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Kimmage 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

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**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.



# Executive Summary

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## Review of the Route Options Assessment

The initial route selection process assessed a wide set of potential routes along existing streets in a wedge-shaped corridor up to 2 km wide defined by Clogher Road at the western edge and Rathmines Road at the eastern edge. Within this study area the two other main radial routes are Kimmage Road Lower and Terenure Road North / Harold's Cross Road.

In the Stage 1 Assessment a "spider's web" of potential routes was identified within the study area that consisted of 23 separate road links that could be assembled in various configurations to form the core bus corridor. A sifting process concluded with 2 potential coherent routes at the end of the Stage 1 assessment, which were then brought forward into the Stage 2 assessment.

Emerging Preferred Route 2 along Kimmage Road Lower and Harold's Cross Road is the most direct route for the bus corridor compared to Route 1 via Clogher Road to the west, and therefore fulfills the CBC objectives better than the alternative route.

For the cycle route 4 sub-option variants were assessed from which the emerging preferred route included a largely off-line cycle route to the east of the bus route at the southern end in the Kimmage area, to the west at Harold's Cross, and to the east again through Portobello in the northern section.

## Conclusion of Review for the Emerging Preferred Route

This draft Preferred Route Option Report confirms that the previous Emerging Preferred Route Selection Study reached the appropriate conclusion for the Kimmage to the City Centre Core Bus Corridor.

From the extensive feedback received in Public Consultations it was evident that some aspects of the design proposals merit reconsideration and possible adaptation to address the concerns raised. Proposed refinements to the design proposals are outlined in the next Section 6 of this report.

## Preferred Route Option Refinement

A full review was undertaken of the previous design proposals as published for the Emerging Preferred Route. This review was informed by additional technical information and the feedback received from Public Consultations No.1 and 2. This section of the Draft Preferred Route Option Report deals with the corridor in 3 sections as defined in Section 4 earlier.

## Conclusions and Draft Preferred Route Option for Section 1 - Lower Kimmage Road: KCR to Harold's Cross

The Emerging Preferred Route has been adjusted to adopt the following changes in the Draft Preferred Route Option:

- a) Southern Bus Gate at Ravensdale Park instead of Sundrive Cross.
- b) The existing road layout retained along Kimmage Road Lower.
- c) An additional alternative *Poddle Cycleway* along the western side of the corridor.
- d) On-street parking bay on the eastern side of Kimmage Road Lower south of Sundrive Cross.
- e) Public realm enhancements at Sundrive Cross with many new street trees.
- f) Public realm enhancements at Corrib Road junction with many new street trees.

## Conclusions and Draft Preferred Route Option for Section 2 – Harold’s Cross Road

The Draft Preferred Route Option for Section 2 has incorporated cycle tracks along Harold’s Cross Road through some localised road widening into adjoining properties where necessary to provide the required width.

Opportunities to plant some additional trees along Harold’s Cross Road will be investigated during the later design development.

## Conclusions and Draft Preferred Route Option for Section 3 - Clanbrassil Street & New Street South

- a) The Draft Preferred Route Option for Section 3 has incorporated cycle tracks along Clanbrassil Street and New Street South. The alternative route on quiet streets through Portobello to the east has therefore been omitted from the BusConnects proposals.
- b) All existing street trees in the median along Clanbrassil Street and New Street South will be retained in the Draft Preferred Route Option.
- c) For the widening at Robert Emmett Bridge over the Grand Canal, the preferred option is for new footbridges on both sides of the existing concrete arch bridge.

## Kimmage to City Centre CBC Draft Preferred Route Summary

The Draft Preferred Route for the Kimmage to City Centre Core Bus Corridor is approximately 3.7 km long from end to end. The updated concept scheme design drawings show the extent of the infrastructure proposed to deliver this CBC.

The proposed route will provide the following improvements for bus priority:

- In the northbound direction towards the city centre there is existing bus priority provision over 24% of the route length, and this will increase to 95% through a combination of bus gates on Kimmage Road Lower and bus lanes along the rest of the route apart from a short 200m section on Clanbrassil Street Lower immediately north of the Leonard’s Corner junction at South Circular Road.
- In the southbound direction from the city centre there is existing bus priority provision over 6.5% of the route length, and this will increase to 97% through a combination of bus gates on Kimmage Road Lower and bus lanes along the rest of the route.

The proposed route will provide the following improvements for cyclists:

- Retention of the existing advisory cycle lanes in both directions over 2 km length along Kimmage Road Lower, with upgrade to cycle tracks over 250m. The interaction with traffic will be greatly reduced over this length due to the proposed bus gates at each end of this street.
- A new **Poddle Cycleway** over a length of 2.3 km parallel to Kimmage Road Lower to the west. This will consist of sections of cycle track through public park areas and along Sundrive Road over short lengths and it will follow quiet residential streets for most of the length with through traffic restrictions.
- Segregated cycle tracks in both directions over 1.4 km length along Harold’s Cross Road, Clanbrassil Street and New Street South.



Blanchardstown to City Centre Core Bus Corridor

Lucan to City Centre Core Bus Corridor

Liffey Valley to City Centre Core Bus Corridor

Clondalkin to Drimnagh Core Bus Corridor

Greenhills to City Centre Core Bus Corridor

Tallaght to Terenure Core Bus Corridor

**Kimmage to City Centre Core Bus Corridor**

Rathfarnham to City Centre Core Bus Corridor

Bray to City Centre Core Bus Corridor

UCD Ballsbridge to City Centre Core Bus Corridor

Blackrock to Merrion Core Bus Corridor; and

Ringsend to City Centre Core Bus Corridor

## 1.2 Background

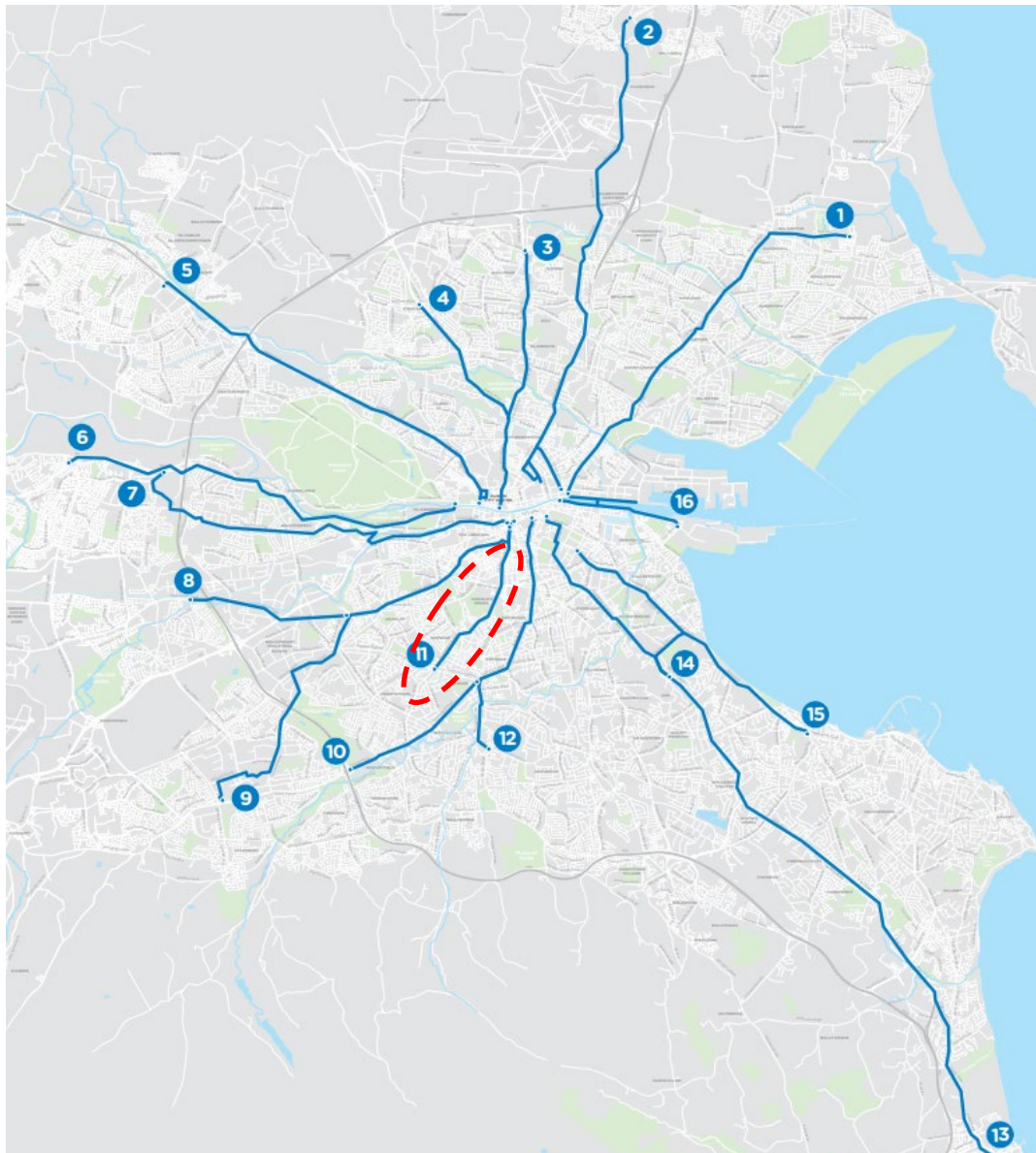
The aim of the CBC Infrastructure Works is to provide enhanced walking, cycling and bus infrastructure on key access corridors in the Dublin region, which will enable and deliver efficient, safe, and integrated sustainable transport movement along these corridors.

The objectives are to:

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

The Transport Strategy identified sixteen indicative Radial Bus Corridors, with the Tallaght-Rathfarnham-Terenure corridor connecting into the city centre via Harold's Cross Road, Clanbrassil Street and Patrick Street. The Transport Strategy also identified that *"[the alignments and details of proposed transport projects are indicative only, and are subject to further development as the design and planning processes for individual projects progress]."*

The Radial Core Bus Network as identified in the GDA Transport Strategy (2016 - 2035) is illustrated in Figure 1.2.



**Figure 1.2 - Radial Core Bus Network in the GDA Transport Strategy**

Following this, a public consultation for the sixteen radial CBCs took place on a phased basis from November 2018 until May 2019. As part of this process the 'Kimmage to City Centre Core Bus Corridor CBC Feasibility Study and Options Assessment Report' was published, which identified feasible options along the corridor, assessed these options and arrived at an Emerging Preferred Route (EPR) Option. Submissions were invited from the public to provide comment on the EPR Option proposals and to inform subsequent design stages. A second round of public consultation commenced on 4<sup>th</sup> March 2020 and ran until the 17<sup>th</sup> of April 2020 when submissions were once again invited from the public on the draft Preferred Route Option.

This Draft Preferred Route Option Report has been prepared for the Kimmage to City Centre Core Bus Corridor, which built on the previously published Feasibility Study and Options Assessment Report.

The Study Area Analysis and Multi Criteria Analysis for the previously proposed feasible route options are considered to still be valid unless otherwise detailed and updated in this Draft Preferred Route Option Report. Any additional design work or optioneering has been assessed against the previously identified Emerging Preferred Route, or the full list of options in the previous Multi Criteria Analyses. Additional design development has been detailed in this Report and updated Draft Preferred Route Option Concept Design Drawings as being based on the following:

- Updated topographical survey information.
- Output from engagement and consultation activities on the Emerging Preferred Route Option and draft Preferred Route Option proposals.
- Clarifications of the previous assessment in the Feasibility Study and Options Assessment Report.
- Further design development and options assessment.

## 1.3 Report Structure

This report is structured as follows:

- **Chapter 2: Planning and Policy Context** – This chapter outlines the general background information to the proposed CBC network. 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 Bus Connects Core Bus Corridor Infrastructure Works.
- **Chapter 3: Background and Public Consultation** – This chapter outlines the summary of the first and second public consultation.
- **Chapter 4: Study Area and Route Options** – In this chapter, the study area for the CBC is detailed. Scheme specific constraints and opportunities are discussed. The integration of the scheme with existing and planned transport networks is considered, along with considerations of the scheme for other road users.
- **Chapter 5: Review of the Emerging Preferred Route** – This chapter is a summary of the options assessment that was previously carried out in each section of the previous Feasibility and Options Report. An assessment has been made on the previous options assessment and the emerging preferred route and outlines the issues and material changes in each section resulting from the design development as explained in section 1.2.
- **Chapter 6: Refinement of the Preferred Route Option** – This chapter summarises the sections of the previous Emerging Preferred Route that has been reviewed for material change for the confirmation of the Draft Preferred Route Option.
- **Chapter 7: Summary of the Draft Preferred Route Option** – This chapter gives the overall conclusions of the scheme options assessment process and identifies and describes the Draft Preferred Route Option.
- **Chapter 8: Next Steps** – This chapter details the “next steps” in the delivery of this CBC.

## 2 Planning and Policy Context

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

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

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

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

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

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

The Kimmage 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.

There are a number of primary and secondary cycle routes identified along the CBC. During the earlier assessment process which identified the CBC EPR Option, the provision of these cycle routes was considered at all stages. Therefore, as part of the options assessment process, any upgrading of infrastructure to provide bus priority also needs to consider and provide for the required cycling infrastructure, where practicable, to the appropriate level and quality of service (as defined by the NTA National Cycle Manual) required for primary and secondary cycle routes.

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

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

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

- *Effective integration of land-use and transportation, and the management of access and mobility.*
- *Pro-active engagement and collaboration with communities to bring about further modal shift and effective mobility management.*
- *The expansion of the strategic cycle network along all major water bodies including the River Liffey and the canals.*

- *Improving the city centre environment for pedestrians through public realm enhancements and through improvement of the strategic pedestrian network.*
- *Ensuring maximum benefits are achieved from public transport improvements including Luas cross-city and the anticipated Bus Rapid Transit network.*
- *Managing city centre road-space to best address the competing needs of public transport, pedestrians, cyclists, and the private car.*
- *Increasing significantly the existing mode share for active modes, i.e. walking and cycling, and supporting the forthcoming National Policy Framework for Alternative Fuels Infrastructure.*

Therefore, sustainable forms of transport such as public transport, walking, and cycling are strongly promoted in this plan, which takes a pro-active approach to influencing travel behaviour and effective traffic management.

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

<b>Movement and Transport: Promoting Modal Change and Active Travel</b>	
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**

<b>Movement and Transport: Public Transport</b>	
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.



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

The aim of BusConnects is to transform Dublin's bus system, with the Core Bus Corridor (CBC) project aiming to provide 230 km of dedicated bus lanes and 200 km of cycle lanes on sixteen of the busiest bus corridors in and out of the city centre. This project is fundamental to addressing the congestion issues in the Dublin region with the population due to grow by 25% by 2040, bringing it to almost 1.55 million.

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 2003. Through the development of continuous bus priority and segregated cycle lanes we can meet the growing demand for fast, reliable, punctual and convenient bus journeys in and out of the city centre, and safe cycling facilities for this growing numbers of cyclists.

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

The aim of the Proposed Project is to transform the bus system to provide better services to more people. There are nine objectives underpinning this aim:

- a) Reduce reliance on private car transport for all trips
- b) Increase the number and variety of destinations served by the bus system
- c) Maximise the people carrying capacity of existing transport corridors
- d) Integrate technology to improve the public transport system and to enhance customer experiences
- e) Enhance the safety and security of the bus system
- f) Improve bus journey times and reliability
- g) Reduce barriers to using the bus system
- h) Simplify interchange between bus services and with other transport modes
- i) Enable Project Ireland 2040 strategic outcomes and deliver on relevant Climate Action targets.

## **3 Background and Public Consultation**

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### **3.1 Kimmage to City Centre Core Bus Corridor Feasibility and Options Assessment Report and Emerging Preferred Route**

In early 2016, the NTA initiated plans to develop the network of Core Bus Corridors identified in the GDA Transport Strategy. As part of this body of work, the 'Kimmage to City Centre Core Bus Corridor CBC Route Selection Report' was prepared which identified feasible options along the corridor, assessed these options and arrived at an Emerging Preferred Route (EPR) Option. These proposals formed the basis for the first Non-Statutory Public Consultation on the Core Bus Corridor.

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

The first non-statutory public consultation on the BusConnects Core Bus Corridor Emerging Preferred Routes took place on a phased basis and ran until the 31st May 2019. The consultation for the Kimmage route was in Phase 3 from 26<sup>th</sup> February 2019 to 31<sup>st</sup> May 2019.

In total 644 submissions were received from 544 separate parties in relation to the Kimmage corridor.

The submissions cover a wide spectrum of views. The majority of the views raised concerns about the scheme, or elements thereof. Some of the submissions were positively supportive of the scheme to varying degrees. The submissions identified positives within the scheme, while challenging other elements of the overall proposals. The issues raised included:

- 1) Traffic and access impacts.
- 2) Cycling Facilities.
- 3) Safety concerns.
- 4) Bus Gates.
- 5) Bus Lanes and Road Widening.
- 6) Suggestions for Modifications.
- 7) Impact for Properties.
- 8) Community Impacts.
- 9) Environmental Impacts.
- 10) Loss of Car Parking.
- 11) Bus Services and Stops.

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

### **3.3 Development of the 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 property owners.

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 Section 6 of this report) to identify the draft Preferred Route Option (PRO). The selected draft PRO identified formed the basis for the second non-statutory public consultation in March / April 2020.

The key changes adopted in the Preferred Route Option are as follows:

- While many submissions welcomed the concept of a bus gate as a means of achieving improvements for bus services, there were concerns about the proposed location for the southern bus gate at Sundrive Cross because of the potential for diversion of large traffic volumes onto adjoining streets as well as the proposals for road widening for new bus lanes along the southern section of Lower Kimmage Road. In response a revised Bus Gate location at Ravensdale Park is proposed resulting in no widening of Kimmage Road Lower and eliminating the need for land take in this section.
- To accommodate alternative access for southbound traffic at Harold's Cross towards Kimmage it is proposed to introduce a right turn from Harold's Cross Road to Kenilworth Park to improve local access.
- An opportunity was recognised to include a cycleway along the River Poddle to the west of Kimmage Road Lower between Kimmage Cross-Roads and Harold's Cross to improve the cycle network as identified in the *Greater Dublin Area Cycle Network Plan*. This will add a further route option for cyclists.
- Many submissions sought a more direct cycle route towards the city at Harold's Cross. Continuous, segregated cycle tracks are now proposed along Harold's Cross Road and Clanbrassil Street, eliminating the need for an offline cycle route. This will require the acquisition of some land from gardens for the necessary minor road widening.
- Some submissions sought environmental enhancements along the route. In response Urban Realm improvements are proposed at Sundrive Road and Corrib Road. This will include planting of new street trees. Additional permanent on-street parking is proposed to replace part-time parking on Kimmage Road Lower south of Sundrive Cross.
- The revised proposals allow the retention of the tree lined median on Clanbrassil Street and New Street.

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

The draft Preferred Route option was published in March 2020 and a second round of public consultation took place from 4<sup>th</sup> March 2020 to the 17<sup>th</sup> of April 2020.

Due to Covid-19 restrictions being imposed by Government in mid-March the planned Public Information Events were impacted. Consequently there were 22 submissions received relating to the CBC (compared to 475 submissions following the First Public Consultation).

There were 43 submissions received (of which several were duplicates, with a net number of 39), mainly personal submissions from residents, businesses and commuters and some lobby groups, resident's associations, and elected representatives. These submissions comprised emails, letters and meeting notes recorded by the NTA.

The key issues are listed below.

- 1) Many submissions **welcomed the changes** of the proposals since the EPR.
- 2) Proposed **bus gates**:
  - a) Welcomed by some people.

- b) Objected to in some submissions because of reduced accessibility by car to Kimmage Road Lower. Combined impacts for traffic management changes across several corridors were highlighted as unwelcome for general traffic movement.
  - c) General query about the legality of bus lane provisions and whether taxis may use what appear to be “contra-flow” bus lanes in some places.
  - d) Times of operation to be clarified with access for large delivery vehicles.
  - e) Access for funerals at Mount Jerome during the late morning and early afternoon.
  - f) Traffic impact on Clareville Road.
- 3) The **Poddle Cycleway** proposals at Mount Argus connecting to Sundrive Road raised concerns in relation to risks for security and anti-social behaviour from several residents in that area, as well as some in support.
  - 4) More **street trees** and public realm improvements along Harold’s Cross Road were requested in some submissions.
  - 5) The more direct **cycling facilities were welcomed** in many submissions, although there remain a few concerns about the proposed arrangements on Lower Kimmage Road at Sundrive Cross where on-street parking is proposed to replace the existing cycle lanes. The configuration of some on-street parking in relation to the cycle tracks was queried. Cycle tracks on Lower Kimmage Road are suggested in one case, even with requirement for 2m road widening. A desire for high-quality construction of the proposed cycle tracks was noted in one submission.
  - 6) The extent of the **public realm proposals at Sundrive Cross** is a matter of concern from some businesses who do not welcome changes to existing parking arrangements and the potential CPO of private landing areas. The concept of urban realm improvements was welcomed by some people, but the extent is questioned: some want more; others want less.
  - 7) A **30 km/h speed limit** has been suggested for much of the route including Harold’s Cross Road. Speeding concerns were noted. Suggestions for traffic calming and pedestrian crossings.
  - 8) Complaints about the **public consultation process**.
  - 9) **Lower Kimmage Road at KCR / Hazelbrook / Ravensdale**: Suggested improvements for footpaths, cycle tracks and local traffic access restrictions. Coordination with the proposed flood defence scheme.
  - 10) Various comments about narrow footpaths at LKR opposite Ravensdale and at Harold’s Cross Park.

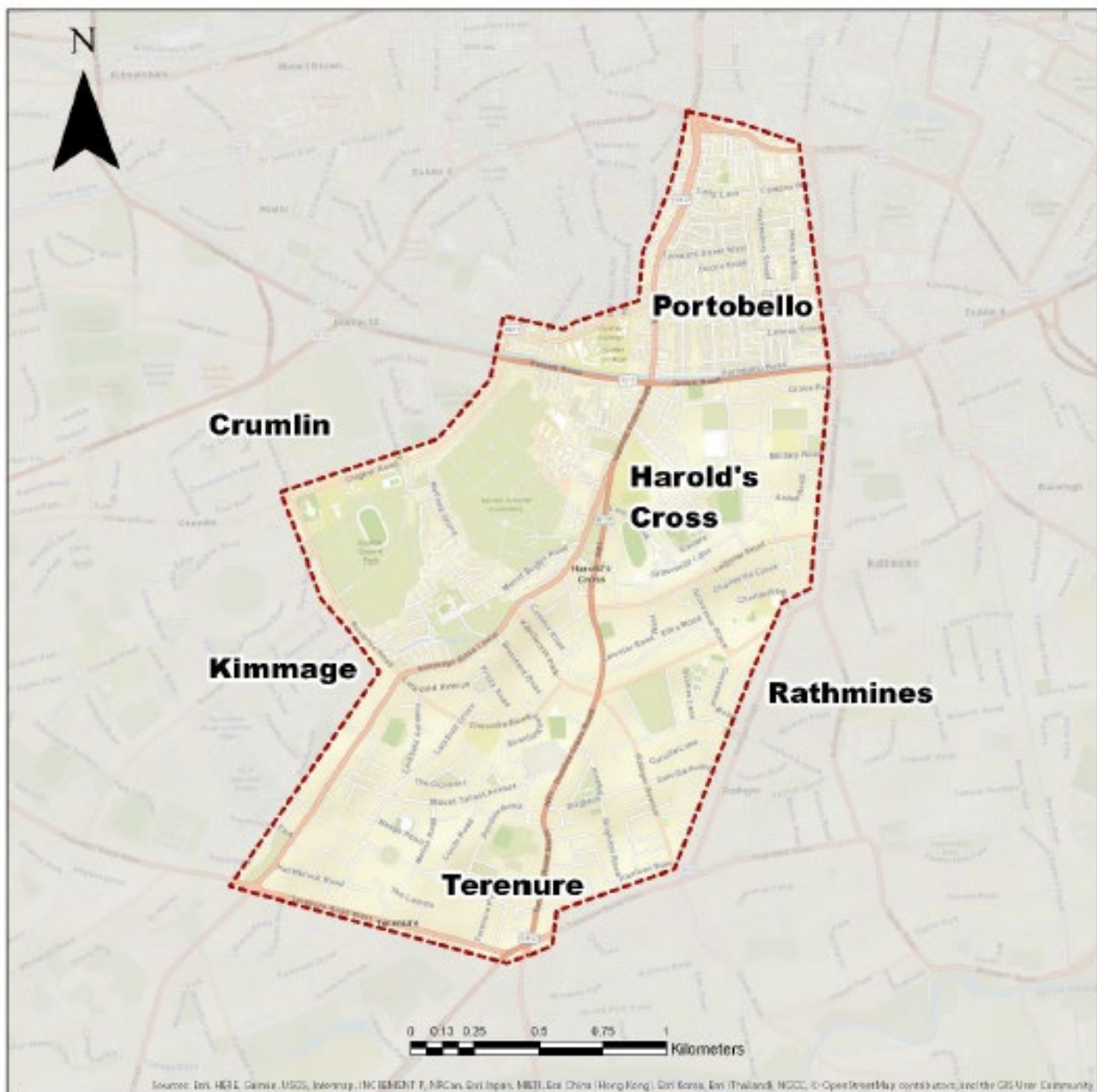
The issues raised during the second public consultation have been considered in the further development of the draft PRO.

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

## 4 The Study Area

### 4.1 Introduction

The City Centre to Kimmage Bus Corridor Study Area runs from the Kimmage Cross Roads (Terenure Road West / Fortfield Road / Kimmage Road West) northwards over a distance of 3.7km to the edge of the City Centre at the Patrick Street / Kevin Street junction. The study area included in the Route Selection Report, as shown below, was generally developed to include the main trip generators between the City Centre and Kimmage either side of the central spine formed by the existing roads of Clanbrassil Street and Kimmage Road Lower. The entire study area lies within the administrative area of Dublin City Council.



**Figure 4.1 – Study Area as defined in the Route Selection Report**

## 4.2 Route Sections

The route may be considered in 3 separate sections as follows and as shown on Figure 4.2:

Section 1: Lower Kimmage Road from Kimmage Cross Roads to the junction with Harold's Cross Road over 2.2 km. (In red on Figure 4.2).

Section 2: Harold's Cross Road from Harold's Cross Park to the Grand Canal over 0.4 km. (In blue on Figure 4.2).

Section 3: Clanbrassil Street Upper and Lower and New Street from the Grand Canal to the Patrick Street junction over 1.1 km. (In green on Figure 4.2).

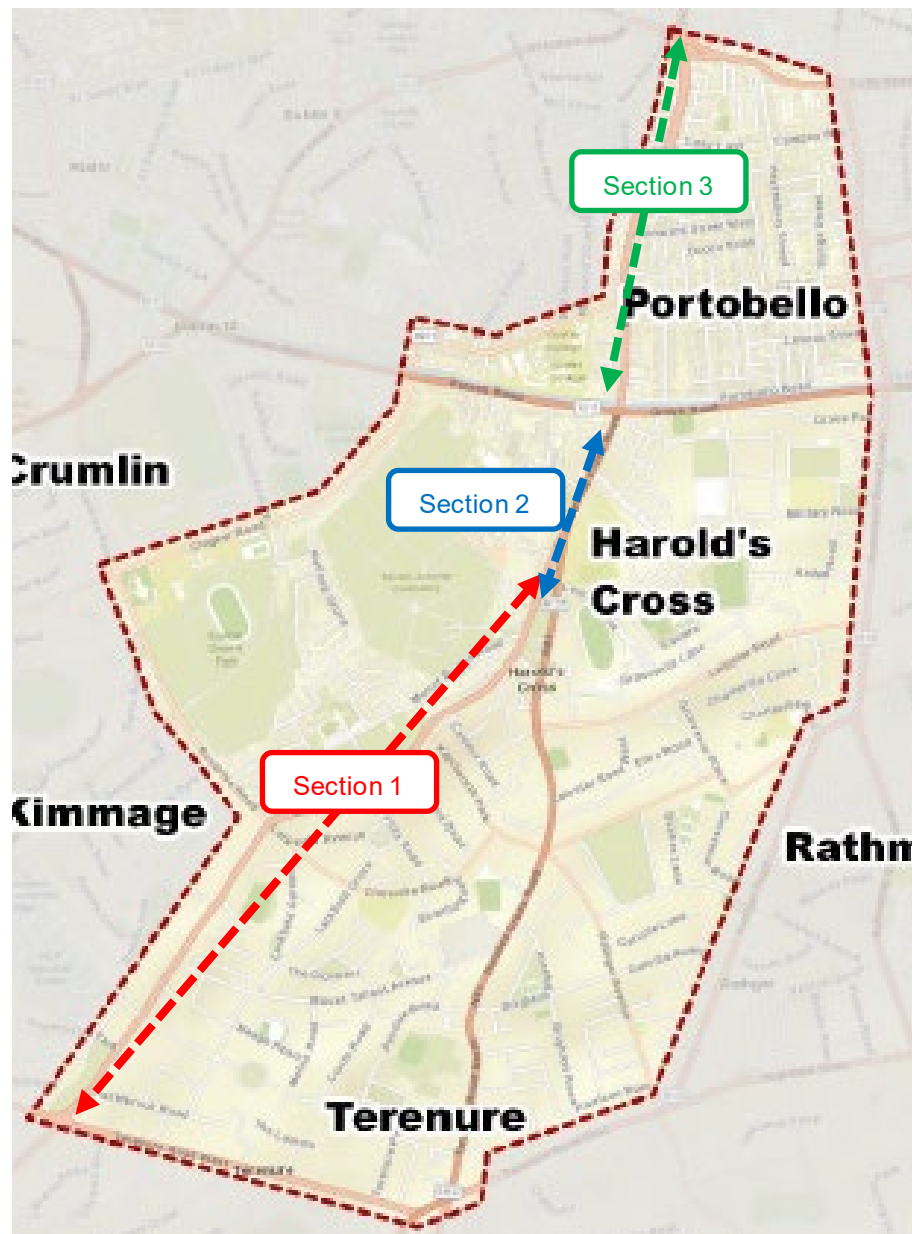


Figure 4.2 – Route Sections

## 4.3 Physical Constraints and Opportunities

There are constraints and opportunities, both natural (i.e. existing natural environment) and physical (the built environment), which affect the potential route options for the proposed scheme within the defined study area including:

- The River Poddle follows the corridor on the western side over the full length. This minor watercourse is culverted in many places but is in an open channel that forms an attractive landscape corridor in several places. There is an opportunity in a few places to follow the river as a natural amenity within the urban landscape. However, there are considerable constraints along the section of the River Poddle through Harold's Cross where it traverses the grounds of Mount Jerome Cemetery and Our Lady's Hospice.
- The crossing of the Grand Canal at the Robert Emmett Bridge is a physical constraint where the street layout is quite narrow, and widening is required to accommodate suitable and segregated facilities for all road users including public transport, pedestrians, cyclists, and general traffic.

## 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 in so far as possible to seek to provide for improved existing or new interchange opportunities with other transport services including from north to south:

- Greenhills to City Centre CBC at Patrick Street at the northern end of the Kimmage Corridor.
- Rathfarnham to City Centre CBC through Terenure: the cycle route for that corridor will link to Harold's Cross and join the Kimmage to City Centre CBC.
- Future City Centre Orbital Bus Route O at South Circular Road (Leonard's Corner).
- Future Orbital Bus Corridor S2 at Sundrive Cross.
- Future Orbital Bus Corridor S4 at Kimmage Cross Roads.

## 4.5 Compatibility with Other Road Users

A key objective of the proposed scheme is to improve pedestrian and cyclist facilities along the route. In general, segregated facilities should be proposed for these modes.

### Pedestrian Facilities

For pedestrians it is proposed to simplify and shorten the road crossings at major junctions, which can be a barrier to mobility. The design development has also undertaken an audit of the public realm for pedestrians so that necessary improvements can be undertaken through application of *Universal Design* principles to ensure that barriers to mobility are removed for people with mobility and visual impairments.

### Cycling Facilities

The *Greater Dublin Area Cycle Network Plan* was adopted by the NTA in early 2014 and there are several of the proposed cycle routes identified along the *Kimmage* Corridor as follows as shown in Figures 4.3 and 4.3a for the south-central Dublin area:

- Radial Primary Route 9 from Kimmage and Secondary Route 9B from Terenure.
- The *River Poddle Greenway*.
- Orbital Secondary Routes SO1, SO2 and SO3 that will cross the corridor at major junctions at Leonard's Corner (South Circular Road), Sundrive Cross and Kimmage Cross Roads respectively.

During the course of the analysis carried out to identify the preferred core bus corridor, the provision of these cycle routes was considered at all stages. Therefore, as part of the analysis, any upgrading of infrastructure to



**Project:** CYCLE NETWORK PLAN FOR THE GREATER DUBLIN AREA

**Title:** PROPOSED CYCLE NETWORK DUBLIN CITY CENTRE SHEET N1

**Legend:**

- Primary
- Secondary
- Tertiary
- Primary/Secondary
- Inter-Urban
- Feeder
- Waterway
- New Cycle Bridge
- Permeability Link
- Gateway
- Employment Zones
- Hospital
- Institute of Technology
- Shopping Centre
- Town Centre
- University
- Village Centre
- Greenline Train Stops
- Busline Train Stops
- Stations

**Scale:** 1:30,000 @ A3  
0 250 500 1,000 meters

**Urbans Naisiunta Iompair**  
National Transport Authority

**AECOM**  
Roughan & O'Donovan

Grand Canal House,  
Upper Grand Canal Street,  
Dublin 4  
Tel: +353 (0)1 226 2100  
Fax: +353 (0)1 226 2109  
www.aecom.com

The map illustrates the Dublin Metro system, showing the proposed routes (red and green lines) and existing infrastructure. Key areas and stations labeled include Dolphins Barn, Rathmines, Harold's Cross, Kimmage, and Rathgar. The map also shows various bus routes and local landmarks.

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While the analysis was carried out to identify the preferred core bus corridor, the provision of these cycle routes was considered at all stages. Where it may be thought impractical to construct cycle facilities directly along a particular section of the CBC route, such facilities will need to be provided along a suitable alternative route. In the previously published Emerging Preferred Route it was proposed to provide the main radial cycle route along minor streets parallel to the main bus route along Lower Kimmage Road, Harold's Cross Road and Clanbrassil Street. This element of the proposals has been reviewed carefully in response to many submissions that expressed a preference for a more direct cycle route to and from the city centre.

### **General Traffic**

Provision of bus priority will result in some impact for general traffic flow along this corridor where bus priority cannot be achieved through provision of bus lanes and bus gates are necessary as an alternative. On the narrow street of Kimmage Road Lower approaching Harold's Cross, it would not be feasible to widen the road into very small front gardens sufficiently for the addition of bus lanes. Instead a bus gate will divert through traffic off this route and thereby provide bus priority. Local access will generally be maintained along the CBC corridor although there could be some impacts on local traffic where it is required to follow diversion routes around bus gates. At some locations it may be necessary to adopt turning movement restrictions or local road closures for appropriate traffic management. Reductions in traffic carrying capacity of the road network will be compensated for by the overall increase in quality and level of service of other modes (walking, cycling and public transport) on the CBC route once implemented.

## 5 Review of the Emerging Preferred Route

---

### 5.1 Introduction

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

### 5.2 Route Options Assessment Methodology

The first step in the assessment process was to review the previous Feasibility and Options Report which concluded with the "Emerging Preferred Route" (EPR).

A number of locations along the EPR 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, were subject to a Multi-Criteria Assessment (MCA) in a similar manner to the previous EPR assessment process.

In addition to the new options considered, any alternative options previously considered within the Kimmage to City Centre Core Bus Corridor (CBC) Feasibility and Options Report which could potentially address the issues being encountered now, have been reconsidered once again. In addition, all new options were assessed against the EPR option.

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.

Options for the Emerging Preferred Route were previously assessed in accordance with the guidance outlined in the Government publication "Common Appraisal Framework for Transport Projects and Programmes" (March 2016). There were 5 headline criteria applied in the appraisal as follows:

1. Economy
2. Safety
3. Integration
4. Accessibility & Social Inclusion
5. Environment

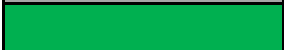



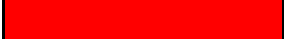
Under each headline criterion, a set of sub-criteria were assessed as listed in Table 5.1.

**Table 5.1: Assessment Criteria & Sub-Criteria**

Assessment Criteria	Assessment Sub-Criteria
a) Economy	1.a. Capital Cost
	1.b. Transport Reliability and Quality (Bus Journey Time)
b) 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
c) Accessibility & Social Inclusion	3.a. Key Trip Attractors (Education/Health/Commercial/Employment)
	3.b. Deprived Geographic Areas
d) Safety	Road Safety, especially for Pedestrians & Cyclists
e) 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 & the Built Environment

The criteria and sub-criteria proposed in this supplementary Multi-Criteria Assessment have been standardised for use across the 16 BusConnects corridors.

For each individual assessment sub-criterion considered, routes have been relatively compared against each other based on a five-point scale, ranging from having significant advantages to having significant disadvantages over other route options. For illustrative purposes, this five-point scale is colour coded as presented below with advantageous routes graded to 'dark green' and disadvantaged routes graded to 'dark red'.

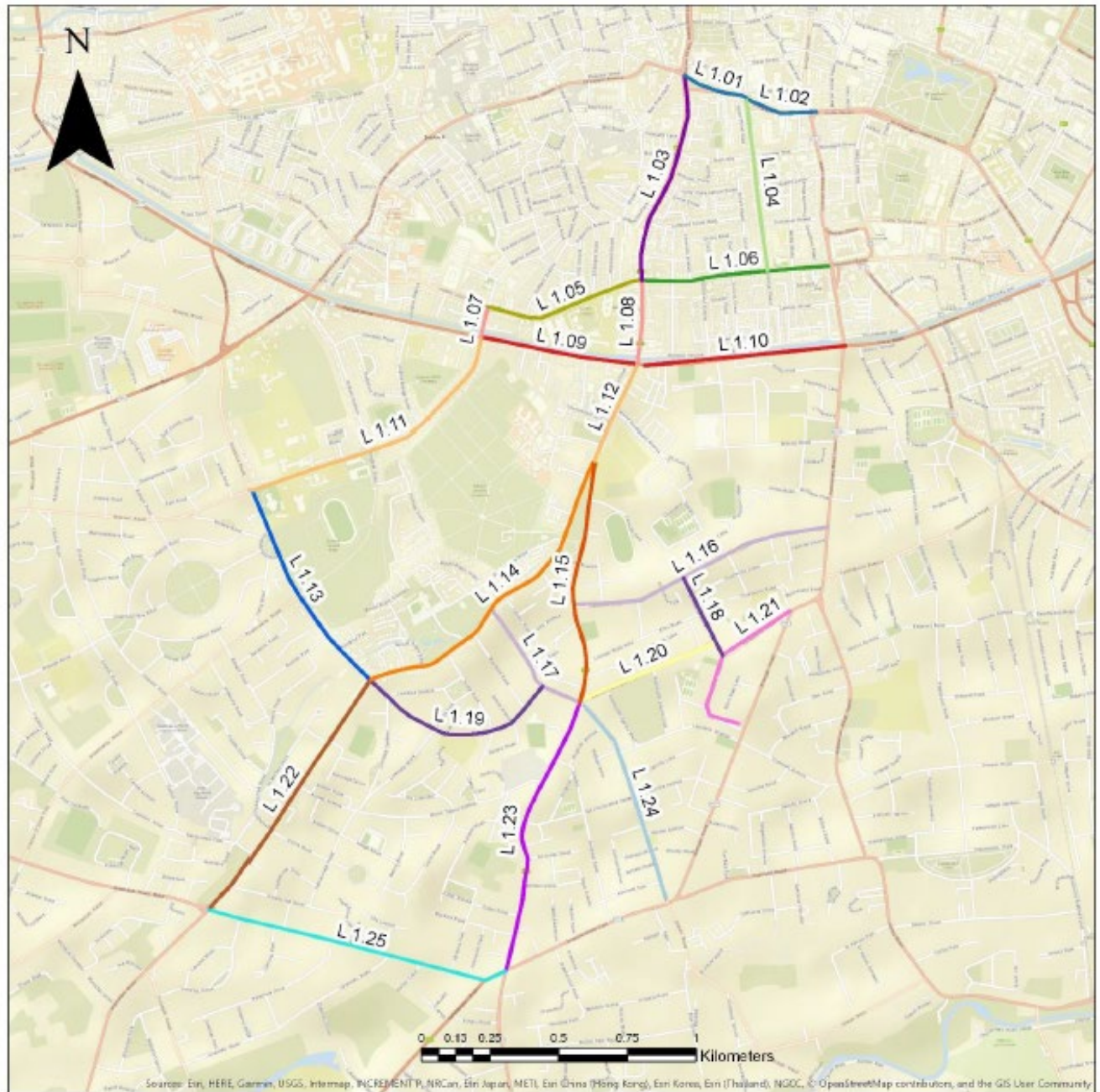
Colour	Description
	Significant advantages over the other options
	Some advantages over other options
	Neutral compared to other options
	Some disadvantages over other options
	Significant disadvantages compared to other options

Options are compared under each sub-criterion before those sub-criteria are aggregated to give a summary score per criterion. These CAF criterion scores are then compared to establish the relative ranking of the options. The Multi-Criteria Assessment (MCA) methodology was applied to compare the refined route options and to select the Draft Preferred Route Option in each case as described in the remainder of this chapter.

### 5.3 Review of Core Bus Corridor Route Options Assessment

The previous Route Selection Report is included in Appendix C. The initial route selection process assessed a wide set of potential routes along existing streets in a wedge-shaped corridor up to 2 km wide defined by Clogher Road at the western edge and Rathmines Road at the eastern edge. Within this study area the two other main radial routes are Kimmage Road Lower and Harold's Cross Road.

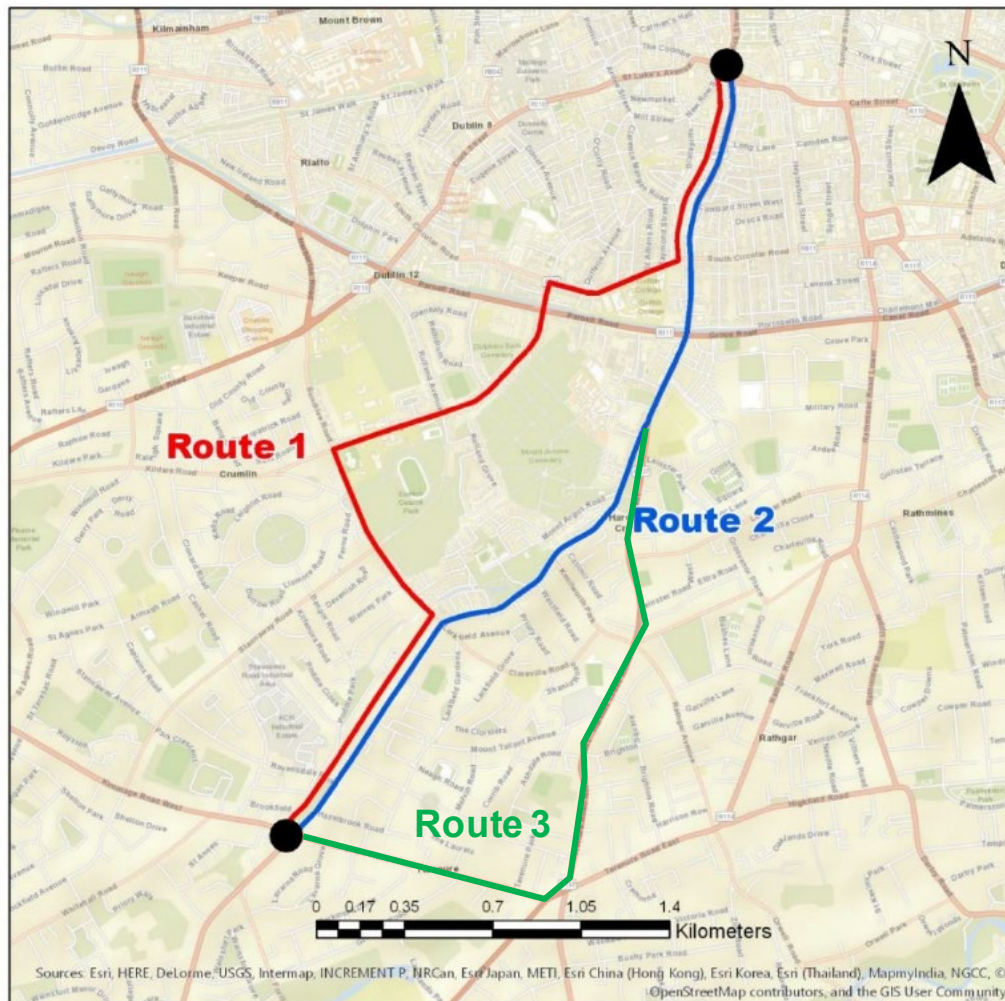
In the Stage 1 Assessment a “spider’s web” of potential routes was identified within the study area that consisted of 23 separate road links that could be assembled in various configurations to form the core bus corridor.



**Figure 5.1 Spider's Web**

A sifting process then concluded with 2 potential coherent routes as shown in the Figure below at the end of the Stage 1 assessment, which were then brought forward into the Stage 2 assessment.





**Figure 5.2 – Bus Route Options for Kimmage CBC**

A third possible Route 3 option would have been along Terenure Road West and Terenure Road North. This route would have required extensive road widening for the provision of bus lanes, similar to Route 2. It is the least direct of the 3 options, considerably longer than the more direct Route 2 along Kimmage Road Lower, although only slightly longer than Route 1.

Of particular relevance in the route selection process is the spatial relationship with the other parallel core bus corridors and the compatibility between their 500m catchment areas. Corridor 11 fits between Corridor 9 to the west and Corridor 12 to the east as shown by a series of red circles in Figure 5.3 The distance from CBC9 at Crumlin area to the west of the Kimmage corridor is up to 2 km between Crumlin Road and Kimmage Road Lower at the Kimmage Cross Roads. On the other side to the east, the distance between Kimmage Road Lower and Rathgar Road on CBC12 is 1.4 km at the furthest. It can therefore be seen that Kimmage Road Lower is reasonably centrally located within the 3.4 km wide gap between CBC9 and CBC12 in the Kimmage area. This gap narrows as the routes converge towards the city centre. If the Kimmage CBC were to be routed through Terenure that would overlap directly with CBC 12 from Rathfarnham but would leave a wide gap of up to 2.8 km on the western side to the CBC9 route at Crumlin Road. In terms of accessibility to bus services on the Core Bus Corridor network it would not therefore be appropriate for the Kimmage route to pass through Terenure which would leave an excessively wide gap in the catchment areas of the CBC services.

This review has confirmed that the Kimmage CBC should generally follow Kimmage Road Lower at the southern end between the KCR and Sundrive Road junctions.



**Figure 5.3 - Catchment Areas for CBC's in Dublin South-West**

Both Route Options 1 & 2 for the bus corridor shared a common route in Section 1 along Kimmage Road Lower from Kimmage Cross Roads over a distance of 1km to Sundrive Cross, and also in Section 3 along Clanbrassil Street Lower and New Street north of Leonard's Corner on South Circular Road over a distance of 0.75 km.

In the central area Route 1 extended for 2.6 km along Sundrive Road, Clogher Road, Donore Avenue and South Circular Road. Route 2 is more direct along Kimmage Road Lower, Harold's Cross Road and Clanbrassil Street Upper over a shorter length of 2 km.

**Route Option 1** proposed road widening for the provision of bus lanes along the full length.

**Route Option 2** proposed some road widening for the provision of bus lanes along the southern section of Kimmage Road Lower only. Along the northern section of Kimmage Road Lower it was not proposed to widen the road for provision of bus lanes due to the constraints of houses with very small front gardens and significant level differences above road level in places. Instead various traffic management options were considered such as one-way operation in certain directions or bus gates for bus only access arrangements.

In combination with the core bus corridor potential variations for the cycle route were also examined for the area from Mount Argus via Harold's Cross to the Grand Canal.

### **5.3.1 Conclusion of the Core Bus Corridor Route Options Assessment**

Route 2 is the most direct route for the bus corridor compared to the other options and therefore fulfills the CBC objectives better than the alternatives.

This Draft Preferred Route Option Report confirms that the previous Route Selection Study completed in April 2018 reached the appropriate conclusion as to the Emerging Preferred Route for the CBC No.11 from Kimmage to the City Centre.

## **5.4 Public Consultation No.1 for the Emerging Preferred Route**

As described in Section 3 of this report, the Emerging Preferred Route Option was published for Public Consultation No.1 in early 2019 with an information booklet that provided detailed maps of the proposals.

The scale of response to Public Consultation No.1 was significant with 644 submissions received.

The previously prepared Feasibility and Route Options Report was available as background information in the public consultation, but there was no real challenge as to the conclusion of the route selection process that the most suitable route for the Kimmage CBC should follow Kimmage Road Lower rather than Clogher Road to the west. Instead most submissions addressed specific aspects of the design proposals as published for the Emerging Preferred Route.

The issues that attracted the most numerous submissions were the following:

- 1) Road Widening for Bus Lanes south of the Sundrive Road junction. Many people objected to these proposals and suggested that the bus gate controls be extended over the full length of Kimmage Road Lower instead.
- 2) Traffic and Access: displacement of traffic from Lower Kimmage Road north of Sundrive Cross due to the proposed bus gates.
- 3) Cycling facilities: There was a strong preference for a more direct cycle route instead of the off-line route.
- 4) Loss of on-street car parking in certain places.
- 5) Various environmental concerns associated with the above issues.

The extensive feedback received in Public Consultation No.1 has identified the potential for refinements to the design proposals are outlined in the next Section 6 of this report.

## **5.5 Route Sections Identified for Review**

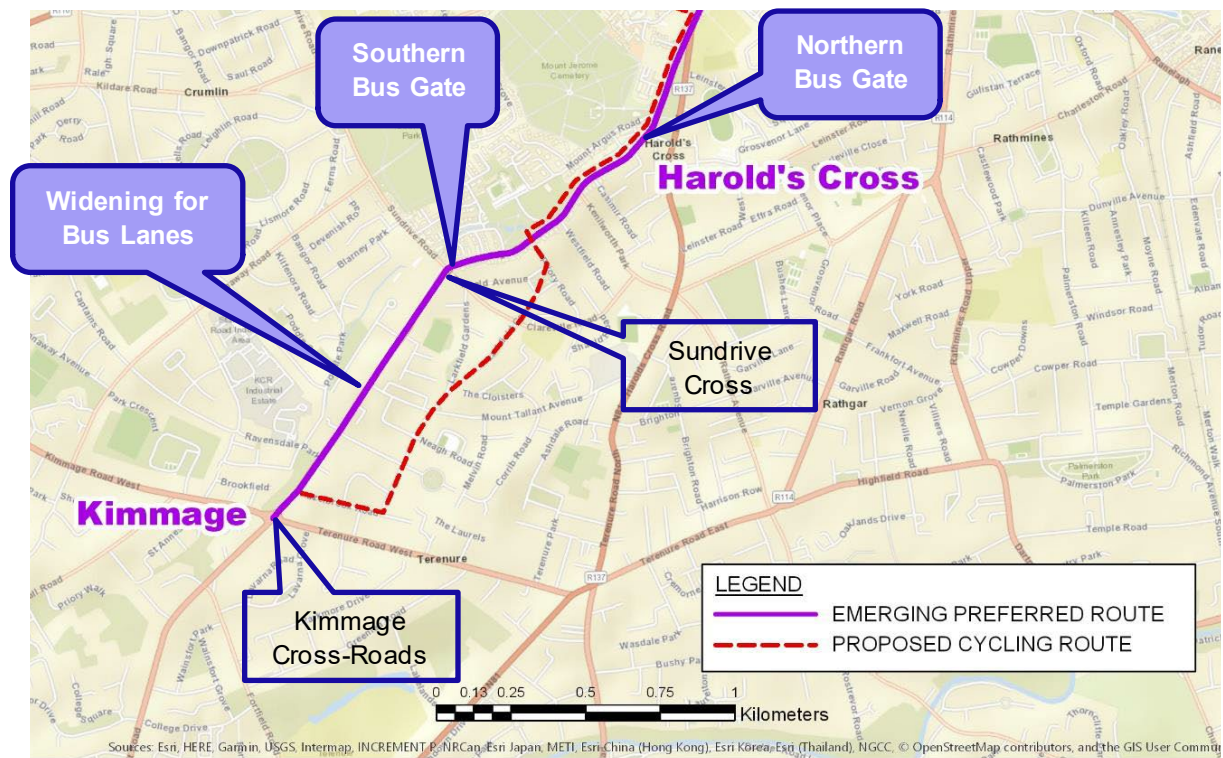
Based on the public consultation submissions received and assessment of topographical survey subsequently undertaken, a number of areas were identified as requiring further review. These are summarised in the following sections.

### **5.5.1 Review of Section 1 - Lower Kimmage Road: KCR to Harold's Cross**

The Emerging Preferred Route, as shown in Figure 5.4, consisted of the following elements:

- a. Road widening for Bus Lanes from Kimmage Cross Roads to Sundrive Cross.
- b. Bus Gates just north of Sundrive Cross and just south of Harold's Cross Park.
- c. A partially parallel cycle route along quiet streets to the east of the corridor south of Sundrive Cross, and then shared road in the northern part from Priory Road to Harold's Cross.





**Figure 5.4 – Emerging Preferred Route in Section 1 – Kimmage Road Lower**

Two key issues were reassessed for this section based on the concerns raised in Public Consultation No.1:

- a) Most suitable Bus Priority provisions.
- b) The Cycle Route

In addition, opportunities were identified for improvements or modifications to the design proposals for:

- c) On-Street Parking at commercial centres.
- d) Public Realm at Kimmage Village (Sundrive Cross)



### 5.5.2 Review of Section 2 - Harold's Cross Road

The Emerging Preferred Route, as shown in Figure 5.5, consisted of the following elements:

- Retention of the existing Bus Lanes along Harold's Cross Road.
- A partially parallel cycle route through Our Lady's Hospice and along quiet streets to the west of the corridor at Greenmount.

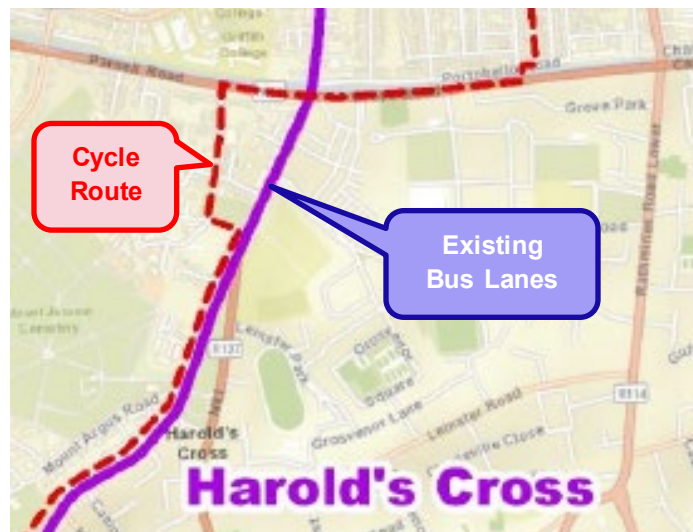


Figure 5.5 – Emerging Preferred Route in Section 2 – Harold's Cross Road

One key issue was reassessed for this section based on the concerns raised in Public Consultation No.1: the cycle route provisions.

### 5.5.3 Review of Section 3 – Clanbrassil Street & New Street South

The Emerging Preferred Route, as shown in Figure 5.6, consisted of the following elements:

- Extension of the existing Bus Lanes in both directions along Clanbrassil Street and New Street South.
- A parallel cycle route through the Portobello area to the east along quiet streets with closure of Heytesbury Street-Bride Street to through traffic.

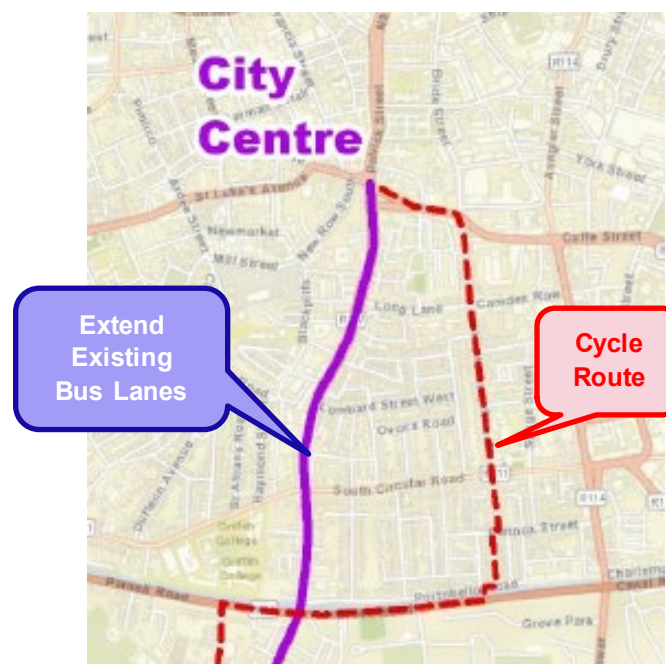


Figure 5.6 – Emerging Preferred Route in Section 3 – Clanbrassil Street & New Street South

Two key issues were reassessed for this section based on the concerns raised in Public Consultation No.1:

- a) The Cycle Route
- b) Trees in the median of Clanbrassil Street Lower and New Street South.

## **5.6 Conclusion of the Emerging Preferred Route Review**

This review of the Emerging Preferred Route has confirmed the conclusions of the previous *Feasibility and Route Options Report* in terms of the selected route for the Core Bus Corridor from Kimmage to the City Centre.

The review has identified the potential for a number of adjustments to the Emerging Preferred Route proposals in each section as developed further in the next Chapter 6 for the Preferred Route Option refinement.

## 6 Preferred Route Option Refinement

During 2019 and 2020 a full review was undertaken of the previous design proposals as published for the Emerging Preferred Route. This review was informed by additional technical information and the feedback received from Public Consultation No.1. This section of the Draft Preferred Route Option Report deals with the corridor in 3 sections as defined in Section 4.2 earlier.

Section 1: Lower Kimmage Road from Kimmage Cross Roads to the junction with Harold's Cross Road over 2.2 km.

Section 2: Harold's Cross Road from Harold's Cross Park to the Grand Canal over 0.4 km.

Section 3: Clanbrassil Street Upper and Lower and New Street South from the Grand Canal to the Patrick Street junction over 1.1 km.

### 6.1 Section 1 - Lower Kimmage Road: KCR to Harold's Cross

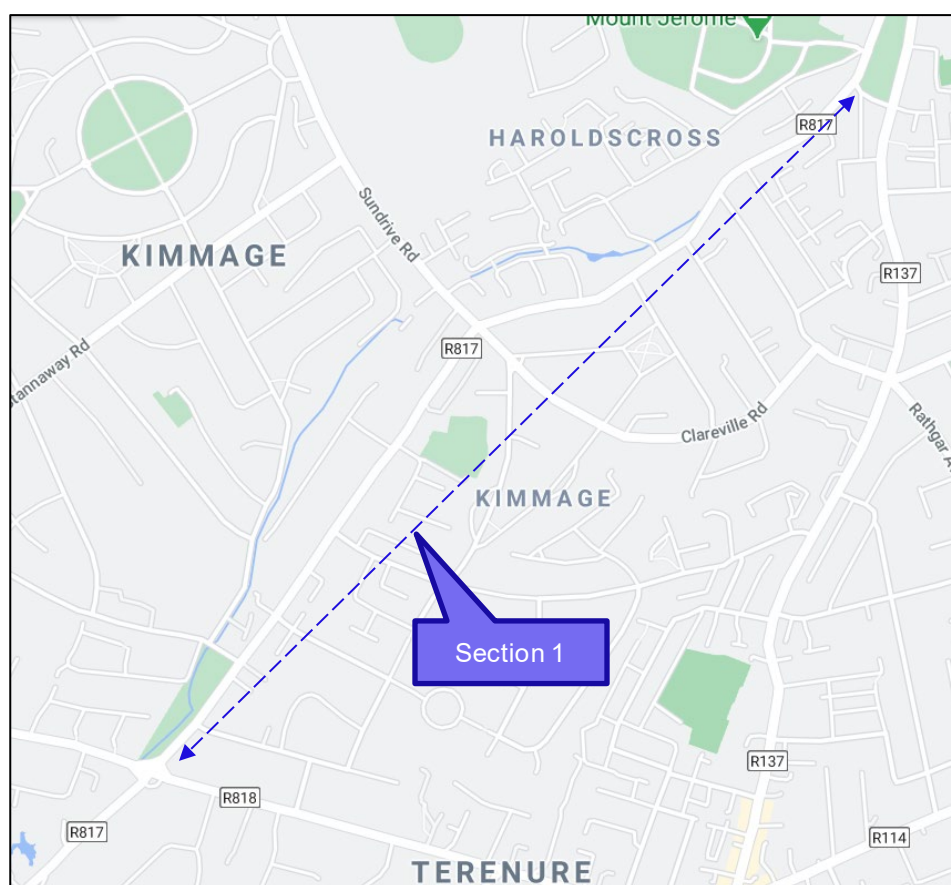


Figure 6.1 – Section 1 Location Map

#### 6.1.1 Introduction

Two key issues were reassessed for this section based on the concerns raised in Public Consultation No.1:

- c) Most suitable Bus Priority provisions.
- d) The Cycle Route

In addition, opportunities were identified for improvements or modifications to the design proposals for:

- e) Parking.
- f) Public Realm

### 6.1.2 Bus Priority Options in Section 1: Kimmage Cross Roads to Harold's Cross

The Emerging Preferred Route proposed to provide bus gates at 2 locations on the northern section of Kimmage Road Lower between Harold's Cross and Sundrive Cross, and to widen the road south of Sundrive Cross to provide bus lanes on the southern section of Kimmage Road Lower. This arrangement would require northbound traffic at Sundrive Cross to divert westward onto Sundrive Road or eastward onto Larkfield Avenue, Larkfield Park and Clareville Road.

An alternative option for bus priority in Section 1 would be to extend the bus gate-controlled road section southward to close to Kimmage Cross Roads. This would avoid the need for road widening for bus lanes and would also not lead to through traffic diversions at Sundrive Cross. To retain access from the south to the KCR Industrial Estate on Ravensdale park and the business park at Cashel Road / Stannaway Road on the western side of the corridor it was selected that a suitable alternative location for the southern bus gate would be at the junction of Ravensdale Park, located 200m north of Kimmage Cross Roads.

There are 2 possible options for the bus priority in Section 1 as shown in Figure 6.2a & 6.2b:

- Option A: Bus Gate north of Sundrive Cross as included in the Emerging Preferred Route, or
- Option B: Bus Gate at Ravensdale Park, 250m north of Kimmage Cross Roads with a northbound bus lane to enable buses to bypass any traffic queue.

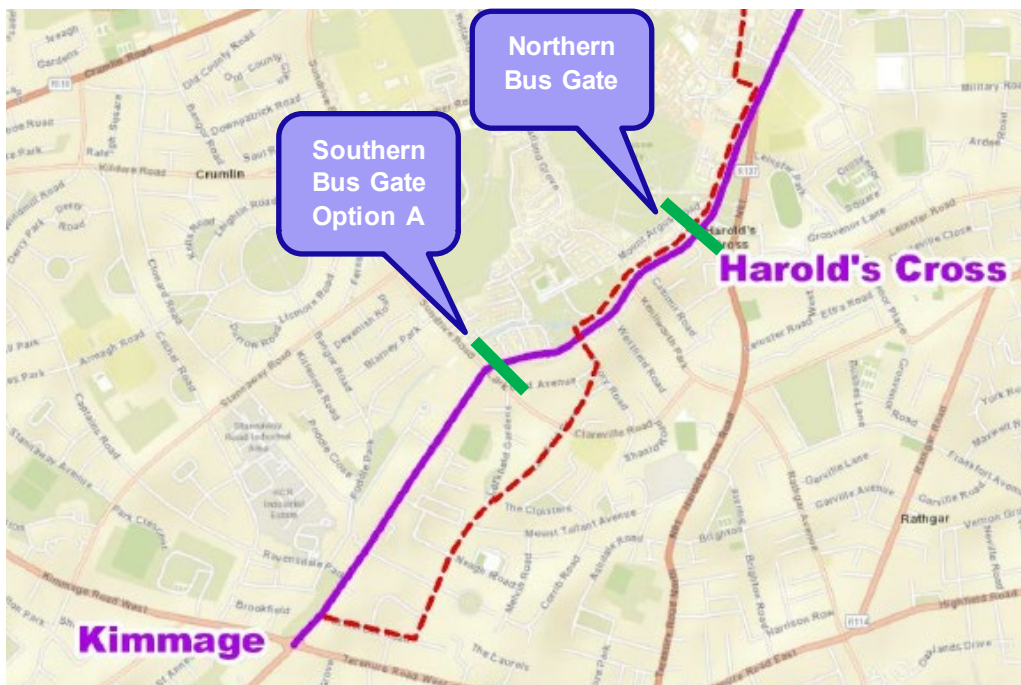


Figure 6.2a: Option A for Bus Priority in Section 1

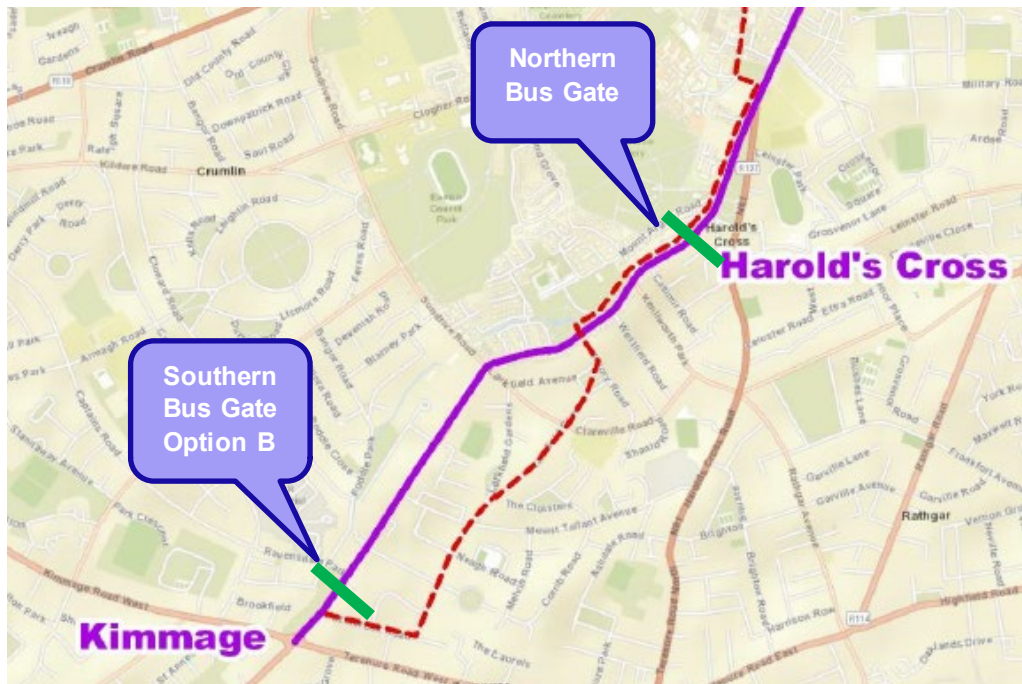


Figure 6.2b: Option B for Bus Priority in Section 1

Table 6.1 – Evaluation of Options for Bus Facilities in Section 1 Lower Kimmage Road

Option	Option A Bus Gate at Sundrive & Bus Lanes on LKR	Option B Bus Gate near KCR
<b>Economy</b>		
Capital Cost	Higher cost	Low cost
Journey Time Reliability (Bus)	Equal	Equal
<b>Integration</b>	Limited local traffic access diversion	All local access traffic diverted via Sundrive Cross
<b>Accessibility &amp; Social Inclusion</b>		
<b>Safety</b>	Cyclists share bus lanes if not on alternative route	Cycle lanes on low traffic road
<b>Environment</b>		
Landscape & Visual	Encroachment into gardens	No encroachment
Air & Noise	No change to existing	Reduced
<b>Preference</b>	<b>Not Preferred</b>	<b>Preferred</b>

The assessment concluded that Option B for the southern bus gate to be located near Kimmage Cross Roads is the preferred arrangement and this has been adopted in the Draft Preferred Route Option design.

### 6.1.3 Cycle Route Options in Section 1 - Lower Kimmage Road: KCR to Harold's Cross

The Emerging Preferred Route proposed no segregated facilities for cyclists along Lower Kimmage Road between KCR and Sundrive Cross. Cyclists could either share the proposed bus lanes or use an alternative “quiet route”



through the residential area to the east in the Kimmage area, and on the western side in Harold's Cross. Numerous submissions in the public consultations sought segregated cycling facilities along the most direct route rather than directing cyclists along the less direct alternative route.

There are 3 potential options for cycling facilities along this section of Lower Kimmage Road:

- A. Bus Gate with low traffic flows, 30 km/h speed limit and shared road.
- B. Cycle Tracks along Lower Kimmage Road.
- C. Alternative (or Complementary) Cycle Routes
  - C1: Quiet street route via Hazelbrook and Larkfield parallel on eastern side.
  - C2: Poddle Greenway Cycle Route parallel on western side.

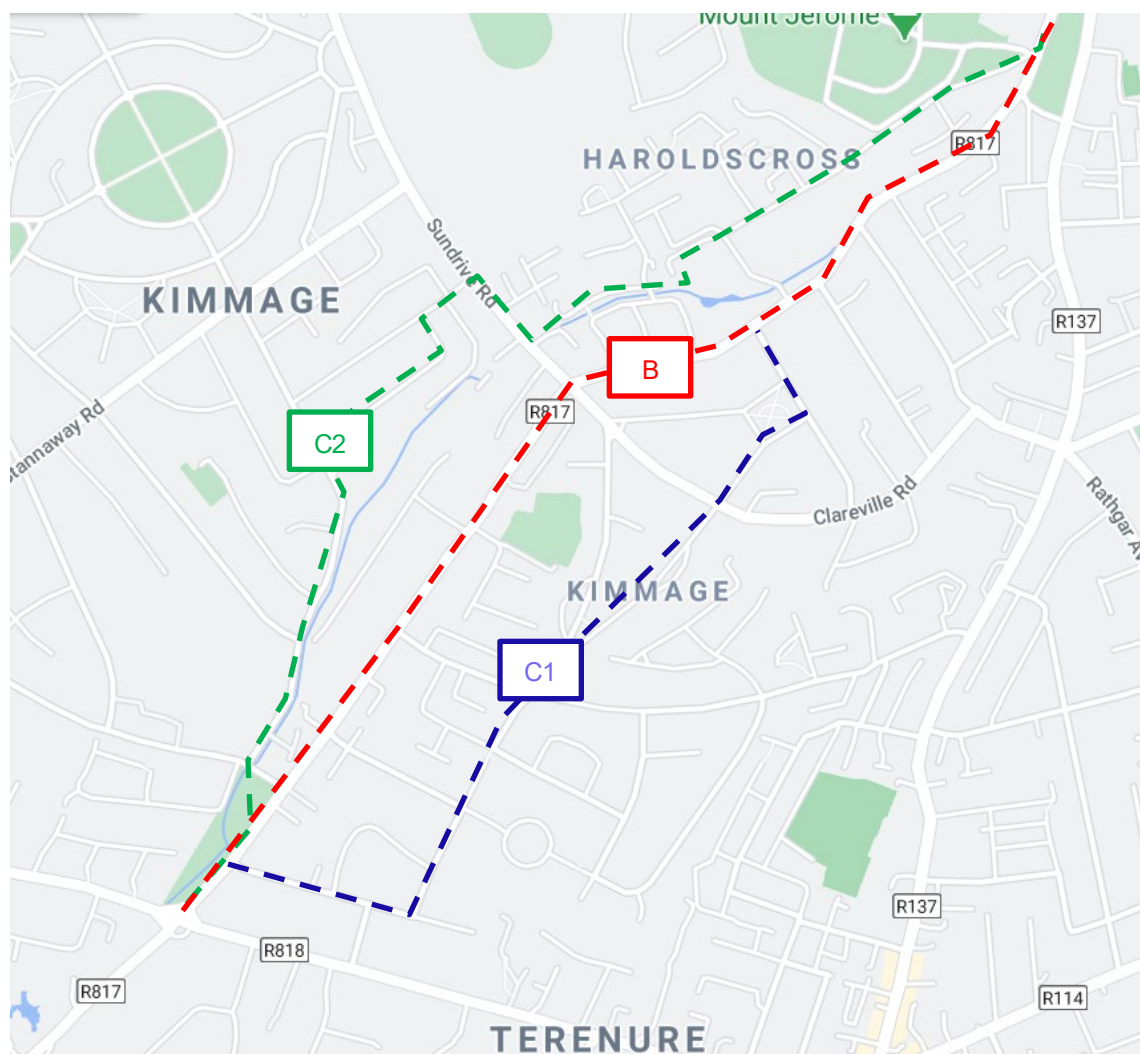


Figure 6.3 – Cycle Route Options in Section 1: Kimmage Road Lower

## Section 1 Cycle Route Option A

On the issue of where segregation for cyclists is desirable, the *National Cycle Manual* provides a guidance graph as indicated in the Figure below. The key factors are traffic speeds and volumes. Shared use of the road is suitable where traffic speeds are 30 km/h or less, with traffic flows of less than 10,000 AADT. These conditions will apply on Lower Kimmage Road downstream of the proposed bus gate.

### 1.7.4 Guidance Graph

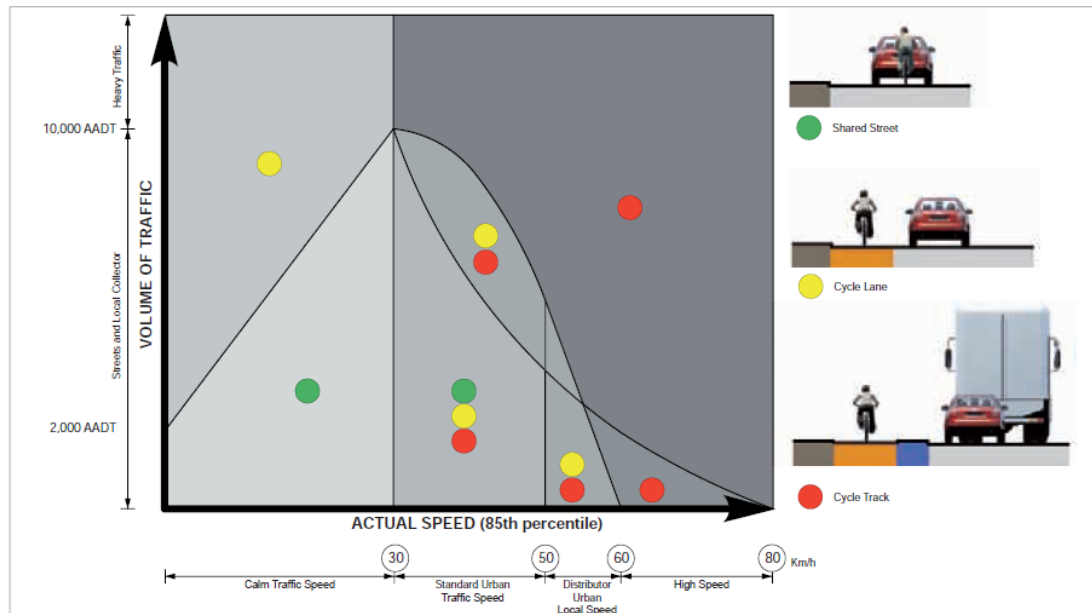


Figure 6.4: Guidance Graph from the National Cycle Manual for Integration or Segregation for Cyclists

## Section 1 Cycle Route Option B

For segregated cycle tracks the required road width 14m for 2m footpaths, 2m cycle tracks and 3m traffic lanes. This could reduce to 13m if the cycle tracks were narrowed to 1.5m, which is lower than the desirable width, but is acceptable for single file cycling. The typical width of the narrowest part of Kimmage Road Lower in Section 1 is 12m, and therefore up to 2m would need to be acquired from the front gardens of the houses.

## Section 1 Cycle Route Option C1 – Quiet Streets Cycle Route

The alternative cycle route Option C1 requires only a minor intervention for the provision of gaps through an existing road closure barrier at Derravaragh Road (and on the eastward link at Mount Tallant Avenue).

## Section 1 Cycle Route Option C2 – River Poddle Cycleway

The *Greater Dublin Area Cycle Network Plan (December 2013)* proposed a recreational amenity cycleway along the River Poddle from the Tymon Park area on the eastern side of Tallaght through Greenhills and Kimmage to Harold's Cross. The river channel is open over most of its length through the Kimmage area commencing at Poddle Park at Kimmage Cross Roads and flows northward a short distance to the west of Kimmage Road Lower. A cycleway can follow the river through public park areas in some places, and along quiet residential streets beside the river channel elsewhere. At Sundrive Road the river is underground for a section before re-emerging at Mount Argus View on the northern side. Here a new link would be required to open up access for pedestrians and cyclists to follow the river course over a short length.

At Harold's Cross the River Poddle channel is not publicly accessible as it passes alongside the Mount Jerome Cemetery and Our Lady's Hospice in Section 2 as described later. A feasibility assessment has confirmed that a cycleway can be provided generally following the River Poddle over the full 2.3km length in Section 1.



Figure 6.5: River Poddle Greenway (green line) as shown in an extract from Map N1 of GDA Cycle Network Plan

Table 6.2 – Evaluation of Options for Cycling Facilities in Section 1 - Lower Kimmage Road: KCR to Harold's Cross

Option	A Shared Road	B Cycle Tracks	C1 Alternative Route to East	C2 Alternative Route to West
<b>Economy</b>				
Capital Cost				
<b>Integration</b>				
Directness for Cyclists				
<b>Accessibility &amp; Social Inclusion</b>				
<b>Safety</b>				
<b>Environment</b>				
Landscape & Visual	No impact	Encroachment at gardens	No impact	Limited impact at Stone Boat
<b>Preference Rank</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>3</b>



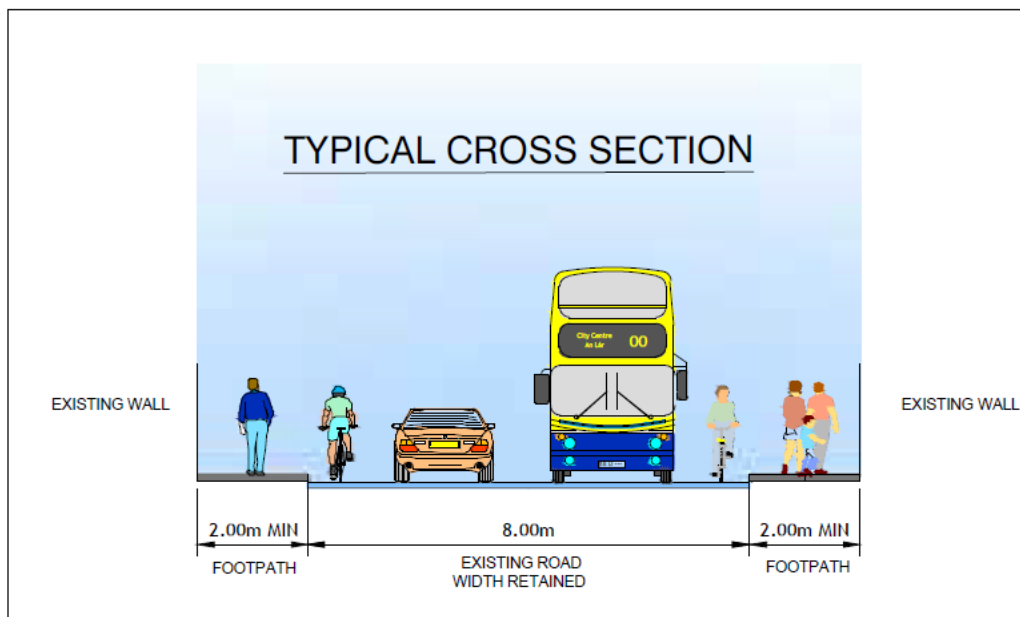
Following this review of the options for cycling facilities, the Draft Preferred Route Option is to provide a bus gate and shared use of the road with low traffic flows and speeds. The existing road layout provides advisory cycle lanes which operate in the peak periods inbound in the morning and outbound in the evening. These arrangements can be retained unchanged along the proposed Bus Corridor. The part-time cycle lanes enable some on-street parking at other times, which suits residents with no driveways, or with limited space for visitors, while ensuring a clear route for cyclists in the peak directions.

The complementary cycle routes along the River Poddle corridor to the west and through the residential areas of Hazelbrook and Larkfield to the east will allow those cyclists who prefer quiet routes to take a slightly less direct alternative to the main corridor as far as Section 2 to the north. Each of these options is likely to suit cyclists in the two different directions by avoiding the need to cross the main road: towards the city along the western Poddle route, and outbound along the eastern route, with simple left-turns at each end.

#### 6.1.4 Conclusions and Draft Preferred Route Option for Section 1 - Lower Kimmage Road: KCR to Harold's Cross

The Emerging Preferred Route has been adjusted to adopt the following changes in the Draft Preferred Route Option:

- a) Southern Bus Gate is located at Ravensdale Park instead of Sundrive Cross.
- b) The existing road layout is retained along Kimmage Road Lower.
- c) An additional alternative *Poddle Cycleway* along the western side of the corridor.

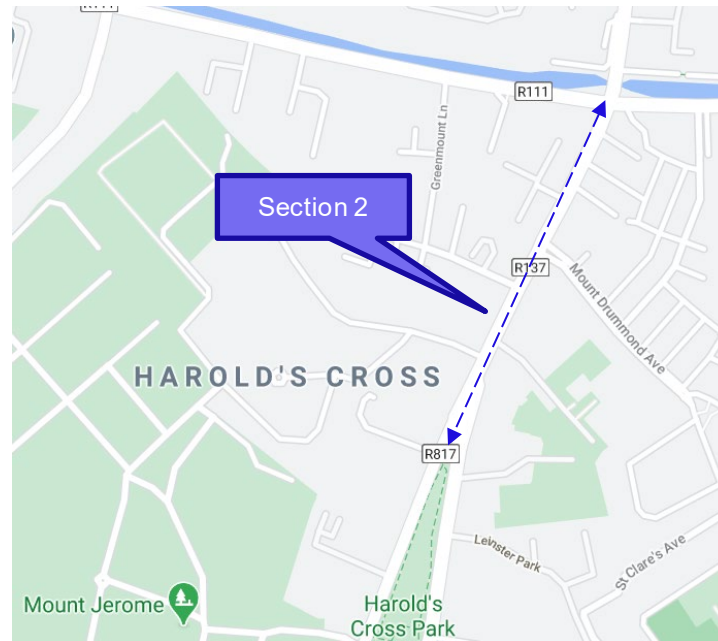


**Figure 6.6 – Typical Cross-Section on Kimmage Road Lower in Section 1**

## 6.2 Section 2 - Harold's Cross Road

### 6.2.1 Introduction

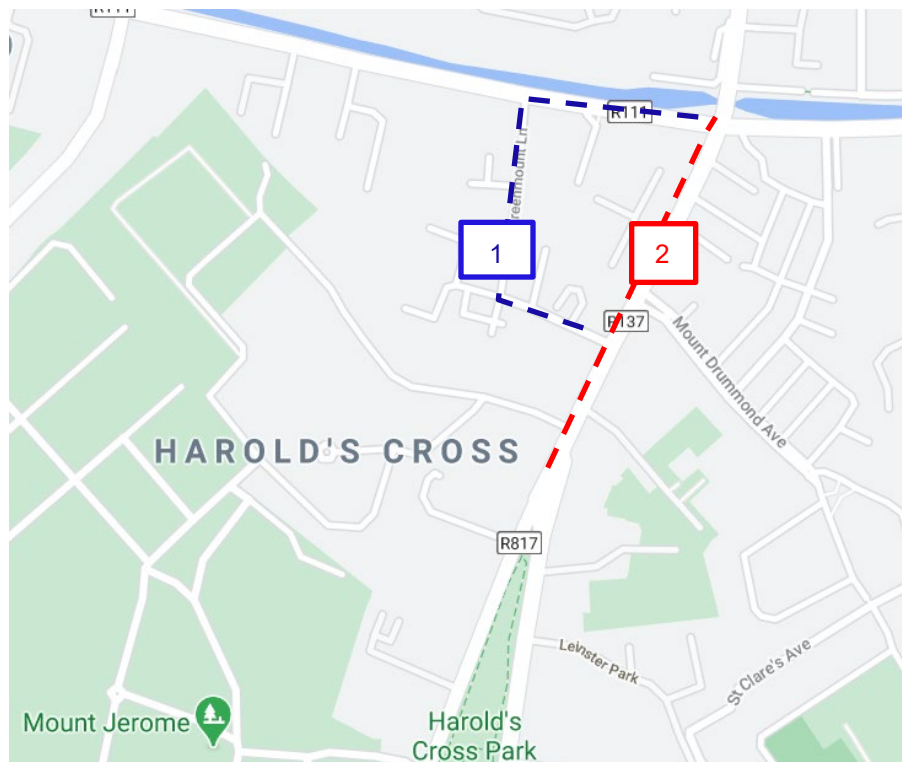
One key issue was reassessed for this section based on the concerns raised in Public Consultation No.1: the cycle route provisions.



**Figure 6.7 – Section 2 at Harold's Cross**

### 6.2.2 Cycle Route Options in Section 2 - Harold's Cross Road

Numerous submissions expressed a preference for a direct cycle route, Option 2, along Harold's Cross Road rather than Option 1 an indirect route via Greenmount Lane and Our Lady's Hospice a short distance to the west as shown in Figure 6.8 from the Emerging Preferred Route proposals.

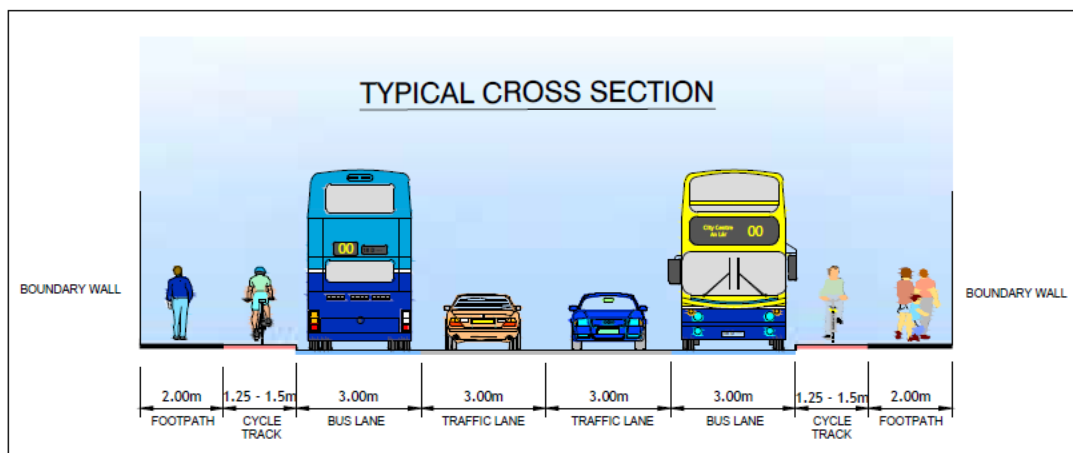


**Figure 6.8 – Cycle Route Options in Section 2 at Harold's Cross**

A review of the potential for the inclusion of cycle tracks along Harold's Cross Road is summarised as follows

- The existing road width is 18.0m minimum and in many places is 20.0m wide or more.
- For a road layout with 2 x 2m wide footpaths, 2 x 3m bus lanes, 2 x 3m traffic lanes and 2 x 2m wide segregated cycle tracks requires a total width of 20m.
- The necessary width can be achieved through acquisition of a 2m wide strip from front gardens on the eastern side of the street over a length of 100m between St. Clare's Primary School and Mount Drummond Avenue.
- Just south of the junction at Parnell Road along the Grand Canal there is a pinch-point where the road is only 16m wide. There is an office development on the western side where the corner of the building is setback by 4m from the boundary within a garden space, such that the road could be widened sufficiently for the required layout.

An alternative option for the cycle route at Harold's Cross was developed as shown in Figure 6.9 below.



**Figure 6.9 – Option 2 with Cycle Tracks on Harold's Cross Road**

The two options for the cycle route at Harold's Cross are compared in Table 6.3.

**Table 6.3 – Evaluation of Options for Cycling Facilities in Section 2 - Harold's Cross Road**

Option	1 Cycleway at Greenmount	2 Cycle Tracks on Harold's Cross Road
<b>Economy</b>		
Capital Cost	130m of new route + land 400m on street	300m of road widening. 130m of land
<b>Integration</b>		
Directness for Cyclists	530m (+77%) Extra right turns	300m
<b>Accessibility &amp; Social Inclusion</b>		
<b>Safety</b>	Away from view in part	On-Street
<b>Environment</b>		
Landscape – Gardens	No impact at houses	15 gardens
<b>Preference Rank</b>	<b>2</b>	<b>1</b>

The options assessment concluded that Option 2 for cycle tracks along Harold's Cross Road was preferred and this was incorporated into the Draft Preferred Route Option as published in March 2020.

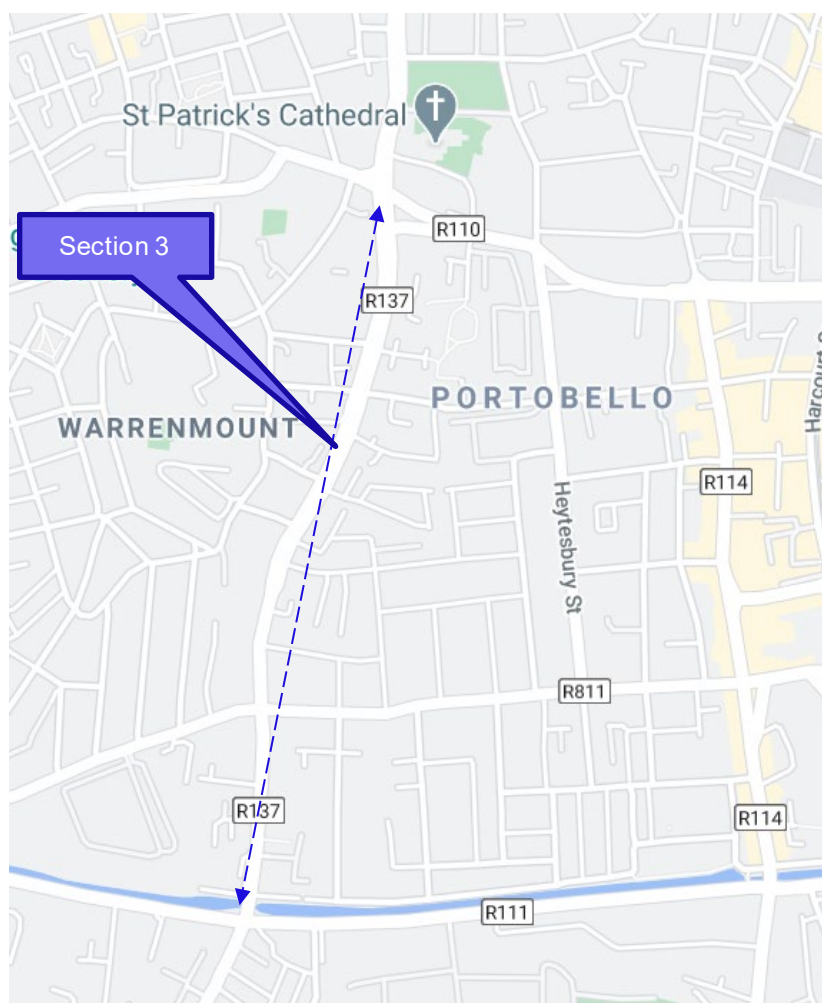
### 6.2.3 Conclusions and Draft Preferred Route Option for Section 2 - Harold's Cross Road

The Draft Preferred Route Option for Section 2 has incorporated cycle tracks along Harold's Cross Road through some localised road widening into adjoining properties where necessary to provide the required width.

## 6.3 Section 3 - Clanbrassil Street Upper and Lower and New Street South

### 6.3.1 Introduction

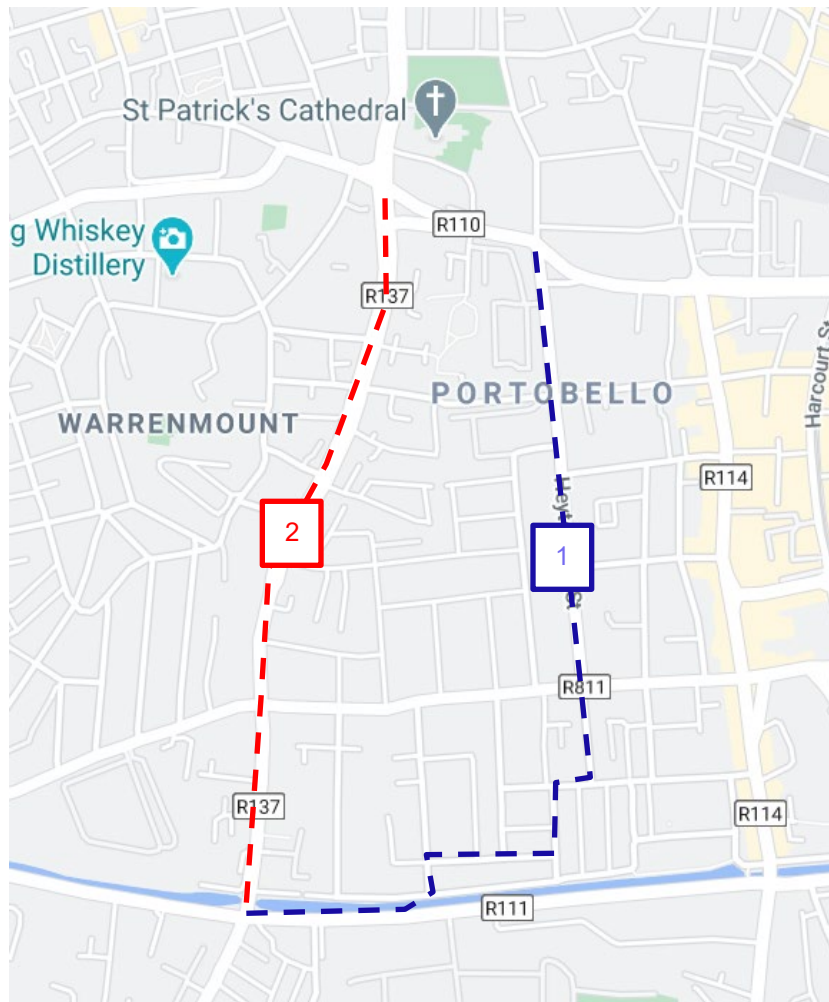
There were few concerns raised in Public Consultation No.1 for Section 3 through the Portobello area to the edge of the City Centre. Design development has identified an opportunity to enhance the cycling facilities in Section 3, with an alternative proposal compared to the Emerging Preferred Route. An opportunity has also been found to retain the existing street trees in the median island along this section.



**Figure 6.10 – Section 3 at Clanbrassil Street & New Street South**

### 6.3.2 Cycle Route Options in Section 3 - Clanbrassil Street & New Street South

In the Emerging Preferred Route (EPR) proposals published for public consultation in early 2019 it was proposed to provide a cycle route along quiet streets through the Portobello area to the east of the bus corridor along Clanbrassil Street as shown in Figure 6.11 below. This cycle route turned east at Robert Emmett Bridge in Harold's Cross and followed the Grand Canal for 0.5km to Martin Street, where it turned north for 1km on a route via Heytesbury Street as far as the Kevin Street Junction. It involved a new bridge over the canal at Grove Road. This route is shown as Option 1 on Figure 6.11. A second Option 2 would follow the main bus corridor directly along Clanbrassil Street and New Street South.

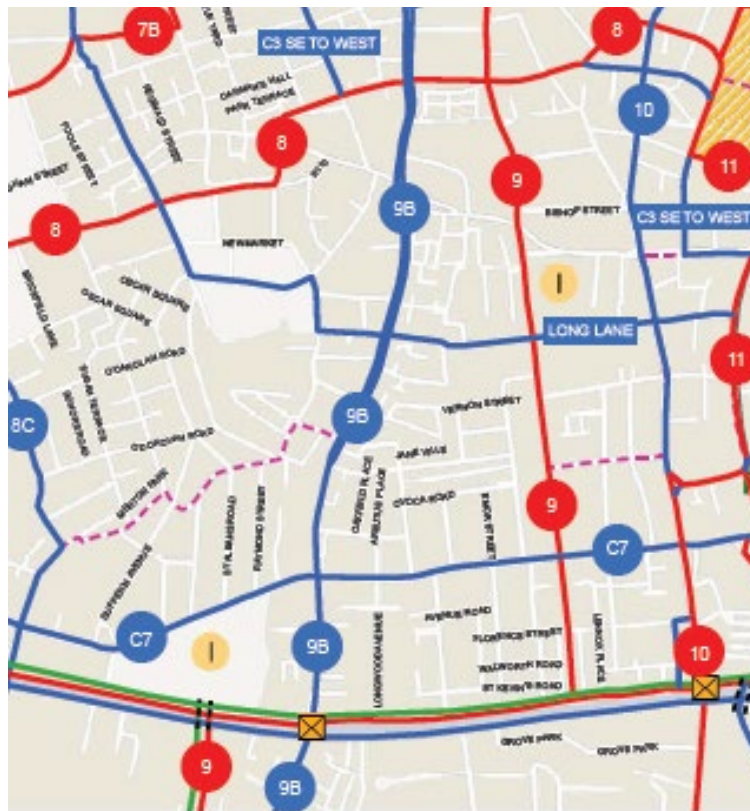


**Figure 6.11 – Cycle Route Options in Section 3**

The cycle route Option 1 shown in the EPR is Primary Cycle Route No.9 included in the *Greater Dublin Area Cycle Network Plan* as shown in Figure 6.12.

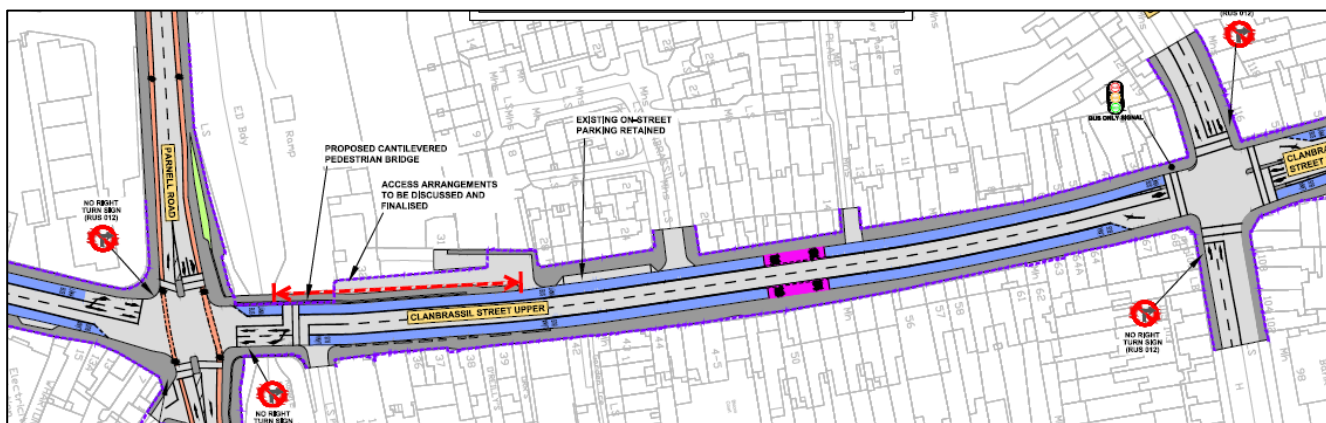
The plan includes Secondary Cycle Route No. 9B along Clanbrassil Street and New Street South to Patrick Street. Option 2 would deliver Cycle Route 9B instead of Route 9 further east, which could be delivered as a separate element outside of the BusConnects Infrastructure Works. In this context by providing fully segregated 2m wide cycle tracks along the CBC route it would enable the primary cycle route to follow the more direct route along Clanbrassil Street instead of the indirect route through Portobello to the east.





**Figure 6.12: GDA Cycle Network Plan at Portobello**

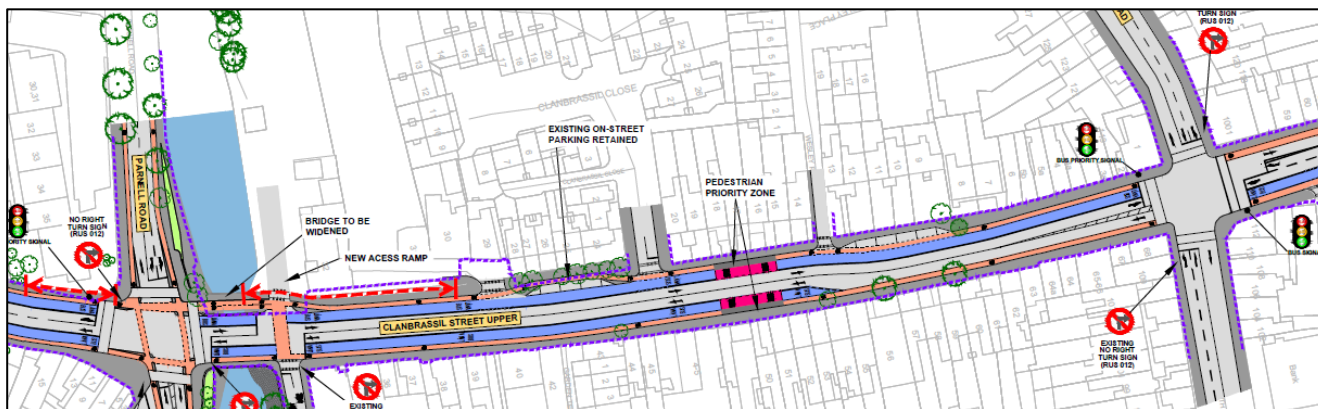
The Emerging Preferred Route proposals for Bus Connects Corridor 11 from Kimmage required cyclists to share with bus lanes as shown in Figure 6.13 below.



**Figure 6.13 – EPR at Clanbrassil Street**

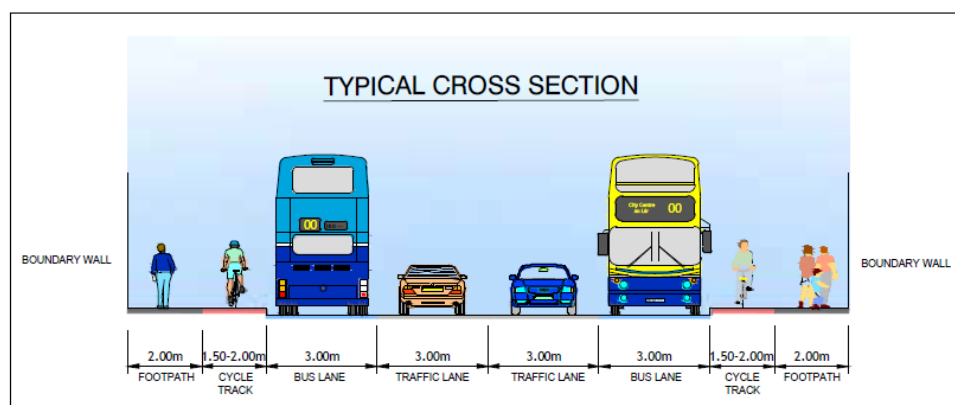
Numerous submissions in Public Consultation No.1 expressed a preference for cycling facilities to be provided along the most direct route along this corridor. While most comments focussed on the section south of the Grand Canal, some submissions also referred to the northern section along Clanbrassil Street.

In the developing design for Bus Connects Corridor 11 from Kimmage, an opportunity was derived to provide very high-quality cycling facilities along Route 9B with 2m wide cycle tracks fully segregated from the bus lanes instead of shared with bus lanes as shown in the EPR. This would enable Route 9B to be promoted from Secondary to Primary status to complement Route 9 as an additional primary cycle route. The alternative cycle route option is shown in Figure 6.14 below.



**Figure 6.14 – Alternative Cycle Route Option 2 at Clanbrassil Street**

The key difference between the 2 options above is that Option 1 provides continuous bus lanes through Leonard's Corner in both directions, whereas Option 2 omits some sections of bus lane immediately downstream of the junction (200m in the northbound direction and 100m in the southbound direction) so as to accommodate cycle tracks instead. Bus priority would be provided through the traffic signals which will provide an early start for the bus lane ahead of the general traffic as they enter the short section of shared use just after the junction. This will also enable buses to turn right from the left lane so as to enable the No.16 service to join South Circular Road.



**Figure 6.15 – Typical Cross Section with Cycle Route Option 2 at Clanbrassil Street**

The two options for the cycle route in Section 3 are compared in Table 6.4.

**Table 6.4 – Options for Cycling Facilities in Section 3 - Clanbrassil Street & New Street South**

Option	1 Portobello	2 Clanbrassil Street
<b>Economy</b>		
Capital Cost	Limited works	Minor works at road edges
<b>Integration</b>		
Directness for Cyclists		
<b>Accessibility &amp; Social Inclusion</b>		
<b>Safety</b>		
<b>Environment</b>		
<b>Preference Rank</b>	2	1

The options assessment concluded that Option 2 for cycle tracks along Clanbrassil Street and New Street South was preferred and this was incorporated into the Draft Preferred Route Option as published in March 2020.



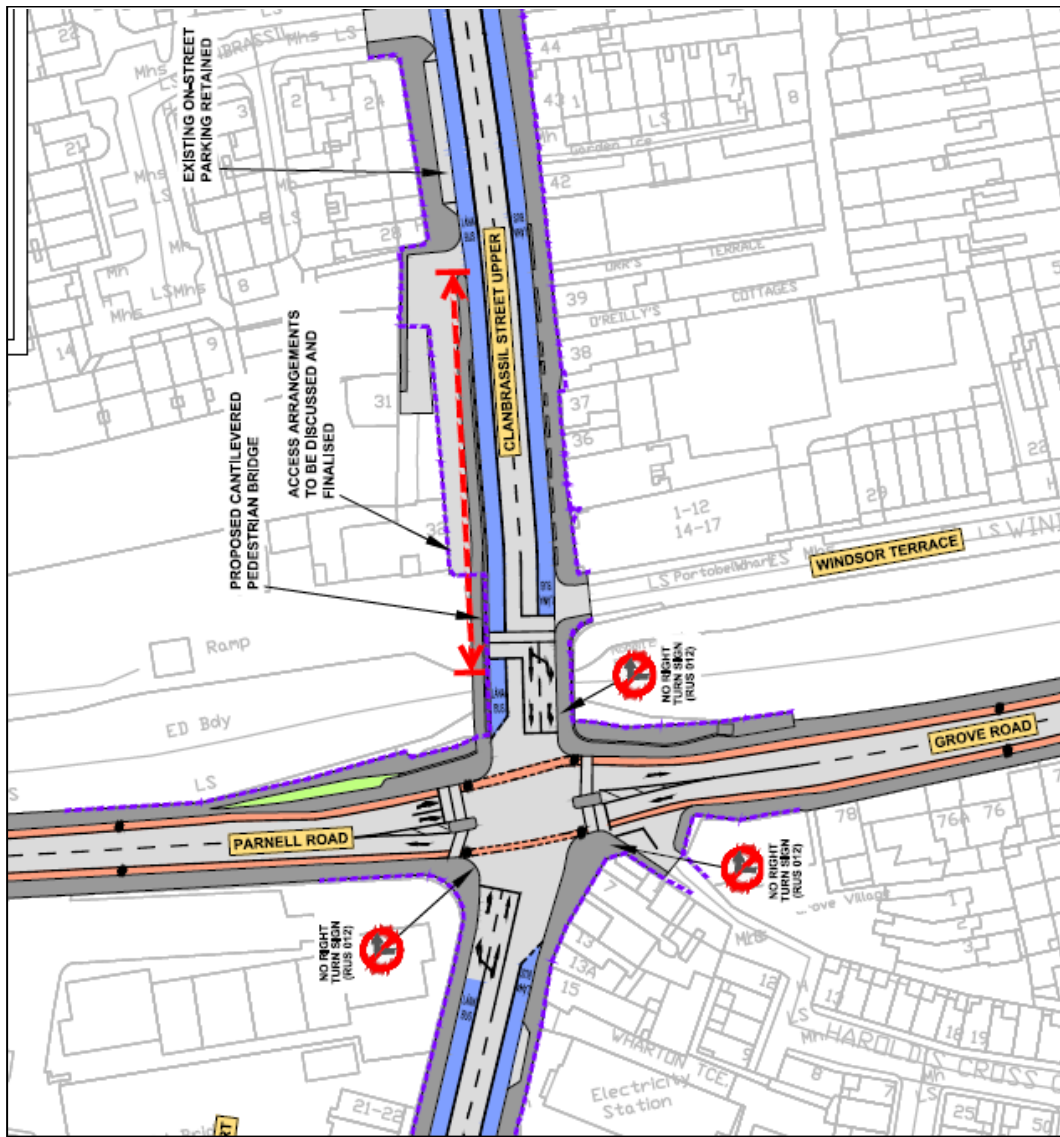
### 6.3.3 Options for Cycle Route & Widening at Emmett Bridge on Grand Canal

The Kimmage CBC crosses the Grand Canal at Robert Emmett Bridge in Harold's Cross beside the junction of Harold's Cross Road to the south, Parnell Road to the west, Clanbrassil Street Upper to the north and Grove Road to the east as shown in Figure 6.16 below.



**Figure 6.16 – Clanbrassil Street Upper at Robert Emmett Bridge over the Grand Canal**

As shown in Figure 6.15 above, the road layout on the bridge is narrow with an overall width of 15m between the parapets. This accommodates an 11m wide carriageway and a pair of 2m wide footpaths. Advisory cycle lanes are marked on the road but southbound traffic queueing at the junction encroaches into the cycle lane and obstructs cyclists. There are no bus lanes on the bridge, nor for a 200m length in the northbound direction, with the southbound bus lane only starting just to the south of the Grove Road junction. The existing bridge is too narrow for the provision of bus lanes alongside two traffic lanes, which requires a minimum carriageway width of 12m. Widening is required to gain 1m of road width plus at least 4m for a pair of cycle tracks while maintaining 2m wide footpaths.



**Figure 6.17: Emerging Preferred Route Proposals at Grand Canal Crossing**

In the Emerging Preferred Route as shown in Figure 6.17 above, no cycling facilities had been proposed in the north-south direction at the Grand Canal Bridge. Instead the cycle route was arranged along an indirect route linking west-east from Greenmount Lane along Parnell Road and Grove Road over a distance of 650m and from there crossing the Grand Canal on a new footbridge to continue northward through Portobello.

In this Draft Preferred Route Option Report, it has been concluded that the cycle route would be best to follow the same direct route as the core bus corridor at this location. This would require widening of Robert Emmett Bridge to accommodate both bus lanes and cycle tracks. A further consideration is the necessity for a significant right-turn facility for northbound cyclists to join the Grand Canal cycle route in the eastward direction. The transport model indicates that more than half of the northbound cyclists in the morning peak will wish to turn right, which could amount to 800 or more cyclists per hour. Stacking space for 20 or more turning cyclists will be needed at this location while they await a signal to cross the street.

Robert Emmett Bridge is a concrete arch structure as shown in Figure 6.16 below and it is described in the National Inventory of Architectural Heritage as follows:

*“Single-arch bridge, built 1935-6, carrying road over the Grand Canal. Elliptical arch with rendered spandrels and string course. Balustrade comprising balusters and rendered handrail, terminating in rendered piers with inset panels surmounted by lamp standards. Rendered wing walls with rendered string courses, cut limestone and rendered copings. Carved limestone plaque with bust of Robert Emmet to eastern balustrade.”*

*“The original canal bridge at this location was named for James Hamilton, 2nd Earl of Clanbrassil, and was constructed around 1790. The current structure was rebuilt in 1935-6, its design echoing the composition of the eighteenth-century bridges on this stretch of the Grand Canal. It was renamed Robert Emmet Bridge to commemorate the member of the United Irishmen who led a failed rebellion against the British in the early nineteenth century. Emmet was captured in Harold’s Cross and executed in 1803. A limestone plaque and relief bust by Albert George Power and an inscription in Irish add artistic and historical interest.”*



**Figure 6.18 –Robert Emmett Bridge over the Grand Canal at Clanbrassil Street Upper (Eastern façade)**

Immediately to the west of the bridge the canal widens to form a harbour as may be seen in Figure 6.16 earlier. Widening of the short-span arch bridge on the western side could potentially impact on the canal harbour and might require modifications to the harbour walls and canal channel.

Three layout options were developed for this location as follows:

Option 1: Western Footbridge as shown in Figure 6.19 from Emerging Preferred Route map (March 2020)

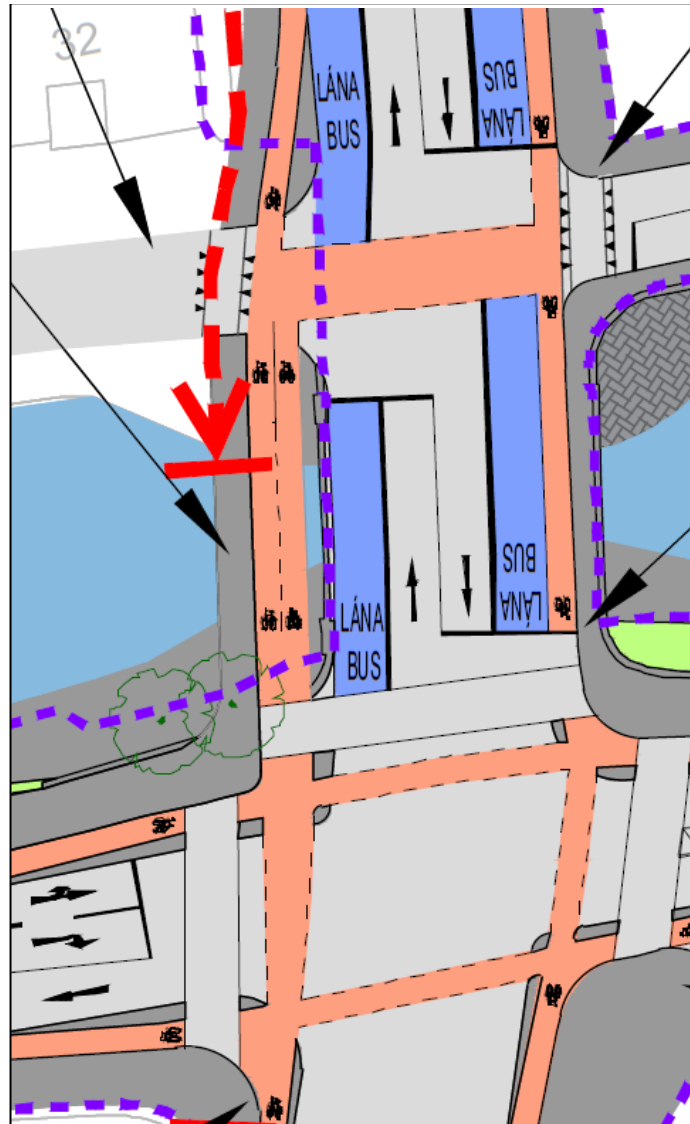
- New 6m wide footbridge on the western side for a 2m wide footpath, 2m wide northbound cycle track and 2m wide right-turn cycle track.
- Widening of the road carriageway on the western side to replace the 2m wide footpath with a 0.3m wide rubbing strip alongside the bridge parapet.
- 12m wide road for 2 x 3m bus lanes & 2 x 3m traffic lanes.
- 1.5m wide southbound cycle track.



- 1.8m wide footpath on the eastern side.

This option makes best use of the 15m width available on the existing bridge, but it is 0.7m wide narrower than desirable to accommodate a 2.0m wide southbound cycle track and a 2.0m wide footpath on the eastern side.

Provision of a lightweight footbridge on the western side in this option will allow a longer span than the existing arch bridge and avoid interference with the canal harbour. It will also allow a separation from the existing bridge to maintain visibility of the arch structure and parapet that would not be altered.



**Figure 6.19– Proposed Widening of Robert Emmett Bridge Option 1**

#### Option 2 – Bridge Widening:

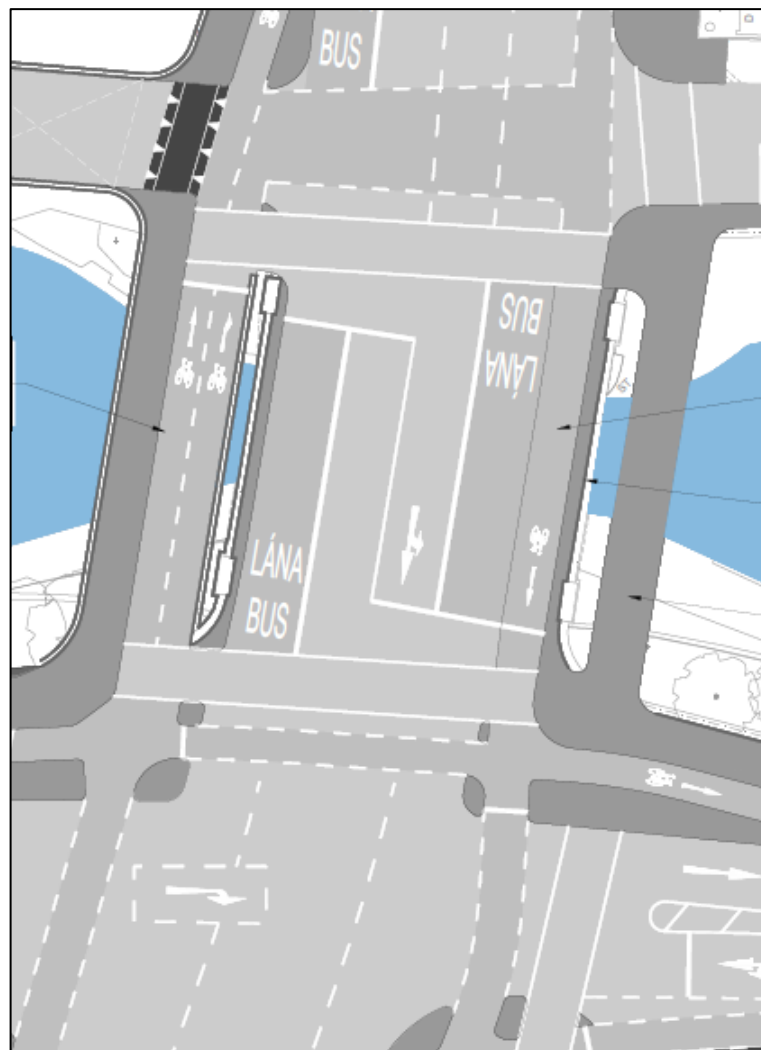
- Widening of the existing concrete arch bridge by 7m from 15m wide to 22m wide for
- 2m wide footpath on the western side.
- 4m wide northbound cycle track including 2m wide right-turn cycle lane.
- 12m wide road for 2 x 3m bus lanes & 2 x 3m traffic lanes.
- 2.0m wide southbound cycle track.
- 2.0m wide footpath on the eastern side.

This option provides the full 2m widths for the southbound cycle track and eastern footpath, which is better than in Option 1.

Widening of the existing concrete arch bridge on the western side in this option will have a short span to match the existing bridge which will require modification of the canal harbour including the historic quay walls. The new bridge facade will be a replica of the existing 85-year old bridge, including the parapet bannister.

**Option 3: Footbridges on both sides** (as shown in Figure 6.20)

- This option is the same as Option 1 on the western side.
- An additional 2.5m wide footbridge would be provided on the eastern side for pedestrians.
- On the existing bridge a wider 3.0m wide southbound cycle track would be provided alongside the 12m wide road and a pair of 0.3m wide rubbing strips alongside the existing parapets. The wider cycle track would accommodate a double line of cyclists and shorten the queue length at the signals.



**Figure 6.20 – Proposed footbridges on both sides of Robert Emmett Bridge**

The three options for the widening of Emmett Bridge in Section 3 are compared in Table 6.5.

**Table 6.5 – Evaluation of Options for Widening of Emmett Bridge**

Option	1 Western Footbridge	2 Bridge Widening	3 Two Footbridges
<b>Economy</b>			
Capital Cost	Least Cost	Highest Cost – significantly more	Mid-range cost
<b>Integration</b>			
<b>Accessibility &amp; Social Inclusion</b>			
<b>Safety</b>	Slightly Narrow footpath on east side		
<b>Environment</b>	Visual impact for existing bridge on west side only	Impact for historic canal harbour and channel	Visual impact for existing bridge on both sides
<b>Preference Rank</b>	<b>2</b>	<b>3</b>	<b>1</b>

The options assessment concluded that Option 3 is preferred as it provides the best overall functionality for pedestrians and cyclists, albeit with visual impact on both sides of the existing arch bridge.

### 6.3.4 Street Trees in Section 3

An opportunity was found in the development of the design to retain the existing median and street trees along Section 3, rather than to remove the median and trees as previously shown in the EPR, as shown in Figure 6.21 below.



**Figure 6.21 – Retention of Street Trees on Clanbrassil Street & New Street South**

These streets were widened to a dual carriageway in the 1980's, and the footpaths are unusually wide at typically 4m to 5m and wider in places. Road design standards at the time provided for a 7.5m wide carriageway, with



3.75m wide traffic lanes. Revised standards adopted in the *Design Manual for Urban Roads and Streets* in 2013, require considerably narrower traffic lanes of 3m in low-speed environments. The BusConnects proposals generally provide for 3m wide bus lanes and 3m wide traffic lanes. In Section 3 therefore, 1.5m of surplus road width is available for provision of cycle tracks segregated from the bus lanes. To provide the optimum 2m wide cycle tracks, a further 0.5m may be gained from minor narrowing of the footpaths, which will still remain wider than usual at 3.5m typically. No road widening is required at the median, apart from a short section over a length of 100m at Cathedral Court north of Fumbally Lane where the median is less than 1m wide and there are no trees.

### **6.3.5 Conclusions and Draft Preferred Route Option for Section 3 - Clanbrassil Street & New Street South**

- a) The Draft Preferred Route Option for Section 3 has incorporated cycle tracks along Clanbrassil Street and New Street South. The alternative route on quiet streets through Portobello to the east has therefore been omitted from the BusConnects proposals.
- b) For the widening at Robert Emmett Bridge over the Grand Canal, the preferred option is for new footbridges on both sides of the existing concrete arch bridge.
- c) All existing street trees in the median along Clanbrassil Street and New Street South will be retained in the Draft Preferred Route Option.

# 7 Draft Preferred Route Option

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## 7.1 Introduction

Chapter 6 of this report presented an appraisal of all route options considered for *Kimmage* CBC Corridor 11. Following this appraisal, the Draft Preferred Route Option has been confirmed as summarised in this chapter of the report. The updated Draft Preferred Route Option scheme design drawings are included in *Appendix B* of this report.

## 7.2 Draft Preferred Route Option in Section 1 - Lower Kimmage Road: KCR to Harold's Cross

The Emerging Preferred Route has been adjusted to adopt the following changes in the Draft Preferred Route Option:

- a) Southern Bus Gate at Ravensdale Park instead of Sundrive Cross.
- b) The existing road layout is retained along Kimmage Road Lower.
- c) An additional alternative *Poddle Cycleway* is provided along the western side of the corridor.

The proposed road layout in Section 1 will be as follows:

- 1) Bus lanes will be provided in both directions on Kimmage Road Lower over a length of 250m from Kimmage Cross-Roads (KCR) northwards to Ravensdale Park.
- 2) A southern bus gate will be provided on Kimmage Road Lower just north of the junction at Ravensdale Park, which will allow only bus lane traffic and cyclists to continue along the street in either direction. A complementary northern bus gate will be provided where Kimmage Road Lower joins Harold's Cross Park at the southwest corner. These measures will divert all through traffic away from Kimmage Road Lower and thereby provide bus priority on the main route over a length of 1.6 km, without need for road widening to provide bus lanes.
- 3) Local streets to the west of Kimmage Road Lower will be protected from diverted through traffic by road closure (except for cyclists and pedestrians) at the southern end of Poddle Park at the junction with Ravensdale Park.
- 4) Local streets to the east of Kimmage Road Lower will be protected from diverted through traffic by road closure (except for cyclists and pedestrians) on Derravaragh Road just south of the junction with Corrib Road.
- 5) Cycle lanes will be provided through the Kimmage Cross-Roads (KCR) junction in all directions, with protected corners and dedicated turning facilities.
- 6) Cycle tracks will be provided along Kimmage Road Lower north of Ravensdale Park, over the full 250m length on the eastern side, and over half the length of the western side between the KCR junction and Hazelbrook Road. A toucan signal crossing facility will be provided for pedestrians and cyclists on Kimmage Road Lower on the northern side of the junction with Hazelbrook Road.
- 7) A *Poddle Cycleway* will be provided with a cycle track through the open park space of *Poddle Park* from the toucan crossing on Kimmage Road Lower at Hazelbrook Road to Ravensdale Park. The cycle route will cross the road at Ravensdale Park to Poddle Park and then will follow quiet residential streets on Bangor Road and Blarney Park to Sundrive Road over a distance of approximately 1 km. The cycle route will extend along Sundrive Road for a distance of 140m east of Blarney Park with segregated cycle tracks. Then it will turn north through a small public car park, and a new connection will be provided into Mount Argus View. An elevated boardwalk structure will carry the greenway over the River Poddle at the *Stone Boat* historic feature. The route will share the local residential streets through Mount Argus View to Mount Argus Park. It will pass through the park along an existing path on the western side, which will be widened

from 3m to 4m. The route will then link through the car park of Mount Argus Church to Mount Argus Road, which it will share as far as Harold's Cross.

- 8) A public realm improvement scheme will be provided at the village centre at the junction of Kimmage Road Lower and Sundrive Road. Some additional on-street parking will be provided on the eastern side of Kimmage Road Lower. The footpath areas will be repaved with high-quality materials and various landscape features will be provided, including new street trees.

### **7.3 Draft Preferred Route Option in Section 2 - Harold's Cross Road**

The Emerging Preferred Route has been adjusted to adopt the following changes in the Draft Preferred Route Option:

- a) Cycle tracks are proposed along Harold's Cross Road through some localised road widening into adjoining properties where necessary to provide the required width.

The proposed road layout in Section 2 will be as follows:

- 1) A bus gate at the northern end of Harold's Cross Park will restrict general traffic from the direct link between Kimmage Road Lower and Harold's Cross Road on the western side of the park. Local access for general traffic will be diverted around the southern end of Harold's Cross Park with suitable adjustments to the road layout, including a right-turn lane on Harold's Cross Road in the southbound direction.
- 2) On the eastern side of Harold's Cross Park, the southbound bus lane on Harold's Cross Road will be removed and replaced by cycle tracks on both sides of the street. This will connect to the Rathfarnham cycle route corridor from Terenure.
- 3) The existing Bus Lanes will be retained on Harold's Cross Road over a length of 400m from Harold's Cross Park to the junction at the Grand Canal.
- 4) Segregated cycle tracks will be provided on both sides of Harold's Cross Road over a length of 400m from Harold's Cross Park to the junction at the Grand Canal.

### **7.4 Draft Preferred Route Option in Section 3 - Clanbrassil Street & New Street South**

The Emerging Preferred Route has been adjusted to adopt the following changes in the Draft Preferred Route Option:

- a) Segregated cycle tracks will be provided along Clanbrassil Street and New Street South. The alternative route on quiet streets through Portobello to the east has therefore been omitted from the BusConnects proposals.
- b) All existing street trees in the median along Clanbrassil Street and New Street South will be retained in the Draft Preferred Route Option.
- c) For the widening at Robert Emmett Bridge over the Grand Canal, the preferred option is for new footbridges on both sides of the existing concrete arch bridge.

The proposed road layout in Section 3 will be as follows:

- 1) Continuous bus lanes will be provided in both directions along this 1 km long route section, with the exception of short lengths immediately downstream of the *Leonard's Corner* junction on South Circular Road. over a length of 170m in the northbound direction, and 70m in the southbound direction.
- 2) Segregated cycle tracks will be provided in both directions along the full length.

## 7.5 Kimmage to City Centre CBC Draft Preferred Route Summary

The Kimmage to City Centre Core Bus Corridor is approximately 3.7 km long from end to end.

The proposed route will provide the following improvements for bus priority:

<b>Bus priority – Northbound to City Centre</b>	Road Length	Existing Length	%	Proposed Length	%
Kimmage Road Lower	2,200	0	0%	2,200	100%
Harold's Cross Road	400	350	88%	400	100%
Clanbrassil Street / New Street South	1,100	540	49%	900	82%
<b>Total</b>	<b>3,700</b>	<b>890</b>	<b>24%</b>	<b>3,500</b>	<b>95%</b>
<b>Bus priority – Southbound from City Centre</b>					
Clanbrassil Street / New Street South	1,100	0	0%	1,000	90%
Harold's Cross Road	400	240	60%	400	100%
Kimmage Road Lower	2,200	0	0%	2,200	100%
<b>Total</b>	<b>3,700</b>	<b>240</b>	<b>6.5%</b>	<b>3,600</b>	<b>97%</b>

The proposed route will provide the following improvements for cyclists:

<b>Cycling Facilities – Northbound to City Centre</b>	Road Length	Existing Length	%	Proposed Length	%
Kimmage Road Lower – <ul style="list-style-type: none"> <li>Advisory cycle lanes</li> <li>Cycle tracks</li> </ul>	2,200	2,200	100%	1,950 250	89% 11%
Harold's Cross Road – Cycle Tracks	400	0	0%	400	100%
Clanbrassil Street / New Street South: Upgrade from advisory cycle lanes to cycle tracks	1,100	600	49%	1,100	100%
<b>Total</b>	<b>3,700</b>	<b>2,800</b>	<b>76%</b>	<b>3,700</b>	<b>100%</b>
<b>Cycling Facilities – Southbound from City Centre</b>					
Clanbrassil Street / New Street South: Upgrade from advisory cycle lanes to cycle tracks	1,100	1,100	100%	1,100	100%
Harold's Cross Road	400	0	0%	400	100%
Kimmage Road Lower – <ul style="list-style-type: none"> <li>Advisory cycle lanes</li> <li>Cycle tracks</li> </ul>	2,200	2,200	100%	1,950 250	89% 11%
<b>Total</b>	<b>3,700</b>	<b>3,300</b>	<b>89%</b>	<b>3,700</b>	<b>100%</b>
<b>Poddle Cycleway</b>	2,300	n/a	n/a	2,300	

## 8 Next Steps

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This report has identified a Draft Preferred Route Option for the bus infrastructure along this Core Bus Corridor for which an updated concept design has been developed.

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

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

# Appendices



## Appendix A - Detailed Multi-Criteria Assessments of Route Options

**Table 6.1 – Evaluation of Options for Bus Facilities in Section 1**

### **Kimmage Road Lower**

<b>Option</b>	<b>Option A Bus Gate at Sundrive &amp; Bus Lanes on LKR</b>	<b>Option B Bus Gate near KCR</b>
<b>Economy</b>		
Capital Cost	Higher cost	Low cost
Journey Time Reliability (Bus)	Equal	Equal
<b>Integration</b>		
Integration with Land-Use policy	Equal	Equal
Residential Population and Employment Catchments	Equal	Equal
Public Transport Network	Equal	Equal
Cycle Network	Equal	Equal
Other Vehicular Traffic Network	Limited local traffic access diversion	All local access traffic diverted via Sundrive Cross
<b>Accessibility &amp; Social Inclusion</b>		
Key Trip Attractors within Catchment	Equal	Equal
Deprived Geographic Areas	Equal	Equal
<b>Safety</b>	Cyclists share bus lanes if not on alternative route	Cycle lanes on low traffic road
<b>Environment</b>		
Archaeology & Cultural Heritage	Equal	Equal
Flora & Fauna / Biodiversity	Equal	Equal
Soils & Geology	Equal	Equal
Hydrology	Equal	Equal
Landscape & Visual	Encroachment at gardens	No encroachment
Air & Noise	No change to existing	Reduced
Land Use and the Built Environment	Equal	Equal
<b>Preference</b>	<b>Not Preferred</b>	<b>Preferred</b>

**Table 6.2 – Evaluation of Options for Cycling Facilities in Section 1**

**Lower Kimmage Road**

<b>Option</b>	<b>A Shared Road</b>	<b>B Cycle Tracks</b>	<b>C1 Alternative Route to East</b>	<b>C2 Alternative Route to West</b>
<b>Economy</b>				
Capital Cost	No works		Existing quiet streets	Some localised works
Journey Time Reliability (Bus)	n/a	n/a	n/a	n/a
<b>Integration</b>				
Integration with Land-Use policy	Equal	Equal	Equal	Equal
Residential Population and Employment Catchments	Equal	Equal	Equal	Equal
Public Transport Network	n/a	n/a	n/a	n/a
Cycle Network	Most direct	Most direct	Indirect	Indirect
Other Vehicular Traffic Network	n/a	n/a	n/a	n/a
<b>Accessibility &amp; Social Inclusion</b>				
Key Trip Attractors within Catchment	Equal	Equal	Equal	Equal
Deprived Geographic Areas	Equal	Equal	Equal	Equal
<b>Safety</b>	Shared with low traffic	Segregated	Shared with low traffic	Shared with low traffic
<b>Environment</b>				
Archaeology & Cultural Heritage	Equal	Equal	Equal	Equal
Flora & Fauna / Biodiversity	Equal	Equal	Equal	Equal
Soils & Geology	Equal	Equal	Equal	Equal
Hydrology	Equal	Equal	Equal	Equal
Landscape & Visual	No impact	Encroachment at gardens	No impact	Limited impact at Stone Boat
Air & Noise	Equal	Equal	Equal	Equal
Land Use and the Built Environment	Equal	Equal	Equal	Equal
<b>Preference Rank</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>3</b>

**Table 6.3 – Evaluation of Options for Cycling Facilities in Section 2**

**Harold's Cross**

Option	1 Cycleway at Greenmount	2 Cycle Tracks on Harold's Cross Road
<b>Economy</b>		
Capital Cost	130m of new route + land	300m of road widening. 130m of land
Journey Time Reliability (Bus)	n/a	n/a
<b>Integration</b>		
Integration with Land-Use policy	Equal	Equal
Residential Population and Employment Catchments	Equal	Equal
Public Transport Network	Equal	Equal
Cycle Network	530m (+77%) Extra right turns	300m - shortest
Other Vehicular Traffic Network	Narrow street shared in Greenmount	No change at Greenmount
<b>Accessibility &amp; Social Inclusion</b>		
Key Trip Attractors within Catchment	Equal	Equal
Deprived Geographic Areas	Equal	Equal
<b>Safety</b>	Shared with low traffic	Segregated
<b>Environment</b>		
Archaeology & Cultural Heritage	Equal	Equal
Flora & Fauna / Biodiversity	Equal	Equal
Soils & Geology	Equal	Equal
Hydrology	Equal	Equal
Landscape & Visual	No impact at houses	15 gardens
Air & Noise	Equal	Equal
Land Use and the Built Environment	Equal	Equal
<b>Preference Rank</b>	<b>2</b>	<b>1</b>

**Table 6.4 – Evaluation of Options for Cycling Facilities in Section 3:**

**Clanbrassil Street & New Street South**

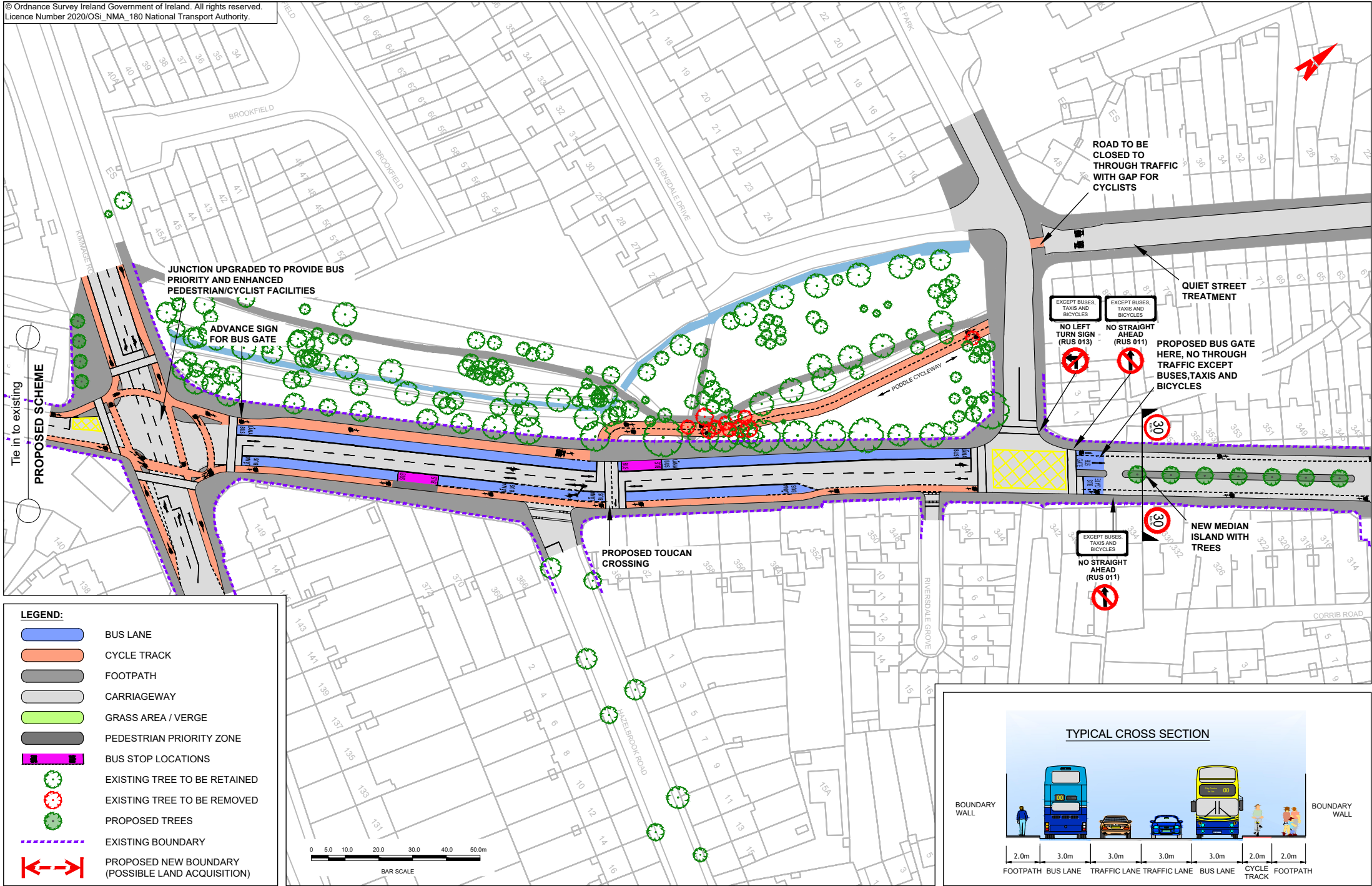
<b>Option</b>	<b>1 Quiet Street Cycle Route through Portobello</b>	<b>2 Cycle Tracks on Clanbrassil Street &amp; New Street</b>
<b>Economy</b>		
Capital Cost	Limited works	Minor works at road edges
Journey Time Reliability (Bus)	n/a	n/a
<b>Integration</b>		
Integration with Land-Use policy	Equal	Equal
Residential Population and Employment Catchments	Equal	Equal
Public Transport Network	Equal	Equal
Cycle Network	1.4 km	1 km
Other Vehicular Traffic Network	Local traffic closure	No impact
<b>Accessibility &amp; Social Inclusion</b>		
Key Trip Attractors within Catchment	Equal	Equal
Deprived Geographic Areas	Equal	Equal
<b>Safety</b>		
<b>Environment</b>		
Archaeology & Cultural Heritage	Equal	Equal
Flora & Fauna / Biodiversity	Equal	Equal
Soils & Geology	Equal	Equal
Hydrology	Equal	Equal
Landscape & Visual	Equal	Equal
Air & Noise	Equal	Equal
Land Use and the Built Environment	Equal	Equal
<b>Preference Rank</b>	<b>2</b>	<b>1</b>

**Table 6.5 – Evaluation of Options for Widening of Emmett Bridge in Section 3 - Clanbrassil Street & New Street South**

Option	1 Western Footbridge	2 Bridge Widening	3 Two Footbridges
<b>Economy</b>			
Capital Cost	Least Cost	Highest Cost – significantly more	Mid-range cost
Journey Time Reliability (Bus)	n/a	n/a	n/a
<b>Integration</b>			
Integration with Land-Use policy	Equal	Equal	Equal
Residential Population and Employment Catchments	Equal	Equal	Equal
Public Transport Network	Equal	Equal	Equal
Cycle Network	Equal	Equal	Equal
Other Vehicular Traffic Network	Equal	Equal	Equal
<b>Accessibility &amp; Social Inclusion</b>			
Key Trip Attractors within Catchment	Equal	Equal	Equal
Deprived Geographic Areas	Equal	Equal	Equal
<b>Safety</b>	Slightly Narrow footpath on east side		
<b>Environment</b>			
Archaeology & Cultural Heritage			
Flora & Fauna / Biodiversity			
Soils & Geology			
Hydrology			
Landscape & Visual	Visual impact for existing bridge on west side only	Impact for historic canal harbour and channel	Visual impact for existing bridge on both sides
Air & Noise			
Land Use and the Built Environment			
<b>Preference Rank</b>	<b>2</b>	<b>3</b>	<b>1</b>

**Appendix B - Updated Preferred Route Maps**



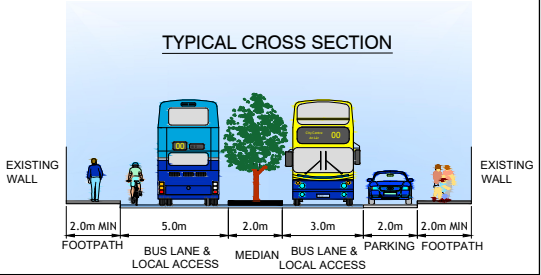




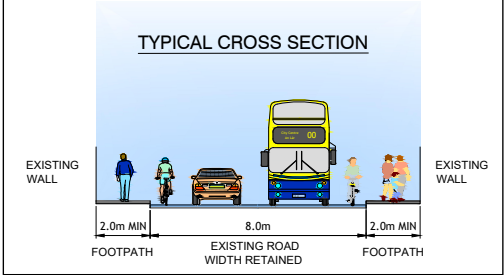
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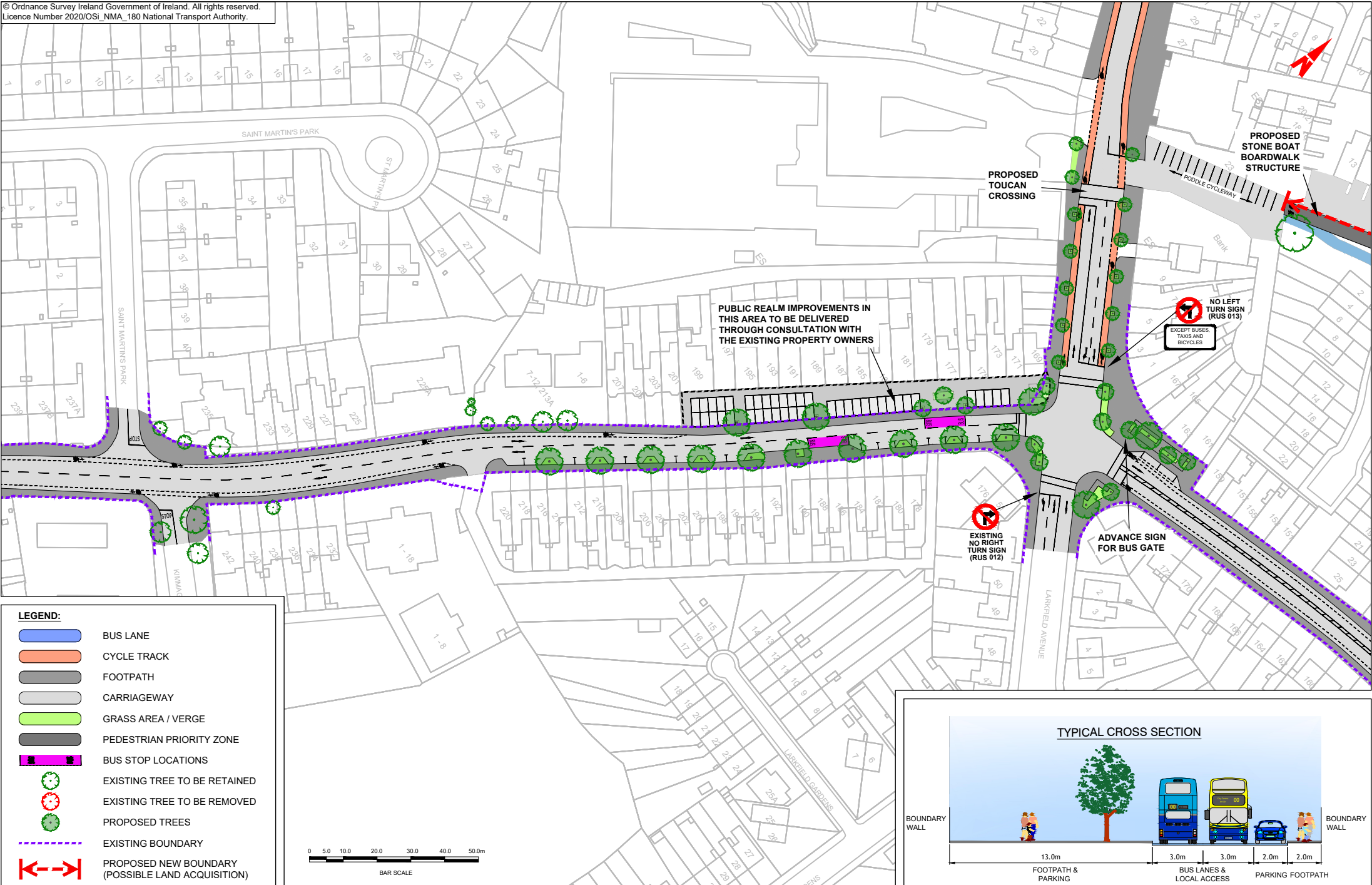
- BUS LANE
- CYCLE TRACK
- FOOTPATH
- CARRIAGEWAY
- GRASS AREA / VERGE
- PEDESTRIAN PRIORITY ZONE
- BUS STOP LOCATIONS
- EXISTING TREE TO BE RETAINED
- EXISTING TREE TO BE REMOVED
- PROPOSED TREES
- EXISTING BOUNDARY
- PROPOSED NEW BOUNDARY (POSSIBLE LAND ACQUISITION)

**TYPICAL CROSS SECTION**

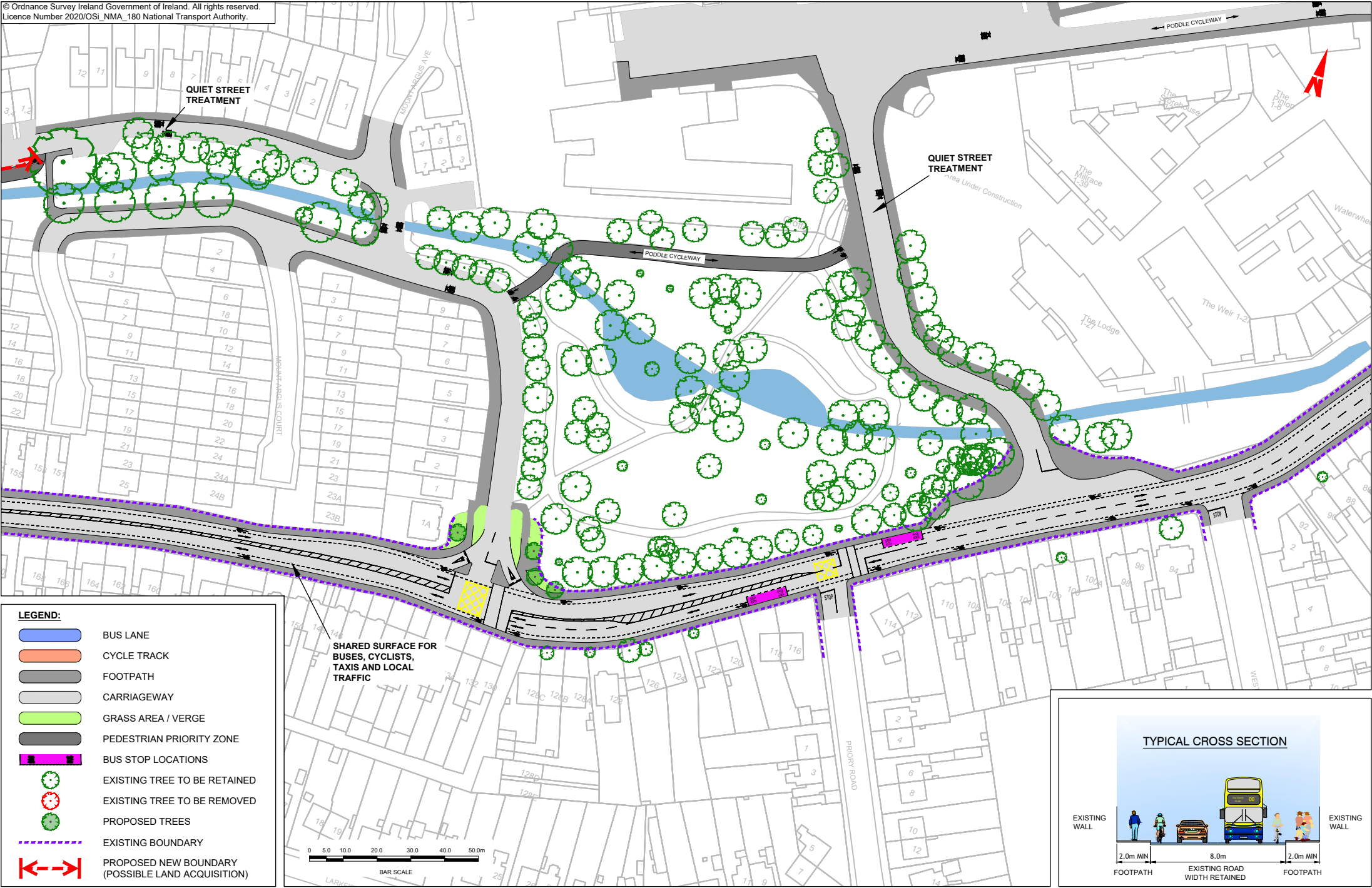


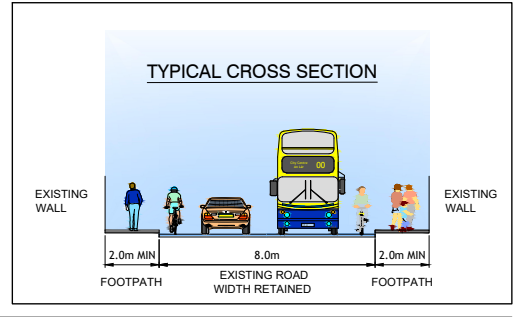
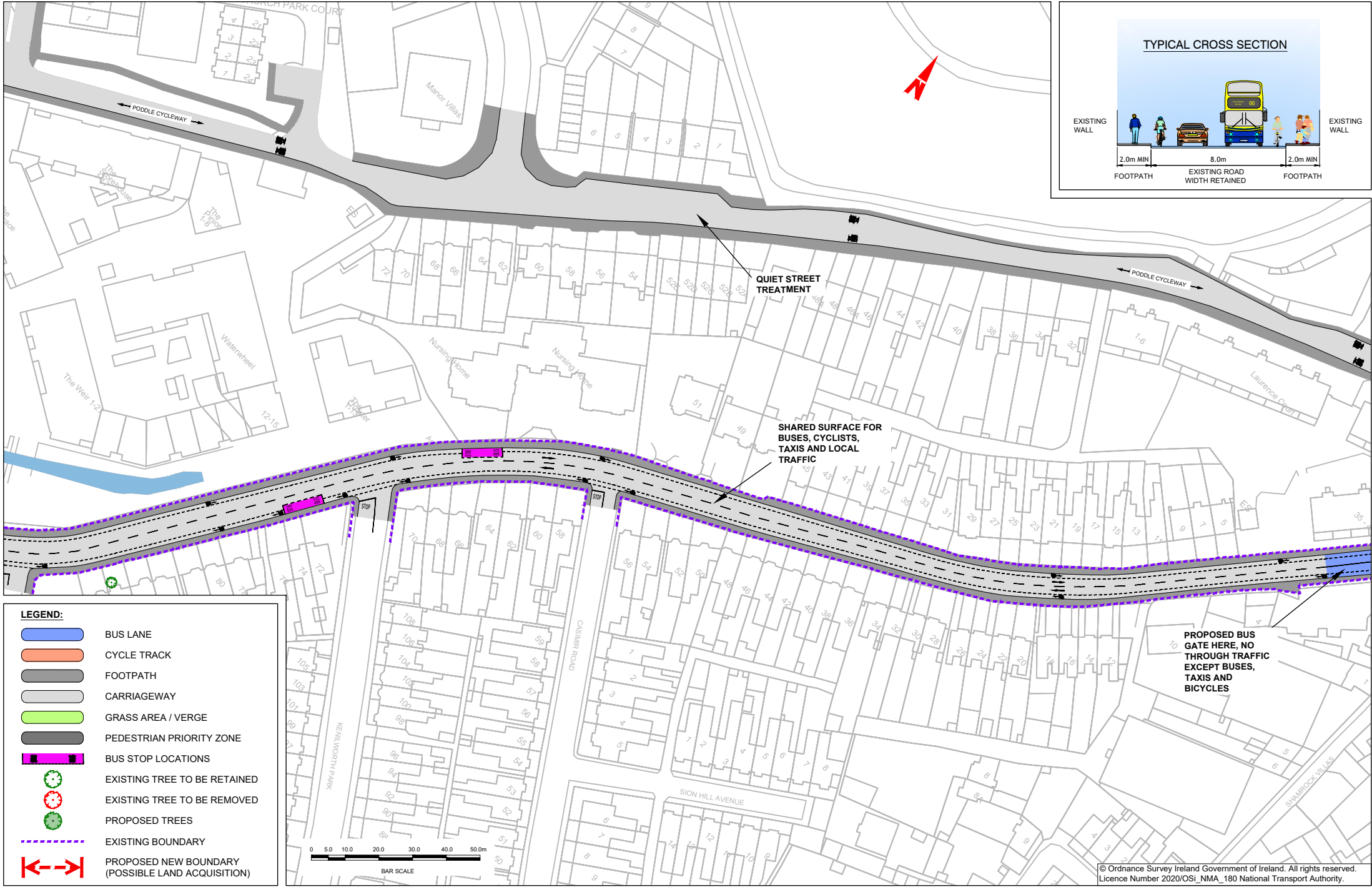
**TYPICAL CROSS SECTION**





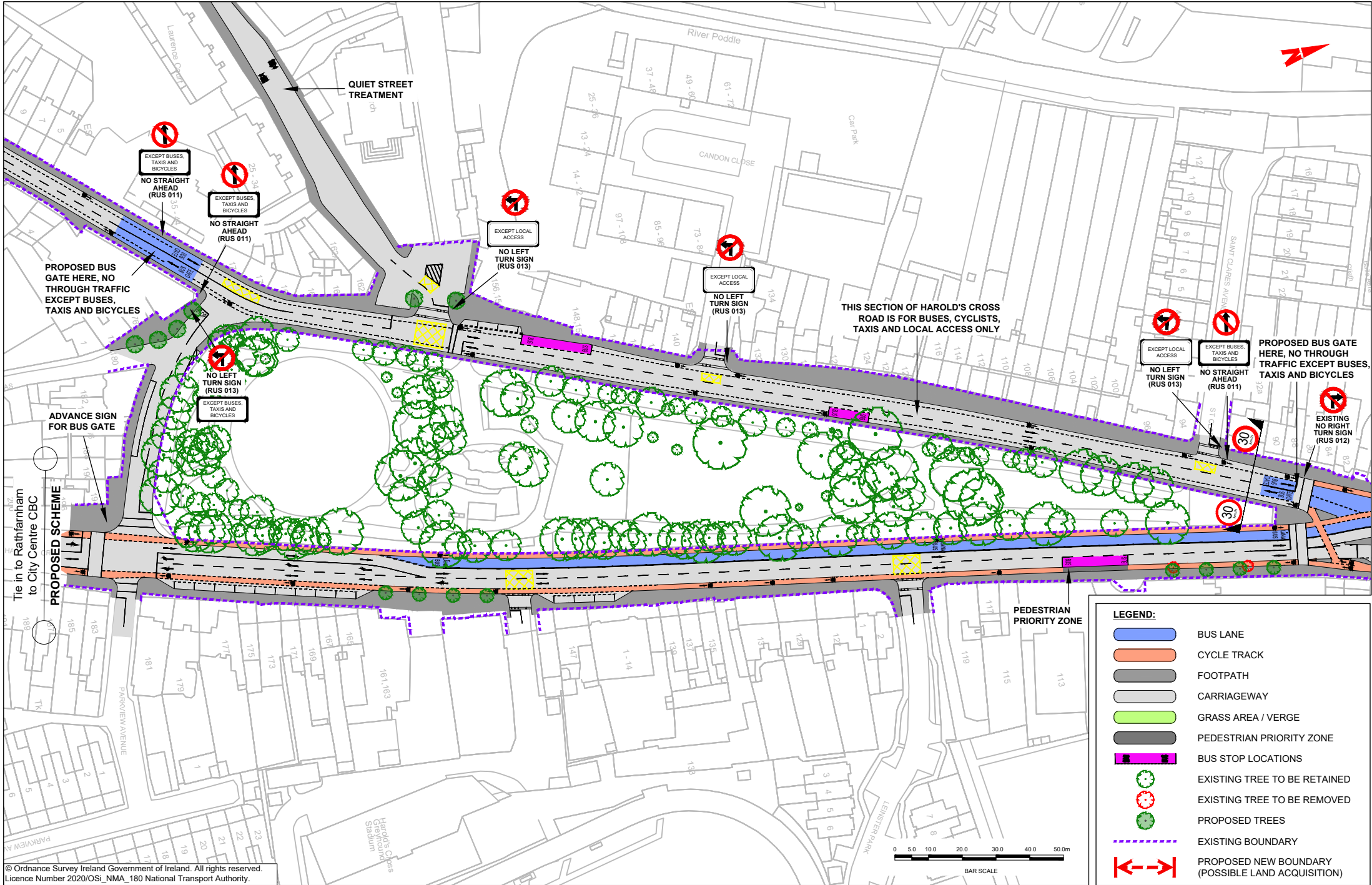




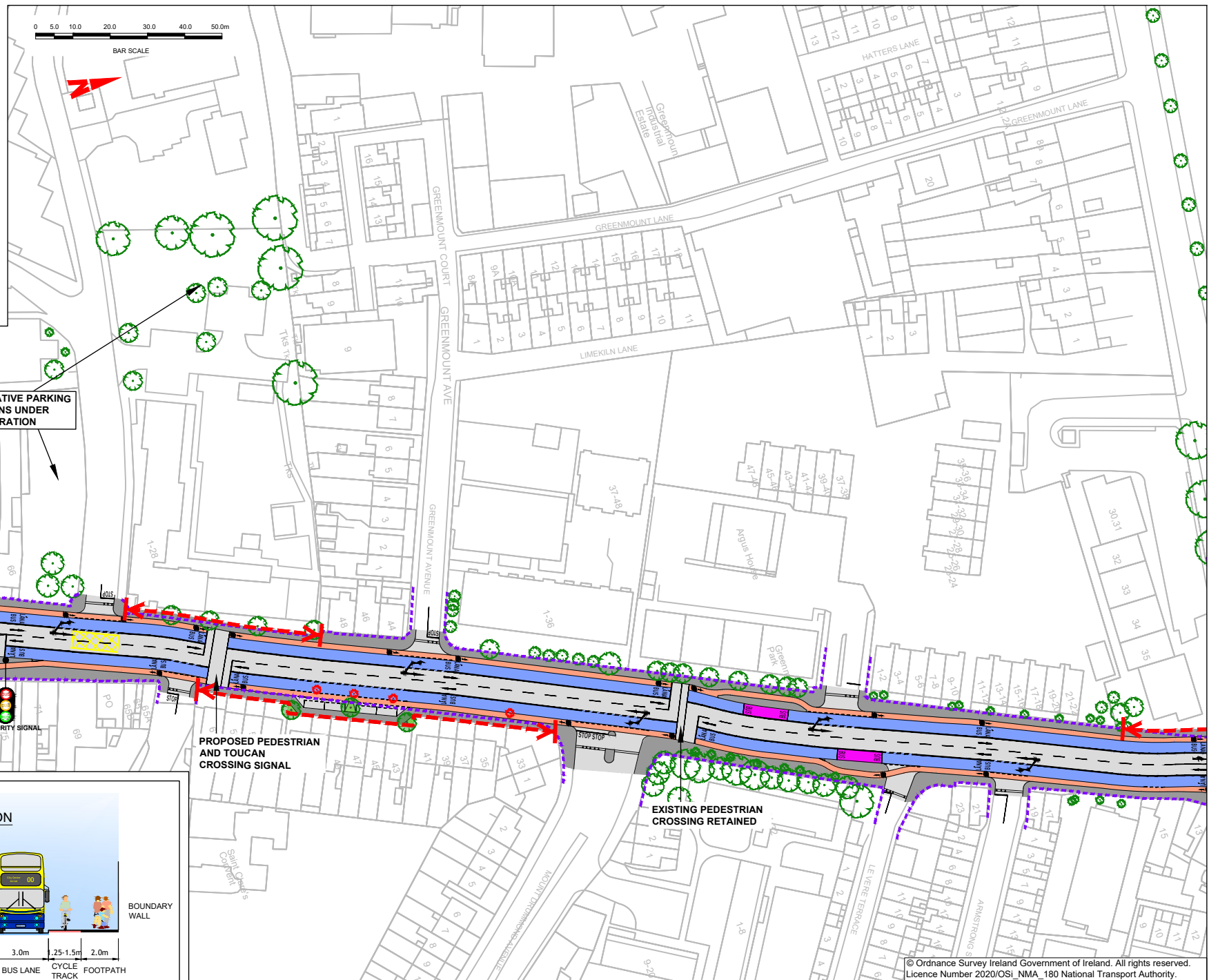
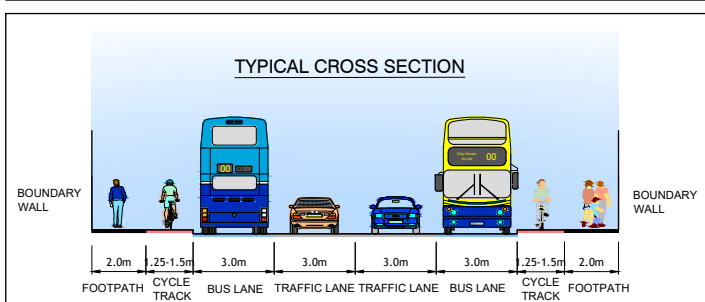


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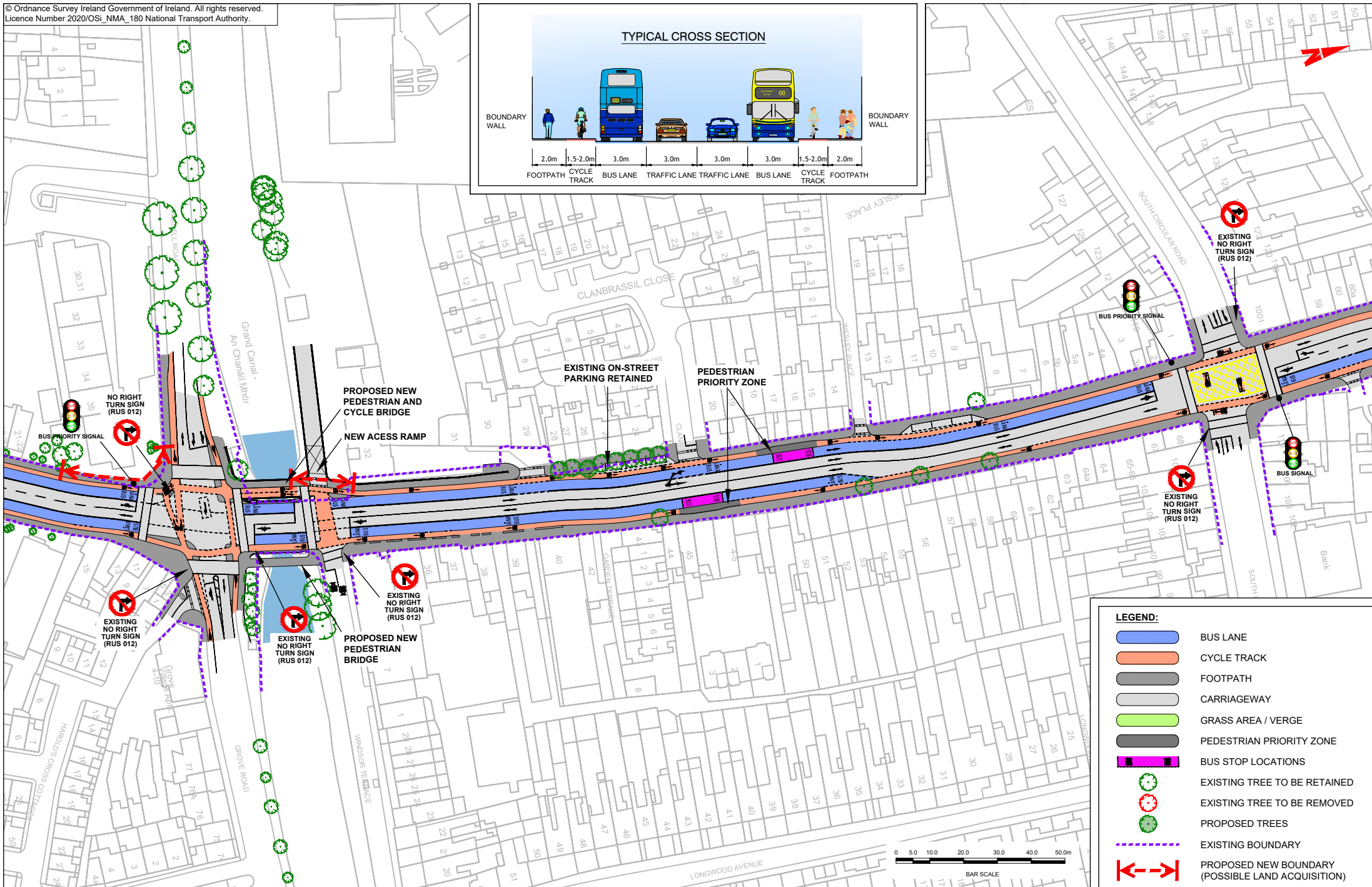
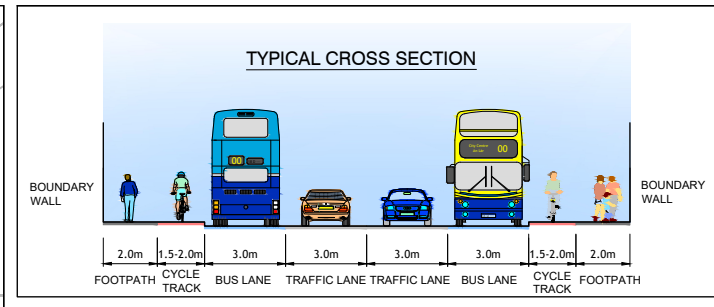
- BUS LANE
- CYCLE TRACK
- FOOTPATH
- CARRIAGEWAY
- GRASS AREA / VERGE
- PEDESTRIAN PRIORITY ZONE
- BUS STOP LOCATIONS
- EXISTING TREE TO BE RETAINED
- EXISTING TREE TO BE REMOVED
- PROPOSED TREES
- EXISTING BOUNDARY
- PROPOSED NEW BOUNDARY (POSSIBLE LAND ACQUISITION)



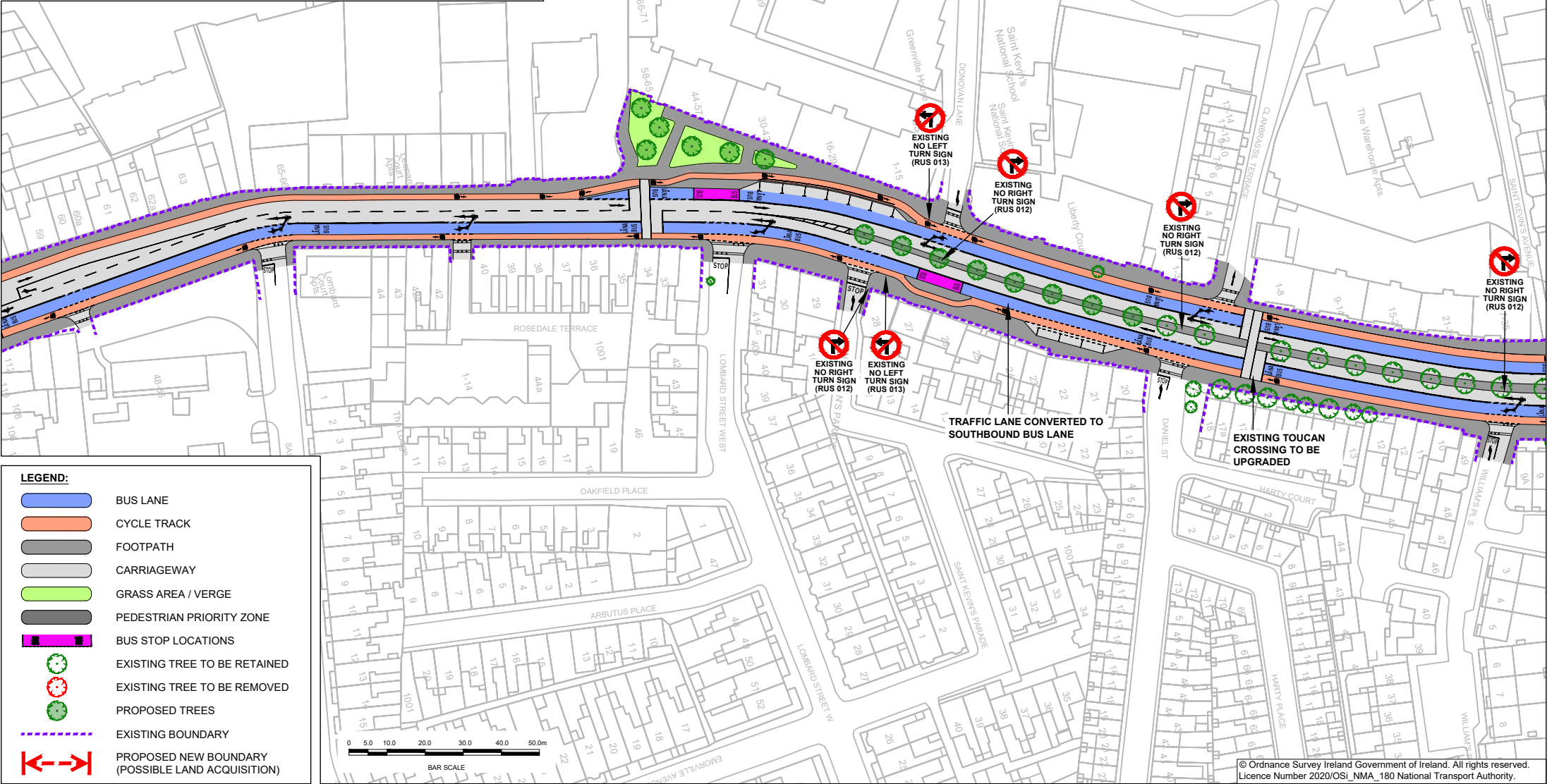
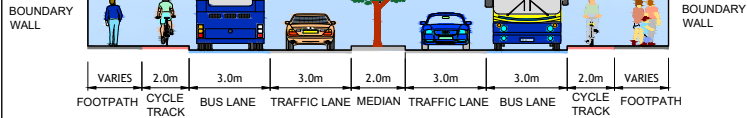






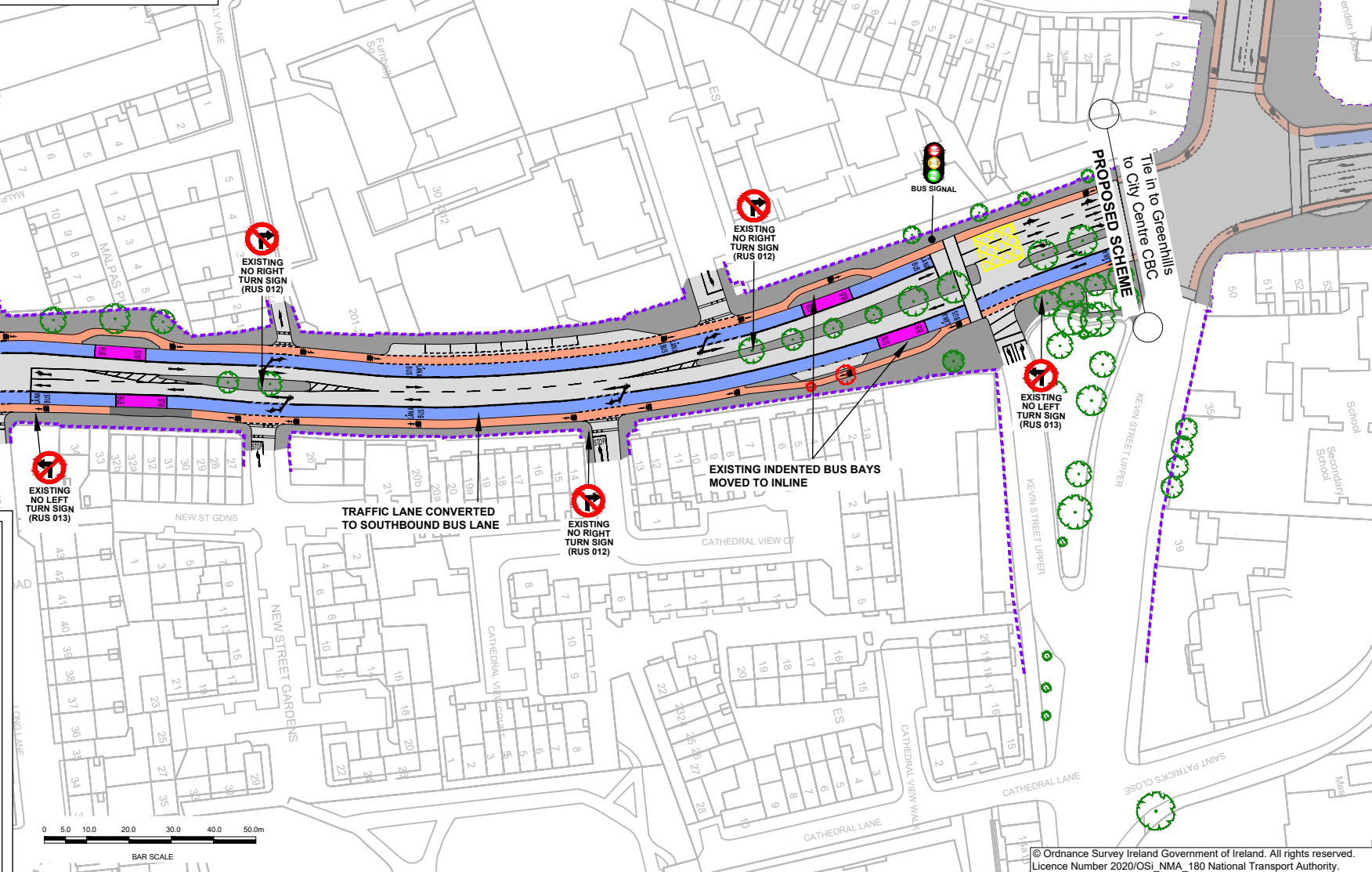
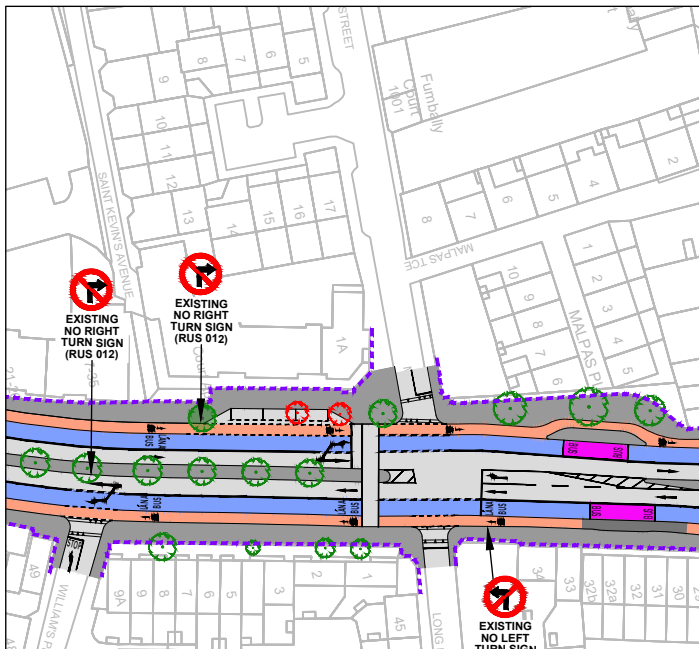


TYPICAL CROSS SECTION



LEGEND:

- BUS LANE
- CYCLE TRACK
- FOOTPATH
- CARRIAGEWAY
- GRASS AREA / VERGE
- PEDESTRIAN PRIORITY ZONE
- BUS STOP LOCATIONS
- EXISTING TREE TO BE RETAINED
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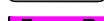







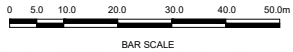




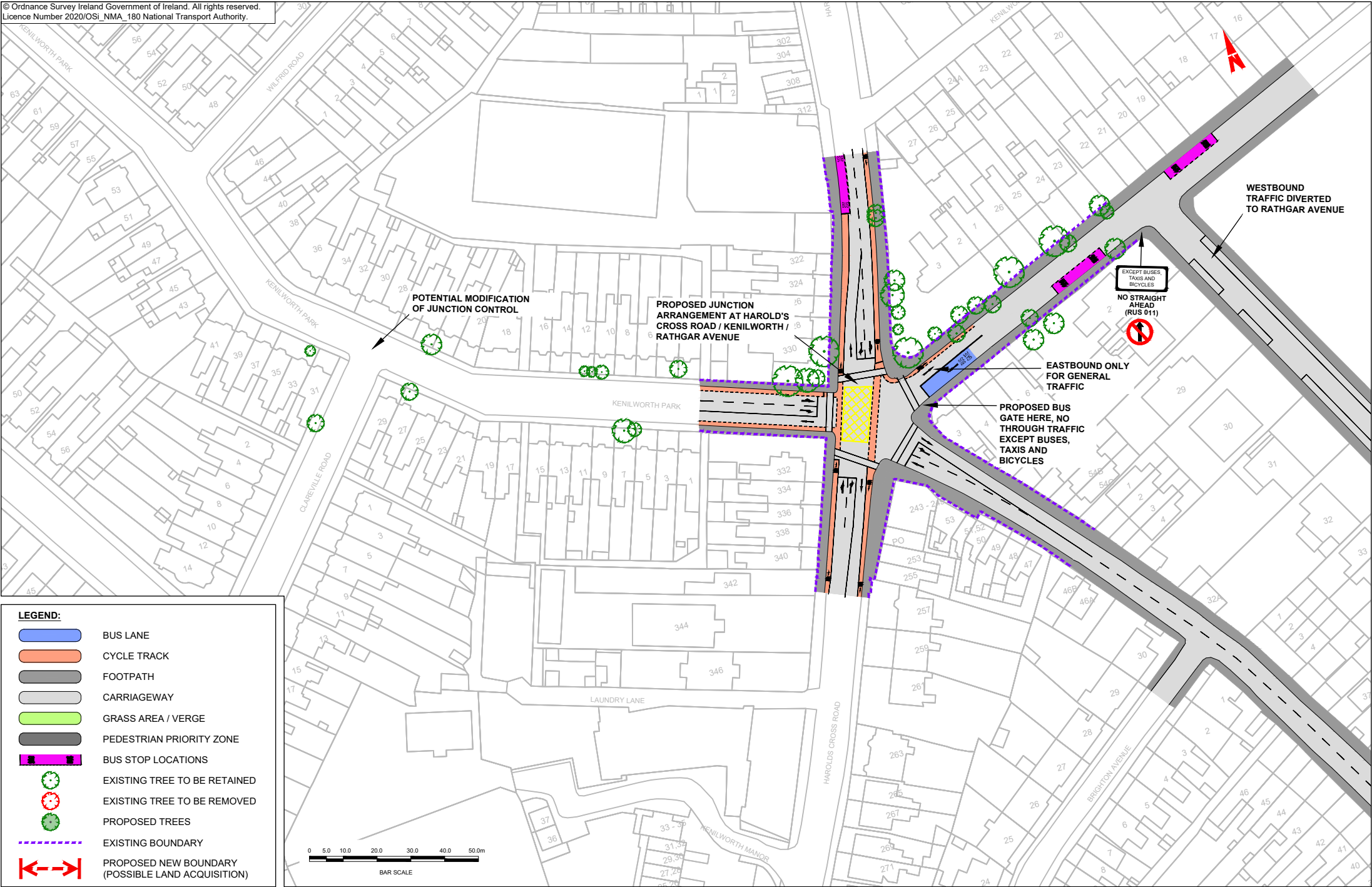


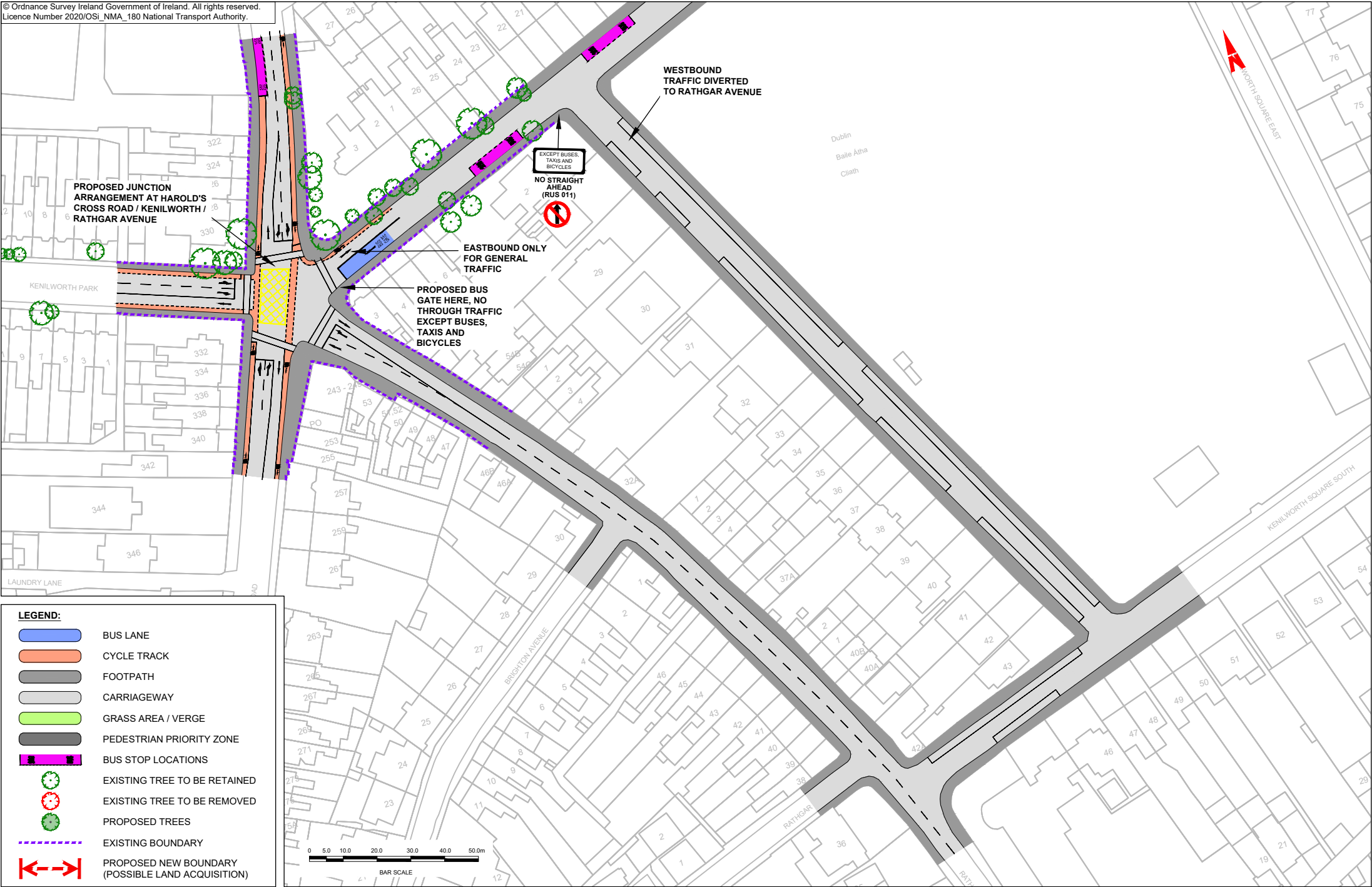
**LEGEND:**

-  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)









## Appendix C - Route Selection Report

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

## Appendix D - Emerging Preferred Route Brochure

<https://busconnects.ie/initiatives/core-bus-corridor-background-information/emerging-preferred-route/>

