- 10. Traffic Issues.

The issues raised during the 2<sup>nd</sup> public consultation have been considered in the development of draft PRO.

Subsequently it was determined by the NTA that a third non-statutory public consultation would be conducted prior to finalising the PRO.

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# 4 Study Area

#### 4.1 Introduction

The overall study area for the CBC within this assessment is shown in **Figure 4.1**. It is noted that the CBC forms part of a longer corridor which was assessed in the 'Dún Laoghaire to City Centre Core Bus Corridor Options Study – Feasibility and Options Assessment Report' and as such the study area herein is a reduction on the previous study area reflective of the CBC extents.

Two sections of the 'Dún Laoghaire to City Centre Core Bus Corridor Options Study – Feasibility and Options Assessment Report' remain within the study area of the CBC, with the extents of each amended in a similar manner to reflect the CBC extents.

Section 1 reflects Study Area Section (SAS) 1 however has been curtailed at Nutley Lane to match the western extents of the CBC.

Section 2 reflects Study Area Section (SAS) 2 however has been extended at Monkstown Road to match the eastern extents of the CBC.



#### Figure 4.1: Study Area and Section Breakdown

(Section 1 herein is an extract of SAS 1 described within the previous report while Section 2 refers to approximately SAS 2 with an additional area included to capture the eastern extents of the route, both combined and updated.).

Arising from the transport policy context and scheme objectives set for the Dun Laoghaire to City Centre CBC, the study area includes road network in the vicinity of the existing bus routes and extends to include additional potentially feasible route options. The Study Area is generally bounded to the north by the Ailesbury Road and to the south by Newtown Park Avenue.

## 4.2 Study Area Sections

#### 4.2.1 Section 1

Section 1 is a narrow corridor along the R118 between Booterstown Avenue and Strand Road. At Strand Road the study area splits to incorporate both Merrion Road and Strand Road. While the CBC ends at the junction of Merrion Road and Nutley Lane, for the purpose of this report, the study area has been extended to Ailesbury Road / Sydney Parade in order to include Strand Road as a potential route as per the 'Dún Laoghaire to City Centre Core Bus Corridor Options Study – Feasibility and Options Assessment Report'.

#### 4.2.2 Section 2

Section 2 of the Study Area is located between Booterstown and Blackrock and includes the R113, R119, R825, N31, R118. This section also includes local roads including Cross Avenue and Booterstown Avenue as well as the village of Blackrock.

## **4.3 Physical Constraints and Opportunities**

A number of potential constraints were identified, both natural (i.e. the existing natural environment) and physical (the built environment), which constrain route options for the proposed scheme within the defined study area including:

- Street trees and other natural features along the route;
- The existing urban and sub-urban roads and street network;
- The existing railway line along the eastern coast;
- The available width along Merrion Road between Strand Road and St. Vincent's Hospital;
- Availability of land in urban and suburban areas;
- Booterstown Marsh and Blackrock Park; and
- The ongoing works within Blackrock Village including the expansion of the existing built form and public realm interventions.

A number of potentially opportunities were also identified, which could potentially enhance the proposed scheme within the defined study area including:

• The opportunity to enhance connectivity to, from, and between two major hospitals – namely St. Vincent's University Hospital and the Blackrock Clinic – through sustainable transport modes.

- The opportunity to enhance connectivity to two major newly developed shopping centres namely Frascati Shopping Centre and Blackrock Shopping Centre through sustainable transport modes.
- The opportunity to enhance connectively to educational centre such as Willow Park and Blackrock College through sustainable transport modes.
- The natural amenity of Blackrock Park, and the opportunity for integration with the cycle routes therein.
- The opportunity for integration with the East Coast Trail (Sutton to Sandycove).
- The opportunity for the provision of enhanced public realm within the various villages and suburban centres within the study area including Merrion Village and Blackrock Village.

#### 4.4 Integration with Existing and Proposed Public Transport Network

One of the key objectives of the CBC Infrastructure Works is to enhance interchange between the various modes of public transport operating in the city and wider metropolitan area, both now and in the future. Route options within the study area have therefore been developed with this in mind and, in so far as possible, seek to provide for improved existing or new interchange opportunities with existing transport services, including:

- Potential for interchange with existing 46e and 84 routes on the Rock Road at Blackrock;
- Potential for interchange with existing 17 route at Mount Merrion Avenue and Carysfort Avenue;
- Potential for interchange with existing 114 route at Carysfort Avenue;
- Potential for interchange with existing 4, 7, and 7a routes along Merrion Road;
- Potential for interchange with existing 47 route at Nutley Lane; and
- Potential for interchange with the DART service at the Blackrock and Booterstown DART Stations.

highlights the potential for interchange with existing public transport services along the CBC.



Figure 4.2: Existing Public Transport Services

#### (the CBC highlighted yellow)

The route options also seek to provide for interchange opportunities with new transport services proposed within the New Dublin Area Bus Network, including:

- Potential for interchange with the proposed B1 and B2 spine routes from the BusConnects Network Redesign at Nutley Lane;
- Potential for interchange with the proposed S6 orbital route from the BusConnects Network Redesign at Mount Merrion Avenue;
- Potential for interchange with the proposed S8 orbital route at Monkstown Road;
- Potential for interchange with the proposed L26 local route at Carysfort Avenue and the L13 local route at Nutley Lane.

**Figure 4.3**, extracted from the New Dublin Area Bus Network maps, highlights the potential for interchange with other proposed bus routes along the CBC.

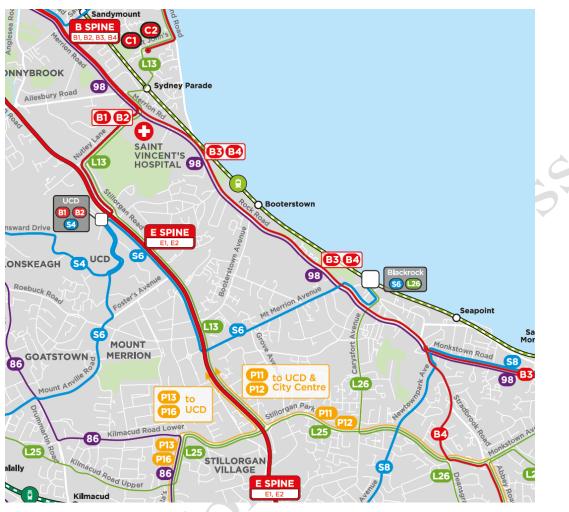


Figure 4.3: Extract from New Dublin Area Bus Network Maps

(the CBC highlighted in yellow)

## 4.5 Integration with Other Road Users

A key objective of the proposed scheme is to improve pedestrian and cyclist facilities along the route. For cyclists, segregated facilities should be provided where practicable to do so. The GDA Cycle Network Plan proposes a network of cycle links throughout the Greater Dublin Area, categorised as follows:

- **Primary Routes:** Main cycle arteries that cross the urban area and carry most cycle traffic.
- Secondary Routes: Link between principal cycle routes and local zones.
- Feeder Routes: Cycle routes within local zones and/or connections from zones to the network levels above.
- Inter Urban Routes: Links the towns and city across rural areas and includes the elements of the National Cycle Network within the GDA.
- **Green Route Network:** Cycle routes developed predominately for tourist, recreational and leisure purposes but may also carry elements of the utility

cycle route network above. Many National Cycle Routes will be of this type.

Specifically, Primary Cycle Route 13 and Secondary Routes S04 and 13D from the GDA Cycle Network Plan run along or are intercepted by the Blackrock to Merrion CBC, with their provision considered at all stages of the options assessment process.

The interaction of the CBC with other schemes progressing through the planning and design process has also been considered, specifically the ongoing development of the East Coast Trail. The proposed greenway, also contained in the GDA Cycle Network Plan runs roughly parallel to the CBC along part of its route.

An extract from the GDA Cycle Network Plan is presented in **Figure 4.4**, which highlights the CBC in the context of the planned cycle network.

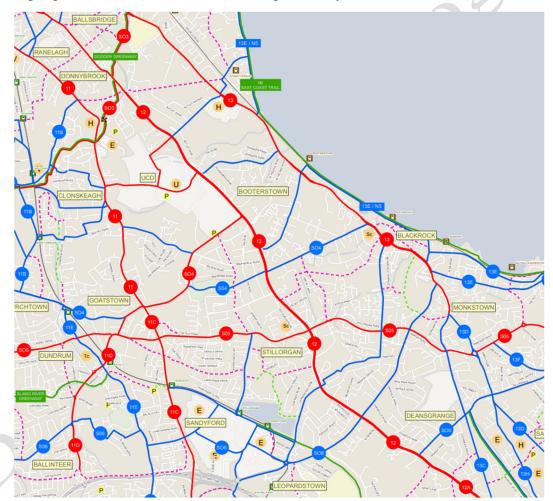


Figure 4.4: Extract from GDA Cycle Network Plan

(the CBC highlighted yellow)

# 5 Review of the 'Dún Laoghaire to City Centre Core Bus Corridor Options Study – Feasibility and Options Assessment Report'

#### 5.1 Introduction

From a review of submissions received as part of the public consultation process, as well as a review of the topographical survey carried out since the EPR Option's publication, a review of potential options which had the potential to overcome concerns through the implementation of alternative design solutions was undertaken. These issues are described in the following sections.

## 5.2 Assessment Methodology

The first step in the assessment process was to review the EPR Feasibility Study and Options Assessment Report.

The 'Dún Laoghaire to City Centre Core Bus Corridor Options Study – Feasibility and Options Assessment Report' utilised a two-stage assessment process to determine the EPR Option, comprising:

- An initial 'Stage 1' high-level route options assessment or 'sifting' process which appraised routes in terms of ability to achieve scheme objectives and whether they could be practically delivered; and
- Routes which passed this initial stage were taken forward to a more detailed Stage 2 assessment.

At the start of the Stage 1 assessment, an initial 'spiders web' of potential route options that could accommodate a CBC was identified for each study area section.

**Figure 5.1** and **Figure 5.2** are extracts from the 'Dún Laoghaire to City Centre Core Bus Corridor Options Study – Feasibility and Options Assessment Report', illustrating the 'spiders web' of potential routes considered in the Stage 1 assessment of each section.

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Figure 5.1: Spiders Web of Route Options extracted from the 'Dún Laoghaire to City Centre Core Bus Corridor Options Study – Feasibility and Options Assessment Report' [Section 1 herein]

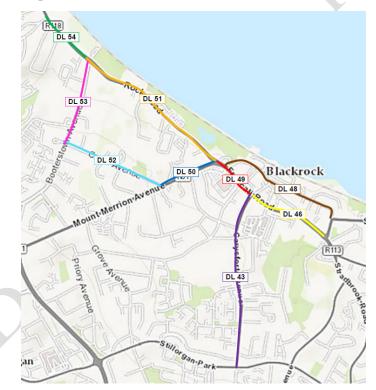


Figure 5.2: Spiders Web of Route Options extracted from the 'Dún Laoghaire to City Centre Core Bus Corridor Options Study – Feasibility and Options Assessment Report' [Section 2 herein] The following extract from the 'Dún Laoghaire to City Centre Core Bus Corridor Options Study – Feasibility and Options Assessment Report' describes the twostage process used to determine the EPR Option:

"At the Stage 1, i.e. sifting stage, the initial "spider's web" of route sections was narrowed down using a high level qualitative method based on professional judgement and a general appreciation for existing physical conditions / constraints within the Study Area from available survey information and site visits.

This exercise identified route sections that would either not achieve the scheme objectives or would be subject to significant cost and/or impact to achieve these objectives (e.g. excessive land-take)." ....

.... "Following completion of the 'Stage 1' assessment, the remaining potentially feasible route sections were progressed to Stage 2 of the assessment process. This stage comprised a more detailed qualitative and quantitative assessment of scheme options identified along each potential route, using criteria established to compare scheme options.

The first step in the Stage 2 assessment was to combine shorter route sections which passed the Stage 1 assessment, to form longer end-to-end potential routes within the Study Area.

After developing routes options, each was explored using different design concepts to identify the degree of facility provision and necessary infrastructure requirements." .....

.... "The scheme options for each route were then progressed to a multi-criteria analysis.

The 'Common Appraisal Framework for Transport Projects and Programmes' published by the Department of Transport, Tourism and Sport (DTTAS), March 2016, requires schemes to undergo a 'Multi-Criteria Analysis' (MCA) under the following criteria;

- Economy;
- Integration;
- Accessibility and Social Inclusion;
- Safety;
- Environment; and
- Physical Activity.

Physical Activity has been scoped out of the multi-criteria analysis at this stage. This is because all route options are considered to promote physical activity equally and as such it is not considered to be a key differentiator between route options."

A proposed methodology of considering alternative options was developed. This methodology set out that the scheme be reviewed to identify locations along the EPR Option where there was potential to revisit scheme proposals, to address

issues raised in the public consultation or identified through a review of additional information. If any areas were identified, additional options were to be developed and if considered feasible, would be passed through a MCA in a similar manner to the EPR Option assessment process.

In addition to the new options considered, any alternative options previously considered within the 'Dún Laoghaire to City Centre Core Bus Corridor Options Study – Feasibility and Options Assessment Report' were considered to determine whether they could potentially address the issues being encountered now. No options were brought forward in this regard. All new options would assessed against the EPR Option, in some cases refined to reflect issues identified upon review of the topographical survey and subsequent design refinement.

Any additional assessments were not intended to supersede work undertaken during earlier stages but to complement it and respond to issues raised by the public during the public consultation process or issues identified by additional information available to the Design Team.

This proposed methodology for the assessment of any new potential options explored at this stage of the project is the same as outlined in the 'Dún Laoghaire to City Centre Core Bus Corridor Options Study – Feasibility and Options Assessment Report'. A summary of the main criteria and sub criteria to be used in the options assessment process, if required, is presented in **Table 5.1**.

Assessment Criteria		Assessment Sub-Criteria
1. Economy		1.a. Capital Cost
1. Economy		1.b. Transport Reliability and Quality (Journey Time)
		2.a. Land Use Integration
		2.b. Residential Population and Employment Catchments
2. Integration	n	2.c. Transport Network Integration
		2.d. Cycle Network Integration
		2.e. Traffic Network Integration
3. Accessibi Inclusion	ity & Social	3.a. Key Trip Attractors (Education/Health/Commercial/Employment)
Inclusion		3.b. Deprived Geographic Areas
4 9 6 4		4.a. Road Safety
4. Safety		4.b. Pedestrian Safety
		5.a. Archaeology and Cultural Heritage
	Γ	5.b. Architectural Heritage
		5.c. Flora & Fauna
		5.d. Soils and Geology
5. Environm	ent	5.e. Hydrology
		5.f. Landscape and Visual
	F	5.g Air Quality
	F	5.h. Noise & Vibration
	F	5.i. Land Use Character

#### Table 5.1: Assessment Criteria

As noted above, Physical Activity was scoped out of the multi-criteria analysis within the 'Dún Laoghaire to City Centre Core Bus Corridor Options Study – Feasibility and Options Assessment Report' and has been similarly scoped out herein. This is because all route options are considered to promote physical activity equally and as such it is not considered to be a key differentiator between route options.

As in the 'Dún Laoghaire to City Centre Core Bus Corridor Options Study – Feasibility and Options Assessment Report', Route options were compared based on a five point scale, ranging from having significant advantages to having significant disadvantages over other route options. **Table 5.2** shows the colour coding of the five point scale, with advantageous routes graded "dark green" and disadvantageous routes graded "red".

Colour	Description	
	Significant advantages over other options.	
	Some advantages over other options.	
	Neutral compared to other options.	Ś
	Some disadvantages to other options	7
	Significant disadvantages to other options.	

#### Table 5.2: Route Options Colour Coded Ranking Scale

Where the design has undergone a material and fundamental change in respect of infrastructure provision or route choice, this would be recorded and explained. An MCA would be undertaken which would assess the newly developed and designed solutions against the MCAs that were previously assessed as part of the 'Dún Laoghaire to City Centre Core Bus Corridor Options Study – Feasibility and Options Assessment Report' considering the chosen option for the EPR.

Where the design has undergone more general updates and enhancements as expected during design maturation these have not been subject to a new MCA.

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## 5.3 Section 1: Nutley Lane to Booterstown Avenue

#### 5.3.1 Section 1 Emerging Preferred Route Option

The EPR Option previously identified along this section of the CBC corridor is presented in **Figure 5.1**. As noted, Section 1 formed part of an extended corridor within the 'Dún Laoghaire to City Centre Core Bus Corridor Options Study – Feasibility and Options Assessment Report' and as such has been highlighted in the figure for clarity.



Figure 5.1: Section 1 EPR Option

The previous MCA undertaken determined that a route along the R118 Merrion Road and Rock Road was the EPR Option.

The public consultation submissions received have been considered against a thorough review of the EPR Options together with an assessment of subsequent topographical survey. This review identified no further alternative options which could meet the objectives of the programme.

It is considered that the options assessment presented in the 'Dún Laoghaire to City Centre Core Bus Corridor Options Study – Feasibility and Options Assessment Report' has appropriately assessed route options and that the selected corridor offers the most benefits for pedestrians, cyclists, and buses, and as such is considered to be the draft PRO.

#### 5.3.2 Areas Identified for Re-examination

Following a thorough review of the 'Dún Laoghaire to City Centre Core Bus Corridor Options Study – Feasibility and Options Assessment Report', Public Consultation Submissions and topographical survey, no alternative options were identified for re-examination.

#### 5.4 Section 2: Booterstown Avenue to Stradbrook Road

#### 5.4.1 Section 2 Emerging Preferred Route Option

The EPR Option previously identified along this section of the CBC corridor is presented in **Figure 5.2**. As noted, Section 2 formed part of an extended corridor within the 'Dún Laoghaire to City Centre Core Bus Corridor Options Study – Feasibility and Options Assessment Report' and as such has been highlighted in the figure for clarity.



#### Figure 5.2: Section 2 EPR Option

The previous MCA undertaken determined that a route along the R118 Rock Road, N31 Frascati Road and R113, was the EPR Option.

The public consultation submissions received have been considered against a thorough review of the EPR Options together with an assessment of subsequent

topographical survey. This review identified no further alternative options which could meet the objectives of the programme.

It is considered that the options assessment presented in the 'Dún Laoghaire to City Centre Core Bus Corridor Options Study – Feasibility and Options Assessment Report' has appropriately assessed route options and that the selected corridor offers the most benefits for pedestrians, cyclists, and buses, and as such is considered to be the draft PRO..

#### 5.4.2 Areas Identified for Re-examination

Following a thorough review of the 'Dún Laoghaire to City Centre Core Bus Corridor Options Study – Feasibility and Options Assessment Report', Public Consultation Submissions and topographical survey, no alternative options were identified for re-examination.

#### 5.5 Summary

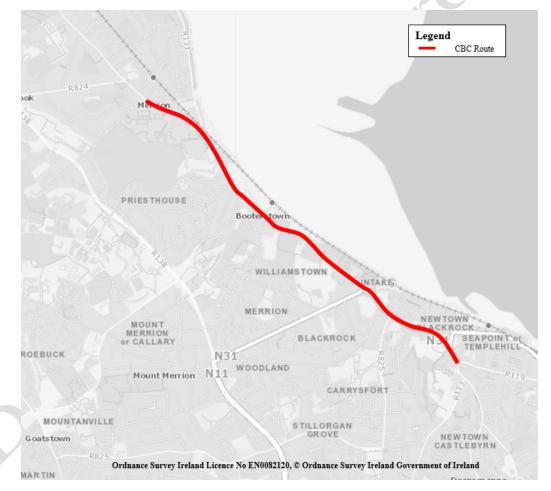
Following a thorough review of the 'Dún Laoghaire to City Centre Core Bus Corridor Options Study – Feasibility and Options Assessment Report', all submissions received as part of the Public Consultation process and examination of the topographical survey, it is considered that the selected corridor offers the most benefits for the CBC and therefore no alternative options have been taken forward for further assessment. The EPR Option is therefore being accepted as the draft PRO.

# 6 Draft Preferred Route Option

#### 6.1 Introduction

Chapter 5 of this report outlines that it is considered that the selected corridor in the EPR Option offers the most benefits for the CBC and therefore no alternative options have been taken forward for further assessment. This chapter of the report presents and describes the draft PRO identified and the draft PRO scheme design. The updated draft PRO scheme design drawings are included in the Appendices of this report.

#### 6.2 Draft Preferred Route Option Description



The draft Preferred Route is presented in Figure 6.1.

#### Figure 6.1: Draft Preferred Route of the CBC

The Blackrock to Merrion Core Bus Corridor commences on the R118 Merrion Road at its junction with Nutley Lane. Buses are proposed to be routed along Rock Road joining the N31 at the Mount Merrion Avenue junction. The proposed scheme terminates at the junction of Temple Hill/ Monkstown Road and Stradbrook Road. Priority for buses and cyclists is provided along the entire route, consisting primarily of dedicated bus lanes in each direction, and continuous segregated cycle tracks. The Blackrock to Merrion Core Bus Corridor connects to the route of the UCD to City Centre Core Bus Corridor at the junction of Merrion Road and Nutley Lane, providing a continuous route from Blackrock to the City Centre.

### 6.3 Draft Preferred Route Option Scheme Design Description

#### 6.3.1 Section 1: Nutley Lane to Booterstown Avenue – Merrion Road, Rock Road

Between the Merrion Road / Nutley Lane junction and the Rock Road / Booterstown Avenue junction, it is proposed to provide a single bus lane, a single general traffic lane and a segregated cycle track arrangement in each direction along the majority of the route.

At the access junction to St. Vincent's Hospital from Merrion Road, it is proposed to remove the left-turn lane in order to improve cyclist safety and reduce the necessary land acquisition.

An adjustment to the cross-section is proposed between St. Vincent's Hospital and Estate Avenue in order to reduce the extent of potential land acquisition.

Between Elm Court and the Strand Road junction, it is proposed to provide a 3lane carriageway along this section with a footpath and cycle track in both directions. The carriageway would comprise 2 no. general traffic lanes and one outbound bus lane. Priority for inbound buses would be provided via signal controlled priority at the Strand Road junction. A strip of parallel parking spaces is proposed to be provided on the outbound side of the Merrion Road, in the vicinity of No. 264 to No. 270.

It is intended to undertake some safety improvement works at the junction of Merrion Road and Strand Road, including the provision of segregated cycle facilities, the removal of the slip lane from Strand Road to Merrion Road and the control of traffic exiting Strand Road utilising traffic signals. On the southern arm of the junction, a strip of parallel parking spaces is proposed on the outbound side.

Between Strand Road and Booterstown Avenue, a 2-way cycle track is proposed on the eastern side of the route.

At the junction of the Elm Park Development on Merrion Road, the arrangement has been revised to remove the proposed traffic island on the inbound arm, which has removed the need for land take onto Landaff Terrace to the south.

Adjustments to the Rock Road cross-section and layout are proposed between the junctions of Trimleston Avenue and Booterstown Avenue in order to reduce the necessary land acquisition and to provide an improved access to the nearby school.

### 6.3.2 Section 2: Booterstown Avenue to Stradbrook Road

Between the Booterstown Avenue and Stradbrook Road junctions, it is proposed to provide a single bus lane, a single general traffic lane and a segregated cycle track arrangement in each direction.

The right-turn lane from Rock Road to Booterstown DART station, previously proposed in the EPR Option February 2019, is no longer being proposed in order to maintain current pedestrian facilities at the junction.

An adjustment to the proposed cross-section is proposed between Booterstown Avenue and Blackrock Clinic to reduce the potential need for land acquisition along Willow Park School and in order to reduce the extent of necessary land acquisition along Blackrock College and adjacent properties.

The gates, railings, and piers forming the existing entrance to Blackrock College are to be rotated on the westernmost pier to accommodate the realigning of the adjacent boundary while preserving the symmetry of the protected entrance.

Alterations to junctions along this section are proposed to improve cyclist safety including the removal of the left-turn slip lane from Rock Road to Rock Hill and the provision of protected cycle tracks at other junctions.

The access and egress arrangements to the Frascati Centre have been amended in the design to reflect the existing, newly constructed, arrangement.

#### 6.4 **Summary**

#### 6.4.1 **Infrastructure Provision**

The draft PRO is approximately 3.9 km long from end to end. The updated concept scheme design drawings show the extent of the infrastructure proposed to deliver this CBC. The bullet point below present the length of existing and proposed bus and cycle priority as a percentage of the overall route length. 05

- 55% Existing bus priority (outbound)
- 47% Existing bus priority (citybound)
- 97% Proposed bus priority (outbound) •
- 97% Proposed bus priority (citybound) (2% virtual)
- 71% Existing cycle priority (outbound) (37% advisory, 34% mandatory)
- 71% Existing cycle priority (citybound) (37% advisory, 34% mandatory)
- 100% Proposed cycle priority (outbound) •
- 100% Proposed cycle priority (citybound)

Virtual bus priority is proposed on the Merrion Road, in the inbound direction between Merrion Gates Junction and Elm Court Apartments. Over this section a 3-lane cross section lane is proposed with a bus lane and a general traffic lane outbound but only a general traffic lane inbound. Signal controlled priority is proposed at the Merrion Gate junction in an inbound direction. This junction will control the volume of traffic along Merrion Road inbound to manage the queue of traffic in order to provide bus priority along this section.

#### **Material Scheme Changes** 6.4.2

The following list highlights the material scheme changes between the published EPR Option and the draft PRO proposals:

- The cross section in front of St. Vincent's Hospital and Estate Avenue has been reduced generally with a reduction in land take.
- The cross-section from Elm Court to Merrion Gates junction has been reduced to a 3-lane arrangement with 2 no. general traffic lanes and an outbound only bus lane:
- The Merrion Gates junction has been significantly altered to a consolidated Tjunction with improved cycle facilities;
- At the junction of the Elm Park Development on Merrion Road, the arrangement has been revised to remove the proposed traffic island on the inbound arm, which has removed the need for land take onto Landaff Terrace to the south:
- The new right-turn lane from Rock Road to Booterstown DART station is no • longer being proposed;

- Land acquisition from residential properties and Blackrock College has been reduced along the Rock Road;
- The gates, railings, and piers forming the existing entrance to Blackrock College are to be rotated on the westernmost pier to accommodate the realigning of the adjacent boundary while preserving the symmetry of the protected entrance;
- The new right-turn lanes from Rock Road to Blackrock Clinic and Seafort Parade are no longer being proposed;
- The access and egress arrangements to the Frascati Centre have been amended in the design to reflect the existing, newly constructed, arrangement;
- The junction of the Rock Road and Mount Merrion Avenue has been reconfigured with the removal of the left-turn slip lanes and improved cycle facilities;
- A number of bus stops along the route have been redesigned as island bus stops where space allows; and
- Bus stop locations have been modified in this revised proposal some bus stops have been relocated or removed to achieve a better spacing between stops, while also ensuring that each stop is sited in the best location to serve surrounding neighbourhoods. These proposals will also ensure a more efficient bus network operation. In a number of locations, separate bus stop laybys have been provided which are envisaged to accommodate private coaches.

In developing the Draft PRO, consideration has been given to the carbon generated by the scheme during construction. Many of the changes made to the scheme design since the EPR proposal have resulted in a change in the construction carbon generated by the scheme. Notable changes include the following:

- Introduction of a 3-lane cross section between Estate Avenue and Merrion Road which retains the majority of the existing kerb lines, retains a number of existing trees, and reduces the need for road widening into adjacent properties;
- Redesign of the junction of the Elm Park Development on Merrion Road, to remove the proposed traffic island on the inbound arm, which has removed the need for road widening into adjacent properties south; and
- Revisions to the proposed road layout on Rock Road has significantly reduced the extent of road widening required into adjacent properties.

Construction carbon will continue to be considered and assessed as part of the evolving scheme design and the preparation of the supporting EIAR documentation.

### 6.4.3 Scheme Benefits

#### 6.4.3.1 Bus Journey Times

Through the provision of increased bus priority infrastructure, the proposed scheme would improve both the overall journey times for buses along the route and their journey time reliability. This can help to realise the objectives of the scheme as set out in Section 2.5 of this report. The facilitation of bus priority along the CBC, through the delivery of dedicated bus lanes and virtual bus priority measures such as signal controlled priority, is envisaged to reduce bus journey times along the CBC. In addition to this, journey reliability is envisaged to be improved, by largely removing interaction between bus traffic and general traffic.

### 6.4.3.2 Walking & Cycling

In addition to the improvements to bus journey time and journey time reliability as discussed in section 6.4.3.1, the proposed scheme would provide benefits for cyclists and pedestrians. The provision of dedicated cycling infrastructure along the CBC, would improve the level of service provided for cyclists along the route, making cycling trips safer and more attractive.

The scheme would deliver substantial elements of the GDA Cycle Network Plan as outlined in Section 4.5, as well as linking with other proposed cycling schemes, contributing towards the development of a comprehensive cycling network for Dublin. Specifically, the scheme would implement a significant section of the East Coast Trail (Sutton to Sandycove) two-way cycle route – in this case the section from Merrion Gates to Booterstown DART Station.

The scheme would also provide improved facilities for pedestrians along the route. Improved crossing facilities would be provided both at junctions and in mid-block locations.

A number of public realm upgrades, including widened footpaths, high quality hard and soft landscaping and street furniture would be provided in areas of high activity to contribute towards a safer, more attractive environment for pedestrians.

## 7 Next Steps

This report has identified a Draft PRO for the bus infrastructure along this CBC for which an updated concept design has been developed.

It has been determined by NTA that a third non-statutory public consultation is to be conducted prior to finalising the PRO. This public consultation is to commence in November 2020, when submissions will once again be invited from the public on the draft PRO.

Following the non-statutory public consultations and subsequent review of the submissions received therein, the Draft PRO designs for the CBC will be further developed to form a Preliminary Design.

This next project stage (the development of a Preliminary Design) will further refine and update the concept design along the route. Further account will be taken of likely public transport service levels, particularly the bus service patterns and any changes to the overall bus network which may arise from the separate bus network review process. The proposals will be amended, if and as required, to integrate any resultant changes. The Preliminary Design will define the final practically achievable scheme for the CBC, considering more detailed studies of constraints, impacts and environmental assessment required at a local level.

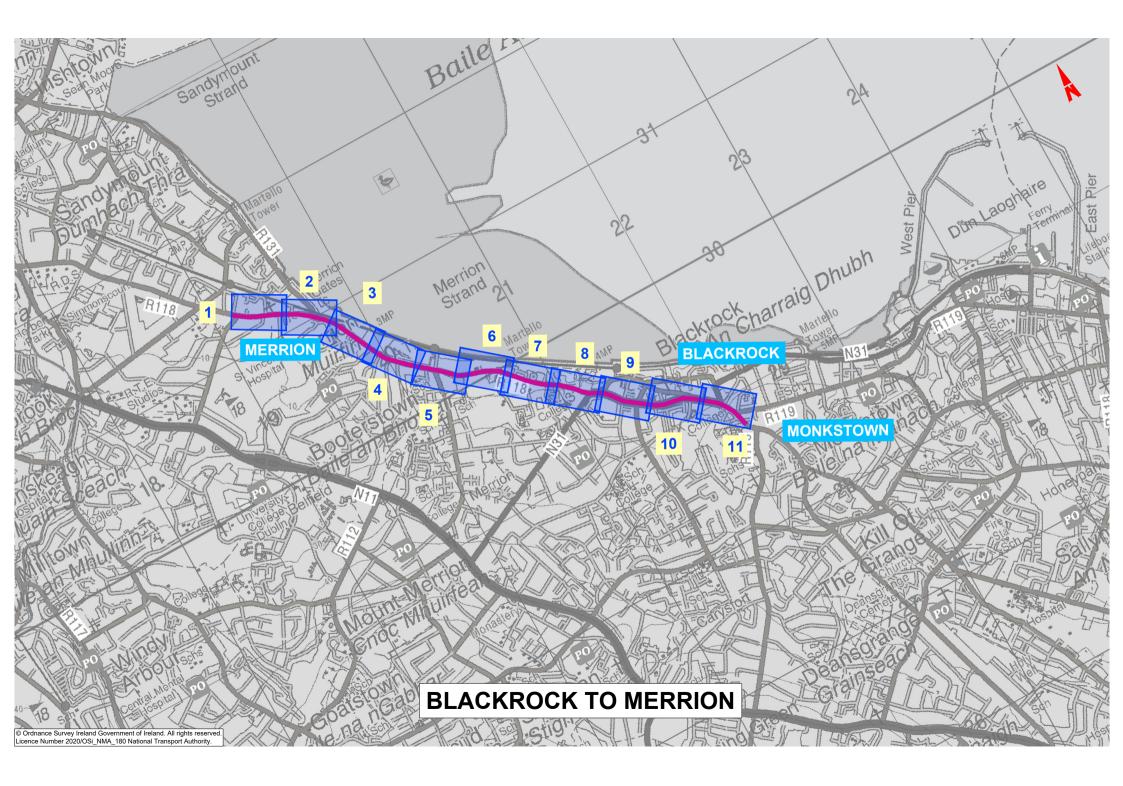
This Preliminary Design will form the basis of the planning consent process for the scheme, which will require a development consent application to be made directly to An Bord Pleanála, due to the nature and extent of the proposed works.

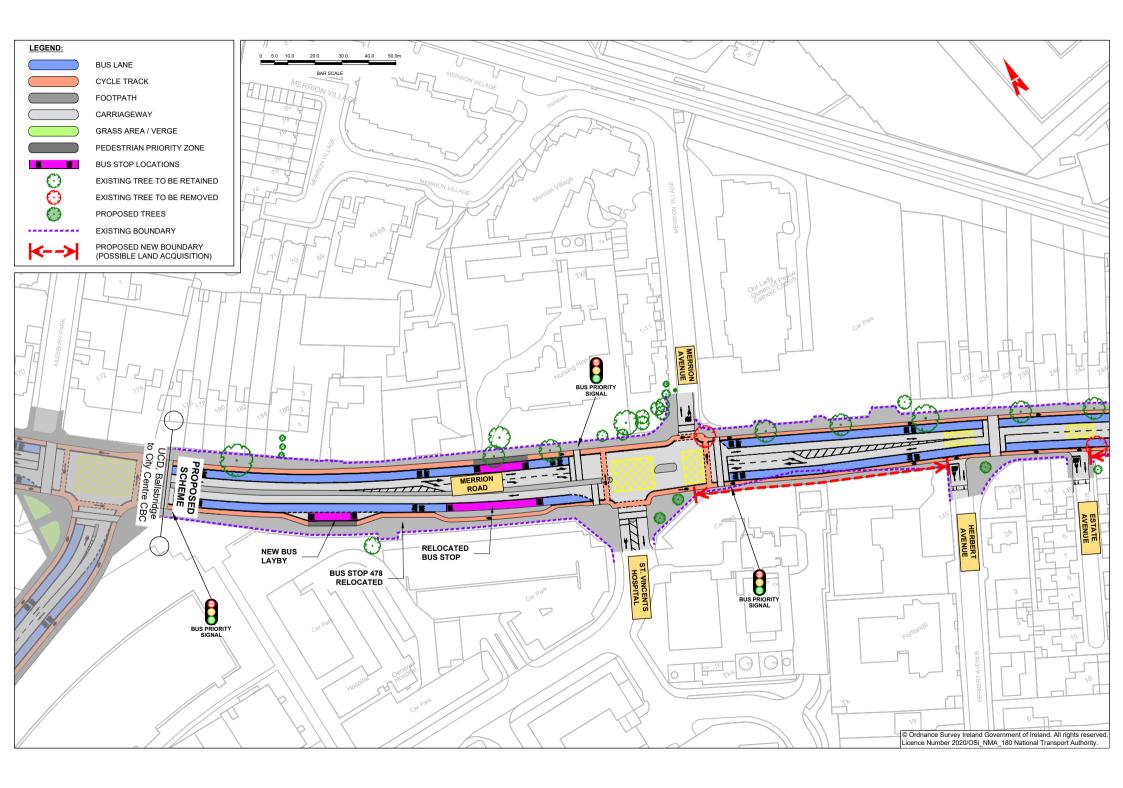
## **Appendix A**

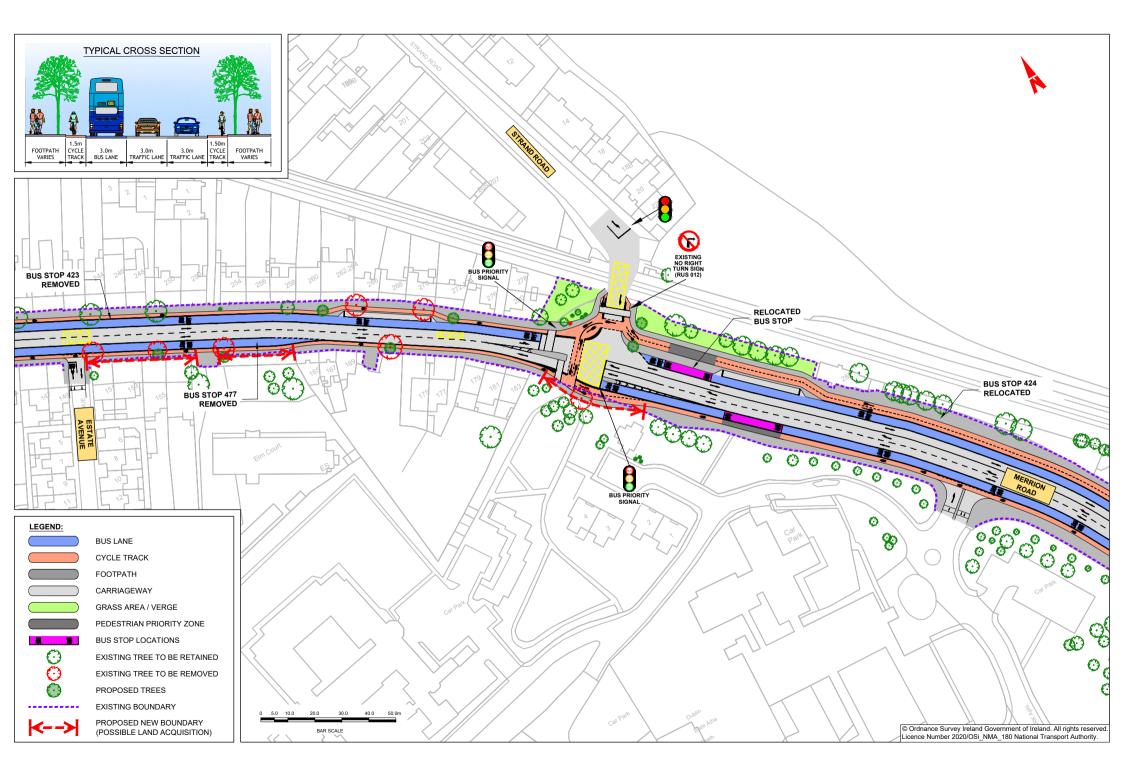
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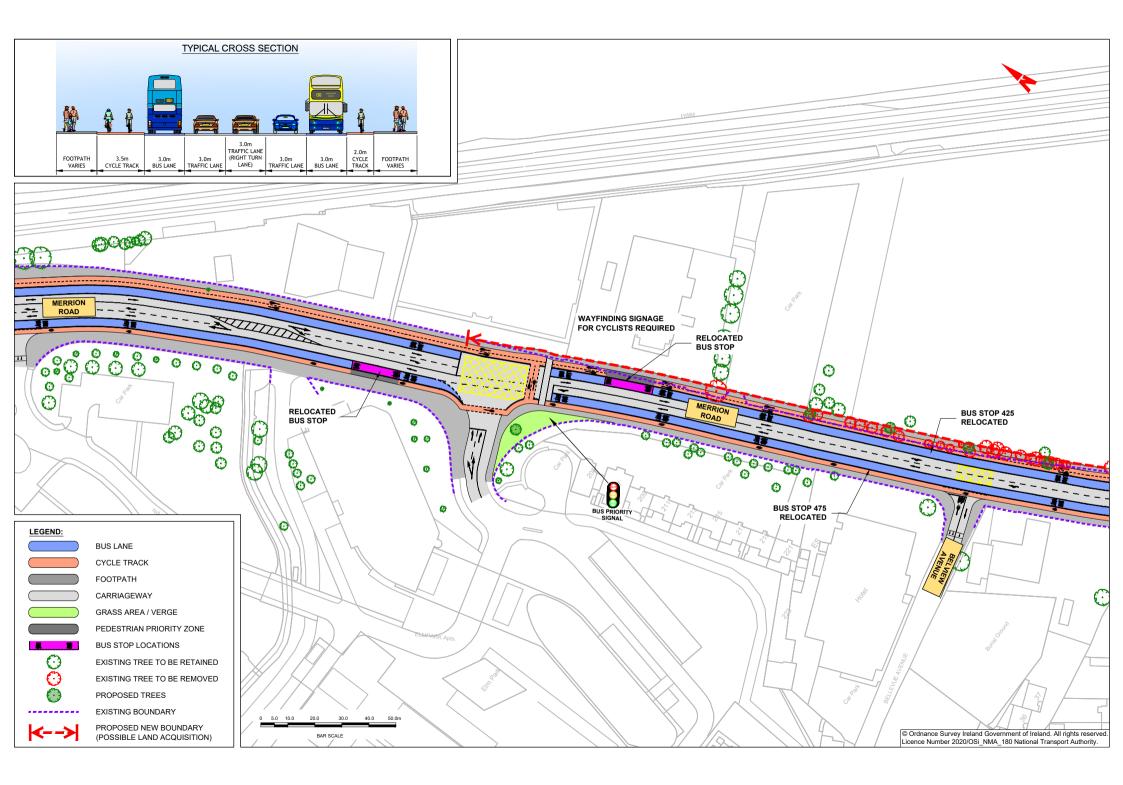
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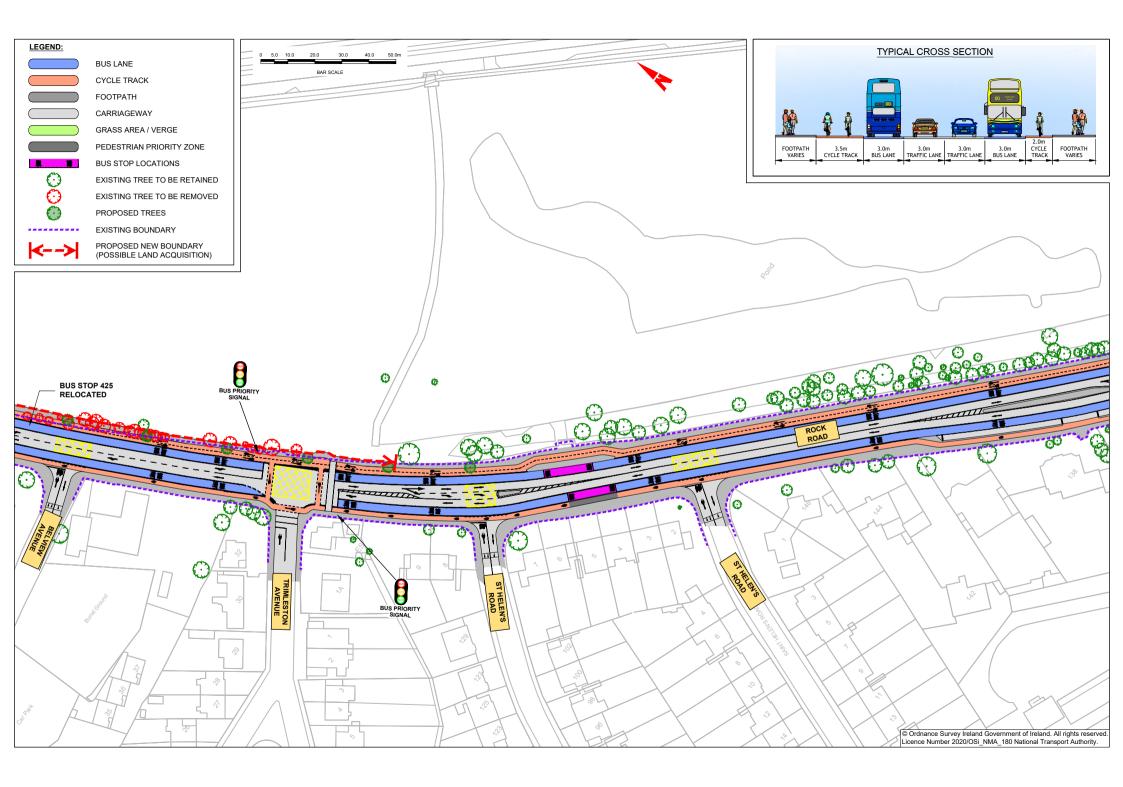
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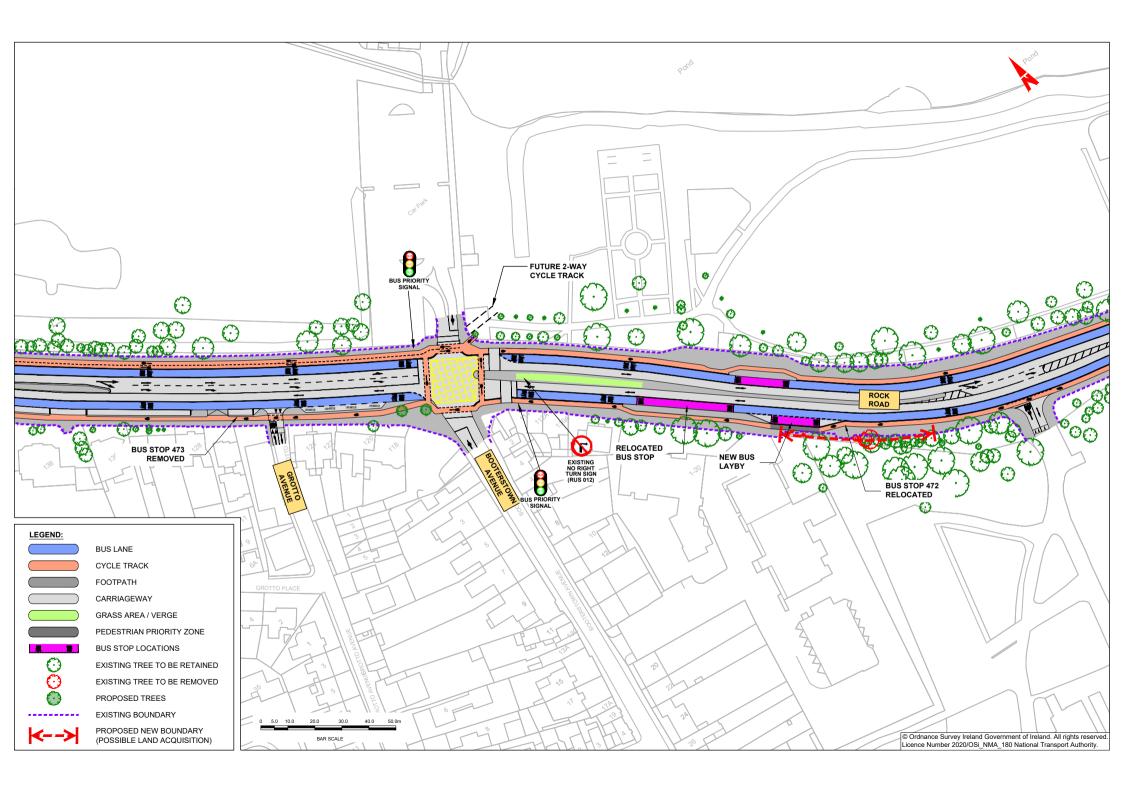


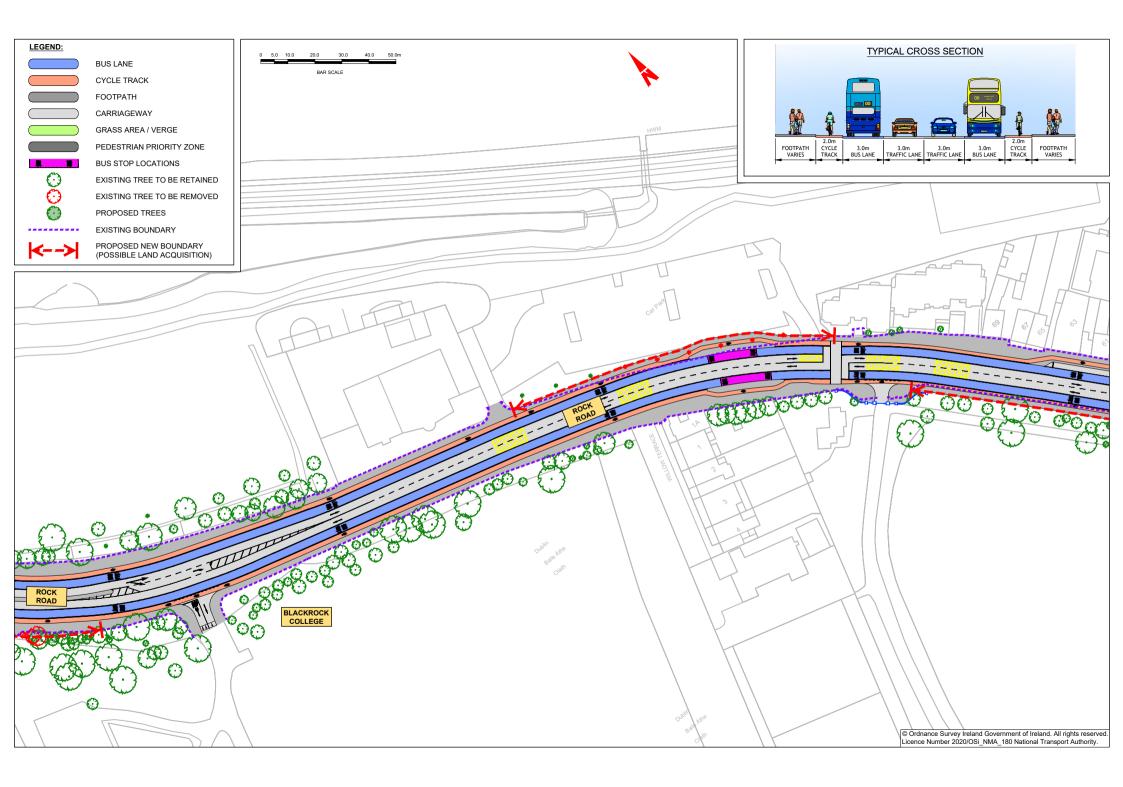


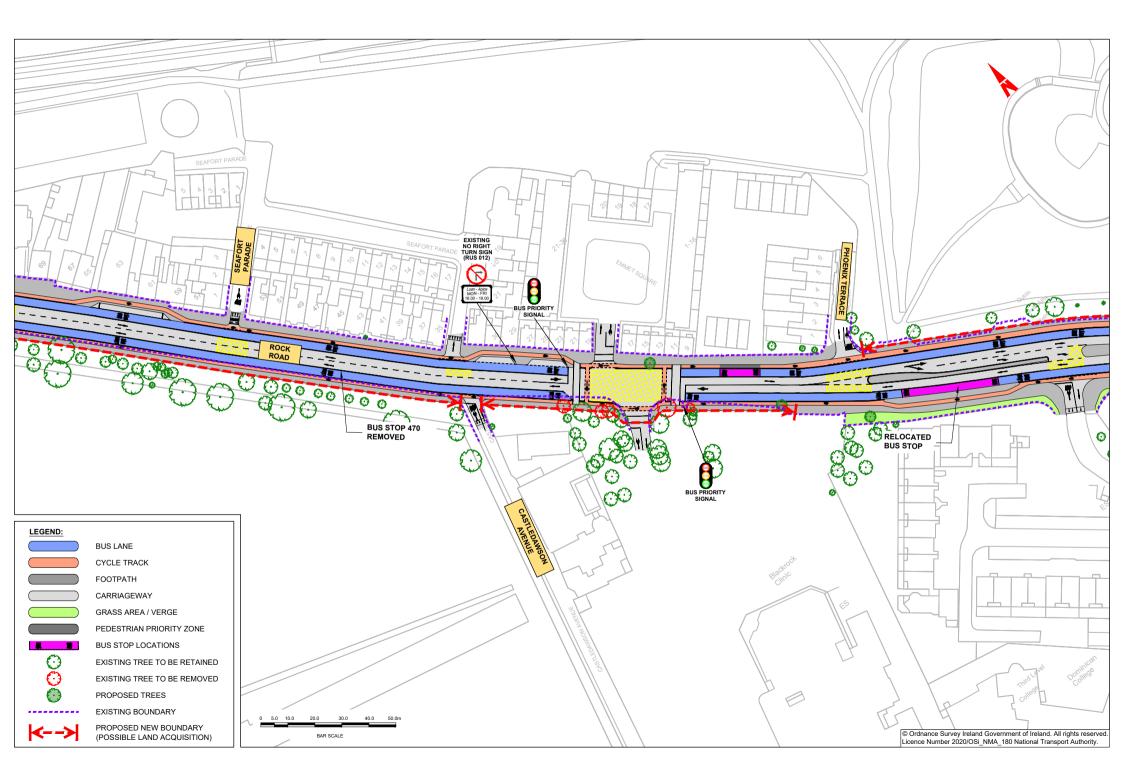


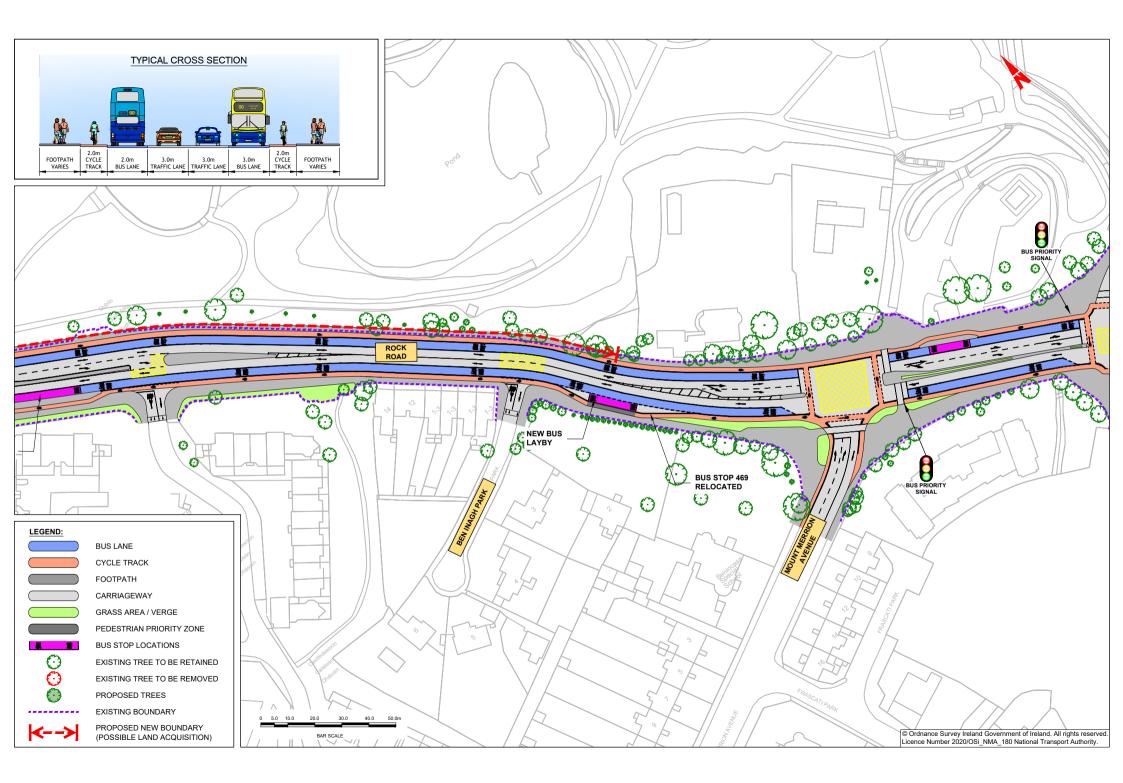


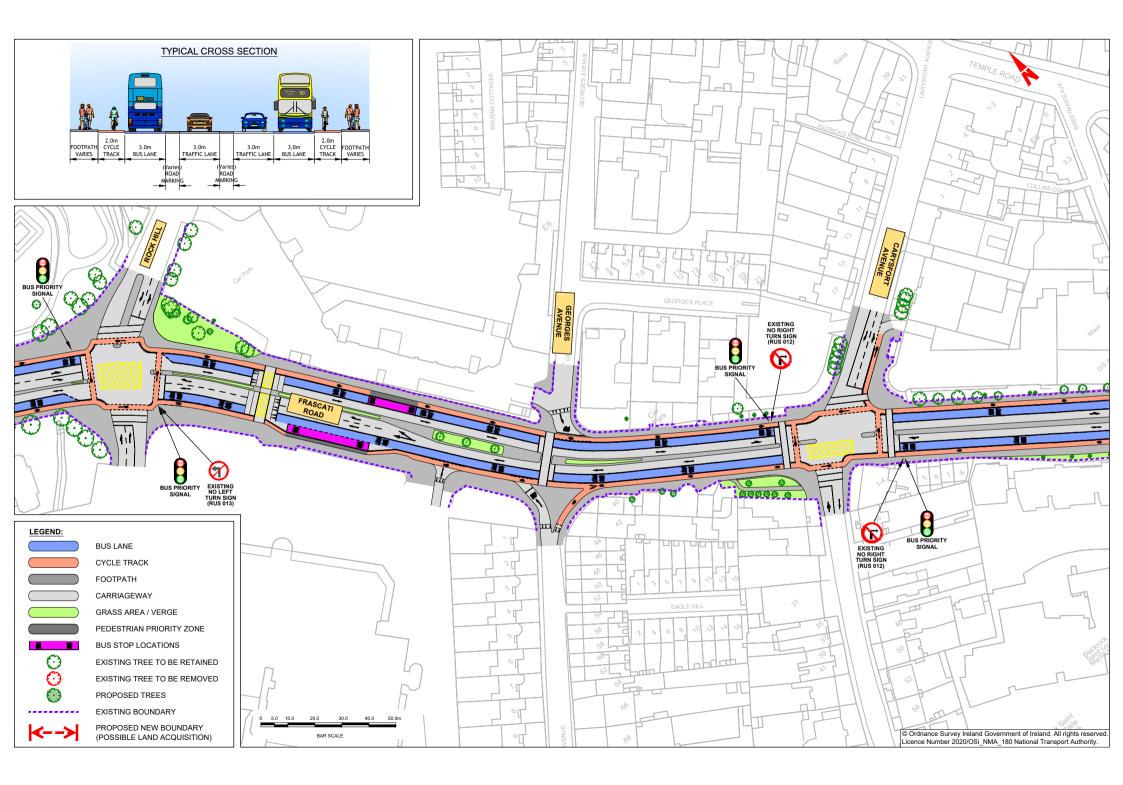


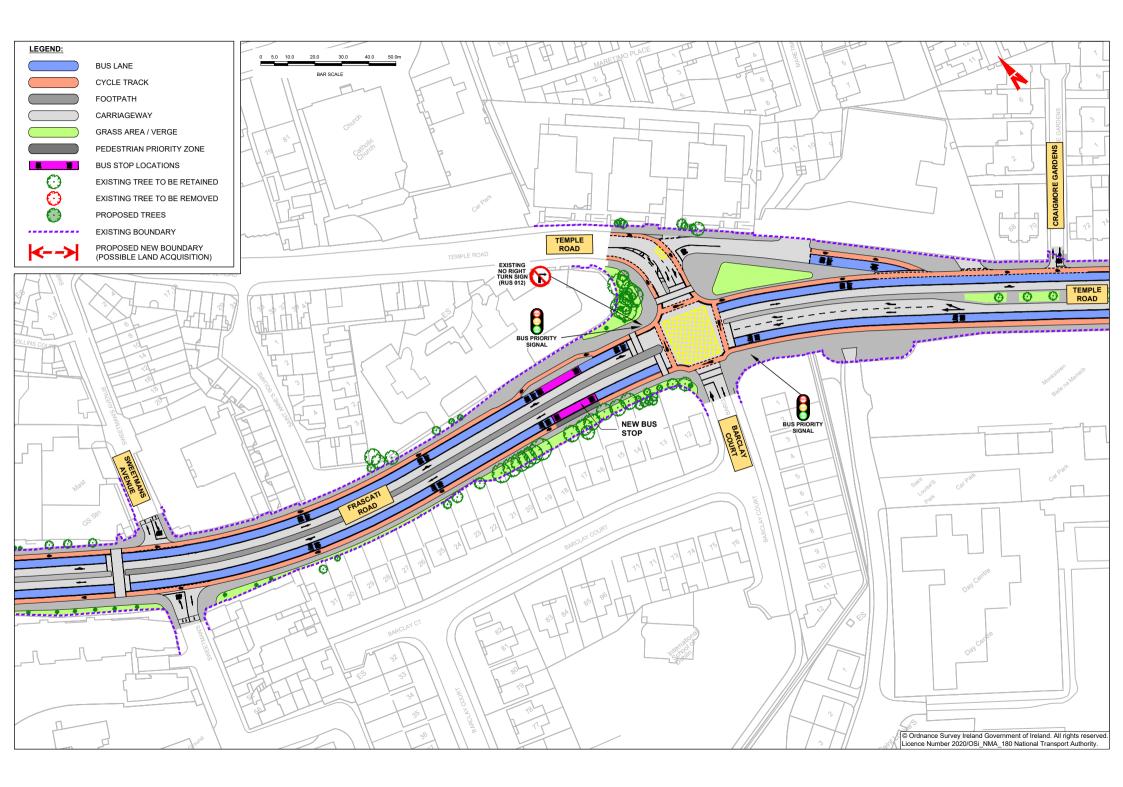


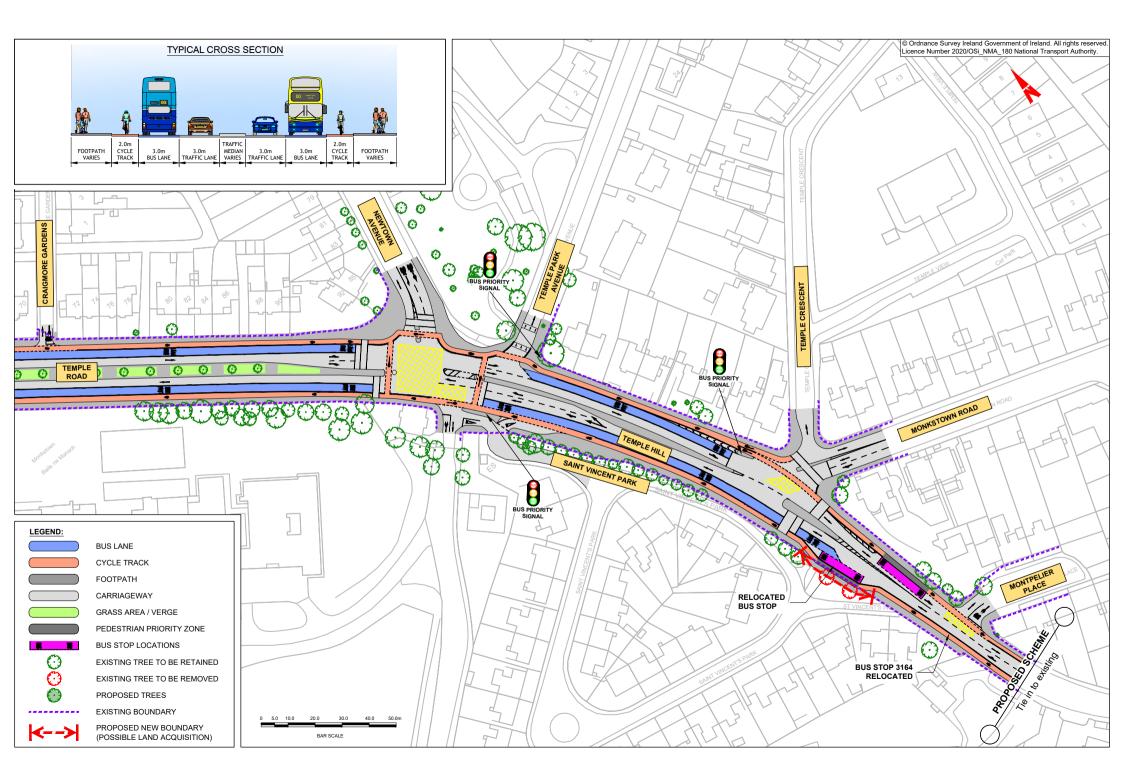












## **Appendix B**

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Dún Laoghaire to City Centre Core Bus Corridor Options Study – Feasibility and Options Assessment Report https://busconnects.ie/initiatives/core-bus-corridor-background-information/technicaldocuments/

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# **Appendix C**

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Blackrock to Merrion Core Bus Corridor - Emerging Preferred Route Information Brochure https://busconnects.ie/media/1476/busconnects-cbc15-blackrock-to-merrion-180219-fa-web.pdf

Crait of





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