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Blanchardstown
to City Centre

Draft Preferred Route Options Report

November 2020



Project Ireland 2040
Building Ireland's Future

BUS CONNECTS

SUSTAINABLE TRANSPORT FOR A BETTER CITY.

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Glossary of Technical Terms

Signal Controlled Bus Priority - Signal Control Bus Priority uses traffic signals to enable buses to get priority ahead of other traffic on single lane road sections, but it is only effective for short distances. This typically arises where the bus lane cannot continue due to obstructions on the roadway. An example might be where a road has pinch-points where it narrows due to existing buildings or structures that cannot be demolished to widen the road to make space for a bus lane. It works through the use of traffic signal controls (typically at junctions) where the bus lane and general traffic lane must merge ahead and share the road space for a short distance until the bus lane recommences downstream. The general traffic will be stopped at the signal to allow the bus pass through the narrow section first and when the bus has passed, the general traffic will then be allowed through the lights

Bus Gate – A Bus Gate is a sign-posted short length of stand-alone bus lane. This short length of road is restricted exclusively to buses, taxis and cyclists plus emergency vehicles. It facilitates bus priority by removing general through traffic along the overall road where the bus gate is located. General traffic will be directed by signage to divert away to other roads before they arrive at the Bus Gate.

Cycle Lane – A cycle lane is a lane on the carriageway that is reserved either exclusively or primarily for cycling and is separated from general traffic or bus lanes by road markings.

Cycle Track – A cycle track is a separate section of the road dedicated for cycling only. This space will generally be isolated from other vehicular traffic by a physical kerb.

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.

Quiet Street Treatment – Where CBC roadway widths cannot facilitate cyclists without significant impact on bus priority, alternative cycle routes are explored for short distances away from the CBC bus route. Such offline options may include directing cyclists along streets with minimal general traffic other than car users who live on the street. They are called Quiet Streets due to the low amount of general traffic and are deemed suitable for cyclists sharing the roadway with the general traffic without the need to construct segregated cycle tracks or painted cycle lanes. The Quiet Street Treatment would involve appropriate advisory signage for both the general road users and cyclists.

Protected Junctions - Refers to junctions, which provide physical kerb buildouts to protect cyclists through the junction. Due to the inherently complex nature of mixed mode movements at junctions, the provision for cyclists at junctions is a critical factor in managing conflict and providing safe junctions for all road users.

As such, this is the preferred layout for signalised junctions as part of the CBC Infrastructure Works.

Greenway – A greenway is a recreational corridor for non-motorised journeys, developed in an integrated manner which enhances both the environment and quality of life of the surrounding area. These routes should meet satisfactory standards of width, gradient and surface condition to ensure that they are both user-friendly and low-risk for users of all abilities.

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Executive Summary

Introduction

The purpose of this report is to present an overview of the Draft Preferred Route Option for the 'Blanchardstown to City Centre' 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 Blanchardstown to City Centre 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 Blanchardstown to City Centre CBC commences on the north side of the South Blanchardstown Road junction with the N3. The corridor proceeds along the R121 Blanchardstown Road South into the Blanchardstown Shopping Centre.

From a new terminus to the north-west of Blanchardstown Shopping Centre the CBC is routed onto the N3 Navan Road via the Snugborough Road junction and follows the N3 and Navan Road as far as the junction with the Old Cabra Road.

From here the CBC is routed along Old Cabra Road, Prussia Street and Manor Street to the junction with Brunswick Street North.

The CBC is then routed via Blackhall Place as far as the junction with Ellis Quay and Arran Quay, where it would join the prevailing traffic management regime on the North Quays.

Priority for buses is provided along the entire route, consisting primarily of dedicated bus lanes in both directions, with alternative measures to give buses priority over traffic proposed at particularly constrained locations.

Where substantial revisions have been made to the design since the publication of the Emerging Preferred Route (EPR Option) Option in November 2018, options have been assessed using a Multi-Criteria Assessment (MCA) to determine the draft 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 EPR Option and the draft PRO proposals:

- The proposed layout at Mulhuddart junction has been changed, with cycle tracks having been modified. Cycle tracks are now proposed on the nearside of the carriageway and cycle crossings are provided alongside pedestrian crossings to minimise conflict between cyclists and motorists.
- Along the N3 corridor, where bridges and culverts are to be widened to accommodate bus lanes, this would also cater for a future upgrade of the N3.
- The previously proposed two-way cycle track westbound along the R147 Navan Road to Auburn Avenue Junction is modified with cyclists routed from the R147 to an on-street 'Quiet Street' cycle route along Castleknock Manor. This would remove the need for land-take in this area.
- The Navan Road roundabout at Ashtown Road is now proposed to be modified to a signal-controlled roundabout - keeping the existing trees on the central island. The EPR Option proposed modifying the existing roundabout to a signal-controlled crossroads.

- A right turn-lane is proposed in the westbound direction on the Navan Road to Kinvara Avenue. The previously proposed eastbound right turn lane into Baggot Road has been removed, although a right turn movement is allowed. This allows for a reduction of landtake in this area.
- Land-take requirement has been removed at Cabra Library due to redesign of junction at Navan Road / Ratoath Road.
- New traffic signal controls are proposed at the Old Cabra Road / Glenbeigh Road junction, which would enable traffic flows turning left or right onto Old Cabra Road to be controlled (mitigating the risk of traffic using Glenbeigh Road as a rat-run).
- On Old Cabra Road, the previously proposed two-way cycle track along Old Cabra Road has been replaced by two one-way cycle tracks on either side of the road, and the northbound bus lane approaching the Navan Road junction has been reduced in length. Thus, reducing land-take in areas on Old Cabra Road.
- Widening of the Old Cabra Road overbridge over the Heuston Station / Connolly Station railway line is not required and it is now proposed to accommodate the bus / bicycle infrastructure within the existing road bridge width.
- The revised design includes making St Joseph's Road one-way towards Prussia Street at its eastern end in order to avoid traffic using this street as a short-cut route.
- The junction of Manor Street / Prussia Street with Aughrim Street at Stoneybatter would be signalised; and would include a bus gate in both directions. All northbound general traffic would need to turn left onto Aughrim Street. A signalised crossing and raised junction would be provided for cyclists and pedestrians crossing Aughrim Street.

In the southbound direction, any general traffic on Prussia Street at this location would have to turn right onto Aughrim Street.
- The Manor Street / Kirwan Street / Manor Place junction would be signalised, and Kirwan Street traffic (which is westbound only) would be limited to 'right-turns only' at its junction with Manor Street to minimise opportunities for through-traffic to use this route.
- At the north end of George's Lane, the revised layout has a signal-controlled junction at Grangegorman Street Lower / Brunswick Street North as a means of limiting traffic flow entering and leaving Grangegorman Street Lower.
- A northbound bus lane on Blackhall Place (at its junction with King Street North) would be provided – and all general traffic would have to turn right into King Street North. Northbound traffic would need to travel via George's Lane and Brunswick Street North to reach Manor Street. Traffic signals at the Brunswick Street North / Blackhall Place junction would enable the flow of northbound traffic to be controlled and limited – thus giving priority to buses.

- On Blackhall Street, the proposed road layout has been revised to include one lane for road traffic, a two-way cycle track, and angled parking for local residents.

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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).

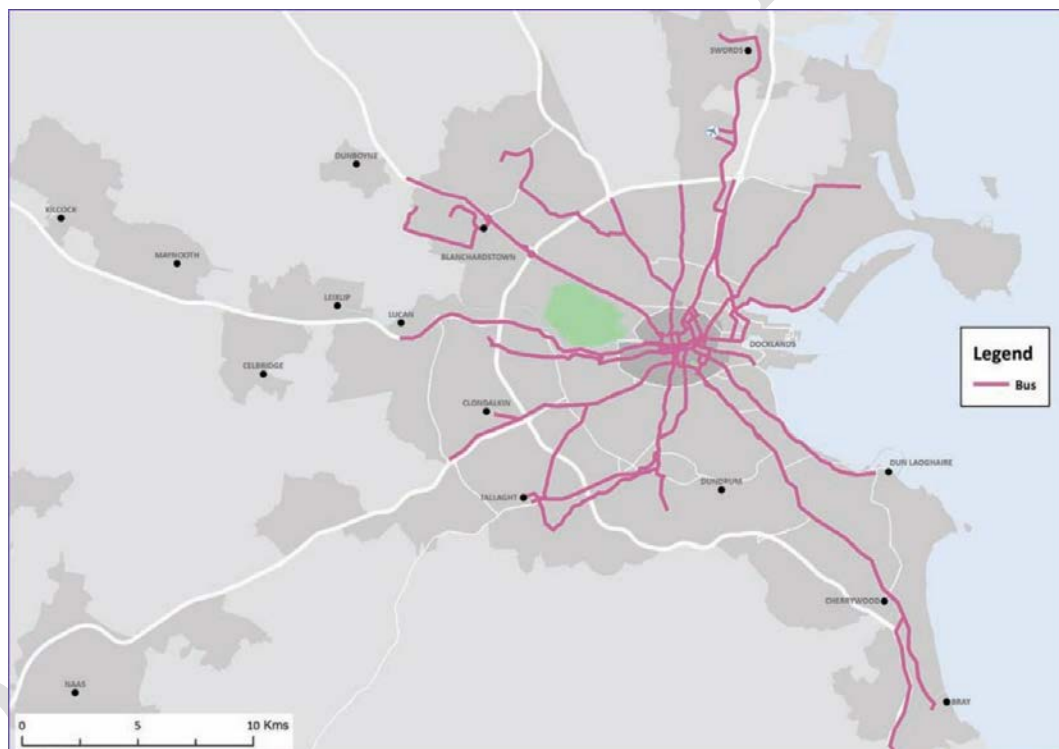


Figure 1.1: 2035 Core Bus Network – Radial Corridors

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 Drimmagh 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 ‘Blanchardstown to City Centre CBC’ is identified in this document as forming part of the Radial Core Bus Network, designated as ‘Route 5’. 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 ‘Blanchardstown Town Centre to the Liffey Quays (Ellis Quay) CBC Route Options Assessment’ was prepared, which identified feasible options along the corridor, assessed these options and arrived at an EPR Option. Submissions were invited from the public to provide comment on the EPR proposals and to inform subsequent design stages. A second round of public consultation commenced on 4th March 2020 and ran until the 17th of April 2020 when submissions were once again invited from the public on the draft PRO.

A comprehensive review of feedback received during both public consultations 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 Blanchardstown to City Centre route which seek to address issues of concern to the public, 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, and assessment of same, 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 Blanchardstown to City Centre CBC (the CBC), which will build on the previous 'Blanchardstown Town Centre to the Liffey Quays (Ellis Quay) CBC Route Options Assessment' prepared by AECOM/Roughan O'Donovan (RO'D) in March 2018.

This previous report along with its associated appendices are included in Appendix G.

The Study Area Analysis and Multi Criteria Analysis (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 has been detailed in this report, and updated draft PRO design drawings produced taking account of:

- 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 'Blanchardstown Town Centre to the Liffey Quays (Ellis Quay) CBC Route Options Assessment';
- Further design development and option 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 – In this chapter, the study area for the Blanchardstown to City Centre CBC is detailed. 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 ‘Blanchardstown Town Centre to the Liffey Quays (Ellis Quay) CBC Route Options Assessment’ – This chapter is a summary of the options assessment that was previously carried out in each section of the ‘Blanchardstown Town Centre to the Liffey Quays (Ellis Quay) CBC Route Options Assessment’. An assessment has been made on the validity of the previous options assessment in the context of additional information collected, including through more detailed survey work undertaken and feedback from the public consultation process. Issues arising and material changes resulting from the design development are detailed.
- Chapter 6: Option Assessment – This chapter subsequently updates the previous options assessment work undertaken in light of the additional considerations set out in Chapter 5.
- Chapter 7: Draft Preferred Route Option – This chapter gives the overall conclusions of the option assessment process and describes the draft PRO proposal.
- Chapter 8: Next Steps – This chapter details the “next steps” in the delivery of the CBC.

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

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”*.

[illegible]

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

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The Blanchardstown to City Centre CBC (the CBC) is identified as an enabling element 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.

Two primary cycle routes (Route 4 and 5) and secondary cycle routes align with the Blanchardstown to City Centre CBC.

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 option assessment process, any upgrading of infrastructure to provide bus priority also needs to consider and provide for 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 October 2016. The DCC Development Plan recognises the challenge that Transport has in making an important contribution 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 behaviour 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 Éireann, 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.

Fingal County Council Development Plan (FCC) (2017 – 2023)

The current Development Plan for Fingal County Council (FCC) came into effect in 2017 and generally seeks to *'Promote and facilitate movement to, from, and within the County of Fingal, by integrating land use with a high quality, sustainable transport system that prioritises walking, cycling and public transport.'*

The FCC Development Plan includes transport and mobility policies and objectives to promote the sustainable development of the County by supporting and guiding national agencies in delivering major improvements to the public transport network and to ensure existing and planned public transport services provide an attractive and convenient alternative to the car. The Development Plan recognises that one of the major challenges facing the County during the life of this Plan is the need to promote and provide for sustainable transport options, whilst maintaining the effectiveness of the County's road network.

In terms of transport infrastructure, the following (see Table 2.3 and 3.4) Policies and Objectives have been identified in the County Development Plan which support the proposed development:

Table 2.3: FCC Development Plan Overarching Objectives aligned with the proposed development

Movement and Infrastructure - Overarching	
Objective MT01	Support National and Regional transport policies as they apply to Fingal. In particular, the Council supports the Government's commitment to the proposed new Metro North and DART expansion included in Building on Recovery: Infrastructure and Capital Investment 2016-2021. The Council also supports the implementation of sustainable transport solutions.
Objective MT02	Support the recommendations of the National Transport Authority's Transport Strategy for the Greater Dublin Area 2016-2035 to facilitate the future sustainable growth of Fingal.
Objective MT03	Implement Smarter Travel – A Sustainable Travel Future policy and work to achieve the Key Goals set out in this policy
Objective MT04	At locations where higher density development is being provided, encourage the development of car-free neighbourhoods, where non-motorised transport is allowed and motorised vehicles have access only for deliveries but must park outside the neighbourhood, creating a much better quality public realm with green infrastructure, public health, economic and community benefits.

Table 2.4: FCC Development Plan Objectives for Public Transport aligned with the proposed development

Public Transport	
Objective MT24	Support and advise the NTA and TII on the planning and implementation of public transport infrastructure, in particular by providing an understanding of Fingal's policies, objectives and requirements, including environmental sensitivities.
Objective MT28	Facilitate, encourage and promote high quality interchange facilities at public transport nodes throughout the County.

Public Transport	
Objective MT33	Facilitate and promote the enhancement of bus services through bus priority measures including bus lanes and bus gates.

The development plan identifies the need to re-balance movement priorities towards more sustainable modes of transportation by prioritising the development of walking and cycling facilities within a safe and traffic calmed street environment (see Table 3.5).

Table 2.5: FCC Development Plan Objectives for walking and cycling aligned with the proposed development

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

2.4 The Aim of the BusConnects 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. These works are 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.

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 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 Emerging Preferred Route Options Assessment Report

In early 2016, the NTA initiated plans to develop the network of CBCs identified in GDA Transport Strategy. As part of this body of work, the ‘Blanchardstown Town Centre to the Liffey Quays (Ellis Quay) CBC Route Options Assessment’ (March 2018) 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

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 Blanchardstown to City Centre CBC EPR Option formed part of the first phase of consultation, which closed on the 29th of March 2019. The Information Brochure published as part of this consultation is included in Appendix H.

There were 542 submissions received relating to the Blanchardstown to City Centre CBC. These submissions ranged from individual submissions by residents, commuters and local representatives, to detailed proposals from public bodies, various associations and private sector businesses.

A brief summary of the feedback received on the Blanchardstown to City Centre CBC during the public consultation is presented in this chapter of the report.

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

1. Traffic Issues Associated with Proposed Traffic Management Measures
2. Removal of Trees
3. Inadequacies in Consultation Process
4. Reduction in Pedestrian Space
5. Rationalisation of Bus Services
6. Proposed Land Acquisition
7. Loss of Parking
8. Loss of Public Space
9. Cyclist Safety / Inadequate Provision for Cyclists

10. Vehicular access to Property
11. Loss of Access to Local Amenities
12. Increased Air and Noise Pollution
13. Increased Anti-Social Behaviour

Further detail on these issues can be found in the Blanchardstown to City Centre CBC Emerging Preferred Route First Non-Statutory Public Consultation Report (March 2020).

3.3 Development of 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 forum, resident groups and one-on-one meetings with directly impacted landowners.

As part of this review, several new options were developed for consideration in specific areas where issues were identified. These new options were subject to further options assessment (as detailed in Chapter 6 of this report) 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 2nd Non-Statutory Public Consultation – Preferred Route Option

The draft PRO was published in March 2020 and a second round of public consultation commenced on 4th March 2020 to the 17th 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 49 submissions received for the Blanchardstown to City Centre CBC. These submissions range 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 Blanchardstown to City Centre 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. Traffic issues associated with proposed traffic management measures;
2. Pedestrian safety;
3. Cyclist safety;

4. Loss of access to local amenities;
5. Removal of trees;
6. Supportive of scheme;
7. Increased air and noise pollution;
8. Inadequacies in consultation process;
9. Loss of parking;
10. Need for scheme; and
11. Proposed land acquisition.

The issues raised during the second public consultation have been considered in the development of the draft PRO.

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

4 Study Area

4.1 Introduction

The study area for this assessment is based on that identified in the ‘Blanchardstown Town Centre to the Liffey Quays (Ellis Quay) CBC Route Options Assessment’. For ease of reference, **Figure 4.1** identifies the sections into which the route was broken into for ease of reporting.

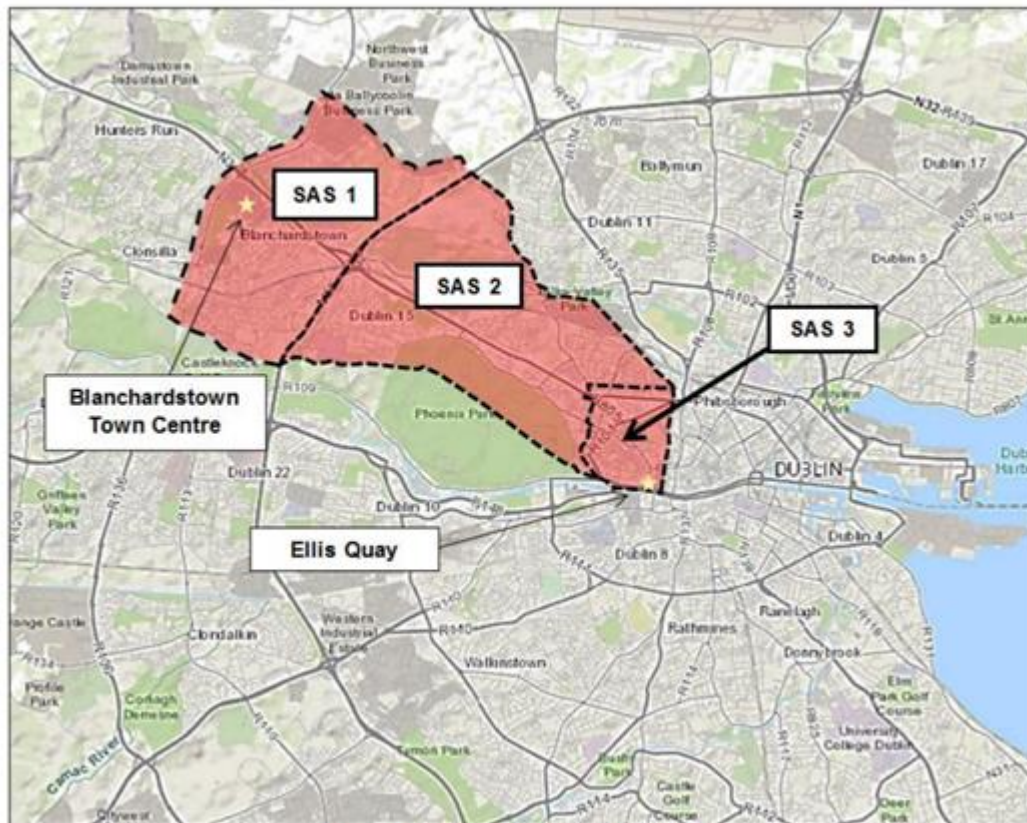


Figure 4.1: Blanchardstown to City Centre Corridor Map

(Reproduced from Blanchardstown Town Centre to the Liffey Quays (Ellis Quay) CBC Route Options Assessment Report)

Arising from the transport policy context, the study area was taken to include the route of the existing Blanchardstown Quality Bus Corridor, but extends beyond this in places to consider alternative potentially feasible route options. The study area is generally bounded to the south by Ellis Quay and to the north by Blanchardstown Road South.

4.2 Study Area Sections

4.2.1 Section 1

Section 1 is bounded to the north by Blanchardstown Road South and to the south by the M50.

Section 1 consists of roads through Blanchardstown Shopping Centre, the Snugborough Road Junction and the N3 dual carriageway west of the M50.

4.2.2 Section 2

Section 2 is bounded to the north by the M50 and to the east and to the south by the Ratoath Road / Navan Road junction. Navan Road along Section 2 consists of a dual carriageway west of Ashtown roundabout, and a three-lane urban road from Ashtown roundabout to the east.

4.2.3 Section 3

Section 3 is bounded to the north by the Ratoath Road / Navan Road junction and to the south by Ellis/Arran Quay. This section of the route includes Old Cabra Road, Prussia Street, Manor Street and Blackhall Place, via Stoneybatter.

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;
- Bridges at identified natural constraints (for example at the Old Cabra Road railway bridge);
- Road width and adjacent parking areas impacting on Blanchardstown Shopping Centre Interchange proposals;
- The available road width along Navan Road between Ashtown Road and Ratoath Road, and along Old Cabra Road;
- The available width between buildings along Prussia Street to Blackhall Place through Stoneybatter.

There are also a number of potential opportunities, which could potentially enhance the proposed scheme within the defined study area including:

- The opportunity for the provision of enhanced public realm spaces within the study area including Stoneybatter Village, along Navan Road and at Ashtown Road Roundabout.
- The natural amenity of the Royal Canal, and the opportunity for integration with the Royal Canal Cycleway.
- The opportunity to enhance connectivity to educational centres, such as Holy Family School for the Deaf on Navan Road, through sustainable transport modes.

4.4 Integration with Existing and Proposed Public Transport Network

One of the key objectives of the proposed CBC scheme 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 other transport services including:

- Potential for interchange with the existing Luas on Benburb Street;
- Potential interchange with the 39a, 37, 39 and 70 at Aughrim St, Stoneybatter;
- Potential for interchange with the existing 46a, 39a, 39 and 70 routes at North Circular Road;
- Potential for interchange with the existing 37 at Skreen Road;
- Potential for interchange with the existing 122 at Kinvara Avenue;
- Potential for interchange with the existing 37 at Ashtown Roundabout;
- Potential for interchange with the existing 38 at Auburn Avenue;
- Potential for interchange with the existing 39, 39a, 38, 38a and 70 along the Navan Road;
- Potential for interchange with the existing 17a and 39a along the N3 / Navan Road at Connolly Hospital;
- Potential for interchange with the existing 37, 38a, 2202, 238, 239, 17a, 39a at Blanchardstown Shopping Centre.

Figure 4.2 highlights the potential for interchange with existing public transport services along the CBC.

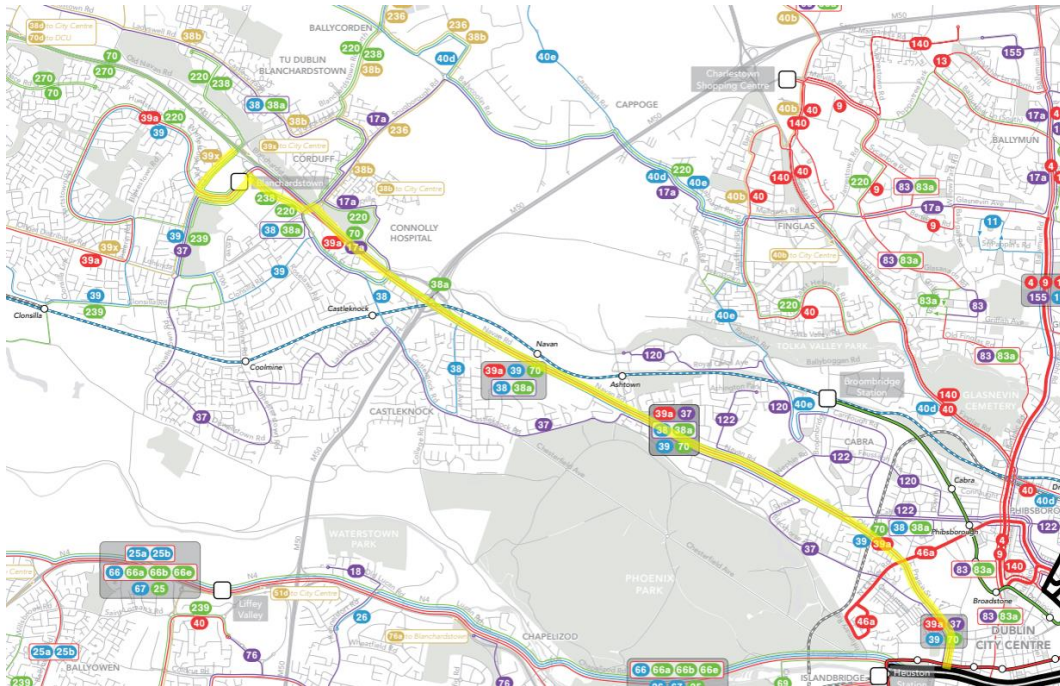


Figure 4.2: Existing Public Transport Services (the CBC highlighted yellow)

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 Orbital route from the BusConnects Network Redesign at North Circular Road;
- Potential for interchange with the proposed 34/35 routes from the BusConnects Network Redesign at Navan Road/Old Cabra Road;
- Potential for interchange with the proposed 48 route and the N2 Orbital from the BusConnects Network Redesign at Nephin Road;
- Potential for interchange with the proposed 34, 35 and 37 routes from the BusConnects Network Redesign at Ashtown Roundabout;
- Potential for interchange with the proposed 35 route from the BusConnects Network Redesign at Auburn Road;
- Potential for interchange with the Navan Road Parkway Rail Station;
- Potential for interchange with the proposed Orbital W4 and N8 routes and routes X62/X62/P63/P64/P65 from the BusConnects Network Redesign at M50/Navan Road;
- Potential for interchange with the proposed 35/L61/N4//X61/X62/P63/P64/P65 routes from the BusConnects Network Redesign at Mill Road;
- Potential for interchange with the proposed orbital W4, N8 and N4 routes from the BusConnects Network Redesign at Snugborough Road Junction; and
- Potential for interchange with the proposed orbital W4, N8 and N4 routes and routes L52/L61/L62/L63/L64/34/35/37 from the BusConnects Network Redesign at Blanchardstown Interchange.

Figure 4.3 is extracted from the BusConnects Network Redesign maps, it highlights the potential for interchange with other proposed bus routes along the CBC.

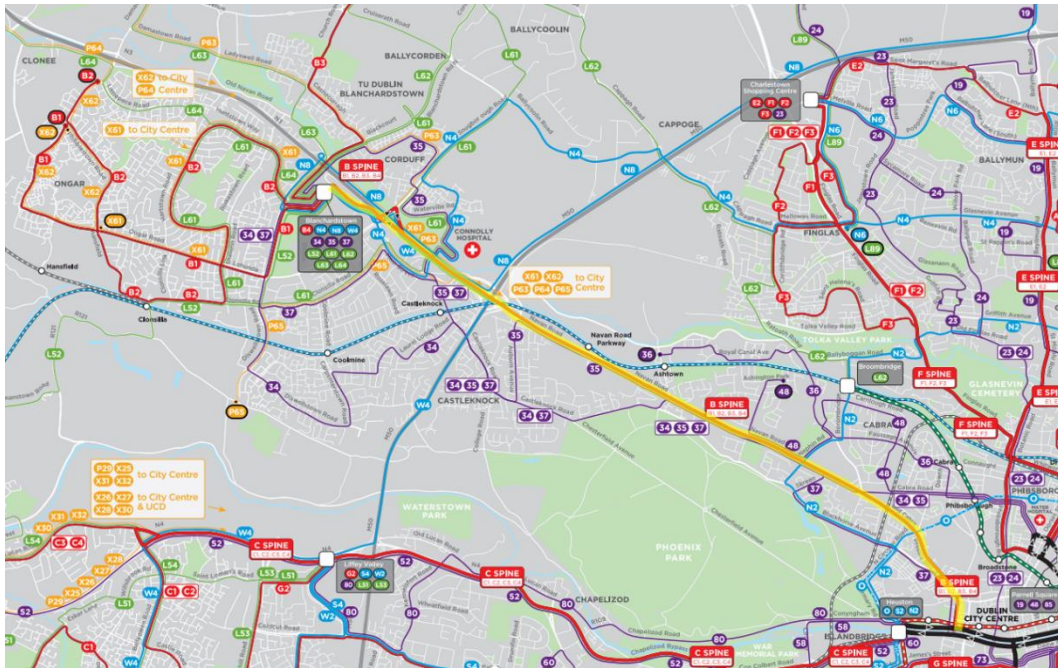


Figure 4.3: Extract from BusConnects Network Redesign Maps (the CBC highlighted yellow)

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 practical to do so.

Figure 4.4, extracted from the GDA Cycle Network Plan, highlights the CBC in the context of the planned cycle network. 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 4, 4B, 4D and 5, and Secondary Route 4A, 2C, C8, NO1 and NO5 from the Greater Dublin Area Cycle Network Plan run along, or are intercepted by, the Blanchardstown to City Centre CBC, with their provision considered at all stages of the option assessment process.

The interaction of the CBC with other schemes progressing through the planning and design process has also been considered, specifically the Royal Canal Greenway and the Tolka Valley Cycle Route. The interaction of the CBC with other cycle route schemes progressing through the planning and design process has also been considered in the design process, specifically the Grangegorman Campus Development and the Liffey Cycle Route Scheme.



Figure 4.4: Extract from GDA Cycle Network Plan showing northern and southern segments of the CBC

5 Review of the ‘Blanchardstown Town Centre to the Liffey Quays (Ellis Quay) CBC Route Options Assessment’

5.1 Introduction

From a review of submissions received as part of the public consultation of the EPR Option, as well as a review of the topographical survey carried out since the EPR Option’s publication, a number of issues have been identified which may be overcome through the implementation of alternative design solutions. These issues are described in the following sections.

5.2 Assessment Methodology

The first step in the assessment process was to review the ‘Blanchardstown Town Centre to the Liffey Quays (Ellis Quay) CBC Route Options Assessment’.

The ‘Blanchardstown Town Centre to the Liffey Quays (Ellis Quay) CBC Route Options Assessment’ 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 is an extract from the ‘Blanchardstown Town Centre to the Liffey Quays (Ellis Quay) CBC Route Options Assessment’, illustrating the ‘spiders web’ of potential routes considered in the Stage 1 assessment.

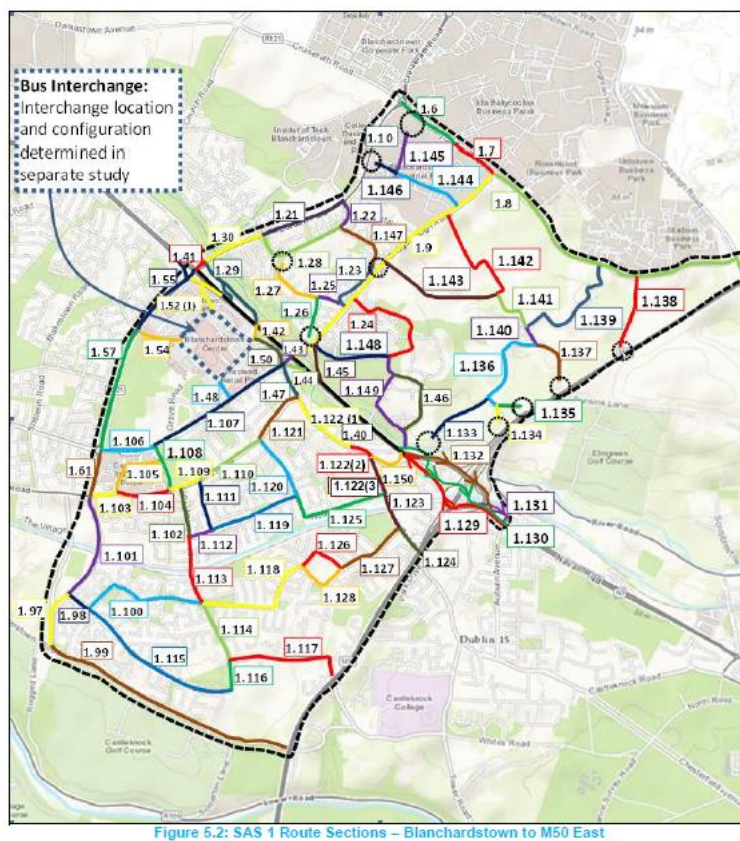


Figure 5.2: SAS 1 Route Sections – Blanchardstown to M50 East

Figure 5.1: Spiders Web of Route Options extracted from ‘Blanchardstown Town Centre to the Liffey Quays (Ellis Quay) CBC Route Options Assessment’

The following extract from the ‘Blanchardstown Town Centre to the Liffey Quays (Ellis Quay) CBC Route Options Assessment’ describes the two-stage 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. This process involved the development of typically two scheme options for each route within the Study Area. 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 multicriteria 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 scheme options. An appreciation of constraints and opportunities within the Study Area as well as the defined project objectives, led to the establishment of project specific route options MCA criteria. These were tailored to have commonality to the Common Appraisal Framework guidelines where practical."

A number of locations along the EPR Option were identified where there was potential to revisit scheme proposals to address issues raised in the public consultation or identified through a review of additional information. For each area identified, additional options were developed and if considered feasible, would be passed through a Multi-Criteria Assessment (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 'Blanchardstown Town Centre to the Liffey Quays (Ellis Quay) CBC Route Options Assessment' were reviewed to determine whether they could potentially address the issues currently being encountered. No options were brought forward in this regard. In addition, all new options were assessed against the EPR Option, in some cases refined to reflect issues identified upon review of the topographical survey and subsequent design refinement.

This additional assessment does not supersede work undertaken during earlier stages but complements it and responds to issues raised by the public during the public consultation process or issues identified by additional information available to the Design Team.

The methodology for the assessment of new options explored at this stage is the same as outlined in the 'Blanchardstown Town Centre to the Liffey Quays (Ellis Quay) CBC Route Options Assessment'. A summary of the main criteria and sub criteria used in the options assessment process is presented in. **Table 5.1.**

Table 5.1: Assessment Criteria

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

As noted above, Physical Activity was scoped out of the multi-criteria analysis within the ‘Blanchardstown Town Centre to the Liffey Quays (Ellis Quay) CBC Route Options Assessment’ 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 ‘Blanchardstown Town Centre to the Liffey Quays (Ellis Quay) CBC Route Options Assessment’, 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”.

Table 5.2: Route Options Colour Coded Ranking Scale

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

Where the design has undergone a material and fundamental change in respect of infrastructure provision or route choice, this will be recorded and explained. An MCA has been undertaken which assessed the newly developed and designed solutions against the MCAs that were previously assessed as part of ‘Blanchardstown Town Centre to the Liffey Quays (Ellis Quay) CBC Route Options Assessment’ 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.

5.3 Section 1: Blanchardstown Shopping Centre to N3/M50 Junction

5.3.1 Section 1: Emerging Preferred Route

The EPR option previously identified along this section of the CBC is presented in **Figure 5.2**.

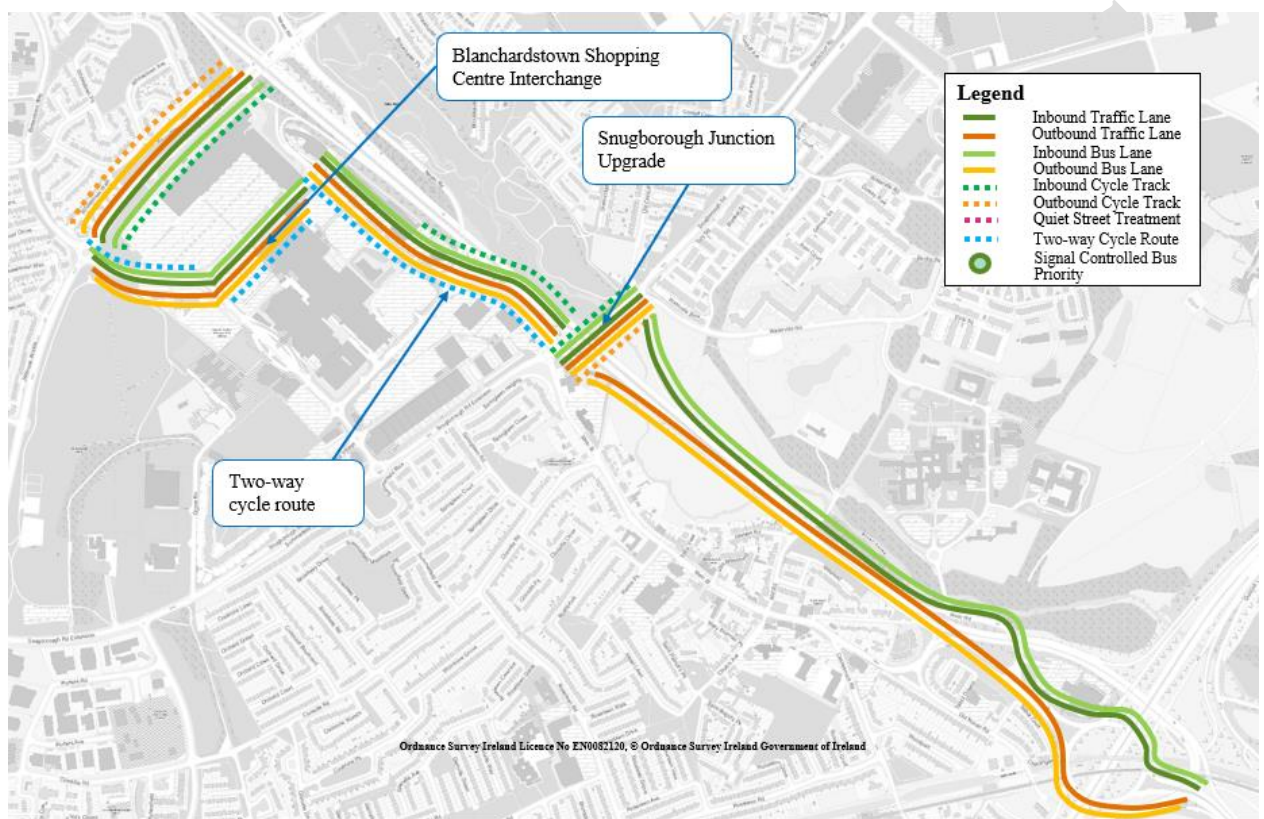


Figure 5.2: Section 1 EPR Option

The previous MCA undertaken determined that a route along West Street / North Street in Blanchardstown, and along the N3 dual carriageway corridor to the M50 junction, was the preferred route and hence designated as the EPR Option.

It is considered that the options assessment presented in the 'Blanchardstown Town Centre to the Liffey Quays (Ellis Quay) CBC Route Options Assessment' for the EPR appropriately assessed route options and that the selected corridor in Section 1 continues to offer the most benefits for pedestrians, cyclist, 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 'Blanchardstown Town Centre to the Liffey Quays (Ellis Quay) CBC Route Options Assessment', Public Consultation Submissions and topographical survey, no alternative options were identified for re-examination.

5.4 Section 2: N3 / M50 Junction to R147 Navan Road / Ratoath Road Junction

5.4.1 Section 2: Emerging Preferred Route

The EPR Option previously identified along this section of the CBC is presented in **Figure 5.3**.

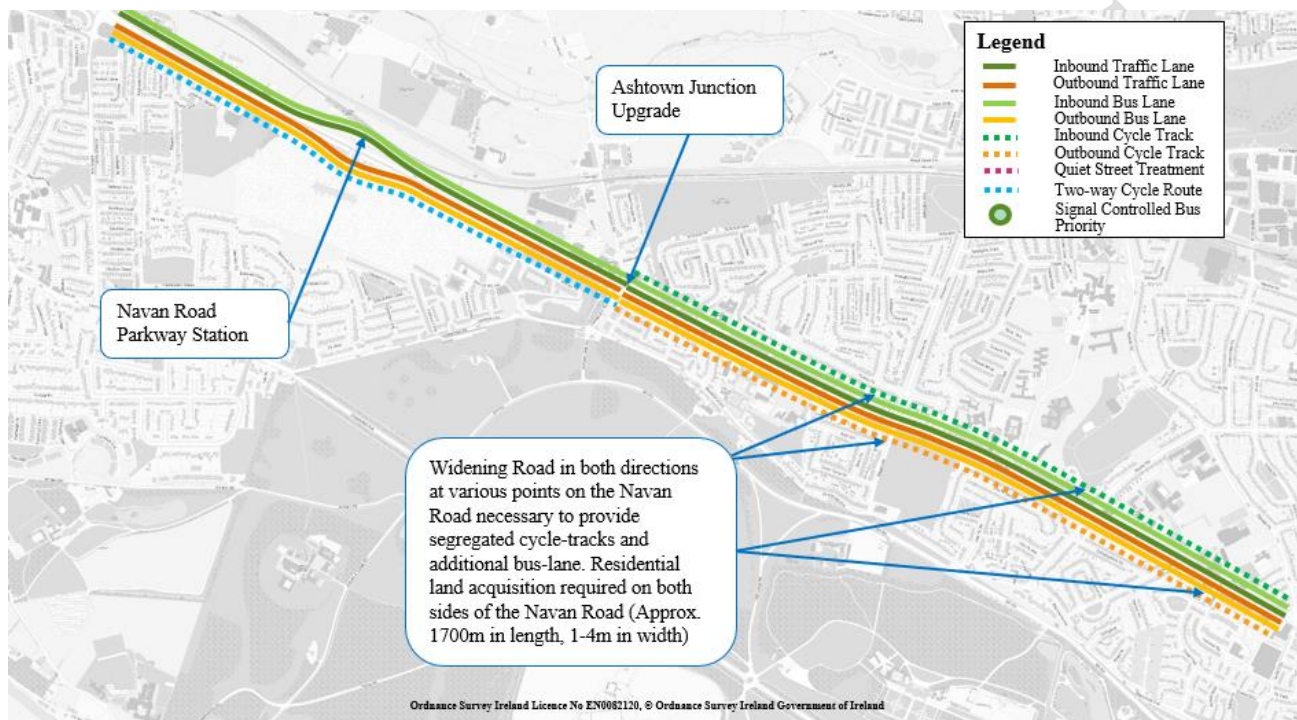


Figure 5.3: Section 2 EPR Option

The previous MCA undertaken determined that a route along the N3 and the R147 Navan Road was the EPR Option. It is considered that the options assessment presented in the 'Blanchardstown Town Centre to the Liffey Quays (Ellis Quay) CBC Route Options Assessment Report' for the EPR has appropriately assessed route options and that the selected corridor offers the most benefits for pedestrians, cyclists, and buses.

However, upon review of the topographical survey and public consultation submissions, a number of issues were identified that could potentially be addressed through the consideration of alternative options along this route section. These are summarised in the following section. The EPR Option remains the preferred option for sections of the scheme not identified for further review.

5.4.2 Areas Identified for Re-examination

5.4.2.1 N3 / M50 Junction to R147 Navan Road Parkway Junction

The EPR Option on the Navan Road included a two-way cycle track from Auburn Avenue to Navan Road Parkway Station. On the northern part of this section, submissions from the public suggested providing a cycle-track alongside Castleknock Manor in order to protect cyclists and highlighted perceived safety concerns regarding the cycle facilities at the junction with Auburn Avenue.

On this section it was also considered that the R147 eastbound lane configuration in the EPR required to be reviewed due to safety concerns in respect of lane drop merge and slip road diverge movements occurring on a common section of road.

An alternative layout has been devised in which the lane drop from three to two lanes is located west of the pedestrian crossing which links the north side of the R147 to Castleknock Manor.

Alternative design solutions have therefore been explored in this area in determining a draft PRO, as described in Section 6.1.1 of this report.

5.4.2.2 R147 Navan Road / Ashtown Road Junction to Navan Road / Skreen Road Junction

The proposed EPR Option within this route section consists of the 'optimum BusConnects cross-section' of two bus lanes, two cycle tracks and two footpaths, plus a traffic lane in both directions to reflect Navan Road's role as an important local principal road.

For the EPR, the provision of continuous bus lanes and segregated cycle tracks in both directions necessitates some land take and loss of trees to achieve the desired standard of bus priority and segregation of cyclists from traffic.

On the southern part of this section, submissions received as part of the public consultation identified that proposed removal of on-street trees and those in front gardens was a significant cause for concern amongst residents.

An alternative approach of operating bus lanes in one direction only for short sections has been assessed – to ascertain whether land take requirements could be reduced.

Alternative design solutions have therefore been explored in this area in determining a draft PRO, as described in Section 6.1.2 of this report.

5.5 Section 3: R147 Navan Road / Ratoath Road Junction to Ellis Quay

5.5.1 Section 3: Emerging Preferred Route

The EPR option previously identified along this section of the CBC is presented in **Figure 5.4**.

The previous MCA undertaken determined that a route along the R805 Old Cabra Road and Prussia Street, Manor Street and Blackhall Place through Stoneybatter was the EPR Option. It is considered that the options assessment presented in the 'Blanchardstown Town Centre to the Liffey Quays (Ellis Quay) CBC Route Options Assessment Report' for the EPR has appropriately assessed route options and that the selected corridor offers the most benefits for pedestrians, cyclists, and buses.

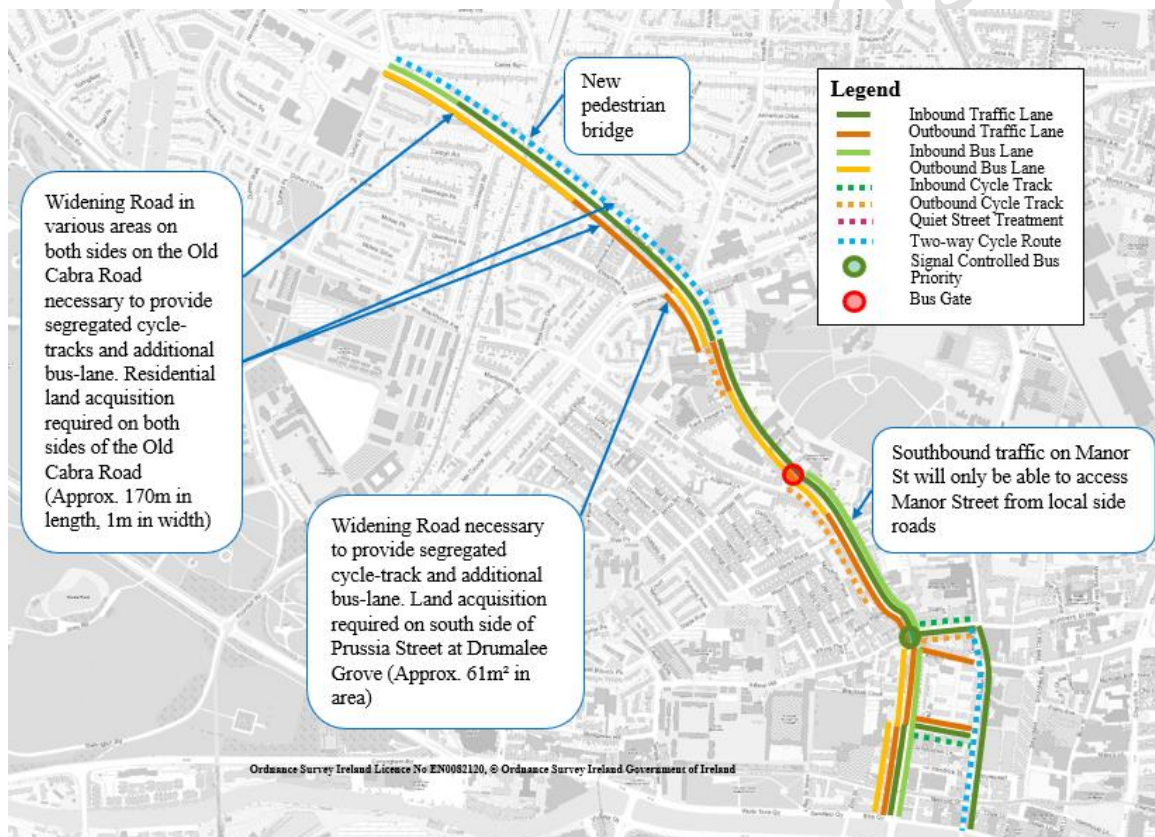


Figure 5.4: Section 3 EPR Option

Upon review of the topographical survey and public consultation submissions, a number of issues were identified that could potentially be addressed through the consideration of alternative options along this route section.

Key issues raised included land take from gardens, footpath widths, retention of local access by car, cycling facilities and safety, and enhancement of public realm. In addition, a review of the topographical survey carried out subsequent to the route's publication identified opportunities for fine-tuning of the scheme design on this section. These are summarised in the following section.

The EPR Option remains the preferred option for sections of the scheme not identified for further review.

5.5.2 Areas Identified for Re-examination

5.5.2.1 Navan Road / Ratoath Road Junction to Prussia Street (Park Shopping Centre)

On this section it was considered that a two-way cycle track on one side of the road would not provide an intuitive route for cyclists. It was determined that a one-way cycle track on each side of the road would be more intuitive and user friendly, and match the remainder of the corridor and allow cyclists to travel northbound or southbound without conflict with opposing cyclists.

Land take on Old Cabra Road could also potentially be minimised by modifying the two-way cycle track to one-way cycle tracks in each direction. Alternative design solutions have therefore been explored in this area in determining the draft PRO, as described in Section 6.2.1 of this report.

5.5.2.2 Prussia Street (Park Shopping Centre) to Manor Street / Brunswick Street North Junction:

On this section the provision of cycle track facilities was proposed in a northbound direction on Manor Street – with southbound cyclists needing to travel in the bus lane, and also to pass multiple side road accesses and adjacent on-street parking bays. Provision of improved cycle tracks on this section was thus investigated. Public realm provision (and bus priority facilities) in the centre of Stoneybatter (at the Aughrim Street junction) was also a concern in consultation and stakeholder responses.

Topographical survey information allowed more detailed investigation of road geometry and in particular pedestrian footpath widths. Alternative design solutions have therefore been explored in this area in determining the draft PRO, as described in Section 6.2.2 of this report.

5.5.2.3 Manor Street / Brunswick Street North Junction to Ellis Quay

Traffic management, footway widths, and cycling facilities were the subject of comments in the public consultation – and in this respect, topographical survey information allowed more detailed investigation of road geometry. Alternative design solutions have therefore been explored in this area in determining the draft PRO, as described in Section 6.2.3 of this report.

5.6 Summary

A summary of the EPR Option review areas discussed in this chapter and taken forward for detailed option assessment is presented below:

- Alternative design options for the corridor section between the Navan Road / Auburn Avenue junction and the Navan Road Parkway Junction.
- Alternative design options along Navan Road between Ashtown Road and Ratoath Road.
- Alternative design options along Old Cabra Road from the R147 Navan Road/ Ratoath Road Junction to south of the North Circular Road junction on Prussia Street (Park Shopping Centre)
- Alternative design options along Prussia Street and Manor Street from the Park Shopping Centre to Brunswick Street North
- Alternative design options along Blackhall Place (from its junction with Brunswick Street North) to Ellis Quay, including George's Lane, King Street North and Queen Street.

Detail of the option assessment completed is presented in Chapter 6.

6 Option Assessment

6.1 Section 2 Option Assessment: N3 / M50 Junction to R147 Navan Road / Ratoath Road Junction

6.1.1 Section 2a - N3 / M50 junction to R147 Navan Road Parkway Junction

6.1.1.1 Introduction

Submissions in the March 2020 consultation suggested providing a cycle route on Castleknock Manor away from the R147 and highlighted perceived safety concerns regarding the cycle facilities at the junction with Auburn Avenue. Also, submissions were made in respect of concerns that land-take was required from front gardens on Navan Road between Ashtown Roundabout and the Ratoath Road junction, and that trees were to be removed.

6.1.1.2 Options Considered

Two alternative options have been assessed as follows

- **Option AA1:** Option AA1 would involve routing cyclists along a two-way cycle track along the southside of the R147 west of Navan Road Parkway, with cyclists then routed to an on-street 'Quiet Street' cycle route along Castleknock Manor. The proposed eastbound general traffic lane and bus lane configuration along this section consists of a four-lane section at the Auburn Avenue junction, with the inner two lanes and outer two lanes both merging to a single lane prior to the pedestrian crossing (which connects to Castleknock Manor) – with the merges separated by a hatched strip between the two general traffic streams. The proposed bus lane on the nearside of the N3 is intermittent to allow left-in / left-out movement from side road and local access junctions. There would also be a lane drop at the Navan Road Parkway eastbound off-slip road, which would widen to a bus lane and general traffic lane.
- **Option AA2:** Option AA2 would involve routing cyclists along a two-way cycle track along the south side of the R147 from Navan Road Parkway to Auburn Avenue. The eastbound general traffic lane and bus lane configuration along this section consists of a four-lane section at the Auburn Avenue junction, with two successive 'outside lane' lane drop merges, and a slip road diverge west of the Navan Road Parkway junction. The eastbound bus lane would be intermittent along this section to allow left-in / left-out movement from side road and local access junctions.

The key characteristics of each option are described in the following sections.

6.1.1.2.1 Alternative Options Considered

No alternative options were considered for this scheme section, additional to those assessed through the MCA.

6.1.1.2.2 Route Option AA1

Route Description

Route option AA1 is presented in **Figure 6.1**.

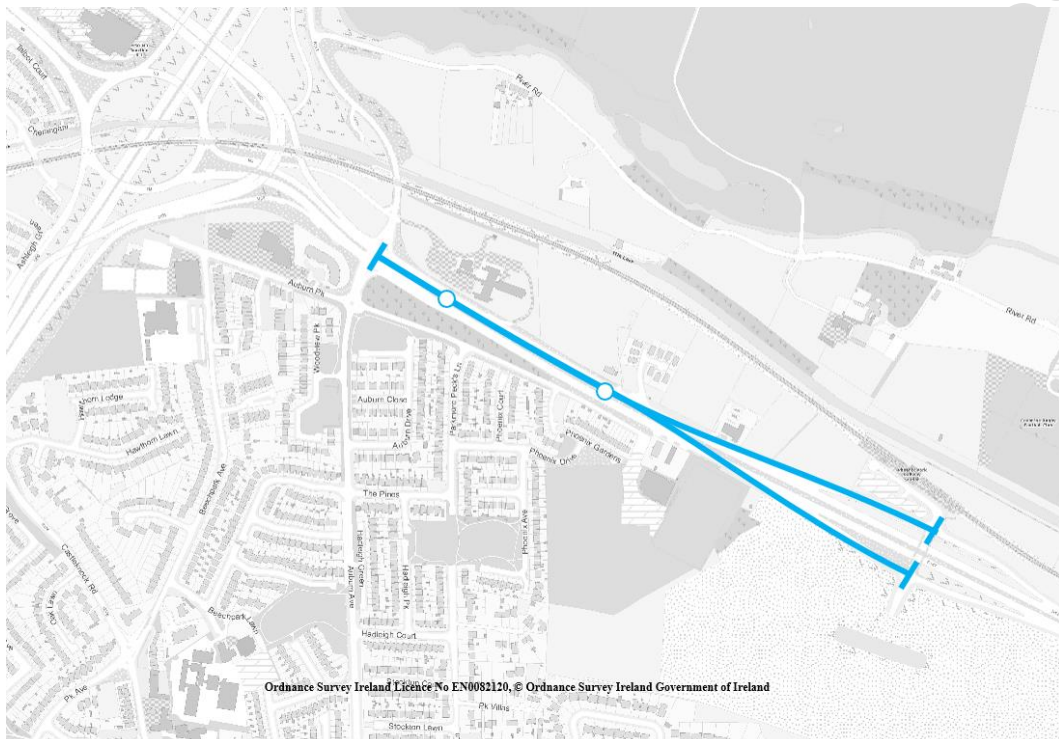


Figure 6.1: Route Option AA1

Inbound: This section of the CBC is routed between Navan Road Parkway junction, along the R147 Navan Road to its junction with Auburn Avenue.

Outbound: The outbound route follows the same route as the inbound route.

Stops: A total of two bus stops would likely be provided in each direction along this route section.

Indicative Scheme Design

Figure 6.2 illustrates the indicative scheme design for this route option. The location of cross-sections and junctions referenced in subsequent sections describing this route option are also presented in this figure.

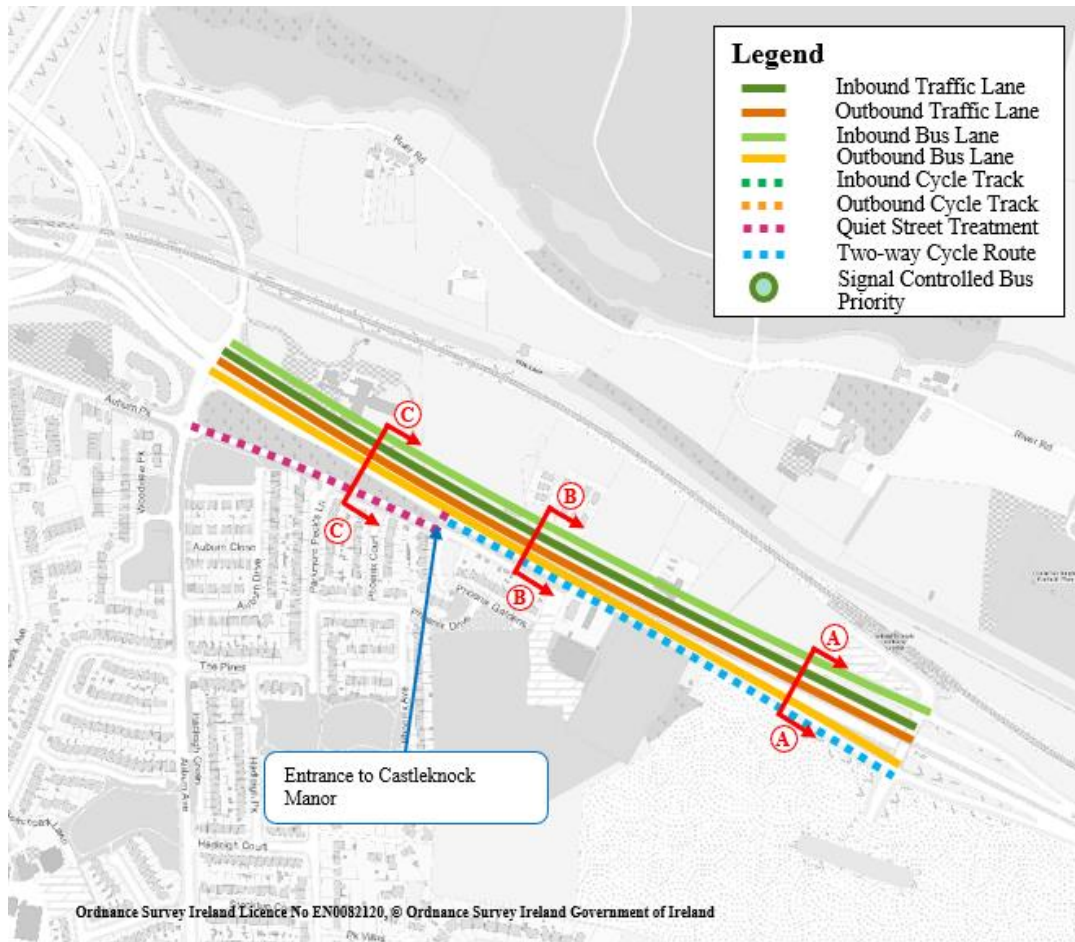


Figure 6.2: Route Option AA1 Indicative Scheme Design

The eastern part of this section is located at Navan Road Parkway junction. On the west-facing on and off slip roads it is proposed to provide a bus lane and general traffic lane on both slip roads, with a two-way cycle track alongside the westbound on-slip road. The proposed cross section of the Navan Road Parkway slip roads and Navan Road is presented in **Figure 6.3**.

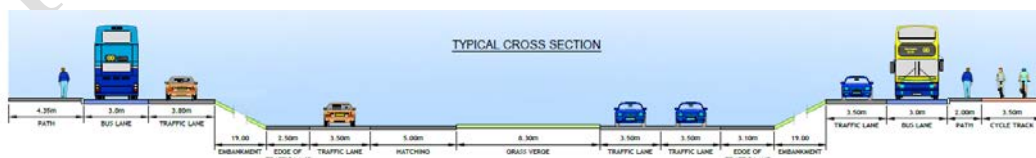


Figure 6.3: Route Option AA1 Cross-Section A-A

On the R147 west of the Navan Road Parkway eastbound off-slip, the inner eastbound general traffic lane would diverge as a lane drop (as at present; i.e. three lanes to two lanes) – such that the diverge movement would be simple to execute. An inbound bus lane is proposed at the end of the diverge taper.

An inbound bus lane and outbound bus lane is proposed on the outer edge of the eastbound and westbound carriageways respectively, but with the inbound bus lane operating as a general traffic lane from Morgan Place eastbound to allow left-in/left-out general traffic access for Morgan Place and the petrol station. The proposed cross section on the R147 Navan Road just west of Navan Road Parkway slip roads is presented in **Figure 6.4**.

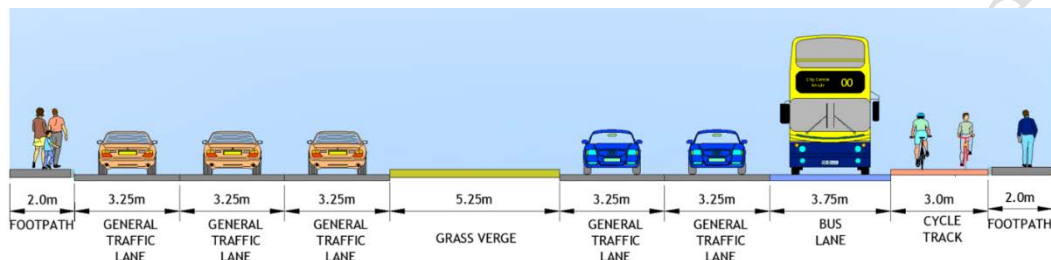


Figure 6.4: Route Option AA1 Cross-Section B-B

West of the Auburn Avenue junction, it is proposed to provide hatching between the inner two lanes and outer two lanes in the eastbound direction; this would enable these two-lane sections to be merged to two single lanes prior to the signalised pedestrian crossing west of Morgan Place. An inbound and outbound bus lane is proposed to be provided on the outer edge of the eastbound and westbound carriageways respectively. The cycle route is proposed to be located on Castleknock Manor, which is proposed as a Quiet Street, carrying low levels of local traffic. The proposed cross section on the R147 section east of Auburn Avenue is presented in **Figure 6.5**.

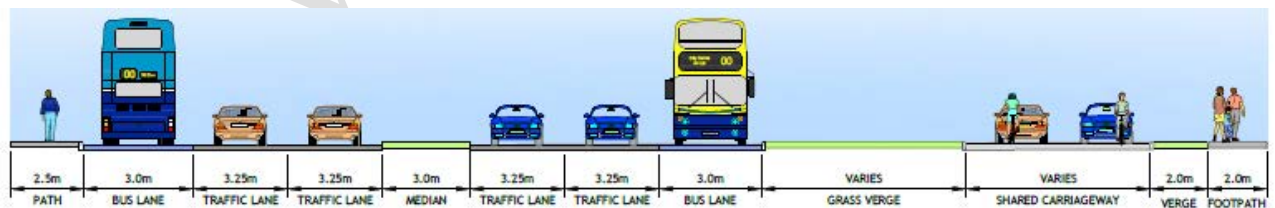


Figure 6.5: Route Option AA1 Cross-Section C-C

In summary, this route option would, subject to confirmation at the scheme design stage, result in the following characteristics:

- At Auburn Avenue / M50 link roads / Navan Road signal-controlled junction, the four eastbound general traffic lanes would merge to two lanes prior to the signalised pedestrian crossing of the R147,
- The proposed inbound bus lane on nearside of the R147 is intermittent to allow left-in / left-out general traffic movement from side road and local access junctions, with a lane drop to reduce the mainline carriageway from three lanes to two lanes.

- A bus lane is to be provided on the off-slip road to ensure appropriate provision for bus priority on the approach to, and through, the Navan Road Parkway junction.
- The cycle track on the south side of the R147 Navan Road is to be diverted onto Castleknock Manor, which is proposed to be modified to a Quiet Street to carry cyclists and low levels of local traffic.

Junctions:

There are two signalised junctions along this route option, both of which would require upgrading to facilitate bus priority and cycle / pedestrian facilities. The locations of these junctions are presented in Figure 6.2 and discussed below:

- **R147 Navan Road/Auburn Avenue:** The junction would be widened to accommodate bus lanes in both directions, and pedestrian crossing facilities would be adjusted to suit the widened carriageway. There would be a possible requirement to relocate/provide new signal equipment.
- **R147 Navan Road Parkway Junction:** Adjustments to the slip road arrangements would be required to accommodate bus lanes on the outer edge of both slip roads. There would be a possible requirement to relocate/provide new signal equipment.

6.1.1.2.3 Route Option AA2

Route Description

Route option AA2 is presented in **Figure 6.6** and represents the EPR Option.



Figure 6.6: Route Option AA2

Inbound: This section of the CBC is routed between Navan Road Parkway junction, and along the R147 Navan Road to its junction with Auburn Avenue.

Outbound: The outbound route follows the same route as the inbound route.

Stops: A total of two bus stops would likely be provided in each direction along this route section.

Indicative Scheme Design

Figure 6.7 illustrates the indicative EPR Option scheme design for this route option. The location of cross-sections and junctions referenced in subsequent sections describing this route option are also presented in this figure.

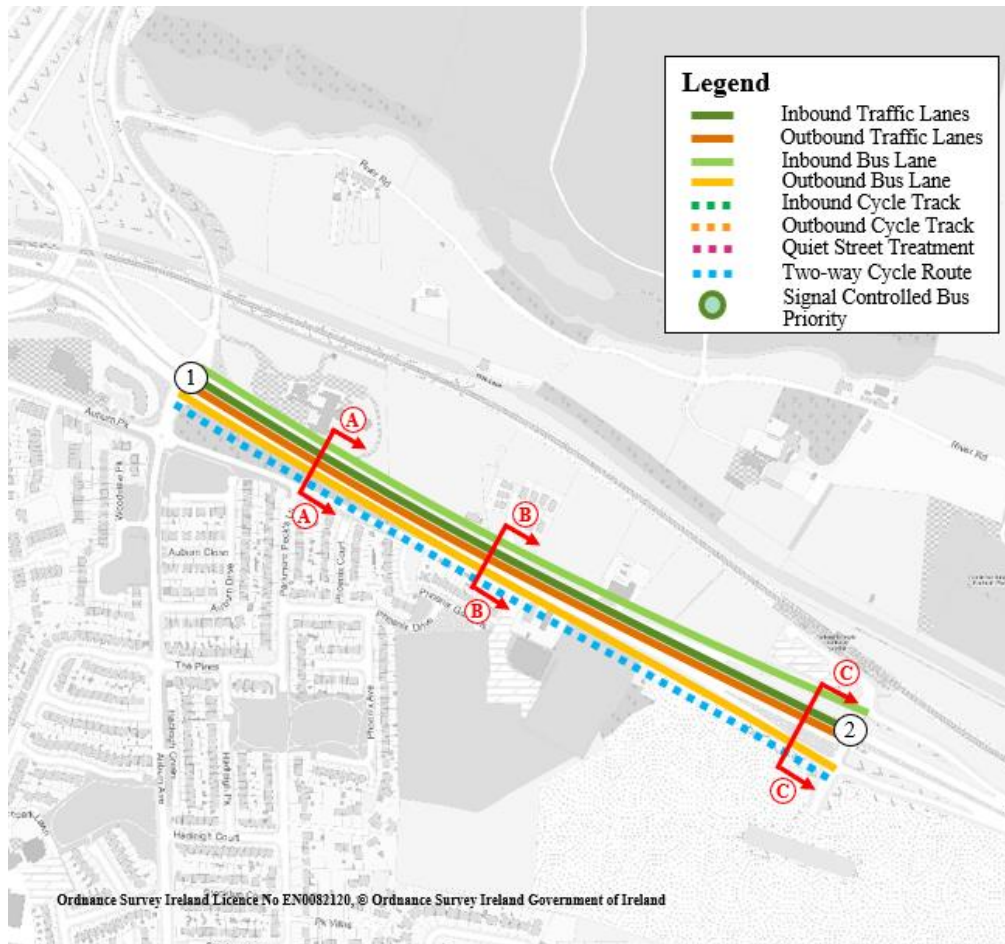


Figure 6.7: Route Option AA2 Indicative Scheme Design

The eastern part of this section is located at Navan Road Parkway junction. On the west-facing on and off slip roads it is proposed to provide a bus lane and a general traffic lane on both slip roads, with a two-way cycle track alongside the westbound on-slip road. The proposed cross section is presented in **Figure 6.8**.

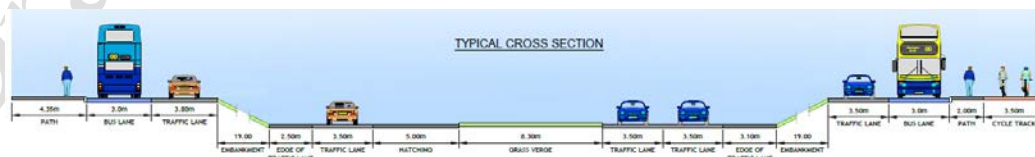


Figure 6.8: Route Option AA2 Cross-Section A-A

On the R147 west of the Navan Road Parkway eastbound off-slip, the proposal involves an outer lane merge (three lanes to two lane) and introduction of a diverge lane. The outer lane drop, diverge lane taper, and left-in / left-out at the petrol filling station, would all occur within the same section of road.

The nearside bus lane would terminate west of Morgan Place with side road and local access traffic using this lane for access and egress.

The bus lane would then be re-established through the diverge taper onto the eastbound off-slip. The proposed cross section on the R147 Navan Road just west of Navan Road Parkway slip roads is presented in **Figure 6.9**.

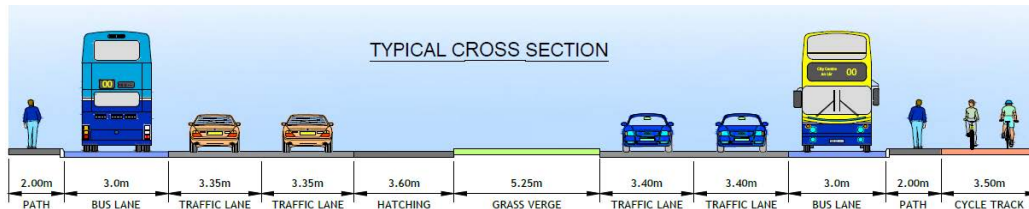


Figure 6.9: Route Option AA2 Cross-Section B-B

East of the Auburn Avenue junction, the proposed layout would include four lanes in the eastbound direction, plus a nearside bus lane. The mainline eastbound four general traffic lanes narrow to three lanes just west of the signalised pedestrian crossing, west of Morgan Place (with an outer lane drop). A two-way cycle track is proposed to be provided on the southern edge of the R147 Navan Road dual carriageway. The proposed cross section is presented in **Figure 6.10**.

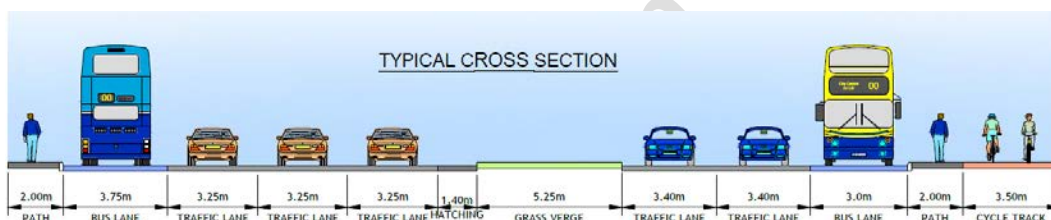


Figure 6.10: Route Option AA2 Cross-Section C-C

In summary, this route option would, subject to confirmation at the scheme design stage, result in the following characteristics:

- At Auburn Avenue / M50 link roads / Navan Road signal-controlled junction, the four eastbound general traffic lanes would merge to three lanes prior to the signalised pedestrian crossing of the N3, with a further outer lane merge prior to the eastbound off-slip road.
- Inbound and outbound bus lanes would be provided on the nearside of the westbound and eastbound carriageways. The proposed inbound bus lane on the nearside of the N3 would be terminated west of Morgan Place to allow left-in / left-out general traffic movement from side road and local access junctions, and would be re-established at the diverge taper of the eastbound off-slip road.
- Bus lanes would be provided on the nearside of the on and off-slip roads at Navan Road Parkway junctions.
- A two-way cycle track on the south side of the R147 Navan Road is to be provided along the whole length of this section.

Junctions:

There are two signalised junctions along this route option, all of which would require upgrading to facilitate bus priority and cycle / pedestrian facilities. The locations of these junctions are discussed below:

- **R147 Navan Road/Auburn Avenue:** The junction would be widened to accommodate bus lanes in both directions, and pedestrian crossing facilities would be adjusted to suit the widened carriageway. There would be a possible requirement to relocate/provide new signal equipment.
- **R147 Navan Road Parkway Junction:** Adjustments to the slip road arrangements would be required to accommodate bus lanes on the outer edge of both slip roads. There would be a possible requirement to relocate/provide new signal equipment.

6.1.1.2.4 Section 2a Route Option Assessment

Details of the route option assessment undertaken for the R147 Navan Road between Auburn Avenue and the Navan Road Parkway junction study area section are presented in Appendix A. The relative ranking of route options against the scheme assessment sub-criteria is summarised in **Table 6.1**.

Table 6.1: Section 2a Route Option Assessment Summary (Sub-Criteria)

Appraisal Criteria	Sub-Criteria	Option AA1	Option AA2
1 Economy	1A Capital Cost		
	1B Transport Quality & Reliability		
2 Integration	2A Land Use Policy		
	2B Residential Population and Employment Catchments		
	2C Transport Network Integration		
	2D Cycle Network integration		
	2E Traffic Network Integration		
3 Accessibility & Social Inclusion	3A Key Trip Attractors		
	3B Deprived Geographic Areas		
4 Safety	4A Road Safety		
	4B Pedestrian Safety		
5 Environment	5A Archaeology & Cultural Heritage		
	5B Architectural Heritage		
	5C Flora & Fauna		
	5D Soils, Geology & Hydrology		
	5E Landscape & Visual		
	5F Air Quality		
	5G Noise & Vibration		
	5H Land Use Character		

In terms of economy, Option AA2 has a greater capital cost option due to the additional infrastructure costs to deliver a two-way cycle track on the entire length of this section of Navan Road. In terms of transport quality and reliability, option AA1 performs better when considering physical bus priority and journey time consistency due to the more efficient bus and general traffic lane arrangement which provides greater clarity for general traffic and buses.

Both options serve the same catchments and as such are ranked equally in relation to land use policy and residential population catchments and employment catchments. Similarly, in terms of transport network integration, as both options follow the same route, the opportunity for interchange with other routes is equal.

In terms of cycle network integration, Option AA1 performs better than AA2 as it has a more direct route on Castleknock Manor, compared to Option AA2 which routes cyclists on a less direct path on a two-way cycle track alongside the R147.

Both options rank equally under accessibility and social inclusion as they both follow the same route.

In terms of safety, Option AA1 is considered to be an improved arrangement of general traffic and bus lanes (in the eastbound direction), with greater separation distance between merging of general traffic lanes and the lane drop diverge at the Navan Road Parkway slip road junctions.

With respect to environment, Option AA1 and AA2 perform similarly in terms of air quality and noise and vibration. Option AA1, in which the cycle route is to be provided on Castleknock Manor, retains all trees on the southern edge of the R147, ranking it better than AA2 (which requires the removal of a number of trees) when considering flora and fauna.

In terms of land use and character. Option AA1 does not require public land-take at Castleknock Manor and keeps trees in place as mentioned above, which is an improved arrangement on Option AA2, as Option AA2 requires public land-take at Castleknock Manor and removal of a number of trees in same location.

A summary of the assessment and relative ranking of route options against the five main assessment criteria is presented in **Table 6.2**.

Table 6.2: Section 2a MCA Summary

Sub-Criteria	Option AA1	Option AA2
1 Economy		
2 Integration		
3 Accessibility & Social Inclusion		
4 Safety		
5 Environment		

6.1.1.2.5 Section 2a Conclusion and Draft Preferred Option

Based on the assessment undertaken, route Option AA1 offers more benefits over Option AA2. Option AA1 is the preferred option for the following reasons:

- On economy, it has a lower cost due to reduced cycle track provision and associated widening of the R147 cross-section;
- On integration, it provides a more direct route path for cyclists along GDA Cycle Network Plan primary route 4 than Option AA2;
- In respect to safety, it provides a better separation of merging and diverging movements; and
- In respect to environment, this option allows more trees to be retained due to removal of the proposal for a two-way cycle track on the R147 corridor.

6.1.2 Section 2b - R147 Navan Road / Ashtown Road Junction to Navan Road / Ratoath Road Junction

6.1.2.1 Introduction

Submissions in the March 2020 consultation were made in respect of concerns that land-take was required from front gardens on Navan Road between Ashtown Roundabout and the Ratoath Road junction, and that trees were to be removed.

6.1.2.2 Options Considered

Two alternative options have been assessed for this section of route east of the Navan Road / Ashtown Road Junction as follows:

- **Option HH1:** Option HH1 proposals consist of inbound and outbound bus lanes on the outer edge of a four-lane carriageway, with a single general traffic lane in both directions. One way cycle tracks are proposed on both sides of the road between the bus lane and footpath.
- **Option HH2:** Option HH2 proposals consist of inbound and outbound bus lanes on the outer edge of a four-lane carriageway, with intermittent three-lane sections, with buses and general traffic travelling in a single lane – controlled by signals at the beginning of these sections, which would give priority for buses over general traffic. One way cycle tracks are proposed on both sides of the road adjacent to the footpath.

The key characteristics of each options are described in the following sections.

6.1.2.2.1 Alternative Options Considered

No alternative options were considered for this scheme section, additional to those assessed through the MCA.

6.1.2.2.2 Route Option HH1

Route Description

Route option HH1 is presented in **Figure 6.11** and described in the following text.



Figure 6.11: Route Option HH1

Inbound: This section of the CBC runs along Navan Road from east of the Ashtown Road junction to the Navan Road / Ratoath Road junction.

Outbound: The outbound route follows the same route as the inbound route.

Stops: A total of eight bus stops would likely be provided in each direction along this route section.

Indicative Scheme Design

Figure 6.12 illustrates the indicative scheme design for this route option. The location of cross-sections and junctions referenced in subsequent sections describing this route option are also presented in this figure.

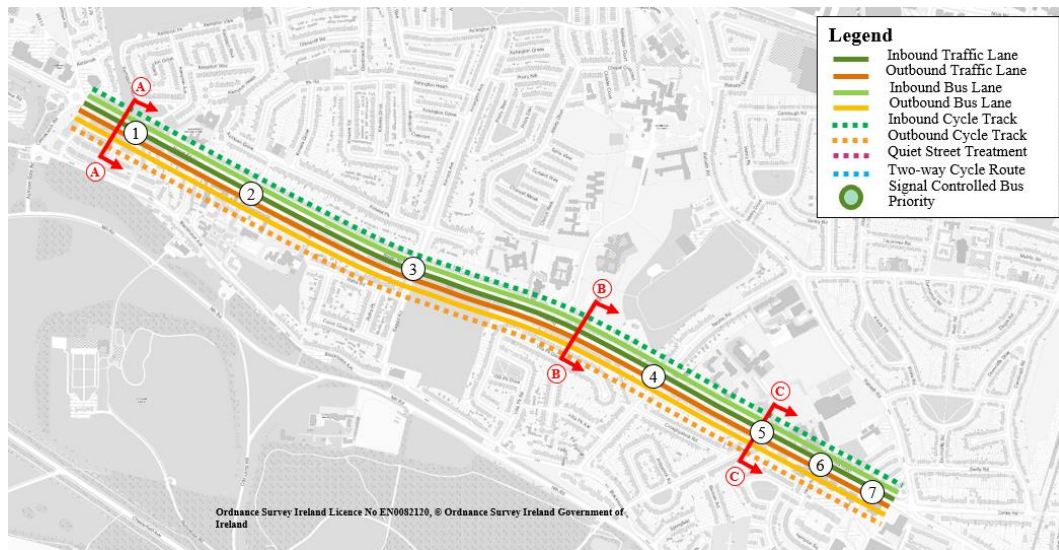


Figure 6.12: Route Option HH1 Indicative Scheme Design

This section of the CBC commences on Navan Road east of the Ashtown Road junction.

The route continues to the east, connecting with side roads at Kempton Avenue and Ashton Grove, and at Kinvara Avenue / Baggot Road. Along Navan Road, two general traffic lanes and two bus lanes, with a cycle track in both directions, are proposed to be provided, as presented in **Figure 6.13**.

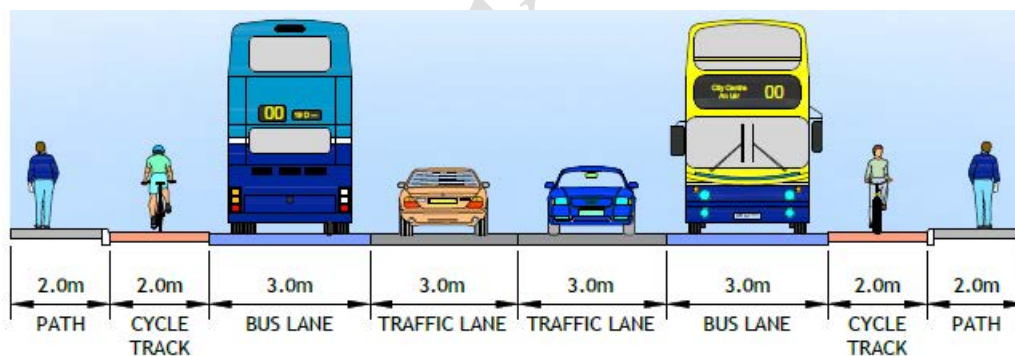


Figure 6.13: Route Option HH1 Cross-Section A-A

From the Kinvara Avenue / Baggot Road junction to Nephin Road, the cross-section of Navan Road is proposed as two general traffic lanes and two bus lanes – except for a 20m section of Navan Road which also has a right turn lane (to Kinvara Avenue) adjacent to the outbound general traffic lane. Cycle tracks are provided in both directions. The proposed cross section is indicated in **Figure 6.14**.

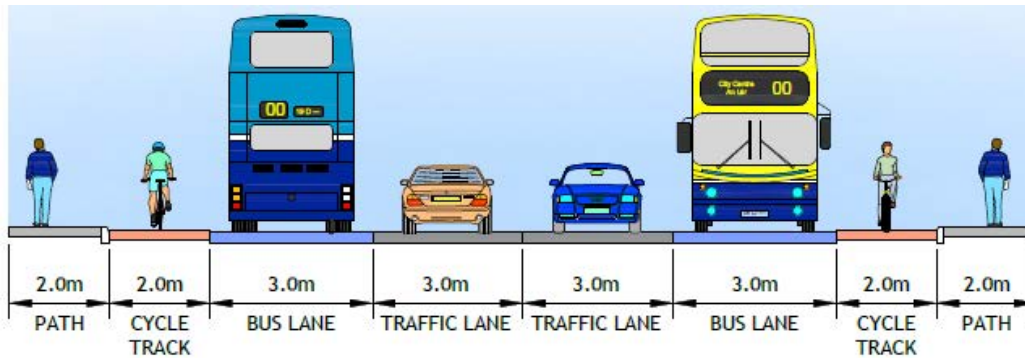


Figure 6.14: Route Option HH1 Cross-Section B-B

From Nephin Road to Skreen Road, the cross-section of Navan Road is proposed as two general traffic lanes and two bus lanes, with cycle tracks provided in both directions. The proposed cross section is indicated in **Figure 6.15**.

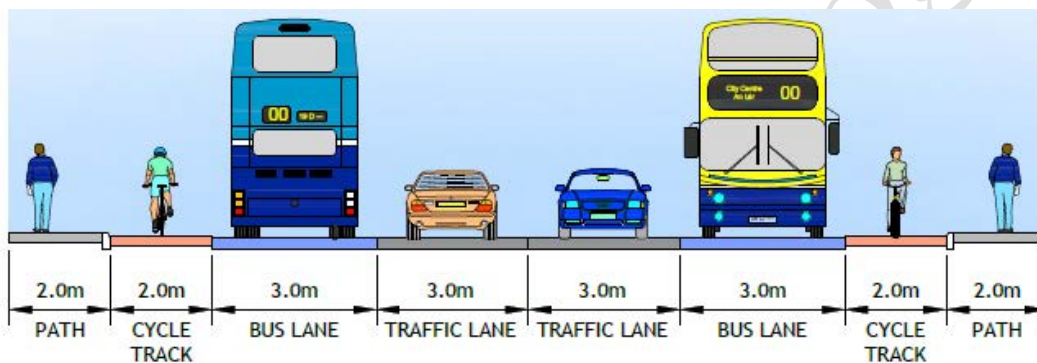


Figure 6.15: Route Option HH1 Cross-Section C-C

In summary, this route option would, subject to confirmation at the scheme design stage, result in the following characteristics:

- Two general traffic lanes and two bus lanes in each direction along Navan Road
- Segregated cycle tracks on both sides of the street.

Junctions:

There are seven signalised junctions along this route option, which would require upgrading to facilitate bus priority. The locations of these junctions are discussed below:

- **R147 Navan Road/Kempton Avenue:** Reallocation of road space would be required to facilitate the inbound and outbound bus lanes on approach to the junction and provision of cycle tracks on both sides of the road. There would also be a possible requirement to relocate/provide new signal equipment.
- **R147 Navan Road / Ashtown Grove:** Reallocation of road space would be required to facilitate the inbound and outbound bus lanes on approach to the junction and provision of cycle tracks on both sides of the road. There would also be a possible requirement to relocate/provide new signal equipment.

- **R147 Navan Road / Kinvara Avenue / Baggot Road:** Widening of the junction would be required to facilitate the inbound and outbound bus lanes on approach to the junction and provision of a right-turn lane from the east, plus cycle tracks on both sides of the road. There would also be a possible requirement to relocate/provide new signal equipment.
- **R147 Navan Road / Nephin Road:** Widening of the junction would be required to facilitate the inbound and outbound bus lanes on approach to the junction and provision of cycle tracks on both sides of the road. There would also be a possible requirement to relocate/provide new signal equipment.
- **R147 Navan Road / Skreen Road:** Widening of the junction would be required to facilitate the inbound and outbound bus lanes on approach to the junction and provision of cycle tracks on both sides of the road. There would also be a possible requirement to relocate/provide new signal equipment.
- **R147 Navan Road / Hampton Green:** Widening of the junction would be required to facilitate the inbound and outbound bus lanes on approach to the junction and a right-turn lane from the east, and provision of cycle tracks on both sides of the road. There would also be a possible requirement to relocate/provide new signal equipment
- **R147 Navan Road / Cabra Library:** Widening of the junction would be required to facilitate the inbound and outbound bus lanes on approach to the junction and provision of cycle tracks on both sides of the road, and a right turn lane to access the library and retail park. There would also be a possible requirement to relocate/provide new signal equipment.

6.1.2.2.3 Route Option HH2

Route Description

Route option HH2 is presented in **Figure 6.16** and described in the following text.

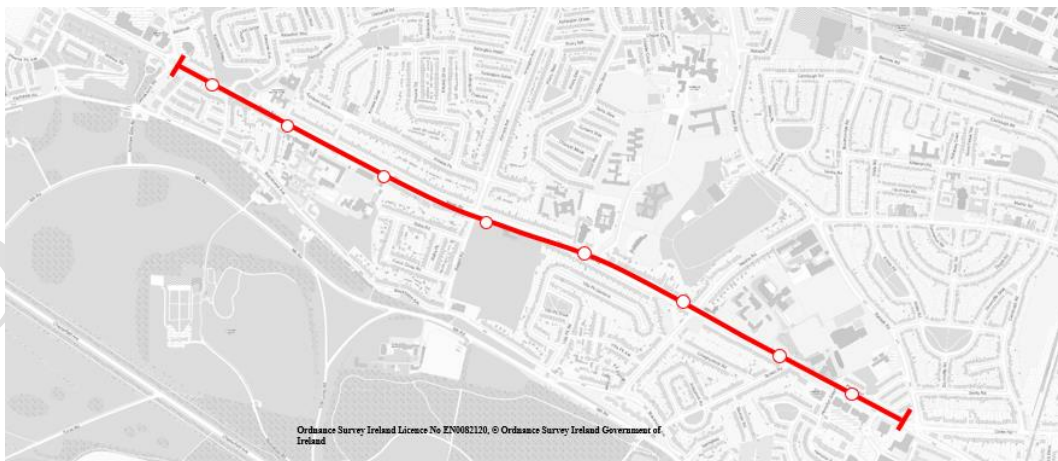


Figure 6.16: Route Option HH2

Inbound: This section of the CBC runs along Navan Road from east of the Ashtown Road junction to the Navan Road / Ratoath Road junction.

Outbound: The outbound route follows the same route as the inbound route.

Stops: A total of eight bus stops would likely be provided in each direction along this route section.

Indicative Scheme Design

Figure 6.17 illustrates the indicative scheme design for this route option. The location of cross-sections and junctions referenced in subsequent sections describing this route option are also presented in this figure.

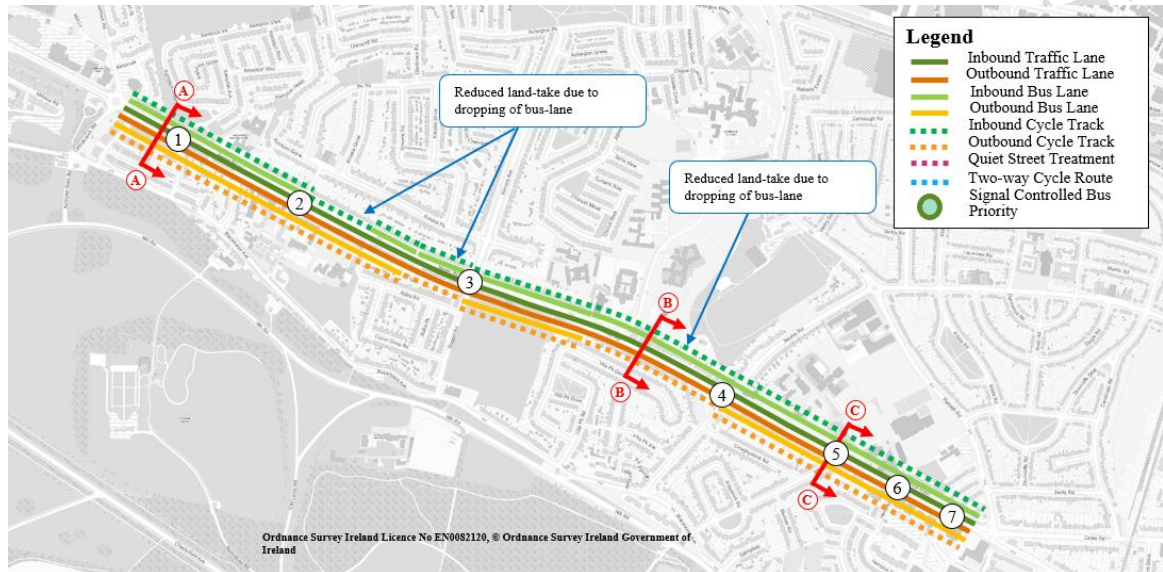


Figure 6.17: Route Option HH2 Indicative Scheme Design

This section of the CBC commences on Navan Road east of the Ashtown Road junction. The route continues to the east, connecting with side roads at Kempton Avenue and Ashtown Grove, and at Kinvara Avenue / Baggot Road. Along Navan Road, two general traffic lanes and two bus lanes are proposed, with one-way cycle tracks on both sides of the road, as presented in **Figure 6.18**. On two short lengths where the road width is most constrained, the proposed arrangement is for general traffic and buses to share a single lane, with Signal Control Priority in place at the beginning of these sections to enable buses to have priority ahead of other general traffic. This single lane arrangement is proposed on a section east of Ashtown Grove (inbound), on a section west of Kinvara Avenue (outbound), and on a section west of Nephin Road (outbound) with a separate bus lane and general traffic lane in the opposing direction.

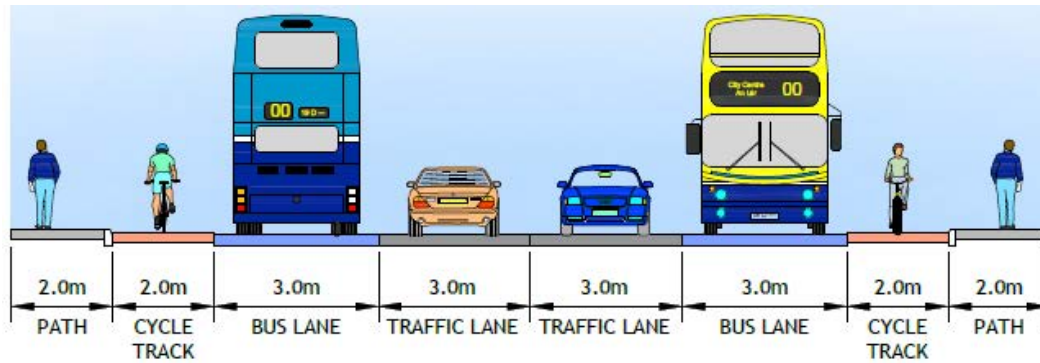


Figure 6.18: Route Option HH2 Cross-Section A-A

From Kinvara Avenue / Baggot Road junction to Nephin Road, the proposed cross-section of Navan Road is proposed as two general traffic lanes and two bus lanes (and cycle tracks in both directions) – except for a 100m section of Navan Road on the western approach to the Nephin Road junction where the road width is constrained.

At this location the proposed arrangement is for outbound general traffic and buses to share a single lane, with Signal Control Priority in place to enable buses to get priority ahead of other general traffic; this proposed cross section is indicated in **Figure 6.19**, and includes a separate bus lane and general traffic lane in the opposing direction.

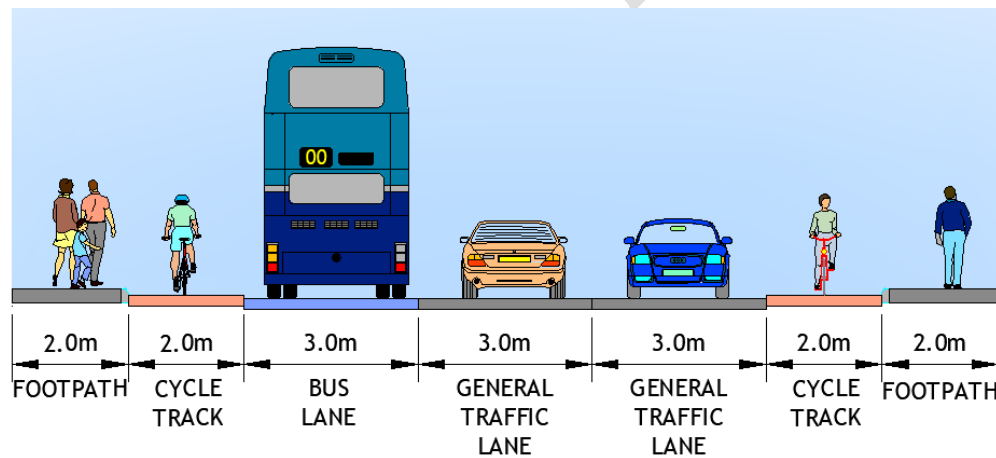


Figure 6.19: Route Option HH2 Cross-Section B-B

From Nephin Road to Skreen Road, the cross-section of Navan Road is proposed as two general traffic lanes and two bus lanes, with cycle tracks are provided in both directions. The proposed cross section is indicated in **Figure 6.20**.

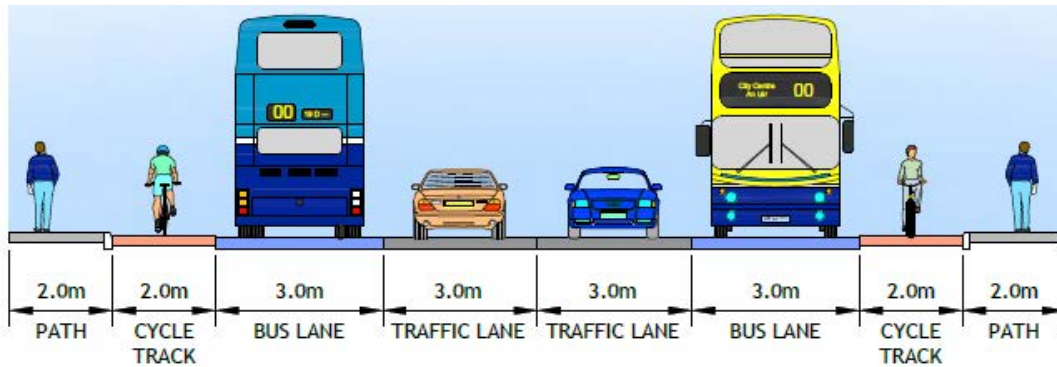


Figure 6.20: Route Option HH2 Cross-Section C-C

In summary, this route option would, subject to confirmation at the scheme design stage, result in the following characteristics:

- Two general traffic lanes and two bus lanes in each direction along Navan Road
- Intermittent three-lane sections where buses and general traffic share an inbound or outbound lane, with Signal Control Priority for buses at the beginning of these sections.
- Segregated cycle tracks on each side of the street.

Junctions:

There are seven signalised junctions along this route option, which would require upgrading to facilitate bus priority. The locations of these junctions are presented in Figure 6.17 and discussed below:

- **R147 Navan Road/Kempton Avenue:** Reallocation of road space would be required to facilitate the inbound and outbound bus lanes on approach to the junction and provision of cycle tracks on both sides of the road. There would also be a possible requirement to relocate/provide new signal equipment.
- **R147 Navan Road / Ashtown Grove:** Reallocation of road space would be required to facilitate the inbound and outbound bus lanes on approach to the junction and provision of cycle tracks on both sides of the road. There would also be a possible requirement to relocate/provide new signal equipment.
- **R147 Navan Road / Kinvara Avenue / Baggot Road:** Reallocation of road space at the junction would be required to facilitate the inbound and outbound bus lanes on approach to the junction and provision of a right-turn lane from the east, plus cycle tracks on both sides of the road. There would also be a possible requirement to relocate/provide new signal equipment.
- **R147 Navan Road / Nephin Road:** Reallocation of road space to facilitate the inbound and outbound bus lanes on approach to the junction and provision of cycle tracks on both sides of the road. There would also be a possible requirement to relocate/provide new signal equipment.

- **R147 Navan Road / Skreen Road:** Reallocation of road space at the junction would be required to facilitate the inbound and outbound bus lanes on approach to the junction and provision of cycle tracks on both sides of the road. There would also be a possible requirement to relocate/provide new signal equipment.
- **R147 Navan Road / Hampton Green:** Widening of the junction would be required to facilitate the inbound and outbound bus lanes on approach to the junction and a right-turn lane from the east, and provision of cycle tracks on both sides of the road. There would also be a possible requirement to relocate/provide new signal equipment
- **R147 Navan Road / Cabra Library:** Widening of the junction would be required to facilitate the inbound and outbound bus lanes on approach to the junction and provision of cycle tracks on both sides of the road, and a right turn lane to access the library and retail park. There would also be a possible requirement to relocate/provide new signal equipment.

6.1.2.2.4 Section 2b Route Option Assessment

Details of the route option assessment undertaken for the R147 Navan Road / Ashtown Road Junction to Navan Road / Ratoath Road Junction Route Option Assessment study area section are presented in Appendix B. The relative ranking of route options against the scheme assessment sub-criteria is summarised in **Table 6.3**.

Table 6.3: Section 2b Route Option assessment Summary (Sub-Criteria)

Appraisal Criteria	Sub-Criteria	Option HH1	Option HH2
1 Economy	1A Capital Cost		
	1B Transport Quality & Reliability		
2 Integration	2A Land Use Policy		
	2B Residential Population and Employment Catchments		
	2C Transport Network Integration		
	2D Cycle Network integration		
	2E Traffic Network Integration		
3 Accessibility & Social Inclusion	3A Key Trip Attractors		
	3B Deprived Geographic Areas		
4 Safety	4A Road Safety		
	4B Pedestrian Safety		
5 Environment	5A Archaeology & Cultural Heritage		
	5B Architectural Heritage		
	5C Flora & Fauna		
	5D Soils, Geology & Hydrology		
	5E Landscape & Visual		
	5F Air Quality		
	5G Noise & Vibration		
	5H Land Use Character		

In terms of capital cost, Option HH1 is the more expensive option due to the junction widening needed at the Kinvara Avenue and Nephin Road junctions. In terms of delivering transport quality & reliability of bus priority and journey time, option HH1 performs much better than HH2 due to the continuous bus lane infrastructure and the associated limited impact of any traffic queues on movement of buses.

For Option HH2, which involves bus and general traffic sharing a general traffic lane, it is considered that any blocking back of traffic queues at junctions would delay buses travelling in the shared traffic lane. It is relevant to note that Navan Road is designated as a major through route for general traffic (unlike in Stoneybatter where measures can be taken to dissuade through traffic) – and hence Navan Road would continue to carry significant levels of traffic flows even with bus priority measures in place.

Therefore, for Option HH2, traffic congestion would be increased (due to queuing at junctions) would adversely impact reliability and punctuality of bus movement – a key objective of the CBC corridor measures.

Both options serve the same catchments and as such are ranked equally in relation to land use policy and residential population catchments and employment catchments. Similarly, in terms of transport network integration, as both options follow the same route, the opportunity for interchange with other routes is equal.

In terms of cycle network integration, the two options perform equally well. HH1 has a better traffic management arrangement with a standard provision of a traffic lane in both directions,

Both options rank equally under accessibility and social inclusion as they both follow the same route.

In terms of safety, Option HH1 performs marginally better than HH2 due to the consistent number of traffic lanes and bus lanes and associated better traffic management conditions. Pedestrian crossing safety is also marginally better for HH1 due to the provision of a more intuitive standard cross-section (unlike Option HH2 which varies in width along its length).

In terms of environment, Option HH2 performs better due to less requirement for the removal of any trees; and more opportunity to provide urban realm improvements.

A summary of the assessment and relative ranking of route options against the five main assessment criteria is presented in **Table 6.4**.

Table 6.4: Section 2b Criteria MCA Summary

Sub-Criteria	Option HH1	Option HH2
1 Economy		
2 Integration		
3 Accessibility & Social Inclusion		
4 Safety		
5 Environment		

6.1.2.2.5 Section 2b Conclusion and Draft Preferred Option

Based on the assessment undertaken, route Option HH1 offers more benefits. It performs well under all criteria. Option HH1 is the preferred option for the Navan Road / Ashtown Road junction to Navan Road / Skreen Road section for the following reasons:

- For economy, although HH1 has the higher capital cost, it is significantly better than HH2 in respect of transport quality and reliability – which in this case enhances the capacity and potential of the public transport system by improving bus speeds, reliability and punctuality through the provision of bus lanes to provide priority to bus movement over general traffic movements;
- For integration, HH1 works better as it has a standard cross-section for traffic movements.

6.2 Section 3 Option Assessment: Navan Road / Ratoath Road to Ellis Quay

6.2.1 Section 3a - Navan Road / Ratoath Road to Prussia Street (Park Shopping Centre)

6.2.1.1 Introduction

Numerous submissions received as part of the public consultation raised concerns that the proposed traffic management plans; in particular, restricting general traffic movement along the Old Cabra Road may cause increased levels of traffic on residential roads as well as creating congestion elsewhere on the road network.

6.2.1.2 Options Considered

Two alternative options have been assessed as follows:

- **Option NV1:** Option NV1 would introduce a bus gate at the northern end of Old Cabra Road (at its junction with Navan Road), and a section of northbound bus lane on Old Cabra Road south of Glenbeigh Road – which would effectively remove the ability of through-traffic to travel between Stoneybatter and Navan Road in both directions along the Old Cabra Road. Cycle-lanes in each direction are proposed on Old Cabra Road from Navan Road to Prussia Street.
- **Option NV2:** EPR Option NV2 is similar to Option NV1, and would involve closing off Old Cabra Road as a general traffic through-route - but with a two-way cycle-track provided on the eastern side of Old Cabra Road from Navan Road to Prussia Street.

The key characteristics of each options are described in the following sections.

No alternative options were considered for this scheme section, additional to those assessed through the MCA.

Route Description

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Inbound: This section of the route commences at the Navan Road / Ratoath Road junction, proceeds along Old Cabra Road, and ends on Prussia Street just south of its junction with North Circular Road at the Park Shopping Centre.

Stops: A total of four bus stops would likely be provided in each direction along this route section.

Indicative Scheme Design

Figure 6.22 illustrates the indicative scheme design for this route option. The location of cross-sections and junctions referenced in subsequent sections describing this route option are also presented in this figure.

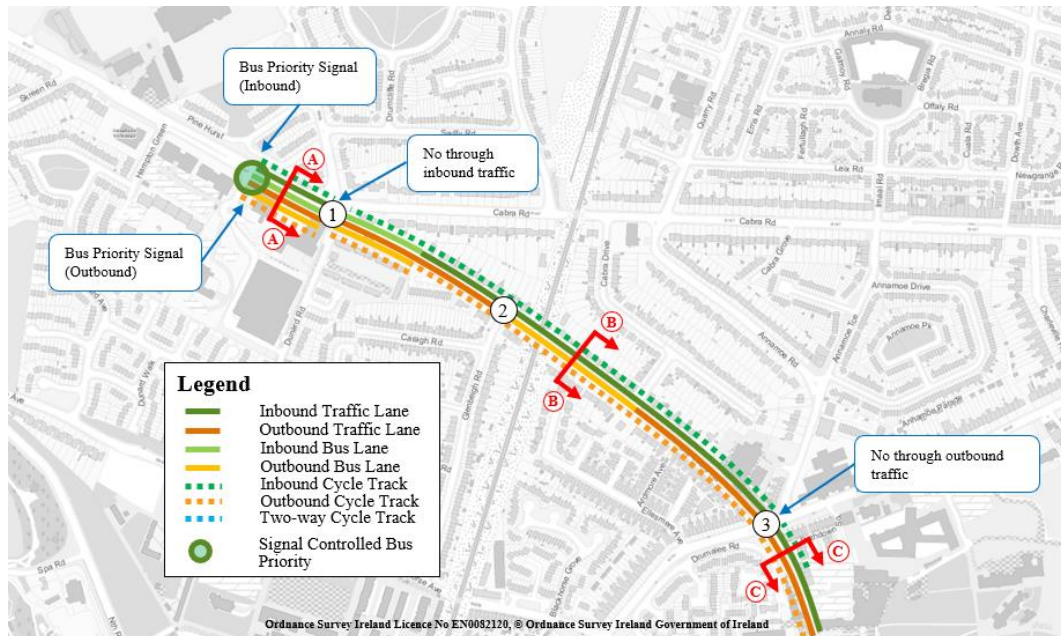


Figure 6.22: Route Option NV1 Indicative Scheme Design

This section of the route commences at the Navan Road / Ratoath Road junction. At the Navan Road / Ratoath Road junction two one-way cycle tracks, bus lanes and general traffic lanes are proposed. The proposed cross section is presented in **Figure 6.23**.

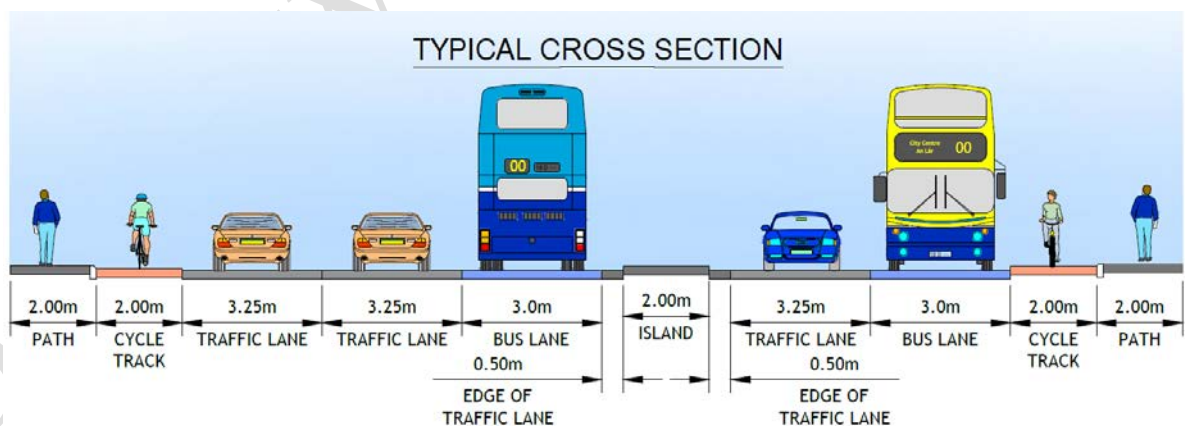


Figure 6.23: Route Option NV1 Cross-Section A-A

General traffic would not be able to travel southbound from Navan Road onto Old Cabra Road (due to a proposed southbound bus gate at the northern end of Old Cabra Road). Similarly, general traffic would be prevented from travelling northbound from the North Circular Road along Old Cabra Road (due to a northbound bus gate just north of Cabra Drive).

These northbound and southbound bus gates on Old Cabra Road would ensure priority for bus movements in both directions along this section. Cycle tracks are also proposed on Old Cabra Road in both directions from Navan Road to Prussia Street. The proposed cross section on Old Cabra Road just north of its junction with Cabra Drive is presented in **Figure 6.24**.

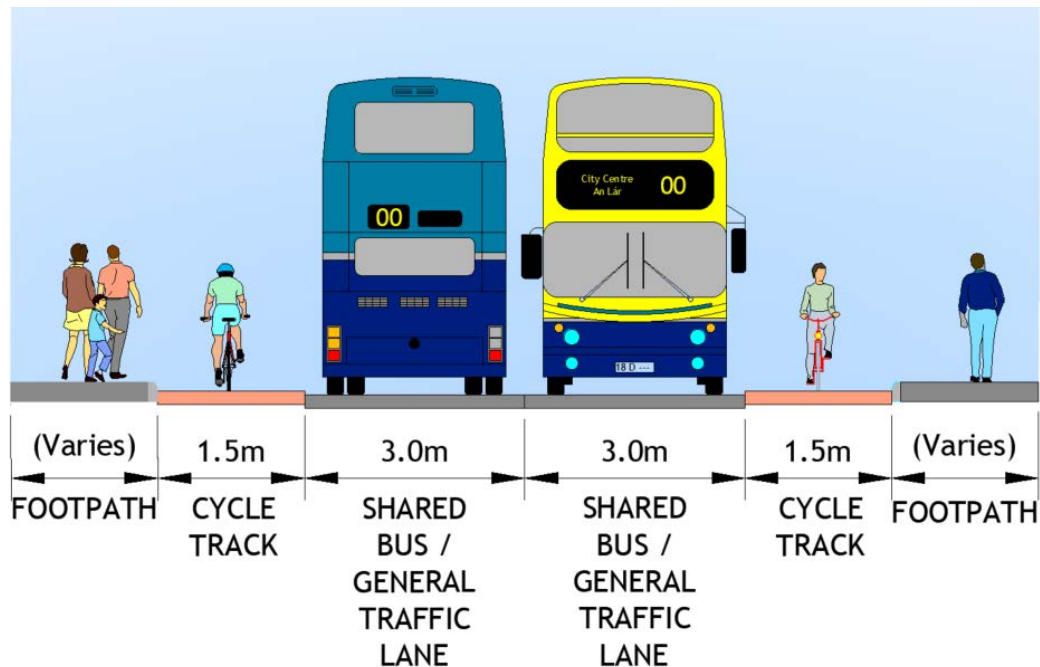


Figure 6.24: Route Option NV1 Cross-Section B-B

The inbound cycle track would merge into the general traffic lane on the northern end of Prussia Street due to width constraints (but with a proposed 30kph speed limit and limitations on through traffic which would give cyclists a safe environment for on-street cycling along this section). The proposed cross section on Prussia Street at its northern end is presented in **Figure 6.25**.

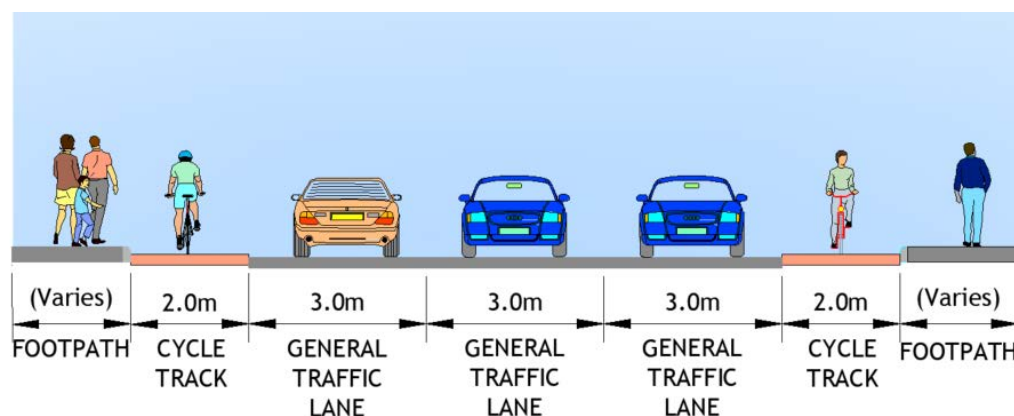


Figure 6.25: Route Option NV1 Cross-Section C-C

Local traffic access would be permitted in both directions along Old Cabra Road under this arrangement, however through-traffic would be directed to other roads.

In summary, this route option would, subject to confirmation at the scheme design stage, result in the following characteristics:

- Priority for bus movements on Old Cabra Road in both directions due to introduction of bus gates at the northern end (southbound) and north of Cabra Drive (northbound), which would limit access for general traffic on this route; and
- A cycle track in both directions along Navan Road and Old Cabra Road.

Junctions:

There are three signalised junctions along this route option, all of which would require upgrading to facilitate bus priority and cycle / pedestrian facilities. The locations of these junctions are presented in **Figure 7.22** and discussed below:

- **Navan Road/Ratoath Road/Cabra Road/Old Cabra Road** Adjustments to the junction layout would be required to facilitate the inbound and outbound bus lanes on approach to the junction and provision of cycle tracks on both sides of the road and appropriate crossings. There would also be a possible requirement to relocate/provide new signal equipment.
- **Old Cabra Road/Glenbeigh Road:** Adjustments to the junction layout would be required to facilitate the provision of separate outbound and inbound cycle tracks through the junction. There would also be a requirement to provide new signal equipment.
- **Prussia Street/North Circular Road:** Adjustments to the junction layout would be required to facilitate the provision of separate inbound and outbound cycle tracks at this junction. There would also be a possible requirement to relocate/provide new signal equipment.

6.2.1.2.3 Route Option NV2

Route Description

Route option NV2 is presented in **Figure 6.26** and represents the EPR Option.



Figure 6.26: Route Option NV2

Inbound: This section of the route commences at the Navan Road / Ratoath Road junction, proceeds along Old Cabra Road, and ends at Prussia Street just south of its junction with North Circular Road at the Park Shopping Centre.

Outbound: The outbound route follows the same route as the inbound route.

Stops: A total of four bus stops would likely be provided in each direction along this route section.

Indicative Scheme Design

Figure 6.27 illustrates the indicative EPR Option scheme design for this route option. The location of cross-sections and junctions referenced in subsequent sections describing this route option are also presented in this figure.

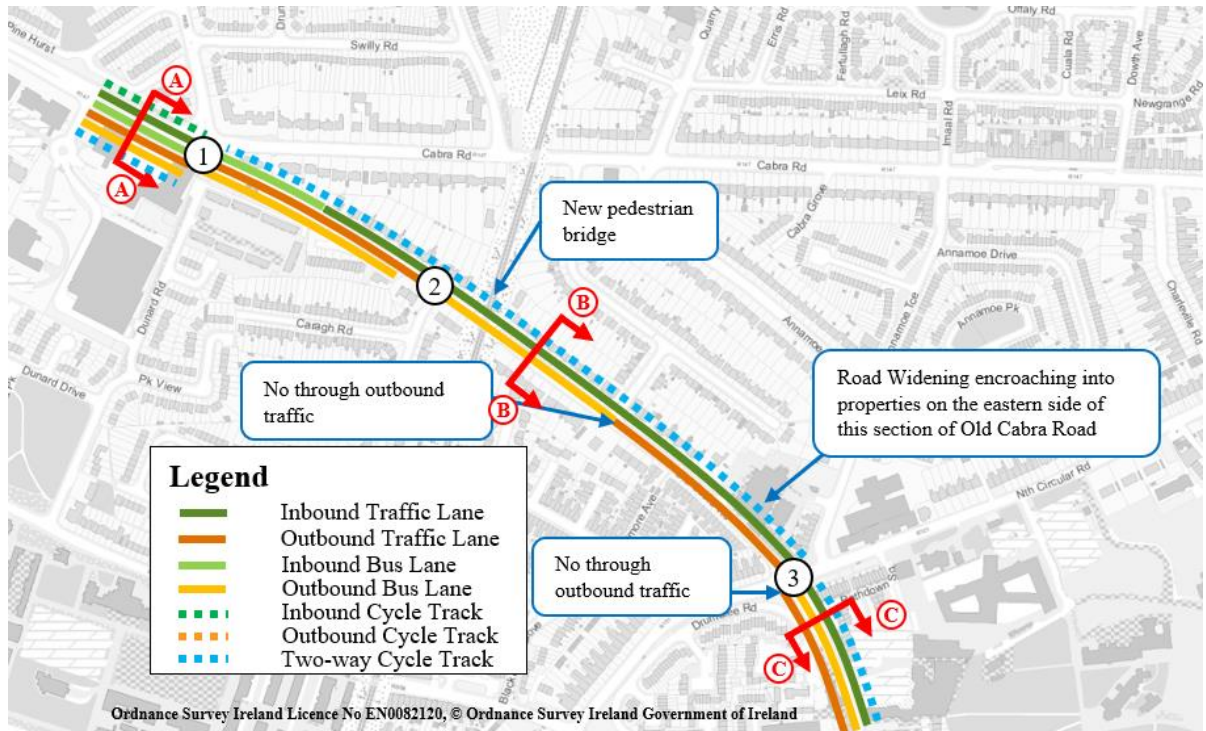


Figure 6.27: Route Option NV2 Indicative Scheme Design

This section of the route commences at the Navan Road / Ratoath Road Junction. At the Navan Road / Ratoath Road Junction a southbound one-way cycle track, and a two-way cycle track on the south side, a bus lane in both directions, and general traffic lanes are proposed. The proposed cross section is presented in **Figure 6.28**.

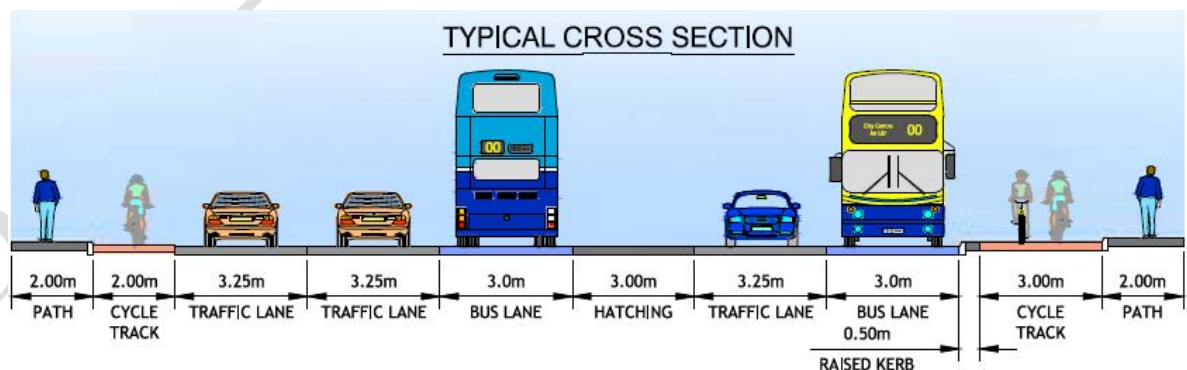


Figure 6.28: Route Option NV2 Cross-Section A-A

General traffic would not be able to travel southbound from Navan Road onto Old Cabra Road (due to a proposed bus gate at the northern end of Old Cabra Road).

Similarly, general traffic would be prevented from travelling northbound from the North Circular Road along Old Cabra Road (due to a northbound bus gate just north of Cabra Drive). These northbound and southbound bus gates on Old Cabra Road would ensure priority for bus movements in both directions on this section. A two-way cycle track would be provided along Old Cabra Road from Navan Road to Prussia Street. The proposed cross section is presented in **Figure 6.29**.

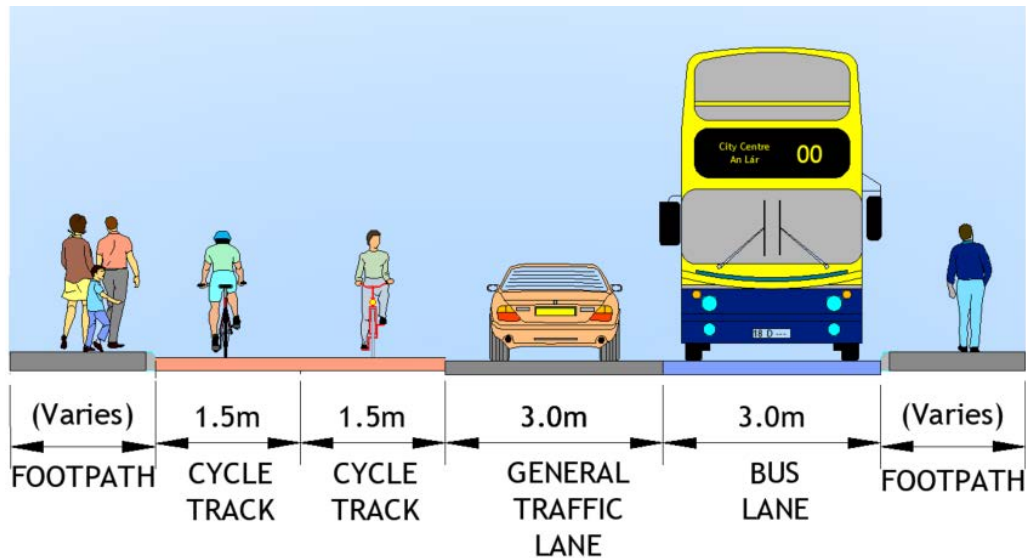


Figure 6.29: Route Option NV2 Cross-Section B-B

The proposed layout would include a two-way cycle track at the northern end of Prussia Street – and the design would allow for the potential future routing of cyclists through the Park Shopping Centre (towards Grangegorman). The proposed cross section is presented in **Figure 6.30**.

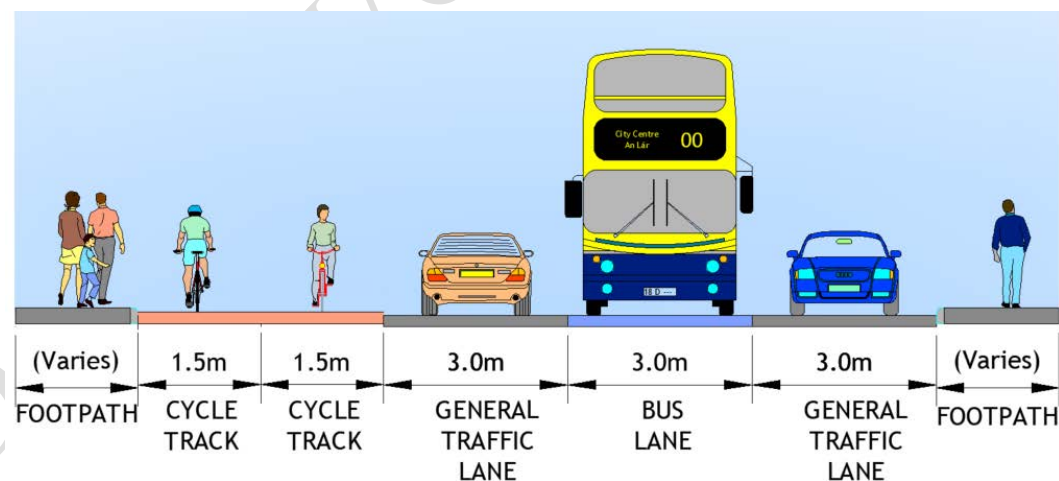


Figure 6.30: Route Option NV2 Cross-Section C-C

Local access would be permitted in both directions along Old Cabra Road under this arrangement, however through-traffic would be directed to other corridors.

In summary, this route option would, subject to confirmation at the scheme design stage, result in the following characteristics:

- Priority for bus movements on Old Cabra Road in both directions due to introduction of bus gates at the northern end (southbound) and south of Glenbeigh Road (northbound), which would limit access for general traffic on this route; and
- A two-way cycle track along Navan Road and Old Cabra Road.

Junctions:

There are three signalised junctions along this route option, some of which would require upgrading to facilitate bus priority. The locations of these junctions are presented in **Figure 6.27** and discussed below:

- **Navan Road/Ratoath Road/Cabra Road/Old Cabra Road:** Adjustments to the junction layout would be required to facilitate the inbound and outbound bus lanes on approach to the junction. There would also be a possible requirement to relocate/provide new signal equipment
- **Old Cabra Road/Glenbeigh Road:** Adjustments to the junction layout would be required to facilitate the two-way cycle track through the junction. There would also be a possible requirement to provide new signal equipment.
- **Prussia Street/North Circular Road:** Adjustments to the junction layout would be required to facilitate the two-way cycle track upgrade at this junction. There would also be a possible requirement to relocate/provide new signal equipment.

6.2.1.2.4 Section 3a Route Option Assessment

Details of the route option assessment undertaken for the Navan Road / Ratoath Road Junction to Prussia Street (Park Shopping Centre) study area section are presented in Appendix C. The relative ranking of route options against the scheme assessment sub-criteria is summarised in **Table 6.5**.

Table 6.5: Section 3a) Route Option assessment Summary (Sub-Criteria)

Appraisal Criteria	Sub-Criteria	Option NV1	Option NV2
1 Economy	1A Capital Cost		
	1B Transport Quality & Reliability		
2 Integration	2A Land Use Policy		
	2B Residential Population and Employment Catchments		
	2C Transport Network Integration		
	2D Cycle Network integration		
	2E Traffic Network Integration		
3 Accessibility & Social Inclusion	3A Key Trip Attractors		
	3B Deprived Geographic Areas		
4 Safety	4A Road Safety		
	4B Pedestrian Safety		
5 Environment	5A Archaeology & Cultural Heritage		
	5B Architectural Heritage		
	5C Flora & Fauna		
	5D Soils, Geology & Hydrology		
	5E Landscape & Visual		
	5F Air Quality		
	5G Noise & Vibration		
	5H Land Use Character		

In terms of economy, Option NV2 has a greater capital cost option due to the significant land acquisition and infrastructure costs to deliver a pedestrian bridge over the railway at Old Cabra Road. However, it should be noted that in terms of transport quality and reliability, Options NV1 and NV2 perform much the same when considering physical bus priority and journey time consistency.

All options serve the same catchments and as such are ranked equally in relation to land use policy and residential population catchments and employment catchments. Similarly, in terms of transport network integration, as all options follow the same route, the opportunity for interchange with other routes is equal.

In terms of cycle network integration, Option NV1 performs better than NV2 as the 'with flow' one-way cycle track arrangement (in NV1) has more direct and intuitive connectivity at both ends of Old Cabra Road than NV2 which would require less direct crossing manoeuvres at the Navan Road and North Circular Road junctions.

All options rank equally under accessibility and social inclusion as they all follow the same route.

In terms of safety, both options are similar with respect to road safety as the route, the number of junctions, and turning movements are the same. However NV1 scores marginally higher on pedestrian and cycle safety due to NV2 including a two-way cycle track across side roads and pedestrian crossings – which although not intrinsically unsafe, is potentially a less comfortable environment for pedestrians and cyclists in this constrained cross-section of Old Cabra Road. NV1 always performs better from a pedestrian safety perspective due to more consistent footway widths and less conflict with cycle tracks due to having cycle tracks on either side of the road.

With respect to appraisal, criteria 5, environment, Option NV1 performs better than NV2 as it has greater scope for urban realm improvements at the junction of Ratoath Road and Navan Road, due to less space for cycle tracks in the reconfigured cross section at this location. In terms of landscape and visual, Option NV1 requires less property acquisition when compared to NV2. In terms of air quality and noise and vibration, both options rank equally. Option NV1 retains a tree line in the central reserve at the Ratoath Road junction when compared to NV2, ranking it better when considering land use and character at this urban focal point.

A summary of the assessment and relative ranking of route options against the five main assessment criteria is presented in **Table 6.6**.

Table 6.6: Section 3a Criteria MCA Summary

Sub-Criteria	Option NV1	Option NV2
1 Economy	Green	Yellow
2 Integration	Green	Yellow
3 Accessibility & Social Inclusion	Yellow	Yellow
4 Safety	Green	Yellow
5 Environment	Green	Red

6.2.1.2.5 Section 3a Conclusion and Draft Preferred Option

Based on the assessment undertaken, route Option NV1 offers more benefits over Option NV2 – although both options perform well in respect of bus priority.

Option NV1 is the preferred option for the following reasons:

- On economy, NV2 has a higher capital cost due to the requirement to widen the rail bridge to accommodate the two-way cycle track, compared to NV1 where bridge widening is not required.
- In respect of Integration, the NV1 option has two one-way cycle tracks, on each side of the road, segregated from the general traffic carriageway, which offers cyclists a more intuitive route on Old Cabra Road (compared to a two-way cycle track without a traffic/cycle buffer for NV2).

- On environment, Option NV1 has less land-take and less impact on trees than NV2 due to a reconfiguration of the proposed carriageway cross-section.

6.2.2 Section 3b - Prussia Street (Park Shopping Centre) to Manor Street / Brunswick Street North Junction

6.2.2.1 Introduction

Numerous submissions received as part of the public consultation raised concerns that the proposed traffic management plans; in particular, restricting general traffic movement through Stoneybatter may cause increased levels of general traffic on residential roads as well as creating congestion elsewhere on the road network. Submissions also raised concerns about the provision of green space at the junction of Manor Street, Prussia Street and Aughrim Street, and constrained width of footpaths in Stoneybatter.

6.2.2.2 Options Considered

Three options have been assessed as follows:

- **Option SB1:** Option SB1 proposals consist of a southbound and northbound bus gate on Prussia Street at its junction with Aughrim Street. South of Aughrim Street, two general traffic lanes and two cycle tracks would be provided on Manor Street until the junction at Manor Place. Along Manor Street between Manor Place and Brunswick Street North, cycle tracks in both directions would be provided, with an outbound bus-lane, and inbound and outbound general traffic lanes.
- **Option SB2:** EPR Option SB2 proposals consist of an inbound general traffic lane, with an inbound bus lane on Prussia Street beginning at Shea's Lane, and an outbound bus lane beginning just south of Manor Place. Aughrim Street would have a general traffic lane in both directions at its junction with Manor Street. Along Manor Street south of Manor Place, there would be general traffic lanes in both directions, a bus lane southbound, and a northbound cycle track.
- **Option SB3:** Option SB3 proposals consist of a southbound and northbound bus gate on Prussia Street at its junction with Aughrim Street. South of Aughrim Street, inbound and outbound general traffic lanes and two cycle tracks would be provided on Manor Street until the junction at Brunswick Street North.

A northbound bus priority signal is proposed on Blackhall Place – where northbound general traffic would need to turn right into King Street North, and then travel via George's Lane and Brunswick Street North, to reach Manor Street.

The key characteristics of each options are described in the following sections.

6.2.2.2.1 Alternative Options Considered

Three options have been assessed as follows:

Alternatives were considered, but not progressed, as follows:

- **Closing Stoneybatter to through traffic:** Full closure of through-traffic access via Stoneybatter was considered unfeasible due to the impracticality of preventing through vehicular traffic while also allowing the necessary vehicular access for local residents and businesses. For example, it would be necessary to allow local traffic to enter from the north or south, and the return journey would require long diversions of around 3km (e.g. via North Circular Road) – which would both tend to create local congestion and would also tend to encourage drivers to perform three-point turns on the bus corridor to avoid having to follow a one-way diversion route on their return journey.
- **Routing cyclists through Grangegorman:** Routing cyclists through Grangegorman instead of along Prussia Street and Manor Street was also considered, which would require a cycle link from the northern end of Prussia Street through to Grangegorman Lower. For purposes of the CBC, this alternative cycle route is not an essential component, and routing cyclists along Prussia Street and Manor Street (Route 4D in the GDA Cycle Network Plan) provides an appropriately high quality and direct route.
- **Routing of the CBC corridor via Phoenix Park:** Use of Phoenix Park has been identified by stakeholders as a potential alternative route for buses between Blanchardstown and the city centre. However, the general principle for successfully attracting people to use buses is to ensure that the bus service path is as close as possible to where people live, work and visit. In this respect, it is essential that buses are routed via Stoneybatter in order to ensure that people who live and work there, or need to visit, are able to do so using a high frequency bus service (which is connected to the wider bus network to maximise travel catchment). Hence the potential for routing the CBC corridor via Phoenix Park has not been taken forward for detailed consideration.

6.2.2.2.2 Route Option SB1

Route Description

Route option SB1 is presented in **Figure 6.31** and described in the following text.

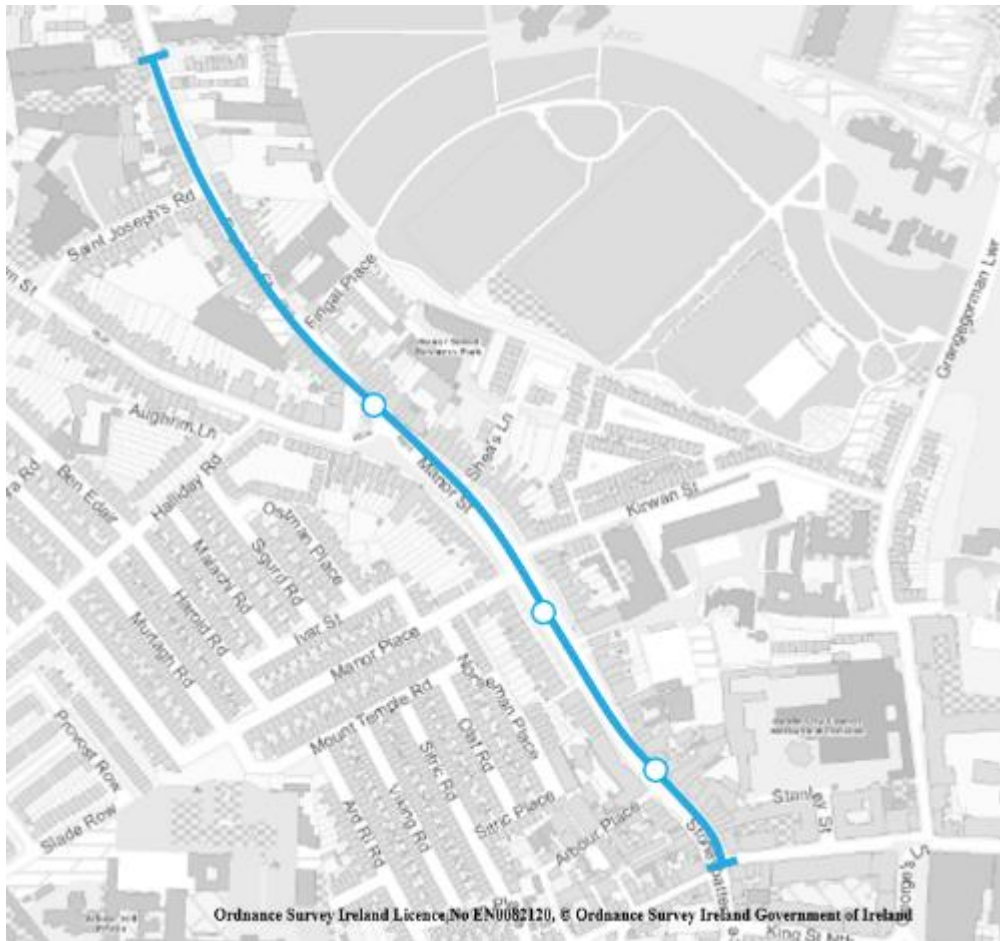


Figure 6.31: Route Option SB1

Inbound: This section of the CBC runs along Prussia Street (from south of the North Circular Road junction at the Park Shopping Centre) through to Manor Street, via the Stoneybatter junction with Aughrim Street. This section of the route ends at the junction of Manor Street and Brunswick Street North.

Outbound: The outbound route follows the same route as the inbound route.

Stops: A total of three bus stops would likely be provided in each direction along this route section.

Indicative Scheme Design

Figure 6.32 illustrates the indicative scheme design for this route option. The location of cross-sections and junctions referenced in subsequent sections describing this route option are also presented in this figure.

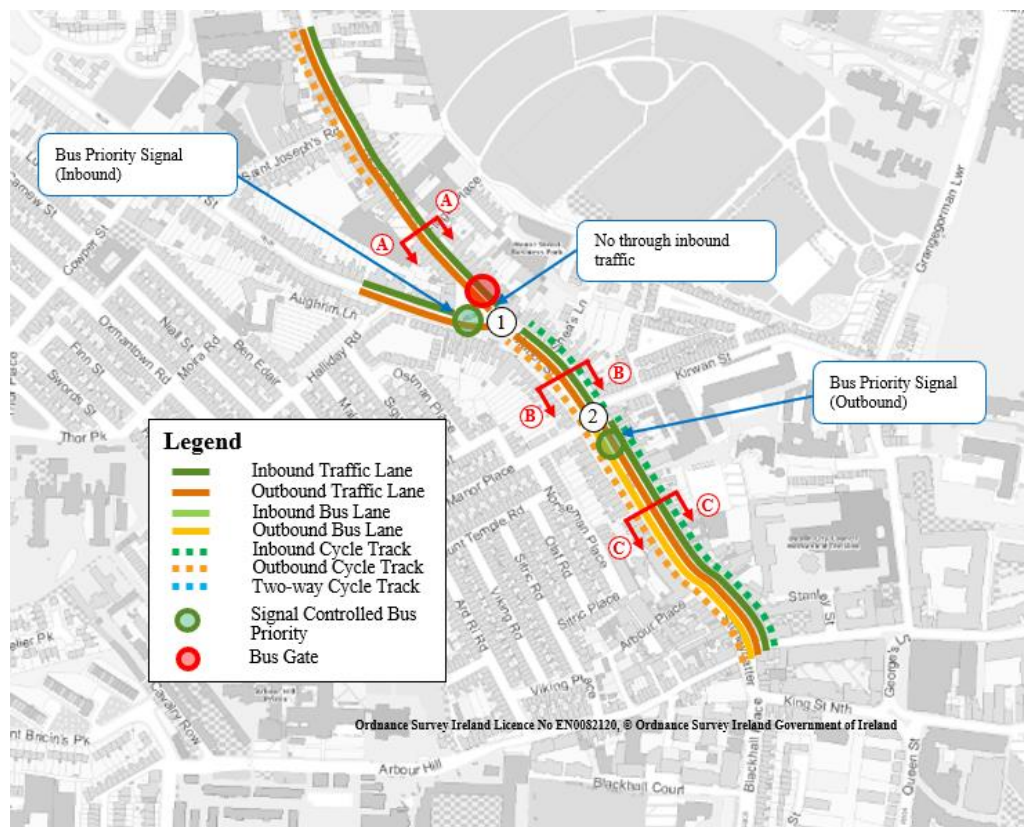


Figure 6.32: Route Option SB1 Indicative Scheme Design

This section of the CBC commences on Prussia Street south of the North Circular Road junction. Along Prussia Street two general traffic lanes would be provided in the cross section just north of the Aughrim Street junction, as presented in **Figure 6.33**.

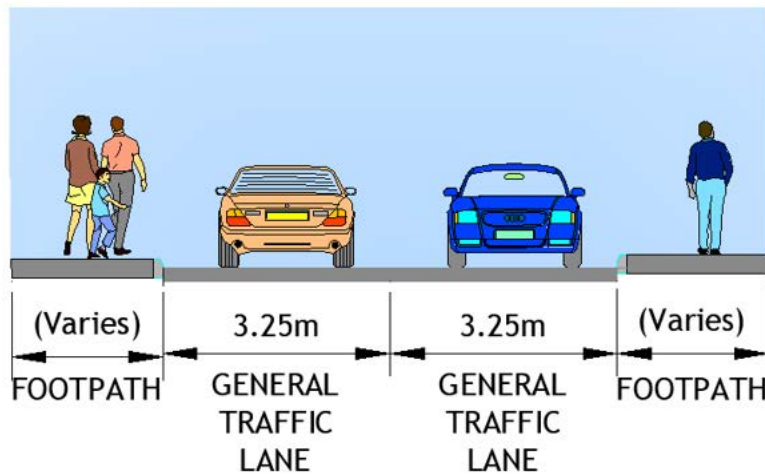


Figure 6.33: Route Option SB1 Cross-Section A-A

Outbound general traffic at the northern end of Manor Street would be directed onto Aughrim Street, with only buses and taxis allowed to proceed onto Prussia Street.

Two cycle tracks and two general traffic lanes are proposed from the Prussia Street / Manor Street / Aughrim Street junction to the junction of Manor Street / Manor Place. The proposed cross section is indicated in **Figure 6.34**.

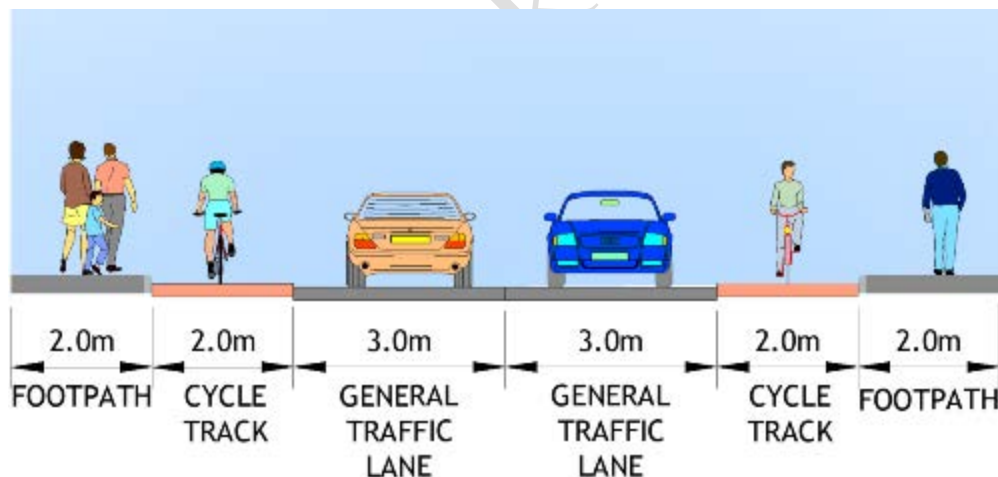


Figure 6.34: Route Option SB1 Cross-Section B-B

An outbound dedicated bus lane would be provided alongside two general traffic lanes and two cycle tracks from the Manor Place / Manor Street Junction to Brunswick Street North as shown in the cross section presented in **Figure 6.35**.

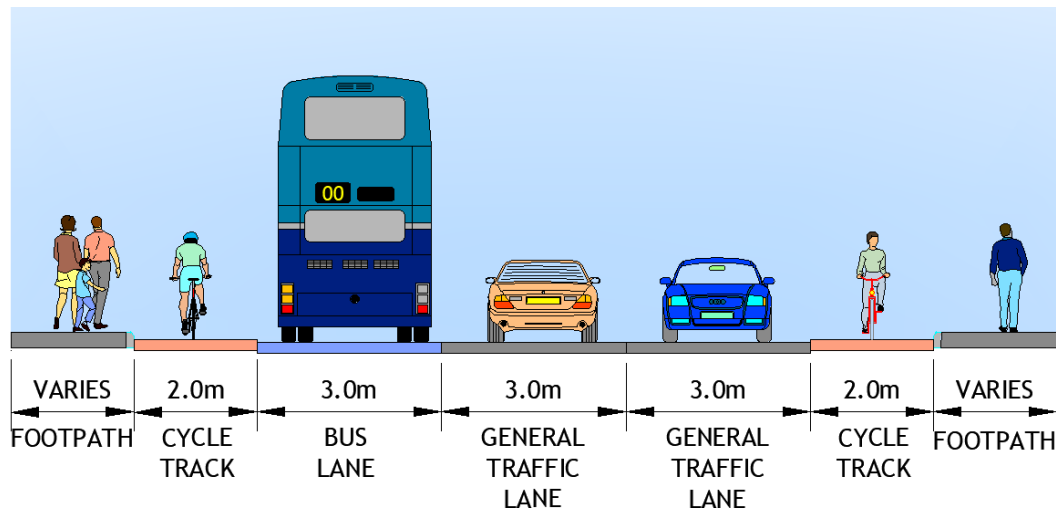


Figure 6.35: Route Option SB1 Cross-Section C-C

In summary, this route option would, subject to confirmation at the scheme design stage, result in the following characteristics:

- Two general traffic lanes and cycle tracks in each direction along Prussia Street / Manor Street, and
- An outbound bus lane on Manor Street, and a southbound and northbound bus only section on Prussia Street at its junction with Aughrim Street, which would severely limit general traffic flows on this section of bus corridor.

Junctions:

There are two signalised junctions along this route option, which would require upgrading to facilitate bus priority. The locations of these junctions are presented in **Figure 6.32** and discussed below:

- **Prussia Street / Aughrim Street / Manor Street Junction:** Adjustments to the junction layout would be required to facilitate the urban realm improvement and bus priority measures on approach to the junction. There would also be a possible requirement to provide new signal equipment.
- **Manor Street / Manor Place Junction:** Adjustments to the junction layout would be required to facilitate the provision of cycle tracks in both directions. There would also be a possible requirement to provide new signal equipment.

6.2.2.2.3 Route Option SB2

Route Description

Route option SB2 is presented in **Figure 6.36** and described in the following text and represents the EPR Option.

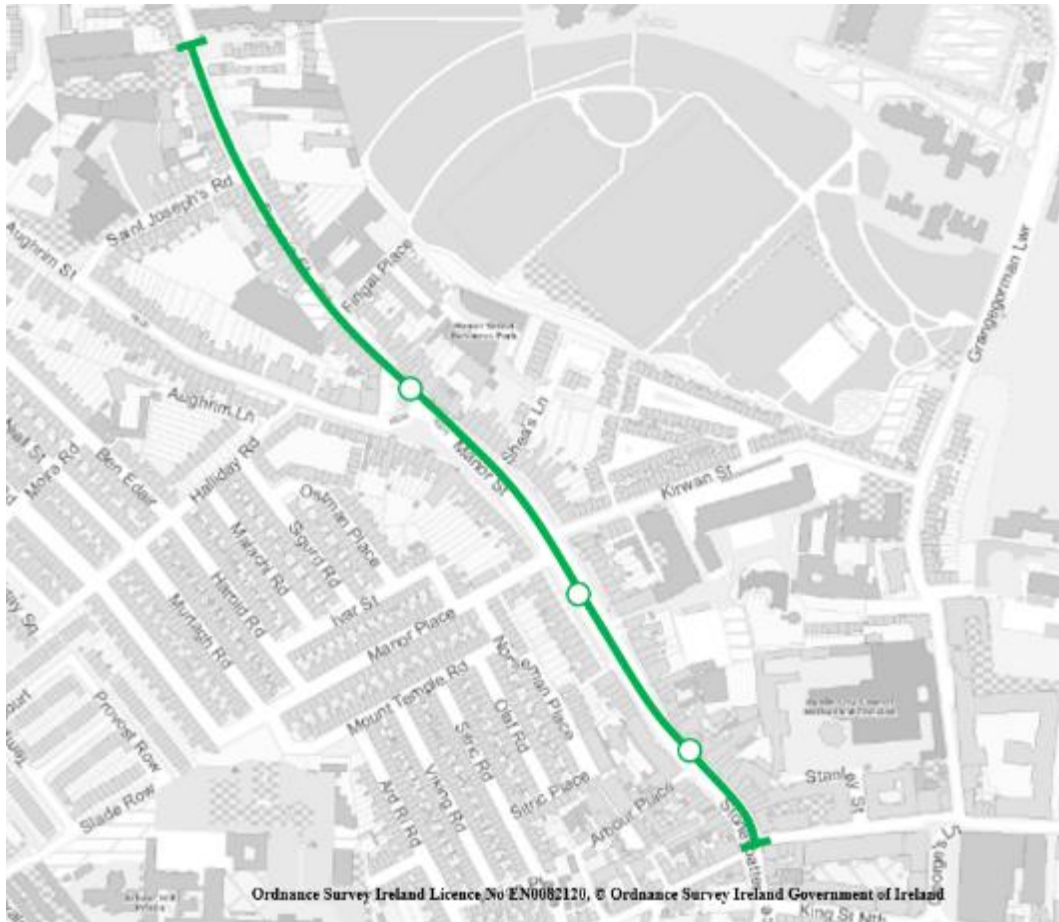


Figure 6.36: Route Option SB2

Inbound: This section of the CBC runs along Prussia Street (from south of the North Circular Road junction at the Park Shopping Centre) through to Manor Street, via the Stoneybatter junction with Aughrim Street. This section of the route ends at the junction of Manor Street and Brunswick Street North.

Outbound: The outbound route follows the same route as the inbound route.

Stops: A total of three stops would likely be provided in each direction along this route section.

Indicative Scheme Design

Figure 6.37 illustrates the indicative EPR Option scheme design for this route option. The location of cross-sections and junctions referenced in subsequent sections describing this route option are also presented in this figure.

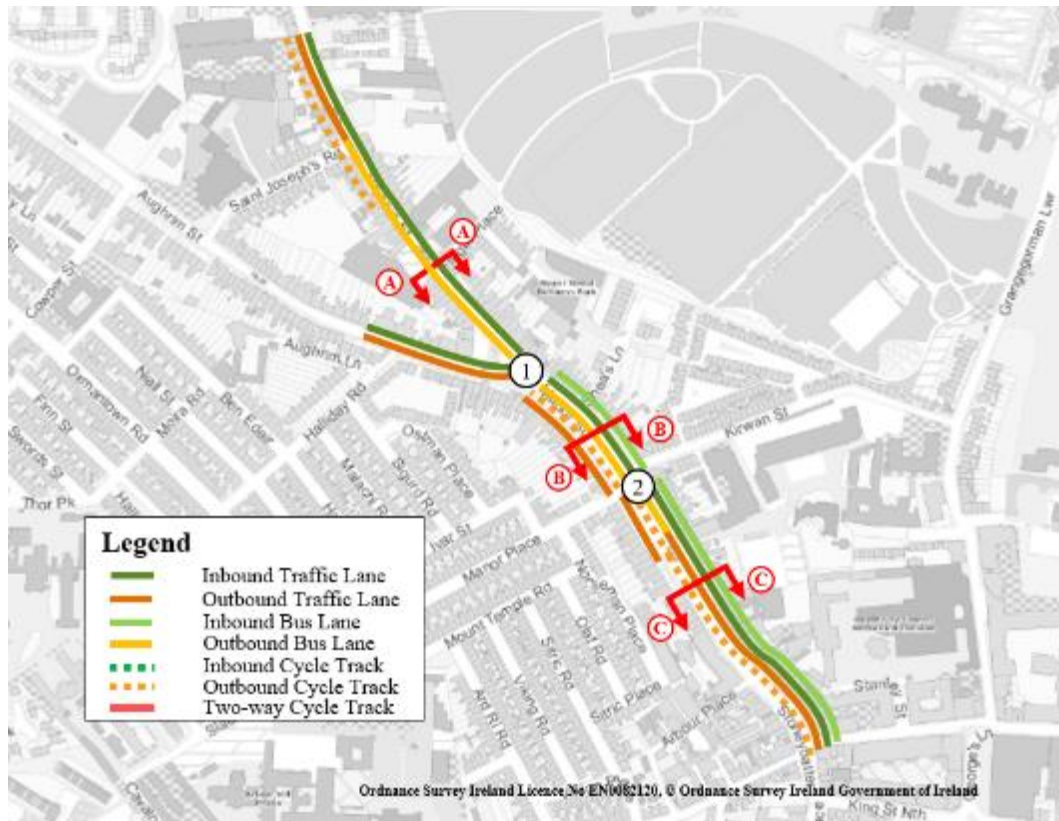


Figure 6.37: Route Option SB2 Indicative Scheme Design

This section of the CBC commences on Prussia Street (from south of the North Circular Road junction at the Park Shopping Centre). Between St. Joseph's Road and Manor Street an outbound bus lane and an inbound general traffic lane are proposed. The proposed cross-section Prussia Street is presented in **Figure 6.38**.

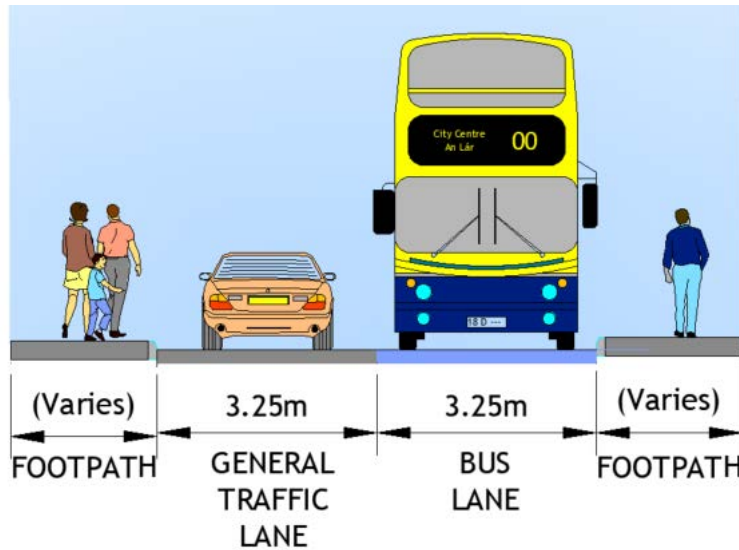


Figure 6.38: Route Option SB2 Cross-Section A-A

Outbound general traffic at the northern end of Manor Street would be directed onto Aughrim Street, with only buses and taxis allowed to proceed onto Prussia Street. One outbound cycle track, two bus lanes and two general traffic lanes would be provided along the northern part of Manor Street. This proposed cross section is presented in **Figure 6.39**.

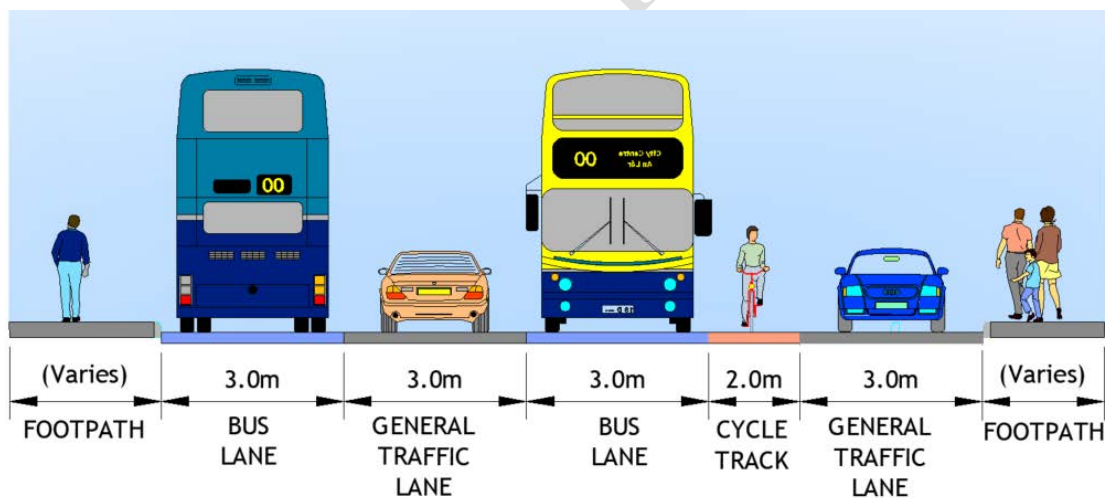


Figure 6.39: Route Option SB2 Cross-Section B-B

An inbound dedicated bus lane would be provided alongside two general traffic lanes (northbound and southbound) and one northbound cycle track on the southern end of Manor Street (from Brunswick Street North). This proposed cross section is presented in **Figure 6.40**.

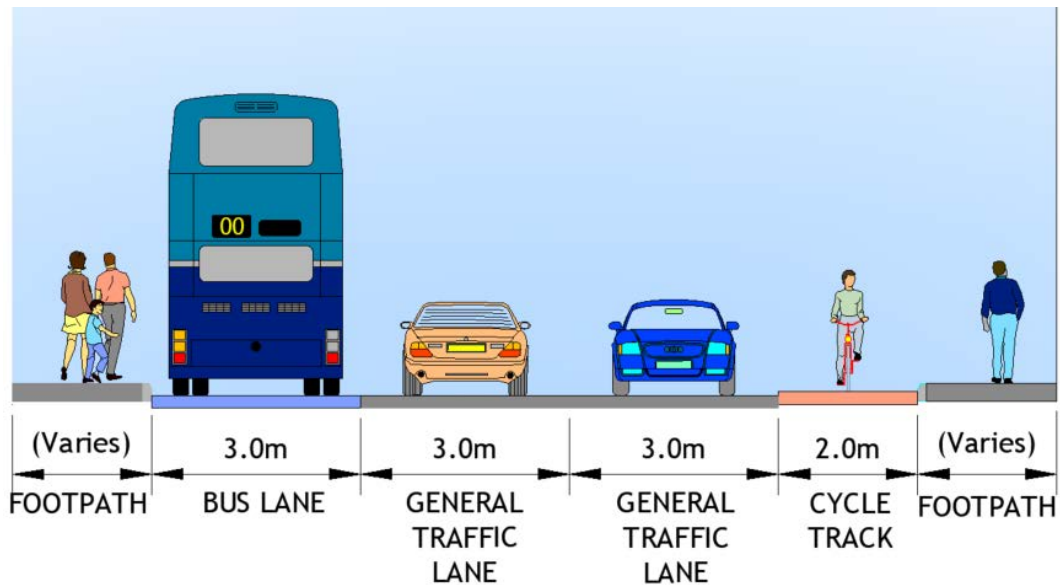


Figure 6.40: Route Option SB2 Cross-Section C-C

In summary, this route option would, subject to confirmation at the scheme design stage, result in the following characteristics:

- An inbound bus lane from Shea's Lane to Brunswick Street and an outbound bus lane from Manor Place Junction to St. Joseph's Road.
- Two general traffic lanes along Manor Street between the Aughrim Street junction and Brunswick Street North. Outbound general traffic would be diverted from the CBC to Aughrim Street.
- An outbound cycle track would be provided from Brunswick Street North to Aughrim Street.

Junctions:

There are two signalised junctions along this route option, which would require upgrading to facilitate bus priority. The locations of these junctions are presented in **Figure 6.37** and discussed below:

- **Prussia Street / Manor Street / Aughrim Street Junction:** Adjustments to the junction layout would be required to facilitate the urban realm improvement and bus priority on approach to the junction. There would also be a requirement to provide new signal equipment.
- **Manor Street / Manor Place / Kirwan Street Junction:** Adjustments to the junction layout would be required to facilitate the inbound and outbound bus lanes on approach to the junction. There would also be a requirement for new signal equipment.

6.2.2.2.4 Route Option SB3

Route Description

Route option SB3 is presented in **Figure 6.41** and described in the following text.

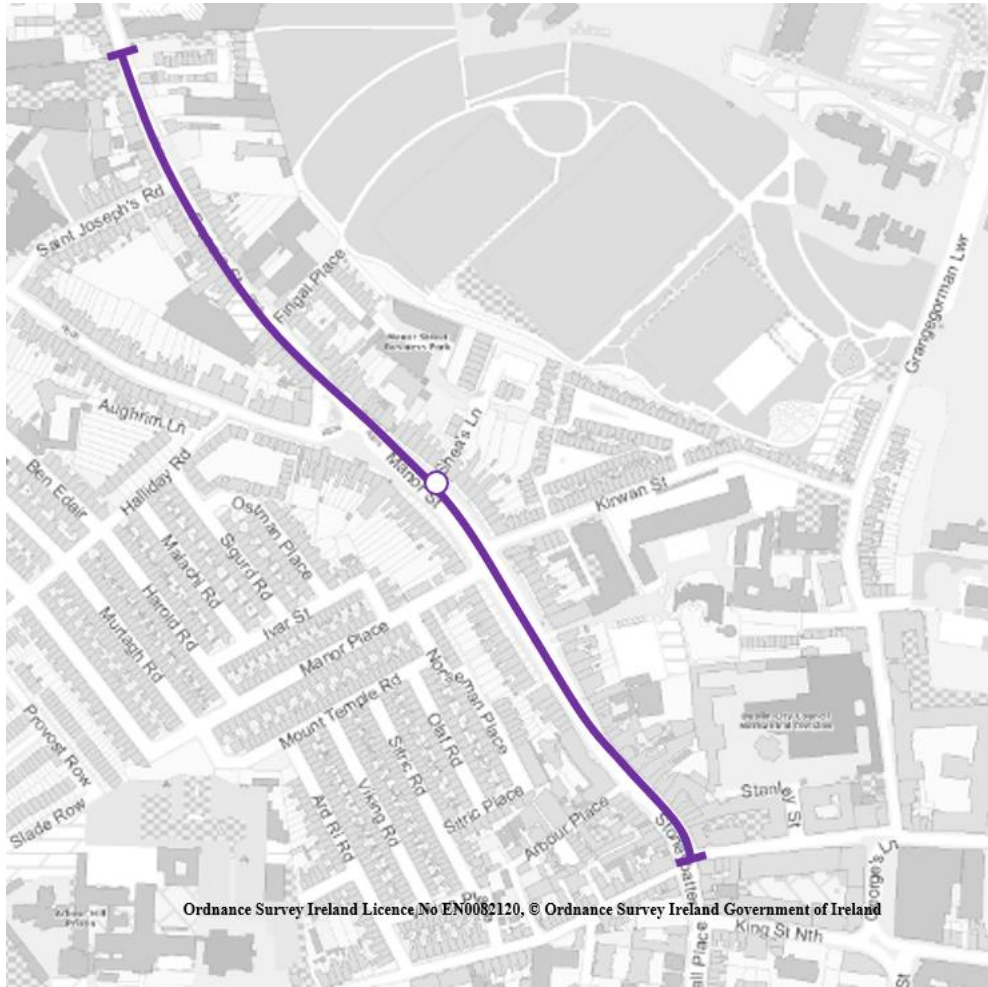


Figure 6.41: Route Option SB3

Inbound: This section of the CBC runs along Prussia Street (from south of the North Circular Road junction at Park Shopping Centre) through to Manor Street, via the Stoneybatter junction with Aughrim Street. This section of the CBC ends at the junction of Manor Street and Brunswick Street North.

Outbound: The outbound route follows the same route as the inbound route.

Stops: One bus stop would be provided in each direction along this route section.

Indicative Scheme Design

Figure 6.42 illustrates the indicative scheme design for this route option. The location of cross-sections and junctions referenced in subsequent sections describing this route option are also presented in this figure.

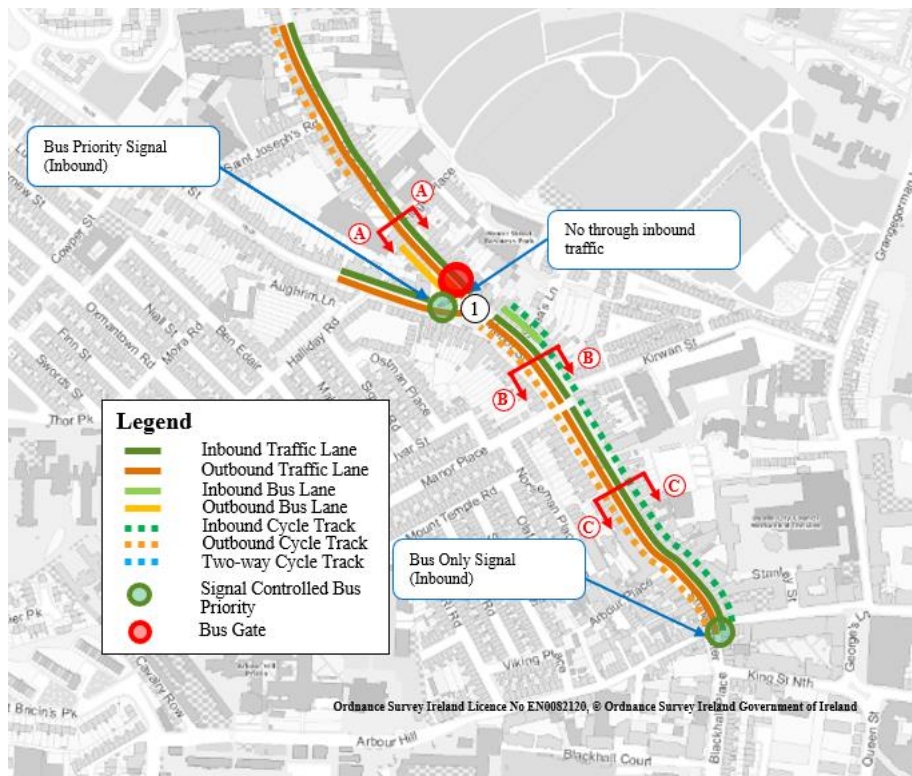


Figure 6.42: Route Option SB3 Indicative Scheme Design

This section of the CBC commences on Prussia Street south of the North Circular Road junction at Park Shopping Centre. Along Prussia Street two general traffic lanes would be provided in the cross section just north of the Aughrim Street junction, as presented in **Figure 6.43**.

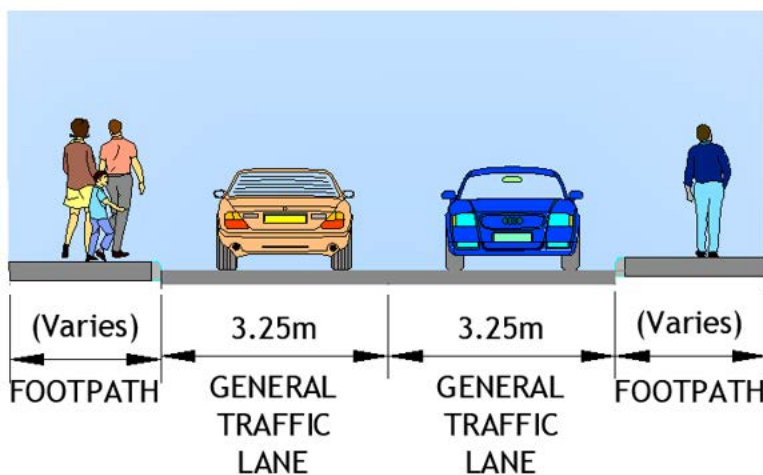


Figure 6.43: Route Option SB3 Cross-Section A-A

Outbound general traffic at the northern end of Manor Street would be directed onto Aughrim Street, with only buses and taxis allowed to proceed onto Prussia Street. Two cycle tracks and two general traffic lanes are proposed from the Prussia Street / Manor Street / Aughrim Street junction to the junction of Manor Street / Manor Place. The proposed cross section is indicated in **Figure 6.44**.

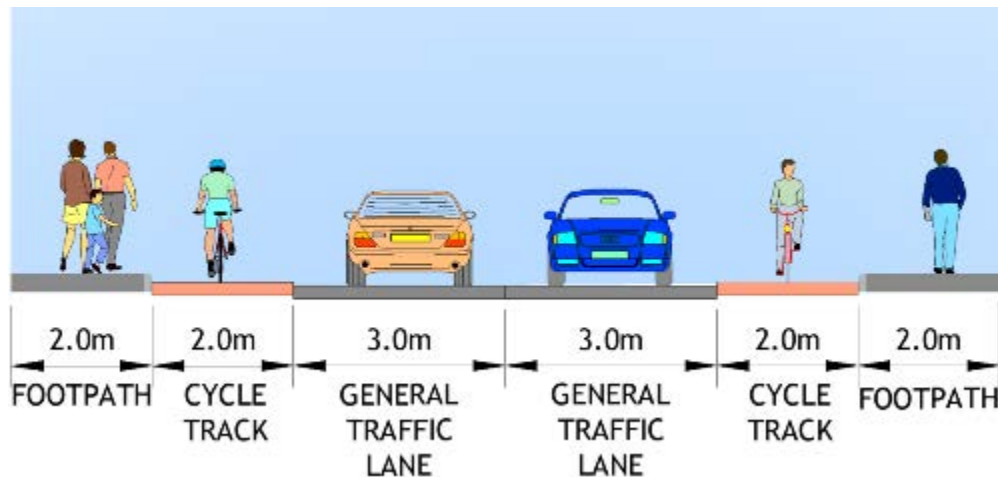


Figure 6.44: Route Option SB3 Cross-Section B-B

Two general traffic lanes and two cycle lanes would be provided from the Manor Place / Manor Street Junction to Brunswick Street North as shown in the cross section presented in **Figure 6.45**.

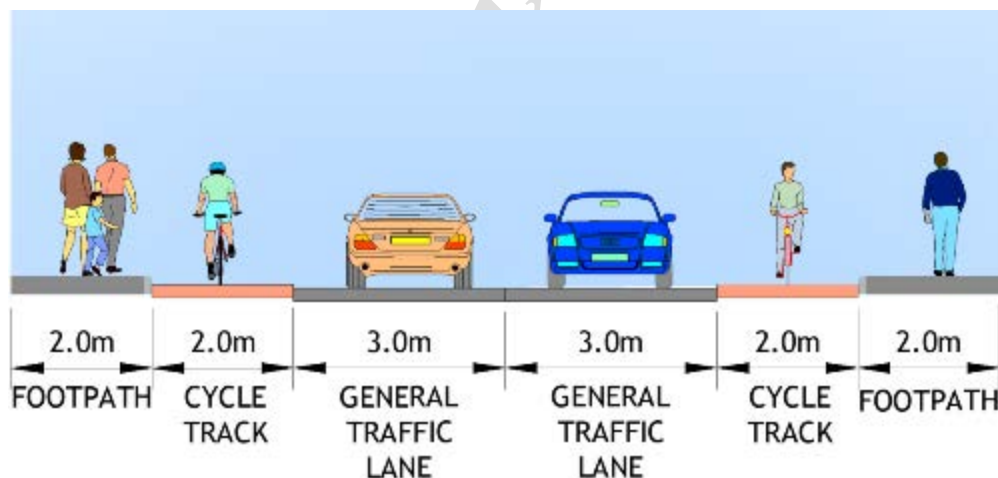


Figure 6.45: Route Option SB3 Cross-Section C-C

In summary, this route option would, subject to confirmation at the scheme design stage, result in the following characteristics:

- Two general traffic lanes and two cycle tracks in each direction along Prussia Street, and
- Two general traffic lanes and two cycle tracks on Manor Street, and a southbound and northbound bus only section on Prussia Street at its junction with Aughrim Street, which would severely limit general traffic flows on this section of bus corridor.

An additional bus priority signal located at Blackhall Place would restrict northbound general traffic, diverting general traffic onto King Street, via St George's Lane and Brunswick Street North to reach Manor Street.

Junctions:

There are two signalised junctions along this route option, which would require upgrading to facilitate bus priority. The locations of these junctions are presented in **Figure 6.42** and discussed below:

- **Prussia Street / Aughrim Street / Manor Street Junction:** Adjustments to the junction layout would be required to facilitate the urban realm improvement and bus priority measures on approach to the junction. There would also be a possible requirement to provide new signal equipment.
- **Manor Street / Manor Place / Kirwan Street Junction:** Adjustments to the junction layout would be required to facilitate the provision of cycle tracks in both directions. There would also be a requirement to provide new signal equipment.

6.2.2.2.5 Section 3b Route Option Assessment

Details of the route option assessment undertaken for the Prussia Street (Park Shopping Centre) to Manor Street / Brunswick Street North Junction study area section are presented in Appendix D. The relative ranking of route options against the scheme assessment sub-criteria is summarised in **Table 6.7**.

Table 6.7: Section 3b Route Option Assessment Summary (Sub-Criteria)

Appraisal Criteria	Sub-Criteria	Option SB1	Option SB2	Option SB3
1 Economy	1A Capital Cost			
	1B Transport Quality & Reliability			
2 Integration	2A Land Use Policy			
	2B Residential Population and Employment Catchments			
	2C Transport Network Integration			
	2D Cycle Network integration			
	2E Traffic Network Integration			
3 Accessibility & Social Inclusion	3A Key Trip Attractors			
	3B Deprived Geographic Areas			
4 Safety	4A Road Safety			
	4B Pedestrian Safety			
5 Environment	5A Archaeology & Cultural Heritage			
	5B Architectural Heritage			
	5C Flora & Fauna			
	5D Soils, Geology & Hydrology			
	5E Landscape & Visual			
	5F Air Quality			
	5G Noise & Vibration			
	5H Land Use Character			

In terms of economy, Option SB2 is the marginally more expensive option due to the extension junction realignment at the Prussia Street / Manor Street junction. In terms of delivering transport quality in respect of bus priority and journey time reliability, options SB1 and SB3 perform better than SB2 due to the northbound bus-priority signal and associated limitation on northbound general through traffic, and SB3 performs better than SB1 due to the position of the bus priority signal on Blackhall Place (to the south) which provides better ability (by signal control) of limiting through traffic before it enters Manor Street.

All options serve the same catchments and as such are ranked equally in relation to land use policy, and residential population and employment catchments. Similarly, in terms of transport network integration, as all options follow the same route, the opportunity for interchange with other routes is equal.

In terms of cycle network integration, Options SB1 and SB3 perform significantly better than SB2 due to two cycle-tracks being provided for the majority of the section compared to SB2 only providing an outbound cycle track.

All options rank equally under accessibility and social inclusion as they all follow the same route.

In terms of safety, Option SB3 performs better than SB2, and marginally better than SB1, due to the reduced number of general traffic lanes and hence more clarity in terms of lane usage and associated management of through traffic. This is the same in terms of pedestrian safety as SB3 allows for wider footpaths.

In terms of environment, Option SB3 performs marginally better than SB1 and SB2 due to the lesser road width reducing the requirement for removal of trees; and more opportunity to provide urban realm improvements.

A summary of the assessment and relative ranking of route options against the five main assessment criteria is presented in **Table 6.8**.

Table 6.8: Section 3b Criteria MCA Summary

Sub-Criteria	Option SB1	Option SB2	Option SB3
1 Economy	Green	Yellow	Green
2 Integration	Green	Yellow	Green
3 Accessibility & Social Inclusion	Yellow	Yellow	Yellow
4 Safety	Green	Yellow	Green
5 Environment	Green	Yellow	Green

6.2.2.2.6 Section 3b Conclusion and Draft Preferred Option

Based on the assessment undertaken, route Option SB3 offers more benefits. It performs well under all criteria. Option SB3 is the preferred option for the Prussia Street / Manor Street to Brunswick Street North section for the following reasons:

- For economy, it has reliable bus priority through Stoneybatter Village while also limiting through traffic efficiently (on Blackhall Place), while also allowing local access for residents and acknowledging the urban village function of Stoneybatter Village;
- For integration, it provides high-quality segregated cycle tracks on both sides of the road, serving the urban village of Stoneybatter which is a significant trip attractor and cycling destination;
- For safety, it has two general traffic lanes and hence more clarity in terms of lane usage and associated management of through traffic, and has wider footpaths for pedestrians;
- For environment, it allows for the wider footpaths and associated public realm improvements within Stoneybatter Village.

6.2.3 Section 3c - Manor Street / Brunswick Street North Junction to Ellis Quay

6.2.3.1 Introduction

Numerous submissions received as part of the public consultation raised concerns about the proposed traffic management plans; constrained width of footpaths and space provided for cyclists and pedestrians in this area.

6.2.3.2 Options Considered

Three alternative options have been assessed as follows:

- **Option BK1:** Option BK1 consists of a full bus lane in both directions on Blackhall Place to Ellis Quay, with inbound general traffic diverted from the bus corridor to King Street North. Northbound general traffic is accommodated on Blackhall Place alongside a bus lane.

A quiet street treatment is proposed for Brunswick Street, and a two-way cycle track is proposed via Brunswick Street North, George's Lane and Queen Street.

- **Option BK2:** EPR Option BK2 consists of a Bus Priority signal for inbound movements from Manor Street at Brunswick Street North, with general traffic diverted onto Brunswick Street North and King Street North. Full bus lanes are provided in both directions on Blackhall Place to Ellis Quay. George's Lane is to become a two-way street for general traffic. A two-way cycle track is proposed on George's Lane and on Queen Street to Ellis Quay.
- **Option BK3:** Option BK3 consists of a bus lane in both directions on Blackhall Place to Ellis Quay, with inbound and outbound general traffic all turning into King Street North. Northbound general traffic to Manor Street would be accommodated via George's Lane and Brunswick Street North (which would be northbound and westbound one-way streets respectively). A two-way cycle track is proposed via Brunswick Street North, George's Lane and Queen Street.

The key characteristics of each option are described in the following sections.

6.2.3.2.1 Alternative Options Considered

An alternative was considered that involved closing Blackhall Street to general traffic at its connection to Manor Street, to remove through traffic. This was not progressed due to the impracticalities of preventing through vehicular traffic while also allowing the necessary vehicular access for local residents and businesses in Stoneybatter.

6.2.3.2.2 Route Option BK1

Route Description

Route option BK1 is presented in **Figure 6.46** and described in the following text.

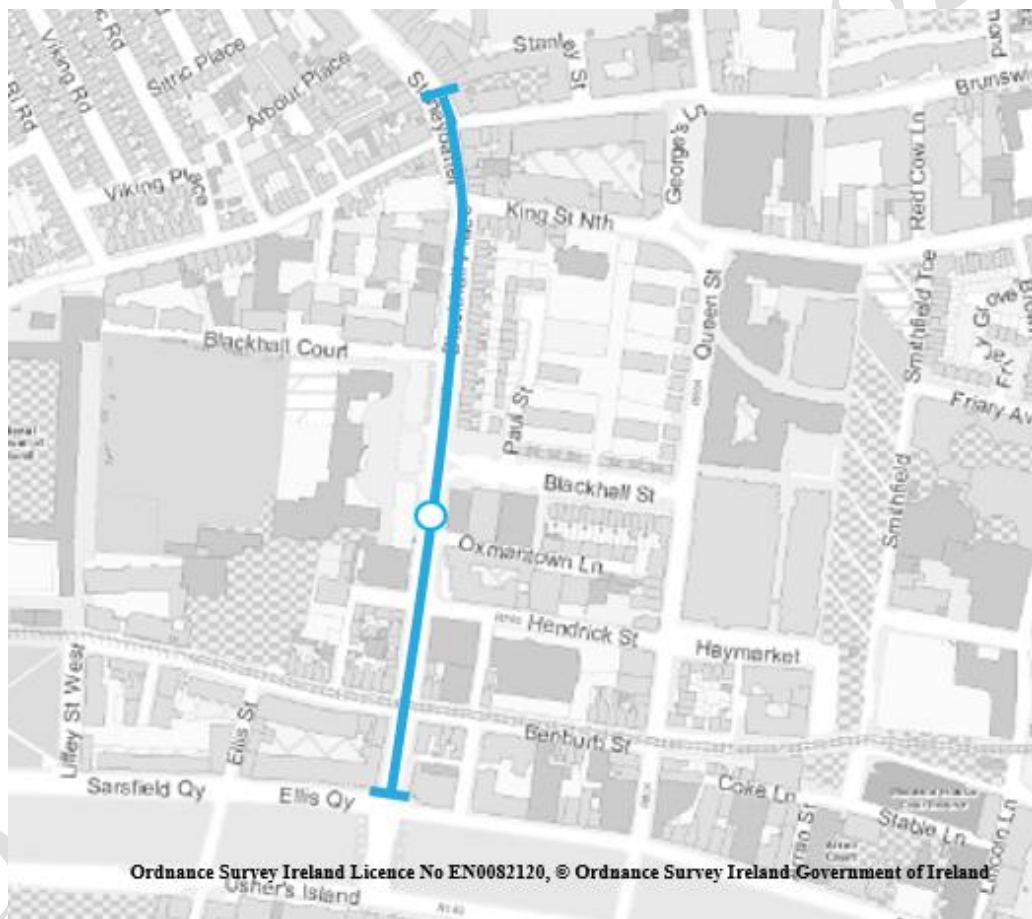


Figure 6.46: Route Option BK1

Inbound: This section of the CBC commences on Manor Street at its junction with Brunswick Street North, and proceeds along Blackhall Place. This route section ends at the junction of Blackhall Place and Ellis Quay.

Outbound: The outbound route follows the same route as the inbound route.

Stops: One bus stop is proposed in each direction along this route section.

Indicative Scheme Design

Figure 6.47 illustrates the indicative scheme design for this route option. The location of cross-sections and junctions referenced in subsequent sections describing this route option are also presented in this figure.

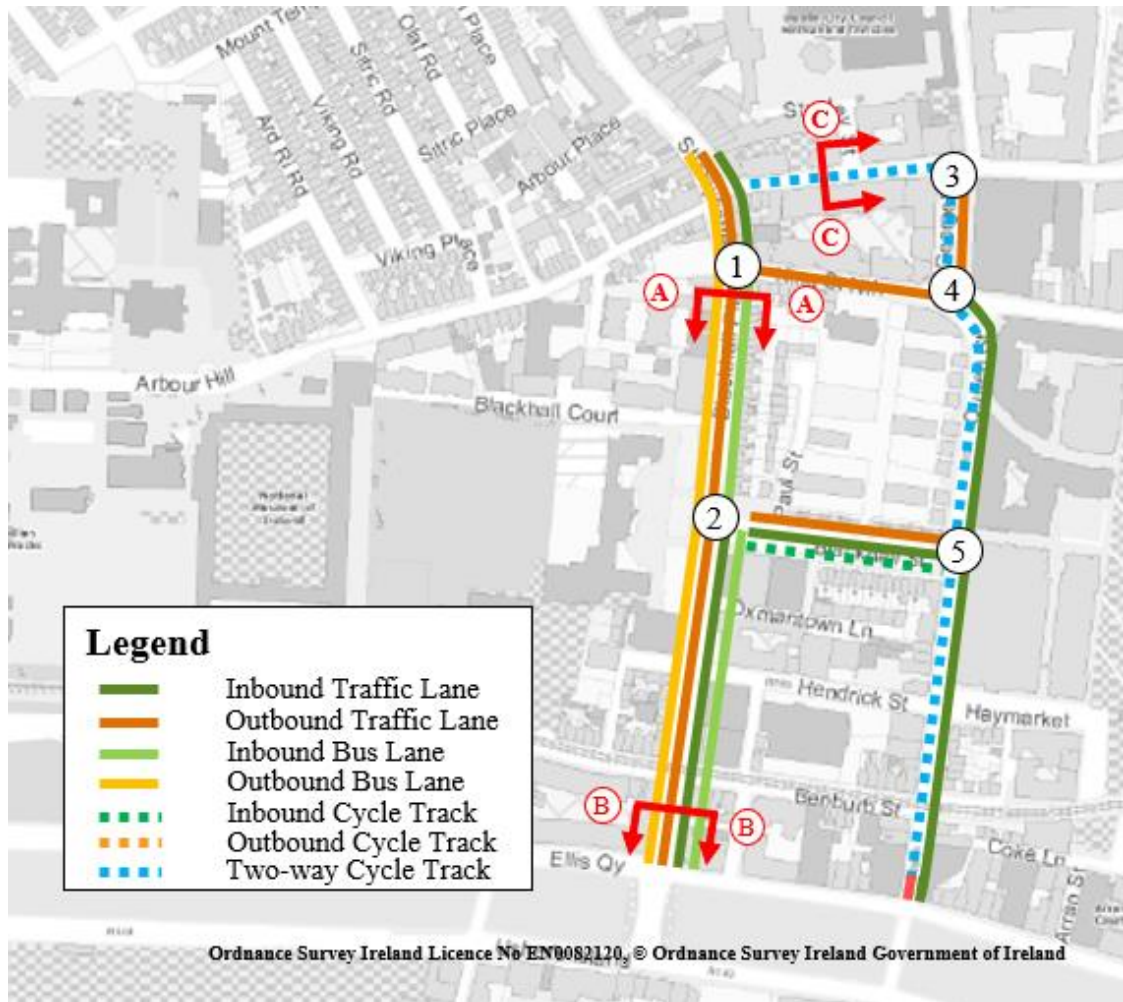


Figure 6.47: Route Option BK1 Indicative Scheme Design

This section of the route commences on Manor Street where it connects with Brunswick Street North. Between Manor Street and King Street North a general traffic lane in each direction is proposed, with an outbound bus lane. Inbound, buses and general traffic would share the single lane, with general traffic diverted onto King Street North, and buses continuing south on Blackhall Place. The cross section at Manor Street would consist of an outbound bus lane and a general traffic lane in each direction.

The section between King Street North and Blackhall Street would consist of bus lanes in both directions, and an outbound general traffic lane. The proposed cross-section along this section of Blackhall Place is presented in **Figure 6.48**.

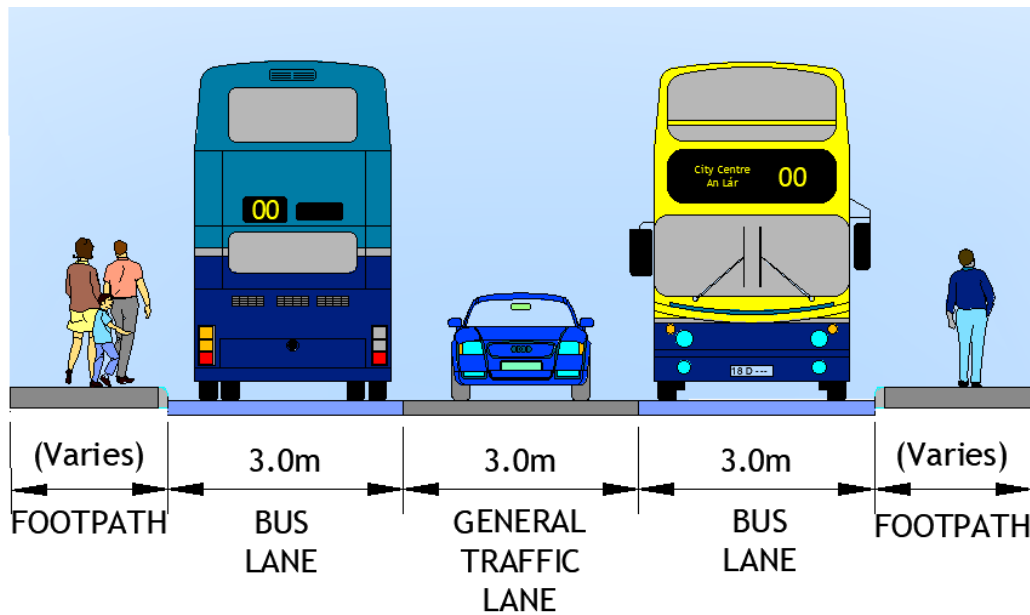


Figure 6.48: Route Option BK1 Cross-Section A-A

Inbound and outbound bus lanes would be provided south of Blackhall Street, but with a general traffic lane in both directions to Ellis Quay. This proposed cross section is presented in **Figure 6.49**.

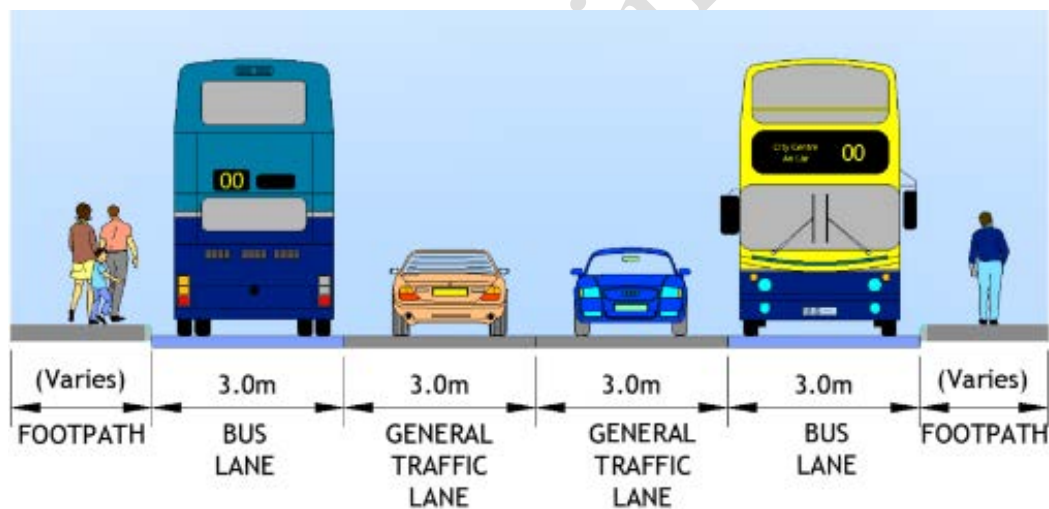


Figure 6.49: Route Option BK1 Cross-Section B-B

Brunswick Street North would be closed to traffic at its western end (at the junction with Blackhall Place), and the streetscape modified to a quiet street treatment. A two-way cycle track is proposed to be included in the quiet street treatment, with access-only traffic able to enter and leave Brunswick Street North via its junction with George's Lane. This proposed cross-section is presented in **Figure 6.50**.

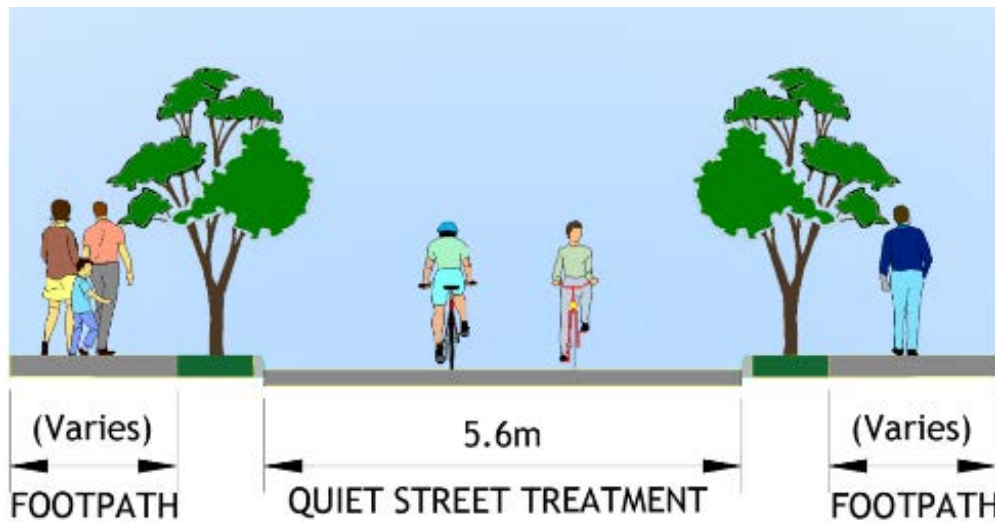


Figure 6.50: Route Option BK1 Cross-Section C-C

In summary, this route option would, subject to confirmation at the scheme design stage, result in the following characteristics:

- An outbound bus lane between Manor Street and Blackhall Place;
- Bus lanes in each direction between Blackhall Place and Ellis Quay;
- A quiet street treatment at Brunswick Street North with a two-way cycle track; and
- A parallel two-way cycle track on Queen Street between Brunswick Street North and Arran / Ellis Quay.

Junctions:

There are seven signalised junctions along this route option, some of which would require upgrading to facilitate bus priority. The locations of these junctions are presented in **Figure 6.47** and discussed below:

- **Manor St/Blackhall Place/King St North:** Adjustments to the junction layout would be required to facilitate the outbound and inbound bus lanes on approach to the junction. There would also be a possible requirement to relocate/provide new signal equipment.
- **Blackhall St/Blackhall Place:** Adjustments to the junction layout would be required to facilitate the bus lanes on approach to the junction. There would also be a possible requirement to relocate/provide new signal equipment.
- **Brunswick Street North/George's Lane:** Adjustments to the junction layout would be required to facilitate the cycle tracks on approach to the junction. There would also be a requirement to provide new signal equipment.
- **King St North/George's Lane/Queen Street:** Adjustments to the junction layout would be required to facilitate the cycle tracks on approach to the junction. There would also be a requirement to provide new signal equipment.

- **Blackhall St/Queen St:** Adjustments to the junction layout would be required to facilitate the cycle tracks on approach to the junction. There would also be a possible requirement to relocate/provide new signal equipment.
- **Blackhall Place/Benburb Street:** No major adjustments are proposed at this junction, although there would be a possible requirement to relocate/provide new signal equipment.
- **Queen Street/Benburb Street:** No major adjustments are proposed at this junction, although there would be a possible requirement to relocate/provide new signal equipment.

6.2.3.2.3 Route Option BK2

Route Description

Route option BK2 is presented in **Figure 6.51** and described in the following text and represents the EPR Option.

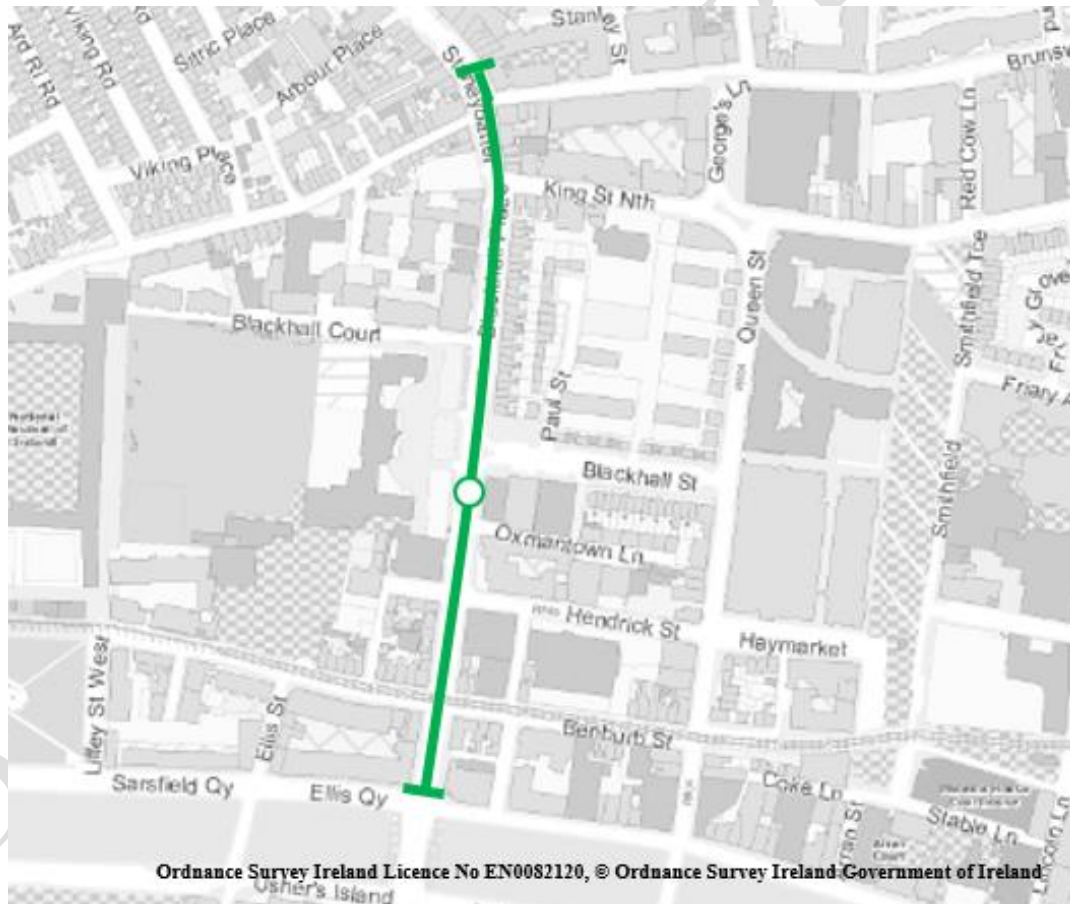


Figure 6.51: Route Option BK2

Inbound: This section of the CBC commences on Manor Street at its junction with Brunswick Street North, and proceeds along Blackhall Place. This route section ends at the junction of Blackhall Place and Ellis Quay.

Outbound: The outbound route follows the same route as the inbound route.

Stops: A total of one stop would likely be provided in each direction along this route section.

Indicative Scheme Design

Figure 6.52 illustrates the indicative EPR Option scheme design for this route option. The location of cross-sections and junctions referenced in subsequent sections describing this route option are also presented in this figure.

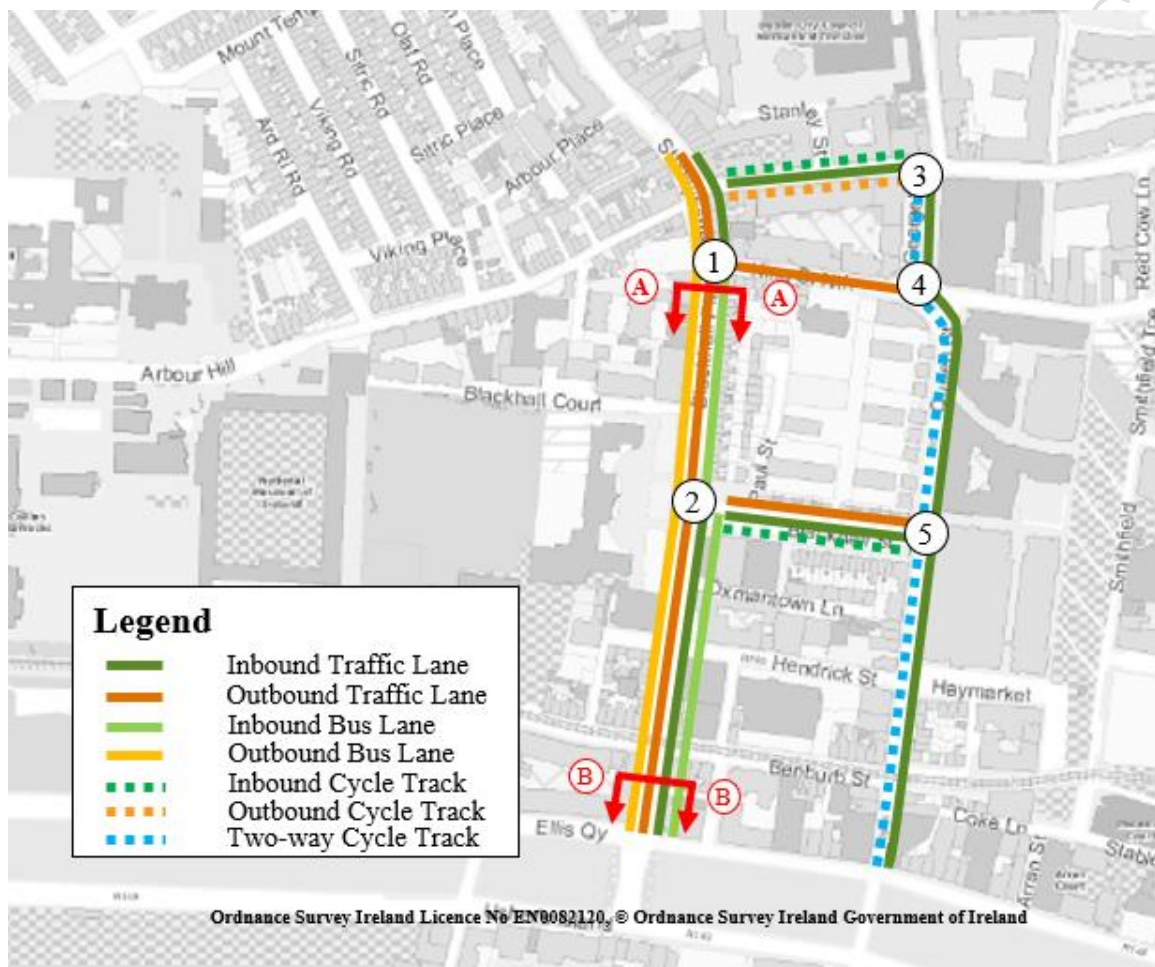


Figure 6.52: Route Option BK2 Indicative Scheme Design

This section of the route would commence on Manor Street at Brunswick Street North. Between Manor Street and Blackhall Place a general traffic lane in each direction is proposed. Inbound, the bus would share a general traffic lane until King Street North, where general traffic is diverted. Outbound Bus Priority would be provided through a bus lane. The cross section at Blackhall Place would consist of bus lanes in each direction and an outbound general traffic lane in each direction. The proposed cross section of Blackhall Place is presented in **Figure 6.53**.

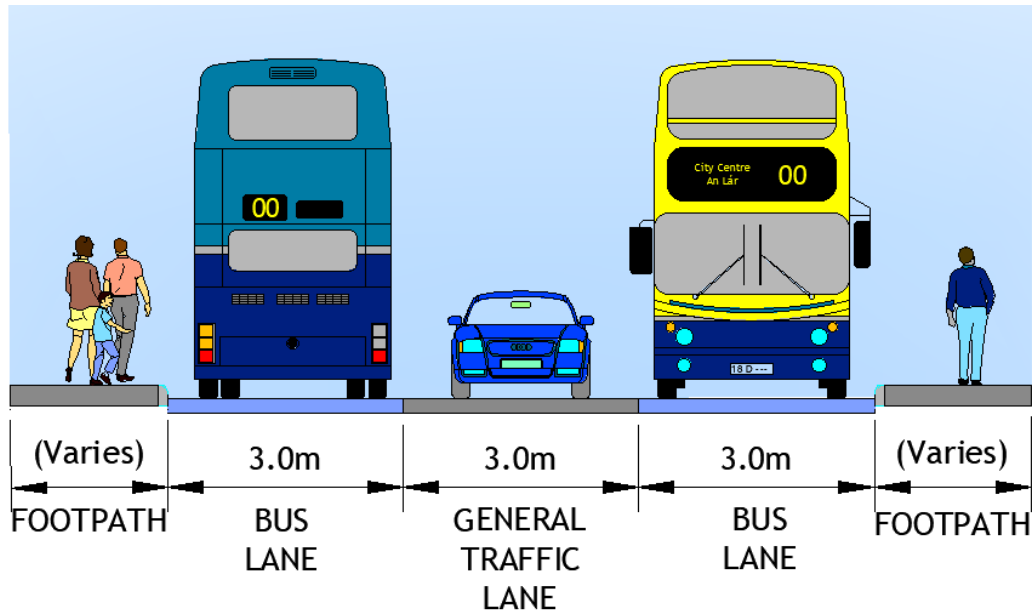


Figure 6.53: Route Option BK2 Cross-Section A-A

Inbound and outbound bus lanes would be provided between the junction with Blackhall Street and Ellis Quay. This cross-section, consisting of inbound and outbound bus lanes and general traffic lanes in each direction, would continue onto Ellis Quay. This proposed cross section is presented in **Figure 6.54**.

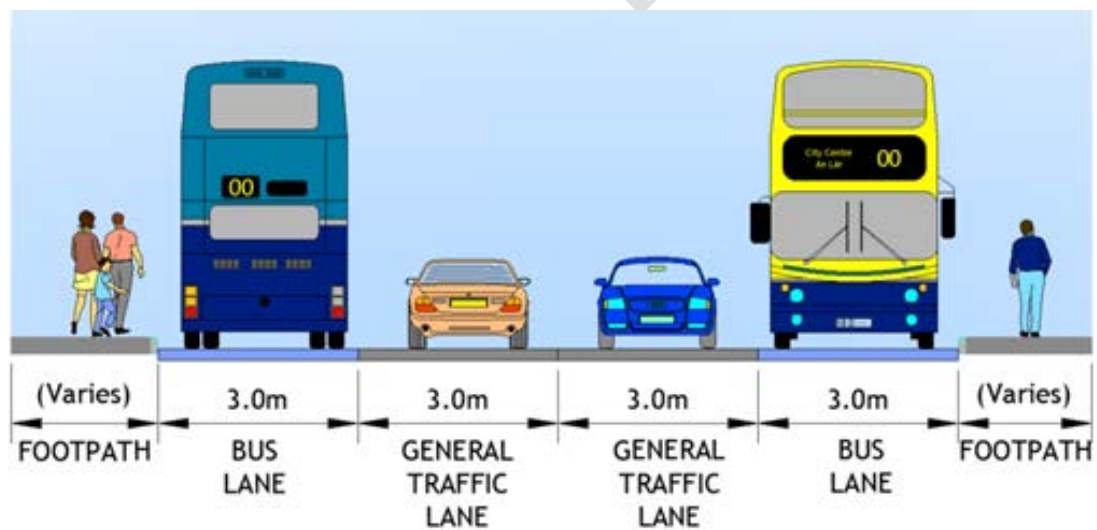


Figure 6.54: Route Option BK2 Cross-Section B-B

In summary, this route option would, subject to confirmation at the scheme design stage, result in the following characteristics:

- Bus lanes in each direction between King Street North and Ellis Quay;
- Cycle tracks in each direction on Brunswick Street; and
- A parallel two-way cycle track on Queen Street between Brunswick Street North and Arran / Ellis Quay.

Junctions:

There are seven signalised junctions along this route option, some of which would require upgrading to facilitate bus priority. The locations of these junctions are presented in **Figure 6.52** and discussed below:

- **Manor Street/Blackhall Place/King St North:** Adjustments to the junction layout would be required to facilitate the outbound and inbound bus lanes on approach to the junction. There would also be a possible requirement to relocate/provide new signal equipment.
- **Blackhall St/Blackhall Place:** Adjustments to the junction layout would be required to facilitate the bus lanes on approach to the junction. There would also be a possible requirement to relocate/provide new signal equipment.
- **Brunswick Street North/George's Lane:** Adjustments to the junction layout would be required to facilitate the cycle tracks on approach to the junction. There would also be a possible requirement to relocate/provide new signal equipment.
- **King St North/George's Lane/Queen Street:** Adjustments to the junction layout would be required to facilitate the cycle tracks on approach to the junction. There would also be a possible requirement to relocate/provide new signal equipment.
- **Blackhall St/Queen St:** Adjustments to the junction layout would be required to facilitate the cycle tracks on approach to the junction. There would also be a possible requirement to relocate/provide new signal equipment.
- **Blackhall Place/Benburb Street:** No major adjustments are proposed at this junction, although there would be a possible requirement to relocate/provide new signal equipment.
- **Queen Street/Benburb Street:** No major adjustments are proposed at this junction, although there would be a possible requirement to relocate/provide new signal equipment.

6.2.3.2.4 Route Option BK3

Route Description

Route option BK3 is presented in **Figure 6.55** and described in the following text.

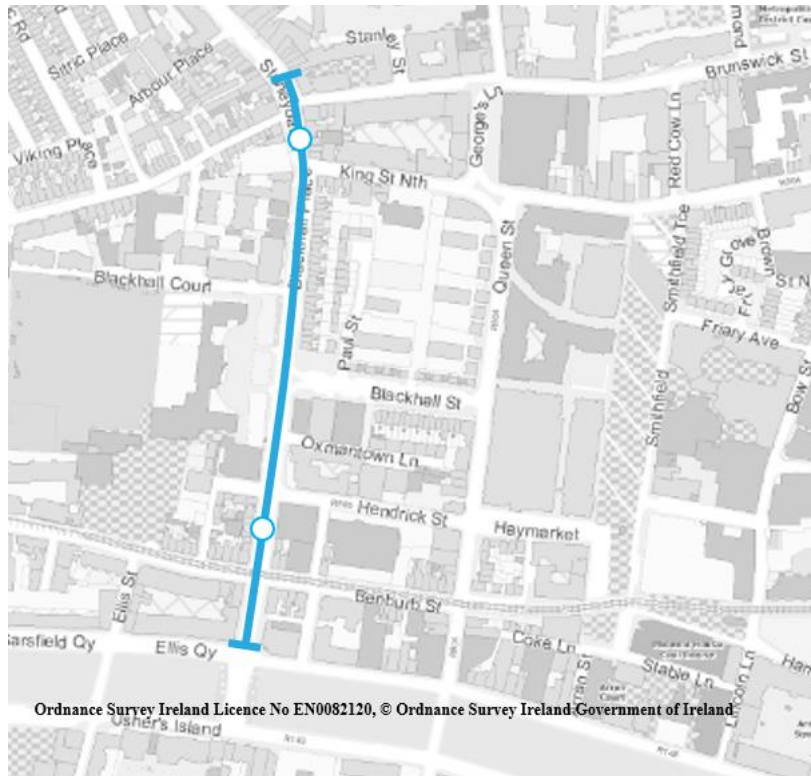


Figure 6.55: Route Option BK3

Inbound: This section of the CBC commences on Manor Street at its junction with Brunswick Street North, and proceeds along Blackhall Place. This route section ends at the junction of Blackhall Place and Ellis Quay.

Outbound: The outbound route follows the same route as the inbound route.

Stops: A total of two stops would likely be provided in each direction along this route section.

Indicative Scheme Design

Figure 6.56 illustrates the indicative scheme design for this route option. The location of cross-sections and junctions referenced in subsequent sections describing this route option are also presented in this figure.

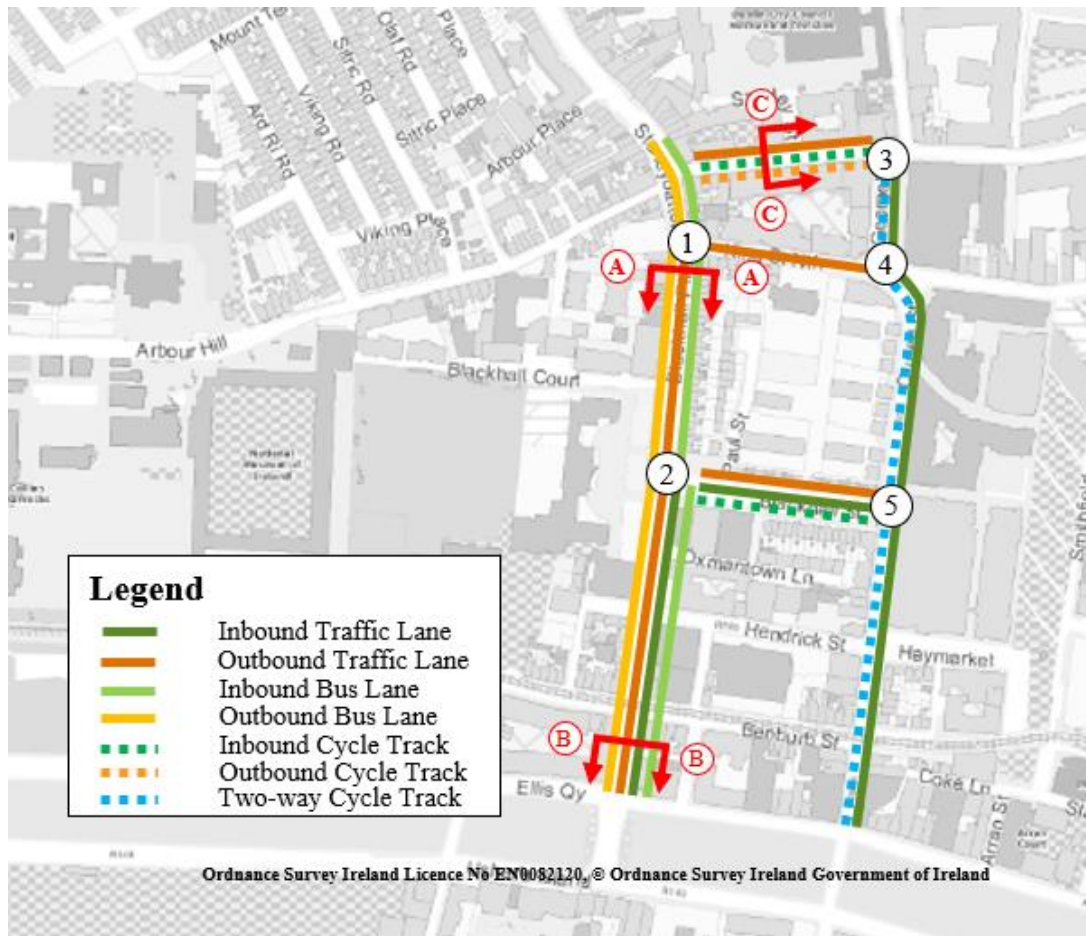


Figure 6.56: Route Option BK3 Indicative Scheme Design

This section of the route commences on Manor Street at its junction with Brunswick Street North. Between Brunswick Street North and King Street North, Blackhall Place would have a general traffic lane in the southbound direction, which would also be used by buses. Southbound general traffic would then be diverted to King Street North, and buses would be allowed to continue south to a bus lane on Blackhall Place. Outbound bus priority would be provided through a bus lane. The cross section at Blackhall Place (at its northern end) would consist of an outbound bus lane and an inbound general traffic lane.

Between King Street North and Blackhall Street, Blackhall Place would consist of bus lanes in both directions, and an outbound general traffic lane. The proposed cross-section along this section of Blackhall Place is presented in **Figure 6.57**.

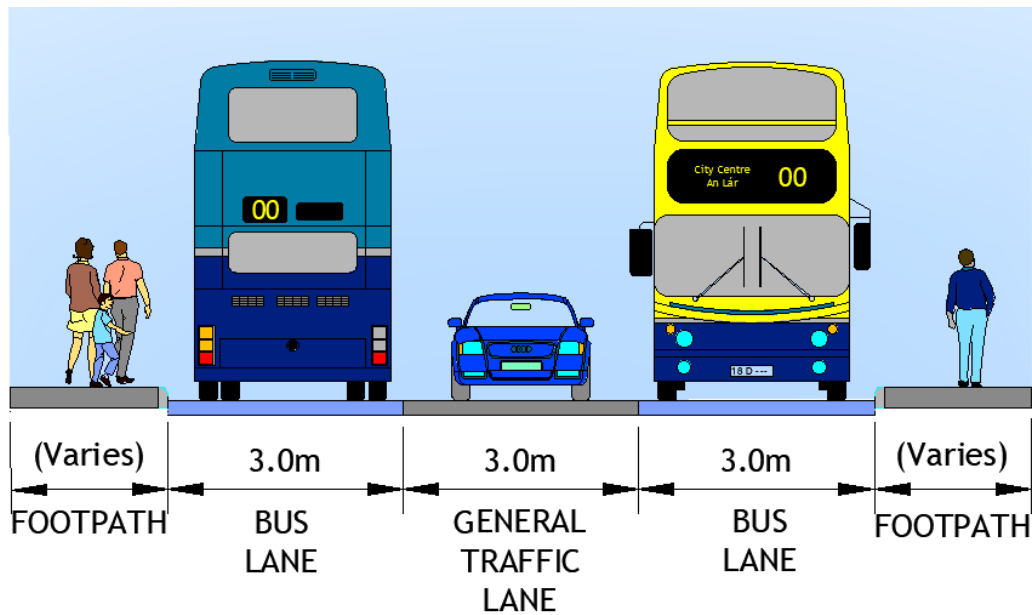


Figure 6.57: Route Option BK3 Cross-Section A-A

The cross-section of Blackhall Place consists of inbound and outbound bus lanes and a general traffic lane in both directions from Blackhall Street to Ellis Quay. This proposed cross section is presented in **Figure 6.58**.

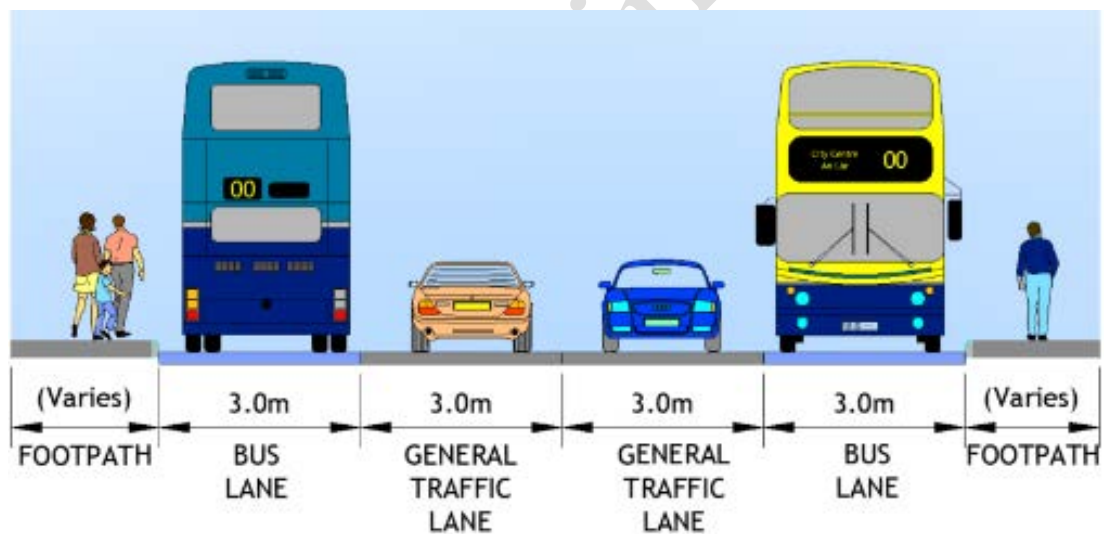


Figure 6.58: Route Option BK3 Cross-Section B-B

Brunswick Street North is proposed as single lane one-way street (westbound) with a two-way cycle track (which connects to a two-way cycle track on Queen Street). This proposed cross-section is presented in **Figure 6.59**.

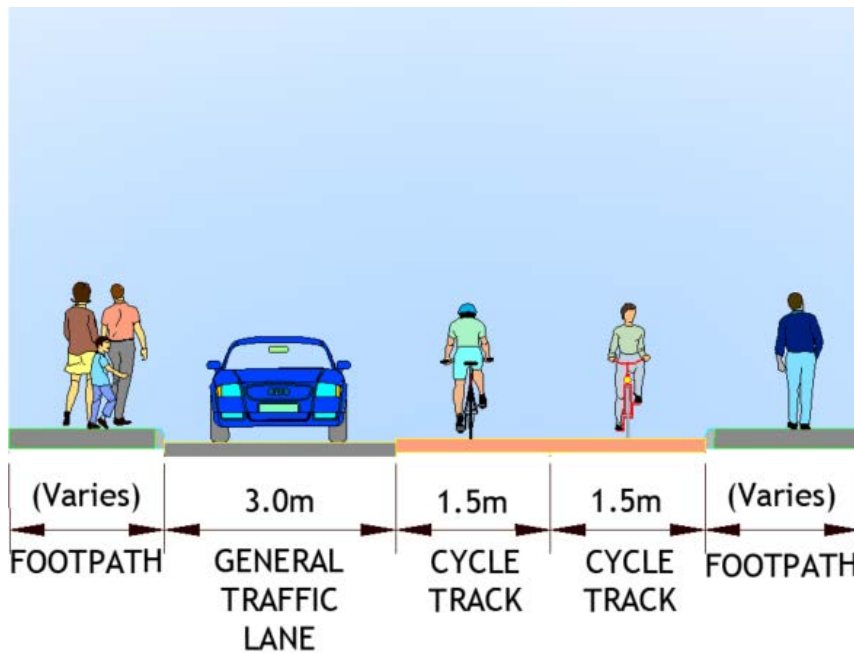


Figure 6.59: Route Option BK3 Cross-Section C-C

In summary, this route option would, subject to confirmation at the scheme design stage, result in the following characteristics:

- An outbound bus lane on Blackhall Place between King Street North and Brunswick Street North;
- Bus lanes in each direction on Blackhall Place between King Street North and Ellis Quay;
- A two-way cycle track on Queen Street and George's Lane between Brunswick Street North and Arran / Ellis Quay.

Junctions:

There are eight signalised junctions along this route option, some of which would require upgrading to facilitate bus priority. The locations of these junctions are presented in **Figure 6.56** and discussed below:

- **Manor St/Blackhall Place/Brunswick Street North:** Adjustments to the junction layout would be required to facilitate the outbound bus lane and conversion of Brunswick Street North to a westbound one-way street. There would also be a possible requirement to relocate/provide new signal equipment
- **Blackhall Place/King St North:** Adjustments to the junction layout would be required to facilitate the outbound and inbound bus lanes on approach to the junction. There would also be a possible requirement to relocate/provide new signal equipment.
- **Blackhall St/Blackhall Place:** Adjustments to the junction layout would be required to facilitate the bus lanes on approach to the junction. There would also be a possible requirement to relocate/provide new signal equipment.

- **Brunswick Street North /George's Lane:** Adjustments to the junction layout would be required to facilitate the cycle tracks on approach to the junction. There would also be a requirement to provide new signal equipment.
- **King St North/George's Lane/Queen Street:** Adjustments to the junction layout would be required to facilitate the cycle tracks on approach to the junction. There would also be a requirement to provide new signal equipment.
- **Blackhall St/Queen St:** Adjustments to the junction layout would be required to facilitate the cycle tracks on approach to the junction. There would also be a possible requirement to relocate/provide new signal equipment.
- **Blackhall Place/Benburb Street:** No major adjustments are proposed at this junction, although there would be a possible requirement to relocate/provide new signal equipment.
- **Queen Street/Benburb Street:** No major adjustments are proposed at this junction, although there would be a possible requirement to relocate/provide new signal equipment.

6.2.3.2.5 Section 3c Route Option Assessment

Details of the route option assessment undertaken for the Blackhall Place to Ellis Quay study area section are presented in Appendix E. The relative ranking of route options against the scheme assessment sub-criteria is summarised in **Table 6.9**.

Table 6.9: Section 3c Route MCA Summary

Appraisal Criteria	Sub-Criteria	Option BK1	Option BK2	Option BK3
1 Economy	1A Capital Cost			
	1B Transport Quality & Reliability			
2 Integration	2A Land Use Policy			
	2B Residential Population and Employment Catchments			
	2C Transport Network Integration			
	2D Cycle Network integration			
	2E Traffic Network Integration			
3 Accessibility & Social Inclusion	3A Key Trip Attractors			
	3B Deprived Geographic Areas			
4 Safety	4A Road Safety			
	4B Pedestrian Safety			
5 Environment	5A Archaeology & Cultural Heritage			
	5B Architectural Heritage			
	5C Flora & Fauna			
	5D Soils, Geology & Hydrology			
	5E Landscape & Visual			
	5F Air Quality			
	5G Noise & Vibration			
	5H Land Use Character			

In terms of capital cost, Option BK2 is marginally more expensive due to the road widening on George's Lane.

In terms of transport quality and reliability, Option BK3 performs better due to the bus priority signals on Blackhall Place providing an efficient means to ensure outbound buses are able to travel unhindered by congestion through Stoneybatter (in particular, northbound through traffic can be effectively capped by limiting green signal time for general traffic movements from Brunswick Street North to Manor Street).

All options serve the same catchments and as such are ranked equally in relation to land use policy and residential population and employment catchments.

In terms of cycle network integration, all options provide high quality cycle facilities parallel to the CBC along Brunswick Street, George's Lane and Queen Street. BK1 and BK3 perform better due to the continuous two-way track on Brunswick Street North and George's Lane.

In terms of transport network integration, all three options require a change in traffic movements from the existing situation. In terms of traffic network integration BK1 and BK3 perform better than BK2 due to the simpler traffic management (with less traffic conflicts) at George's Lane / Queen Street and Blackhall Place / King Street.

All options rank equally under accessibility and social inclusion as they all follow the same route. Option BK3 performs better for safety due to a rationalisation of general traffic and bus movements at Blackhall Place / King Street (such that only buses can travel directly north and all general traffic must turn right on to King Street). All options rank equally in the Environment criteria – as Option BK2 encroaches on public realm at George's Lane, while BK1 has a beneficial provision of Quiet Street treatment at Brunswick Street North, while BK3 provides more scope for public realm with wider footpaths on Manor Street, and with a lesser road width on George's Lane.

A summary of the assessment and relative ranking of route options against the five main assessment criteria is presented in **Table 6.10**.

Table 6.10: Section 3c Criteria MCA Summary

Sub-Criteria	Option BK1	Option BK2	Option BK3
1 Economy			
2 Integration			
3 Accessibility & Social Inclusion			
4 Safety			
5 Environment			

6.2.3.2.6 Section 3c Conclusion and Draft Preferred Option

Based on the assessment undertaken, route Option BK3 offers more benefits over the other options. Option BK3 is the preferred option for the following reasons:

- For economy, it provides reliable bus priority by traffic signal control (and limitation) of through traffic at Blackhall Place.
- For integration, it provides a continuous high-quality cycle facility from Manor Street through to Queen Street.
- For safety, it provides safe facilities for pedestrians and cyclists alike due to the rationalised junction arrangements at Blackhall Place / King Street North and George's Lane / Queen Street.
- For Environment, it provides for wider footpaths on Manor Street and maintains public space on George's Lane.

7 Draft Preferred Route Option

7.1 Introduction

Chapter 6 of this report presented an appraisal of all route options considered for sections of the Blanchardstown to City Centre CBC. Following this appraisal, the draft preferred options for each section have been incorporated into the route from the ‘Blanchardstown Town Centre to the Liffey Quays (Ellis Quay) CBC Route Options Assessment’ to form an end-to-end draft PRO. This chapter of the report presents and describes the draft preferred route option identified and the draft preferred route option scheme design.

7.2 Draft Preferred Route Description

The draft Preferred Route is presented in **Figure 7.1** below:



Figure 7.1: CBC Draft Preferred Route Option

The Blanchardstown to City Centre CBC commences on the north side of the South Blanchardstown Road junction with the N3. The corridor proceeds along the R121 Blanchardstown Road South into the Blanchardstown Shopping Centre.

From a new terminus to the north-west of Blanchardstown Shopping Centre the CBC is routed onto the N3 Navan Road via the Snugborough Road junction and follows the N3 and Navan Road as far as the junction with the Old Cabra Road.

The CBC is then routed along Old Cabra Road, Prussia Street and Manor Street to the junction with Brunswick Street North.

The CBC continues via Blackhall Place as far as the junction with Ellis Quay and Arran Quay, where it would join the prevailing traffic management regime on the North Quays.

7.3 Draft Preferred Route Option Scheme Design Description

7.3.1 Section 1: Blanchardstown Shopping Centre to M50 Junction (East)

The CBC commences on the north side of the South Blanchardstown Road junction with the N3. The proposed layout would consist of altering the existing off-slip road from the N3 from two general traffic lanes to one general traffic lane and one bus lane. The junction at Blanchardstown Road North / Blanchardstown Road South would be modified to a protected style junction to enhance safety for cyclists. Another change from the EPR Option would be the relocation of cycle tracks to alongside footpaths, which would cross with pedestrians at the slip-roads to avoid conflict with vehicular traffic.

This proposed lane configuration would continue to R121 Blanchardstown Road South over the N3, again with the provision of a bus lane being accommodated on the overbridge by changing the present road layout from two general traffic lanes to one general traffic lane and one bus lane.

The corridor would proceed along the Blanchardstown Road South towards the Blanchardstown Shopping Centre via the Blakestown Way junction. It is proposed that the Blakestown Way Roundabout is modified to a four-arm signalised junction to maximise bus priority and manage peak congestion flows. This draft PRO arrangement also accommodates enhanced cycling and walking facilities.

Between the Blakestown Way junction and the N3 Mulhuddart junction, it is proposed, to provide a new general traffic access into the northern car park of the shopping centre. This access would reduce traffic pressure on the road network adjacent to the proposed new bus interchange on West Street.

South of Blanchardstown Road South, it is proposed that the West Street / Blakestown Way roundabout junction be modified to a signal-controlled junction in order to maximise bus priority directly into and out of the bus interchange, located just to the east of the junction. As with previous proposed junction amendments, this proposed arrangement would also provide better cycling and walking facilities.

Within the Blanchardstown Centre site, it is proposed to upgrade the existing bus stops on West Street area to a more formal bus terminus / interchange with associated improved passenger waiting facilities. It is proposed to revise the layout presented from the EPR Option, with a modified size and shape for the interchange, with seven bays for boarding / alighting, and alighting bays for four buses. The proposed layout would have eastbound and westbound general traffic lanes routed to the north and south of the interchange respectively.

The proposed interchange layout has greater capacity for bus movements, and accommodates pedestrian and passenger movements, and seeks to provide a comfortable route through the interchange for shoppers on foot.

A northbound bus lane on the Blanchardstown north-eastern link road towards Blanchardstown Road South is proposed for buses travelling north from Blanchardstown Interchange, and a new bus-stop for inter-urban buses is proposed on the Northbound N3 off-slip adjacent to Crown Plaza. The bus lane would be an additional lane and would not reduce traffic, pedestrian or cycle provision. It is also proposed that a bus layover 'layby' is to be located north of the shopping centre on Blanchardstown Road South, which would meet bus operational needs in terms of providing flexibility in the operation of Blanchardstown Bus Interchange. An element of land-take is required here which was not previously identified in the EPR Option.

South of the Shopping Centre, buses would then be routed along the existing North Street running to the north-east of the Blanchardstown Centre. It is proposed to provide dedicated bus lanes on North Street as per the EPR Option scheme.

As per the EPR Option, it is proposed to modify the existing roundabout at the south eastern edge of Blanchardstown (at the Old Navan Road junction) to a fully signalised crossroads; and to provide a bus lane through this junction in both directions.

Following this section, it is proposed to route bus lanes through the Snugborough Road junction. The proposed configuration for this junction has been updated from the EPR Option proposal in line with proposals for the Snugborough Interchange Upgrade proposed by Fingal County Council. The proposed works involve the widening of the Snugborough Road bridge and provision of additional general traffic lanes on the L3020.

Following the Snugborough Road Junction, bus lanes would be routed on to the N3 Navan Road via the south-facing on and off-slip roads. On the N3, it is proposed to maintain a continuous bus lane on the outer edge of the carriageway in both directions.

It is proposed to provide continuous bus lanes in both directions along the N3 route across the M50 / N3 interchange via the main junction roundabout.

7.3.2 Section 2: M50 Junction (East) to R147 Navan Road / Ratoath Road Junction

The proposed CBC scheme has additional bus stops at the Auburn Avenue junction, with a proposed two-way cycle track on the outer edge of the western (outbound) carriageway i.e. the side of the R147 closest to existing and planned local residential areas.

This cycle facility would tie into the proposed Greater Dublin Area Proposed Cycle Network that connects to Old Navan Road via Castleknock Manor – which would be modified to a Quiet Street carriageway to provide a safe route for cyclists (which is a change from the previous design in which the cycle route was located on a cycle track directly adjacent to the R147 Navan Road).

At the Navan Road Parkway junction on the R147, it is proposed that buses be routed off the mainline and along the on and off slip roads (widened to carry bus lanes) to the junction overbridge.

At the Navan Road roundabout at Ashtown Road, the draft PRO scheme would modify the roundabout to a signal controlled gyratory – keeping the existing trees on the central island.

At Ashtown Road junction, it is proposed to terminate the two-way cycle track on the R147, west of the junction, and to transition to a one-way cycle track on each side of the Navan Road carriageway (east of the junction, and within the 50kph speed limit). A general traffic lane and bus lane in both directions would be provided along Navan Road (i.e. four lanes in total), with a one-way cycle track on both sides of the road.

To address concerns that general traffic may divert from Navan Road to Blackhorse Avenue, the junction of Blackhorse Avenue / Ashtown Gate Road would be signalised to allow improved traffic management – such that signal green times from Blackhorse Avenue can be minimised to limit through movement on this route.

At the junction of Navan Road / Kinvara Avenue / Baggot Road, the previously proposed southbound right turn lane into Baggot Road has been removed (although the right-turn movement is allowed). This would result in a reduced land take.

On the approach to the Old Cabra Road / Cabra Road junction, the two-way cycle track on the south side of Navan Road previously proposed in the EPR Option has been modified within the draft PRO to two one-way cycle tracks (on either side of the road). This would provide a more intuitive route for cyclists and reduce the need for land-take. The overall width of bus / traffic / cycling and pedestrian infrastructure would be less than the previous layout and land take would hence be reduced.

7.3.3 Section 3: R147 Navan Road / Ratoath Road Junction to Ellis Quay

On the section of route from the Navan Road / Ratoath Road junction to Prussia Street (Park Shopping Centre), proposals are summarised as follows:

Proposals to limit use of Old Cabra Road to local access traffic, buses, taxis and cyclists have been retained from the EPR Option scheme. It is proposed that no through traffic would be permitted in the southbound direction at the northern end of Old Cabra Road (at its junction with Navan Road), except for buses, taxis and cyclists-which thus would preclude general traffic from Navan Road travelling to Stoneybatter along Old Cabra Road.

It is also proposed that no through traffic would be permitted in the northbound direction except for buses, taxis and cyclists on Old Cabra Road between Cabra Drive and Glenbeigh Road – which thus would preclude general traffic from Stoneybatter and the North Circular Road from travelling along Old Cabra Road through to Navan Road.

At this section, further minor changes have been made from the EPR Option. It is proposed that there would be new traffic signal controls at the Old Cabra Road / Glenbeigh Road junction. This junction alteration would enable general traffic flows turning left or right onto Old Cabra Road to be controlled and minimised (to avoid general traffic taking short-cuts along Glenbeigh Road). The general layout of the junction would be unchanged except for signals and a pedestrian crossing.

On Old Cabra Road, the extent of the proposed northbound dedicated bus lane has been revised from the EPR Option and would be limited to an approximate 50m section just south of the Navan Road junction; this has been reduced in length in response to introduction of a signal control at the Glenbeigh Road junction, which would provide a method of controlling the level of general northbound general traffic movement from Glenbeigh Road; that is, to give northbound buses a virtual bus priority over general traffic.

Previously, a two-way cycle track had been proposed along Old Cabra Road in the EPR Option. This proposal has been replaced by two one-way cycle tracks on either side of the road.

The infrastructure proposed at the bridge over the Heuston Station/Connolly Station railway line has been reviewed and it is now proposed to accommodate the bus / bicycle infrastructure within the existing road bridge width, negating the need for a new pedestrian bridge at this location.

Proposed land take on Old Cabra Road to accommodate the BusConnects infrastructure improvements has been reduced from the EPR proposal – but some limited land take would still likely be required between Cabra Drive and the North Circular Road junction.

On the section of route from Prussia Street (Park Shopping Centre) to Manor Street / Brunswick Street North junction, proposals are summarised as follows:

On Prussia Street, between North Circular Road and the entrance to the Park Shopping Centre, the proposed road layout has been amended marginally from the EPR Option; with one southbound general traffic lane, one northbound ‘straight-ahead only’ lane (for local traffic, cyclists and buses travelling to Old Cabra Road), and one left turn lane from Prussia Street to North Circular Road. The straight-ahead movement from Prussia Street to Old Cabra Road would be signposted as ‘no through road except for buses, taxis, cyclists and local access traffic’, and right-turns from Prussia Street to North Circular Road would be banned. The revised proposals avoid the need for land-take on the approach to the North Circular Road on Prussia Street at Drumalee Road.

To provide an alternative route to and from the city centre (along Cabra Road, North Circular Road, Infirmary Road and Conyngham Road) the proposals include a proposed alteration to an offline junction at St Peter's Church (where Cabra Road meets the North Circular Road). This signalised junction would be modified to allow right-turns from Cabra Road to North Circular Road and left-turns from North Circular Road onto Cabra Road, which would provide an alternative route for general traffic movement between Navan Road and Stoneybatter - instead of travelling along Old Cabra Road.

Through traffic travelling between Navan Road and the Quays would also be able to travel from Cabra Road via the North Circular Road, Berkeley Road (southbound) or Phibsborough Road / Constitution Hill (northbound).

On Prussia Street at the Park Shopping Centre access junction, the previously proposed (in the EPR Option) two-way cycle track routed into the Park Shopping Centre has been removed. Two one-way cycle tracks on each side of the road are proposed instead at the northern end of Prussia Street. The southbound cycle track merges into the general traffic lane just north of the Park Shopping Centre.

On Prussia Street south of the Park Shopping Centre, the proposal would provide a general traffic lane in both directions which would allow local traffic to access this area as at present. The proposal has been modified to reduce the possibility of through traffic using St Joseph's Road, by including a short one-way section (in an eastbound direction) at its eastern end (at the junction with Prussia Street).

At the junction of Aughrim Street / Manor Street / Prussia Street, the updated draft PRO includes revised bus gate arrangements in both directions at the junction, which would effectively limit use of Prussia Street / Manor Street to local access traffic, buses and taxis – as well as cyclists. In the northbound direction, the bus gate would be located on Prussia Street just north of the Aughrim Street junction, such that all northbound general traffic would need to turn left onto Aughrim Street. In the southbound direction, a bus gate would be located on Prussia Street / Manor Street just south of the Aughrim Street junction, and any general traffic travelling southbound on Prussia Street at this location would have to turn right onto Aughrim Street. This change would provide improved bus priority southbound, better facilities for cyclists, and greater scope for public realm improvements. These arrangements would allow for local traffic access, but effectively discourage through traffic.

The updated junction design at Stoneybatter also includes provision for a signal controlled 'bus only' phase from Aughrim Street to Manor Street (which would be activated by southbound buses on Aughrim Street).

South of the Stoneybatter junction, the draft PRO proposal includes introducing signal control at the Manor Street / Kirwan Street / Manor Place junction, which would allow general traffic levels on these side roads to be limited by management of green times in order to reduce their attractiveness to through traffic. The signal-controlled junction would also include a pedestrian crossing of Manor Street within the junction. It is also proposed to restrict movements out of Kirwan Street to right-turns only to limit the ability of general traffic to short-cut along local roads.

On Manor Street south of the Manor Place junction, the previous design included a southbound bus lane and a general traffic lane in both directions, and a northbound cycle track. The revised design would include a general traffic lane in both directions, and a cycle track in both directions.

The revised proposal would include retention of parking bays where appropriate on Manor Street, and a long loading bay on the east side of the southern section of Manor Street – although two small loading bays on the west side would be removed to create space for provision of bicycle track infrastructure.

On the section of route from Manor Street / Brunswick Street North junction to Ellis Quay, proposals are summarised as follows:

On Brunswick Street North, the EPR Option scheme proposed one general traffic lane which allowed general traffic to turn right to George's Lane, or to continue straight along Brunswick Street North. In the EPR Option, Brunswick Street North included cycle tracks on each side of the general traffic lane – with a link to a proposed two-way cycle track on George's Lane, crossing King Street North, and then along Queens Street onto Arran Quay. Blackhall Place would be accessed by cyclists through Blackhall Street.

The revised proposal on Blackhall Place would be to operate a northbound bus-only section between the junctions of King Street North and Brunswick Street North – with northbound general traffic having to turn right into King Street North, and then travel anti-clockwise along George's Lane and Brunswick Street North to reach Manor Street. This arrangement would provide improved control and limitation of northbound through-traffic while also ensuring reliability for bus movement through Stoneybatter; wider footpaths on Manor Street would also be achieved by removal of the previously proposed northbound bus lane there (whose role is replaced by the proposed bus priority / traffic signal on Blackhall Place).

Brunswick Street North is proposed as a westbound one-way street, with a two-way cycle track – which would link to the one-way cycle tracks on Manor Street (to the north), and two-way cycle tracks on George's Lane and Queen Street (to the south). The cycle track on George's Lane has been realigned in the draft PRO to connect better with Grangegorman Lower which is considered to be an increasingly important cycle route to / from the TU Dublin campus at Grangegorman.

Local vehicular traffic on Brunswick Street North would be able to exit to the south (Blackhall Place) and the north (Manor Street). General traffic exiting Arbour Hill would be required to turn right only at the Blackhall Place junction. General traffic into Arbour Hill would only be allowed from Manor Street or Brunswick Street North.

Southbound general traffic would travel on Manor Street / Blackhall Place in a single lane; and would be required to turn left into King Street North (which would remain one-way eastbound), but with buses allowed to continue travelling straight ahead to a southbound bus lane on Blackhall Place.

On Blackhall Street, the EPR Option scheme proposed a junction redesign at Blackhall Place and two general traffic lanes with a one-way cycle track exiting on to Blackhall Place. The draft PRO proposed road layout has been revised to include one lane for general traffic, a two-way cycle track, and echelon parking for local residents.

General traffic movements from Blackhall Place to the east would continue to be able to be made via King Street North. In the preferred layout, George's Lane would continue as at present as a one-way street (northbound), with proposed new signal controls at the junction of Grangegorman Street Lower / Brunswick Street North.

Westbound general traffic from the city centre on the eastern section of King Street North (east of George's Lane) would be restricted to left turns only, into Queen Street, in response to local community concerns about general traffic from King Street North turning right into George's Lane and onwards to Grangegorman Street Lower. This updated preferred layout would provide more scope to maximise pedestrian space within the George's Lane / Queen Street junction footprint.

On Blackhall Place between Blackhall Street and Ellis Quay, the EPR Option scheme is unchanged, with a bus lane and general traffic lane proposed in each direction, with a two-way cycle track on Queen Street.

7.4 Summary

7.4.1 Infrastructure Provision

The Preferred Route is approximately 10.9 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 points below present the length of existing and proposed bus and cycle priority as a percentage of the overall route length.

- 10% Existing bus priority (outbound) (*10% physical*)
- 40% Existing bus priority (citybound) (*40% physical*)
- 100% Proposed bus priority (outbound) (*89% physical – 11% virtual*)
- 98% Proposed bus priority (citybound) (*85% physical – 13% virtual*)
- 48% Existing cycle priority (outbound) (*14% mandatory cycle lane, 23% advisory, 11% cycle-track*)
- 38% Existing cycle priority (citybound) (*15% mandatory lane, 16% advisory, 7% cycle-track*)
- 81% Proposed cycle priority (outbound) (*81% cycle track*)
- 78% Proposed cycle priority (citybound) (*78% cycle track*)

Virtual bus priority measures are provided at a number of locations. These are sections of road with limited traffic movements due to traffic management restrictions in place, as follows:

- Old Cabra Road (citybound and outbound) - Approximately 800m length;
- Prussia Street (citybound and outbound) - Approximately 480m length; and
- Stoneybatter Village from Brunswick Street North to Prussia Street (inbound and outbound) - Approximately 400m length;

7.4.2 Material Scheme Changes

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

- The proposed layout at Mulhuddart junction has been changed, with cycle tracks having been modified. Cycle tracks are now proposed on the nearside of the carriageway and cycle crossings are provided alongside pedestrian crossings to minimise conflict between cyclists and motorists.
- Along the N3 corridor, where bridges and culverts are to be widened to accommodate bus lanes, this would also cater for a future upgrade of the N3.
- The previously proposed two-way cycle track westbound along the R147 Navan Road to Auburn Avenue Junction is modified with cyclists routed from the R147 to an on-street 'Quiet Street' cycle route along Castleknock Manor. This would remove the need for land-take in this area.
- The Navan Road roundabout at Ashtown Road is now proposed to be modified to a signal-controlled roundabout - keeping the existing trees on the central island. The EPR Option proposed modifying the existing roundabout to a signal-controlled crossroads.
- Land-take requirement has been removed at Cabra Library due to redesign of junction at Navan Road / Ratoath Road.
- New traffic signal controls are proposed at the Old Cabra Road / Glenbeigh Road junction, which would enable general traffic flows turning left or right onto Old Cabra Road (local access only) to be controlled (mitigating the risk of general traffic using Glenbeigh Road as a rat-run).
- On Old Cabra Road, the previously proposed two-way cycle track along Old Cabra Road has been replaced by two one-way cycle tracks on either side of the road, and the northbound bus lane approaching the Navan Road junction has been reduced in length. These measures reduce the need for land-take in areas on Old Cabra Road.
- Widening of the Old Cabra Road overbridge over the Heuston Station / Connolly Station railway line no longer would be required. It is now proposed to accommodate the bus / bicycle infrastructure within the existing road bridge width.
- The revised proposals include making St Joseph's Road one-way towards Prussia Street at its eastern end, in order to avoid general traffic using this street as a short-cut route.

- The junction of Manor Street / Prussia Street with Aughrim Street at Stoneybatter would now be signalised and would include a bus gate in both directions. All northbound general traffic would need to turn left onto Aughrim Street. In the southbound direction, any general traffic on Prussia Street at this location would have to turn right onto Aughrim Street.
- The Manor Street / Kirwan Street / Manor Place junction would now be signalised, and Kirwan Street general traffic (which is westbound only) would be limited to 'right-turns only' at its junction with Manor Street to minimise opportunities for through-traffic to use this route.
- At the north end of George's Lane, the revised layout has a signal-controlled junction at Grangegorman Street Lower / Brunswick Street North as a means of limiting general traffic flow entering and leaving Grangegorman Street Lower.
- A northbound bus lane on Blackhall Place (at its junction with King Street North) would be provided and all general traffic would have to turn right into King Street North. Northbound general traffic would need to travel via George's Lane and Brunswick Street North to reach Manor Street. Traffic signals at the Brunswick Street North / Blackhall Place junction would enable the level of traffic flow of northbound general traffic to be controlled, and limited to a level which ensures that buses are able to travel without delay along this section,
- On Blackhall Street, the proposed road layout has been revised to include one lane for general traffic, a two-way cycle track, and angled parking for local residents.

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:

- Revisions to the previously proposed two-way cycle track westbound along the R147 Navan Road to Auburn Avenue Junction, which is modified with cyclists routed from the R147 to an on-street 'Quiet Street' cycle route along Castleknock Manor. This reduces the amount of construction work required and the extent of road widening;
- Retention of the roundabout arrangement at the Navan Road Roundabout at Ashtown Road, which was previously proposed to be converted into a signalised crossroads, reduces the amount of construction works proposed;
- Revisions to the proposed junction arrangement at Navan Road / Ratoath Road, which reduces the extent of road widening and works encroaching into adjacent properties;
- Revisions to the proposed road layout on Old Cabra Road, which reduces the extent of road widening and works encroaching into adjacent properties; and

- Revisions to the proposed layout on the Old Cabra Road overbridge (at Heuston Station / Connolly Station railway line) which removes the need for widening of the bridge extents and reduces overall construction works.

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

7.4.3 Scheme Benefits

7.4.3.1 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 would 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 bus gates and bus priority traffic signals, is forecast to reduce bus journey times along the CBC. In addition to this, journey reliability is forecast to be improved, by largely removing interaction between bus traffic and general traffic.

7.4.3.2 Walking & Cycling

In addition to the improvements to bus journey time and journey time reliability, as discussed in Section 7.4.3.2 the proposed scheme would provide benefits for cyclists and pedestrians.

The provision of dedicated cycling infrastructure along the CBC as well as on parallel routes in some cases, 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.

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 of pedestrians. The scheme would also provide improved pedestrian crossing facilities along the route.

8 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 work.

Appendix A

N3 / M50 Junction to R147
Navan Road Parkway Junction
Route Option Assessment MCA
Tables

Draft - Work in Progress

A1

Table A1.1: N3 / M50 Junction to R147 Navan Road Parkway Junction MCA

Appraisal Criteria	Sub-Criteria	Option AA1	Option AA2
1 Economy	1A Capital Cost	<p><i>Indicative Scheme Infrastructure Works Costs</i></p> <p>- Quiet Street treatment along Castkeknock Manor.</p> <p><i>Land Acquisition Cost</i></p> <p>226 sqm Private Land 0 sqm Public Land 1 Property affected</p>	<p><i>Indicative Scheme Infrastructure Works Costs</i></p> <p>- Cycle track alongside Navan Road. - Bus Lane along length of Navan Road and slip-road</p> <p><i>Land Acquisition Cost</i></p> <p>226 sqm Private Land 847 sqm Public Land 1 Property affected</p>
	Rank		

Appraisal Criteria	Sub-Criteria	Option AA1	Option AA2
1 Economy	1B Transport Quality & Reliability	Journey Time Inbound: 2.4 mins Journey Time Outbound: 2.4 mins Length: 0.95 km No. of Junctions: 1 No. of Pedestrian Crossings: 1	Journey Time Inbound: 2.7 mins Journey Time Outbound: 2.7 mins Length: 0.95 km No. of Junctions: 1 No. of Pedestrian Crossings: 1
	Rank		
2 Integration	2A Land Use Policy	Integrates with existing residential, educational & leisure uses in this established area.	Integrates with existing residential, educational & leisure uses in this established area.
	Rank		
	2B Residential Population and Employment Catchments	Similar Catchment for all route options.	Similar Catchment for all route options.
	Rank		
	2C Transport Network Integration	Similar potential along all route options.	Similar potential along all route options.
	Rank		

Appraisal Criteria	Sub-Criteria	Option AA1	Option AA2
2 Integration	2D Cycle Network integration	This route integrates with primary route 4 in a direct manner along Castleknock Manor.	This route does not integrate directly with primary route 4.
	Rank		
	2E Traffic Network Integration	Unchanged	Unchanged
	Rank		
3 Accessibility & Social Inclusion	3A Key Trip Attractors	All routes service the same trip attractors.	All routes service the same trip attractors.
	Rank		
	3B Deprived Geographic Areas	All routes serve areas of the same means from the Pobal Deprivation Index.	All routes serve areas of the same means from the Pobal Deprivation Index.
	Rank		

Appraisal Criteria	Sub-Criteria	Option AA1	Option AA2
4 Safety	4A Road Safety	No. of junctions: 1 No turn movements required. In terms of safety, Option AA1 is considered to be an improved arrangement of traffic and bus lanes (in the eastbound direction), with greater separation distance between merging of traffic lanes and the lane drop diverge at the Navan Road Parkway slip road junctions.	No. of junctions: 1 No turn movements required.
	Rank		
	4B Pedestrian Safety	Footpaths provided throughout. Signalised crossings at all major junctions.	Footpaths provided throughout. Signalised crossings at all major junctions.
	Rank		
5 Environment	5A Archaeology & Cultural Heritage	No recorded monuments affected in the area.	No recorded monuments affected in the area.
	Rank		
	5B Architectural Heritage	Minimal impact on protected structures.	Minimal impact on protected structures.
	Rank		
	5C Flora & Fauna	Requires the removal of 0 trees in public areas and 0 trees in private areas. Total trees impacted: 0	Requires the removal of 21 trees in public areas and 0 trees in private areas. Total trees impacted: 21
	Rank		
	5D Soils, Geology & Hydrology	No appreciable impact	No appreciable impact
	Rank		

Appraisal Criteria	Sub-Criteria	Option AA1	Option AA2
5 Environment	5E Landscape & Visual	Land acquisition required from 1 property. No public land acquisition needed.	Land acquisition required from 1 property.
	Rank		
	5F Air Quality	Increased proximity of vehicles to residential properties due to road widening.	Increased proximity of vehicles to residential properties due to road widening.
	Rank		
	5G Noise & Vibration	Increased proximity of vehicles to residential properties due to road widening.	Increased proximity of vehicles to residential properties due to road widening.
	Rank		
	5H Land Use Character	This option would impact on private property development in places.	This option would impact on existing tree-lines at Castleknock Manor and require public-landtake at Castleknock Manor. It would impact on private property in places.
	Rank		

Appendix B

R147 Navan Road / Ashtown
Road to Navan Road / Ratoath
Road Junction Route Option
Assessment MCA Tables

Draft - Work in Progress

B1**Table B1.1: Navan Road / Ashtown Road Junction to Navan Road / Ratoath Road Junction MCA**

Appraisal Criteria	Sub-Criteria	Option HH1	Option HH2
1 Economy	1A Capital Cost	<p><i>Indicative Scheme Infrastructure Works Costs</i></p> <p>- Cycle track / Bus lane and general traffic lane each direction from Ashtown Roundabout to Ratoath Road / Navan Road Junction.</p> <p><i>Land Acquisition Cost</i></p> <p>2202 sqm Private Land 0 sqm Public Land 63 Properties affected</p>	<p><i>Indicative Scheme Infrastructure Works Costs</i></p> <p>- Cycle track in each direction along Navan Road from Ashtown Roundabout to Ratoath Road / Navan Road Junction. Intermittent Bus-lanes</p> <p><i>Land Acquisition Cost</i></p> <p>1237 sqm Private Land 0 sqm Public Land 14 Properties affected</p>
	Rank		

Appraisal Criteria	Sub-Criteria	Option HH1	Option HH2
1 Economy	1B Transport Quality & Reliability	Journey Time Inbound: 5 mins Journey Time Outbound: 5 mins Length: 2.46 km No. of Junctions: 3 No. of Pedestrian Crossings: 7 Cycle lanes in both directions provided.	Journey Time Inbound: 6.5 mins Journey Time Outbound: 6.5 mins Length: 2.46 km No. of Junctions: 3 No. of Pedestrian Crossings: 7 Intermittent bus-lanes provided. Cycle lanes in both directions provided.
	Rank		
2 Integration	2A Land Use Policy	Integrates with existing residential, educational & leisure uses in this established area.	Integrates with existing residential, educational & leisure uses in this established area.
	Rank		
	2B Residential Population and Employment Catchments	Similar Catchment for all route options.	Similar Catchment for all route options.
	Rank		
	2C Transport Network Integration	Similar potential along all route options.	Similar potential along all route options.
	Rank		

Appraisal Criteria	Sub-Criteria	Option HH1	Option HH2
2 Integration	2D Cycle Network integration	This route integrates with primary route 4.	This route integrates with primary route 4.
	Rank		
	2E Traffic Network Integration	Road widened allowing for greater traffic movement.	Buses to get priority at junction, causing restricted traffic movement.
	Rank		
3 Accessibility & Social Inclusion	3A Key Trip Attractors	All routes service the same trip attractors.	All routes service the same trip attractors.
	Rank		
	3B Deprived Geographic Areas	All routes serve areas of the same means from the Pobal Deprivation Index.	All routes serve areas of the same means from the Pobal Deprivation Index.
	Rank		

Appraisal Criteria	Sub-Criteria	Option HH1	Option HH2
4 Safety	4A Road Safety	No. of junctions: 3 No turn movements required. Consistency across entire section is intuitively safer.	No. of junctions: 3 No turn movements required.
	Rank		
	4B Pedestrian Safety	Footpaths provided throughout. Signalised crossings at all major junctions. Consistency across entire section is intuitively safer.	Footpaths provided throughout. Signalised crossings at all major junctions.
	Rank		
5 Environment	5A Archaeology & Cultural Heritage	No recorded monuments affected in the area.	No recorded monuments affected in the area.
	Rank		
	5B Architectural Heritage	Minimal impact on protected structures.	Minimal impact on protected structures.
	Rank		
	5C Flora & Fauna	Requires the removal of 84 trees in public areas and 0 trees in private areas. Total trees impacted: 84	Requires the removal of 84 trees in public areas and 0 trees in private areas. Total trees impacted: 84
	Rank		
	5D Soils, Geology & Hydrology	No appreciable impact	No appreciable impact
	Rank		

Appraisal Criteria	Sub-Criteria	Option HH1	Option HH2
5 Environment	5E Landscape & Visual	Land acquisition required from 63 properties.	Land acquisition required from 14 properties.
	Rank		
	5F Air Quality	Increased proximity of vehicles to residential properties due to road widening.	Increased proximity of vehicles to residential properties due to road widening.
	Rank		
	5G Noise & Vibration	Increased proximity of vehicles to residential properties due to road widening.	Increased proximity of vehicles to residential properties due to road widening.
	Rank		
	5H Land Use Character	This option for road widening along the entire length of the Navan Road would impact on existing tree lines and on-street parking provision.	This option for road widening along the entire length of the Navan Road would impact on existing tree lines and on-street parking provision, but to a lesser extent than HH1
	Rank		

Appendix C

Navan Road / Ratoath Road
Junction to Prussia Street (Park
Shopping Centre) Route Option
Assessment MCA Tables

DRAFT WORK IN PROGRESS

C1

Table C1.1: Navan Road / Ratoath Road to Prussia Street (Park Shopping Centre) MCA

Appraisal Criteria	Sub-Criteria	Option NV1	Option NV2
1 Economy	1A Capital Cost	<p><i>Indicative Scheme Infrastructure Works Costs</i></p> <ul style="list-style-type: none"> - Cycle track in each direction from Navan Road to Prussia Street - Junction re-configuration at junction of Navan Rd/Ratoath Rd/Cabra Rd/Old Cabra Rd - Glenbeigh Rd to become a signalised junction. <p><i>Land Acquisition Cost</i></p> <p>241 sqm Private Land 0 sqm Public Land 1 Properties affected</p>	<p><i>Indicative Scheme Infrastructure Works Costs</i></p> <ul style="list-style-type: none"> - Two-way cycle track from Navan Road to Prussia Street - Junction re-configuration at junction of Navan Rd/Ratoath Rd/Cabra Rd/Old Cabra Rd - Glenbeigh Rd to become a signalised junction - New pedestrian bridge over train line on Old Cabra Rd <p><i>Land Acquisition Cost</i></p> <p>453 sqm Private Land 61 sqm Public Land 14 Properties affected</p>
		Rank	

Appraisal Criteria	Sub-Criteria	Option NV1	Option NV2
1 Economy	1B Transport Quality & Reliability	Journey Time Inbound: 3.7 mins Journey Time Outbound: 3.7 mins Length: 1.13 km No. of Junctions: 4 No. of Pedestrian Crossings: 5	Journey Time Inbound: 3.7 mins Journey Time Outbound: 3.7 mins Length: 1.13 km No. of Junctions: 4 No. of Pedestrian Crossings: 5
	Rank		
2 Integration	2A Land Use Policy	Integrates with existing residential, educational & leisure uses in this established area.	Integrates with existing residential, educational & leisure uses in this established area.
	Rank		
	2B Residential Population and Employment Catchments	Similar Catchment for all route options.	Similar Catchment for all route options.
	Rank		
	2C Transport Network Integration	Similar potential along all route options.	Similar potential along all route options.
	Rank		

Appraisal Criteria	Sub-Criteria	Option NV1	Option NV2
2 Integration	2D Cycle Network integration	This route integrates with primary route 4. It has better integration than NV2 as the 'with flow' one-way cycle track arrangement (in NV1) has more direct and intuitive connectivity at both ends of Old Cabra Road than NV2 which would require less direct crossing manoeuvres at the Navan Road and North Circular Road junctions.	This route integrates with primary route 4.
	Rank		2
	2E Traffic Network Integration	Inbound and Outbound traffic diverted to suitable alternative routes	Inbound and Outbound traffic diverted to suitable alternative routes
	Rank		
3 Accessibility & Social Inclusion	3A Key Trip Attractors	All routes service the same trip attractors.	All routes service the same trip attractors.
	Rank		
	3B Deprived Geographic Areas	All routes serve areas of the same means from the Pobal Deprivation Index.	All routes serve areas of the same means from the Pobal Deprivation Index.
	Rank		
4 Safety	4A Road Safety	No. of junctions: 4 No turn movements required.	No. of junctions: 4 No turn movements required.
	Rank		

Appraisal Criteria	Sub-Criteria	Option NV1	Option NV2
4 Safety	4B Pedestrian Safety	Footpaths provided throughout. Signalised crossings at all major junctions. Provides consistent footway widths and less conflict with cycle tracks due to cycle tracks on both sides of the road.	Footpaths provided throughout. Signalised crossings at all major junctions.
	Rank		
5 Environment	5A Archaeology & Cultural Heritage	No recorded monuments affected in the area.	No recorded monuments affected in the area.
	Rank		
	5B Architectural Heritage	Minimal impact on protected structures.	Minimal impact on protected structures.
	Rank		
	5C Flora & Fauna	Requires the removal of 7 trees in public areas and 18 trees in private areas. Total trees impacted: 25	Requires the removal of 7 trees in public areas and 28 trees in private areas. Total trees impacted: 35
	Rank		
	5D Soils, Geology & Hydrology	No appreciable impact	No appreciable impact
	Rank		

Appraisal Criteria	Sub-Criteria	Option NV1	Option NV2
5 Environment	5E Landscape & Visual	Land acquisition required from 1 property.	Land acquisition required from 14 properties.
	Rank		
	5F Air Quality	Increased proximity of vehicles to residential properties due to road widening.	Increased proximity of vehicles to residential properties due to road widening.
	Rank		
	5G Noise & Vibration	Increased proximity of vehicles to residential properties due to road widening.	Increased proximity of vehicles to residential properties due to road widening.
	Rank		
	5H Land Use Character	Option NV1 retains a tree line in the central reserve at the Ratoath Road junction when compared to NV2	The land take required on Old Cabra Rd would not have great effect on the viability of the residential properties from being used for their intended use. Sufficient access and parking space will still be provided.
	Rank		

Appendix D

Prussia Street (Park Shopping
Centre) to Manor Street /
Brunswick Street North Junction
Option Assessment MCA Tables

DRAFT WORK IN PROGRESS

D1

Table D1.1: Prussia Street (Park Shopping Centre) to Manor Street / Brunswick Street North Junction MCA

Appraisal Criteria	Sub-Criteria	Option SB1	Option SB2	Option SB3
1 Economy	1A Capital Cost	<p><i>Indicative Scheme Infrastructure Works Costs</i></p> <ul style="list-style-type: none"> - Cycle track each direction from Prussia Street to Brunswick Street - Footpath widening and Urban Realm Improvement at Stoneybatter Village. <p><i>Land Acquisition Cost</i></p> <p>0 sqm Private Land 0 sqm Public Land 0 Properties affected</p>	<p><i>Indicative Scheme Infrastructure Works Costs</i></p> <ul style="list-style-type: none"> - Large scale junction reconfiguration at junction of Prussia St/Manor St/Aughrim St <p><i>Land Acquisition Cost</i></p> <p>0 sqm Private Land 0 sqm Public Land 0 Properties affected</p>	<p><i>Indicative Scheme Infrastructure Works Costs</i></p> <ul style="list-style-type: none"> - Cycle track each direction from Prussia Street to Brunswick Street - Footpath widening and Urban Realm Improvement at Stoneybatter Village. <p><i>Land Acquisition Cost</i></p> <p>0 sqm Private Land 0 sqm Public Land 0 Properties affected</p>
	Rank			

Appraisal Criteria	Sub-Criteria	Option SB1	Option SB2	Option SB3
1 Economy	1B Transport Quality & Reliability	Journey Time Inbound: 2.2 mins Journey Time Outbound: 2.2 mins Length: 0.602 km No. of Junctions: 2 No. of Pedestrian Crossings: 2 Outbound Bus Priority provided. Cycle lanes in both directions provided.	Journey Time Inbound: 3.0 mins Journey Time Outbound: 3.0 mins Length: 0.602 km No. of Junctions: 2 No. of Pedestrian Crossings: 2	Journey Time Inbound: 2.2 mins Journey Time Outbound: 2.2 mins Length: 0.602 km No. of Junctions: 2 No. of Pedestrian Crossings: 2 Outbound Bus Priority provided. Cycle lanes in both directions provided.
	Rank			
2 Integration	2A Land Use Policy	Integrates with existing residential, educational & leisure uses in this established area.	Integrates with existing residential, educational & leisure uses in this established area.	Integrates with existing residential, educational & leisure uses in this established area.
	Rank			
	2B Residential Population and Employment Catchments	Similar Catchment for all route options.	Similar Catchment for all route options.	Similar Catchment for all route options.
	Rank			
	2C Transport Network Integration	Similar potential along all route options.	Similar potential along all route options.	Similar potential along all route options.
	Rank			

Appraisal Criteria	Sub-Criteria	Option SB1	Option SB2	Option SB3
2 Integration	2D Cycle Network integration	This route integrates with primary route 4.	This route integrates with primary route 4. No Cycle tracks provided in Stoneybatter.	This route integrates with primary route 4.
	Rank			
	2E Traffic Network Integration	Outbound traffic diverted to suitable alternative routes	Outbound traffic diverted to suitable alternative routes	Outbound traffic diverted to suitable alternative routes
	Rank			
3 Accessibility & Social Inclusion	3A Key Trip Attractors	All routes service the same trip attractors.	All routes service the same trip attractors.	All routes service the same trip attractors.
	Rank			
	3B Deprived Geographic Areas	All routes serve areas of the same means from the Pobal Deprivation Index.	All routes serve areas of the same means from the Pobal Deprivation Index.	All routes serve areas of the same means from the Pobal Deprivation Index.
	Rank			
4 Safety	4A Road Safety	No. of junctions: 2 No turn movements required.	No. of junctions: 2 No turn movements required.	No. of junctions: 2 No turn movements required.
	Rank			
	4B Pedestrian Safety	Footpaths provided throughout. Signalised crossings at all major junctions.	Footpaths provided throughout. Signalised crossings at all major junctions.	Footpaths provided throughout. Signalised crossings at all major junctions.
	Rank			

Appraisal Criteria	Sub-Criteria	Option SB1	Option SB2	Option SB3
4 Safety	4A Road Safety	No. of junctions: 2 No turn movements required.	No. of junctions: 2 No turn movements required.	No. of junctions: 2 No turn movements required.
	Rank			
	4B Pedestrian Safety	Footpaths provided throughout. Signalised crossings at all major junctions.	Footpaths provided throughout. Signalised crossings at all major junctions.	Footpaths provided throughout. Signalised crossings at all major junctions.
	Rank			
5 Environment	5A Archaeology & Cultural Heritage	No recorded monuments affected in the area.	No recorded monuments affected in the area.	No recorded monuments affected in the area.
	Rank			
	5B Architectural Heritage	Minimal impact on protected structures.	Minimal impact on protected structures.	Minimal impact on protected structures.
	Rank			
	5C Flora & Fauna	Requires the removal of 0 trees in public areas and 0 trees in private areas. Total trees impacted: 0	Requires the removal of 7 trees in public areas and 0 trees in private areas. Total trees impacted: 7	Requires the removal of 0 trees in public areas and 0 trees in private areas. Total trees impacted: 0
	Rank			
	5D Soils, Geology & Hydrology	No appreciable impact	No appreciable impact	No appreciable impact
	Rank			

Appraisal Criteria	Sub-Criteria	Option SB1	Option SB2	Option SB3
5 Environment	5E Landscape & Visual	Land acquisition required from 0 properties.	Land acquisition required from 0 properties.	Land acquisition required from 0 properties.
	Rank			
	5F Air Quality	Increased proximity of vehicles to residential properties due to road widening.	Increased proximity of vehicles to residential properties due to road widening.	Increased proximity of vehicles to residential properties due to road widening.
	Rank			
	5G Noise & Vibration	Increased proximity of vehicles to residential properties due to road widening.	Increased proximity of vehicles to residential properties due to road widening.	Increased proximity of vehicles to residential properties due to road widening.
	Rank			
	5H Land Use Character	There is no great effect on the viability of the residential properties from being used for their intended use. Sufficient access and parking space would still be provided.	There is no great effect on the viability of the residential properties from being used for their intended use. Sufficient access and parking space would still be provided.	There is no great effect on the viability of the residential properties from being used for their intended use. Sufficient access and parking space would still be provided.
	Rank			

Appendix E

Manor Street / Brunswick Street
North Junction to Ellis Quay
Route Option Assessment MCA
Tables

Draft - Work in Progress

E1**Table E1.1: Manor Street / Brunswick Street North Junction to Ellis Quay MCA**

Appraisal Criteria	Sub-Criteria	Option BK1	Option BK2	Option BK3
1 Economy	1A Capital Cost	<p><i>Indicative Scheme Infrastructure Works Costs</i></p> <ul style="list-style-type: none"> - Parallel cycle track to CBC corridor along Brunswick St, George's Lane and Queen Street. - Quite street treatment along Brunswick Street. - New Junction layouts between King Street North/George's Lane/Queen Street and Brunswick Street and George's Lane - Dedicated bus lanes in either direction on Blackhall place to Ellis Quay. <p><i>Land Acquisition Cost</i></p> <p>0 sqm Private Land 0 sqm Public Land 0 Properties affected</p>	<p><i>Indicative Scheme Infrastructure Works Costs</i></p> <ul style="list-style-type: none"> - Paralell cycle track to CBC corridor along Brunswick St, George's Lane and Queen Street. - New Junction layouts between King Street North/George's Lane/Queen Street and Brunswick Street and George's Lane - Dedicated bus lanes in either direction on Blackhall place to Ellis Quay. <p><i>Land Acquisition Cost</i></p> <p>0 sqm Private Land 0 sqm Public Land 0 Properties affected</p>	<p><i>Indicative Scheme Infrastructure Works Costs</i></p> <ul style="list-style-type: none"> - Parallel cycle track to CBC corridor along Brunswick St, George's Lane and Queen Street. - Quite street treatment along Brunswick Street. - New Junction layouts between King Street North/George's Lane/Queen Street and Brunswick Street and George's Lane - Dedicated bus lanes in either direction on Blackhall place to Ellis Quay. <p><i>Land Acquisition Cost</i></p> <p>0 sqm Private Land 0 sqm Public Land 0 Properties affected</p>
	Rank			

Appraisal Criteria	Sub-Criteria	Option BK1	Option BK2	Option BK3
1 Economy	1B Transport Quality & Reliability	Journey Time Inbound: 1.6 mins Journey Time Outbound: 1.6 mins Length: 0.409 km No. of Junctions: 3 No. of Pedestrian Crossings: 3 90% bus priority provided. Parallel cycle route provided.	Journey Time Inbound: 1.6 mins Journey Time Outbound: 1.6 mins Length: 0.409 km No. of Junctions: 3 No. of Pedestrian Crossings: 3 90% bus priority provided. Parallel cycle route provided.	Journey Time Inbound: 1.6 mins Journey Time Outbound: 1.6 mins Length: 0.409 km No. of Junctions: 3 No. of Pedestrian Crossings: 3 90% bus priority provided. Parallel cycle route provided.
	Rank			
2 Integration	2A Land Use Policy	Integrates with existing residential, educational & leisure uses in this established area.	Integrates with existing residential, educational & leisure uses in this established area.	Integrates with existing residential, educational & leisure uses in this established area.
	Rank			
	2B Residential Population and Employment Catchments	Similar Catchment for all route options.	Similar Catchment for all route options.	Similar Catchment for all route options.
	Rank			
	2C Transport Network Integration	Similar potential along all route options.	Similar potential along all route options.	Similar potential along all route options.
	Rank			

Appraisal Criteria	Sub-Criteria	Option BK1	Option BK2	Option BK3
2 Integration	2D Cycle Network integration	The route deviates from primary route 4 for a short section. Quiet Street-treatment on Brunswick St North.	The route deviates from primary route 4 for a short section.	The route deviates from primary route 4 for a short section. Continuous two-way cycle track on Brunswick St North.
	Rank			
	2E Traffic Network Integration	Brunswick Street does not allow for general traffic to travel it.	George's Lane is changed from a one-way northbound street to a two-way street.	Brunswick Street is a one-way street in the westbound direction.
	Rank			
3 Accessibility & Social Inclusion	3A Key Trip Attractors	All routes service the same trip attractors.	All routes service the same trip attractors.	All routes service the same trip attractors.
	Rank			
	3B Deprived Geographic Areas	All routes serve areas of the same means from the Pobal Deprivation Index.	All routes serve areas of the same means from the Pobal Deprivation Index.	All routes serve areas of the same means from the Pobal Deprivation Index.
	Rank			
4 Safety	4A Road Safety	No. of junctions: 3 No turn movements required.	No. of junctions: 3 No turn movements required.	No. of junctions: 3 No turn movements required.
	Rank			

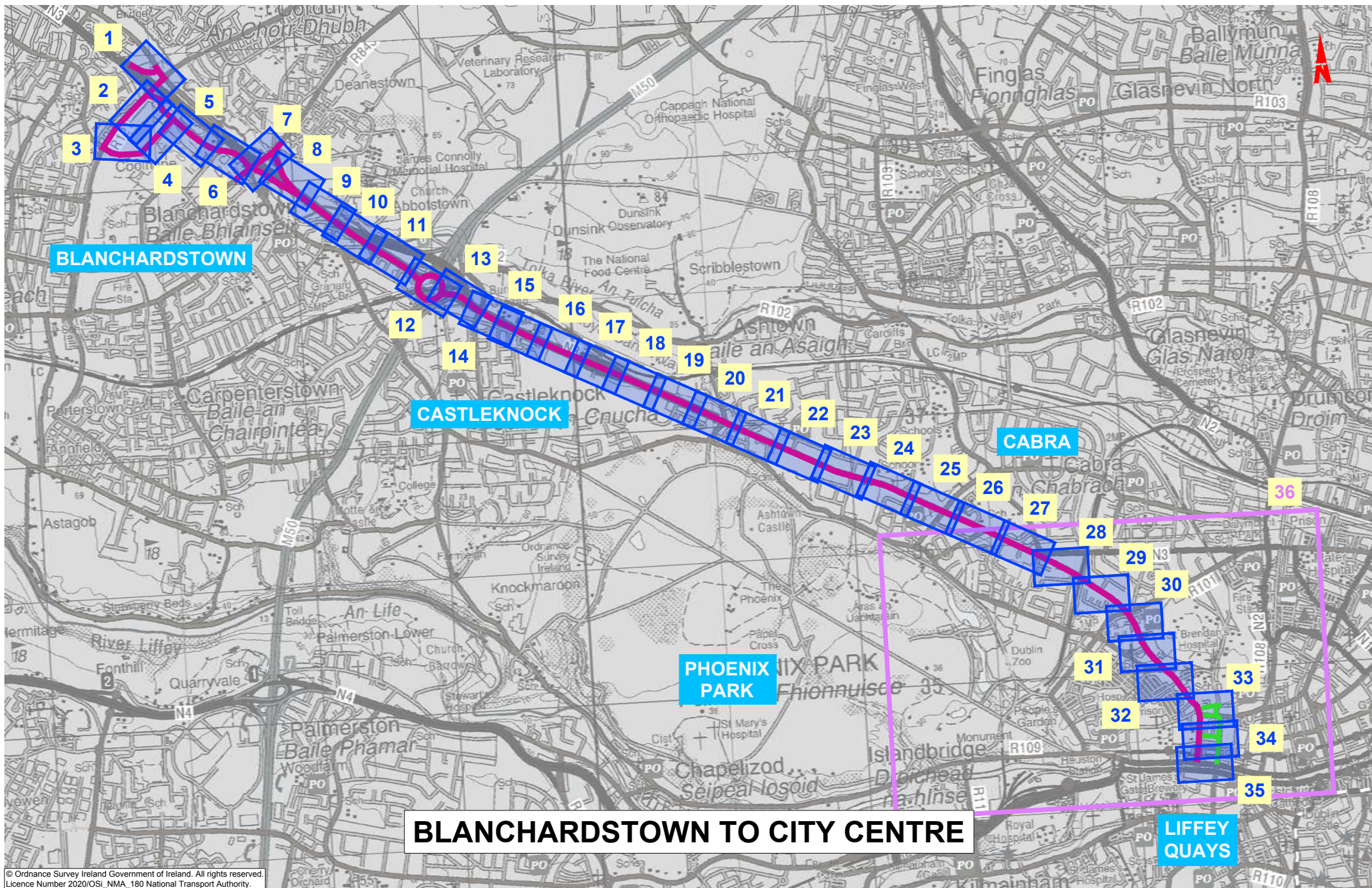
Appraisal Criteria	Sub-Criteria	Option BK1	Option BK2	Option BK3
4 Safety	4B Pedestrian Safety	Footpaths provided throughout. Signalised crossings at all major junctions. Increased Roadspace to pedestrians.	Footpaths provided throughout. Signalised crossings at all major junctions.	Footpaths provided throughout. Signalised crossings at all major junctions. Increased Roadspace to pedestrians.
	Rank			
5 Environment	5A Archaeology & Cultural Heritage	No recorded monuments affected in the area.	No recorded monuments affected in the area.	No recorded monuments affected in the area.
	Rank			
	5B Architectural Heritage	Minimal impact on protected structures.	Minimal impact on protected structures.	Minimal impact on protected structures.
	Rank			
	5C Flora & Fauna	Requires the removal of 0 trees in public areas and 0 trees in private areas.	Requires the removal of 0 trees in public areas and 0 trees in private areas.	Requires the removal of 0 trees in public areas and 0 trees in private areas.
		Total trees impacted: 0	Total trees impacted: 0	Total trees impacted: 0
	Rank			
	5D Soils, Geology & Hydrology	No appreciable impact	No appreciable impact	No appreciable impact
	Rank			

Appraisal Criteria	Sub-Criteria	Option BK1	Option BK2	Option BK3
5 Environment	5E Landscape & Visual	No Land acquisition required	No Land acquisition required	No Land acquisition required
	Rank			
	5F Air Quality	Increased proximity of vehicles to residential properties due to road widening.	Increased proximity of vehicles to residential properties due to road widening.	Increased proximity of vehicles to residential properties due to road widening.
	Rank			
	5G Noise & Vibration	Increased proximity of vehicles to residential properties due to road widening.	Increased proximity of vehicles to residential properties due to road widening.	Increased proximity of vehicles to residential properties due to road widening.
	Rank			
	5H Land Use Character	There is no great effect on the viability of the residential properties from being used for their intended use. Sufficient access and parking space would still be provided.	There is no great effect on the viability of the residential properties from being used for their intended use. Sufficient access and parking space would still be provided.	There is no great effect on the viability of the residential properties from being used for their intended use. Sufficient access and parking space would still be provided.
	Rank			





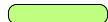







Appendix F

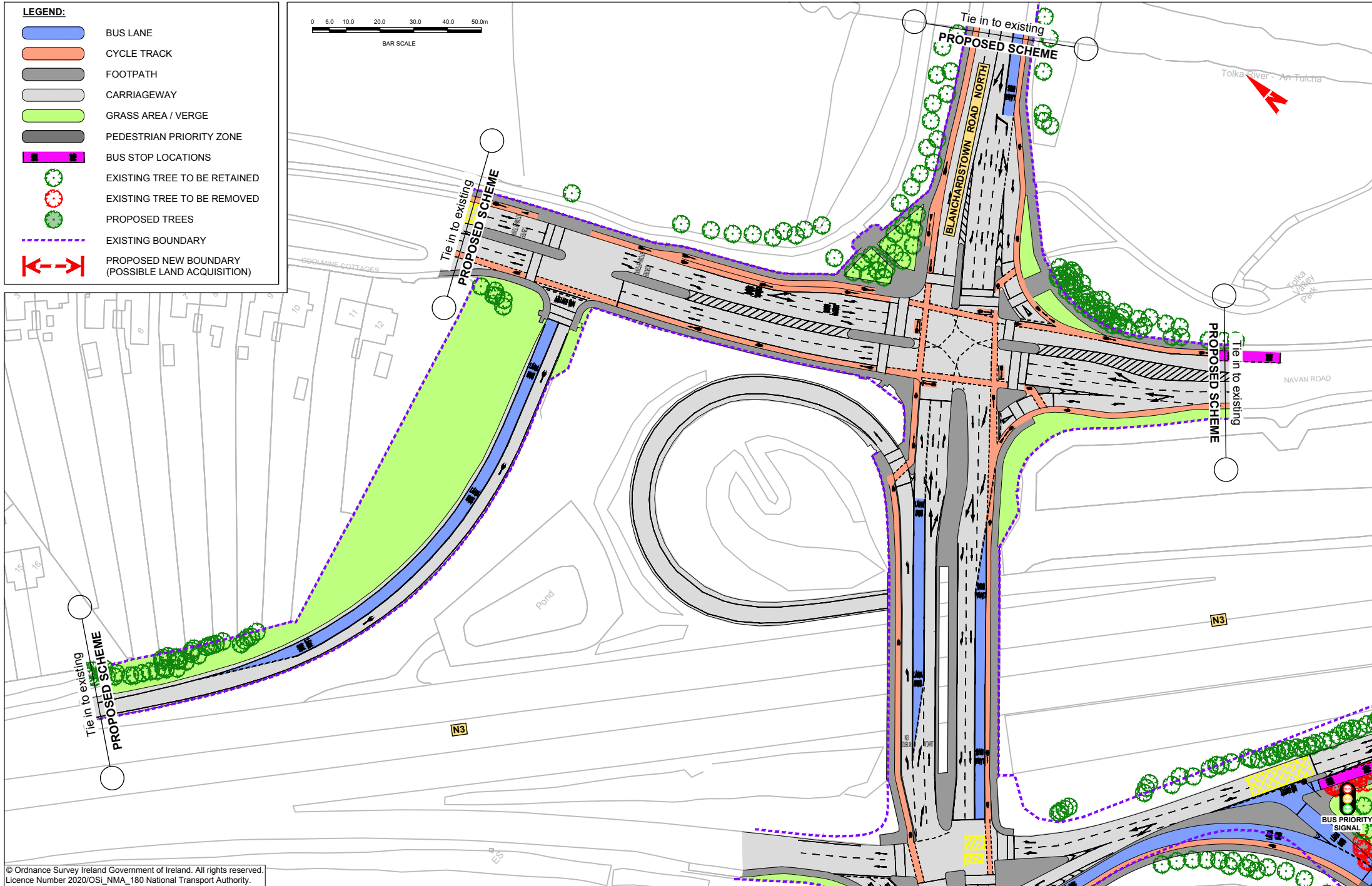
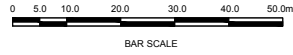
Updated Scheme Concept
Design Drawings

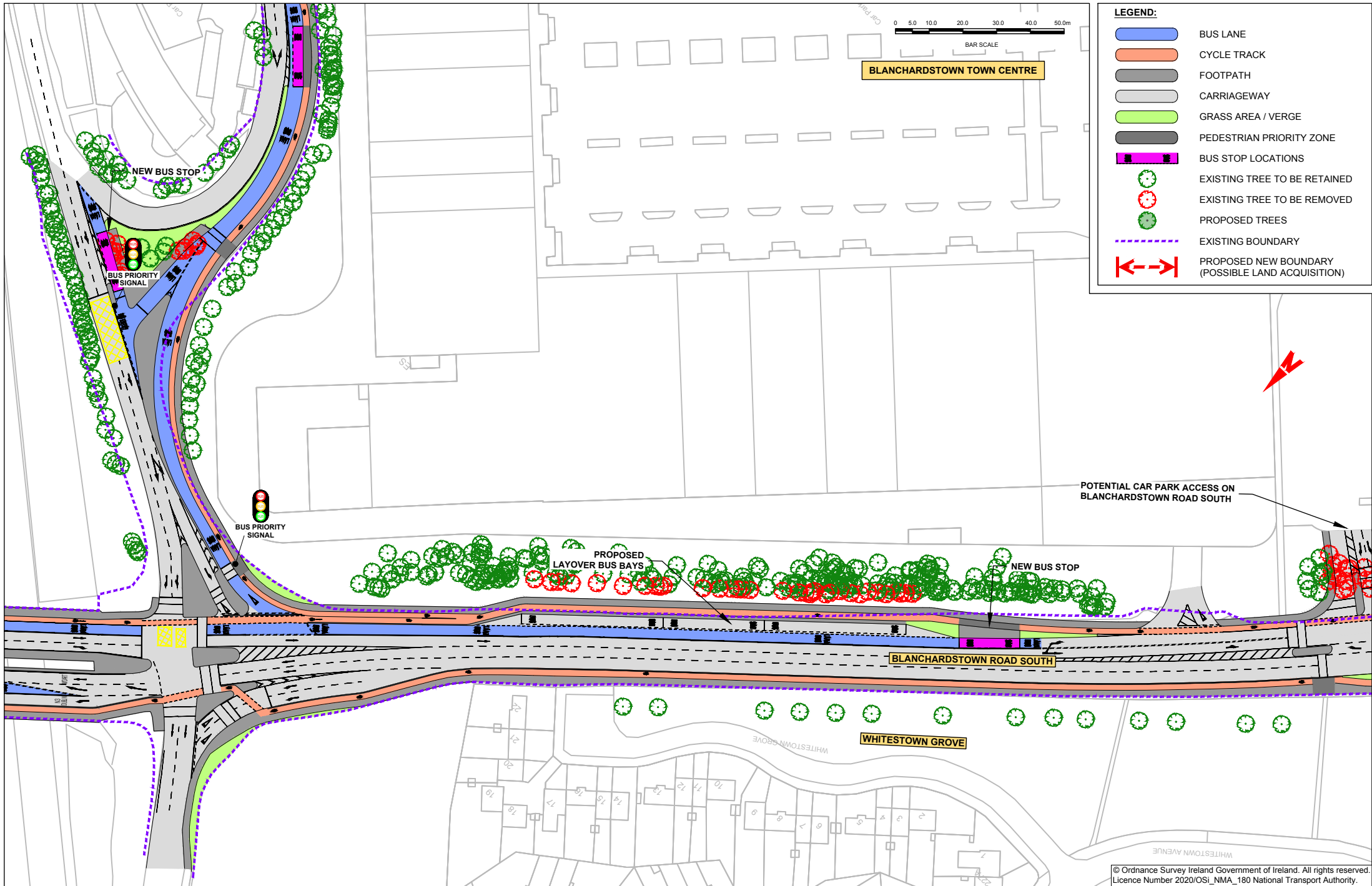
Draft - Work in Progress















LEGEND:

-  BUS LANE
-  CYCLE TRACK
-  FOOTPATH
-  CARRIAGEWAY
-  GRASS AREA / VERGE
-  PEDESTRIAN PRIORITY ZONE
-  BUS STOP LOCATIONS
-  EXISTING TREE TO BE RETAINED
-  EXISTING TREE TO BE REMOVED
-  PROPOSED TREES
-  EXISTING BOUNDARY
-  PROPOSED NEW BOUNDARY (POSSIBLE LAND ACQUISITION)





LEGEND:

-  BUS LANE
-  CYCLE TRACK
-  FOOTPATH
-  CARRIAGEWAY
-  GRASS AREA / VERGE
-  PEDESTRIAN PRIORITY ZONE
-  BUS STOP LOCATIONS
-  EXISTING TREE TO BE RETAINED
-  EXISTING TREE TO BE REMOVED
-  PROPOSED TREES
-  EXISTING BOUNDARY
-  PROPOSED NEW BOUNDARY (POSSIBLE LAND ACQUISITION)

0 5.0 10.0 20.0 30.0 40.0 50.0m

BAR SCALE



Car Park

BLANCHARDSTOWN TOWN CENTRE

POTENTIAL CAR PARK ACCESS ON
BLANCHARDSTOWN ROAD SOUTH

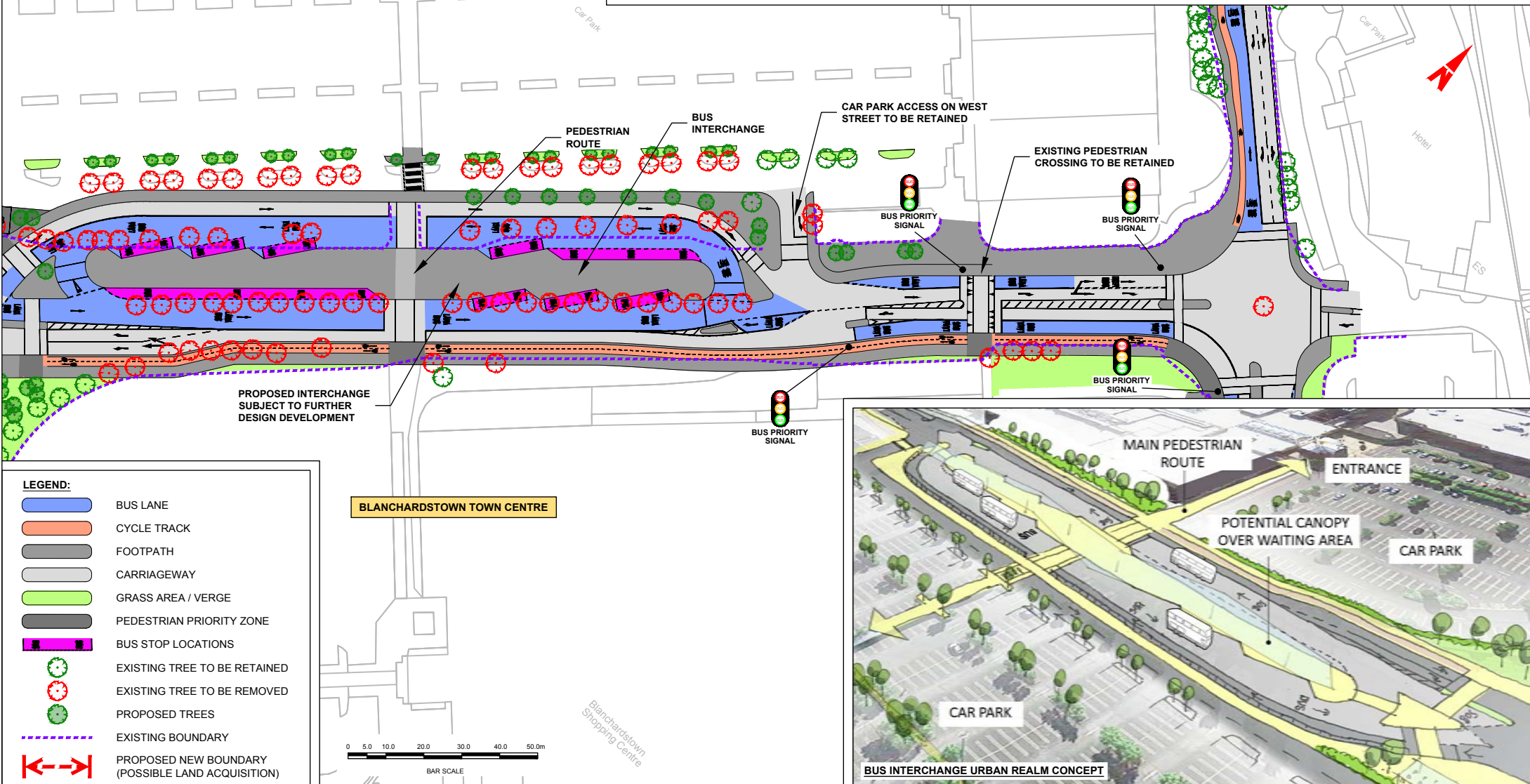
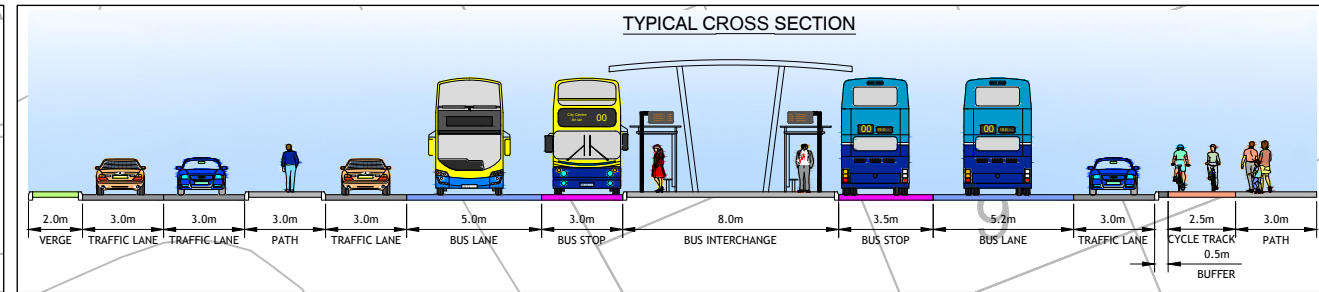
ROUNDBABOUT MODIFIED TO
SIGNAL-CONTROLLED JUNCTION







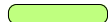







BUS PRIORITY
SIGNAL

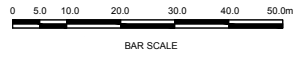
Car Park

PROPOSED SCHEME
Tie into Existing

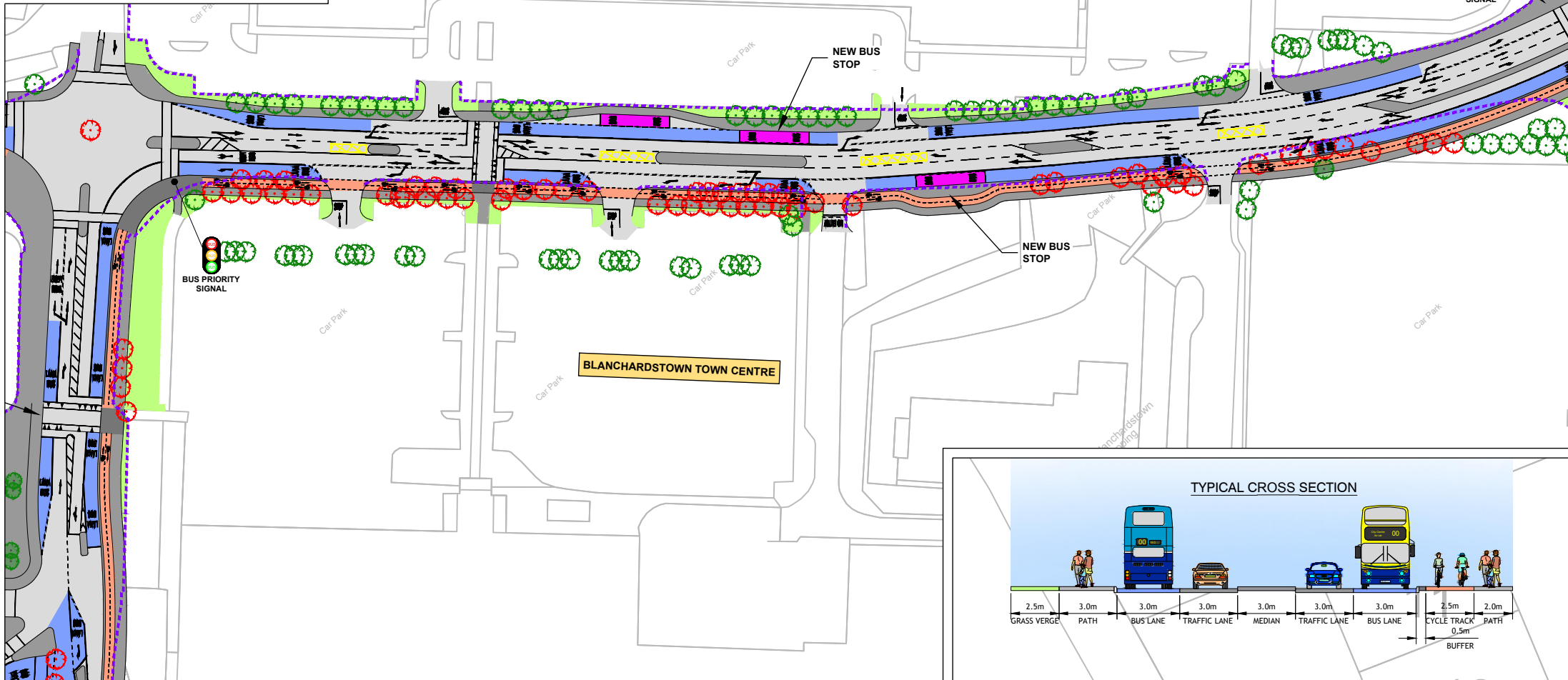


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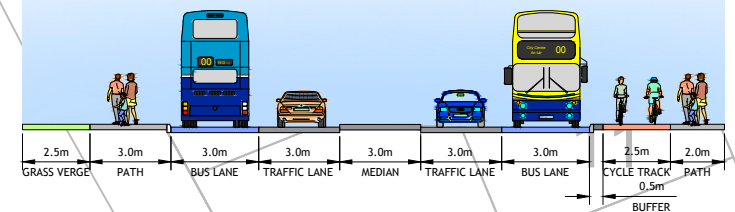
-  BUS LANE
-  CYCLE TRACK
-  FOOTPATH
-  CARRIAGEWAY
-  GRASS AREA / VERGE
-  PEDESTRIAN PRIORITY ZONE
-  BUS STOP LOCATIONS
-  EXISTING TREE TO BE RETAINED
-  EXISTING TREE TO BE REMOVED
-  PROPOSED TREES
-  EXISTING BOUNDARY
-  PROPOSED NEW BOUNDARY
(POSSIBLE LAND ACQUISITION)



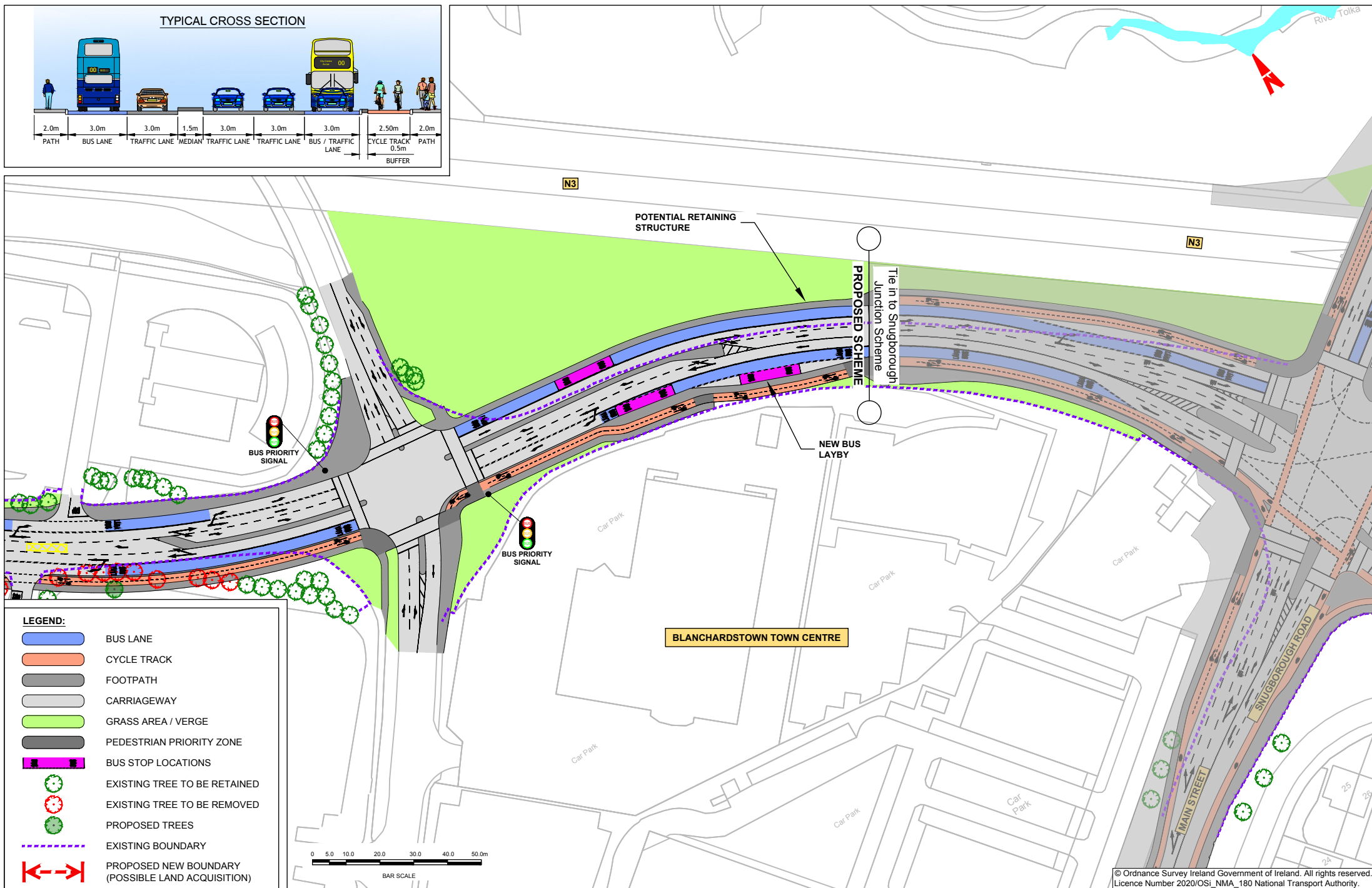
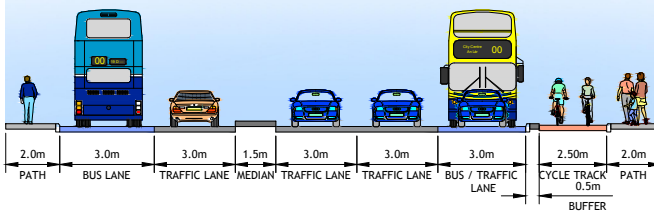
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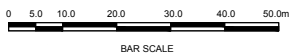


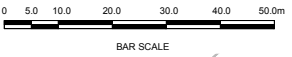
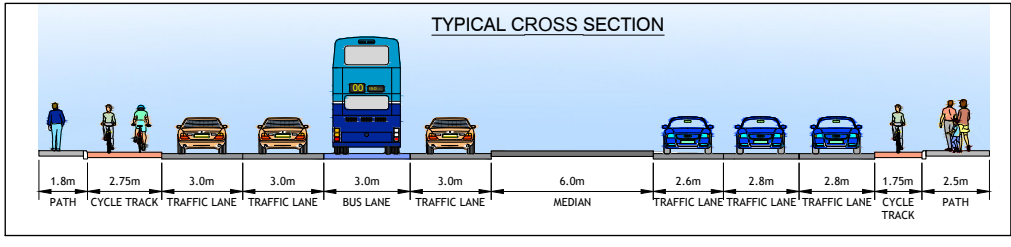
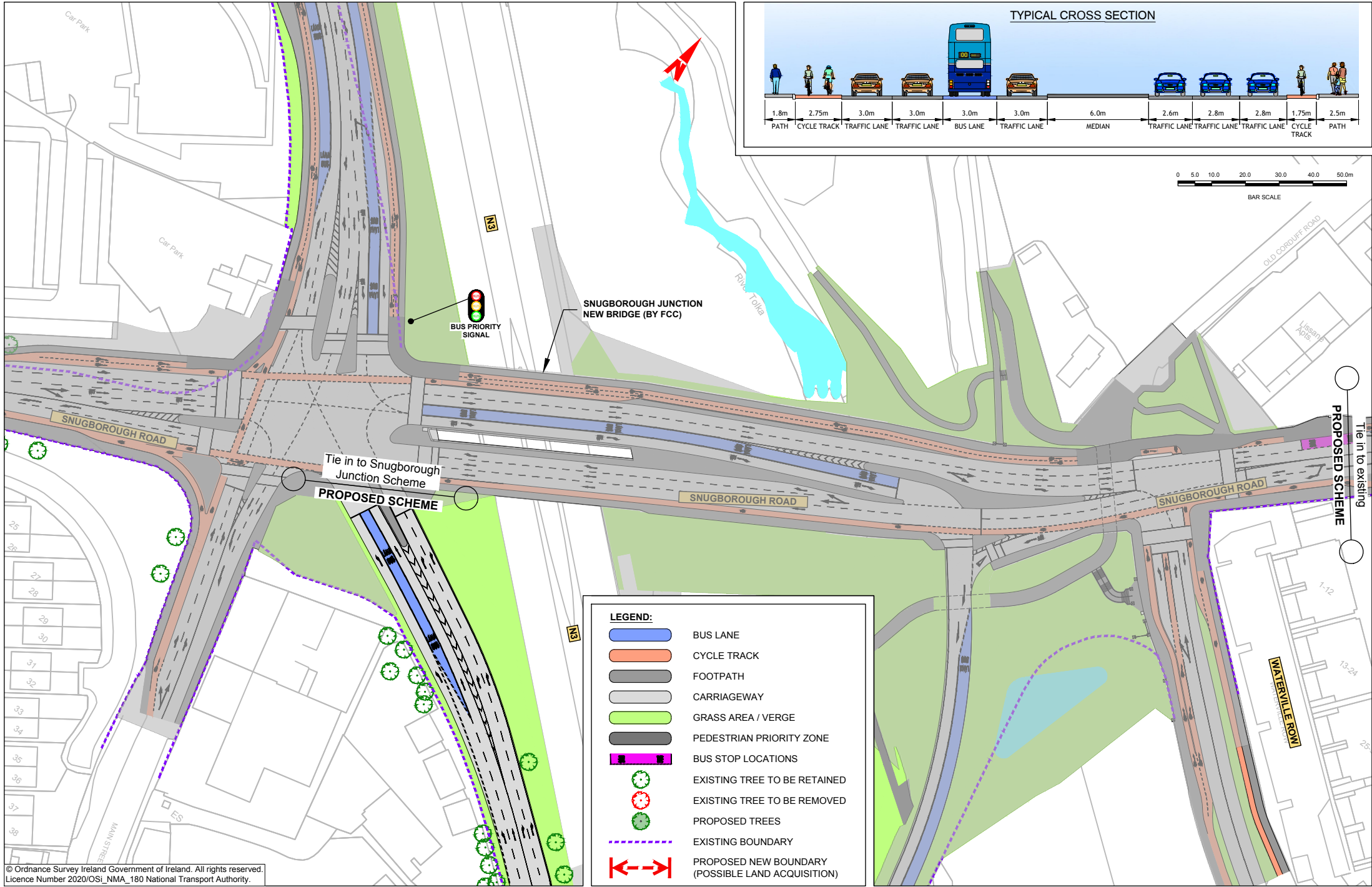
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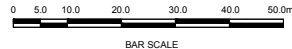
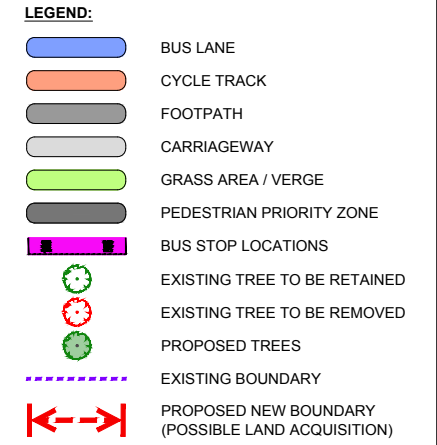
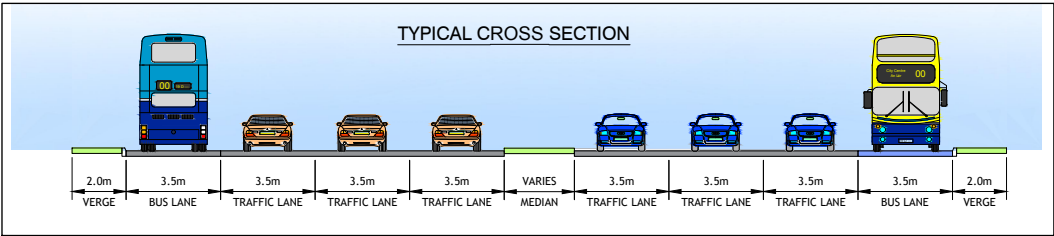
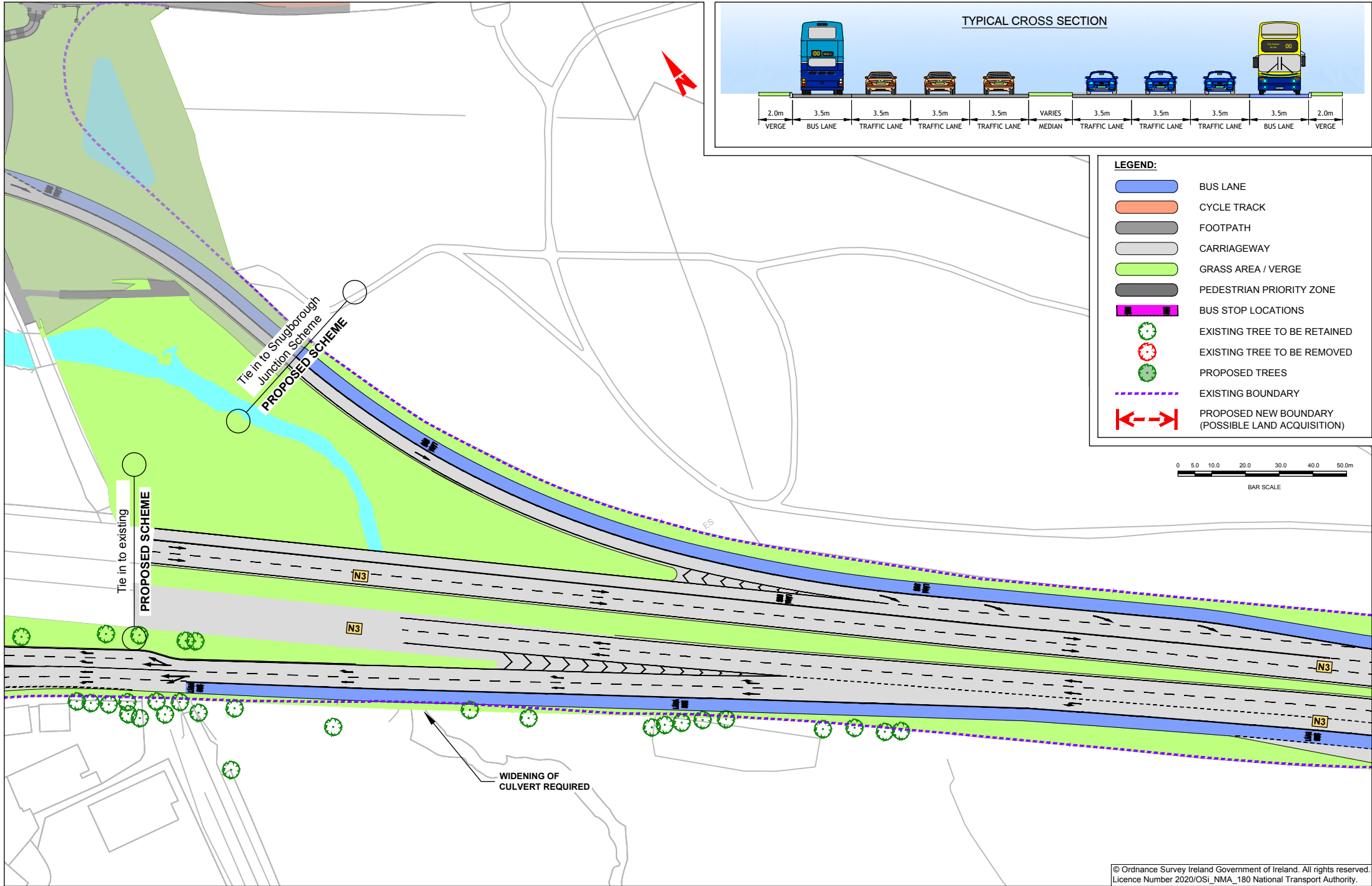


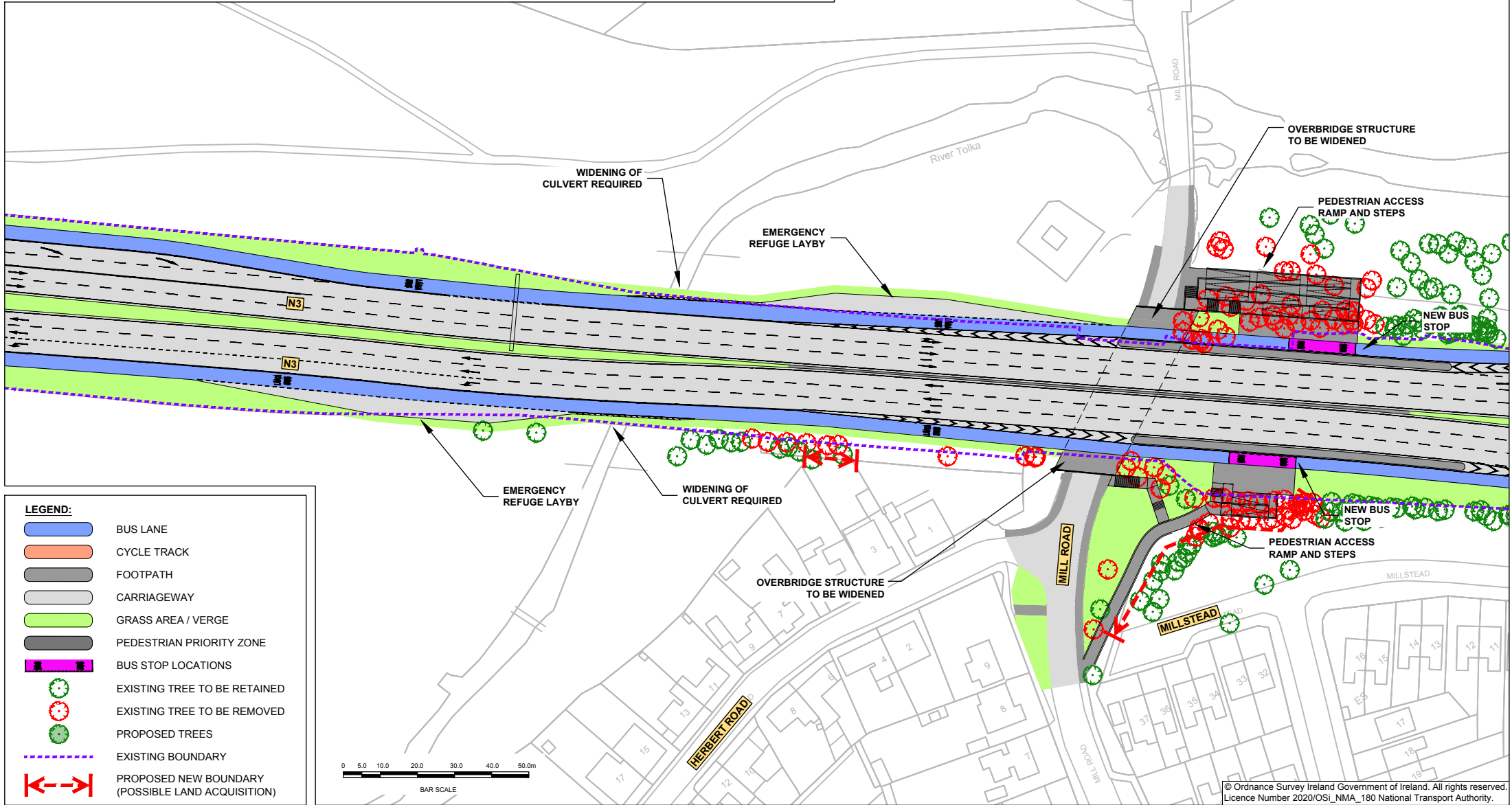
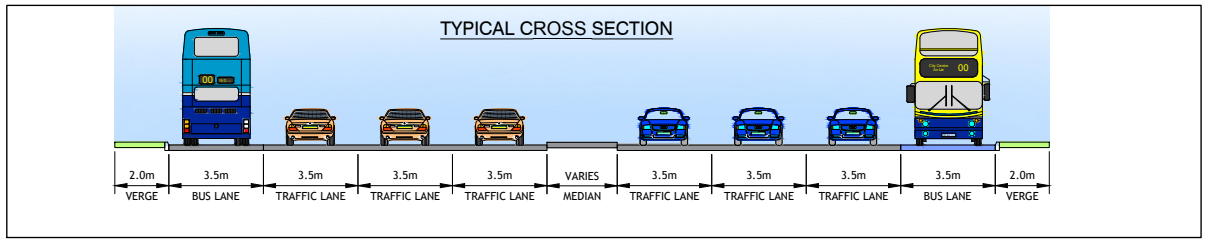
LEGEND:

- BUS LANE
- CYCLE TRACK
- FOOTPATH
- CARRIAGEWAY
- GRASS AREA / VERGE
- PEDESTRIAN PRIORITY ZONE
- BUS STOP LOCATIONS
- EXISTING TREE TO BE RETAINED
- EXISTING TREE TO BE REMOVED
- PROPOSED TREES
- EXISTING BOUNDARY
- PROPOSED NEW BOUNDARY (POSSIBLE LAND ACQUISITION)

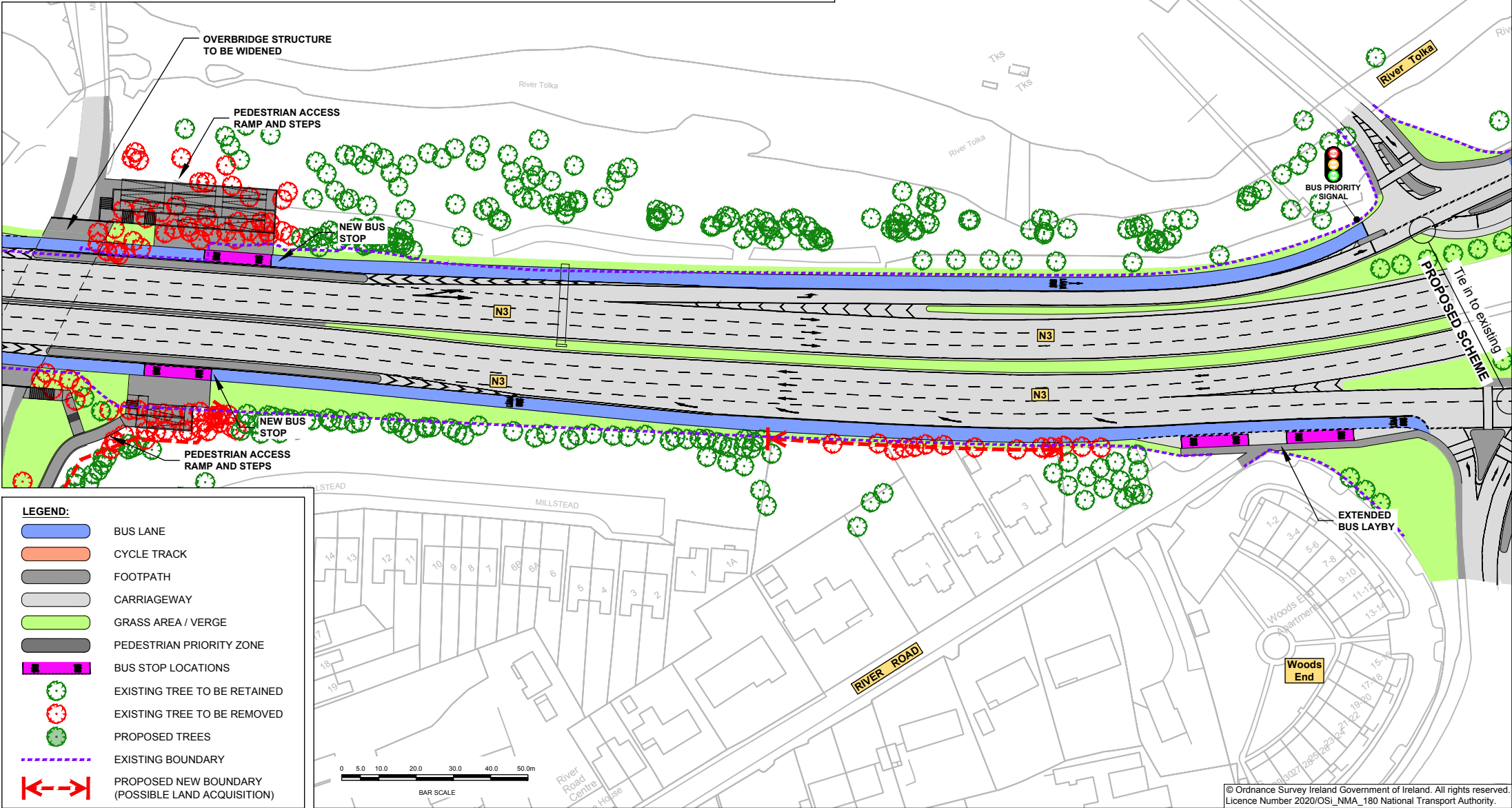
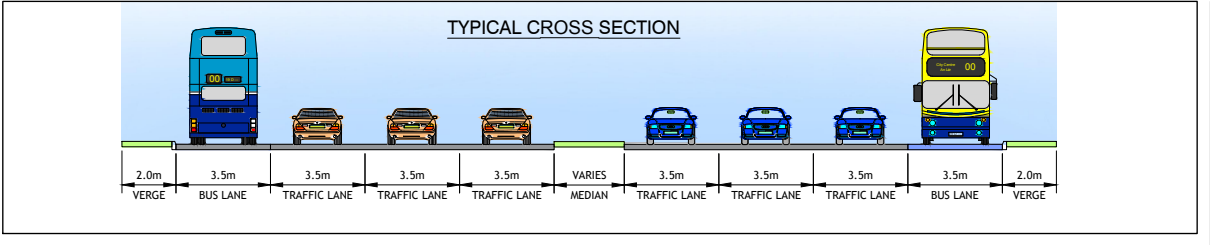


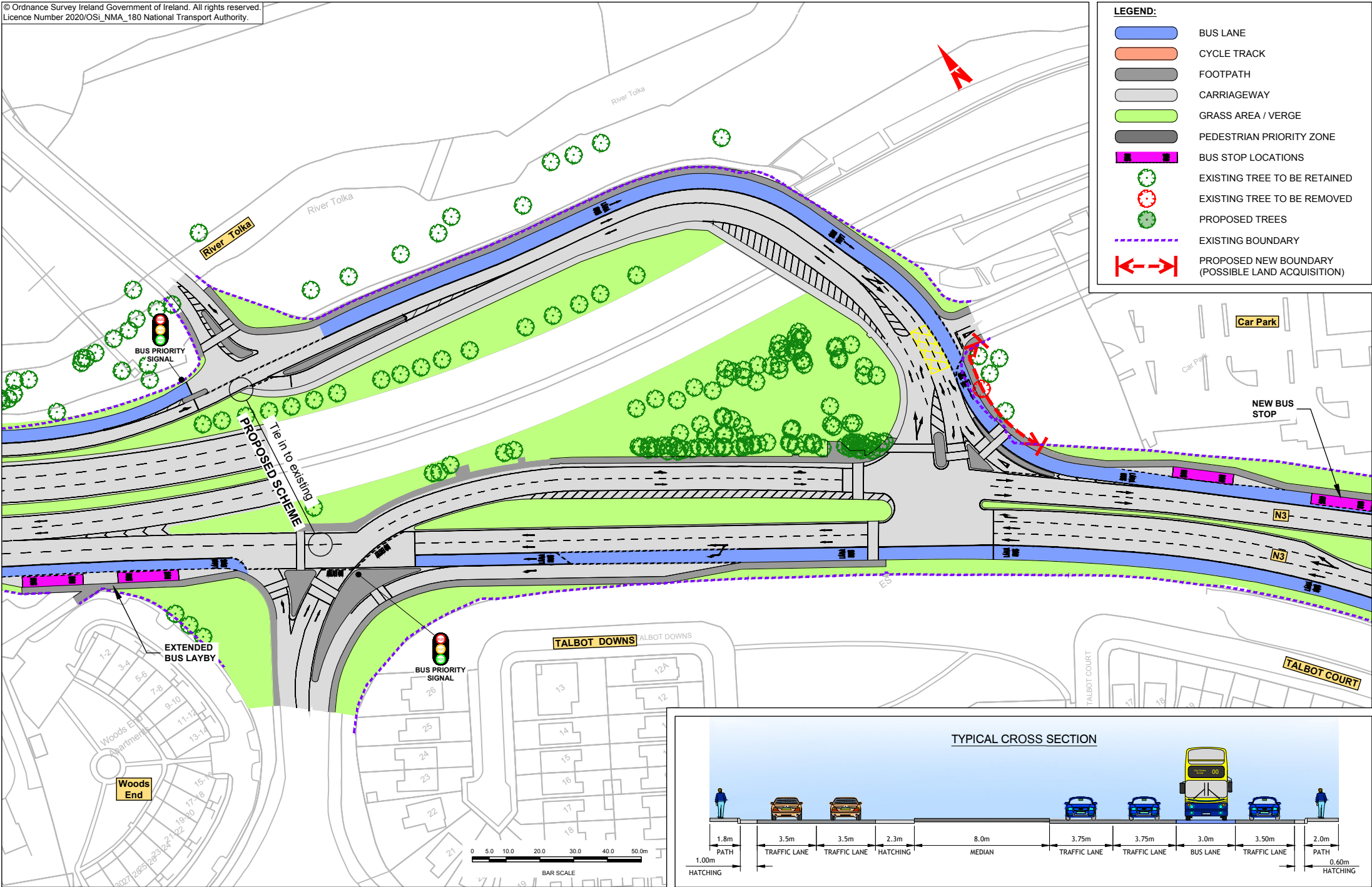


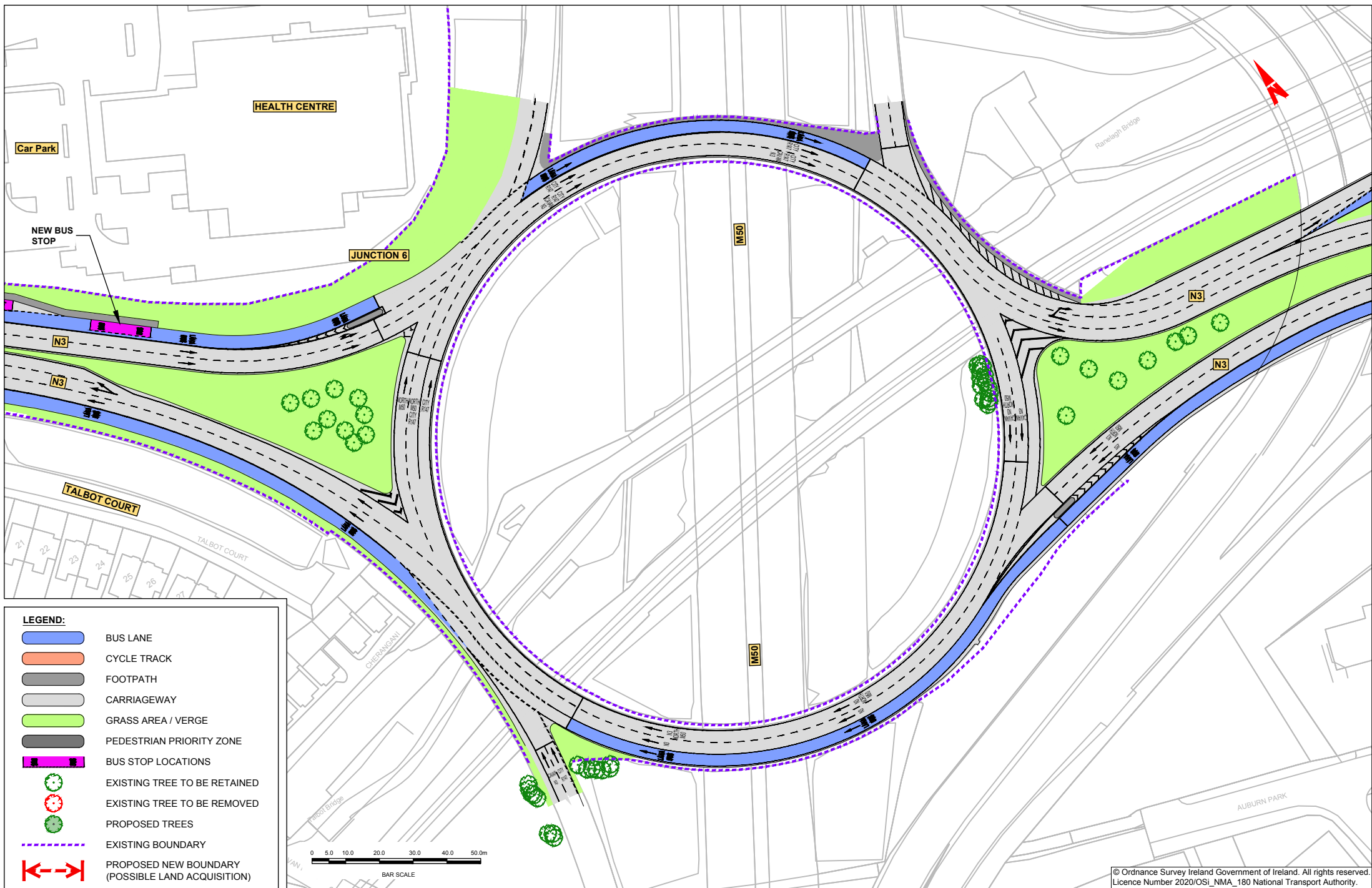


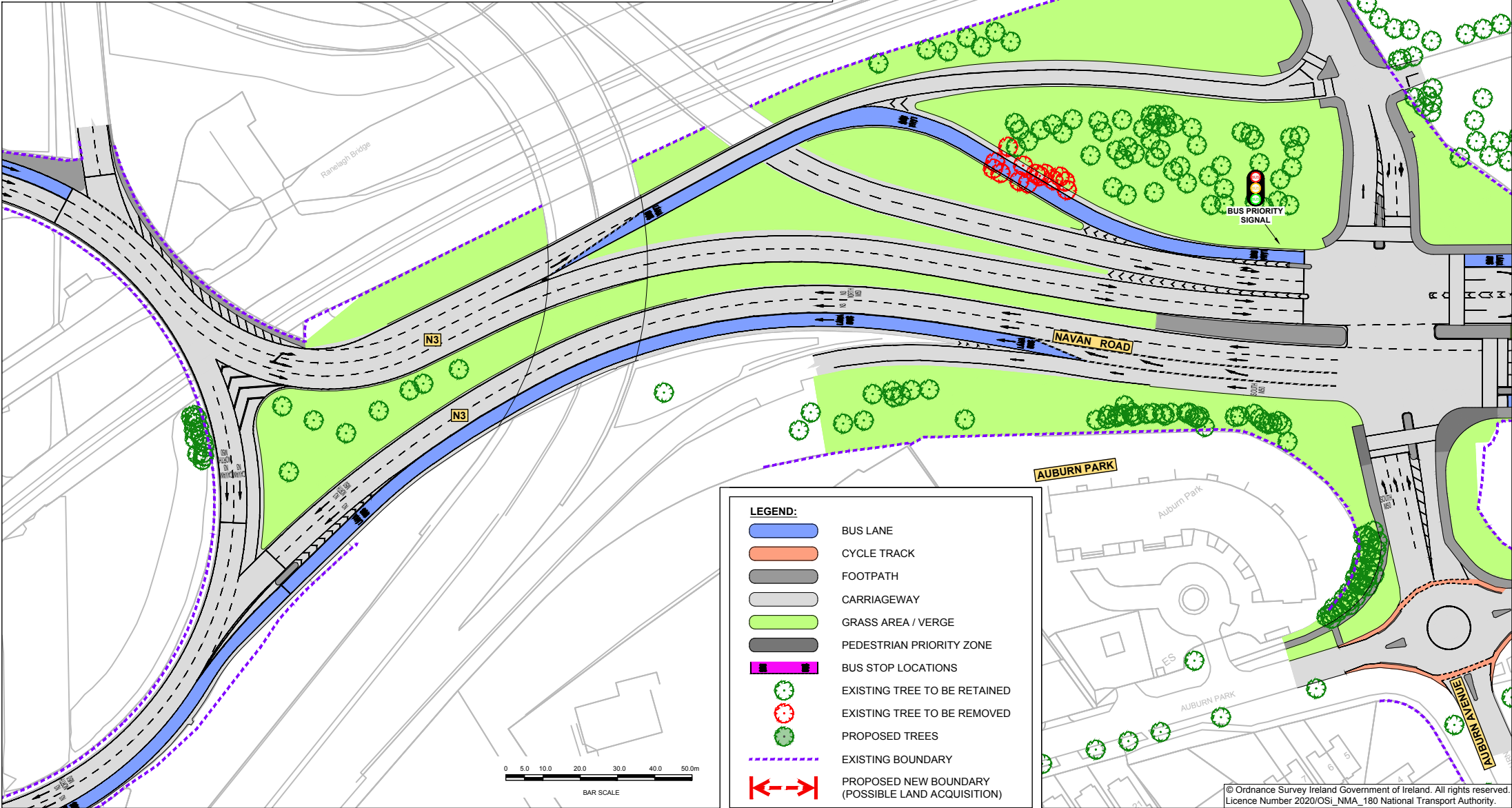
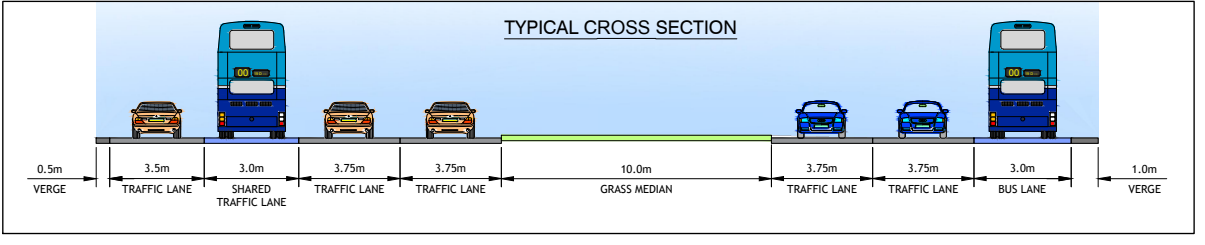


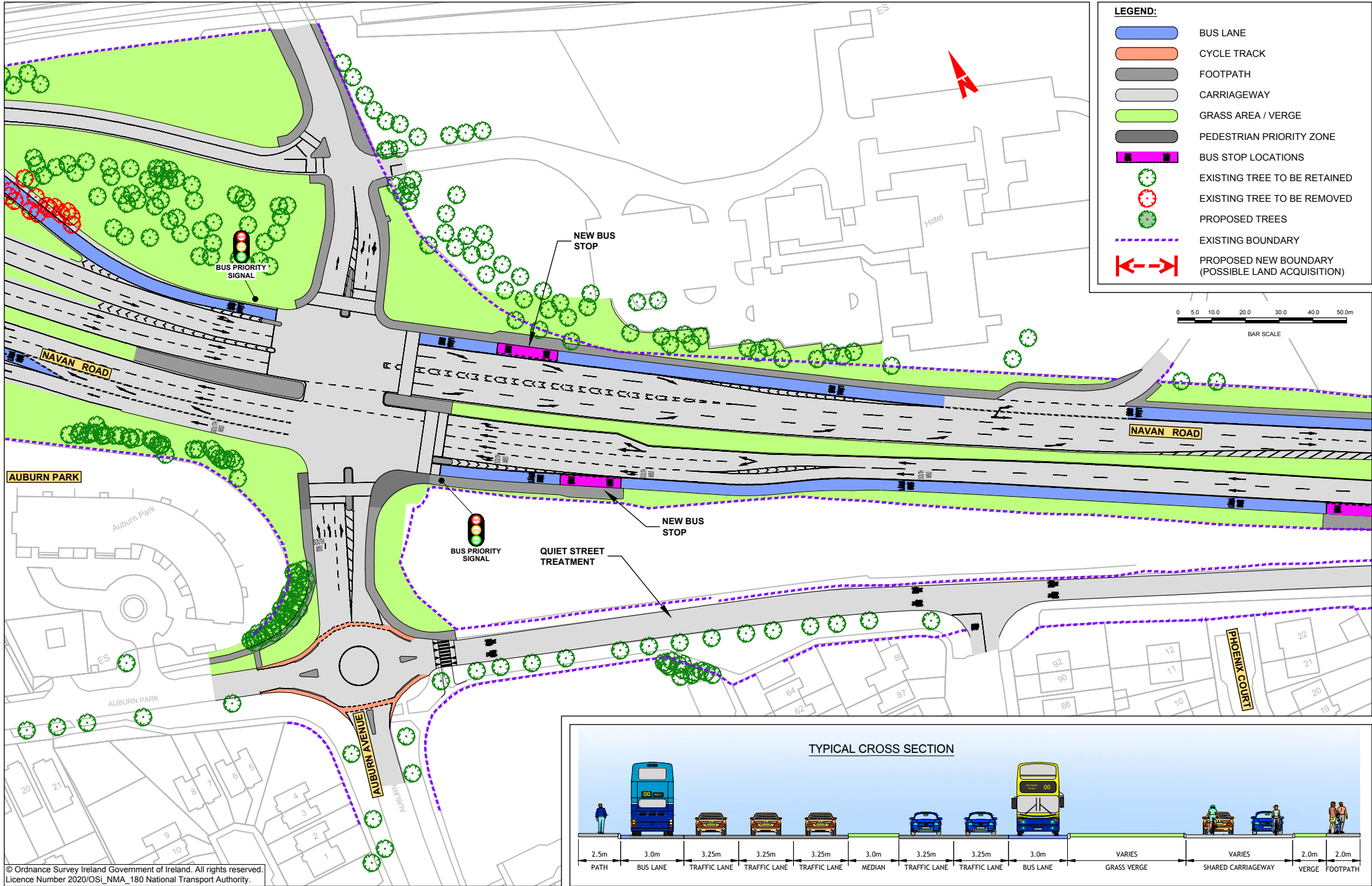
- LEGEND:**
- BUS LANE
 - CYCLE TRACK
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 - PROPOSED NEW BOUNDARY (POSSIBLE LAND ACQUISITION)

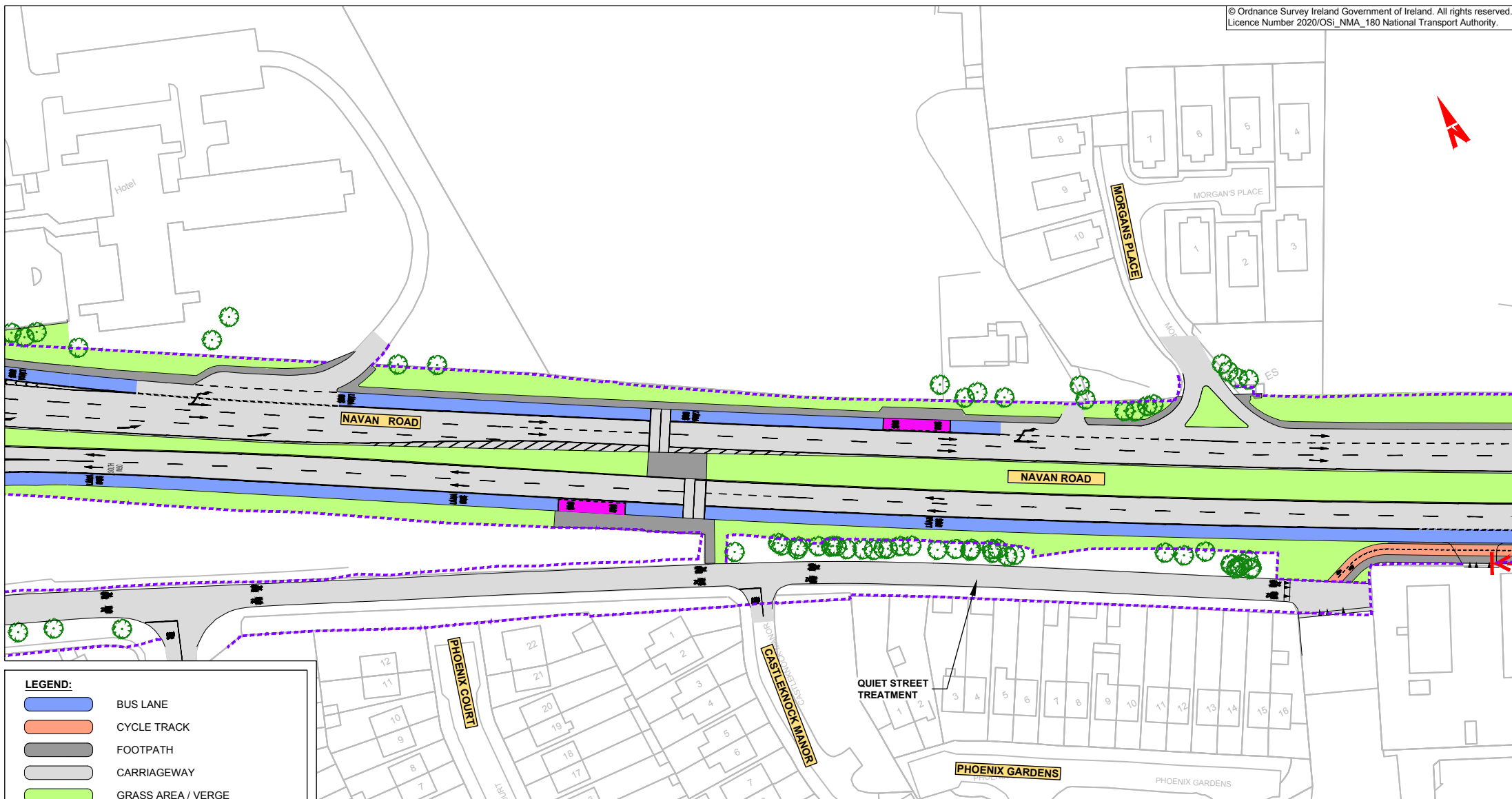






















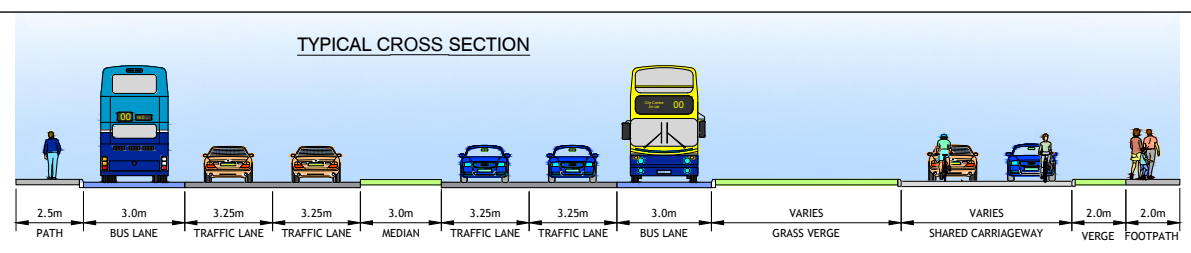


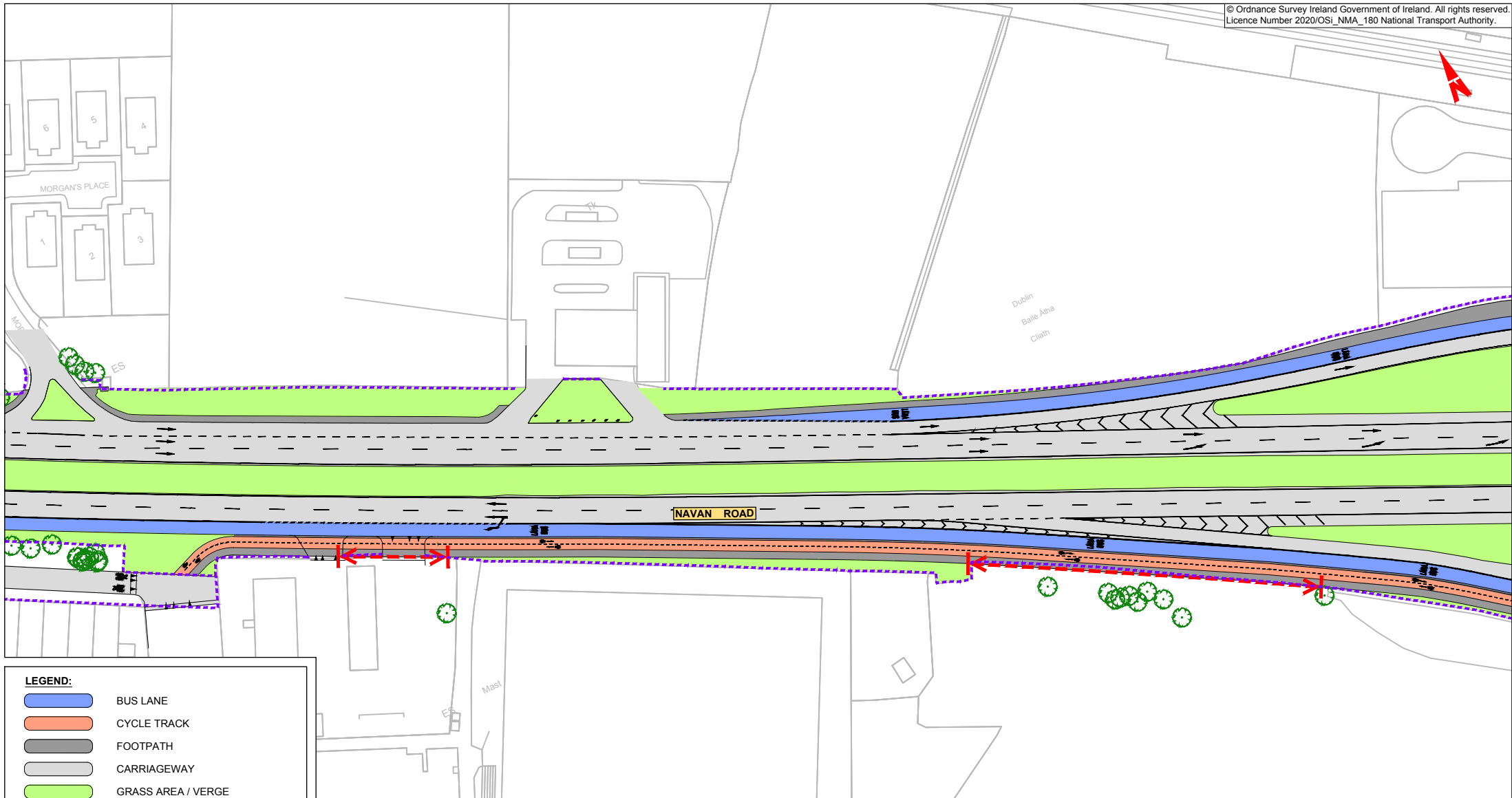
LEGEND:

-  BUS LANE
-  CYCLE TRACK
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-  CARRIAGEWAY
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-  EXISTING TREE TO BE REMOVED
-  PROPOSED TREES
-  EXISTING BOUNDARY
-  PROPOSED NEW BOUNDARY (POSSIBLE LAND ACQUISITION)















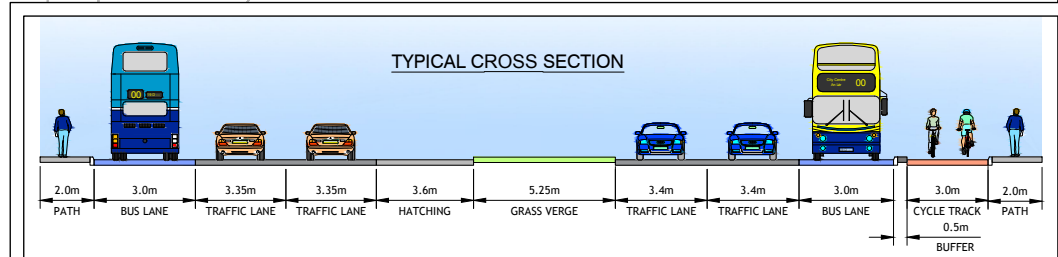
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LEGEND:

-  BUS LANE
-  CYCLE TRACK
-  FOOTPATH
-  CARRIAGEWAY
-  GRASS AREA / VERGE
-  PEDESTRIAN PRIORITY ZONE
-  BUS STOP LOCATIONS
-  EXISTING TREE TO BE RETAINED
-  EXISTING TREE TO BE REMOVED
-  PROPOSED TREES
-  EXISTING BOUNDARY
-  PROPOSED NEW BOUNDARY (POSSIBLE LAND ACQUISITION)



LEGEND:

-  BUS LANE
-  CYCLE TRACK
-  FOOTPATH
-  CARRIAGEWAY
-  GRASS AREA / VERGE
-  PEDESTRIAN PRIORITY ZONE
-  BUS STOP LOCATIONS
-  EXISTING TREE TO BE RETAINED
-  EXISTING TREE TO BE REMOVED
-  PROPOSED TREES
-  EXISTING BOUNDARY
-  PROPOSED NEW BOUNDARY (POSSIBLE LAND ACQUISITION)

0 5.0 10.0 20.0 30.0 40.0 50.0m

BAR SCALE

NAVAN ROAD PARKWAY STATION

NEW BUS LAYBY



BUS PRIORITY SIGNAL

NEW BUS STOP

NAVAN ROAD

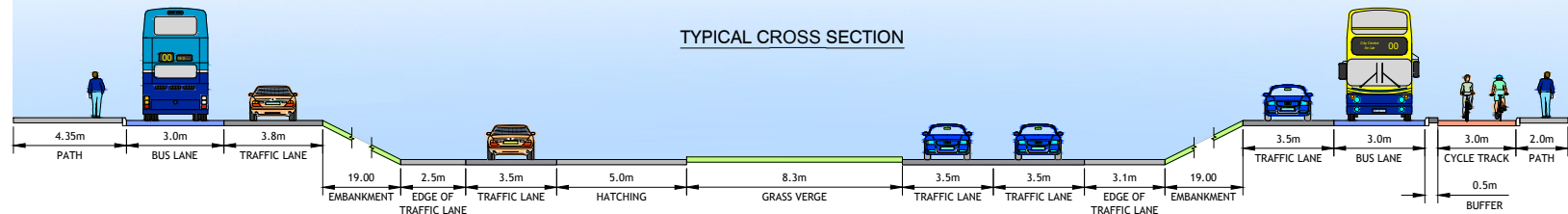
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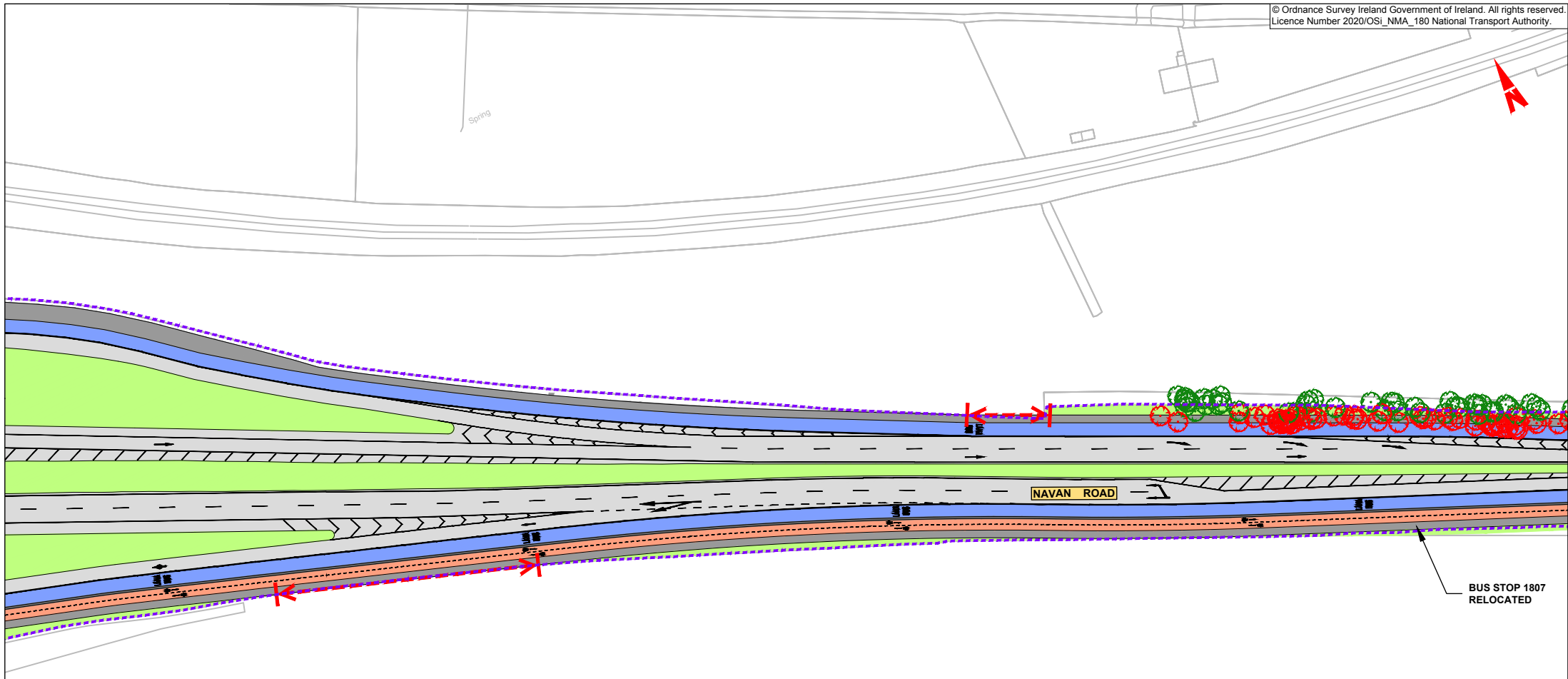
NEW BUS LAYBY















BUS PRIORITY SIGNAL

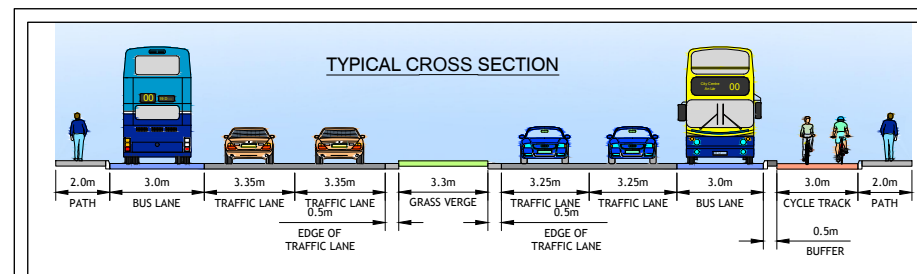
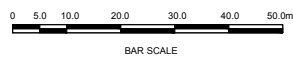
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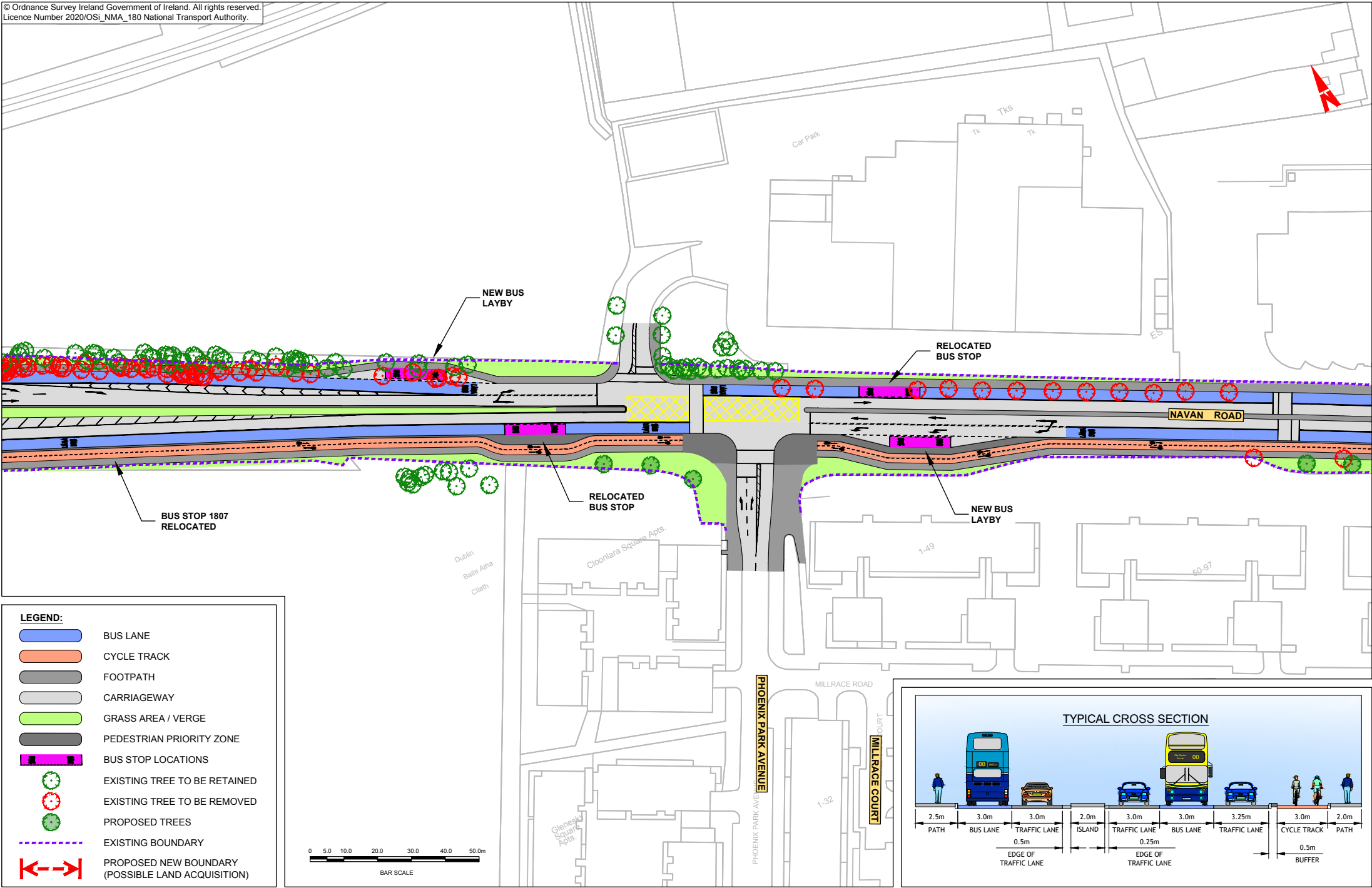


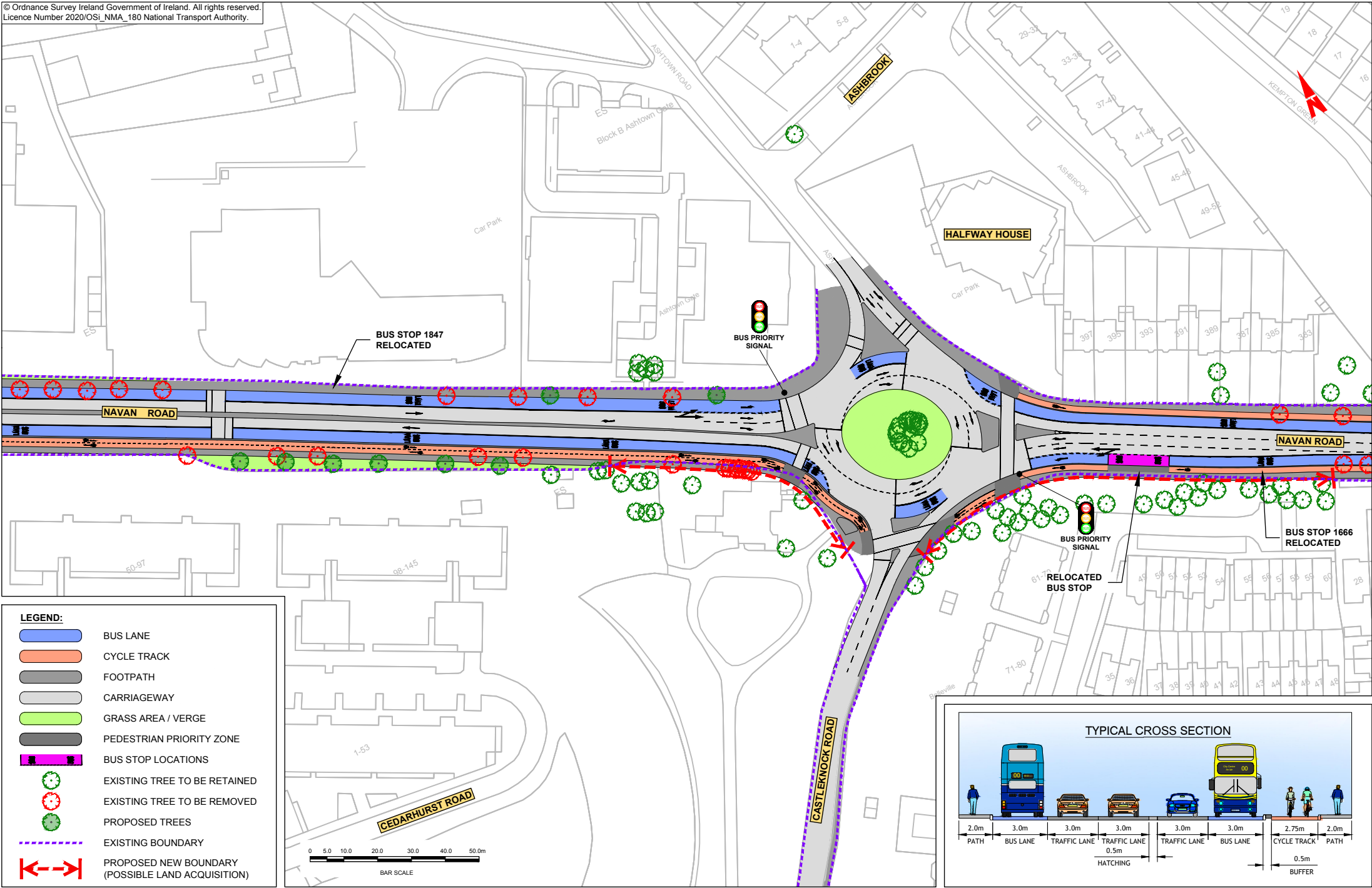


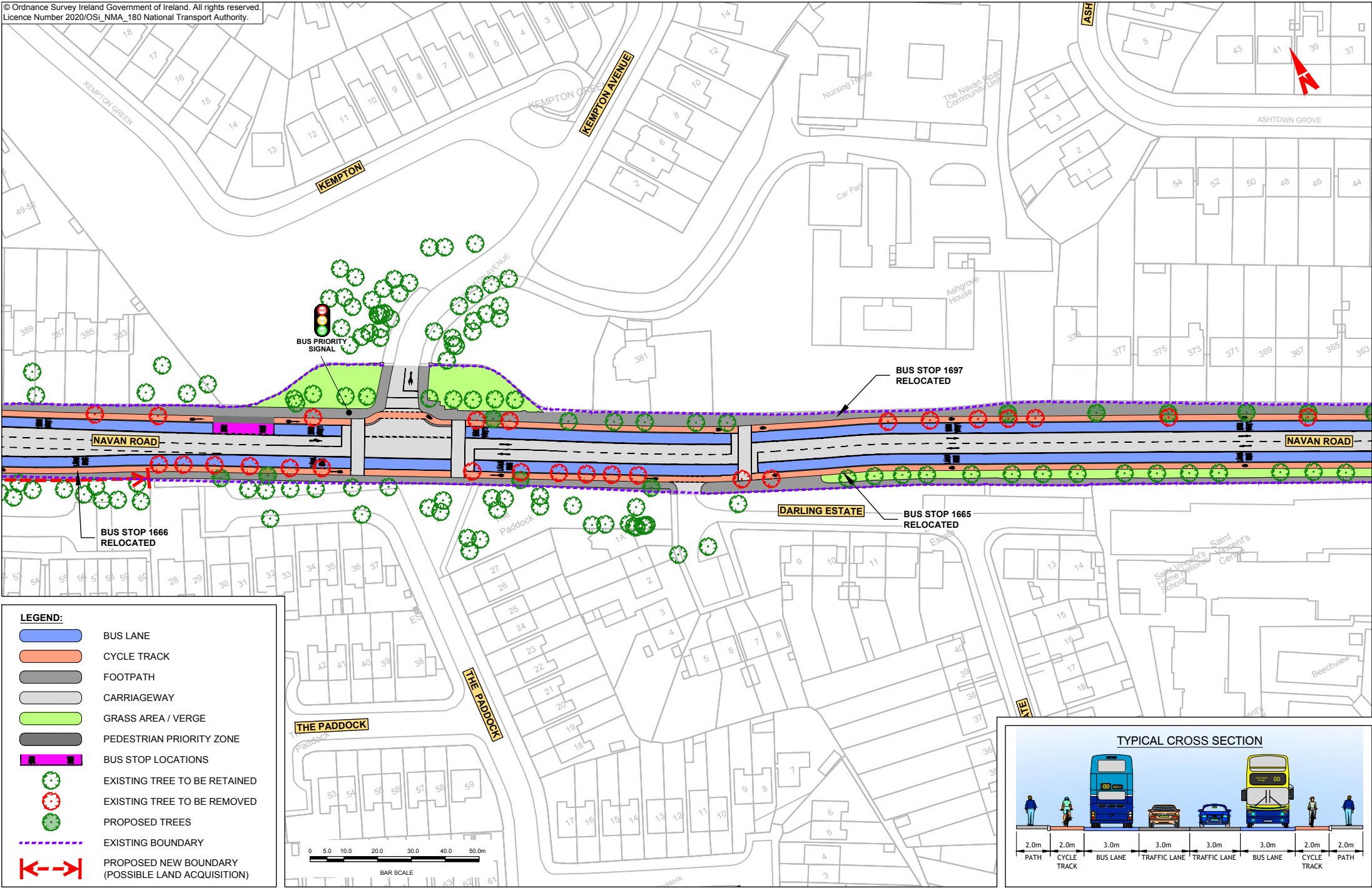
LEGEND:

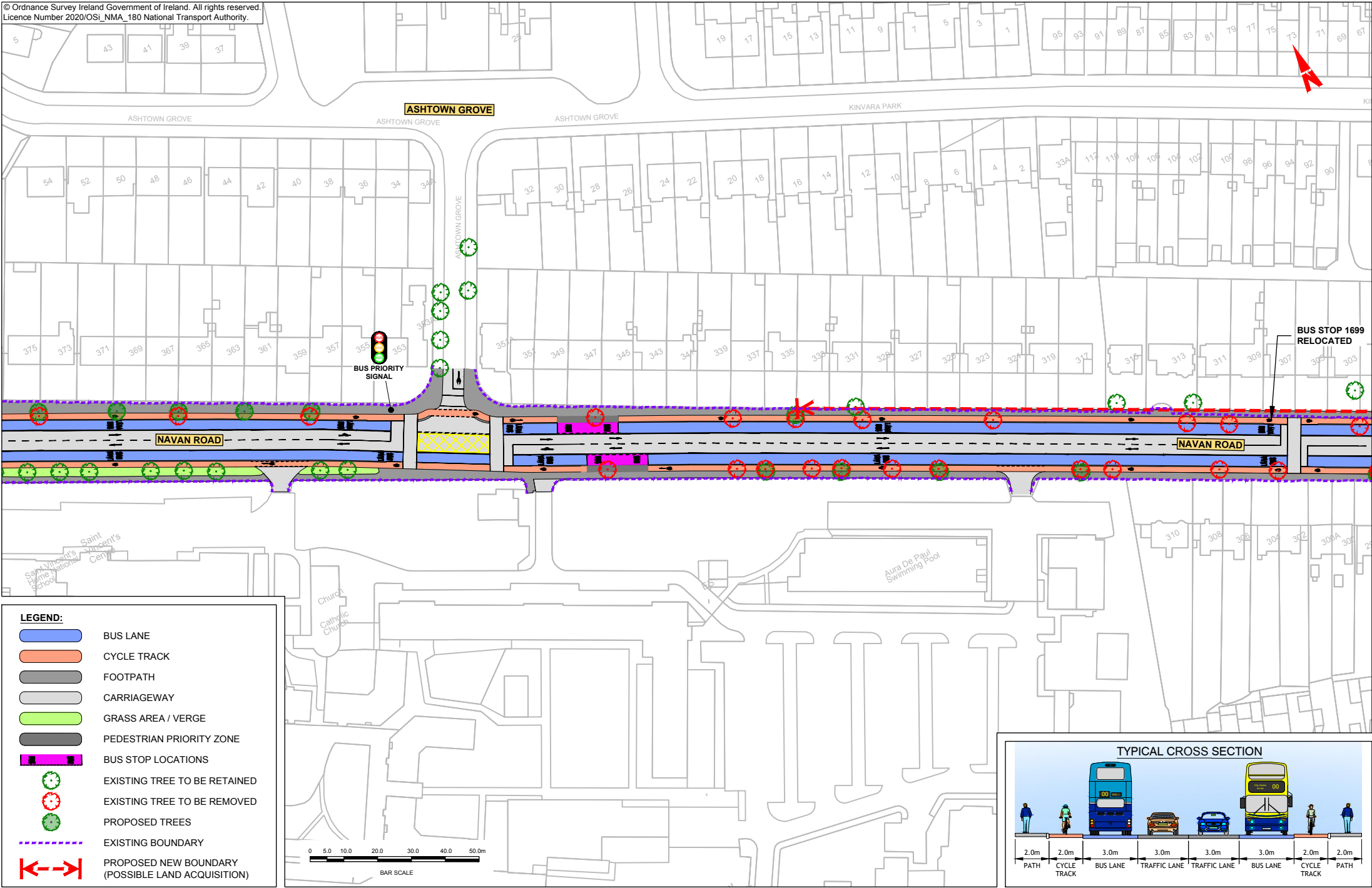
-  BUS LANE
-  CYCLE TRACK
-  FOOTPATH
-  CARRIAGEWAY
-  GRASS AREA / VERGE
-  PEDESTRIAN PRIORITY ZONE
-  BUS STOP LOCATIONS
-  EXISTING TREE TO BE RETAINED
-  EXISTING TREE TO BE REMOVED
-  PROPOSED TREES
-  EXISTING BOUNDARY
-  PROPOSED NEW BOUNDARY (POSSIBLE LAND ACQUISITION)





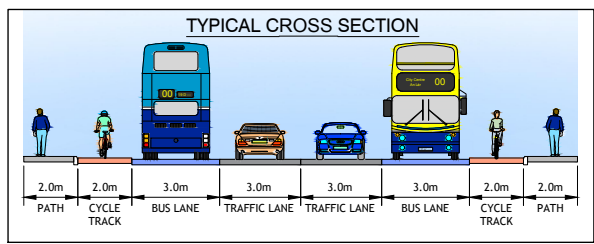


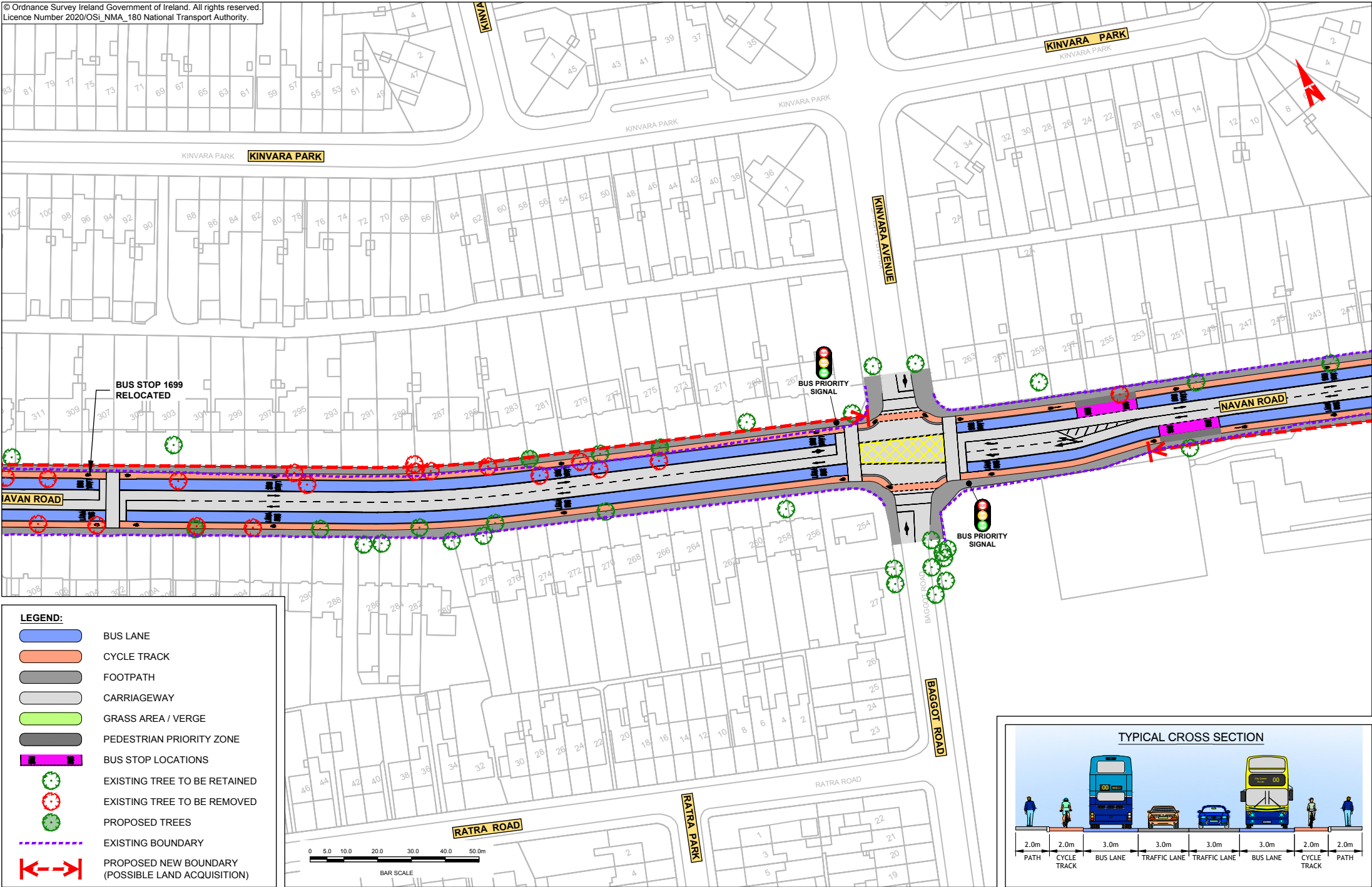


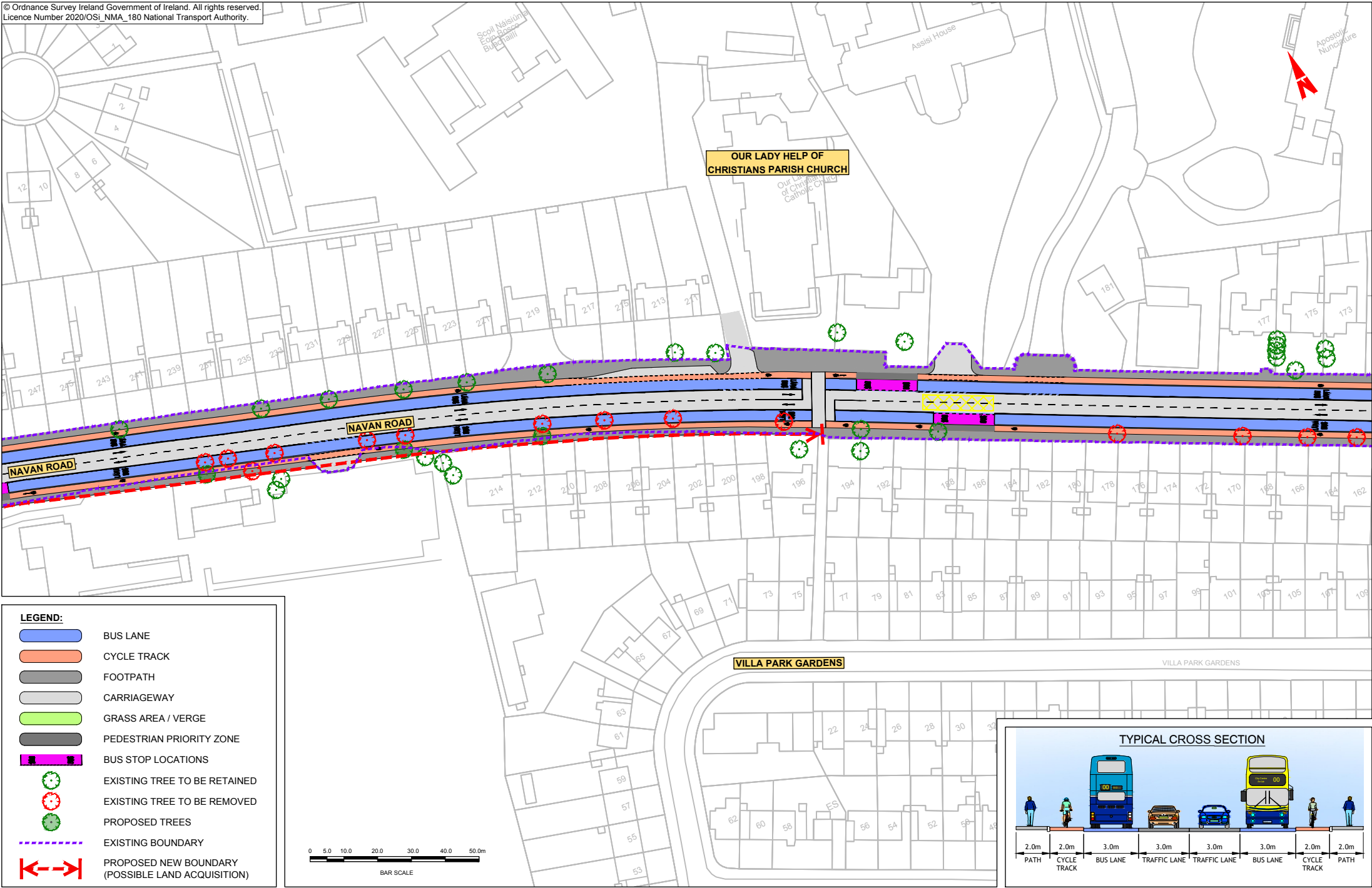


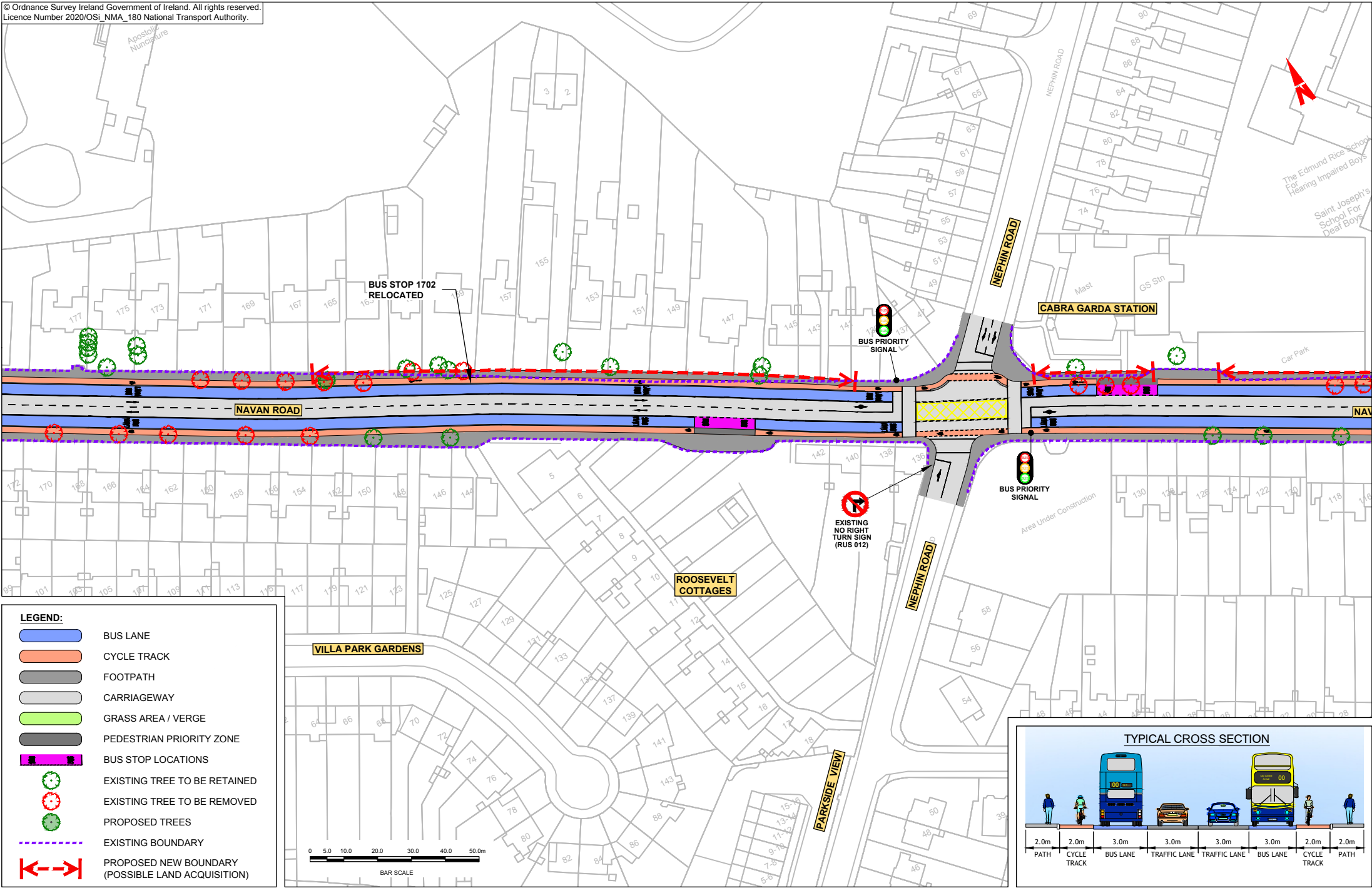
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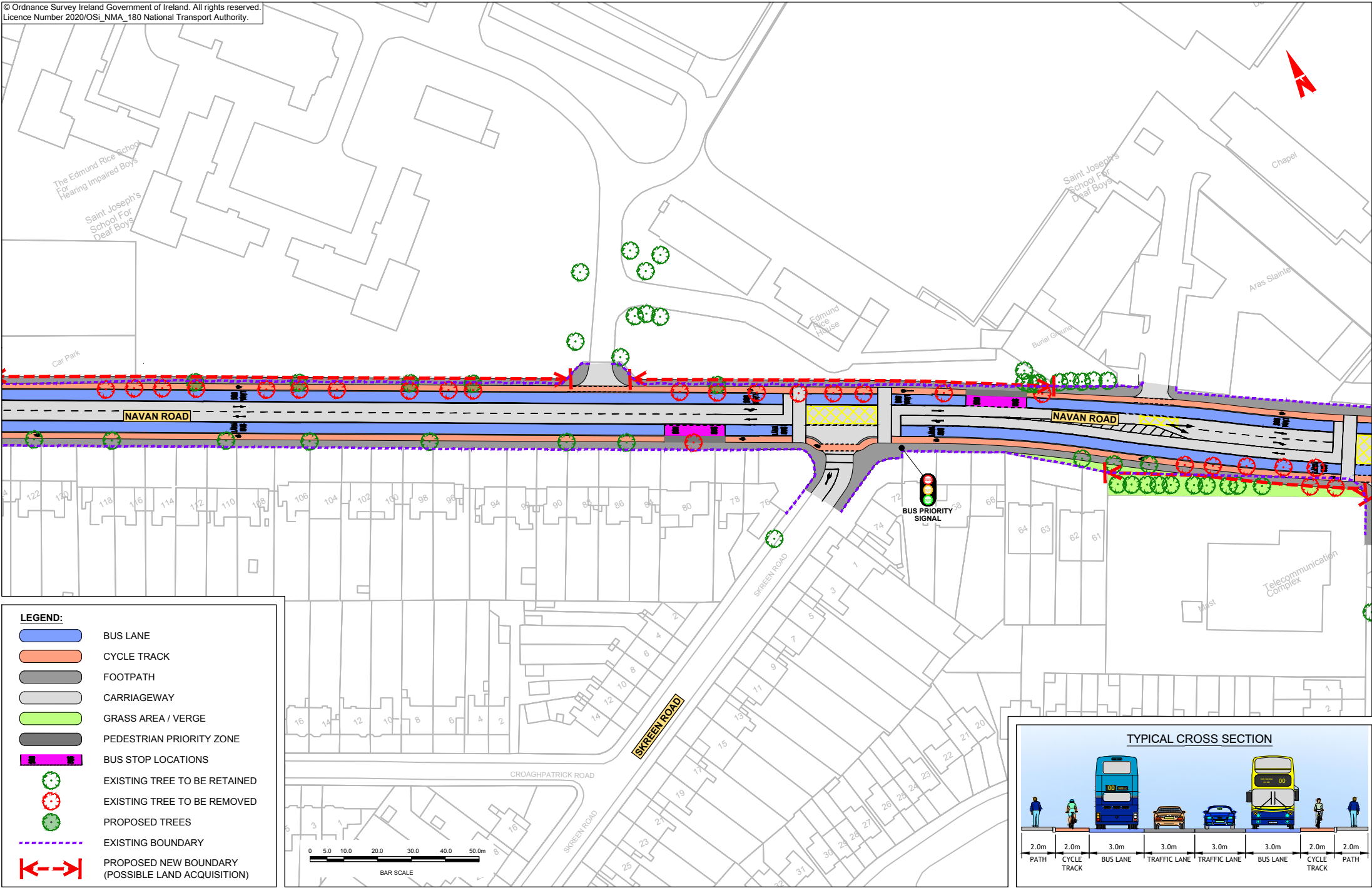
- BUS LANE
- CYCLE TRACK
- FOOTPATH
- CARRIAGEWAY
- GRASS AREA / VERGE
- PEDESTRIAN PRIORITY ZONE
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- EXISTING TREE TO BE RETAINED
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- PROPOSED TREES
- EXISTING BOUNDARY
- PROPOSED NEW BOUNDARY (POSSIBLE LAND ACQUISITION)

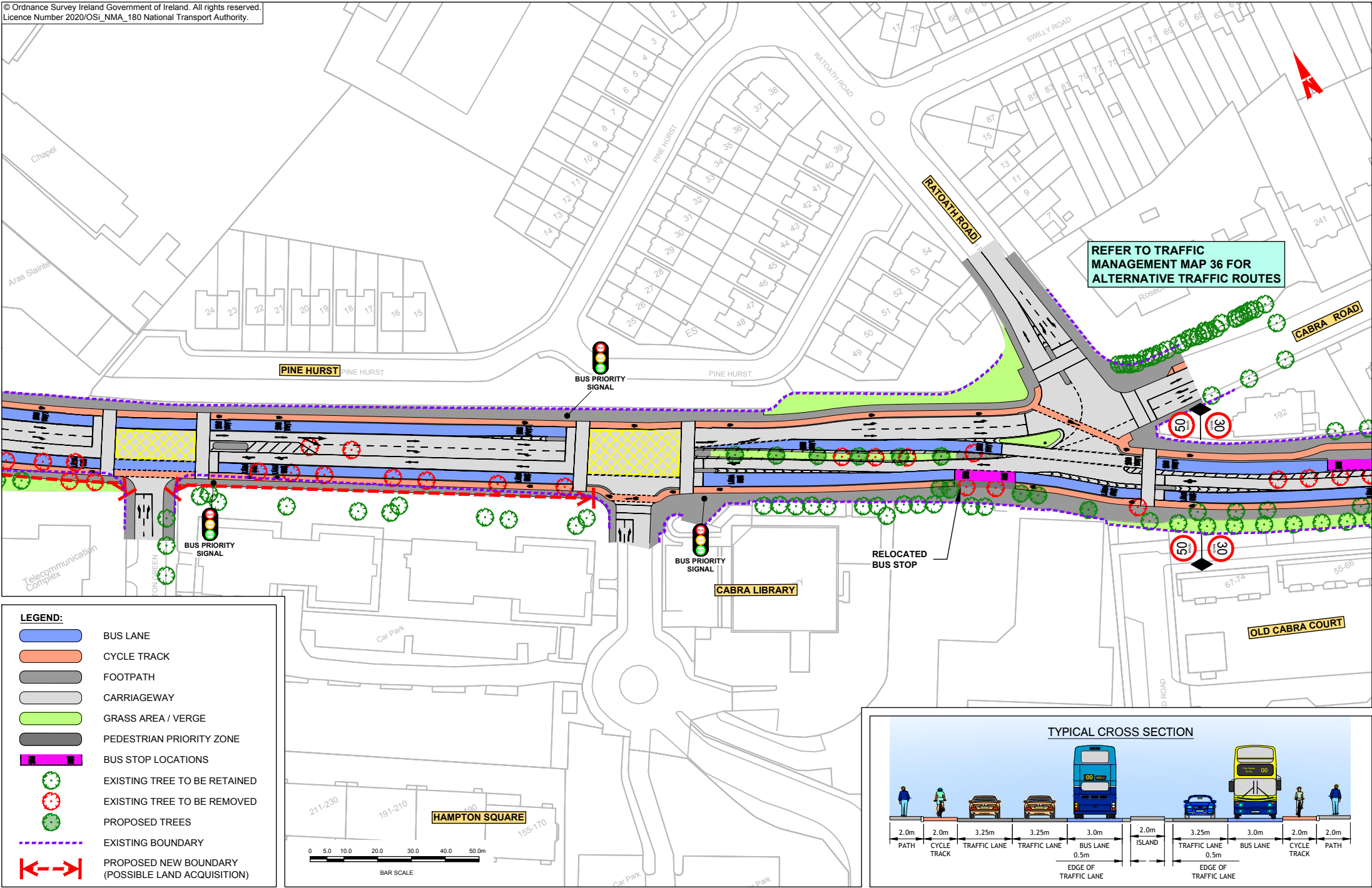


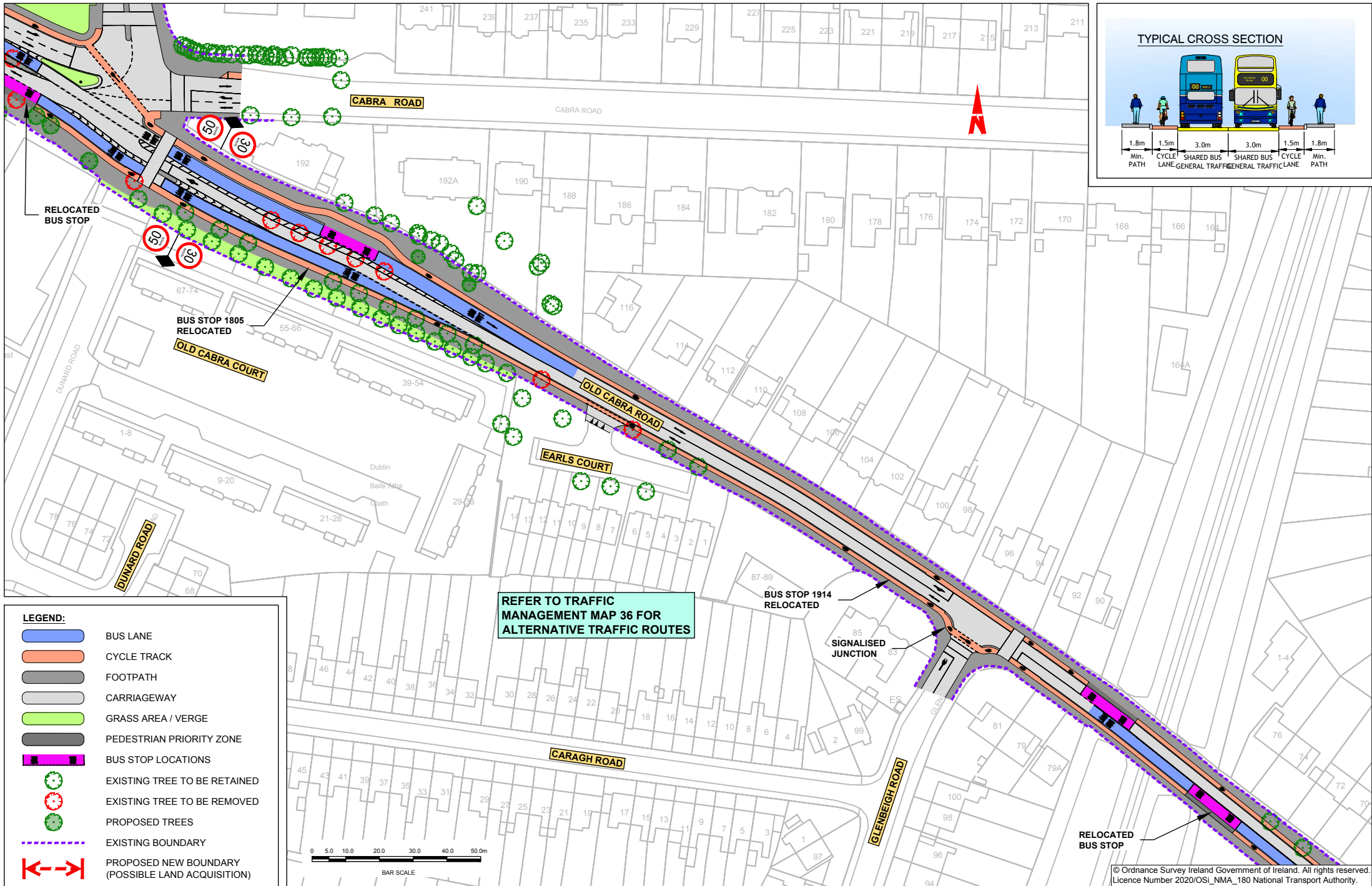


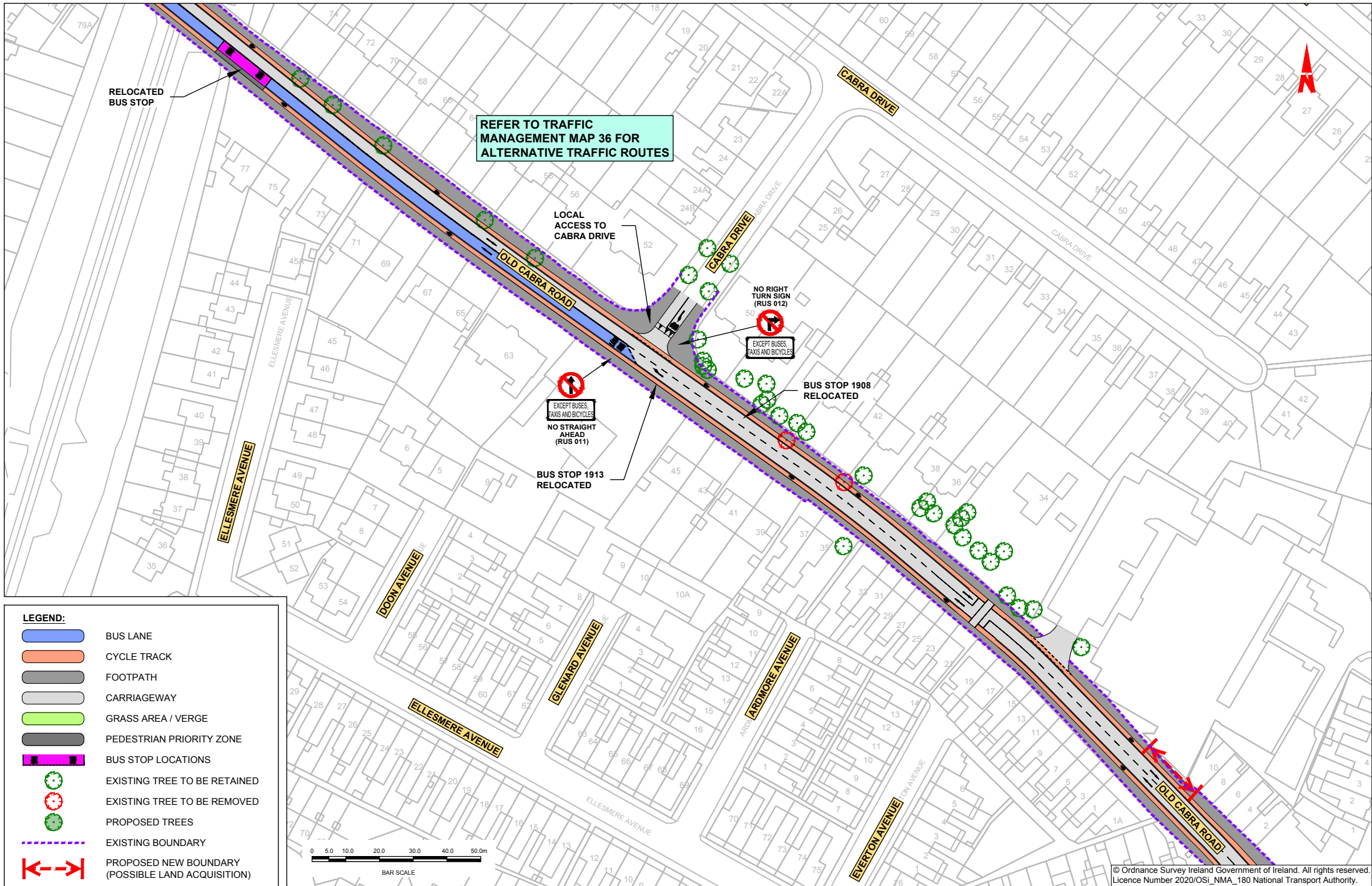


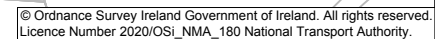


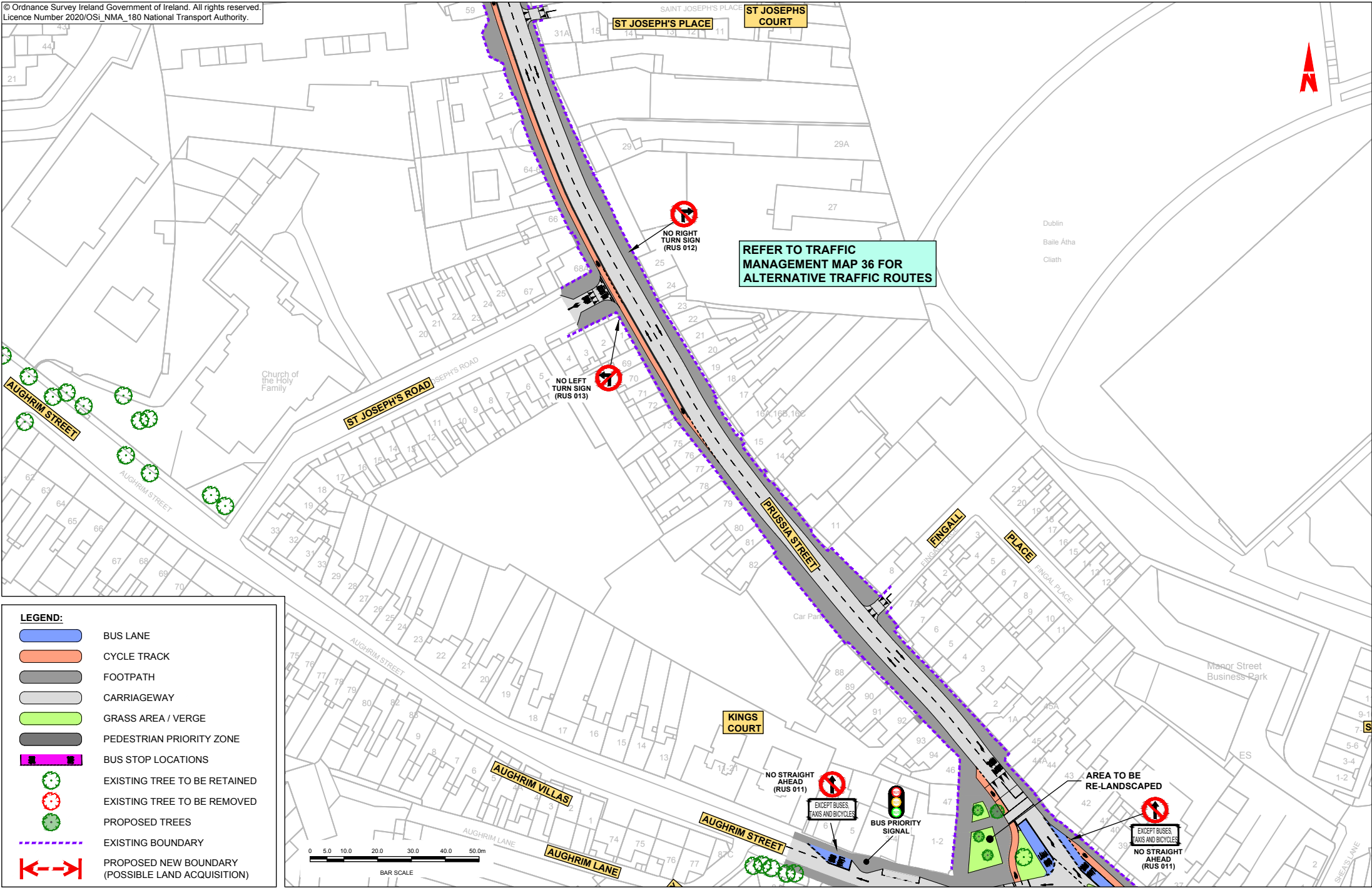


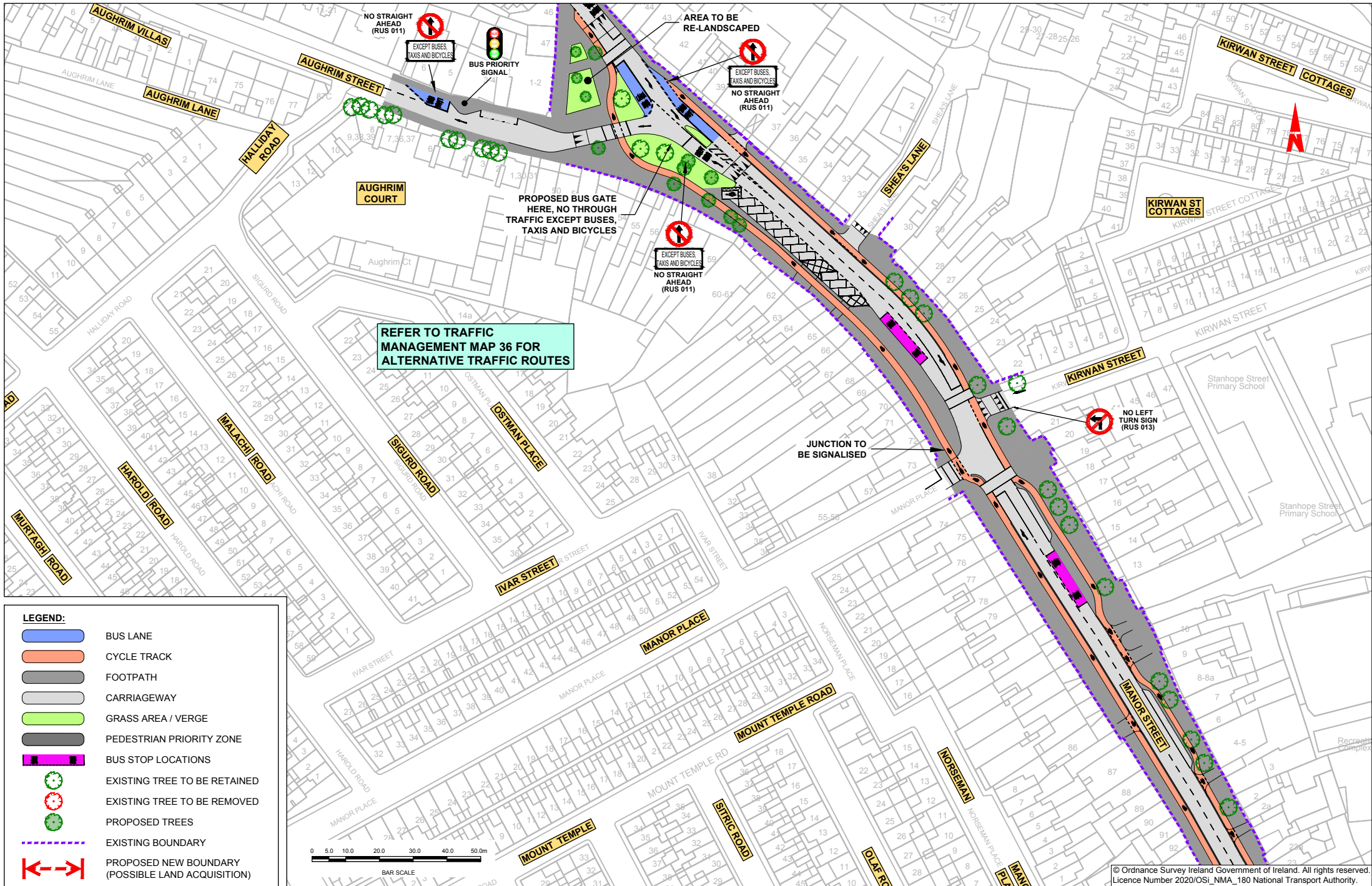


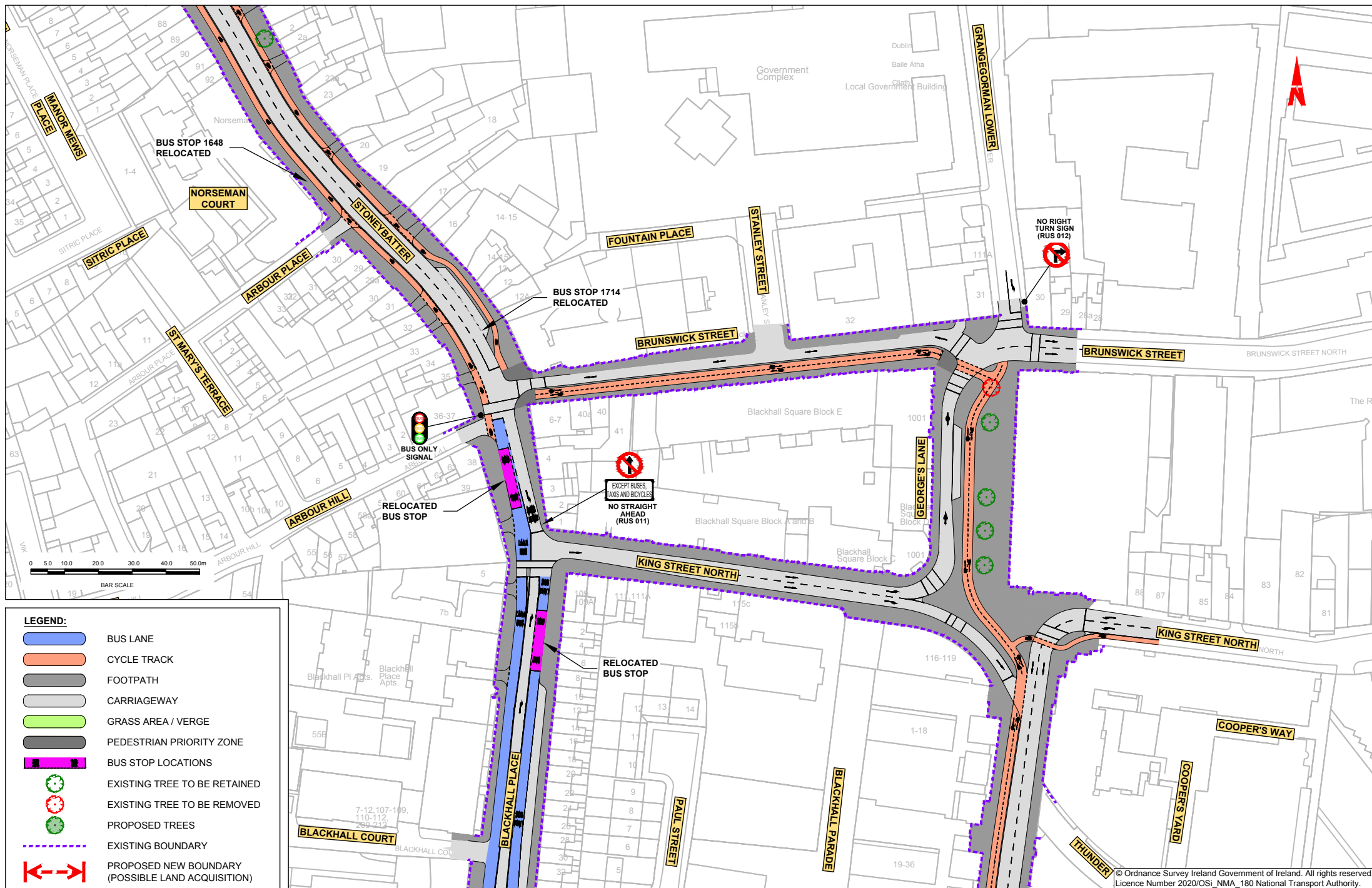


















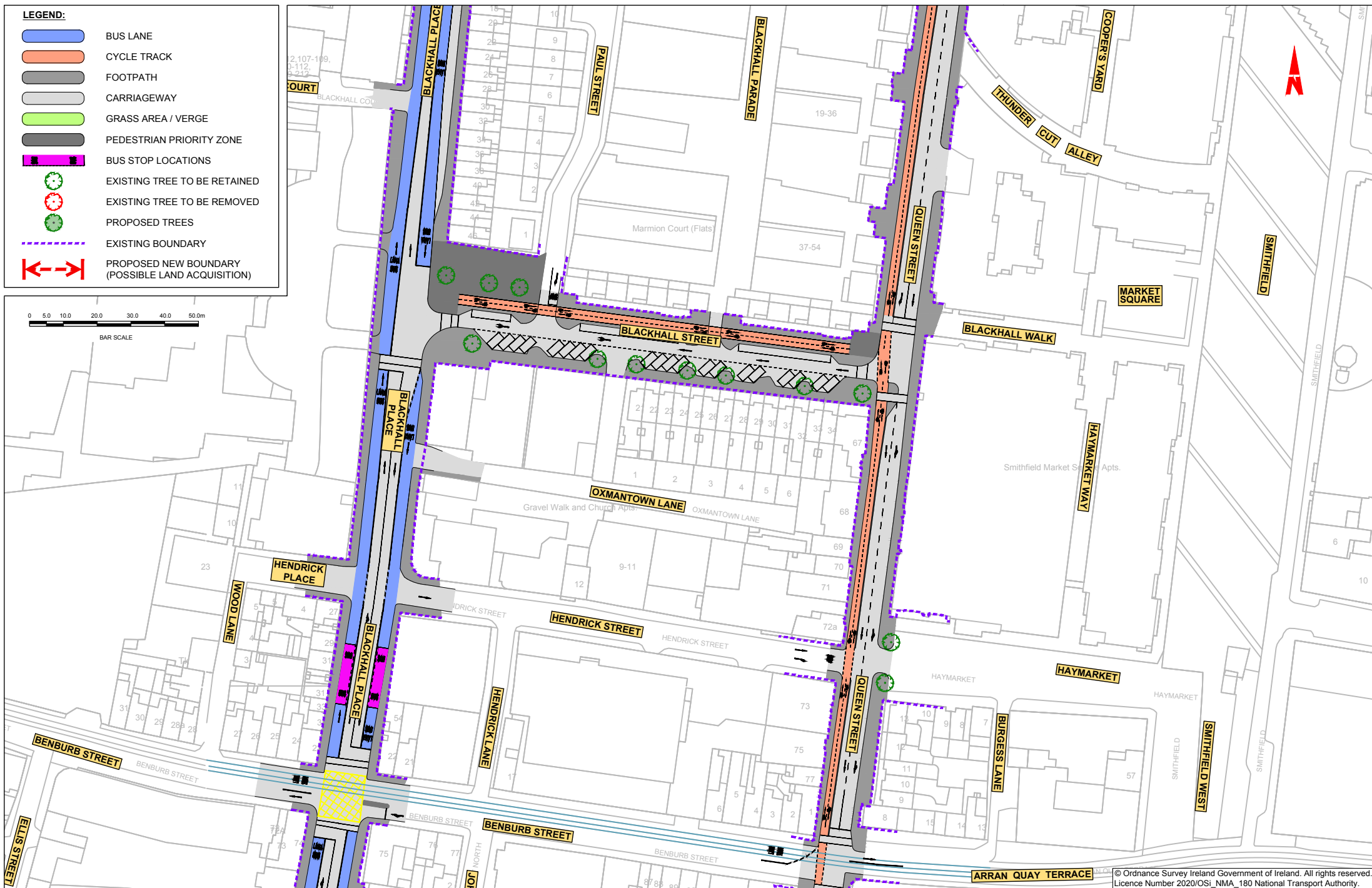




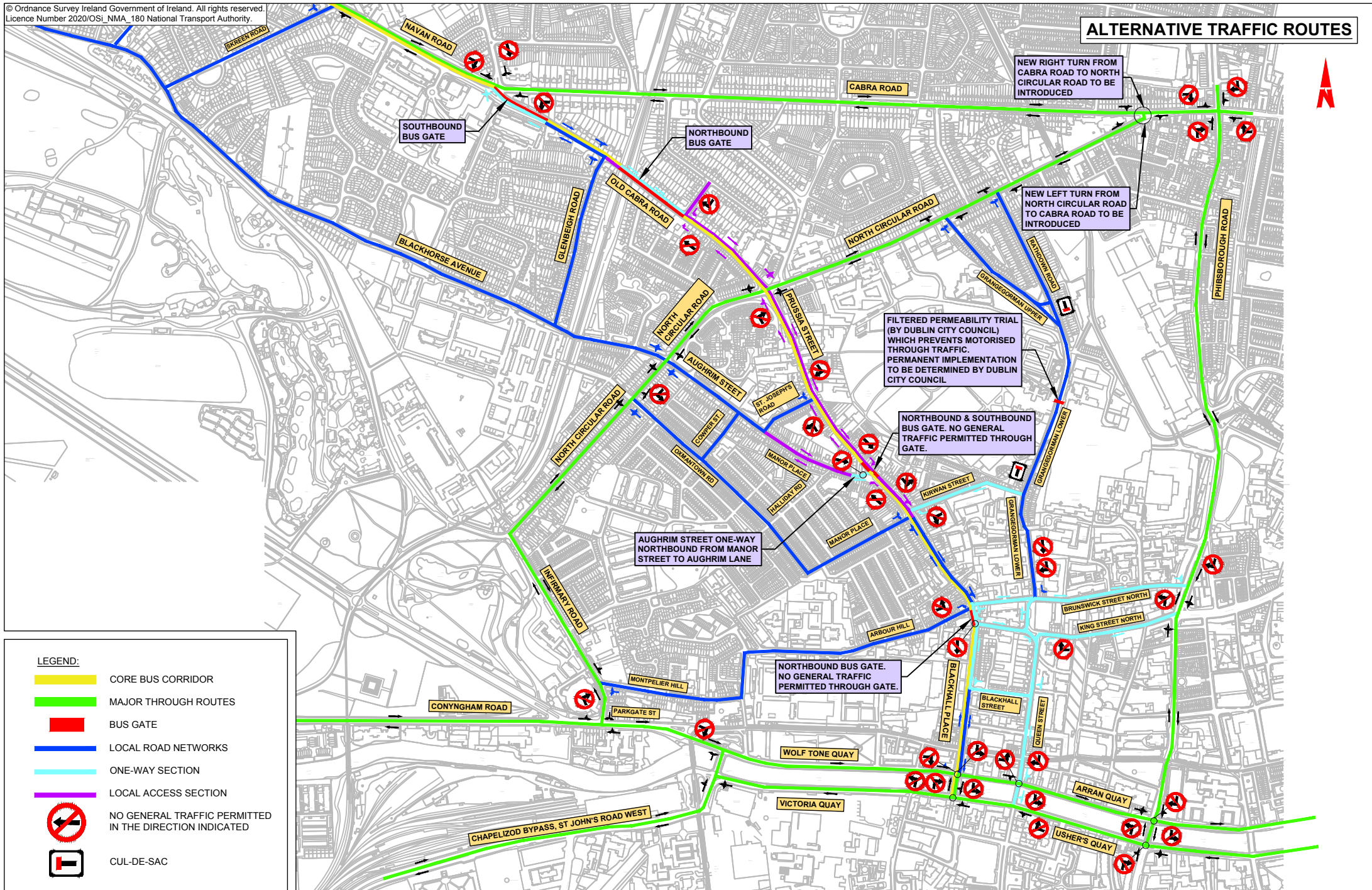


LEGEND:

-  BUS LANE
-  CYCLE TRACK
-  FOOTPATH
-  CARRIAGEWAY
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Appendix G

Blanchardstown Town Centre to
the Liffey Quays (Ellis Quay)
CBC Route Options Assessment

Draft - Work in Progress

<https://busconnects.ie/initiatives/core-bus-corridor-background-information/technical-documents/>

Draft - Work in Progress

Appendix H

Blanchardstown to City Centre
Core Bus Corridor - Emerging
Preferred Route Information
Brochure

Draft - Work in Progress

<https://busconnects.ie/media/1467/busconnects-cbc5-blanchardstown-to-city-centre.pdf>

Draft - Work in Progress

