



Appendix I

Preferred Route
- 3rd Non-Statutory
Public Consultation
- Brochure

Lucan to City Centre

Core Bus Corridor Preferred Route

Third Round of Public Consultation
November 2020

6



Project Ireland 2040
Building Ireland's Future

**BUS
CONNECTS**
SUSTAINABLE TRANSPORT FOR A BETTER CITY.



Contents

1. Introduction	1
1.1 What is BusConnects?	1
1.2 What are the aims and objectives of BusConnects Core Bus Corridors?	3
1.3 What has happened so far?	4
1.4 What is in this brochure?	4
1.5 A map of all 16 core bus corridors	6
2. What has been happening over the last few months?	7
2.1 Technical Design	7
2.2 Environmental Impact Assessment	7
2.3 Transport Impact	7
2.4 Urban Realm	9
2.5 Compulsory Purchase Maps & Schedules	9
2.6 Timeline for the Core Bus Corridor Process	10
3. How to take part in the public consultation	11
3.1 General queries	11
3.2 How to engage	11
3.3 What happens next?	11
4. Preferred Route Description	13
4.1 Overview	13
4.2 N4 Junction 3 to M50 Junction (Junction 7) – N4 Lucan Road	14
4.3 M50 Junction (Junction 7) to R148 Con Colbert Road – Chapelizod Bypass	15
4.4 Con Colbert Road to Frank Sherwin Bridge – St. John’s Road West	15
4.5 Key Changes from the Preferred Route Published in March 2020	17
4.6 Key Facts	18
5. Understanding the terminology	19
6. Appendices	21
6.1 Index Map	22
6.2 Route Maps	25

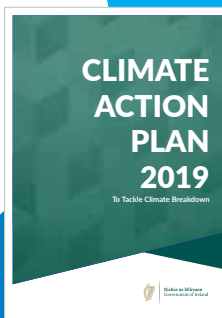
1. Introduction

1.1 What is BusConnects?

BusConnects is the National Transport Authority's (NTA) programme to greatly improve bus and sustainable transport services. It is a key part of the Government's policies to improve public transport and address climate change in Dublin and other cities. Dublin is growing and needs a bus network that works for a developing city. The aim of BusConnects is to deliver an enhanced bus system that is better for the city, its people and the environment.

BusConnects is included in the Programme for Government "Our Shared Future" 2020, as well as within the following Government strategies:

- The National Development Plan 2018 - 2027;
- Transport Strategy for the Greater Dublin Area 2016 - 2035
- The Climate Action Plan 2019.



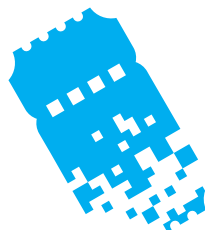
BusConnects Dublin is a programme of 9 elements

BUS  **230km** of bus priority making journeys faster and more reliable

CYCLE  **200km** of cycle routes



Transitioning to a new
low emissions bus fleet



State of the art
ticketing system



Cashless payment system



Simpler fare structure



New Park & Ride
sites in key locations



New bus livery

providing a common style across all operators



New bus stops and shelters

with better signage and information



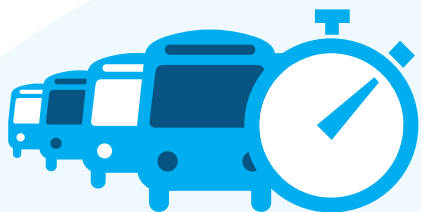
Dublin area bus network redesign

creating a more efficient network with high frequency spines, new orbital routes and increased bus services

1.2 What are the aims and objectives of BusConnects Core Bus Corridors?

Aims: The aim of BusConnects Core Bus Corridors 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.

Objectives:



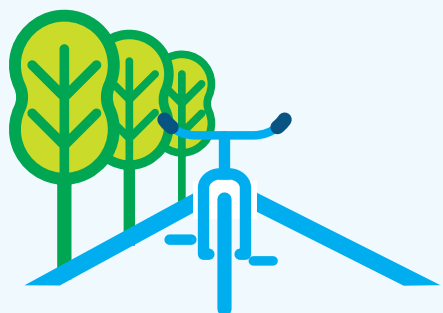
Enhance the capacity and potential of the public transport system by improving bus speeds, reliability and punctuality through the provision of bus lanes and other measures to provide priority to bus movement over general traffic movements;



Support the delivery of an efficient, low carbon and climate resilient public transport service, which supports the achievement of Ireland's emission reduction targets;



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



Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable;



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;



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.

1.3 What has happened so far?

Between November 2018 and May 2019 the National Transport Authority (NTA) carried out the first round of public consultation regarding proposals for the Emerging Preferred Routes of 16 Core Bus Corridors (CBC) across Dublin. During this first round of consultation we received 13,000 submissions in total. These submissions were reviewed and considered as part of the design process for the Preferred Route option for each corridor.

A second round of public consultation on the Preferred Route options commenced in March 2020 and continued until mid-April 2020. Notwithstanding the Covid-19 pandemic and subsequent Government restrictions, the consultation continued due to the level of interest. The focus of public queries and submissions came through emails, post, phone conversations and online submissions as all the information was available on the BusConnects website for review.

It was decided in March that an additional third round of public consultation would take place in the latter part of this year to provide further opportunities for the public to review and submit feedback to the latest set of designs.

1.4 What is in this brochure?

This document is one of 16, each dedicated to a single core bus corridor. The document provides a written description of the Preferred Route from start to finish with supporting maps. It includes all revisions made, if any, since the last round of public consultation. It also includes a revised timeline for the progress of the programme due to Covid19 implications.

The brochures detailing the Emerging Preferred Route and the brochures from the second round of consultation earlier this year are available to view and download on our website www.busconnects.ie.

Definitions of the terminology used in the document can be found in chapter 4 of this brochure.





1.5 A map of all 16 core bus corridors

Preferred Routes

1. Clongriffin to City Centre
2. Swords to City Centre
3. Ballymun to City Centre
4. Finglas to Phibsborough
5. Blanchardstown to City Centre
6. Lucan to City Centre
7. Liffey Valley to City Centre
8. Clondalkin to Drimnagh
9. Greenhills to City Centre
10. Tallaght to Terenure
11. Kimmage to City Centre
12. Rathfarnham to City Centre
13. Bray to City Centre
14. UCD Ballsbridge to City Centre
15. Blackrock to Merrion
16. Ringsend to City Centre



2. What has been happening over the last number of months?

Considerable design work has been continuing since the last round of consultation. This work includes the following:

2.1 Technical Design

Designs have progressed with further refinements being made to elements of each corridor such as junctions, alignments, bus stops, cycling and walking facilities, and urban realm features. Engagement with stakeholders is continuing including engagement with individual householders directly impacted. The developing design has been, and continues to be, informed by stakeholder engagement and further detailed surveys. These include the identification of underground services and detailed assessment of trees along the routes.

Draft Preferred Route Option Reports have been prepared for each CBC detailing the

development of each corridor from the Emerging Preferred Route through to the draft Preferred Route Option. These draft “Preferred Route Option Reports” are being published as part of the public consultation and will be finalised following this third round of public consultation and the inclusion of feedback received. **These draft reports are available to view and download on the website www.busconnects.ie.**

2.2 Environmental Impact Assessment

As part of the intended planning application for each corridor, the NTA will be preparing an Environmental Impact Assessment Report (EIAR) in accordance with current Irish and European legislation. This document will identify the anticipated environmental effects of the scheme during both the construction and operational stages. This assessment is being undertaken by environmental specialists on behalf of the NTA. As part of this assessment, these specialists are undertaking studies of the current condition of the receiving environment within the identified corridor extents. This involves a combination of on-site surveys and desktop study of existing records. At the time

of this public consultation, various surveys and studies are underway. The information collected will also be shared with the technical designers for consideration in the design decision making process for the infrastructure works.

Further details of the environmental assessment approach for each scheme are outlined in an individual corridor document called “Information on the Proposed Approach to Environmental Assessment”. This document gives a more in-depth description of the determination of the extents of anticipated impacts and how the cumulative impacts of adjacent core bus corridors and other construction projects will be assessed.

These draft reports are available to view and download on the website www.busconnects.ie.

2.3 Transport Impact

The transport assessment of the core bus corridor proposals is focussed on the “movement of people” rather than, solely, the “movement of vehicles”. In order to adequately determine the impact on public transport, active modes (walking and cycling), and general traffic, a comprehensive suite of transport models have been developed.

An extensive set of traffic counts were undertaken in late 2019 and early 2020 and this data, along with other sources, has been used to calibrate and validate the models to assist in the evaluation of the core bus corridors. On a strategic level, the Eastern Regional Model has been used to forecast the modal split for future years. At a more refined level, a Local Area Model has been developed to examine the potential displacement of traffic. In addition, detailed modelling is ongoing in terms of junction and corridor analysis tests and to quantify the effect on the movement of people through each junction and along the corridor itself.

Each EIAR will contain a section on the potential traffic and transport impacts associated with the construction and operational phases of the core bus corridors. This assessment will be informed by the following reports:

- Transport Impact Assessment (TIA)
 - this will include the comprehensive assessment of each core bus corridor covering all modes and will include a cumulative assessment of all corridors; and



- ▶ Transport Modelling Report – this will detail the model development, data inputs, calibration and validation, and forecast model development for the set of models used to support the assessment.

A draft, work-in-progress version of the “Transport Modelling Reports” for each core bus corridor, together with a summary of the work-in-progress strategic modelling results to-date, are being published as part of the public consultation and will be finalised following this third round of public consultation and the inclusion of feedback received. **These draft reports are available to view and download on the website www.busconnects.ie.**

2.4 Urban Realm

In tandem with the technical design work on finalising the road alignment in the urban cross sections across the core bus corridors, planning has also progressed for refining the Urban Realm design proposals. These designs are being developed in consultation with the local authorities to ensure tie-in to existing schemes and initiatives. The NTA is focusing on finishing the layout of spaces, considering desire lines (how people want to move through spaces) and

the placement of urban furniture (trees, bins, bollards, benches, bike stands, railings, etc.)

Urban Realm improvement opportunities along the routes present themselves through the civil/physical works needed to reach the BusConnects objective to provide bus priority, along with improved cycling and pedestrian facilities. All put together, the core bus corridors provide an opportunity for lots of continuous interventions that, together, can give a general city-wide lift.

The Urban Realm improvement opportunities are spread out along the core bus corridors and need to respond to and reflect specific locality and context. In the design of the urban spaces we will be using appropriate materials and urban furniture that comply with standards for use, durability and maintenance as well as carbon footprint considerations.

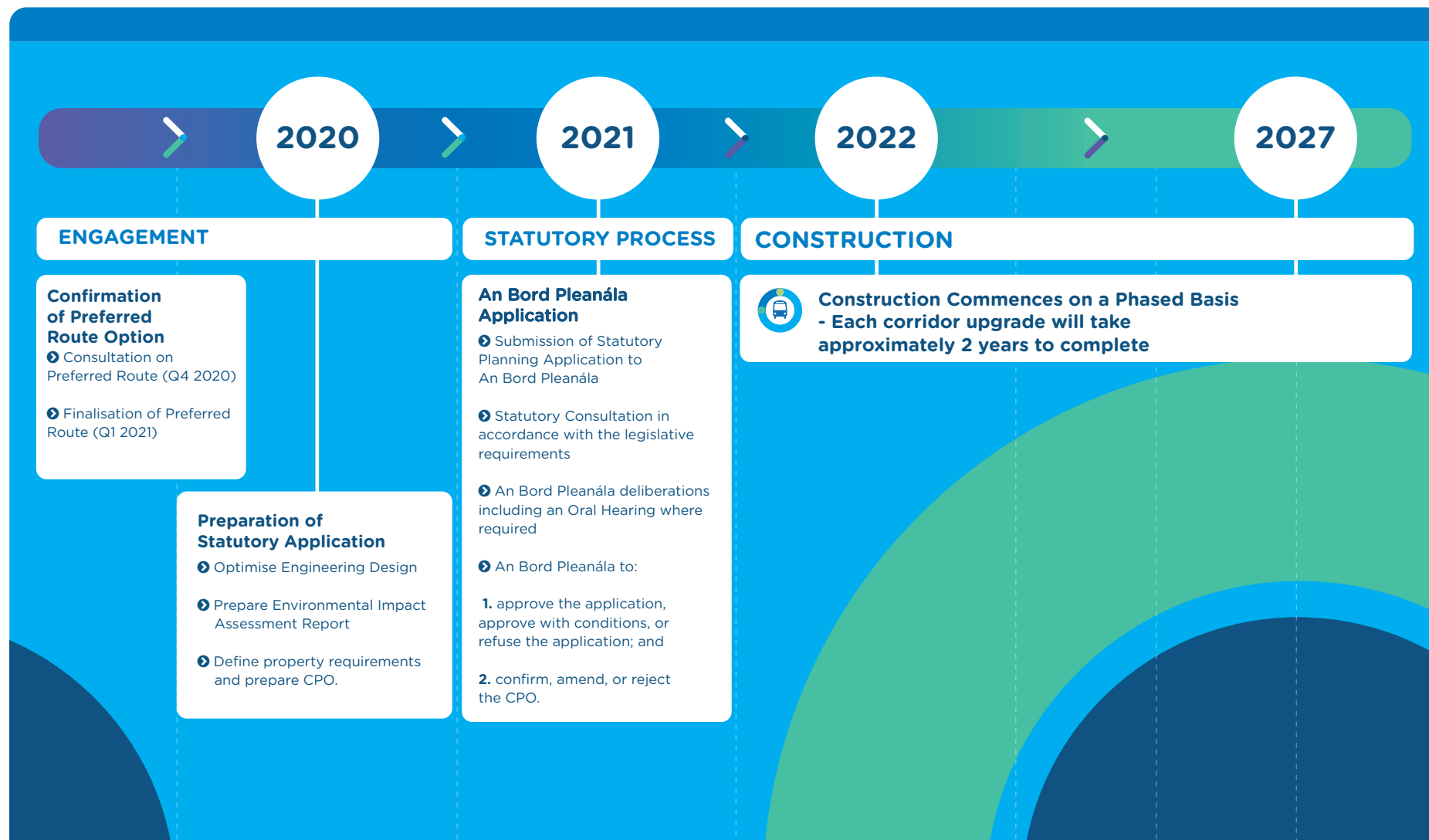
Further details of the urban realm design approach can be found in a document called “BusConnects Urban Realm Concept Design” published as part of the public consultation. **This document is available to view and download on the website www.busconnects.ie.**

2.5 Compulsory Purchase Maps & Schedules

In tandem with the technical design work the designers will be starting the work of preparing the various maps and schedules of areas that are proposed to be acquired under the statutory compulsory purchase order process (CPO). The attached Maps in this brochure indicate Proposed New Boundaries (Possible Land Acquisition) represented by broken red lines. These boundaries are indicative of potential areas for permanent CPO, and are not yet finalised. As detailed plots are finalised the designers will be continuing to seek to meet those with an interest in the impacted areas.

In some cases there may also be a need to realign driveways and/or redo the landscaping of property front gardens, or reorganise business accesses and/or loading areas. Some of these works may be outside the permanent CPO area, and consequently there may be a need to put in place temporary arrangements to ensure access during construction to carry out necessary accommodation works. Similar to the permanent CPO development, the designers will be continuing to seek to meet those with an interest in the impacted areas.

2.6 Timeline for the Core Bus Corridor Process



3. How to take part in the public consultation

This brochure provides details of the proposed Preferred Route Option for this core bus corridor. These proposals are subject to a third non-statutory round of public consultation, and subsequent design refinement and environmental impact assessment, before a formal statutory application will be made by the NTA to An Bord Pleanála for approval.

Virtual consultation rooms for each Core Bus Corridor can be found on www.busconnects.ie. These rooms will provide a description of each Preferred Route from start to finish with supporting maps and include information of all revisions made, if any, since the last round of public consultation as well as other supporting documents.

3.1 General queries

The project website www.busconnects.ie has a dedicated section for the Core Bus Corridor


project. All previous emerging preferred route brochures are available on the website. Users can access the site to find out more about the project and download copies of the key documents.


General queries can be directed to a dedicated Freephone – **1800 303 653** or by email to cbc@busconnects.ie

3.2 How to engage

We are inviting submissions in relation to the Preferred Route Options set out in this document. The closing date for submissions is stated on the website.

Written submissions and observations may be made by:

 cbc@busconnects.ie

 BusConnects Core Bus Corridors
National Transport Authority,
Dún Scéine, Harcourt Lane, Dublin 2
D02 WT20

3.3 What happens next?

Following the third round of public consultation, the NTA will finalise the Preferred Route Options for all sixteen corridors. The scheme designs will be finalised, transport and environmental impact assessments will be completed. This will culminate in the preparation of an Environmental Impact Assessment Report (EIAR) for the scheme together with details of land to be acquired. This will be submitted to An Bord Pleanála in 2021 for its consideration and determination. A formal statutory consultation process will be undertaken as part of that process.



4. Preferred Route Description

4.1 Overview

The Lucan to City Centre Core Bus Corridor (CBC) commences at Junction 3 on the N4 and it is routed via the N4 as far as Junction 7 (M50), and via the R148 along the Chapelizod Bypass, Con Colbert Road and St John's Road West as far as Frank Sherwin Bridge, where it will join the prevailing traffic management regime on the South Quays.

Priority for buses is provided along the entire route, consisting primarily of dedicated bus lanes in both directions, with alternative measures proposed at particularly constrained locations. Cycle facilities are provided along the length of the corridor between Junction 3 and Chapelizod village, at which point they will connect with other future cycle route schemes. Cycle facilities are also provided between Con Colbert Road and the end of the corridor at Heuston Station.

The following paragraphs will describe each section of the CBC in more detail, identifying the key design revisions which have been incorporated into the design since the publication of the Preferred Route Option in March 2020.

4.2 N4 Junction 3 to M50 Junction (Junction 7) – N4 Lucan Road

It is proposed to commence this CBC at Junction 3 on the N4 Lucan Road. The existing lane arrangement on the Ballyowen Road bridge over the N4 is to be amended to include the provision of cycle lanes in both directions in lieu of the right turning lane for the N4 westbound on slip. However, the right turn movement to the N4 westbound slip will still be permitted.

At the Ballyowen Road junction with Lucan Road the existing layout is to be modified to remove the left turn slip lanes and improve cyclist and pedestrian safety.

On the N4 it is proposed to maintain the existing city centre bound bus lane. Over the full length of this section of the corridor a segregated two-way cycletrack is proposed on the northern side of the N4. In the vicinity of the Hermitage Golf Club land acquisition will be required to provide this cycle track which will connect to the existing foot/cycle bridge over the N4 adjacent to the Mount Andrew estate.

Eastwards of this location the two-way cycle track continues on the north side of the N4 and will require some additional land acquisition from the Hermitage Clinic lands. The two-way cycle track then runs along the eastbound off slip at Junction 2. From here the segregated two-way cycle track runs along the southside of the Old Lucan Road before connecting to the foot/cycle bridge that crosses the M50. The Old Lucan Road will be narrowed, and traffic calmed. The indicative extents of this land take associated with the proposals described above are shown on the drawings in the Appendix of this brochure.

On the southside of the N4 a Pedestrian Priority Zone (PPZ) is provided between existing foot/cycle bridge over the N4 adjacent to the Mount Andrew estate and Ballyowen Lane. From there a quiet cycle way is provided along Hermitage Road to Ballyowen Road. The provision of the two-way cycle track along the northern side of the N4 avoids the need for a segregated one-way cycle track on the southern side of the N4 and along the westbound off slip at Junction 3.

The latest proposals include a significant improvement to the bus stop provision in the

vicinity of the Liffey Valley Shopping Centre. The bus stops themselves are moved some 150m further west, segregated from the adjacent N4 carriageway and increased in length. To better serve the increased bus stop capacity a new footbridge is proposed adjacent to the new bus stop locations, some 200m further west from the existing footbridge. The position of this new bridge aligns with the proposed public transport interchange within the Liffey Valley Shopping Centre. The relocation of the bus stops allows for an increased weaving length for all eastbound traffic approaching the M50 interchange and for all westbound traffic exiting the M50 interchange. The existing foot/cycle bridge will be retained with improved connections to the new two-way cycle track along Old Lucan Road.

At the M50 junction, it is proposed to include a continuous bus lane with two general traffic lanes in both directions through the junction. Cyclists will be directed to the existing foot/cycle bridge over M50 on to the Old Lucan Road.

4.3 M50 Junction (Junction 7) to R148 Con Colbert Road – Chapelizod Bypass

Between the M50 Junction and Kennelsfort Road junction, a continuous bus lane, two general traffic lanes and a merging lane for traffic from the M50 are proposed on the city centre bound route. On the westbound carriageway of the R148 west of Kennelsfort Road the proposed lane arrangement maintains two lanes for general traffic, with a continuous bus lane.

A segregated two-way cycle track is proposed to run along the north side of the Old Lucan Road between the foot/cycle bridge crossing the M50, through Palmerstown village to the start of the Chapelizod bypass. There is also a proposed segregated two-way cycle facility along the east side of Kennelsfort Road Lower which crosses the R148 Palmerstown bypass via a new Toucan crossing on the east side of the junction. It then connects to a new Toucan crossing on Kennelsfort Road Upper.

At the R148 signalised junction with the Old Lucan Road / the Oval a new westbound, bus

only, right turn lane is provided on the R148 to facilitate bus services serving Palmerstown village. An additional strip of land acquisition will be required from the western edge of the petrol filling station at this location to accommodate this new bus movement. In addition, new bus stops are provided on the Old Lucan Road to serve Mill Lane / Stewarts Hospital.

Between Kennelsfort Road Junction and the junction with the Oval, the existing bus stops will be upgraded with bus laybys provided. Between the Oval junction and Con Colbert Road Junction, it is proposed to maintain a single bus lane and two general traffic lanes in each direction. The existing bus lane and public transport signals on the R112 Kylemore Road on-ramp road will be retained.

On the Chapelizod bypass new bus stops are proposed at the bridge over Chapelizod Hill Road, with access ramps and steps provided to make use of the existing Chapelizod Hill Road underpass. Additionally, the speed limit for the bus lanes along the full length of the R148 Chapelizod bypass will be reduced from 80km/hr to 60km/hr.

4.4 Con Colbert Road to Frank Sherwin Bridge – St. John's Road West

Between the Con Colbert Road junction and the South Circular Road junction continuous bus lanes, two general traffic lanes and segregated cycle tracks will be maintained in their current configuration. At the junction between the R148 Con Colbert Road and Memorial Road an eastbound right turning lane is proposed to facilitate the changes to Memorial Road included in Liffey Valley CBC. As a consequence of this additional turning lane the existing pedestrian crossing facility would be moved to the east side of the junction.

At the South Circular Road junction, a short right turn lane on South Circular Road is provided in the northbound direction to compensate for restricted turns included in the Liffey Valley CBC.

Between the South Circular Road junction and the junction into the Heuston South Quarter Development, continuous bus lanes and two general traffic lanes will be maintained in their current configuration. Between the Heuston

South Quarter Development junction and the Frank Sherwin Bridge one bus lane and one single general traffic lane is proposed in each direction. Along St Johns Road West additional trees will need to be removed and replaced so that facilities for both taxis and bicycles can be provided on the approaches to Heuston Station. An Urban Realm landscaping improvement is proposed along the affected length of the road as far as the train station. This includes the removal of the pedestrian guard railing and new planting, which will result in a net increase in the number of trees along the road.

The latest proposals include a significant improvement to the bus stop provision in the vicinity of Heuston Station with the introduction of bus laybys and increased passenger waiting areas.



4.5 Key Changes from the Preferred Route Published in March 2020

- The location of bus stops has been reviewed and rationalised, including the introduction of layby facilities to reduce delays to through buses and stops being located closer to signalised crossing points;
- The proposed new bridge at Liffey Valley Shopping Centre has been allocated for pedestrians only and the existing pedestrian / cycle bridge retained for shared use;

- The two-way cycle track on Old Lucan Road has been extended through Palmerstown village to the start of the Chapelizod bypass;
- The new bus stops on Chapelizod bypass have been lengthened, segregated and bus laybys introduced;
- At Heuston Station, enhanced bus stops are proposed on St Johns Road West.

4.6 Key Facts

- Approximate number of properties that may be impacted **15**
- Approximate number of designated on-street parking spaces that may be removed **82**
- Approximate number of roadside trees that may be removed **509***
- Approximate route length: **10kms**
- Approximate new cycle route length: **7kms**
- Current bus journey time: **up to 50 mins**
- BusConnects journey time: **30-35 mins**
- Future Bus journey time without BusConnects: **60 mins +**

*353 trees are associated with proposed cycle track at Hermitage Golf Club lands

5. Understanding the terminology

1. Core Bus Corridor (CBC):

Part of the overall BusConnects Programme is to create 16 radial core bus corridors (CBC). A CBC is an existing road with bus priority so that buses can operate efficiently, reliably and punctually. This generally means full length dedicated bus lanes on both sides of the road from start to finish of each corridor or other measures to ensure that buses are not delayed in general traffic congestion. The bus lanes will be alongside segregated cycle lanes/tracks where feasible and general traffic.

2. Segregated Cycle Tracks:

A segregated 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. Where it is not physically possible to have segregated cycle tracks there will be the option of quiet roads and shared cycling on reduced speed roads for cyclists.

3. Emerging Preferred Route (EPR):

The NTA published outline plans for each of the 16 CBCs in a non-statutory public consultation process in 2018/2019. The options were called Emerging Preferred Routes (EPR), in some cases with multiple sub-options, to inform the public of the likely layout of the roadway with the necessary CBC infrastructure in place. They included possible impacts on front gardens, and likely changes to how traffic will operate to facilitate bus priority.

4. Preferred Route Option (PRO):

Following consideration of the public submissions about the 16 EPR's, the core bus corridor proposals have been reviewed and amended. They are now being presented as the Preferred Route Option (PRO) and are subject to a further round of non-statutory public consultation.

They are not final proposals as they are subject to further consideration from this round of public consultation and also subsequent examination in the context of environmental impact assessment.

5. 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. To see an animation of how a Bus Gate will work, please visit our website www.busconnects.ie.

6. Signal Controlled Priority (SCP):

Signal Control Priority uses traffic signals to enable buses to get priority ahead of other traffic on single lane road sections, but it is typically only effective for short distances. This typically arises where the bus lane cannot continue due to obstructions on the roadway. An example might be when a road has pinch-points where it narrows due to existing buildings or structures that cannot be removed 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 will be stopped at the signal to allow the bus pass through the narrow section first, when the bus has passed the general traffic will then be allowed through the lights. To see an

animation of a how Signal Controlled Priority will work, please visit our website www.busconnects.ie

7. Toucan Crossing:

A Toucan Crossing is a roadway crossing designed to enable both pedestrians and cyclists to cross the road with purposefully designed signal controls.

8. 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

cyclist 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.

9. Urban Realm:

Urban Realm refers to the everyday street spaces that are used by people to cross, shop, socialise, play and use for activities such as walking, exercise or commuting to/from work. The Urban Realm encompasses all streets, squares, junctions and other rights-of-way in residential, commercial and civic use areas as well as seating, trees and other enhancements. When well designed and laid out with care in a community setting, it enhances the everyday lives of residents and those passing through.

Signal Controlled Priority (SCP)



1. Traffic proceeds as normal.

2. As the bus approaches, the light signal changes to halt general traffic.

3. The bus has priority to proceed.

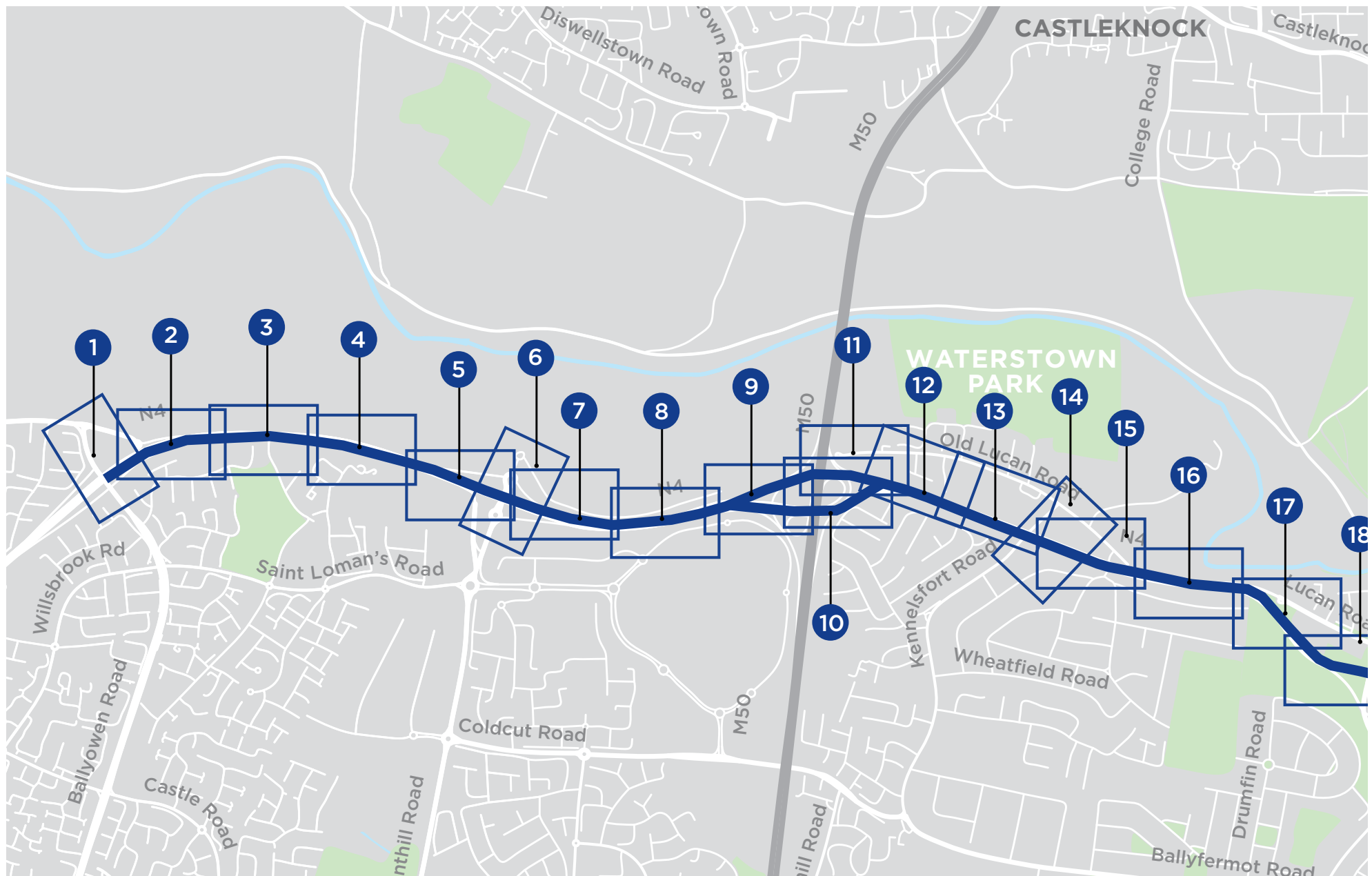
4. When the bus has cleared the junction, general traffic proceeds.



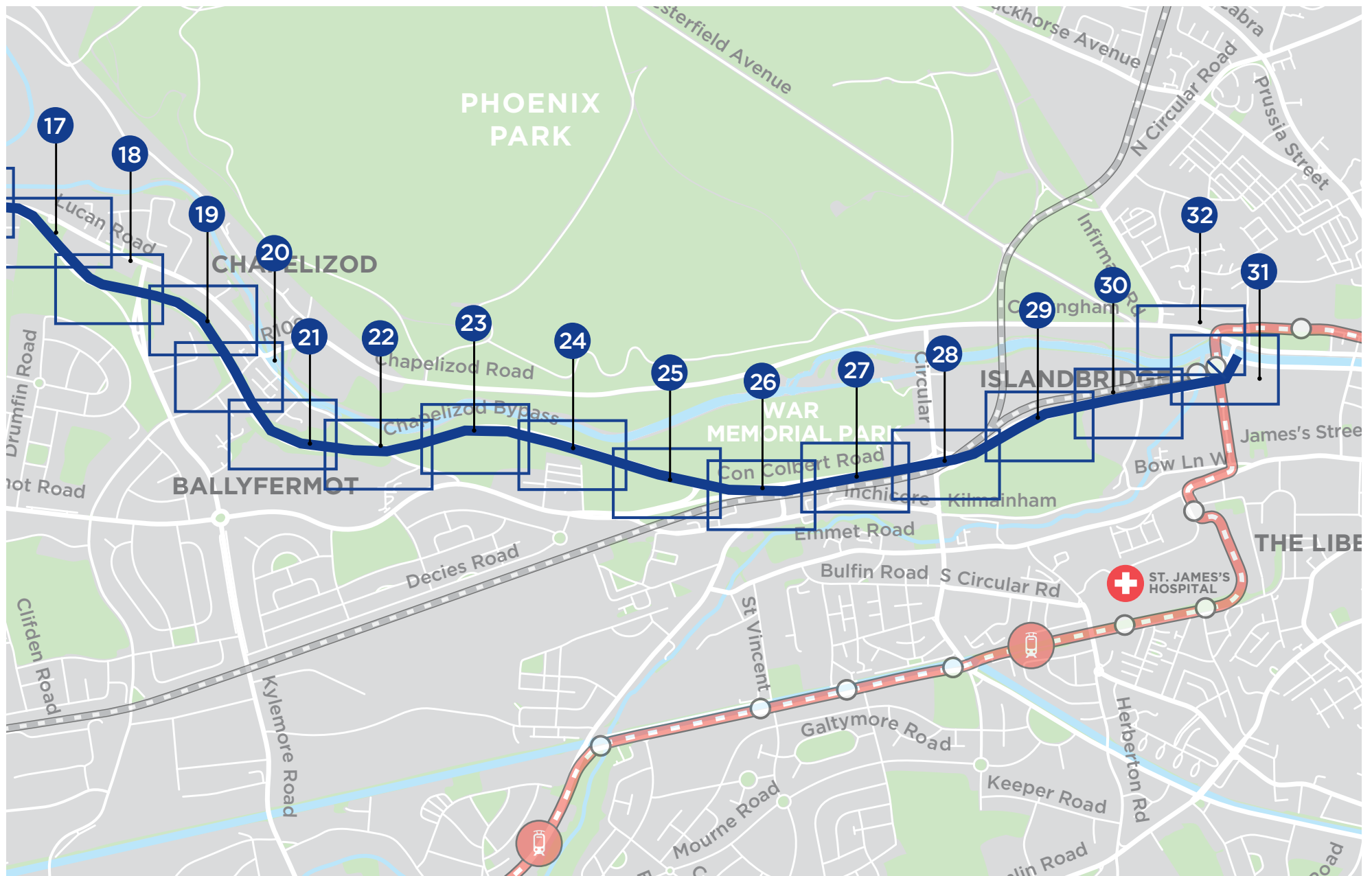
6. Appendices

Index maps
Route maps

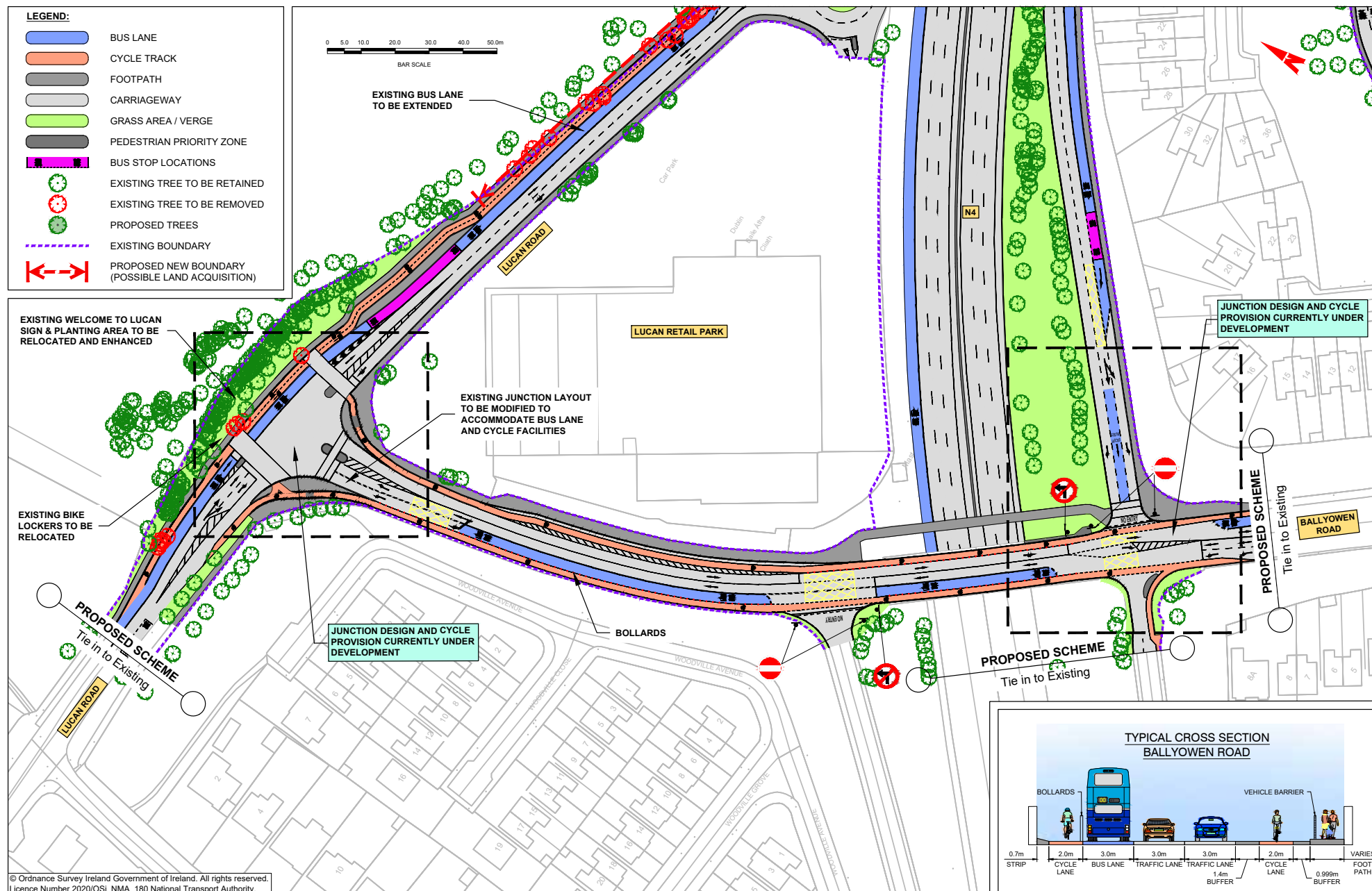




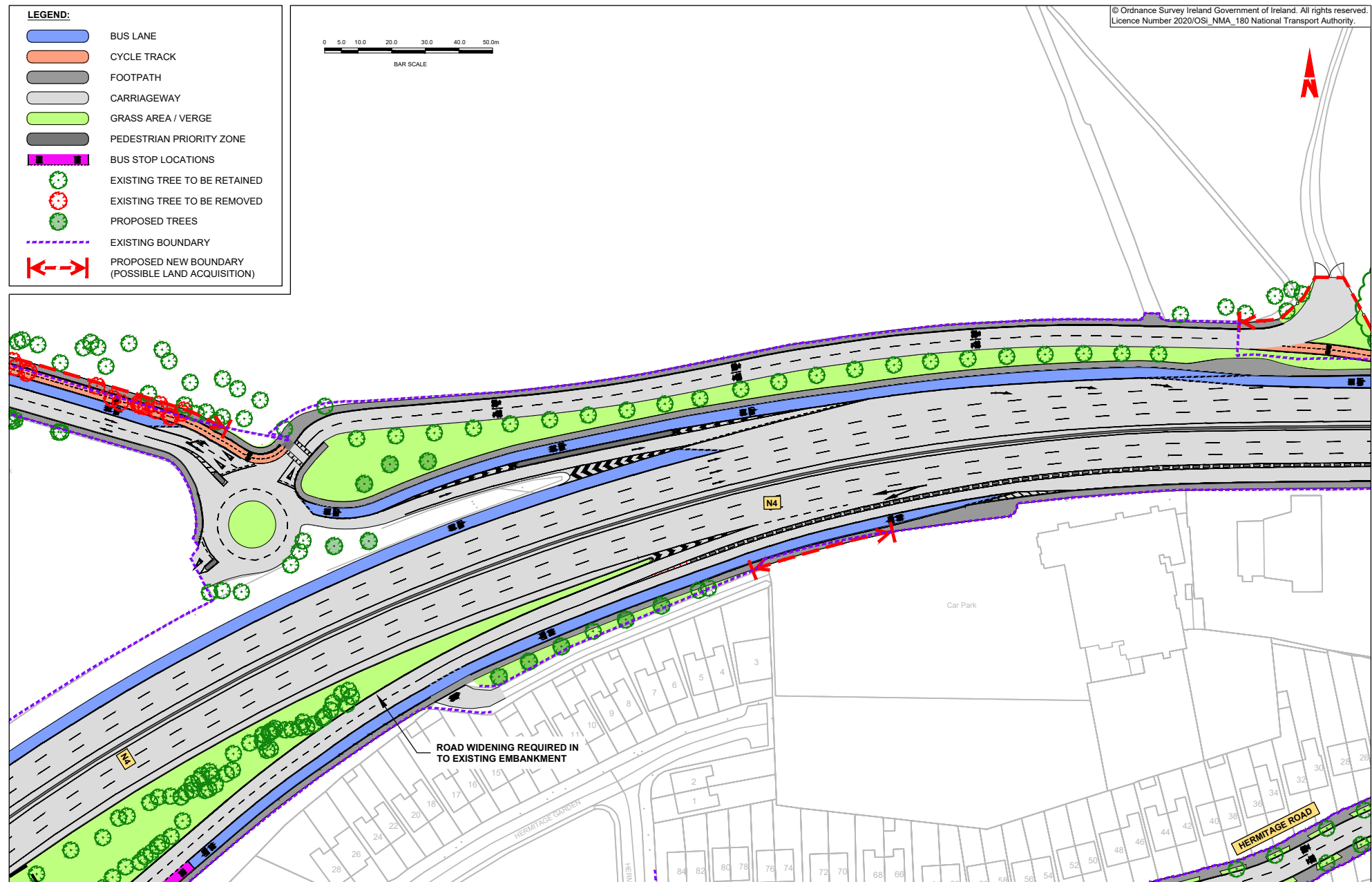
NOTE: The Preferred Route shown on the following drawings is indicative only and is subject to change following consultation and as part of the design development process.



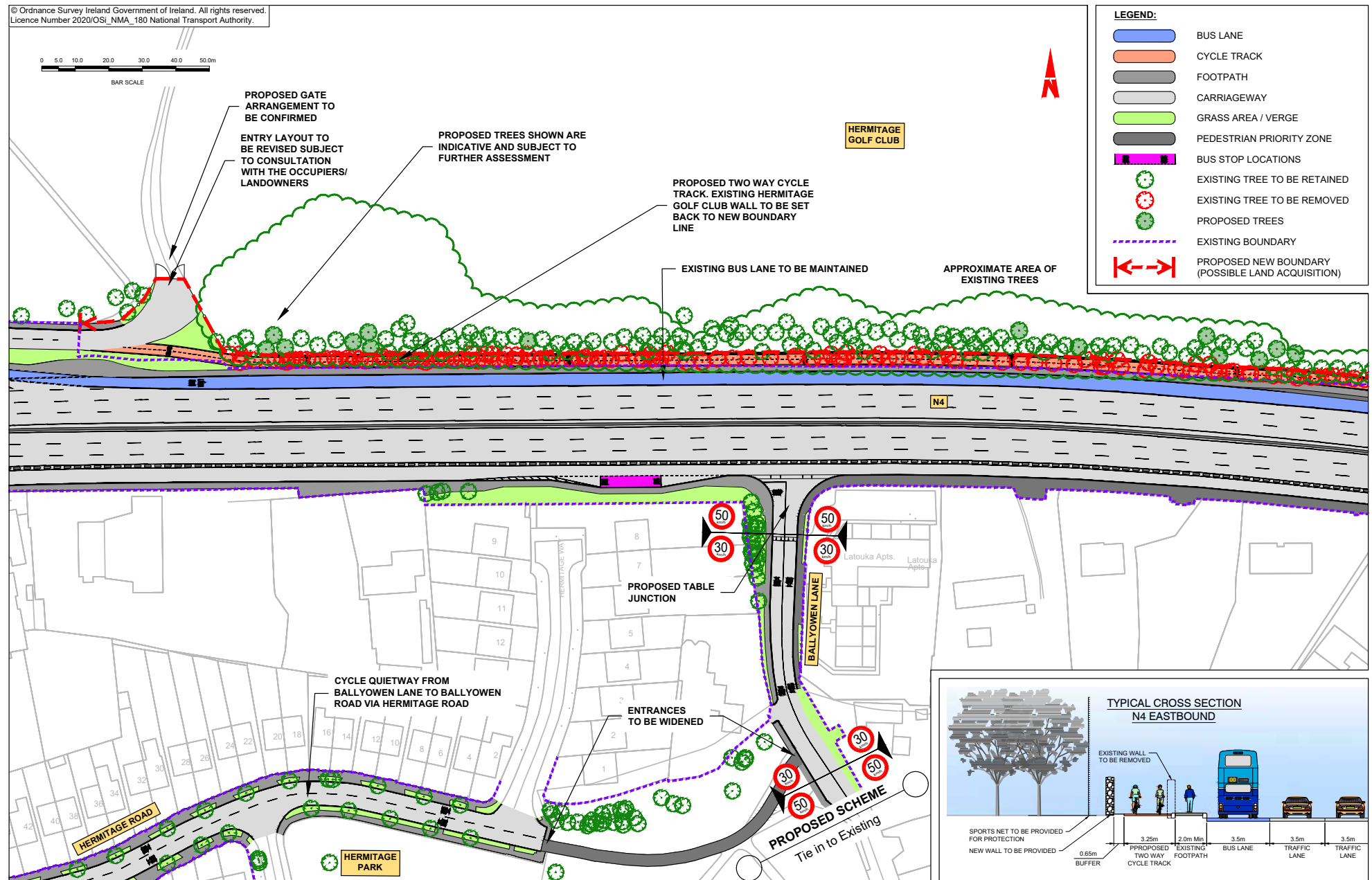




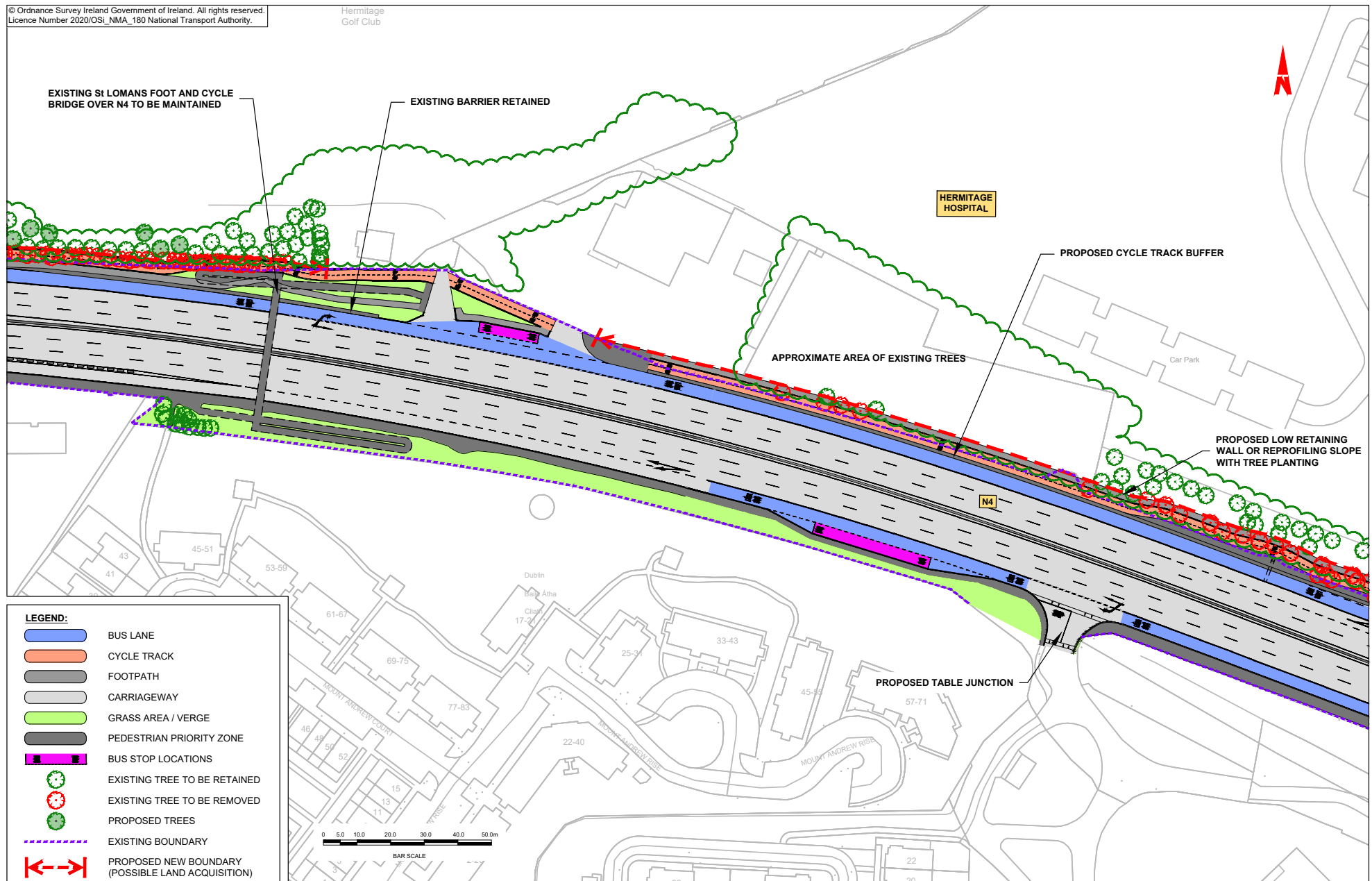


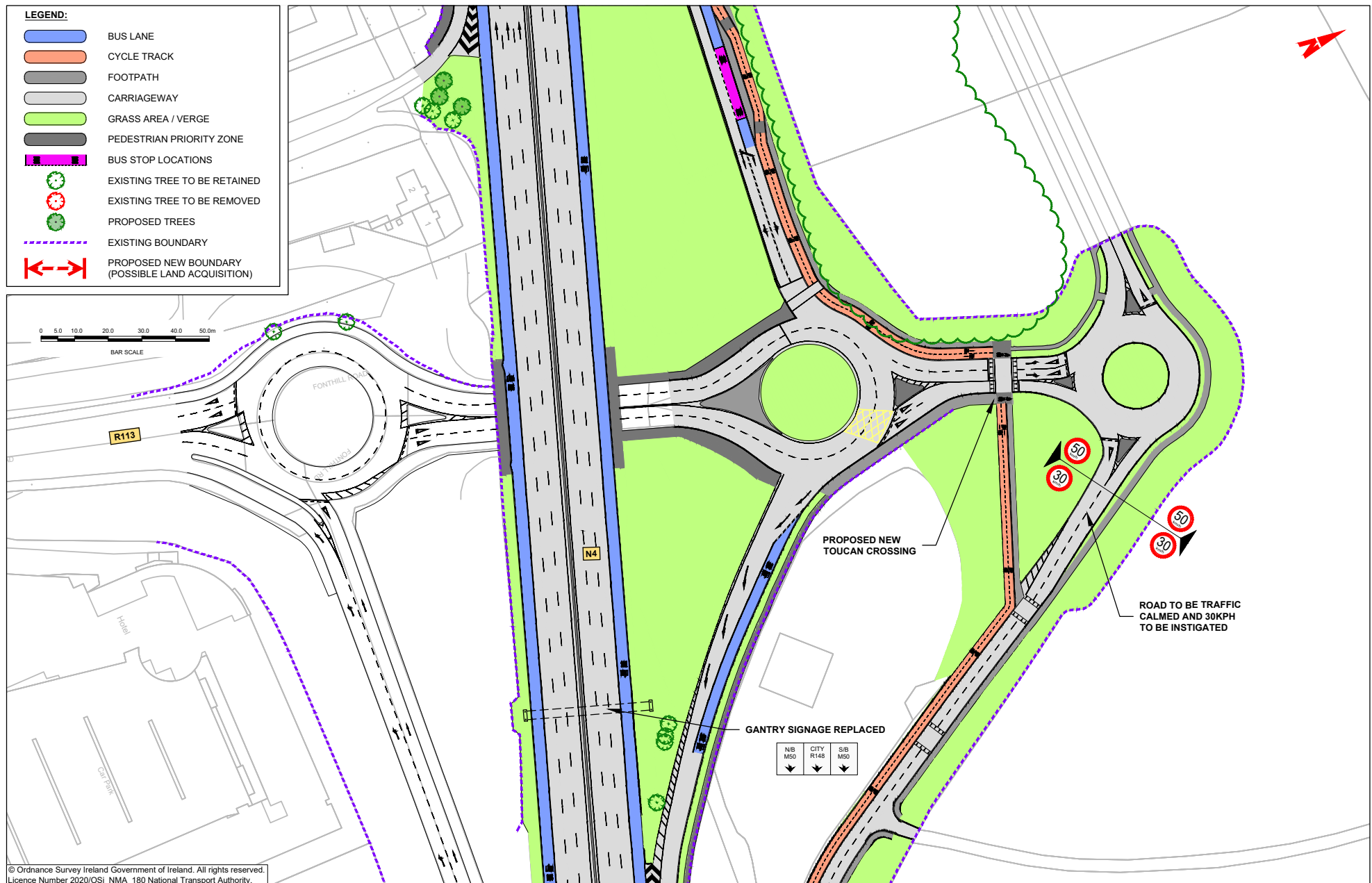


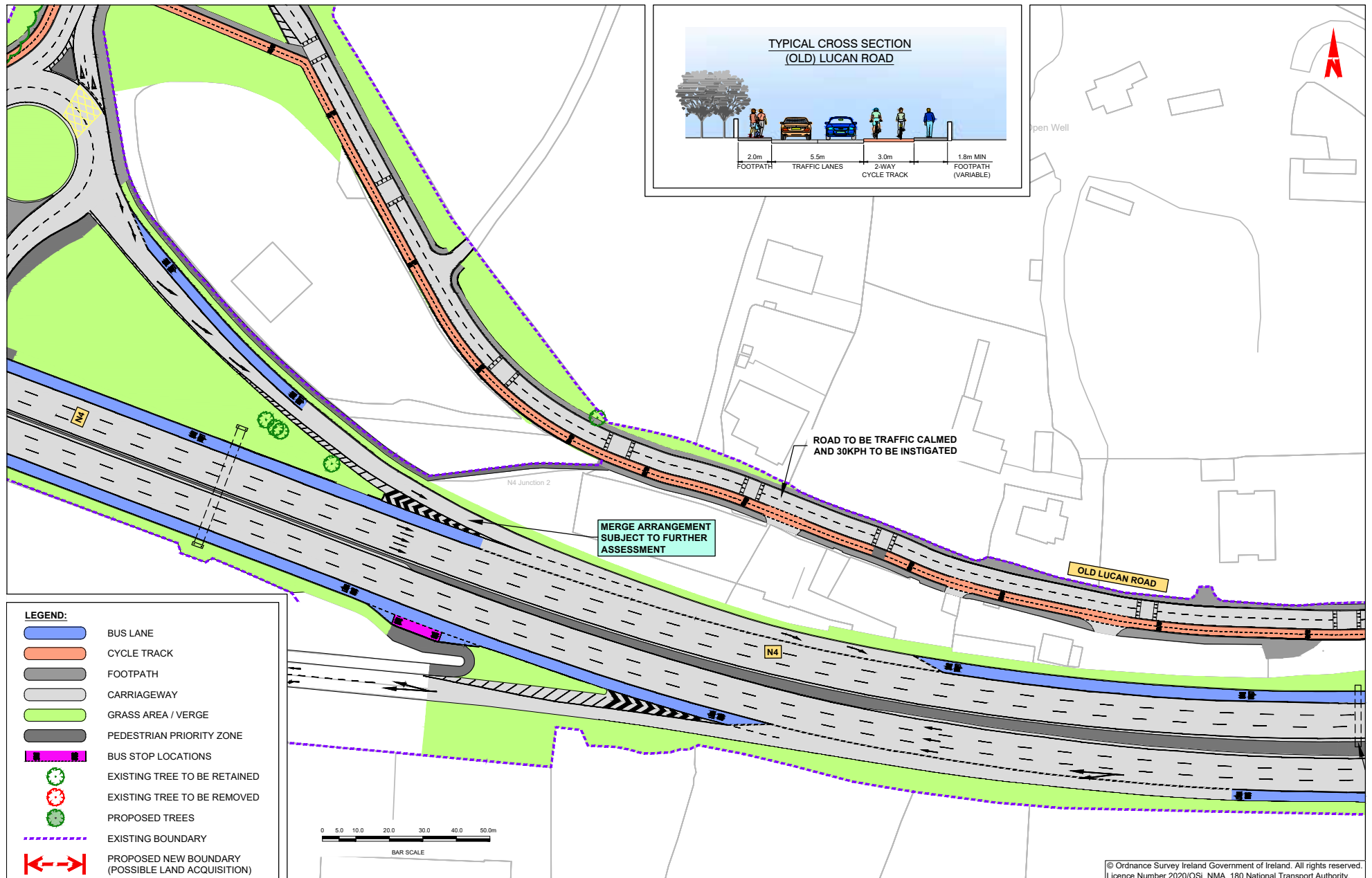


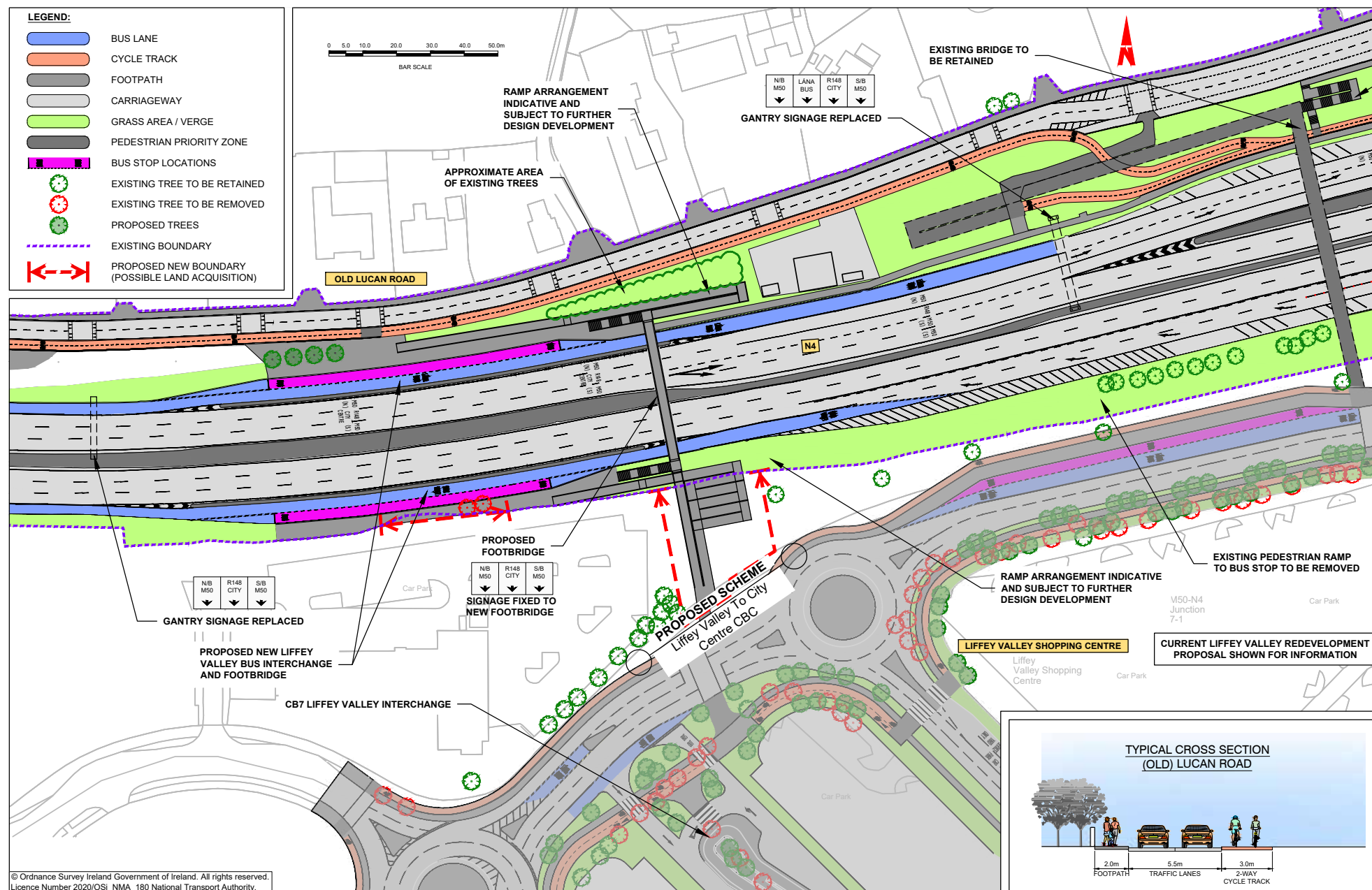


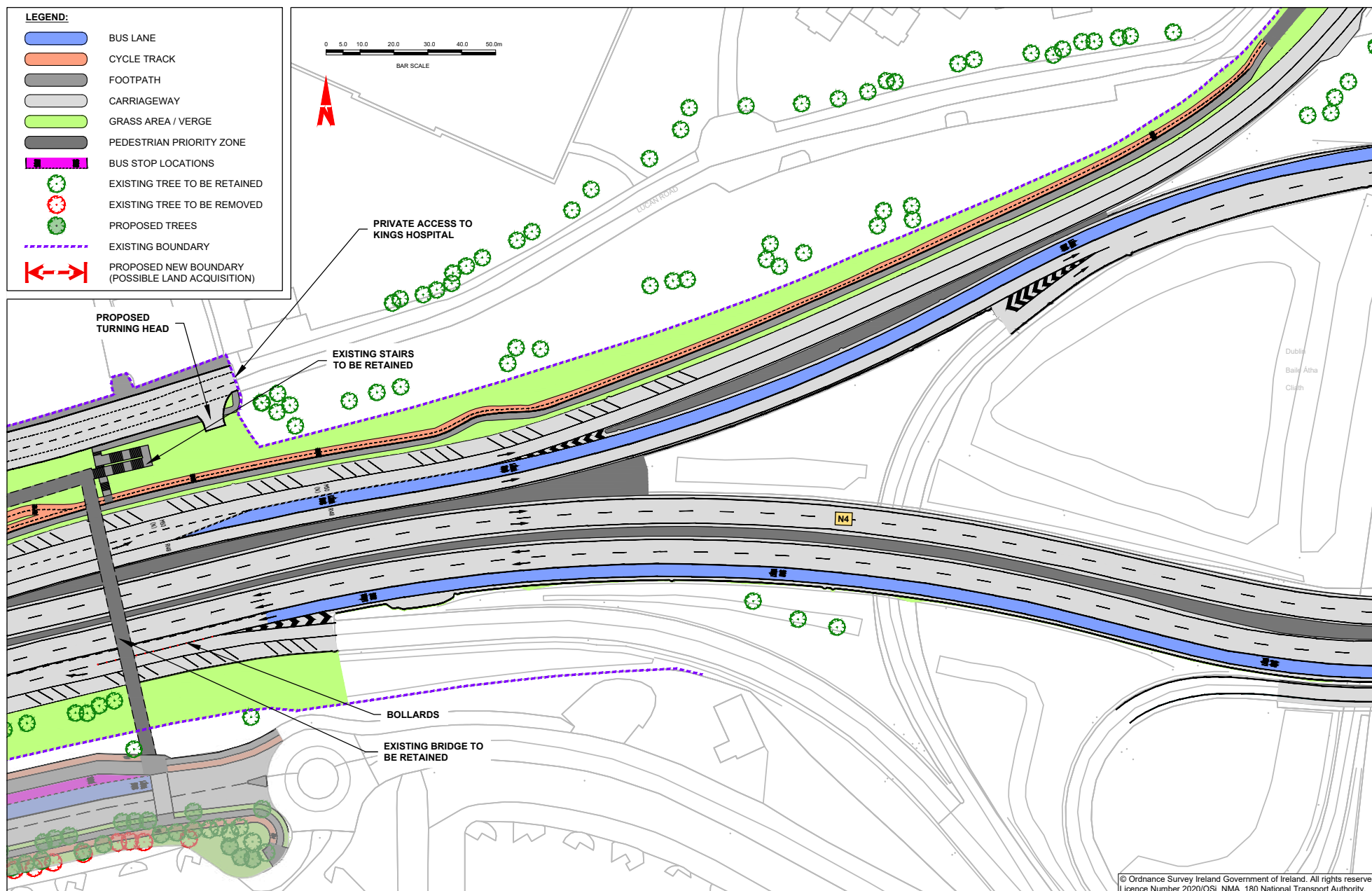


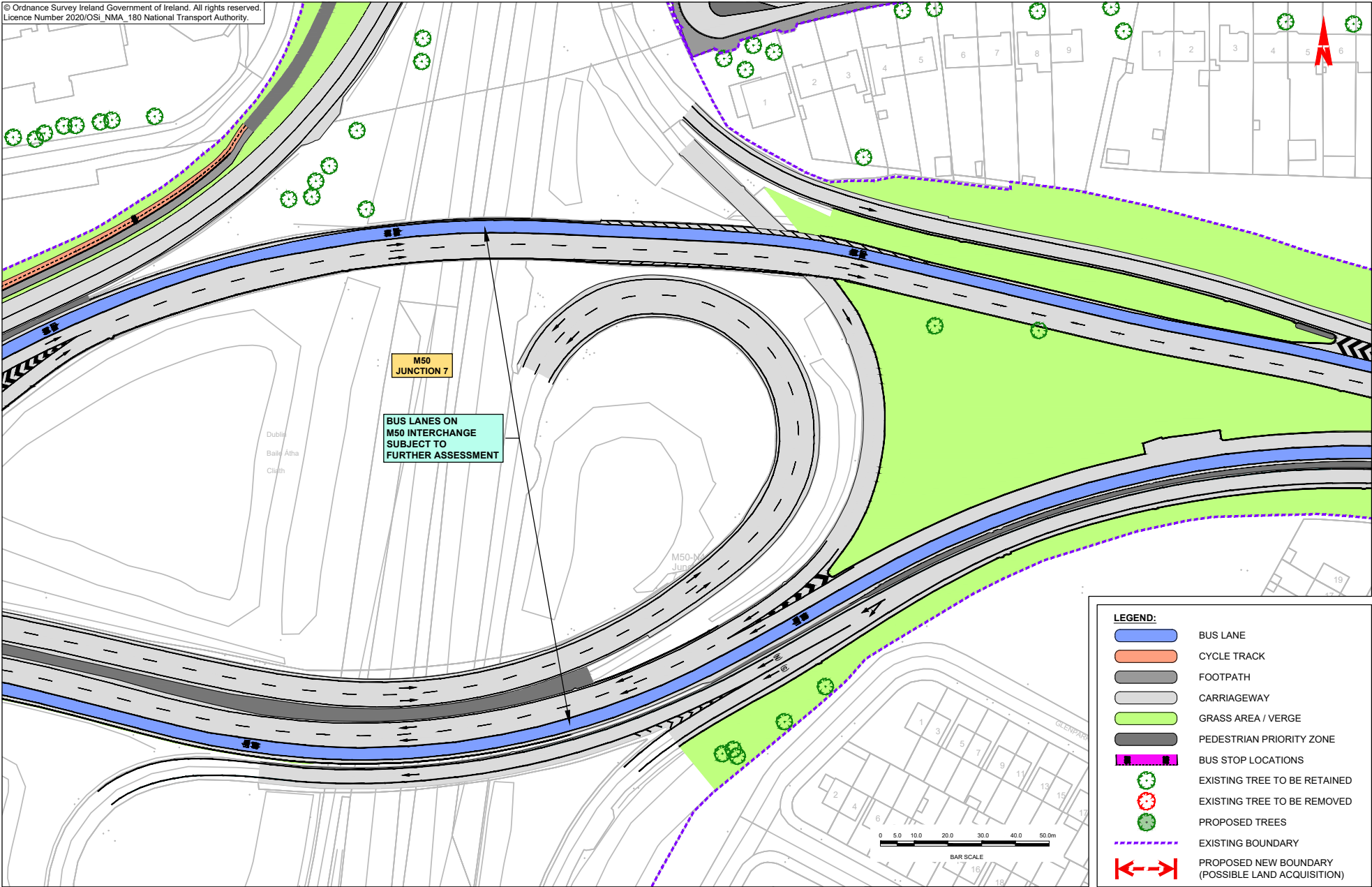


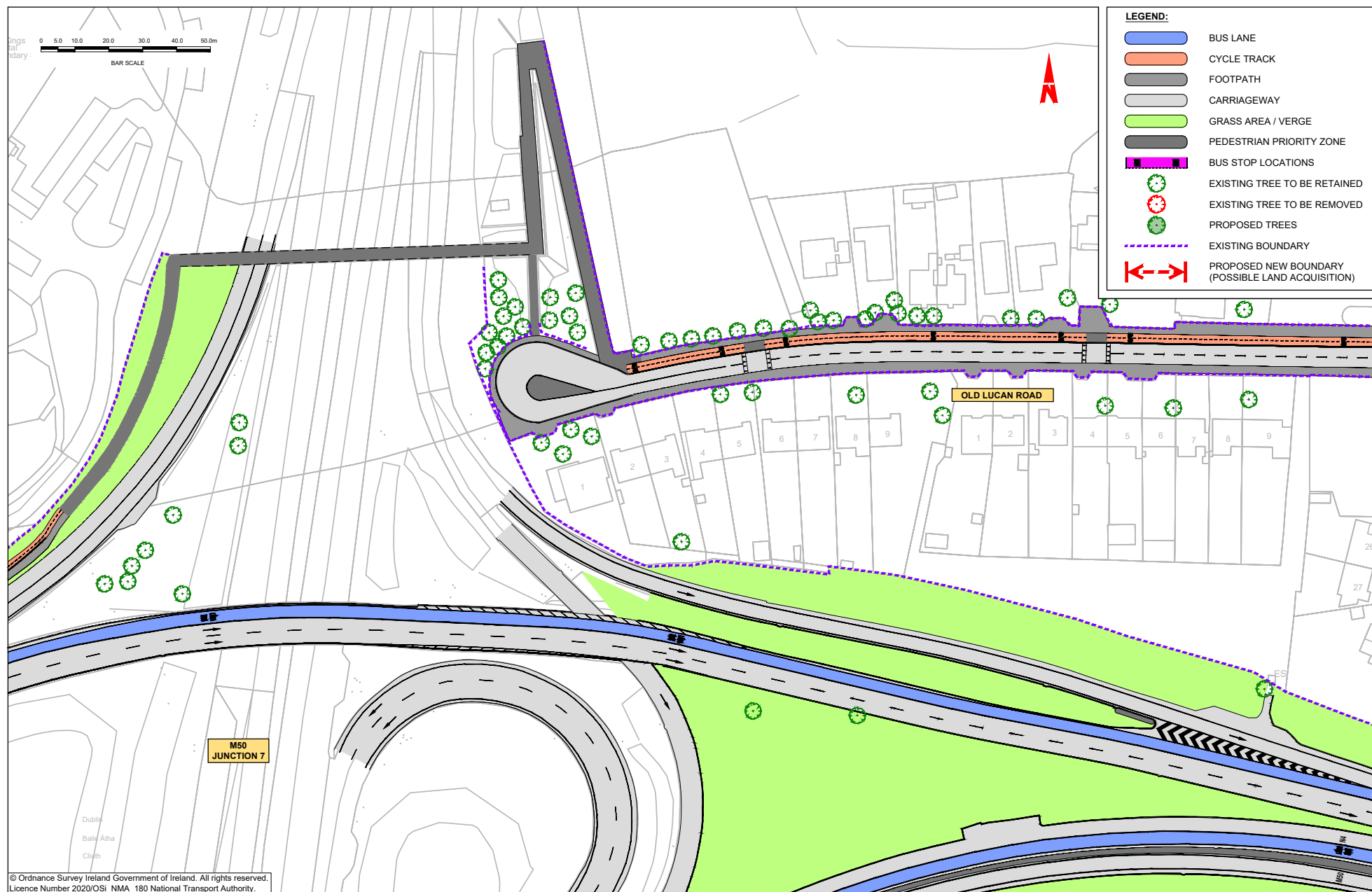


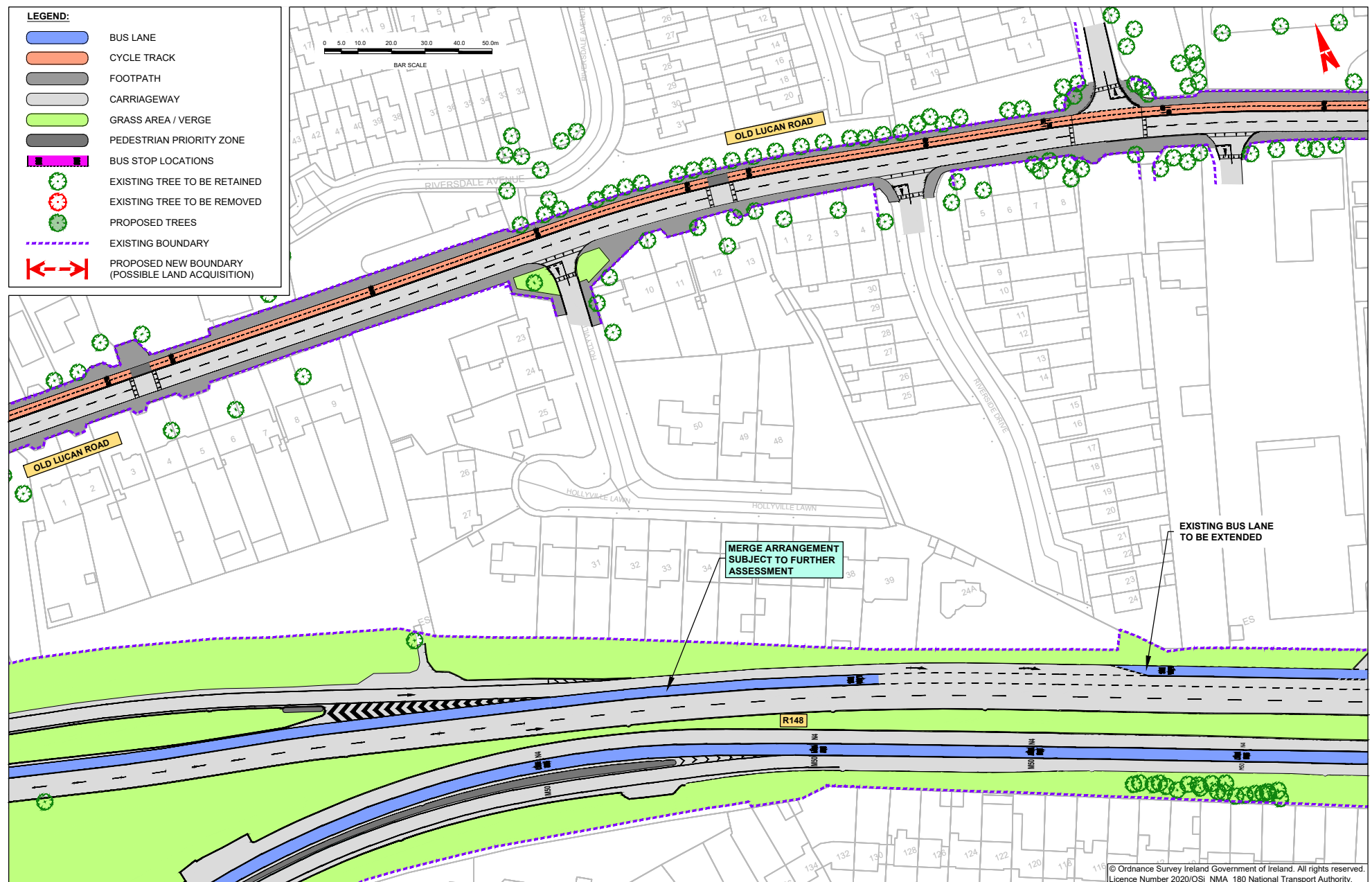




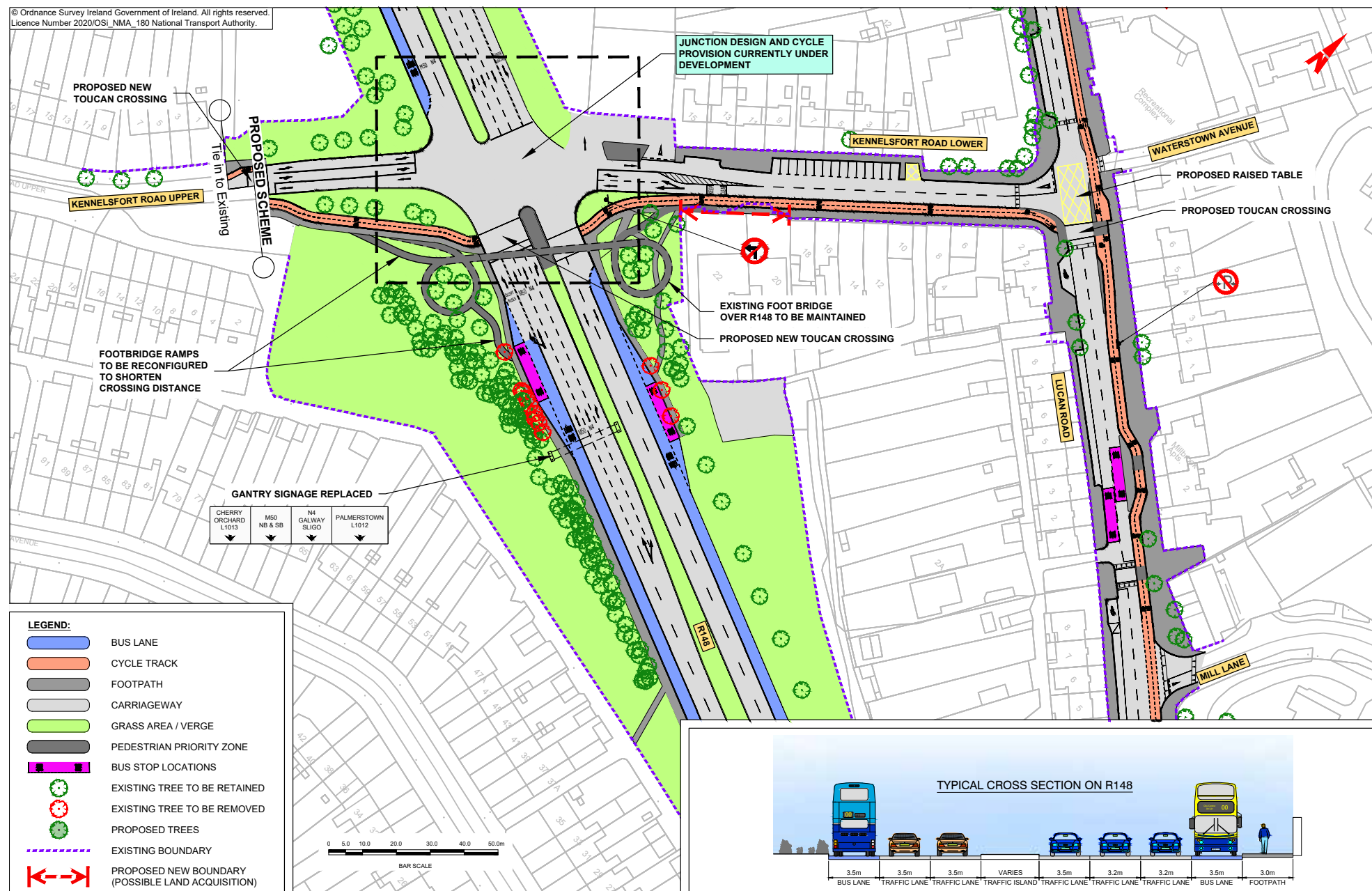


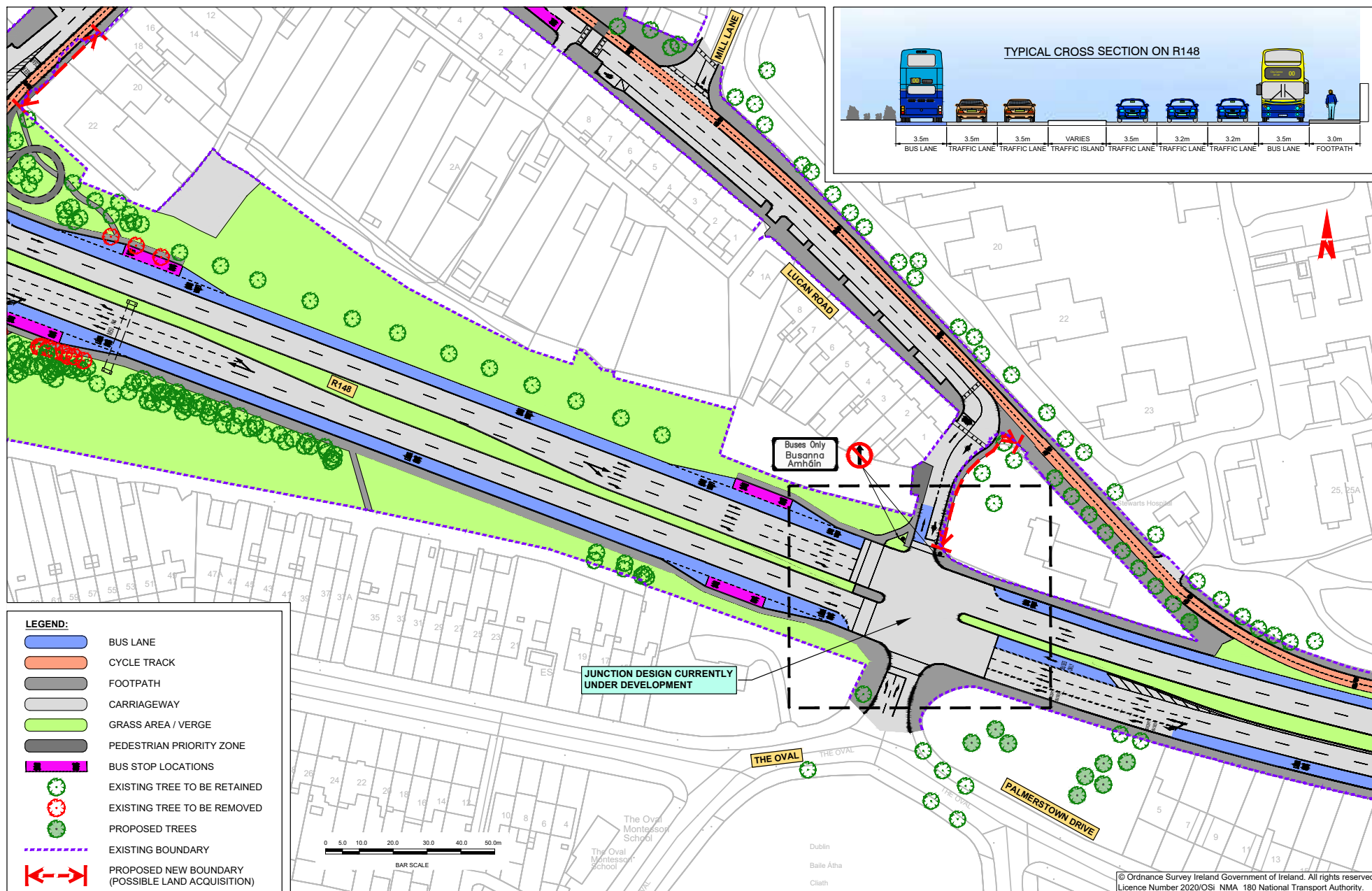


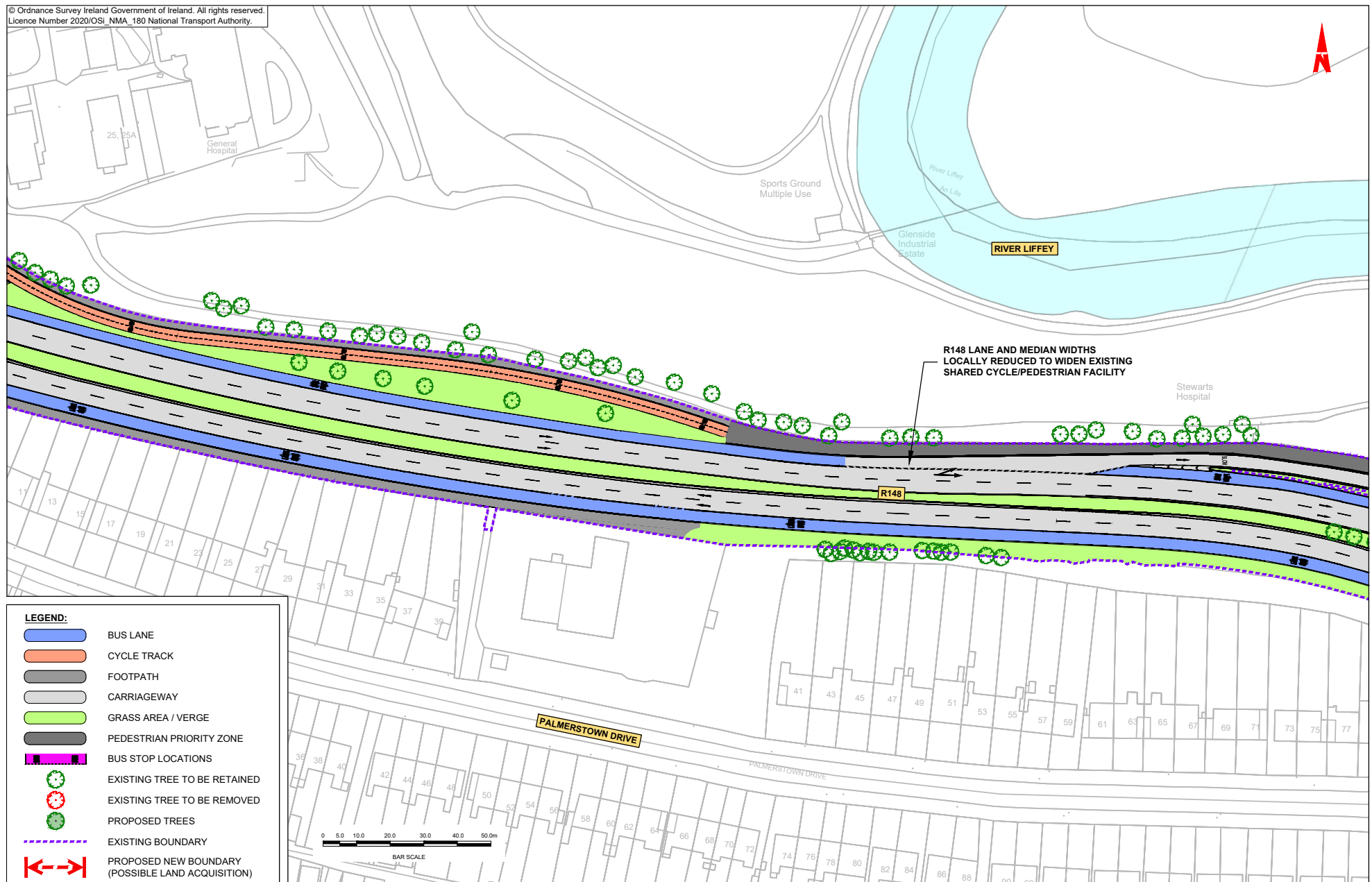


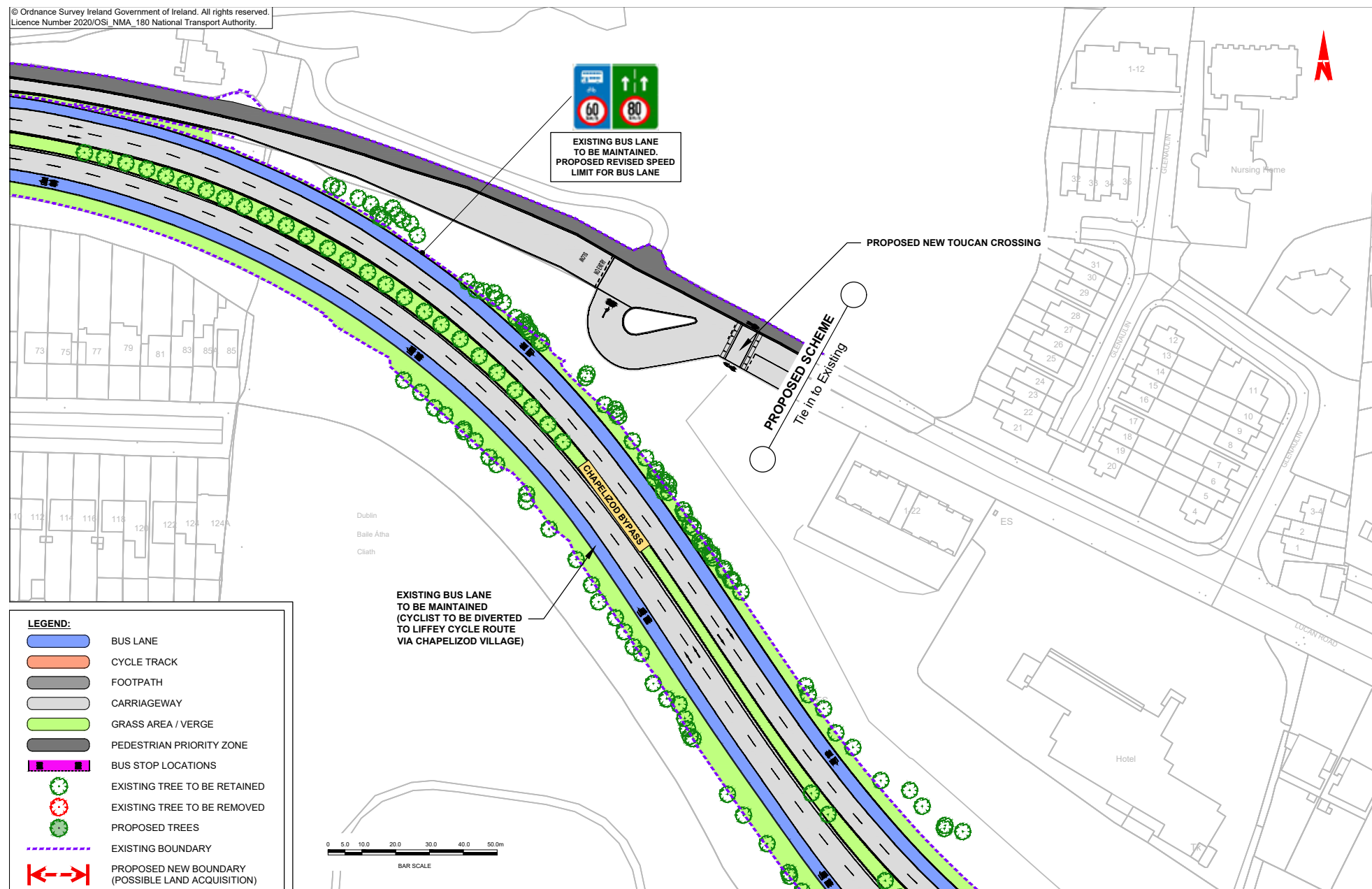


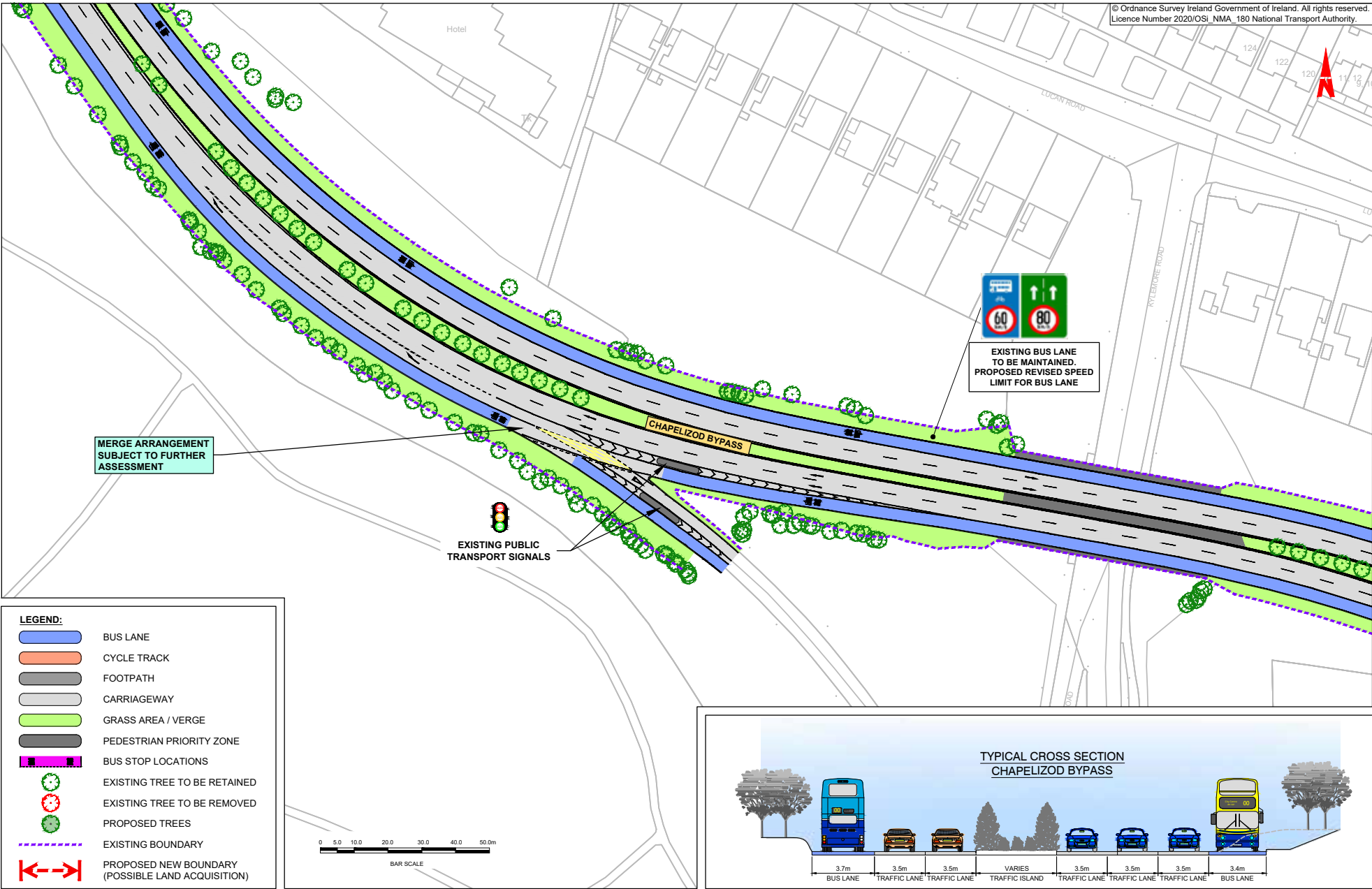


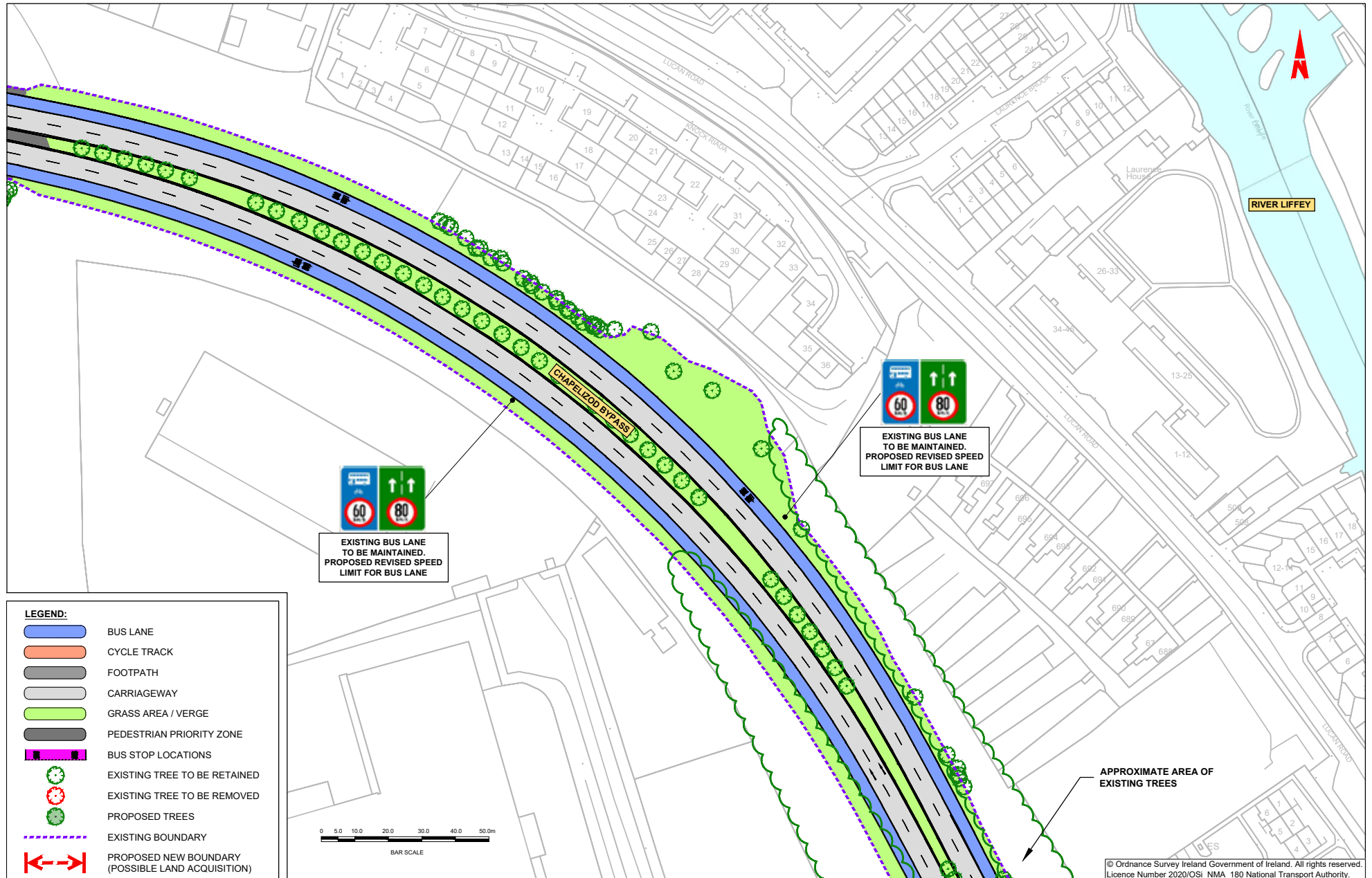


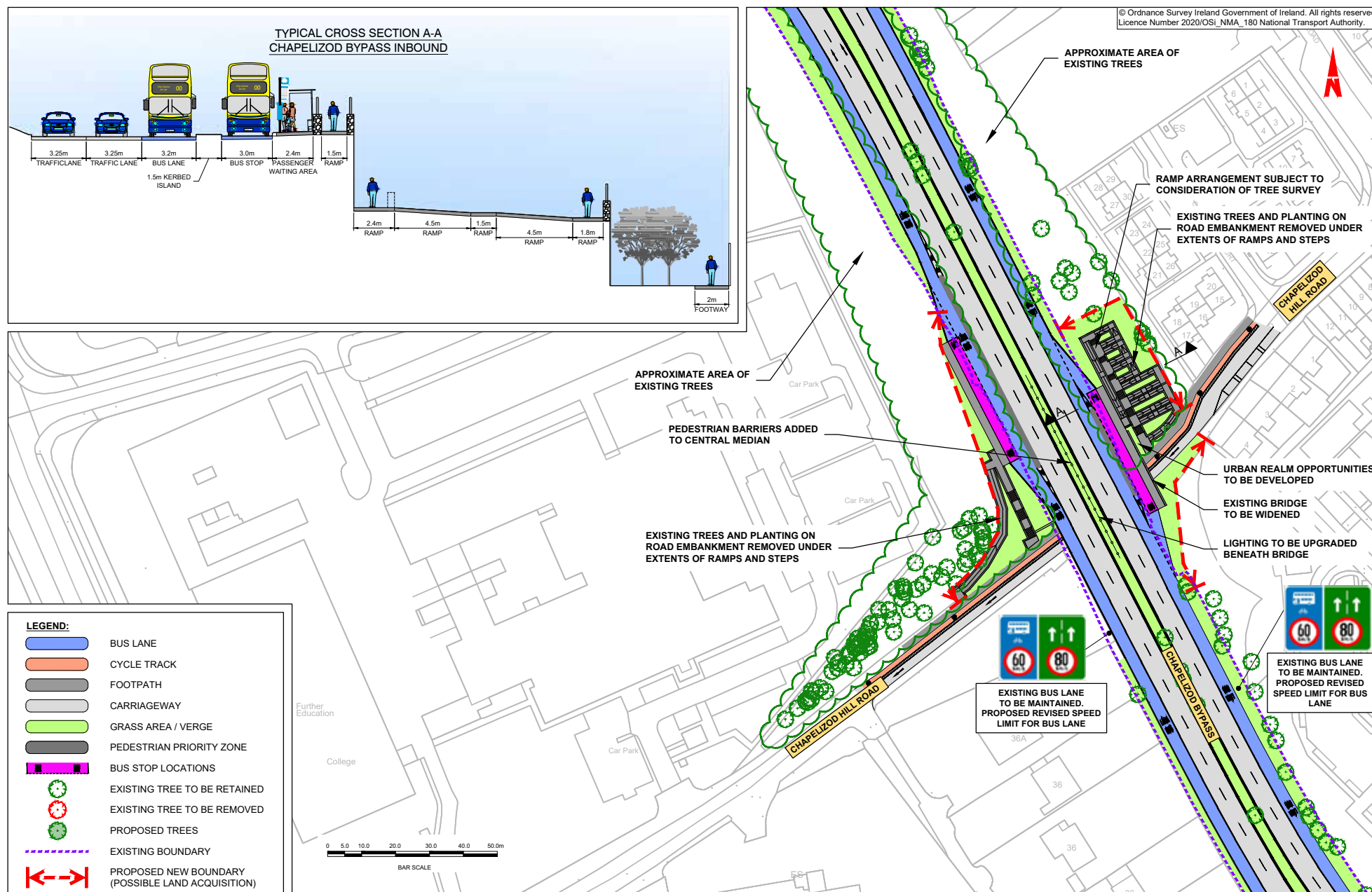


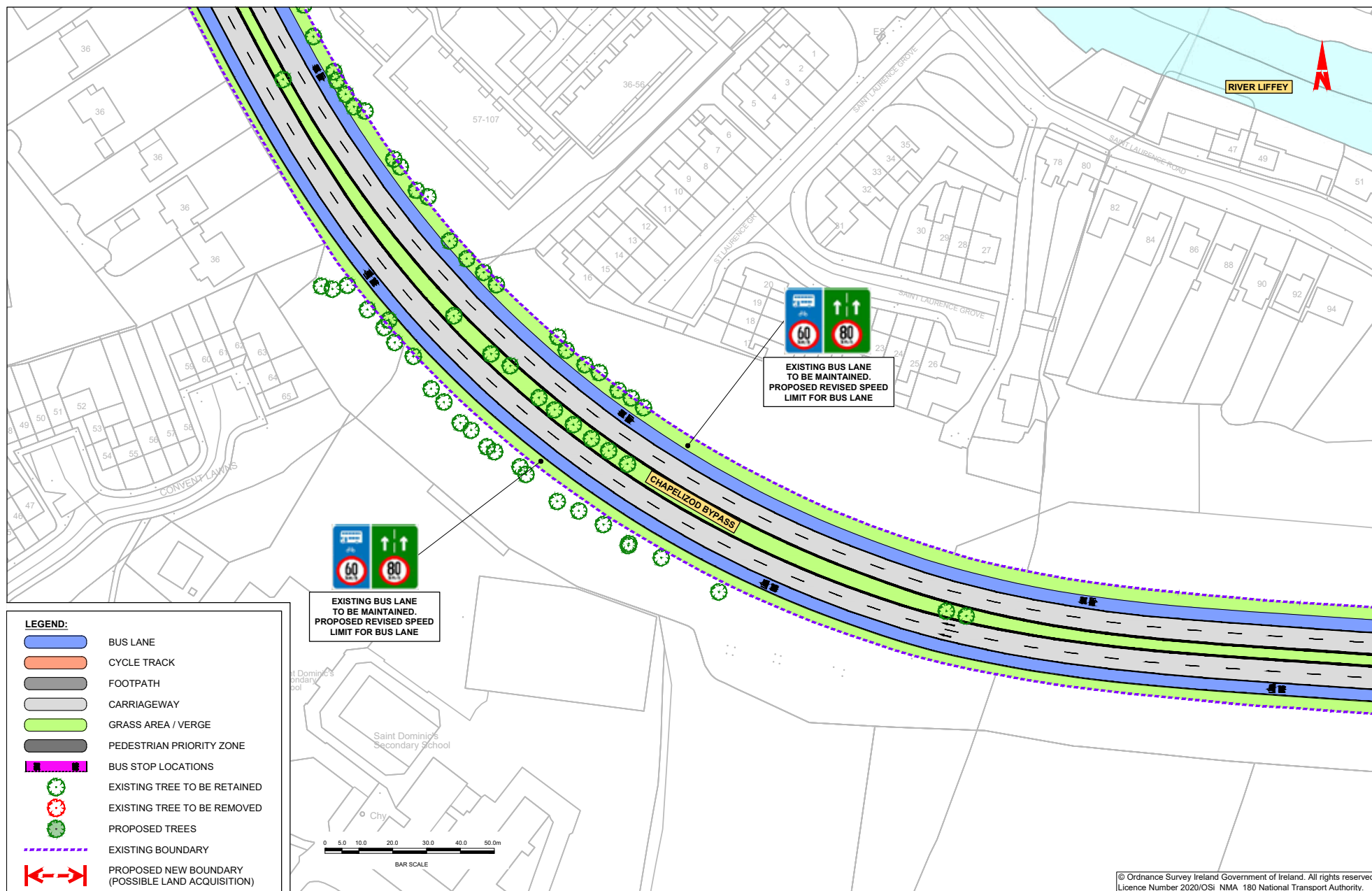


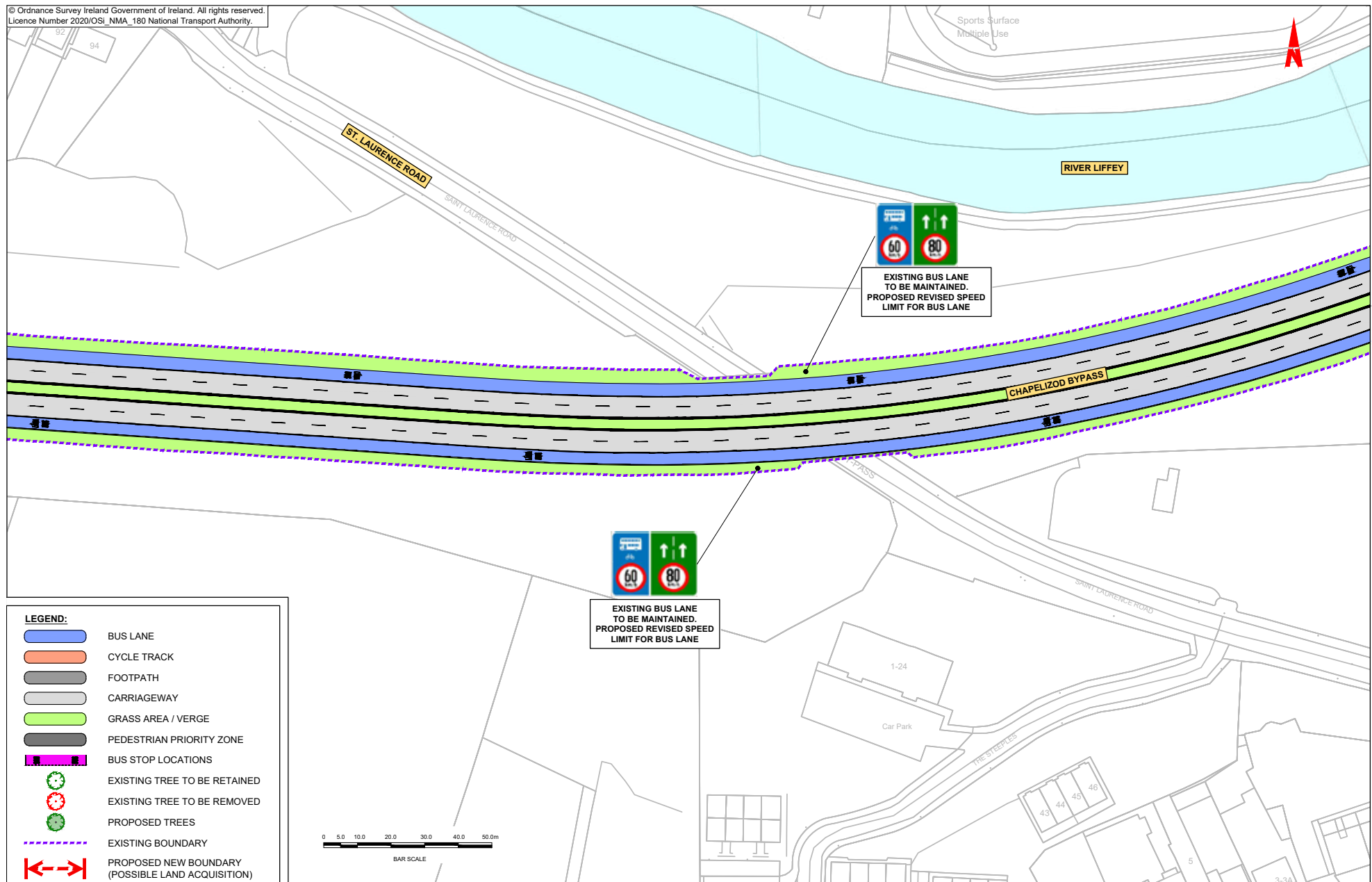


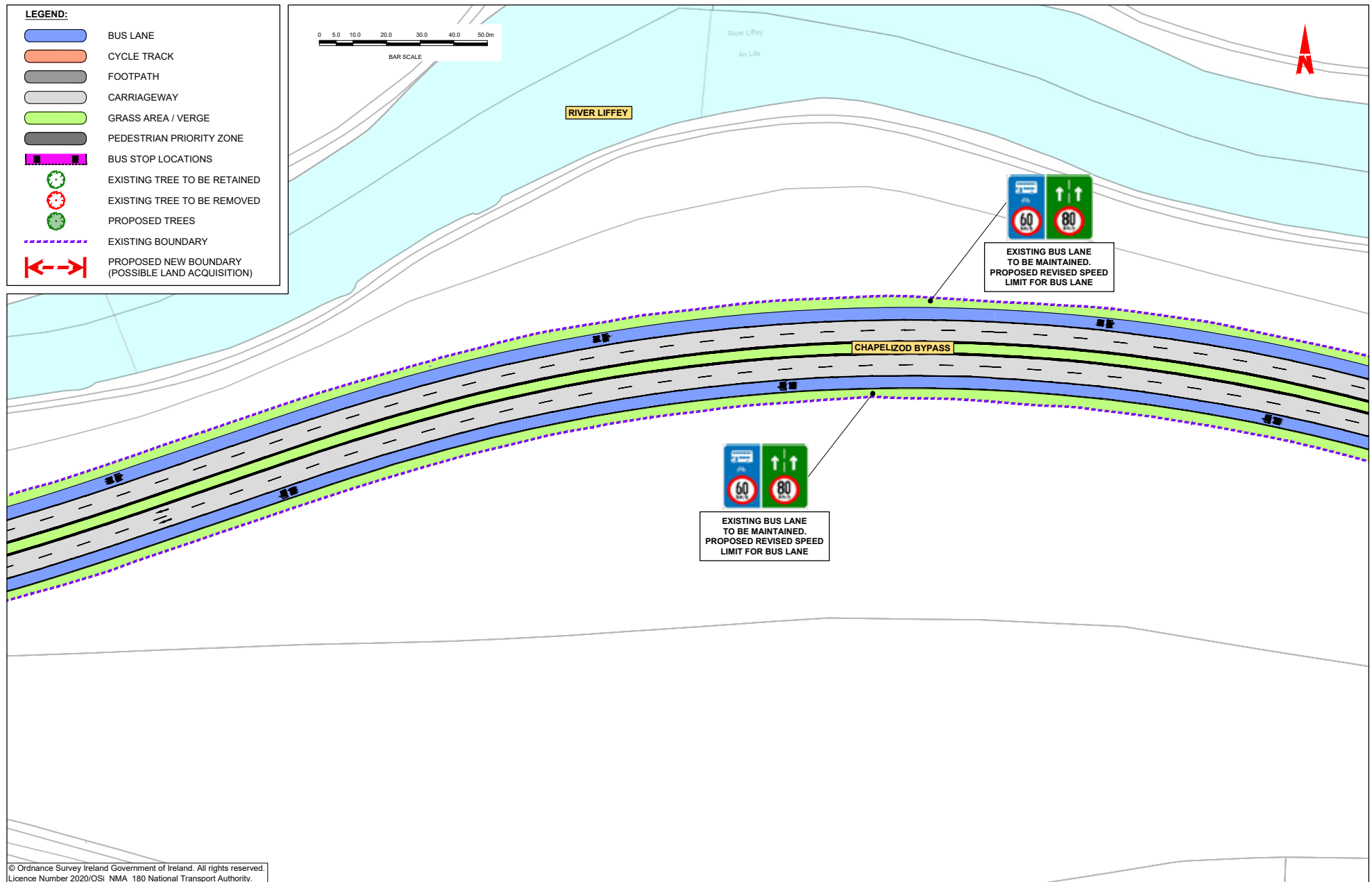




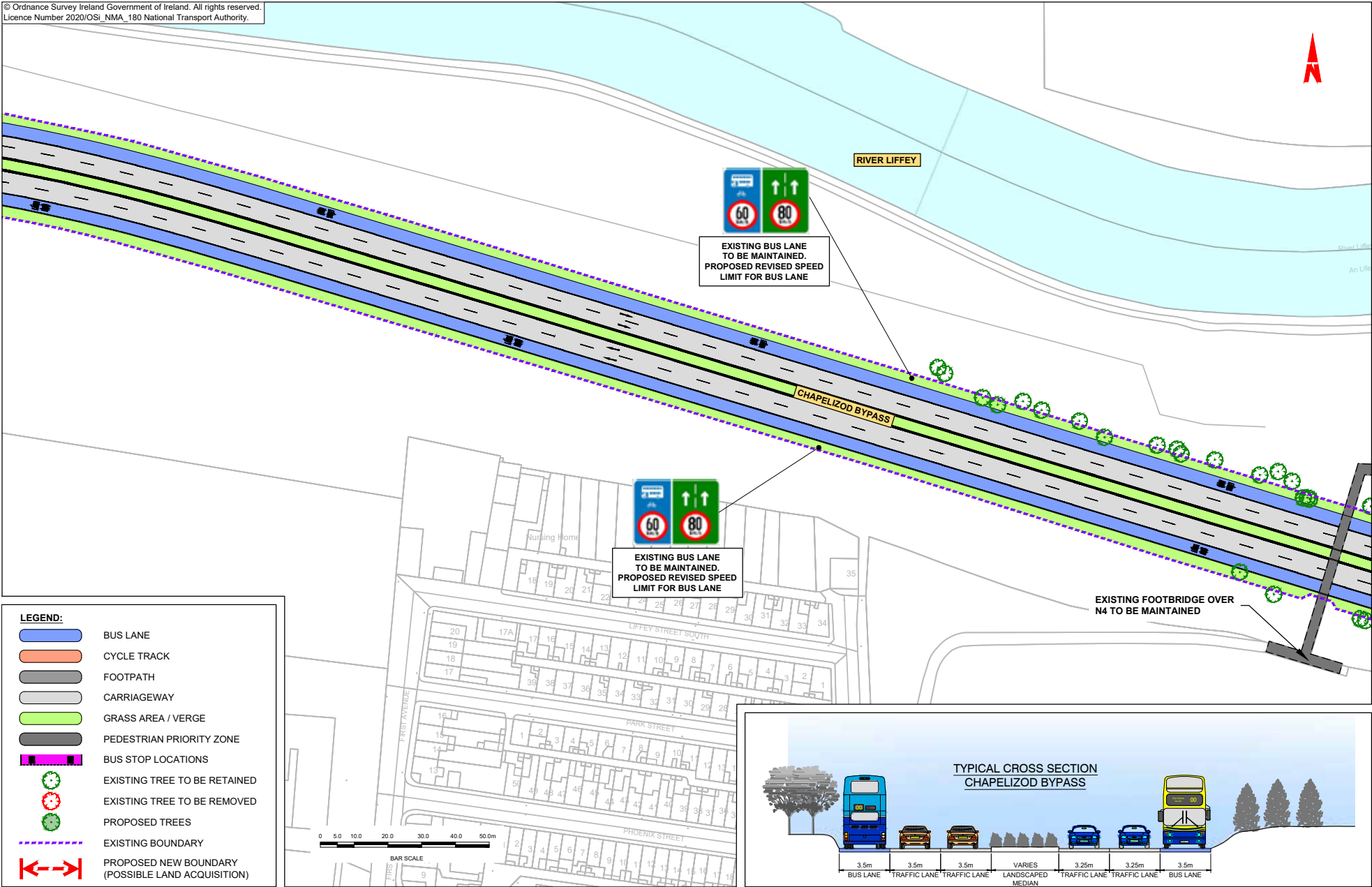




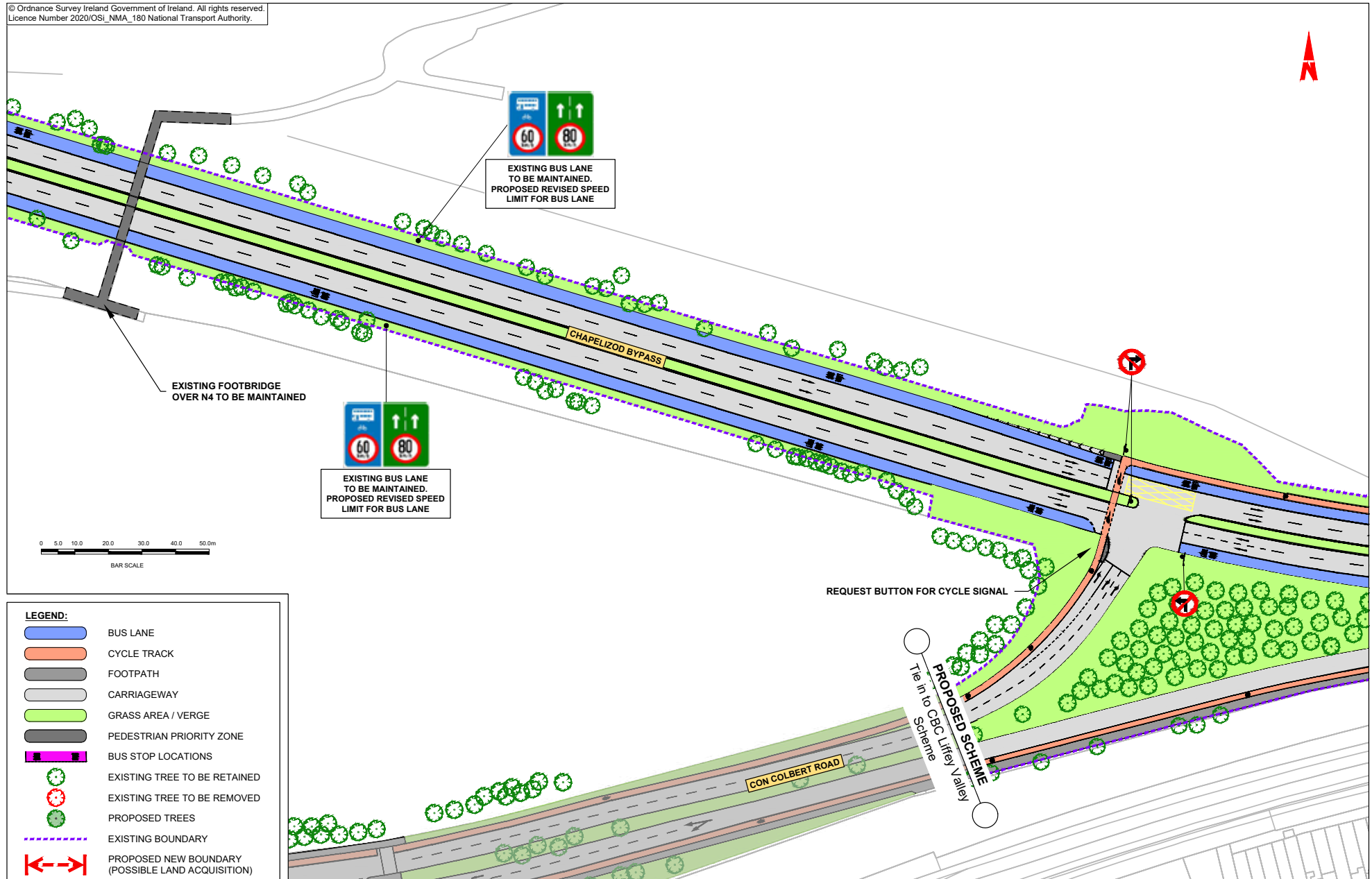


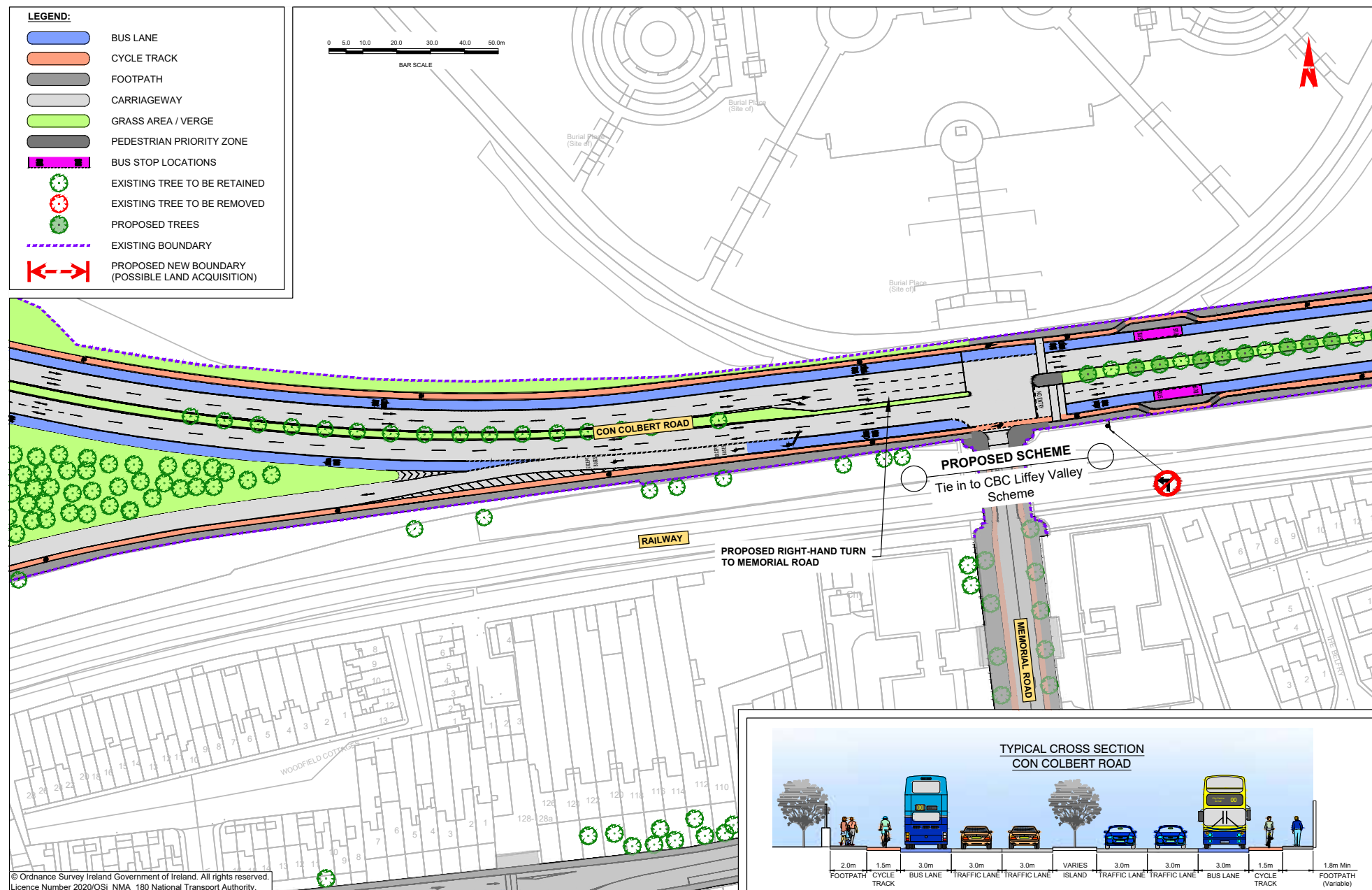


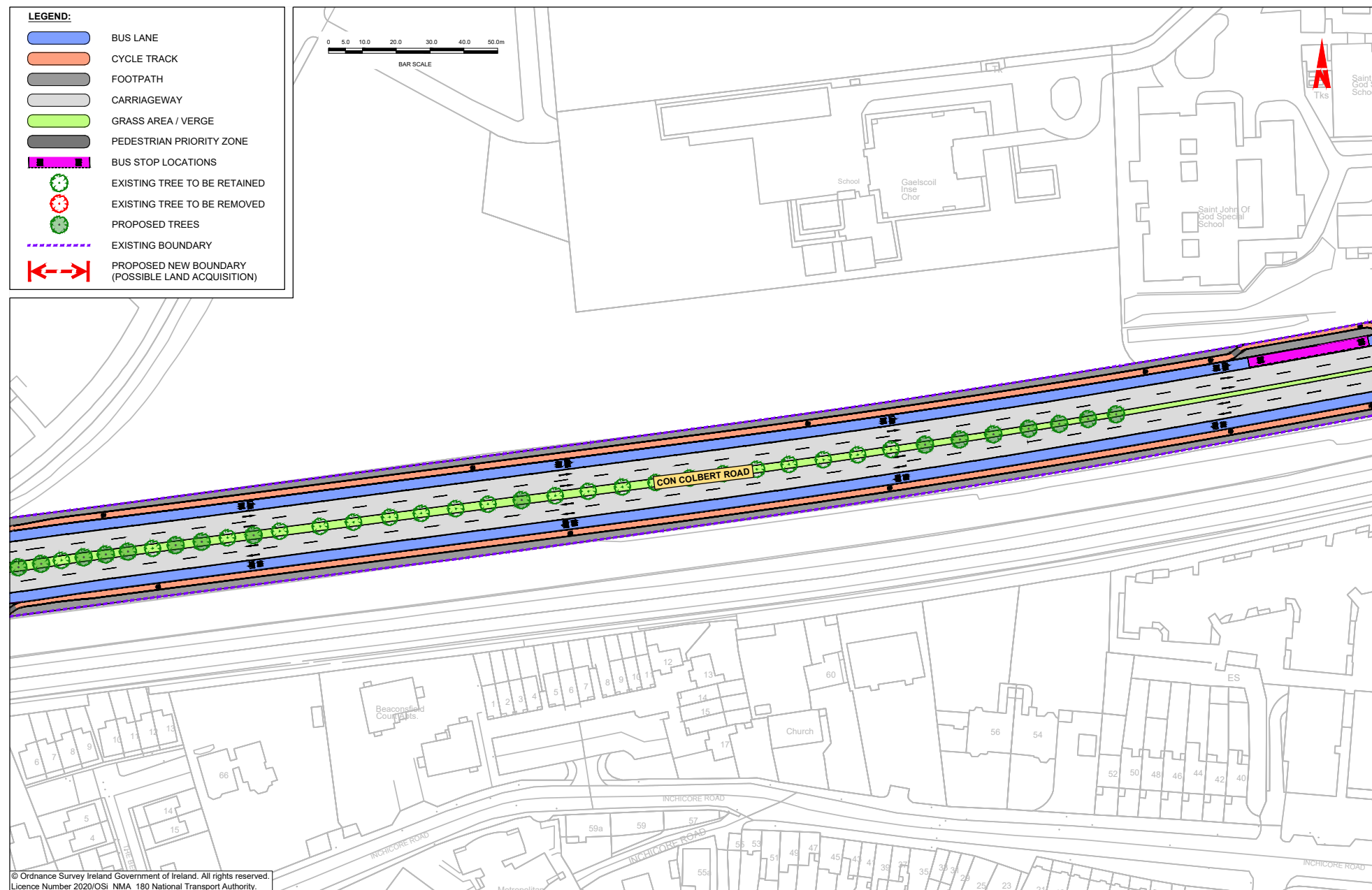
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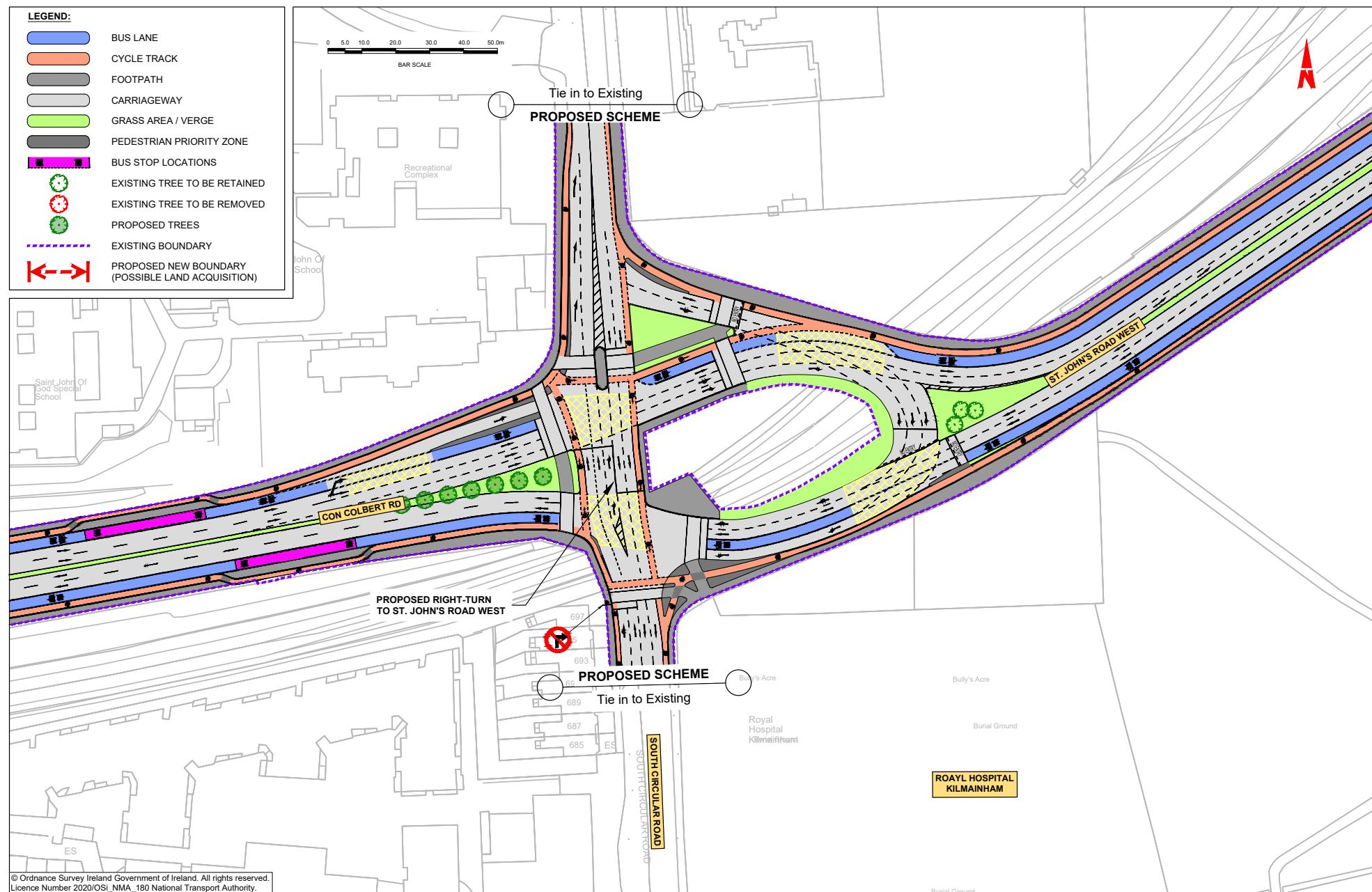


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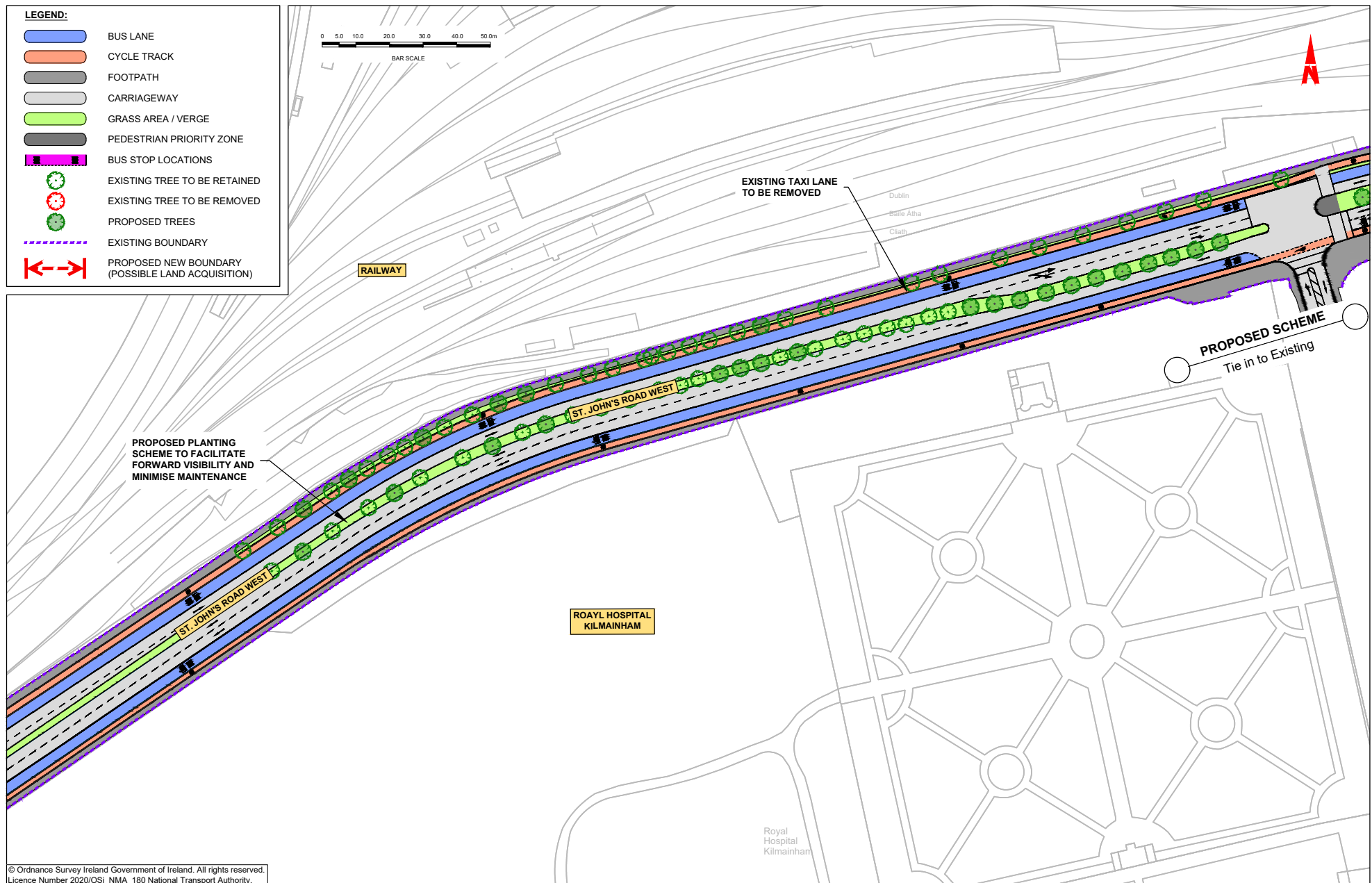


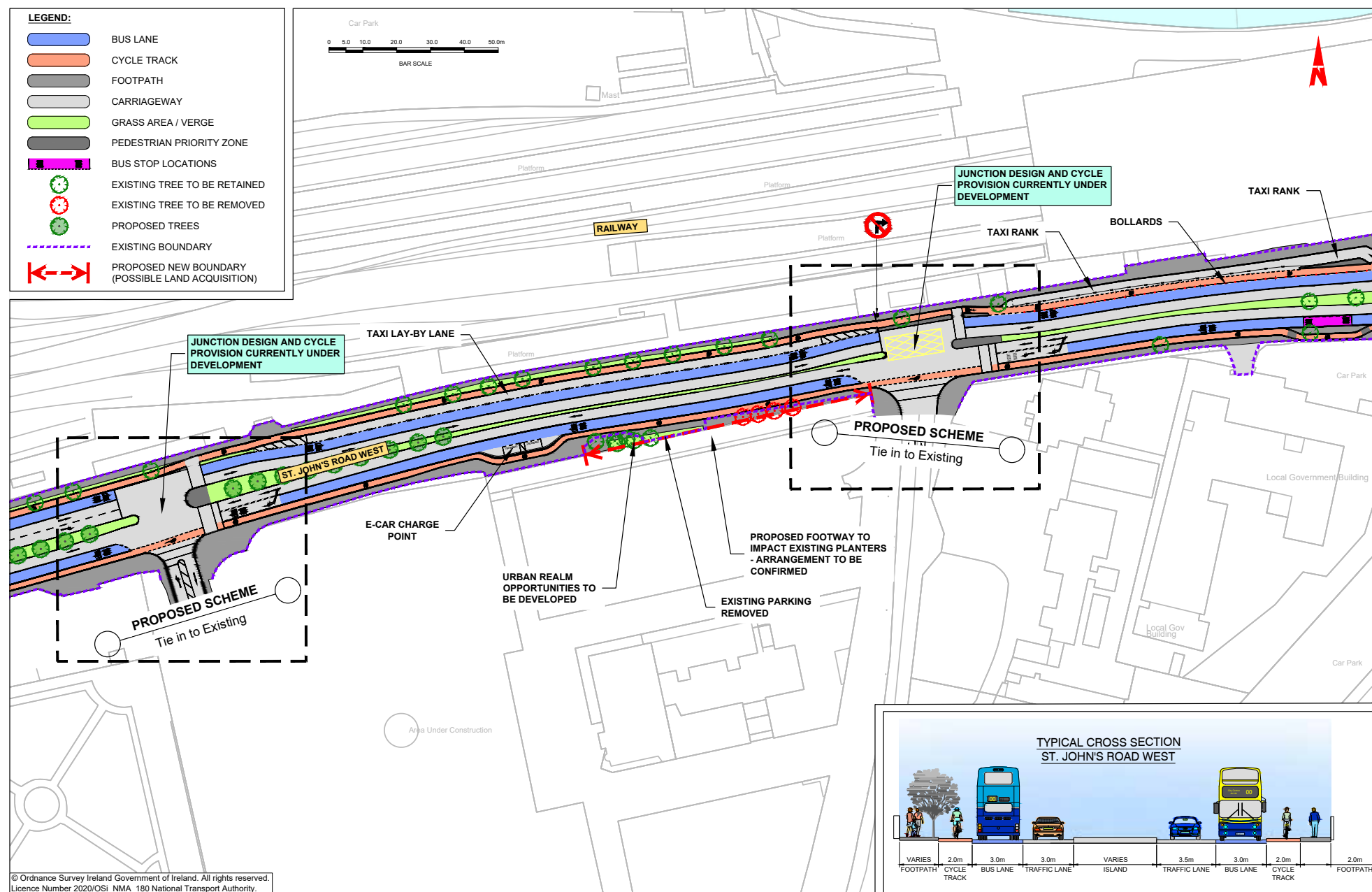


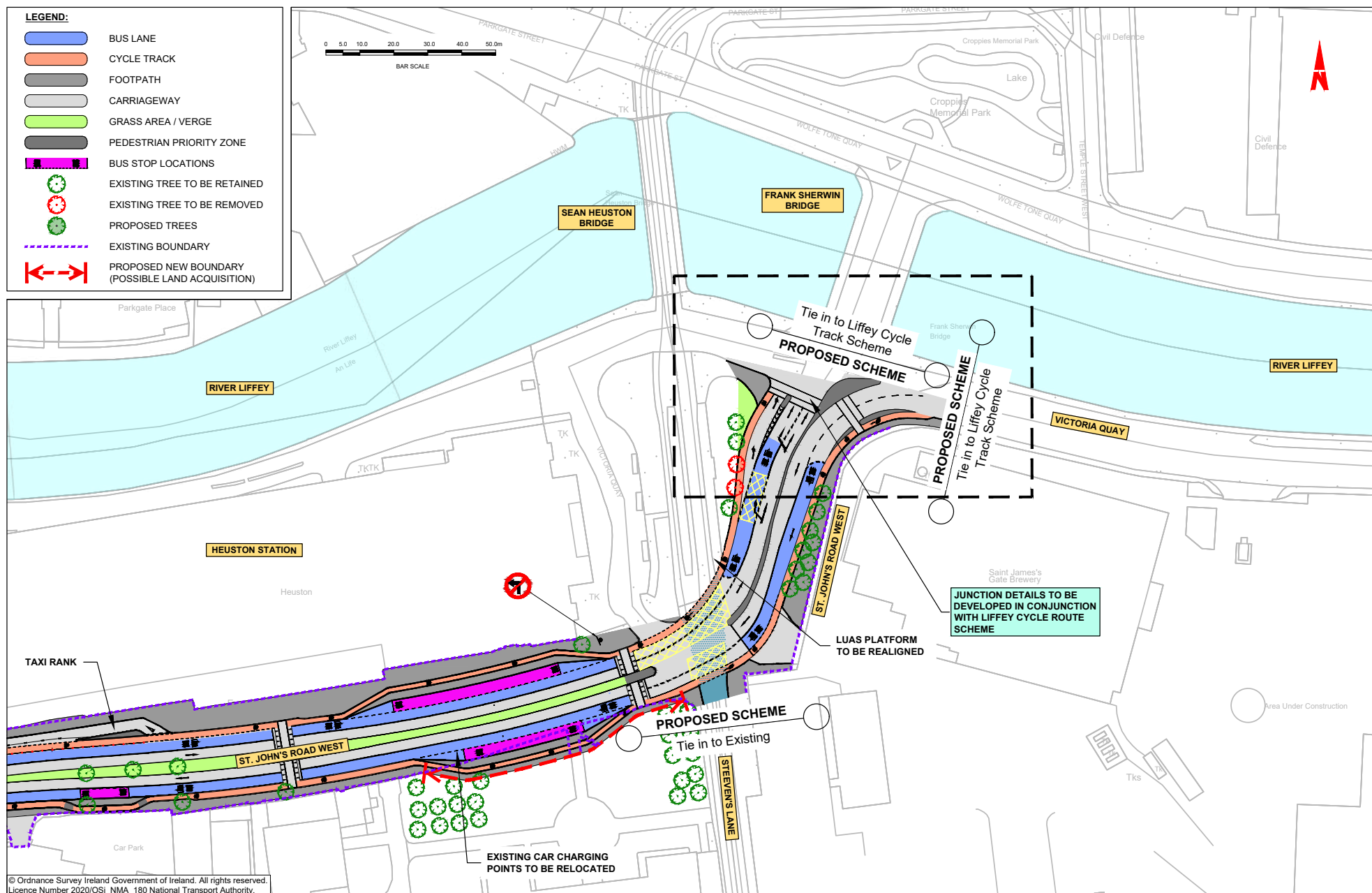
















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