AECOM

CORK CYCLE NETWORK PLAN

Comhairle Cathrach Chorcaí
Cork City Council

CORK COUNTY COUNCIL
1899

CONTENTS

Prepared by:
Paul Kelly (Consultant)
Sarah Moraillon (Consultant)

Checked by:
Elaine Brick (Associate Director)

Approved by:
Eoin O'Mahony (Associate Director)

01

Introduction

01 Introduction

1.1 Background

Cork City Council and Cork County Council have commissioned AECOM to prepare a Cycling Network Plan for the Cork City Metropolitan Area and surrounding towns. The objective of the project is to provide a clear plan for the future development of the cycling network within the Metropolitan Area to encourage greater use of cycling for trips to work, school, recreation and leisure. Figure 1.2 outlines the study area for the network plan.

Development of the Plan has been driven by a need to respond to national targets for sustainable transport as set out in Smarter Travel, A New Transport Policy for Ireland 2009-2020. This plan sets a target of 10% for all trips to be by bike by 2020. At present the modal share for cycling within the Cork Metropolitan Area is 1.7%. This compares to a national modal share of 2.3% for cycling. Take-up of cycling within the Cork area is therefore relatively low and as such there is a need to provide strategic direction to influence modal shift.

The purpose of this Network Plan is limited purely to recommendations for cycling infrastructure and development of an integrated and coherent cycling network. It does not provide recommendations in relation to additional behaviour change and spatial planning measures which also need to be considered if modal shift is to be achieved.

A Steering Group was established to oversee development of the Cycle Network Plan with representation from transport infrastructure and planning departments of Cork City Council and Cork County Councils. This Steering Group has collaborated closely with AECOM in developing the network proposals.

The Cycle Network Plan was updated in January 2017 to incorporate comments and suggestions received during the Public Consultation process that was undertaken in 2016.

1.2 Project Methodology

The Cork Cycle Network Plan has been developed in line with the National Cycle Manual guidelines for network planning. These steps are summarised in Figure 1.1. It should be noted that Step 7 of the guidelines (Programme, Consultation, Budgets) will be completed by Cork County and City Councils as part of a separate exercise.

Figure 1.1 Project Methodology for Cork Cycle Network Plan

1 STAGE ONE: INVENTORY OF EXISTING CYCLE NETWORK

- Map existing network
- Quality of Service Audits
- Accident mapping
- Public consultation

2 STAGE TWO: NETWORK DEMAND

- 2011 Census Analysis
- VISSUM model
- Traffic Counts
- Main trip generators

3 STAGE THREE: TRIP ASSIGNMENT

- Key demand corridors based on existing patterns
- Future Demand Matrices
- Route choice factors

4 STAGE FOUR: FUTURE TRIP DEMAND

- Future population and employment figures
- Modal shift projections
- National trends

5 STAGE FIVE: PLANNING

- Planned Development sites
- Planned new and upgraded infrastructure

6 STAGE SIX: PRIORITISING IMPROVEMENTS

- Key destinations
- High demand routes
- Gap analysis
- Accident hot-spots

1.3 Report Structure

The Cork Cycle Network Plan is set out as follows:

– Chapter 2, Policy Context: reviews the national and local policy context which will form the basis for the Cycle Network Plan. This section also considers some recently completed studies whose recommendations for new infrastructure could have an impact on final recommendations of the plan;

– Chapter 3, Existing Facilities: Presents the existing network. This section provides a breakdown of quality of service for existing facilities and a summary of issues and opportunities incorporating public feedback;

– Chapter 4, Understanding Trip Demand: Provides an understanding of the current and future demands on the network. This section describes how modal share targets were developed for the study area to generate future year flows;

– Chapter 5, Network Plan Overview: Provides the overview and strategic intention of the proposed network plan;

– Chapters 6 - 9, Cork City Area Cycle Network: Describes the proposed cycle network in the Cork City Centre Area, Cork City North, Cork City Southwest and Cork City Southeast;

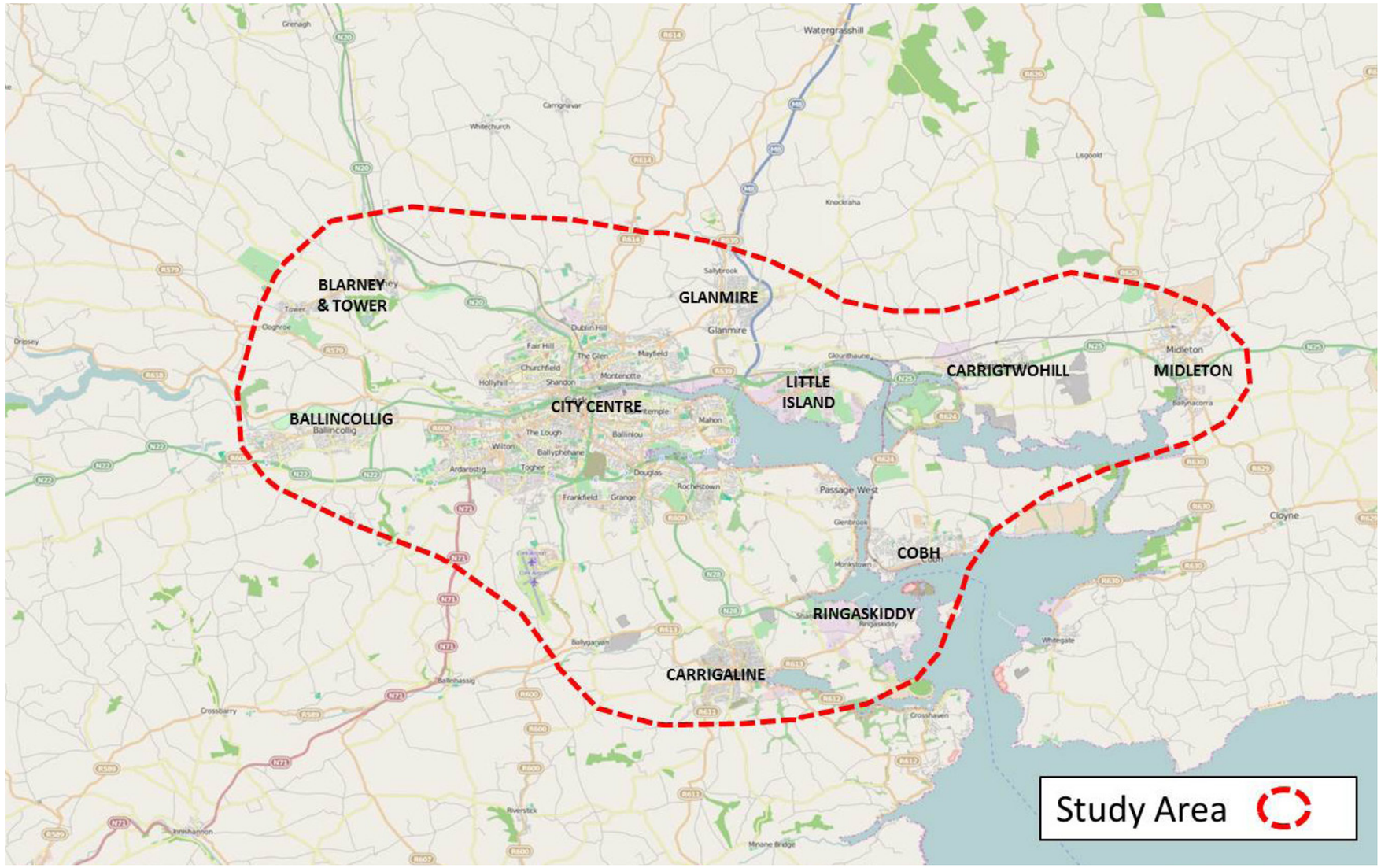
– Chapters 10 -17 Cork Metropolitan Towns Cycle Network: Describes the proposed cycle network in Blarney and Tower, Ballincollig, Carrigaline, Passage West, Cobh, Glanmire, Little Island, Carrigtwohill and Midleton; and

– Chapter 18, Cork Inter-Urban Cycle Network: Details the inter-urban cycle routes that will connect the metropolitan towns to Cork City.

The appendices to the report:

– Appendix 1 Existing Facilities Maps
– Appendix 2 Accident Maps
– Appendix 3 POWSCAR Mapping
– Appendix 4 Cycle Modelling Methodology

Figure 1.2 Project Study Area



02

Policy Context

02 Policy Context

2.1 Strategic Urban and Transport Planning

The proposed Cycle Network Plan for Cork has been developed having regard to various plans and policies that will affect the future development of the transport network.

The following policies, studies, guidelines, plans and schemes are relevant to the Cork cycle network:

– The Eurovelo International Cycle Network;

– The Government's Smarter Travel initiative;

– The National Cycle Policy Framework;

– The National Cycle Manual;

– The Regional Planning Guidelines;

– The Development Plans of the respective affected Local Authorities; and

– Other relevant studies.

Analysis of the existing planning policy background was carried out to gain an overall understanding of the planned cycle network across the study area. Local Area Plans and previous studies of cycling in Cork were analysed to ascertain the variety of cycling infrastructure currently proposed in the City and Metropolitan Towns. This included identification of the strategic direction of the cycle network and where any obvious gaps occur in the system.

2.2 Eurovelo International Cycle Route Network

There is an international dimension to the long-distance cycle route network in Ireland as part of the Eurovelo network across the European continent as shown in Figure 2.1.

One of the Eurovelo routes is particularly relevant to the Cork Cycle Network Plan. The EV1 (Atlantic Coast Route) extends from Norway to Portugal along the west coast of Europe in Ireland, this route extends from Larne, County Antrim in the northeast, around the northern, western and southern coasts, via Kerry, Cork and Waterford and ending in Rosslare, County Wexford in the southeast.

The Cork Cycle Network Plan has included for connections from the east with an inter-urban route via Midleton and Carrigtwohill and from the west with a greenway via Ballincollig. Within the City Centre there are a number of route choices with the proposed network that can respond to the strategic intent of the Eurovelo route network.

Figure 2.1 Eurovelo International Route Network Map

2.3 Smarter Travel: A Sustainable Transport Future 2009 – 2020

In 2009, the Department of Transport unveiled Smarter Travel as the new national transport policy document for Ireland. The document was developed as an umbrella document under which all other transport policy in the state would be guided. One of the main aims of the policy is to develop walking and cycling as viable commuter modes in the short to medium term with the long term aim of fostering a lasting walking and cycling culture in Ireland.

The government has set key national targets for a reduction in the levels of those commuting by private car from 65% to 45% by 2020 with the remainder of trips made up of sustainable travel modes such as cycling, walking and public transport.

The document acknowledges that:

"pedestrian and cycle facilities will be most successful where they form a coherent network, place an emphasis on safety, directly serve the main areas where people wish to travel, provide priority over vehicular traffic at junctions, are free from obstruction and have adequate public lighting."

2.4 National Cycle Policy Framework

The National Cycle Policy Framework (NCPF) 2009-2020, uses the targets outlined in Smarter Travel and focuses more specifically on cycling as a sustainable transport mode. The document sets out with the stated aim of creating a strong cycling culture in Ireland and to make cycling the norm, rather than an exception, for all short trips undertaken in Ireland.

The vision is that all cities, towns, villages and rural areas will be bicycle friendly. Next to walking, cycling will be the most popular means of getting to school, university, college and work. The bicycle will be the transport mode of choice for all ages. We will have a healthier and happier population with consequent benefits on the health service. We will all gain economically as cycling helps in easing congestion and providing us with a fitter and more alert work force.

The NCPF recognises the potential of cycling to significantly improve various aspects of people's lives through the obvious personal benefits of improved health and finance, but also in a more communal sense it benefits society in terms of lower CO_2 emissions and also has positive social impacts in that it gets people out walking and cycling together.

The overarching objective of the NCPF is that 10% of all trips in Ireland will be made by bike by 2020.

A new "hierarchy of measures" introduced in the Framework proposes the following measures for cycle route development:

– Traffic Reduction;

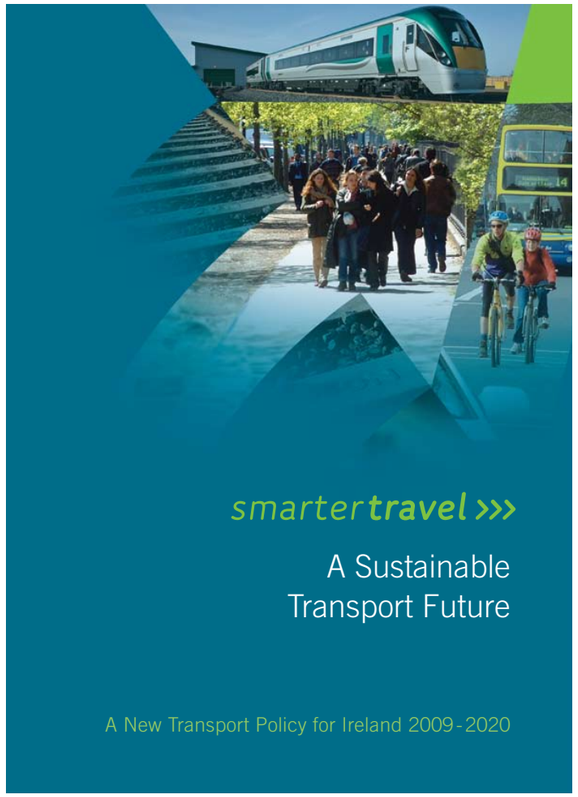
– Traffic Calming;

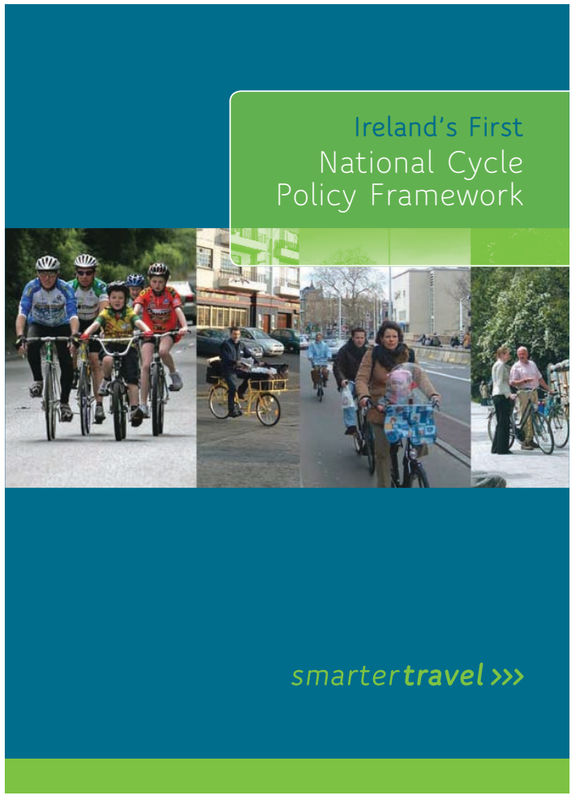
– Junction Treatment and Traffic Management;

– Redistribution of Carriageway;

– Cycle Lanes and Cycle Tracks; and

– Cycleways.





2.5 National Cycle Manual

The National Cycle Manual was published by the NTA in 2011. It brings a more standardised and logical approach to the design of cycling facilities in Ireland, which have traditionally being designed haphazardly where space allowed with very little consistency or coherence.

The Cycle Manual introduces the concept of Quality of Service (QoS). The concept involves identifying infrastructure from Grade A+ to D, with A+ being a route which is designed to the highest possible standard.

The seven steps to planning a cycling network defined in section 3.4 of the manual have been taken into account in the development of the Cork Cycle Network plan.

2.6 Regional Planning Guidelines (RPGs) for the South West 2010 - 2022

The Regional Planning Guidelines envisage a population increase for the South West of 795,000 inhabitants by 2022 including a population of 466,531 in Cork County and 150,000 in Cork City.

In terms of walking and cycling, the RPGs set out these modes as having the lowest environmental impact in Cork and a number of inter-related infrastructure and land use policy factors need to coalesce. It also aims to achieve 10% modal split for cycling as set out in the NCPF.

Specifically, the region's local authorities are encouraged to prepare plans for improvement to the cycling and walking networks in urban areas, linking areas of population growth and employment, in a sustainable manner.

2.7 Cork City and County Development Plans

The Draft Cork County Development plan 2013-2019 sets out a number of transportation policies and objectives for the implementation of a cycling strategy for the county. The following objectives are listed:

a) Encourage and facilitate a safe walking and cycling route network and a culture of walking and particularly cycling in the county, as a viable alternative travel choice. Local Area Plans will set out Active Travel Strategies (cycling and walking) for individual towns and their hinterlands.

b) Improve the streetscape environment for pedestrians, cyclists and those with special mobility needs while seeking to provide facilities which enhance safety and convenience. The Design Manual for Urban Roads & Streets (DMURS) is a useful guidance tool.

c) Ensure that development in urban areas, towns and villages is well located, permeable and prioritises walking, cycling and access to public transport and other important amenities. The Design Manual for Urban Roads & Streets (DMURS) is a useful guidance tool.

d) Promote the development of an integrated and coherent local and countywide cycle network to form part of the wider National Cycle Network.

Cycle Parking is also discussed under this section of the Plan in the context of the provision of sufficient facilities to encourage people to make the transfer to cycling as a viable mode of transport.

The Tourism section of the County Development Plan identifies the potential of the development of a number of 'Greenways' to provide off-road cycle trails. Combined off-road cycle and walking routes and recreational trails developed along abandoned rail lines, utility corridors or other natural linear open spaces such as river banks are often referred to as Greenways. County Cork has a large number of abandoned rail lines and while some of these routes are being brought back into use with commuter rail services as part of the Cork Suburban Rail Network Project, there is no immediate prospect that many of these routes will revert to rail use. They could however, make a highly valuable contribution to the recreation and tourism infrastructure of the county if developed as multi-user recreational trails.

While the majority of the rail lines run through open countryside, opportunities for providing greenways are not confined to rural locations. Highly successful greenways have already been developed along the old coastal rail line along the western side of Cork Harbour linking Rochestown to Passage West and Carrigaline to Crosshaven. Achieving connectivity between completed sections of the existing trail network with future routes is an important consideration. A further feasibility report has been completed on the potential for a greenway from Passage West to Carrigaline (including a branch to Ringaskiddy) that would link the Rochestown to Passage West and Carrigaline to Crosshaven routes and would thereby provide a continuous dedicated walking and cycling route from Rochestown to Crosshaven and make important links with transport connections at the Carrigaloe cross river ferry (and hence onwards to Cobh) and more significantly, the passenger ferry terminal at Ringaskiddy.

The Draft Cork City Development plan 2015-2021 outlines the need for over 20,000 new units up to 2022 based on Regional Planning Guidelines population projections. The majority of these units will come from key development areas such as the City Centre, Docklands, Mahon, Blackpool and the North West regeneration area.

The N28, Dunkettle Interchange Upgrade, and the Northern Ring Road are the key strategic road priorities for the city. At this time there are no planned improvements within the City Council's administrative area that requires reserving lands for potential capacity enhancements; key issues relate to demand management.

In 2011, 2% of persons working in Cork City cycled to work in comparison to the 10% national target to be reached by 2020. Cycling is especially targeted at trips of up to 5 km, particularly where topography is not a limiting factor. A number of objectives are in place to improve the cycle facilities for those who choose this mode of transport.

There is a strong emphasis on the integration of transport with the cultural and tourist characteristics of the city and this is supported in Chapter 11 on Recreational Culture where it is an objective to promote a network of amenity routes to meet the increasing demand for active and passive recreational activities, as well as for walking and cycling for commuting purposes. The dual use of such routes as walkways and cycleways is to be encouraged wherever possible.

The Draft City Development Plan refers to major upgrade of cycling facilities as being implemented as part of the City Centre Movement Strategy. Cycle lanes and cycle priority at junctions will be provided on a number of key routes in the city centre and will link with suburban routes. New cycle parking facilities will be provided within the public realm in appropriate locations and cycle parking is required as part of new development proposals.

A major development opportunity within the City Centre is the Beamish and Crawford site where planning permission has been granted for a mixed use

development including an event centre, cinema, offices and student housing. The cluster of development sites to the west of Grand Parade and the development site cluster at the east end of the City Centre Island which is expected to be office led development are also identified as major opportunity sites.

The largest and most significant development site within the City is identified as being at Docklands that has noteworthy development potential. The vision for Docklands is that of a vibrant mixed use and socially inclusive urban quarter that will capitalise on the intrinsic advantages of the area.

Development of the area will involve the relocation of port activities and the re-development of the north and south docks areas to mixed use, integrated development zones.

The Draft Cork City Development Plan also sets out the suburban area policies for a number of locations such as Mahon, Blackpool, Ballyvolane and educational institutions.

Other strategies and studies that were considered relevant and informed the review of the currently planned infrastructure included:

– North-west Regeneration Masterplan 2011;

– Passage West to Carrigaline Greenway 2012;

– Tramore Valley Park Cycling Walking Connectivity 2012

– West Cork Greenways 2011;

– Metropolitan Cork Cycle Strategies 2012;

– Cork Harbour and Dockland studies;

– Bishopstown and Wilton Area Action Plan;

– Youghal to Midleton Green Route;

– Rochestown Cycle Smart Initiative;

– Cork City Centre Movement Strategy 2012;

– City Centre Strategy 2014; and

– Cork south-east Transport Corridor.

2.8 Local Area Plans

A number of LAPs released in 2011 are relevant for the specific network of cycling and pedestrian routes proposed as well as the significant quantum of development forecast at certain locations. The LAPs included Mahon, Blarney, Carrigaline and North Blackpool.

A number of major residential, retail and employment development sites such as Shannonpark at Carrigaline, Water Rock at Midleton, Ballincollig (south), Ballyvolane and Kilbarry in the north city environs and Stoneview and Monard in Blarney have been identified in the recent sequence of LAPs released in 2011. It is an objective of the LAPs to improve existing and provide new cycling facilities, linkages to the City Centre and surrounding areas with a number of corresponding routes identified in the plan maps. The LAPs reviewed as part of this study include:

– South Docks LAP;

– Blarney LAP;

– Farranferris LAP;

– Carrigaline LAP;

– North Blackpool LAP;

– Mahon LAP;

– Midleton LAP; and

– Macroom LAP.

Each of these LAPs plans for varying levels of development and infrastructure during the period 2011-2017. South Docks LAP for example plans for a significant mix of office, commercial and residential development to the south east of the city centre including a comprehensive new road network. The development of the South Docks will open up a harbour side and other connections onwards to Passage West, Blackrock and Mahon. It is an objective of the Blarney LAP to facilitate between 2,300 and 3,600 units at Ballyvolane with additional development sites at Stoneview and Monard. Any cycling connections

2.9 Other Relevant Studies

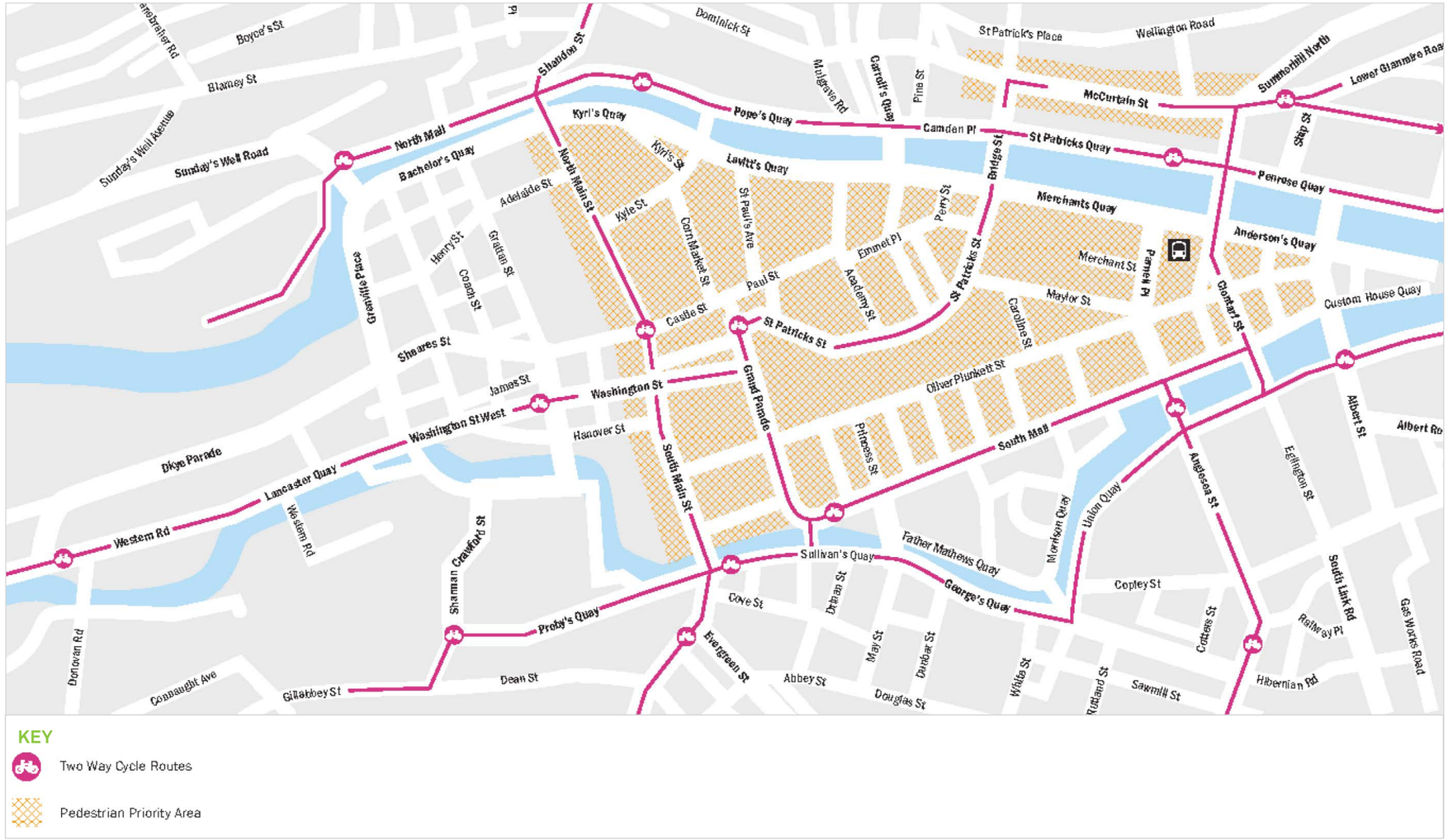
2.9.1 City Centre Movement Strategy 2012

The City Centre Movement Strategy was recommended as part of the Cork Area Transit System (CATS) Strategy and its purpose is to support the movement of sustainable modes in the city centre. The City Centre Movement Strategy involves the development of a new traffic management plan for the city which will improve journey times for buses and provide an enhanced environment for pedestrians and cyclists. A number of traffic management measures are put forward in the strategy to improve the overall vibrancy of Cork City Centre. These measures include one-way streets, two way links where one-way previously existed, bus lanes, cycle lanes and parking. The Cycle Movement Strategy identified the key trip attractors in the City Centre and the cycle improvement measures have been concentrated along the desire lines between attractors. In addition, the pedestrian priority area will also act to facilitate the through movement of cyclists in a positive environment. The Movement Strategy builds on the Walking Strategy for the City which has an objective to reduce the use of private cars by 30%. The cycling strategy can contribute to this reduction by increasing the modal share for cyclists. The proposed City Centre Primary Cycle Routes are illustrated in Figure 2.2.

2.9.2 South Docks LAP 2008

The regeneration of the South Docks Area has been the subject of various studies and strategies in the past. The South Docks Local Area Plan is based on the policies set out in the Cork City Development Plan and the recommendations of the Cork Docklands Economic Study 2007. It proposes residential and employment targets of 20,000 and 25,000 respectively for the area. The Plan's targets will be achieved through the development of a high density urban quarter which will be based around a District Centre and two Neighbourhood Centres.

Figure 2.2 Cork City Centre Primary Cycling Routes



The South Docks Local Area Plan was adopted by Cork City Council on February 11th 2008. Further to this Cork City Council formally amended the South Docks Local Area Plan on October 5th 2009. A further amendment to the Plan was made in 2012 that rezoned 6.82 acres of public open space to sports grounds at Pairc Ui Chaoimh.

The South Docks Local Area Plan sets out proposals in relation to a number of development issues and will be an important link point to the City Centre. A number of bridges are proposed to span the River Lee in this plan, providing access to and from the northern side of the river. The three bridges as illustrated in Figure 2.3 are:

– Eastern Gateway Bridge;

– Water Street Bridge; and

– Mill Road Bridge

The design and implementation of these bridges will be subject to detailed investigations at a later stage but will form part of overall cycling connectivity in Cork. In order to encourage cycling within the South Docks the following infrastructure elements are required with all applications for new development:

– High quality bicycle parking areas in urban centres and the workplace;

– Cycle priority lanes on all major roads within the South Docks;

– Cycle priority on segregated pathways from vehicular traffic where appropriate; and

– Cycle paths on the Quayside Amenity Area.

The development of the South Docks is dependent on other schemes currently in the planning process but when it is developed it has the potential to provide a critical link into the city from the Mahon Greenway Trail and north-south across the River Lee.

The traffic and transportation plan for the South Docks area is illustrated in Figure 2.3.

Figure 2.3 South Docks LAP Traffic and Transportation Plan

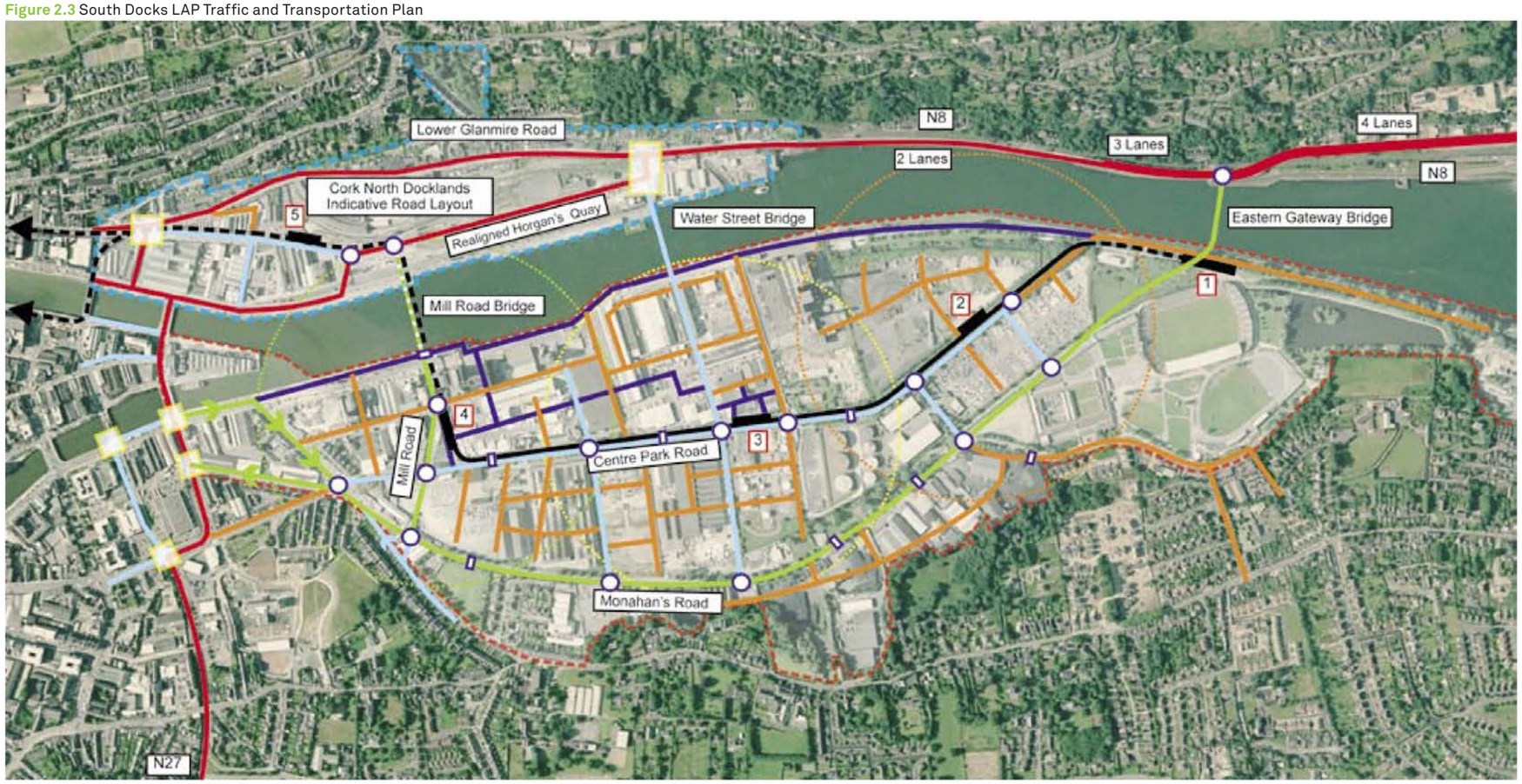


Figure 3.5 South Docks Traffic and Transportation Plan

South Docks LAP
North Docks LAP

Road Network
Primary Distributor Road
District Distributor Road
Local Collector Road
Access Only
Restricted Access - Pedestrian Priority

Road Network
Junction Upgrade Required
Proposed Signalised Junction
Proposed Pedestrian Crossing
Proposed One Way Street

High Quality Public Transport Network:
LRT / RBT Reserved Route Through South Docks
Potential Extension of LRT / RBT Route
LRT / RBT Stop
1: Pairc Ui Chaoimh Terminal
2: Marina Park Stop
3: Centre Park East Stop
4: Kennedy Spine Stop
5: Kent Station Interchange

350m Walk Band Radius

2.9.3 Tramore Valley Park Cycling Walking Connectivity 2012

This strategy was developed to aid with the integration of the park with the surrounding area up to 2018. The main objective for the cycle network is to encourage a significant increase in cycling in, to and through Tramore Valley Park for commuting trips to work and school and to help Tramore Valley Park become a hub for recreational cycling within Cork City and South Environs connecting areas such as Douglas, South Douglas Road, Togher and Kinsale Road Roundabout. The study area forms part of a wider cycle network across the South City and Environs that includes the upgrade of relevant junctions as well as additional cycle lanes and facilities. The proposed Tramore Valley Connectivity Plan is illustrated in Figure 2.4.

2.9.4 Douglas LUTS 2012

The overall land use strategy for Douglas indicates that there is a priority for infilling of vacancies in the short term coupled with a modest growth in comparison and convenience retail facilities in line with local demand. The cinema and woollen mills sites are seen as two sites with important development potential in the coming years with the ability to connect back to the existing town centre.

The transport strategy element of the study identifies a number of cycle and pedestrian upgrades such as additional on-street cycle lanes, additional off-road pedestrian and cycling lanes, connectivity between estates and a 30kph speed limit in the town centre.

2.9.5 N28 Sustainable Transport Strategy 2014

The purpose of this study is to develop a strategy to deliver sustainable travel in the N28 corridor from Ringaskiddy to the N40 to the south of Cork City, before and after the proposed N28 upgrade (to dual carriageway in both directions). The strategy proposes to utilise the spare capacity on the existing N28 when the upgrade works are complete. The study identifies the challenges to sustainable travel in the study area such as high car ownership and mode share; and then developed a Strategic Transport Hierarchy for the study area that included pedestrians, cyclists, public transport, freight and private cars. The N28 will become a Cycling and Public Transport priority corridor once the N28 upgrade is complete.

2.9.6 Metropolitan Cork Cycle Strategies 2012

The strategy focuses on each of the Metropolitan Towns (Ballincollig,Blarney, Tower, Carrigaline/Ringaskiddy/ Crosshaven, Passage West, Glanmire, Cobh, Carrigtwohill, Midleton, Little Island and Douglas).

The Strategy document outlines the infrastructural improvements that would create significantly improved urban environments for cycling access to key trip attractors such as town centres, schools, employment and amenities and that would provide access to the longer distance cycle linkages in the wider Metropolitan Area. A number of measures for each town were proposed in the strategy that included on and off road cycle paths, greenways and mixed streets.

2.9.7 Cork South East Strategic Transport Corridors Study 2014

The Cork City South East Strategic Transport Corridors scheme (located in the southeast of Cork City, as bounded by the River Lee, Docklands, Southern Ring Road (SRR), South City Link Road (SCLR), Infirmary Road, and Anglesea Street) aims to deliver enhanced strategic transportation routes in the South-East quarter of Cork City, with designs and options to provide improved facilities and increased priorities for smarter travel users. The objective of this is to promote the modal shift among the local population to walking, cycling, and public transport as safe and convenient means of making local trips to work, school and recreational facilities. The overriding objective of this study is to identify strategic transport corridors for sustainable travel modes, and to identify the investments required on these strategic corridors. A number of cycling measures were proposed in the study such as:

- New cycle lanes in both directions at Skehard Road/ Church Road Junction;
- New Cycle Lanes outbound on Douglas Road and South Douglas Road (requiring significant land acquisition);
- Upgrade of Victoria Avenue / Blackrock Road junction;
- Contra-flow bus/ cycle shared lane on Victoria Road and Albert Quay; and
- New Ramp access to Passage West Greenway from Mahon Point.

Figure 2.4 Tramore Valley Park Cycling and Walking Connectivity 2012

03

Existing Facilities

03 Existing Facilities

3.1 Overview

At present there is approximately 100km of cycling infrastructure in the Cork Metropolitan Area.

There are a number of different facility types in place, including greenways, cycle lanes and tracks. A breakdown of facility type is illustrated in Figure 3.1.

These facilities are dispersed throughout the area and do not connect in a coherent way to form the basis of a 'cycle network'. This study aims to set the strategic direction for development of this network.

Maps of existing facilities across the study area are attached in Appendix 1.

3.2 City Centre

The past five years have seen significant improvements in cycling infrastructure in the city centre with the introduction of with-flow and contra-flow cycling facilities. These facilities are of a very good standard and will form the basis for further improvements to the cycle network.

Facilities such as two-way cycling on Anglesea Street and links from Parnell Place to the bus station have added real benefit to cyclists in Cork.

With the high number of one-way streets in Cork, the introduction of contra flow cycling lanes in a number of areas has improved access for cyclists in the City. Examples of recent, good quality facilities are at Washington Street from Western Road, Sullivan's Quay and South Main Street (Figures 3.2-3.5).

The Coke Zero bike scheme has also been a very positive addition to cycling infrastructure in the City, encouraging people to cycle for short and 'last mile' trips within the city.

Owing to the low speed nature of traffic in the City Centre, many streets are already well suited to cycling without the need for any major interventions. However, there is a need for some strategic infrastructure links to connect the network in a more cohesive manner.

Figure 3.1 Breakdown of Facility Type in Cork Metropolitan Area

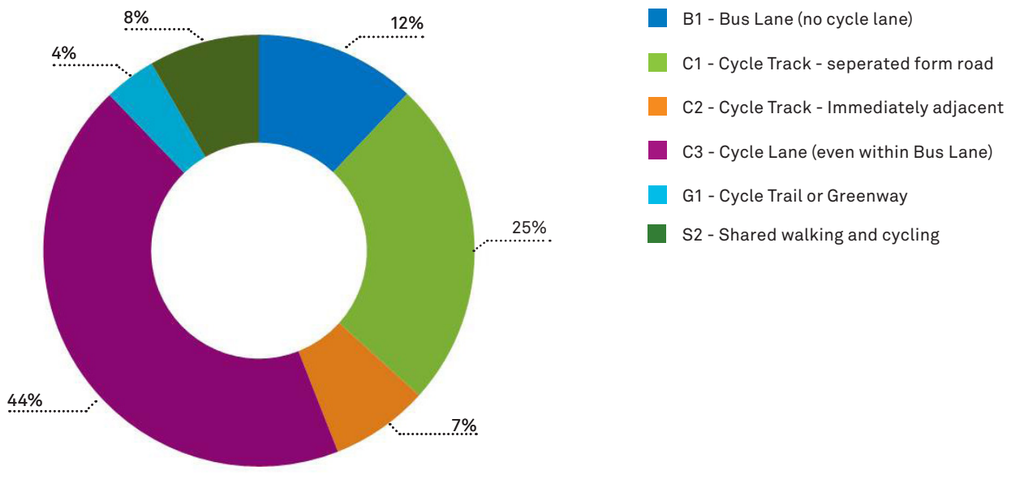


Figure 3.2 Two-way cycling facilities at Parnell Place

Figure 3.3 Washington Street Contra Flow Cycle Lanes

Figure 3.4 Sullivans Quay Contra Flow Cycle Lanes

Figure 3.5 South Main Street Contra Flow Cycle Lanes

Figure 3.6 Section of the Passage West Greenway north of Skehard Road

Figure 3.7 Curraheen River Greenway

Figure 3.8 Greenway link on north side of N40 corridor

3.3 South East

The Passage West Greenway facility extends from Passage West to Pairc Ui Chaoimh and is perhaps the longest stretch of uninterrupted facility within the study area. The route is a fantastic asset to the area and should form the basis of development of a wider greenway network.

3.4 South West

Despite a number of significant trip generators such as CIT, Cork University Hospital and Wilton shopping centre there is a lack of a direct, high quality cycling link between the South West City and Cork City Centre.

The Curraheen River Greenway extending from Curraheen Science Park to join with the Lee fields greenway link, is a high quality link along the western boundaries of the city area. The route is a significant amenity and should be extended where possible.

The Curraheen River Greenway can form the basis of a significant orbital path that can be segregated for the majority of its route. The potential to link with existing partial segregated links along the N40 corridor should be explored.

Cycling facilities on Wilton Road, Sarsfield Road, Old Kinsale Road and the N71 to the airport have the potential to be high quality facilities in the network but require some upgrade and maintenance work.

3.5 North

One of the key challenges faced by cyclists in Cork is the significant differences in topography levels, especially in the North Inner City. Figure 3.9 illustrates steep gradients in the Fairhill and Hollyhill areas with the area close to the N20 corridor currently having a similar level to the City Centre.

Cycling facilities currently in place in the north city are generally focused in the Hollyhill industrial area. These are a mixture of good quality segregated cycling tracks and on-road advisory cycle lanes. The facilities are generally quite dis-jointed however, and lack any definite connection to other areas of the city.

Figure 3.10 Segregated Cycle Track at Hollyhill

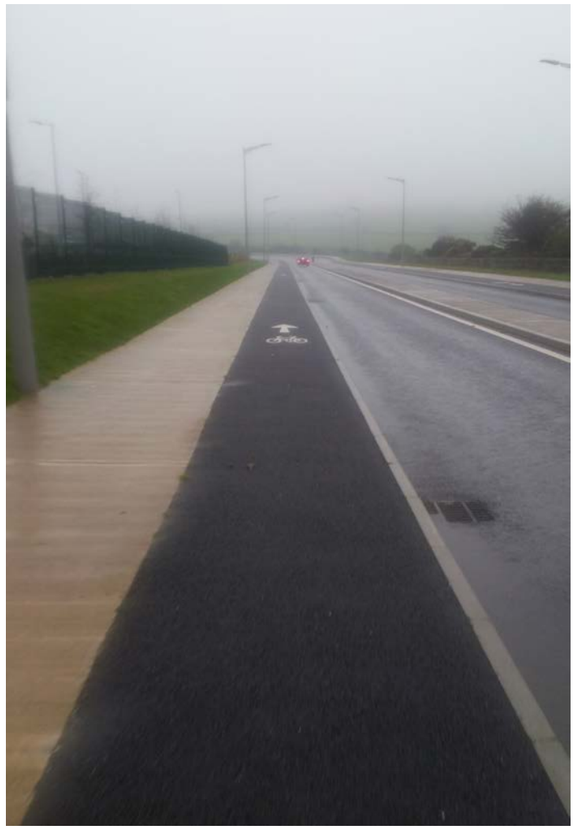


Figure 3.9 Topography Differences in Cork City North

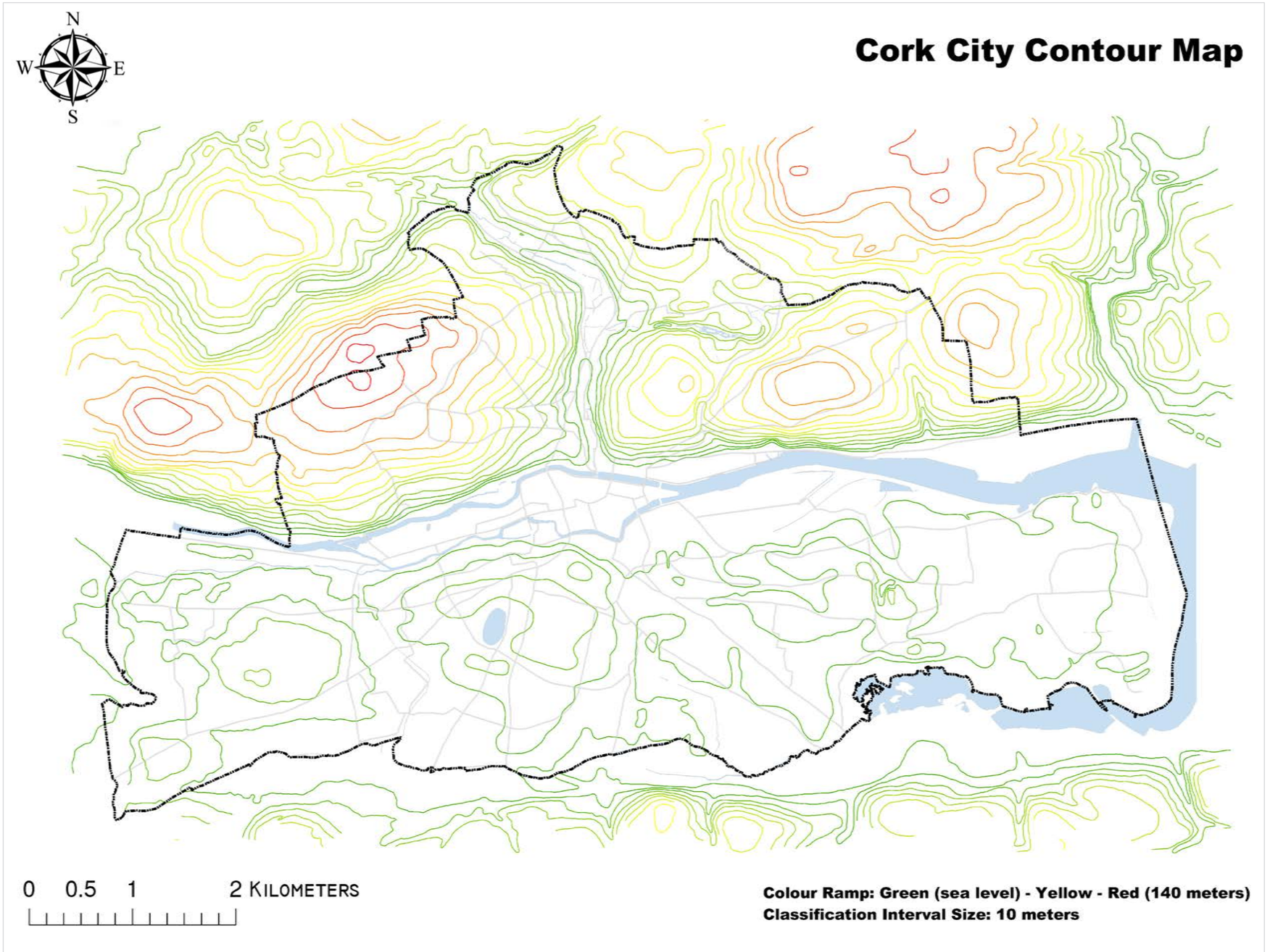


Figure 3.11 Cycling facilities Old Fort Road (Ballincollig)

Figure 3.12 Carrigaline Crosshaven Greenway

3.6 Metropolitan Towns

There are some good cycling facilities in the other Metropolitan Towns such as Ballincollig, Carrigaline, Carrigtwohill and Midleton but like the city area, they do not form a coherent network.

Cobh, Ringaskiddy, Glanmire, Little Island and Blarney and Tower have very limited cycling infrastructure that could be currently used to form the basis of an existing cycling network.

Ballincollig has the most developed cycling network and has the potential to be well linked to Cork City owing to existing infrastructure and geographical proximity. Good quality facilities have been introduced in Ballincollig Regional Park, Old Fort Road and the Main Street in recent years.

Carrigtwohill has seen some recent segregated cycle tracks introduced in newer housing estates but they do not form part of a wider network.

Midleton has an existing segregated cycle track on the outskirts of the town that currently does not serve any major catchment. Although it does pass some major industrial employers, it does not connect to residential areas currently.

The existing facilities in Carrigaline, including the greenway link to Crosshaven, are of a good quality and are well used.

3.7 Accident Data

Cyclist accident data for the period 2002-2012[1] has been reviewed. Within this period there were 148 minor incidents, 6 serious and 4 fatal accidents. The City Centre has the highest concentration of accidents over the ten year period. Two fatal accidents - at the old Mallow Road north of the City Centre and at Monahan Road in the South Docks - were recorded in this period with a minor incidents dispersed across the City Centre. 10 accidents including 1 serious were also recorded on the N40. The full set of accident mapping for the study area is attached in Appendix 2.

1 2012 is the most recent RSA accident data available at the time of writing

3.8 Quality of Service

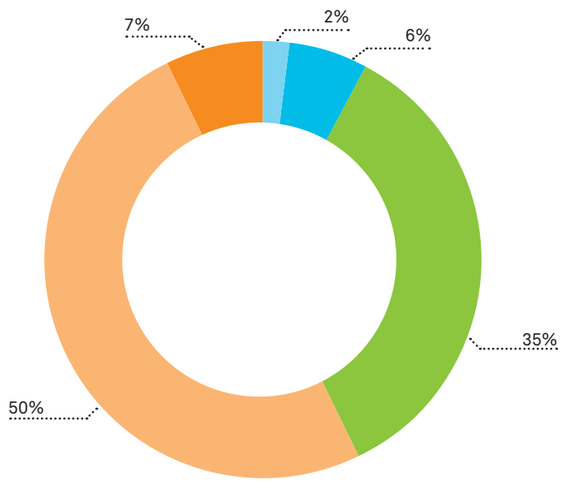
A Quality of Service (QOS) assessment has been undertaken of the existing cycling infrastructure to establish how the facilities meet the needs of cyclists. The assessment is based on five criteria specified in the National Cycle Manual[2] as follows:

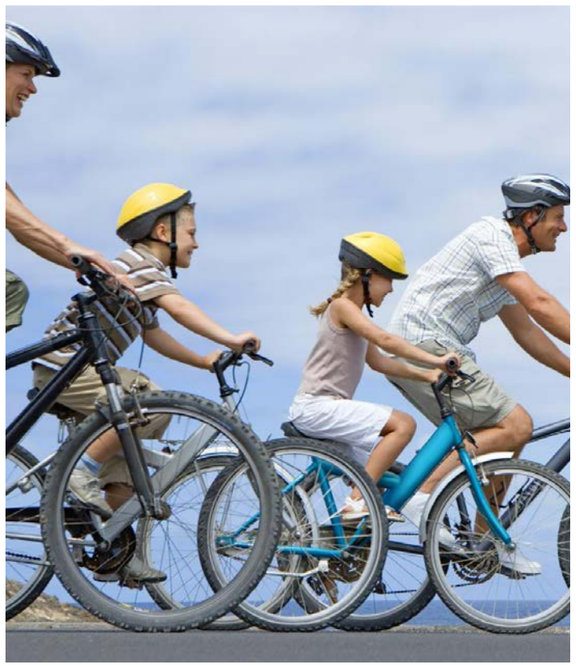
- Pavement quality – Measure of the physical integrity of the cycling surface, determined by means of visual inspection;
- Width – Describes the number of adjacent cyclists;
- Number of conflicts per 100m – Number of conflicts is a measure of the potential interruptions to a cyclist per 100m and may include bus stops, side roads, driveways, entrances, junctions, pedestrian crossings, parking and loading etc.;
- Junction time delay – Junction time delay is a measure of the actual time delay at junctions as a percentage of the overall journey time, assuming journey speed of 15km/hr; and
- Level of comfort – This criterion reflects the qualitative experience of cyclists along the route generated by their interaction with other traffic (both vehicular and pedestrian).

As illustrated in Figure 3.13 the vast majority of facilities in Cork receive a QOS ‘B’ or ‘C’ rating. The high proportion (44%) of on road cycle lane (shared with bus lane) may be directly related to the QOS results as these facilities generally don’t score very strongly in QoS audits, especially older facilities. New off-road facilities, and some higher quality on-road facilities, also ensure a high proportion of facilities scoring B. Facilities scoring D are generally old, they have been poorly maintained and often no longer fit for purpose. Greenways and off-road trails are generally the only facilities that can score A+. Overall, there is a promising, emerging network with the more recent infrastructure rating well. A breakdown of the QOS grades is illustrated in Figure 3.13.

2 Section 1.4 and 3.3 of National Cycle Manual, National Transport Authority.

Figure 3.13 Summary of current Cork cycle network quality of service





3.9 Inputs from the Public

Early in the development of the Cycle Network Plan, input from members of the public was invited. The public were consulted through the following forums:

– Open days at Cork County Hall and Cork City Council Offices: These exhibitions focused on identifying opportunities for new routes, views on the current cycling network, possible route upgrades and general comments on cycling experiences in Cork. This was complemented by a mapping exercise and feedback forms at the consultation. Approximately 60-70 people attended each exhibition with the needs of different road users recorded on maps and in written format; and

– Online Feedback Forms: A link to the feedback forms was placed on the Cork County Council and Cork City Council websites and was also emailed to various interested stakeholders. Approximately 90 written submissions were received.

Feedback received through community consultation is summarised in the following sections. This feedback has been structured on the basis of the 'five needs of cyclists' classified within the National Cycle Manual (safety, coherence, directness, attractiveness and comfort).

Safety

Safety issues for cyclists were identified on narrow streets and roads leading into the City Centre, such as the Skew Bridge on the N8/Lower Glanmire Road. Where roads and streets are narrow, cyclists are considerably more sensitive to car volumes and speeds. Parking on these narrow streets and roads reduces the perception of safety for cyclists especially in shopping areas when alighting drivers pose safety issues for cyclists by opening doors suddenly.

Key safety issues identified in feedback from the public included:

– Traffic volumes and speeds;

– Lighting;

– Poor natural surveillance on greenway routes;

– Cycle facilities on approach to junctions;

– Crossing of busy routes;

– Anti-social activity on secluded routes; and

– Lack of surface maintenance on many routes leading to potential safety concerns.

Key opportunities identified include:

– Some good quality junctions have been put in place recently (e.g. Sarsfield Roundabout). Although the new crossing arrangements at the Sarsfield Roundabout are less direct than the previous grade separated crossing, it is legible and safe and of a good surface quality. If similar crossing arrangements (in lieu of grade separated crossings) could be provided at each of the junctions across the N40 it would greatly help permeability; and

– There have been no serious or fatal accidents involving a cyclist in the city centre in the last 10 years. Reduced speeds in the city centre and 'shared' environments incorporating traffic calming and the possible implementation of more 30kph speed limits in the city centre would be desirable.

Coherence

Coherence relates to the continuity of a route, and the provision of facilities at junctions that correspond with the movements that cyclist undertake.

Key issues identified in this regard within the Cork Metropolitan Area include:

– The introduction of cycling facilities has been in a piecemeal way with little or no coherent network in place;

– Aside from some quality greenway amenities, facilities don't generally link up or interconnect;

– Parking and other in-appropriate use of cycle lanes;

– Some greenways/links close at night, which limits the connectivity of the network at various times of the day;

– Signage is lacking in most areas and where it is provided lacks quality in terms of route information and branding;

– Transition from off road cycle track to on road cycle lane is essential for route coherence. Many segregated facilities transition back on road quite abruptly, reducing coherence and leaving the cyclist unsure of where to go next.

Key opportunities identified in relation to coherence include:

– Exisiting greenway links could be consolidated to form a core network of off-road facilities;

– There are a number of disused railway lines in the Cork Metropolitan area which could be used as direct links between towns and commuter routes.

Directness and Connectivity

The previous sections have outlined the lack of integration of the existing facilities and need for better network provision.

Key issues identified in terms of directness and connectivity includes:

– There are many one-way streets in the core city centre which can create long diversions for cyclists;

– New routes have not been introduced where demand exists (e.g. Douglas); and

– There is a lack of direct facilities across major distributor routes such as the N20 and N40 resulting in diversions for cyclists who wish to cross.

Key opportunities identified include:

– Some greenways are well connected to residential areas; and

– Extension of contra-flow cycle facilities in the City Centre where they can be facilitated, particularly on one-way streets.

Attractiveness

Responses from the public were generally very positive in relation to the greenway network. Some suggestions were focused around the need for better signage and promotion, the need for lighting particularly in winter, the need for more extensive access times to existing facilities.

It is perceived that there is a shortfall in bike parking availability in the City Centre as evidenced through overflowing bike racks and bikes parked on pavements against poles to the detriment of pedestrians.

Key issues identified in relation to attractiveness include:

– A number of facilities, are not sufficiently attractive especially for young/inexperienced cyclists (e.g. Carrigrohane Road to Ballincollig) due to traffic speeds and low quality cycling infrastructure along this link;

– There is almost no sheltered bike parking in the city centre and a lack of bike parking overall;

– A lack of consistency in cycling facility type and signage means the network is less attractive and less ‘promotable’.

Opportunities identified in terms of attractiveness include:

– There are some good quality facilities, notably into the City Centre which could be built upon (Washington Street, Anglesea Street);

– Existing greenways are attractive facilities and an extension of the greenway network will only add to this;

– The public bikes scheme will improve attractiveness of cycling in the city; and

– The expanding Greenway network also promotes the potential for leisure/tourism trips from outside the Study Area.

Comfort

The key issues identified in relation to the comfort afforded by existing facilities include:

– Poor surface quality and maintenance;

– Gradients are substantial in some areas, especially in the north of the city;

– Bus lanes are not comfortable to cycle especially in terms of pavement quality e.g. along Carrigrohane Road; and

– Some facilities are very narrow and generally of a poor standard.

– Generally poor surface quality of road network.

– Key opportunities identified include:

– There are many new facilities, particularly in the City Centre, which do offer a high level of comfort to users;

– Lower gradients in the City Centre can be exploited to improve the attractiveness of cycling in the City; and

– Additional soft landscaping to provide shelter for cyclists.

Figure 3.14 New at grade crossing at Sarsfield Roundabout

Figure 3.15 Cycling Facilities and Bike Hire Station on MacCurtain Street

04

Understanding Trip Demand

04 Understanding Trip Demand

4.1 Introduction

This section sets out the existing cycling demand with the study area as well as targets for future growth.

Two approaches were used to analyse cycle trip demand within the Cork Metropolitan Area. The first method was to analyse outputs from the Census 2011 Place of Work, School or College - Census of Anonymised Record (POWSCAR). The second approach was to use 2011 cycling demand outputs to develop a spatial model of cycling demand. These are outlined separately in the following sections.

4.2 POWSCAR Data Analysis

POWSCAR was used to analyse existing journey patterns in the study area. Results are presented for the overall Metropolitan Area as well as at a more localised level. These two assessments were undertaken due to the variable nature of cycling mode share within the Metropolitan Area.

Based on 289,739 residents in the Cork Metropolitan Area within the 2011 Census, 188,755 people were travelling to work or school in 2011. Among them:

– 142,999 commute to a destination inside the study area (80.2%);

– 9,070 commute to a destination outside the study area (5.1%);

– 22,184 did not state where they work or study (12.4%); and

– 4,103 are actually work/study from home (2.3%).

For the purpose of this study, analysis of trip demand and distribution is based only on trips with origins and destinations within the study area (142,999). A breakdown of the commuting travel mode among this population is provided in Table 4.1.

At present, just 1.7% of all trips to work and education are taken by bike. A higher use of 4.5% is recorded among third level students. Overall, a large majority (67.8%) travel by car.

Analysis of trip distance shows that 52% (or 50,425) of all car commuting trips in the study area are less than 5km, a short distance that is generally suggested as an acceptable cycling distance. As such, these trips should form the focus for the transfer of trips to cycling.

Based on current employment trips within the study area, the largest generators of trips (all modes) are:

1. City Centre: 20,000 trips;
2. Little Island: 3,700 trips;
3. Cork University Hospital and Wilton area: 3,700 trips;
4. Mahon: 3,500 trips;
5. CIT and Cork Business Park: 2,900;
6. Blackpool: 2,600 trips;
7. UCC: 2,500 trips;
8. Airport and Airport Business Park: 2,400 trips; and
9. Ringaskiddy: 2,000 trips.

The key focus of the network will be to connect these key destinations to existing population bases and to each other.

With regards education trips, UCC and CIT campuses are the two top destinations for education trips with two primary and two secondary schools located close to each other in Cobh also having more than 1,000 trips in the AM Peak. There are also a number of other primary and secondary schools that have close to 1,000 trip ends in the AM peak such as in Carrigaline, Ballincollig, Carrigtwohill and the City Centre.

It is apparent that there are five specific area types which demonstrate varying levels of cycling (and potential for cycling) as follows:

– Leader Areas (Cork City Centre, South City and South City Environs, North City and North City and Environs): The 'Leader Areas' currently demonstrate the highest modal share of cycling trips – 2.3% for work trips and 4.5% for college trips. This area caters for the majority of cycling trips within the study area and should therefore be a particular focus for the enhancement of the cycle network;

– Intermediate Areas (Midleton, Ballincollig and Passage West & Monkstown): Intermediate areas demonstrate an average level of cycling but with potential to grow at a similar level as 'Leader Areas'. Midleton, Ballincollig and Passage West have potential to be future 'Leader Areas' based on current modal share and the extent of local trips for work and education in particular. Within Intermediate Areas, 44% of trips by car are currently less than 5km;

– Metropolitan Towns (Carrigaline, Cobh, Carrigtwohill, Blarney, Tower and Glanmire): These areas currently have a very low cycling base with just 0.4% of commuting trips by bike. Despite this, 16% of trips are less than 2km and 23% are 2-5km in length which demonstrates some potential for an increase in cycling;

– Business Parks (Ringaskiddy, Little Island and Airport): Ringaskiddy, Little Island and the Airport Business Park are looked at specifically due to the nature of trips to them. At present, 0.6% of trips to work in Ringaskiddy are by bike and 0.7% in both Little Island and the Airport Business Park. There are difficulties in encouraging cycling in these areas due to relatively inhospitable infrastructure and the longer distance of trips to them. In Ringaskiddy, 3% of existing car trips are less than 2.5km while at Little Island the figure is 4%. In the Airport Business Park this figure drops to 1%, perhaps reflective of its relatively isolated location south of the city; and

– Other: Other trips consist of various trip types in between the metropolitan towns and suburban areas. These trips are difficult to target for cycling as the majority of trips in this area are in the 5-10km and 10km+ range. The Cycle Network Plan will focus primarily on consolidating the existing cycling mode share in 'Other' areas.

A summary of the current modal share for cycling within these areas is shown in Table 4.4 with a map of the geographical boundary of each area referred to above illustrated in Figure 4.1. Additional maps illustrating current travel demand are provided in Appendix 3.

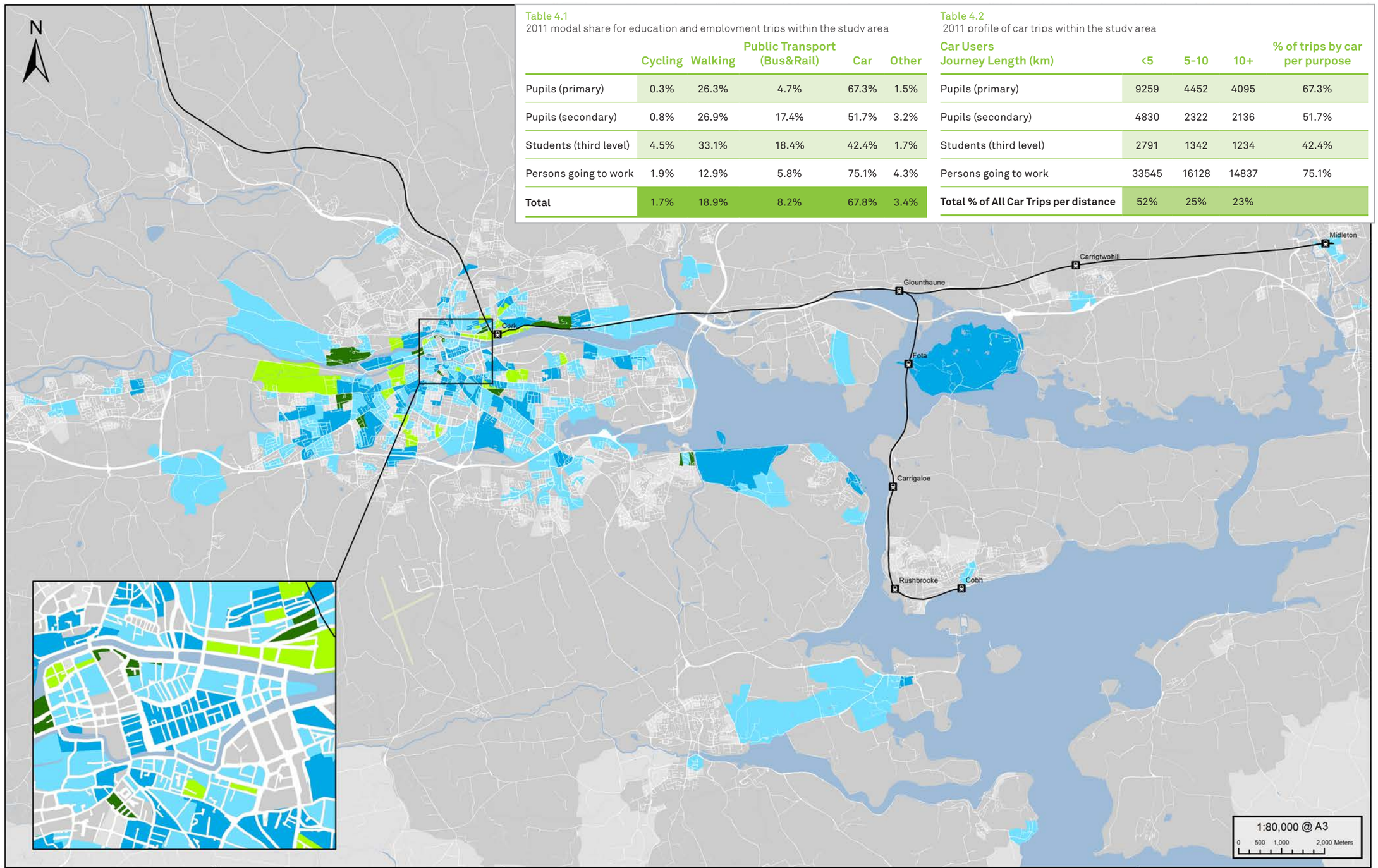
Figure 4.1 Cycle model share within Cork Metropolitan area

Table 4.1
2011 modal share for education and employment trips within the study area

	Cycling	Walking	Public Transport (Bus&Rail)	Car	Other
Pupils (primary)	0.3%	26.3%	4.7%	67.3%	1.5%
Pupils (secondary)	0.8%	26.9%	17.4%	51.7%	3.2%
Students (third level)	4.5%	33.1%	18.4%	42.4%	1.7%
Persons going to work	1.9%	12.9%	5.8%	75.1%	4.3%
Total	1.7%	18.9%	8.2%	67.8%	3.4%

Table 4.2
2011 profile of car trips within the study area

Car Users Journey Length (km)	<5	5-10	10+	% of trips by car per purpose
Pupils (primary)	9259	4452	4095	67.3%
Pupils (secondary)	4830	2322	2136	51.7%
Students (third level)	2791	1342	1234	42.4%
Persons going to work	33545	16128	14837	75.1%
Total % of All Car Trips per distance	52%	25%	23%	



Project:
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA

Title:
CENSUS 2011 CYCLE MODE SHARE - RESIDENTS WITHIN CORK METROPOLITAN AREA

Legend:
Cycle mode share, journeys to work and education
<2.5% | 2.5 - 5.0% | 5.0 - 7.5% | 7.5% - 10% | >10%

AECOM
Grand Canal House,
Upper Grand Canal Street,
Dublin 4
Tel: +353 (0)1 238 3100
Fax: +353 (0)1 238 3199
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4.3 Cycle Network Modelling

The cycle trips recorded in the 2011 Census were used to develop a simulation model of cycling in the Metropolitan Area. Outputs from the model are used to gain an understanding of the main demand corridors within the network. The model was then used to forecast future travel demand using the targets proposed for each area.

Cycling demand matrices developed from the 2011 Census date were assigned onto a transport network using VISUM v13 strategic modelling software. Cycle count data at various locations across the city was used to compare the modelled flows to observed data. The accuracy of the base year model has been checked using the GEH statistic. The GEH statistic is a measure of comparability that takes account of not only the difference between the observed and modelled flows, but also the significance of this difference with respect to the size of the observed flow.

When comparing assigned volumes with observed volumes a GEH parameter of 5 or less indicates an acceptable fit whilst a value greater than 10 requires closer attention. The base year model check involved comparing modelled flows against observed counts on 34 no. of links. A GEH statistic of less than 5 was achieved at 100% of these links, with no links having a GEH value in excess of 5. As a quick network check, a comparison of observed two-way cycle flows across the major routes through the city to the modelled cycle flow is presented in Table 4.3.

The main source of network information for the model was taken from Ordnance Survey Ireland (OSI) vector data. Supplementary cycling network links that are not part of the road network were coded manually based on information from other vector sources.

The cycling trips were assigned to the transport network in VISUM using stochastic assignment. This method assumes that route options for individual journeys are perceived subjectively by road users. The best (lowest cost) route is generally selected by the majority of road users but some individuals will chose alternative routes based on incomplete information. A number of alternative routes to the lowest cost route are initially calculated and the demand is distributed across the alternatives based on a distribution model.

In the assignment procedure, the impedance to travel between each OD in the model was based on the network distance alone. Therefore no delay or congestion is modelled and the model does not account for complex cycling route choice decisions based on cycle provision and quality of service.

A detailed methodology for development of the cycling model is presented in Appendix 4 of this report.

Mapping outputs from the model are shown in Figure 4.2 and 4.3. As shown, routes with the highest levels of cycling demand based on 2011 Census Data include:

– Cobh to Ringaskiddy using the R610/Strand road and cross river ferry at Passage West;

– Ballincollig to Cork City on Model Farm Road;

– Passage West to Cork City along Passage West Greenway;

– Douglas and South Douglas Road into Cork City; and

– From Glanmire/Montenotte/north west of the City using the Old Youghal Road.

City Centre routes experience a relatively high demand from cyclists. Streets with the highest demand include:

– Washington Street/Western Road;

– College Road;

– Bandon Road; and

– Grand Parade.

The 2011 cycle network model has also been used to understand current cycling demand and provides focus on some of the key routes which may require investment. Further development of the model is presented in Section 4.5.

Table 4.3 Comparison of Observed and Modelled 2-way Flows across Cork City

Road	Observed	Modelled	GEH
Model Farm Road	25	31	1.1
Rossa Avenue	16	17	0.2
Western Road	85	50	4.3
Western Road (Wood Street)	58	81	2.8
Carrigrohane Road	43	27	2.7
Western Road (UCC)	58	71	1.6
Washington Street	46	74	3.6
Washinton Street (Main Street)	25	14	2.5
Main Street	7	7	0.0
Grand Parade	16	12	1.1
North Mall	31	16	3.1
Shandon Street	3	7	1.8
Woods Street	11	7	1.3
Wandersford Quay	15	12	0.8
Shaman Crawford Street	29	12	3.8
Bishop Street	38	21	3.1
Sullivan's Quay	27	16	2.4
Albert Quay	26	17	1.9
Albert Street	27	37	1.8
Eglinton Street	3	5	1.0
South Douglas Road	22	25	0.6
Evergreen Road	42	32	1.6
Douglas Road	44	49	0.7
Douglas Road (Well Road)	31	35	0.7
Well Road	7	9	0.7
Skehard Road	24	19	1.1
Old Crosshaven Railway Path	27	21	1.2
R852 (Mahon Point)	4	10	2.3
Sarsfield Road	12	17	1.3
Togher Road	17	11	1.6
Pouladuff Road	18	20	0.5
Kinsale Road	25	9	3.9
Curraheen Road	6	6	0.0
Bishopstown Road	5	6	0.4
GEH < 5			**100%**
GEH 5 – 10			**0%**
GEH > 10			**0%**

Figure 4.2 Cork City Area Base Year (2011) Cycle Flows as presented in simulation model (Wider City Area)

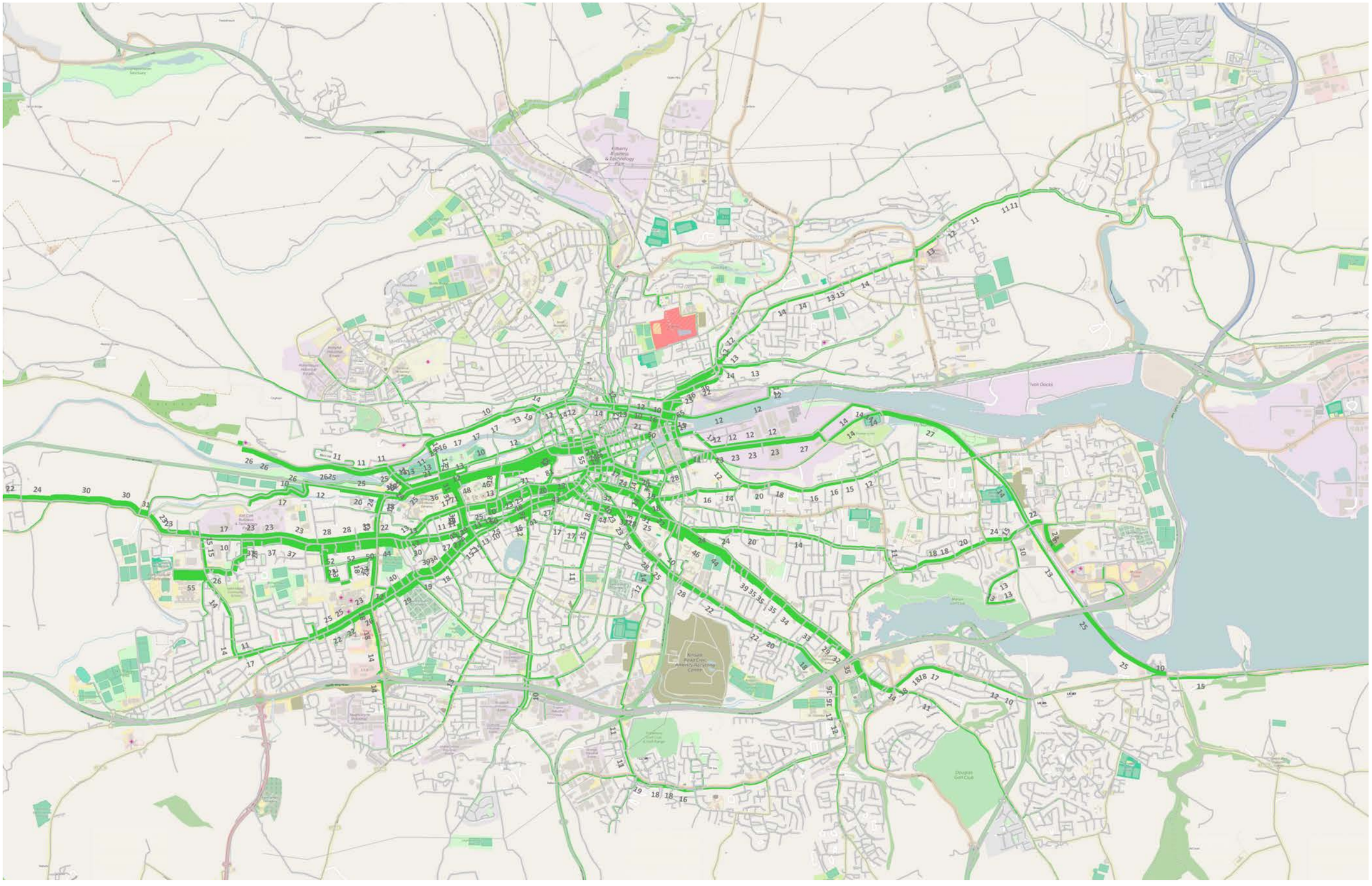
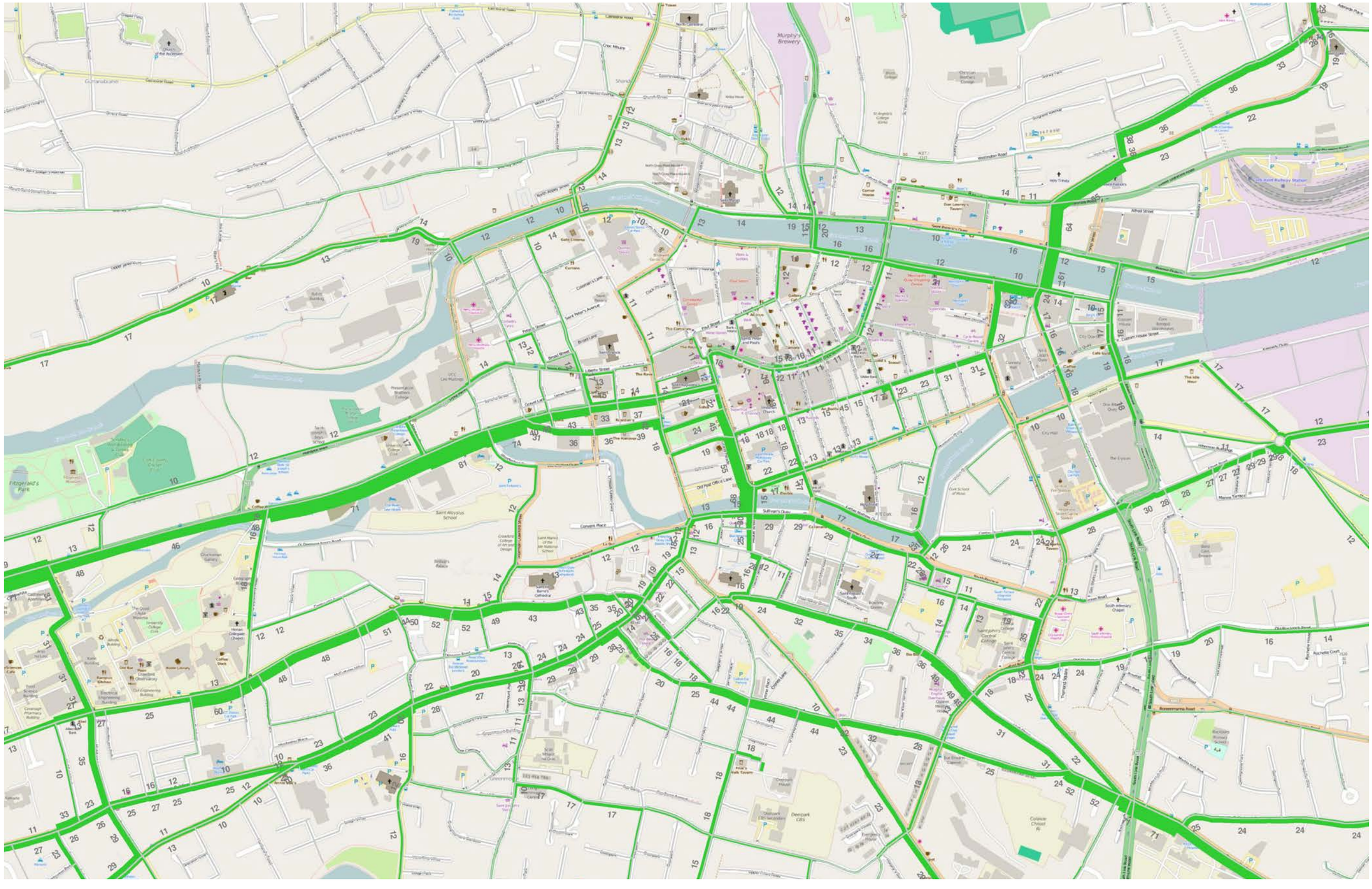


Figure 4.3 Cork City Centre Base Year (2011) Cycle Flows as presented in simulation model (City Centre)



4.4 Mode Spilt Targets

Development of targets for cycling within the Cork Metropolitan Area have been developed based on an understanding of the outputs from both the POWSCAR Data Analysis and Network Modelling, as follows:

– Existing trip types and their potential for transferring to cycling. For example, there are limitations to the extent by which cycling trips to primary school can be influenced compared to work/third level education trips;

– Existing modal split: The current modal share of cycling trips is a reflection of the current nature of trips and the cycle network available;

– Existing cycle network/facilities available: While the purpose of the Cycle Network Plan is to propose a network of facilities, the extent of existing facilities available is also taken into account to understand the basis for future potential; and

– Existing trip distances: Trips which are less than 5km are prioritised for the promotion of cycling however trips of varying distances will possibly transfer to cycling given appropriate conditions.

Based on an analysis of each of the 4 criteria outlined above, a proposed target for cycling mode share in each of the five identified areas has been developed.

The study analysis of trip demand and distribution is based on the Figure of 142,999 commuters who commute to a destination within the study area only. A cycling target put forward for each trip type (work, school, college) from each location (City, suburbs, towns). Each of these targets feed into development of an overall target for the Metropolitan Area, outlined as follows:

Leader Areas: The target for 'Leader Areas' is to increase cycling modal share from 2.5% to 11% of all commuter trips. This figure is derived from the following targets of each trip type:

– Cycling trips to work to increase from 2.3% at present to 10%;

– Primary school cycling trips to increase 0.4% to 5%;

– Secondary School cycling trips to increase from 1% to 10%;

– University/College cycling trips to increase from 4.5% to 20%.

These targets can be justified on the basis that:

– 8% of existing car trips within the area are less than 2km;

– 30% of existing car trips within the area are between 2km-5km;

– It is perceived that cycling trips within the area have already increased in excess of 2.5% within the area since the Census was undertaken in 2011;

– The area already has the highest concentration of network facilities;

– The area is relatively compact and high density with a large concentration of different trip types;

– The area experiences high levels of congestion and therefore travel by bike can be advantageous in terms of travel time savings;

– There are large trip generators in the North City that should be the focus for improvement in cycling infrastructure such as Blackpool Business Park and Apple; and

– Roll-out of the Cork Bike Share Scheme within the area is likely to encourage an increase in local cycling trips.

Intermediate Areas: The target for Intermediate areas is to increase cycling modal share from 0.8% to 7%. This figure is derived from the following percentages for each trip type:

– Employment cycling trips to increase from 1.1% to 8%;

– Primary School cycling trips to increase from 0.4% to 3%;

– Secondary School cycling trips to increase from 0.6% to 9%; and

– University/College cycling trips to increase from 0% to 10%.

These targets can be justified on the basis that:

– 15% of existing car trips within the area are less than 2km;

– 29% of existing car trips within the area are between 2km-5km;

– Ballincollig and Midleton already have relatively good provision of cycling infrastructure which could have a strong role in the promotion of cycling;

– Ballincollig and Midleton have a number of primary and secondary schools where the promotion of cycling for local trips should be possible;

– Although cycling to third level education from Midleton is unlikely to be feasible, there are existing facilities from Ballincollig to UCC; and

– The proximity of Passage West to the City should also be an advantage when promoting cycling trips to third level – UCC, College of Commerce etc.

– 10% of University/College trips translate to 10 cycling trips in the context of trips from Intermediate Areas, which is a realistic target.

Towns: The target proposed for the Metropolitan Towns is to increase cycling from 0.4% to 5%. The breakdown by trip is as follows:

– Cycling trips to work to increase from 0.7% to 5%;

– Primary School cycling trips to increase from 0.3% to 3%;

– Secondary School cycling trips to increase from 0.2% to 8%; and

– University/College cycling trips to increase from 0% to 1%.

These targets can be justified on the basis that:

– 16% of existing car trips within the town areas are less than 2km;

– 23% of existing car trips within the area are between 2km-5km;

– The nature of some roads in these areas is rural in nature with relatively high volumes of traffic that do not encourage cycling; and

– Cycling to third level education from most of these areas is unlikely to be feasible with Glanmire the most likely town for students to cycle to third level education.

Business Parks: The overall cycling mode share target for Ringaskiddy and Little Island is 5%. The proposed modal share breakdown for cyclists within the business parks at these locations are:

– Cycling trips to work to increase from 0.7% to 5%;

– Primary School cycling trips to increase from 0.5% to 2%;

– Secondary School cycling trips to increase from 0% to 0%; and

– University/College cycling trips to increase from 4.2% to 10%.

These targets can be justified on the basis that:

– The catchment area for trips to Ringaskiddy and Little Island are much greater with just 9% and 7% of existing trips less than 5km in length;

– There is a limited number of education trips in these areas as they are generally composed of employment land uses;

– These sites are relatively isolated and accessed via busy roads which don't encourage cycling; and

– Improved cycling links from Ringaskiddy to the City will improve accessibility for third level trips to the City.

Other: The proposed modal share targets for cycling trips in all other areas are as follows:

– Employment cycling trips to increase from 1.3% to 2%;

– Secondary School cycling trips to increase from 0.3% to 1%; and

– University/College cycling trips to increase from 5.4 % to 6%.

These targets can be justified on the basis that:

– 19% of existing car trips within the area are less than 5km;

– There is already a cycling modal share of 1.3% for employment trips;

– There may be limited potential to expand on the existing level of third level cycling trips; and

– There is very limited potential for cycling to primary school within these areas.

A summary of existing and proposed cycling targets for the Cork Metropolitan Area are presented in Table 4.4.

4.5 Future Cycling Demand

A 2025 Cycling Model for the Cork Metropolitan Area was developed by applying population and employment growth factors for the area as well as mode share targets for cycling. More detail on development of the model can be found in Appendix 4.

Outputs from the model for the city area are shown in Figures 4.5 and 4.6. As can be seen, some of the key areas of future demand include the Old Youghal Road and Lower Glanmire Road in the north of the city while in the southeast, the Passage West Greenway, Douglas and South Douglas Roads are the main radial routes into the city. In the South west quadrant of the city the dominant corridors are Model Farm Road / Magazine Road and Glasheen Road coming from Bishopstown.

This forecast future cycling demand will feed into the development of the future metropolitan area route network as well as the hierarchy of those proposed routes.

Table 4.4 Existing and Proposed Cycling Targets for Study Area

		Existing Cycling Mode Share for AM Trips by Journey Purpose					*Proposed* Cycling Mode Share for AM Trips by Journey Purpose				
	Trip Origin	Work	Primary	Second	College	TOT	Work	Primary	Second	College	TOT
Leader	City Centre	2.4%	1.2%	1.2%	1.9%	2.3%	10%	5%	10%	20%	9,593 trips **11%**
	South City and South City Environs	2.5%	0.6%	1.6%	4.9%	2.5%					
	North City and North City Environs	1.7%	0.0%	0.1%	2.5%	1.1%					
	Sub-total "leader areas"	2.3%	0.4%	1.0%	4.5%	2.2%					
Intermediate Areas	Midleton	1.1%	0.4%	0.7%	0.0%	0.8%	8%	3%	9%	10%	842 trips **7%**
	Ballincollig	1.1%	0.6%	0.7%	0.0%	0.9%					
	Passage West & Monkstown	1.5%	0.2%	0.0%	0.0%	0.5%					
	Sub-total "Intermediate areas"	1.1%	0.4%	0.6%	0.0%	0.8%					
Metropolitan Towns	Carrigaline	0.9%	0.9%	0.2%	0.0%	0.8%	5%	3%	8%	1%	714 trips **5%**
	Cobh	0.6%	0.2%	0.3%	0.0%	0.4%					
	Carrightwohill	0.8%	0.0%	0.2%	0.0%	0.3%					
	Blarney&Towers	0.7%	0.1%	0.0%	0.0%	0.3%					
	Glanmire	0.5%	0.0%	0.2%	0.0%	0.2%					
	Sub-total "Towns"	**0.7%**	**0.3%**	**0.2%**	**0.0%**	**0.4%**					
Business Parks	Ringaskiddy	0.6%	0.7%	0.0%	4.3%	0.7%	5%	2%	0%	10%	292 trips **5%**
	Little Island	0.7%	0.0%	0.0%	0.0%	0.7%					
	Sub-total "Business Parks"	0.7%	0.5%	0.0%	4.2%	0.7%					
Other	Other	1.3%	0.0%	0.3%	5.4%	1.1%	2%	0%	1%	6%	323 trips **2%**
	Total	1.9%	0.3%	0.8%	4.5%	1.7%	7.9%	3.5%	9.0%	19.2%	8.2%

Figure 4.4 Cork Metropolitan Areas used for development of cycling targets

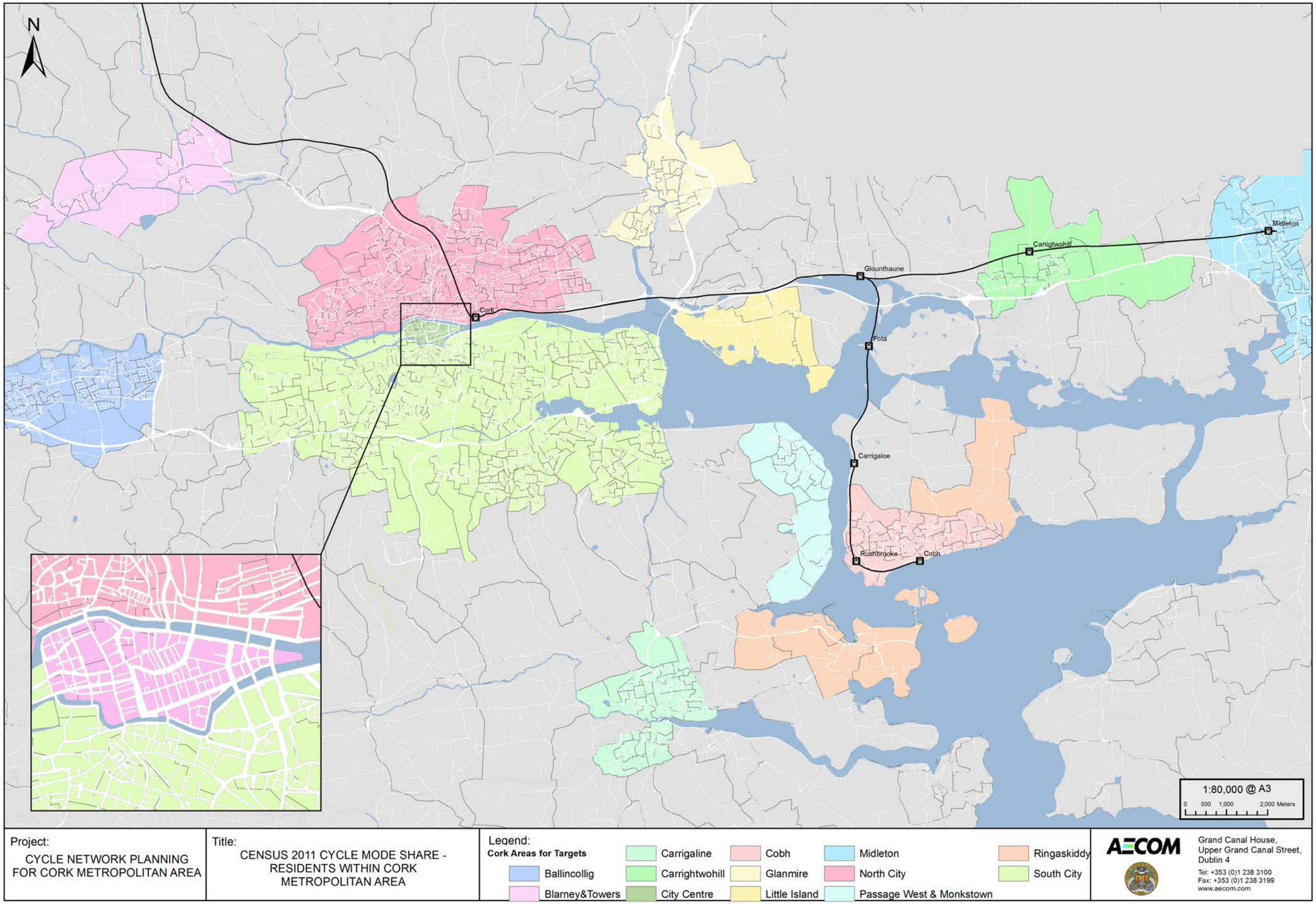
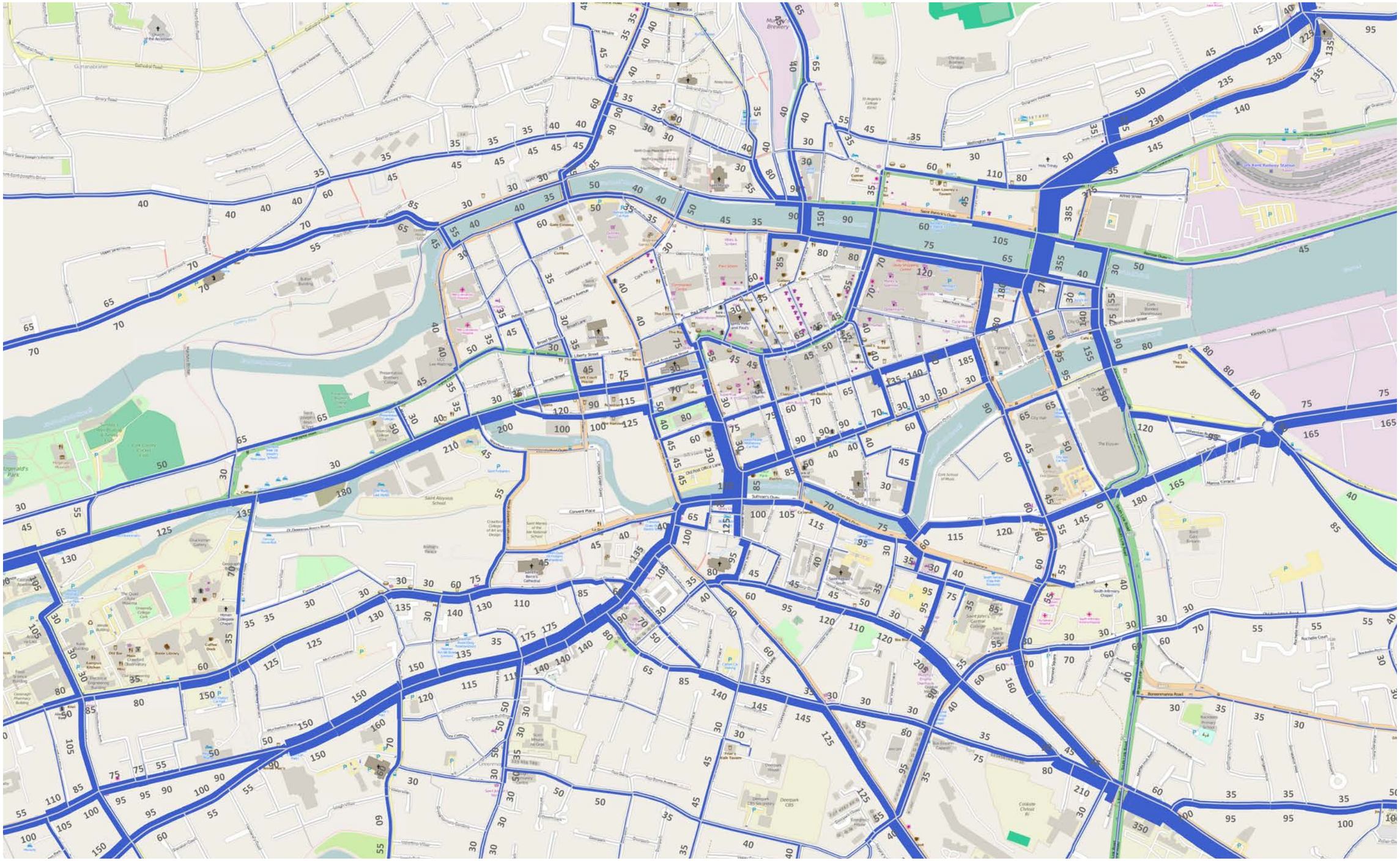
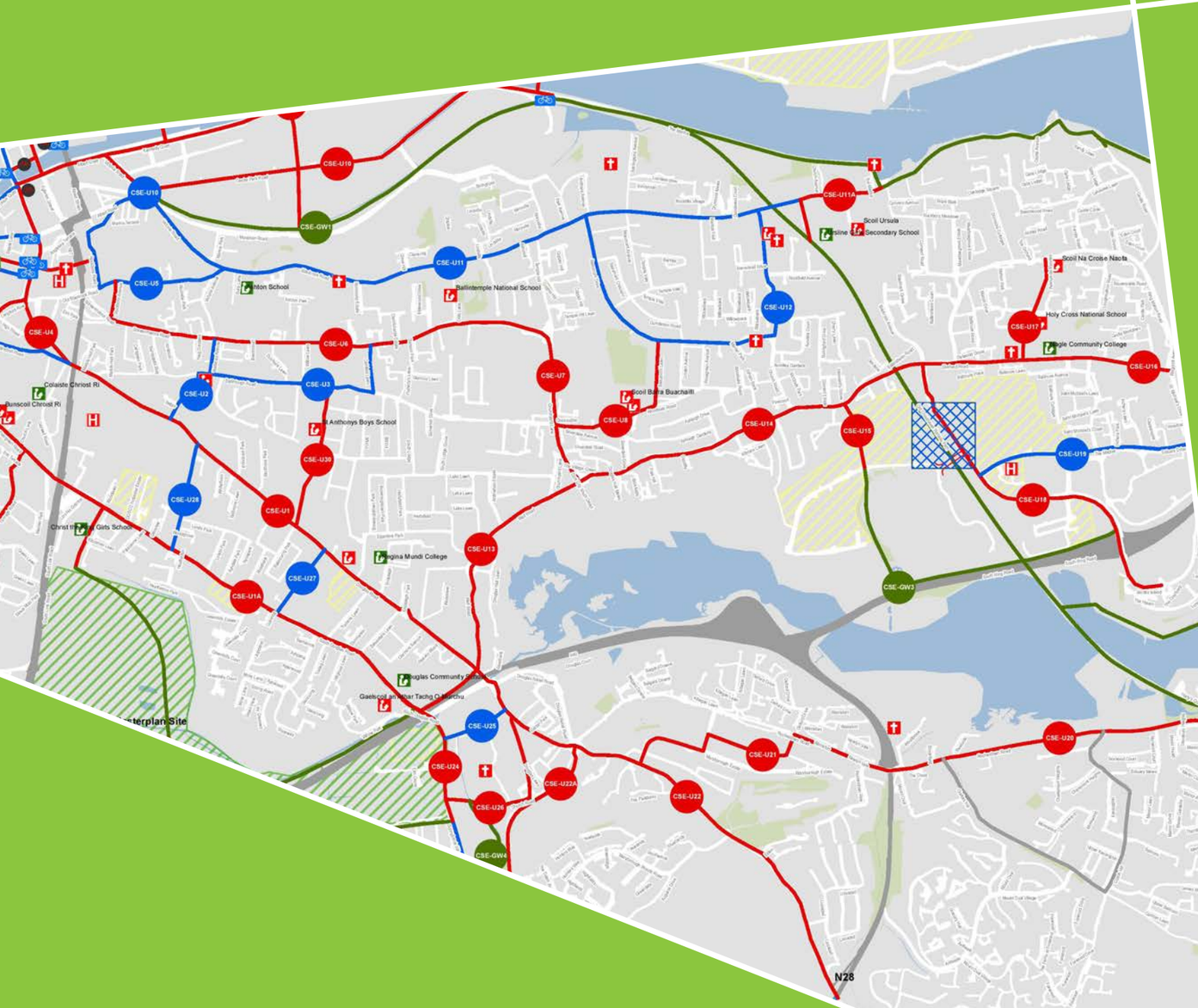


Figure 4.5 Cork City Area Future Year (2025) Cycle Flows as presented in simulation model (Wider City Area)

Figure 4.6 Cork City Centre Future Year (2025) Cycle Flows as presented in simulation model (City Centre)





05

Network Plan Overview

05 Network Plan Overview

5.1 Cycle Network Plan Vision

The vision for the Cork Metropolitan Area Cycle Network Plan is to provide a coherent, safe and attractive cycle network that will support a shift from the private car to cycling for employment and education trips as well as provide a strong basis for increasing leisure and tourist cycling.

This section provides a summary of the approach to development of the Cork Metropolitan Area cycling network with more detailed proposals provided in subsequent sections.

The proposed network has been developed on the basis of all of the following:

– Transport and land use proposals set out in the policies and plans for the area;

– Assessment of existing cycling infrastructure within the area;

– Guidelines set out in the National Cycle Manual;

– Agreed targets for mode share; and

– Detailed assessment of travel demand within the area using outputs from the cycling model.

Key priorities for development of the Cycle Network Plan are as follows:

– Designating a coherent network of east-west and north-south cycle routes across the area which will provide access to all major trip generators;

– The first priority in terms of access will be employment areas and third level education followed by schools. These priorities have been established to support proposed modal shift targets. Cycle links to new development areas have also been prioritised;

– Providing the highest possible Level of Service on identified corridors of high demand;

– Identifying and maximising opportunities for high quality greenways1 ; and

– Responding to feedback from key stakeholders and the public.

Based on the recommendations within the National Cycle Manual a number of different infrastructure types are proposed at various locations within the network, including:

– Cycle Lanes: Incorporates a dedicated space adjacent to the kerb or car parking and can take the form of mandatory or advisory cycle lanes;

– Mixed Streets: Suitable in low traffic environments where the cyclist shares the road space with motorists;

– Cycling and Bus Lanes: Cycle lanes can be provided alongside the bus lane or cyclists can cycle with the buses within the bus lane;

– Cycle Tracks: Cycle tracks are different from cycle lanes in that they are physically segregated from motorised traffic in some way whether by a barrier or through a level change;

– Cycle Trails or Greenways: Roads and paths through green areas and parks that are segregated from vehicular roads.

In general, there are examples of each of these facilities in many locations across the study area and implementation of these measures is part of 'business as usual' for both Cork City and County Councils.

Table 5.1 Cycle Route Network Categorisation

Network	Route Category	Description
Urban Cycle Network	Primary	Main cycle arteries that cross the urban area and carry most cycle traffic
	Secondary	Link between principal cycle routes and zones
	Feeder	Cycle routes within local zones and/or connections from zones to the network levels above (primary and secondary)
Inter Urban Cycle Network	Links the towns and city across rural areas and includes elements of the National Cycle Network	
Green Network	Cycle routes developed predominantly for tourist, recreational and leisure purposes but may also carry elements of the utility cycle route network above	

1 Supported by research undertaken by Brick, Caulfield, McCarthy (2012) which suggests that cycling infrastructure which is segregated is most likely to influence modal shift to cycling. See: Determining bicycle infrastructure preferences (2012). Transportation Research, Part D, 17 (2012) 413–417.

5.2 Route Categorisation

The National Cycle Manual outlines requirements in relation to categorisation of cycle network routes shown in Table 5.1, this hierarchy has been applied in development of the Cork Cycle Network Plan.

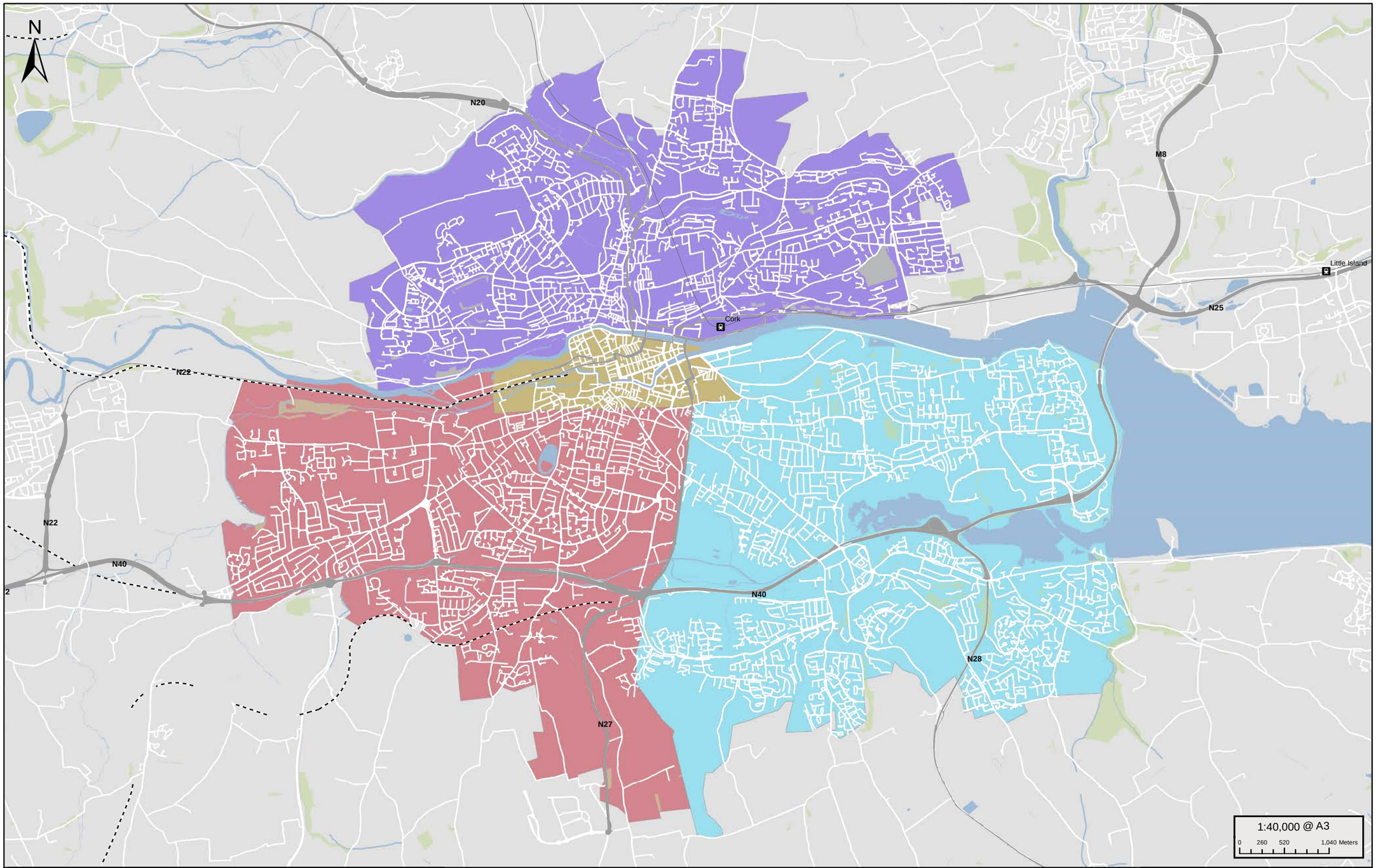
The Urban Cycle Network Plan was developed in the first instance and is composed of primary, secondary and feeder routes. Primary routes have been designated as such because they experience the highest level of demand. These routes are supplemented by secondary routes which may provide access to residential catchments.

The Inter Urban Cycle Network has been developed to indicate possible connections from the Metropolitan Towns to Cork City. In this instance, AECOM has sought to designate the route with least possible traffic conflicts while maintaining the importance of direct and convenient access.

Finally, a greenway network for completely (or almost) traffic free cycling has been proposed. This has been developed on the basis of a considerable existing network of greenway routes and the upgrade of existing paths to provide a comprehensive greenway route network.

A summary of the approach to network categorisation is shown in table 5.1

Figure 5.1 Map Index for Cork City Areas



Project:	Title:	Legend:	
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	Cork City Areas	City Centre North Cork City	South East City South West City

AECOM
4th Floor, Adelphi Plaza,
Upper Georges Street,
Dun Laoghaire, Co, Dublin
Tel: +353 (0)1 238 3100
Fax: +353 (0)1 238 3199
www.aecom.com

5.3 Summary of Recommendations

Sections 6-18 of this report provide detailed proposals for development of the Cork cycle network. Proposals have been prepared as follows:

– Proposals for the City Centre, the North City, the Southwest City and the Southeast City are described in Chapters 6, 7, 8 and 9 respectively. Figure 5.1 illustrates each of these areas; and

– Proposals for the Metropolitan Towns are outlined individually in Chapters 10-17; and

– Proposals for the Inter-Urban Network are presented in Chapter 18.

A number of main corridors are proposed to connect the Metropolitan Towns to Cork City and also to connect the suburban areas to Cork City Centre.

Within each of the Metropolitan Towns a localised cycling network has also been proposed that will improve existing cycling connectivity and serve future development of these towns.

The key inter-urban routes within the study area are:

– Segregated cycle path from Midleton to Dunkettle Roundabout via Carrigtwohill, Little Island and the Dunkettle Interchange where it can collect trips from Glanmire;

– Utilisation of the N28 to provide a high quality public transport and cycling connection from Ringaskiddy, Crosshaven and Carrigaline to Cork City when the motorway upgrade is complete;

– Provision of a suitable link from Passage West Greenway to the ferry terminal to facilitate cycling trips from Cobh;

– Provision of Greenway link north of Carrigrohane Road along the River Lee and development of disused rail corridor between River Shournagh and R579 to provide an almost complete off-road connection to Ballincollig, Tower and Blarney; and

– Segregated cycle track from Blarney to the north city via a segregated cycle track off-road and within the N20 corridor.

The inter-urban routes proposed will feed into the City network and connect with the following routes that link to the City Centre:

– Connect Douglas to Bishopstown, Wilton and Ballincollig;

– One way cycling loop inbound via South Douglas Road and outbound via Douglas Road;

– Enhanced connections to the Apple site in Hollyhill;

– East-west greenway route along the N40 corridor to connect Douglas to Bishopstown, Ballincollig and Wilton;

– An east west route across the south city at Pearse Road and Vicars Road to provide an east-west link to UCC/CIT/CSIP and Ballincollig without going via the City Centre;

– Provision of segregated link into the City Centre via the South Docks LAP lands;

– Cycling connections in the north city on the N20 corridor, Watercourse Road, North Ring Road and Assumption Road that provide a vital connection north to Blackpool and north west to the Apple facility in Hollyhill; and

– Links to/from the south west suburbs via Bishopstown Road and Model Farm Road.

The greenway network forms an integral part of the cycling system in Cork and Cork Network Plan will seek to build on the existing greenways and expand to other areas of the City where possible. Existing greenway facilities in the study area include:

– Passage West Greenway to Cork City via Mahon including spur to Lough Mahon waterfront;

– Curraheen River Greenway to the west of the city;

– Lee Fields Greenway along the banks of the River Lee;

– The Glen off-road route;

– Carrigaline to Crosshaven Greenway; and

– Greenway links in Ballincollig and Carrigaline.

A number of additional greenway routes are proposed in the Network Plan to complement the existing facilities and provide new links where feasible. The new routes include:

– Greenway link between Passage West and Carrigaline/ Ringaskiddy along disused rail line;

– Segregated facility adjacent to railway and within old N25 corridor from Dunkettle Interchange to Midleton via Carrigtwohill ;

– Greenway link from Blarney to the N20 connecting to the north City;

– Provision of segregated greenway facility to the rear of properties along Carrigrohane Road along banks of River Lee;

– Provision of greenway facility between Carrigrohane Road and Tower;

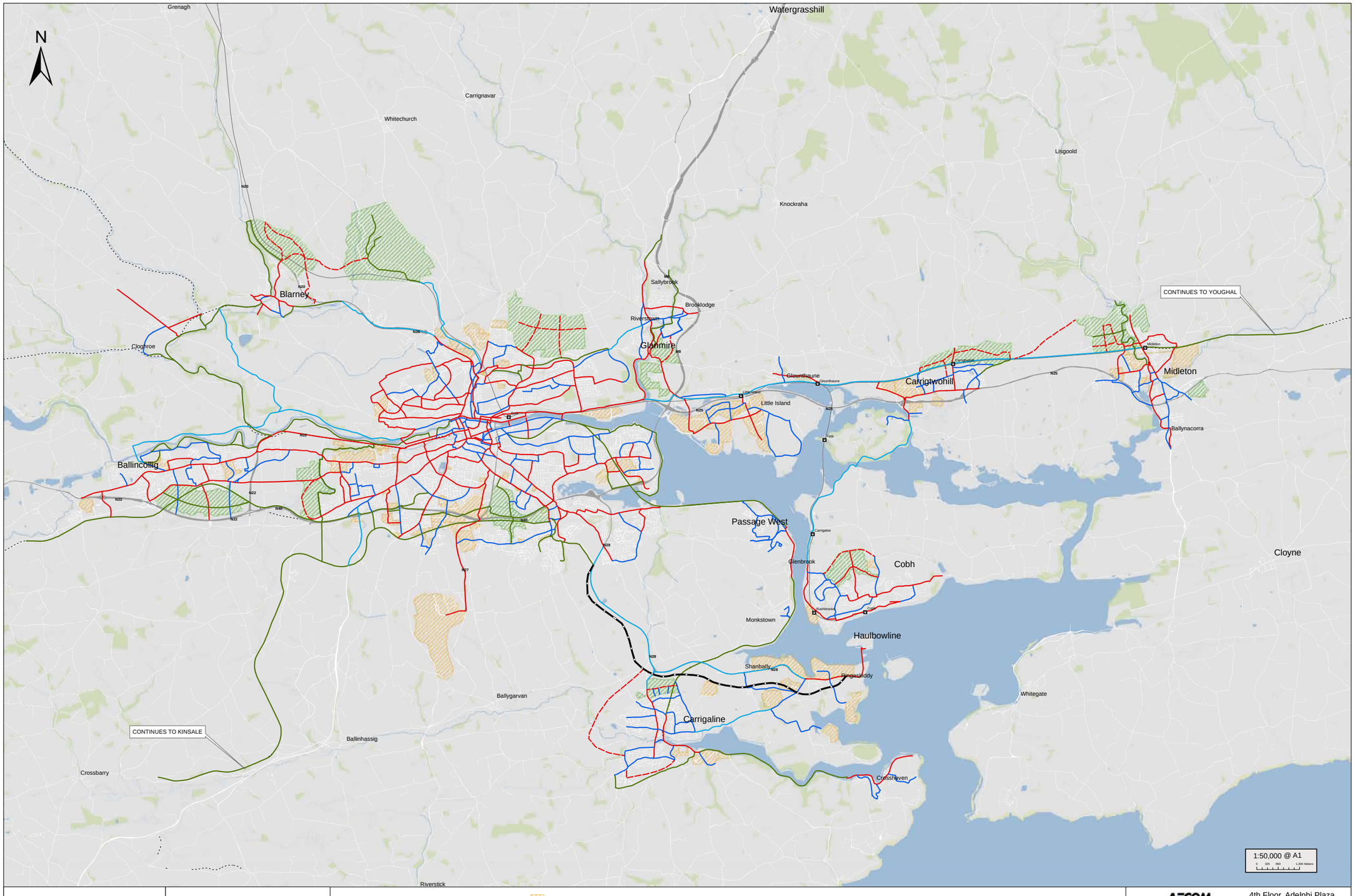
– Series of greenway links along N40 corridor building on some existing facilities and utilising disused Kinsale Rail Line where possible; and

– Greenway routes through the re-developed Tramore Valley Park.

For ease of reference, the route descriptions provided for each route on the network maps in numerical order. Primary routes are highlighted with a red header, secondary routes with a blue header and greenway routes with a green header. Some inter-urban routes are proposed as advisory cycle routes, which are shared on-road routes that are neither primary nor secondary routes, and these routes are highlighted with a blue header to correlate with the colour of inter-urban routes on the network maps.

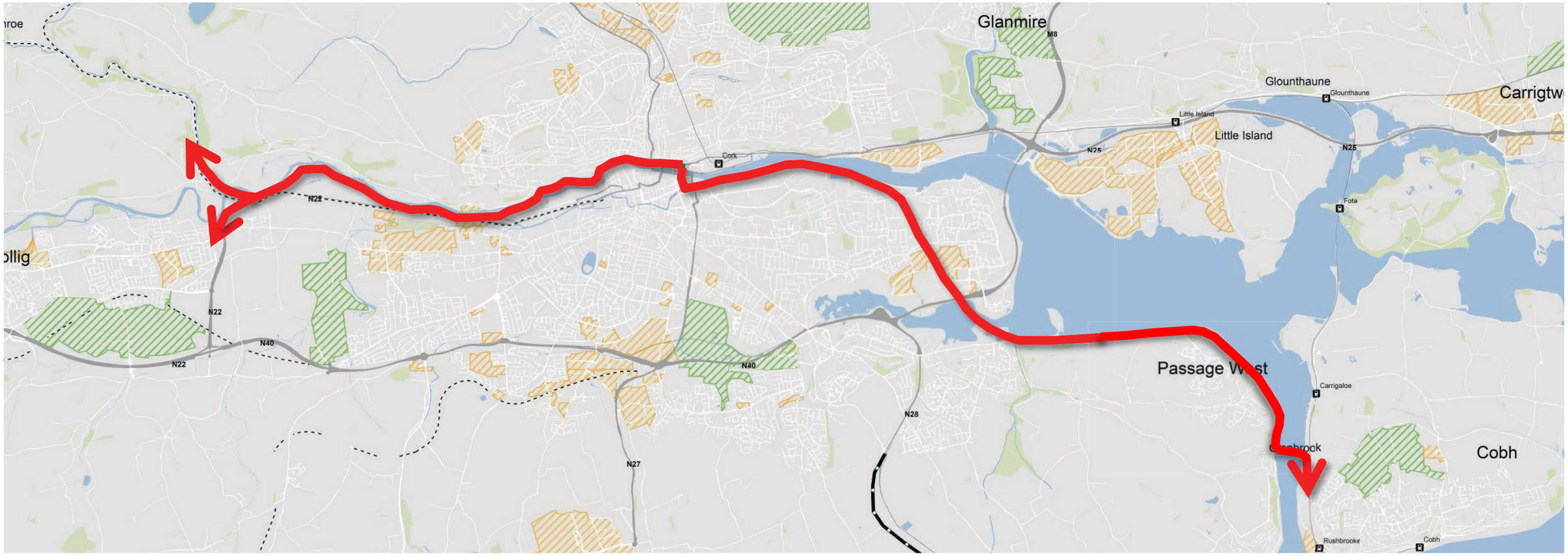
The proposed Cycle Network Plan for Cork is illustrated in Figure 5.2.

Figure 5.2 Cork Cycle Network Plan



Project:	Title:	Legend:	
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	CN1 - CORK INTER-URBAN ROUTE NETWORK	Greenway, Potential Primary, Employment Centre, Train Station, N28 Upgrade; Interurban, Secondary, Masterplan Area, Irish Rail Network; Primary, Disused Railways	AECOM, 4th Floor, Adelphi Plaza, Upper Georges Street, Dun Laoghaire, Co, Dublin. Tel: +353 (0)1 238 3100 Fax: +353 (0)1 238 3199 www.aecom.com

Figure 5.3 Cork Cycle Route 1



Based on the cycle network proposals outlined above, many opportunities could be pursued in terms of the promotion of cycling in Cork. The most obvious scheme that could commence in the short term is the designation of Cork Cycle Route 1 to include the existing Passage West Greenway and provide additional enhancements by extending the route to Ballincollig via the Lee Fields and to Cobh on the southern end. Most of this route is already heavily used by commuters as well as tourists and recreational cyclists but is not formalised and lacks signage. A further extension of the route from Ballincollig to Blarney/Tower is also possible in the longer term. It is acknowledged that it will not always be possible to provide segregated facilities along the corridor from Ballincollig to Cobh but active signage and promotion of Cork Cycle Route 1 will raise awareness of cyclists and drivers alike of the route. This route is shown in Figure 5.3.

Priority infrastructure that would be required to deliver this route is:

- Greenway link to the rear of properties along Carrigrohane Road;
- Two-way segregated cycling facilities along the north quays;
- Provision of cycle route along water front at South Docks LAP lands; and
- Upgrade of links from Passage West Greenway to cross-river ferry service to link to Cobh.

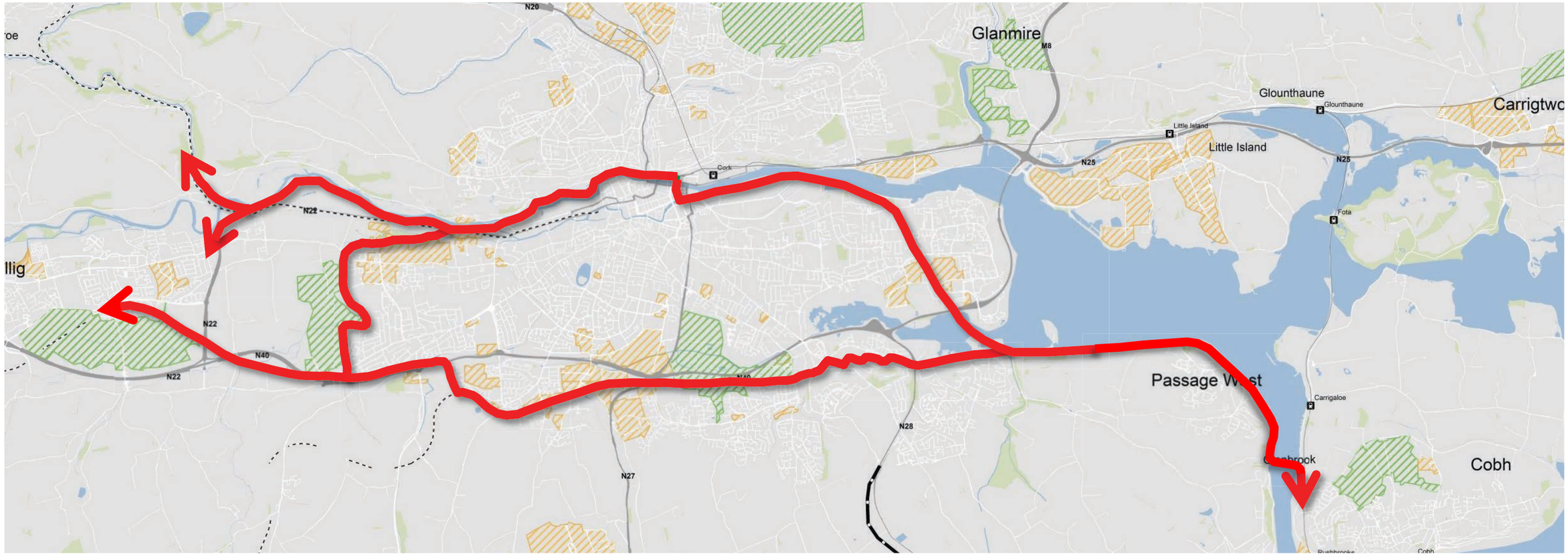
Further development of Cork Cycle Route 1 in the medium term could provide a full orbital route of the city utilising the proposed greenway links proposed adjacent to the N40. This would use cycle paths at Tramore Valley Park, Togher, the disused Kinsale Rail Line and the Curraheen River Greenway. An orbital route of this kind would provide a convenient commuter route as well as be attractive to leisure and tourism cyclists. The proposed route is illustrated in Figure 5.4.

5.4 Network Monitoring

Monitoring the impact of infrastructure delivered will be critical to maximising the value of future investment. As such, it is recommended that specific resources should be designated for monitoring and evaluation of Network Plan delivery. The following approach to monitoring is recommended:

- Installation of permanent automatic cycle counters on key routes;
- Monitoring of public bike scheme usage;
- Traffic counts to identify changes to vehicular traffic numbers;
- Household surveys to gain an understanding of commuter preferences; and
- Review of census information to ascertain changes in modal split.

Figure 5.4 Potential Cork City Cycling Trail



5.5 Non-Infrastructure Measures to Encourage Cycling

The provision of cycling infrastructure alone will not be sufficient to achieve the proposed modal share targets for cycling in Cork by 2025. A range of additional measures will be required to promote cycling and behavioural change within the study area.

One of the most important factors in encouraging modal shift to cycling is spatial planning. The potential for increased cycling in Cork is directly linked to transport and land use policy and to a large extent is dependent on the type and density of land use. As such, more compact and mixed land use development will encourage shorter trips to work, school and for business. Reducing the length of these trips will increase the practicality of sustainable transport modes such as cycling.

Behavioural change measures have also proven to increase cycling mode share. Examples of these measures include:

- Branding and marketing of the emerging Cycle Network Plan for Cork City as well as supporting signage and wayfinding;
- Ongoing development and promotion of the Cycle Journey Planner in addition to the Coke Zero Bike Scheme;
- Management and enforcement of car parking strategy across the Metropolitan Area;
- Cycle training in schools and workplaces as well as 'buddy schemes' for new cyclists;
- Delivery of travel plans, events and challenges in schools and workplaces;
- Delivery of personalised travel planning within workplaces and residential areas; and
- Promotion of area wide events such as Bike Week and European Mobility Week.

5.6 Environmental Constraints and Proposed Mitigation

The Cork Cycle Network Plan is a long term plan with a target year of 2025 used for mode share targets. The vast majority of the proposals made include routes along existing roadways. The plan covers a large geographical area and contains so many elements that it is unlikely that funding for the development of all elements will be provided at one time. It is expected that statutory planning must first be applied for and granted to develop many of the routes. If statutory planning is received, detailed design of the individual elements must then be carried out before funding can be secured and tendering for construction commences. Detailed design will then consider the environmental impacts especially in the SPA and SAC areas and involve further consultation with the public and statutory bodies.

During preparation of this Plan, a high level assessment of environmental constraints within the area was undertaken. The identified constraints will be fully taken into account as the Plan is developed through detailed design.

Two of the key environmental sites in the study area are:

– Great Island Channel Special Area of Conservation (SAC); and,

– Cork Harbour Special Protection Area (SPA).

The Great Island Channel SAC is designated for mudflats, sandflats and Atlantic salt meadows. The site is of major importance for the habitats listed, as well as for its important numbers of wintering waders and wildfowl. The intertidal flats are composed mainly of soft muds, which support a range of macro-invertebrates.

The Cork Harbour SPA is of international importance because of the total numbers of wintering birds and other nationally and internationally important bird species it supports. The site provides both feeding and roosting sites for the various bird species that use it.

Part of the legislation which protects these sites also requires that an Appropriate Assessment be conducted to identify if either the plan will result in significant effects on the European sites and if these effects are not certain, whether, significant adverse effects to the designation features of the European protected sites are likely. An Appropriate Assessment screening report has been completed for this Plan and consulted on separately. The Appropriate Assessment screening report found that there will be no significant effects from the Plan to the European sites or their conservation status or designated features.

The Cork Cycle Plan is a strategy document which proposes how the greater Cork area could be linked up using existing infrastructure. It is proposed that the Plan will be implemented on a phased approach over a number of years and the proposals in the Plan will be subject to further detailed design

Whilst the Plan will make use of existing road and infrastructure as far as possible, mitigation measures will be provided to minimise or eliminate any potential environmental impacts. The following mitigation measures will be incorporated into the detailed design of all proposals:

– During the detailed design and prior to construction, the Council heritage officer and National Parks and Wildlife Service (NPWS) will be contacted to agree the specific details of each proposal and associated mitigation prescription from the Plan. These consultations will determine the need for any preconstruction surveys and will identify what specific mitigation will be required.

– No works will commence until timing of activities (including vegetation removal) has been agreed with the council heritage officer and NPWS. Timing of works will be integral to minimising effects.

– Where works are adjacent to the European protected sites, the boundary of the European protected site will be securely fenced to minimise unregulated access to the sites by the general public.

– Parts of the Plan require landtake from verges, vegetation will only be removed to facilitate access and if there is a Health and Safety reason to do so. All work resulting in land take from verges near to watercourses will be completed with silt containment facilities present. All silt containment will be designed and implemented according to the specifics of each element, they will then be monitored to ensure there is no silt overflow into either the main body of the European protected sites or their tributaries.

– During work to excavate verges, resurface/repaint existing road surfaces, appropriate dust suppression techniques will be used to protect connecting water courses to the European sites, and their associated habitats and species.

– All surface run-off resulting from any of the proposal will be treated and filtered prior to discharge. A range of techniques will be proposed for each element and the most appropriate for a particular set of circumstances employed and subsequently monitored to ensure their efficacy,

– There will be no lighting of any cycle route which is not already illuminated, unless light levels are previously agreed with the council heritage officer and NPWS. Any lighting will be designed to prevent light spill from the cycle routes on to sensitive habitats.

– For the routes which require them, site compounds will be a minimum of 100m from the European protected sites.

– All storages tanks will be bunded with a suitable volume excess and will be located remote from water courses (100m away from the European protected sites).

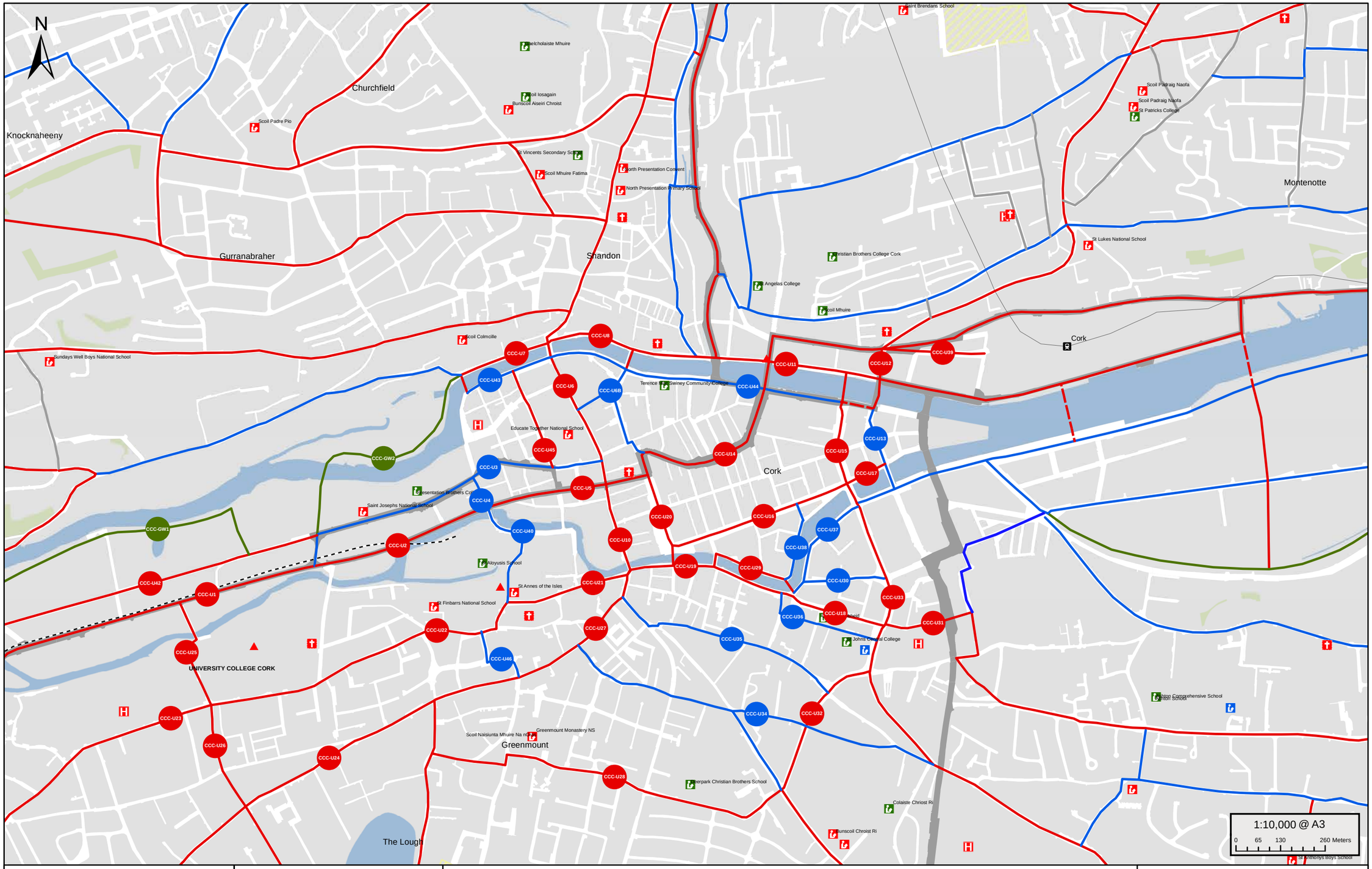
– Where tree planting is required, the planting schedule will be agreed with the council heritage officer and NPWS. All trees will be native species, of local provenance, and will be sourced from local, nursery grown stock.

– During the operational phase, signage will be placed on appropriate sections of the routes to identify the local environmental sensitivities and what etiquette is expected of users during sensitive periods.

06

Cork City Centre

Map U1 Proposed Future Network - Cork City Centre



Project:	Title:	Legend:
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	U1 - CORK CITY CENTRE	**Future Network Facility Type**: Greenway, Interurban, Primary, Potential Primary, Secondary, Feeder, Third Level Institution, Hospital, Place of Worship, Primary School, Secondary School, Special School, Train Station, NewTrain Station, Irish Rail Network, Disused Railways, Gateway, N28 Upgrade, New Bridge, Ferry Terminal, Ferry Connection, Employment Centre, Masterplan Area

AECOM
4th Floor, Adelphi Plaza,
Upper Georges Street,
Dun Laoghaire, Co, Dublin
Tel: +353 (0)1 238 3100
Fax: +353 (0)1 238 3199
www.aecom.com

06 Cork City Centre

6.1 Introduction

The Cork City Centre Network proposals are focused primarily around the island created by the two spurs of the River Lee and the area extending west towards University College Cork (UCC) and Model Business Park.

The area also extends to the main feeder routes to and from the City Centre. **Map E1 illustrates the existing cycling infrastructure in place in the area. Map U1 also illustrates the proposed network in Cork City Centre.**

The City Centre plays and important local and regional function and this will continue to be the case in the context of a cycling vision for Cork. The City has recently seen the introduction of the Coke Zero Bike Scheme aimed at encouraging an active and healthy lifestyle across the city. The nature of the traffic environment lends itself to favourable cycling conditions on many of the city streets and this can be seen by the numbers of people currently cycling in the city. Recent cycling infrastructure put in place in the city such as the cycle lanes provided at Washington Street, Western Road and South Main Street have had a positive impact on the experiences of cyclists.
Among the main trip attractors in the City Centre include Cork English Market, Mardyke Arena, Cork Opera House, St Finbarre's Cathedral and third level institutions Cork Institute of Technology and University College Cork. The primary trip generator is the City Centre itself with the mix of retail and commercial activities that generate the majority of activity in the City. The future demand flows for Cork City Centre are shown in Section 4.

Many of the main demand corridors in the City Centre have already been covered in the Cork South East, South West and North area network descriptions these routes Western Road, Lower Glanmire Road, Barrack Street, South Douglas Road and Douglas Road. Within the City Centre itself main demand corridors include Washington Street, Grand Parade and South Mall, the City Quays, Oliver Plunkett Street and Parnell Place.

The recommendations of the 2012 Cork City Centre Movement Strategy have been used to inform the City Centre Cycle Network and how these proposals can integrate with proposals for the surrounding city area. The two way cycle link along the north quays will provide an important east-west connection proving a direct link for cyclists who wish to travel from the Lee Fields greenway to the Passage West Greenway in the east. This link, in conjunction with the proposed greenway network around the city, will facilitate a convenient orbital route around the city that will be suitable for both leisure and commuter trips.

A number of north-south routes are also provided through the city centre at North Main Street, Grand Parade/Patrick Street and Clontarf Street. Additional north-south connections across the Lee are expected with the development of the South Docks LAP in future years.

Additional east-west routes within the south city at Sullivan's Quay/George's Quay, Saint Patricks Street, Tower Street and Abbey Street will provide a vital connector function for trips from the Douglas/Blackrock area to University College Cork and surrounding land uses. Western Road will maintain its existing key function as a link to and from the City for areas such as Ballincollig, CIT and Curraheen Science Park which are connected via the Curraheen River Greenway.
The route descriptions below should be read in conjunction with Map U1 which sets out the proposed network in the City Centre.

6.2 Route Descriptions

ROUTE CODE: CCC-U1

Road Name:
Western Road

Section (where applicable):
Carrigrohane Road to Dyke Parade

Existing Facility and Quality of Service:
There is an existing inbound cycle lane along this route with a QoS D.

Proposed QoS:
It is proposed to upgrade this cycle lane to at least a QoS of B.

Proposed Infrastructure Type:
This is proposed as a primary route utilising and upgrading the existing city bound cycle lane within the existing bus lane. TM arrangements should be explored for the the possibility of completing the missing link at Gaol Cross.

Key Locations Served:
UCC, surrounding residential area, Mardyke Arena, County Hall, Kingsley Hotel.

Pinch Points/Constraints:
Limited road width will impact the feasibility of completing a cycle lane within the bus lane for the length of this facility. There is no space for an outbound cycle lane but cyclists travelling in this direction could potentially us=e a new route (CCC-U1A) along the banks of the River Lee within the grounds of UCC or alternatively CCC-GW1 to the north of this link.

ROUTE CODE: CCC-U2

Road Name:
Lancaster Quay/Western Road

Section (where applicable):
Courthouse Street to Mardyke Street

Existing Facility and Quality of Service:
There is an existing inbound contra flow cycle lane along this route with a QoS A. The outbound cycle lane within a bus lane has a QoS of C.

Proposed QoS:
It is proposed to maintain the QoS of A on the contra flow lane and provide suitable measures for the outbound cycling facility to achieve a QoS of at least B.

Proposed Infrastructure Type:
This is proposed as a primary route utilising the existing city bound segregated cycle track and the outbound cycle lane within the existing bus lane.

Key Locations Served:
Surrounding residential areas, UCC, City Centre including tourist accommodation, Granary Theatre, Presentation and St.Josephs School.

Pinch Points/Constraints:
Some treatment of junctions with inbound cycle track should be considered to improve cyclist safety and comfort.

ROUTE CODE: CCC-U3

Road Name:
Dyke Parade

Section (where applicable):
Western Road to Grattan Street

Existing Facility and Quality of Service:
There is an existing disjointed inbound cycle lane along this route with a QoS of C and D.

Proposed QoS:
It is proposed to upgrade this cycle lane to at least a QoS of B and connect the lane for the full length.

Proposed Infrastructure Type:
This is proposed as a secondary route utilising the existing city bound cycle lane within the bus lane. Traffic and car parking management measures should be considered to provide sufficient road space for a continuous cycle lane along this route.

Key Locations Served:
Surrounding residential areas, primary and secondary schools, Mardyke Entertainment Complex, Tyandall Institute and Mercy hopistal.

Pinch Points/Constraints:
Limited road width may require relocation of existing car parking to provide sufficient road width for continuous cycle lane. School drop off points in this area also cause delay and safety issues.

ROUTE CODE: CCC-U4

Road Name:
Woods Street

Section (where applicable):
Sheares Street to Washington Street

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this link.

Proposed Infrastructure Type:
Under the City Centre Movement Strategy there are plans to upgrade the junction with Sheares Street and make Woods Street shared space. This will improve the environment for cyclists too with lower traffic speeds and greater priority for cyclists.

Key Locations Served:
City Centre including residential and retail premises, and forms part of a link between the City Centre and Cork City North.

Pinch Points/Constraints:
Traffic management, signage and road markings will be required to provide adequate cyclist safety.

ROUTE CODE: CCC-U5

Road Name:
Washington Street

Section (where applicable):
Courthouse Street to Grand Parade

Existing Facility and Quality of Service:
There is existing cycle lanes along this route with a QoS A inbound and B outbound.

Proposed QoS:
It is proposed to maintain at least the existing levels of QoS along this route.

Proposed Infrastructure Type:
This is proposed as a primary route utilising existing cycle lanes in both directions.

Key Locations Served:
This route forms part of one of the key east/west primary routes through the City Centre, providing access to City Centre retail and entertainment/ nightlife.

Pinch Points/Constraints:
No constraints given that infrastructure is already existing.

ROUTE CODE: CCC-U6

Road Name:
North Main Street and part of South Main Street

Section (where applicable):
Bachelor's Quay to Washington Street

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a primary route providing a shared cycle and vehicular lane southbound.
The section north of Adelaide Street will be a mixed street northbound.

Key Locations Served:
Cork City Centre retail area, the Gate Cinema, and forms part of a link between the City Centre and Cork City North.

Pinch Points/Constraints:
Traffic and car parking management are required to implement proposals for mixed street environment.

ROUTE CODE: CCC-U6B

Road Name:
Cornmarket Street and Kyle Street

Section (where applicable):
Lavitt's Quay to North Main Street (Kyle Street, one-way south bound) and Castle Street to Lavitt's Quay (Cornmarket Street, one way northbound).

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route providing an alternative access route to North Main Street in a mixed street environment. These streets are currently low speed and low impact traffic environments that are suitable for cycling without any major interventions.

Key Locations Served:
Cork City Centre retail area, the Gate Cinema, and forms part of a link between the City Centre and Cork City North.

Pinch Points/Constraints:
Traffic management and signage are required to provide adequate safety and comfort for cyclists along this route.

ROUTE CODE: CCC-U7

Road Name:
North Mall

Section (where applicable):
Upper Wyses Hill to Griffith Bridge

Existing Facility and Quality of Service:
There are currently no dedicated cycle facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route providing an eastbound cycle lane and a mixed street environment in a westbound direction connecting to Greenway CCC-GW1 to the west. There is insufficient road width to provide a westbound cycle lane but the low impact traffic environment along this short link is considered suitable for cyclists to mix with vehicular traffic. The eastbound cycle lane is considered important to provide dedicated cycling facilities all the way from Ballincollig into the city with the option of continuing the journey eastbound. Dedicated facilities are proposed in the opposite direction along the south quays.

Key Locations Served:
UCC and student accommodation.

Pinch Points/Constraints:
Traffic and car parking management are required to provide space for cycle lane.

ROUTE CODE: CCC-U8

Road Name:
Pope's Quay/Camden Quay

Section (where applicable):
Griffith Bridge to Bridge Street

Existing Facility and Quality of Service:
There is an existing segregated cycle track along this route with a QoS B. There is also a contra flow cycle lane with a QoS of C.

Proposed QoS:
It is proposed to maintain and upgrade the facilities along this route to at least a QoS of B and a bus flow lane on Camden Quay with a QoS of of C.

Proposed Infrastructure Type:
This is proposed as a primary route utilising the existing segregated cycle track on the north side of Pope's Quay from Griffith Bridge to Mulgrave Road where it will transfer to the south side of Pope's Quay and continue to Camden Quay.

Key Locations Served:
Part of an important east/west primary route along the northern side of the River Lee.

Pinch Points/Constraints:
Traffic and car parking management are required to provide space for cycle facilities.

ROUTE CODE: CCC-U10

Road Name:
South Main Street

Section (where applicable):
Washington Street to Sullivan's Quay

Existing Facility and Quality of Service:
There is an existing contra flow cycle lane northbound along this route with a QoS B.

Proposed QoS:
It is proposed to maintain the existing cycle lane to at least a QoS of B and provide a mixed street environment southbound also with a QoS B.

Proposed Infrastructure Type:
This is proposed as a primary route providing a contra flow cycle lane northbound and a shared cycle and vehicular lane southbound.

Key Locations Served:
Cork City Centre including retail and entertainment/ nightlife as well as a future event centre.

Pinch Points/Constraints:
Traffic and car parking management are required to implement proposals as per the Cork City Centre Movement Strategy.

ROUTE CODE: CCC-U11

Road Name:
St. Patricks Quay

Section (where applicable):
Bridge Street to Brian Boru Bridge

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route providing a segregated two-way cycle track along the south side of the St. Patricks Quay carriageway.

Key Locations Served:
Leisureplex, part of an important east/west primary route along the northern side of the River Lee.

Pinch Points/Constraints:
Traffic and car parking management are required to implement proposals as per the Cork City Centre Movement Strategy for St. Patricks Quay, Aircoach pickup/ set down area on river side of Quay.

ROUTE CODE: CCC-U12

Road Name:
Brian Boru Street

Section (where applicable):
MacCurtain Street to St. Patricks Quay

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route providing cycle lanes in each direction, as per the proposals in the Cork City Centre Movement Strategy to change Brian Boru Street and Brian Boru Bridge from one way southbound to two way traffic with cycle lanes on both sides of the road.

Key Locations Served:
Cork City Centre, link to Kent Station.

Pinch Points/Constraints:
Traffic management required to remove traffic lane and provide adequate safety and comfort for cyclists.

ROUTE CODE: CCC-U13

Road Name:
Clontarf Street

Section (where applicable):
Anderson's Quay to Albert Quay

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route providing cycle lanes in each direction, as per the proposals in the Cork City Centre Movement Strategy to remove one lane southbound and replace with cycle lanes in both directions.

Key Locations Served:
Forms part of a north/south primary route link between Cork City Centre and Cork South East Networks.

Pinch Points/Constraints:
Traffic and car parking management required to implement proposals as per the Cork City Centre Movement Strategy for Clontarf Street.

ROUTE CODE: CCC-U14

Road Name:
St. Patricks Street

Section (where applicable):
Merchants Quay to Grand Parade

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route but the route is sufficiently traffic calmed to provide an adequately safe environment for cyclists.

Proposed Infrastructure Type:
This is proposed as a primary route providing a shared street environment with general traffic restrictions at certain times of the day.

Key Locations Served:
Cork City Centre retail zone, Cork English Market, provides part of an important east/west primary route through the City Centre.

Pinch Points/Constraints:
General traffic restrictions are proposed in the City Centre Movement Strategy - these include restricting access to the street except to public transport services, taxis and cyclists for a certain period during the day.

ROUTE CODE: CCC-U15

Road Name:
Parnell Place

Section (where applicable):
Merchant's Quay to Parnell Bridge

Existing Facility and Quality of Service:
There is currently a dedicated two way cycle track along the west side of this route with a QoS of A.

Proposed QoS:
It is proposed to maintain this facility at QoS A.

Proposed Infrastructure Type:
This is proposed as a primary route utilising the existing segregated two way cycle track. The track will be on the west side of the street between Parnell Bridge and Lower Oliver Plunkett Street as per existing situation.

Key Locations Served:
Cork City Centre, bus station, Cork City Council

Pinch Points/Constraints:
No major constraints given existing nature of this facility.

ROUTE CODE: CCC-U16

Road Name:
South Mall

Section (where applicable):
Parliament Street to Parnell Place

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route providing a dedicated contra flow cycle lane west bound and a cycle lane within a bus lane east bound.

Key Locations Served:
Cork City Centre, including retail, commercial and dining/entertainment premises.

Pinch Points/Constraints:
Traffic and car parking management are required to implement proposals as per the Cork City Centre Movement Strategy along this link.

ROUTE CODE: CCC-U16

Road Name:
South Mall

Section (where applicable):
Grand Parade to Parliament Street

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route providing a dedicated cycle lane east bound and a shared on-road link west bound.

Key Locations Served:
Cork City Centre, including retail, commercial and dining/entertainment premises.

Pinch Points/Constraints:
Traffic and car parking management are required to implement proposals as per the Cork City Centre Movement Strategy at South Mall.

ROUTE CODE: CCC-U17

Road Name:
Lapp's Quay

Section (where applicable):
Parnell Bridge to Clontarf Bridge

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route utilising a mixed street environment.

Key Locations Served:
Cork City Centre including the City Chamber and Waterfront Business Centre.

Pinch Points/Constraints:
Appropriate signage is required to allow cyclists to share this link safely with vehicular traffic.

ROUTE CODE: CCC-U18

Road Name:
South Terrace

Section (where applicable):
Rockboro Road to George's Quay

Existing Facility and Quality of Service:
There is currently a westbound cycle lane along this route with a QoS of C on the eastern section (within a bus lane) and B on the western section (mandatory cycle lane.

Proposed QoS:
It is proposed to provide a QoS of at least B for the full length of this link.

Proposed Infrastructure Type:
This is proposed as a primary route utilising the existing west bound cycle lane within the bus lane utilising the existing footbridge to link to Rockboro Road.

Key Locations Served:
Colaiste Daibheid Secondary School, St Johns College and part of an east/west Primary Route and links to Cork South East Network.

Pinch Points/Constraints:
No major constraints given the existing nature of this facility.

ROUTE CODE: CCC-U19

Road Name:
George's Quay

Section (where applicable):
South Terrace to South Main Street

Existing Facility and Quality of Service:
There is currently a westbound cycle lane along this route with a QoS of C on the eastern section (within a bus lane) and B on the western section (mandatory cycle lane).

Proposed QoS:
It is proposed to provide a QoS of at least B for the full length of this link.

Proposed Infrastructure Type:
This is proposed as a primary route utilising a west bound cycle lane within the bus lane as far as Parliament Street. The bus lane will not continue to the junction with Parliament Street so cyclists will have to share the street with vehicles for this portion. From Parliament Street to South Main Street cyclists will continue to share with vehicular traffic west bound and a contra flow segregated cycle track will be provided eastbound (partially in place).

Key Locations Served:
Cork City Centre commercial premises and part of the primary east/west link through the south of Cork City Centre.

Pinch Points/Constraints:
Traffic and car parking management are required to implement proposals as per the Cork City Centre Movement Strategy.

ROUTE CODE: CCC-U20

Road Name:
Grand Parade

Section (where applicable):
South Mall to St. Patrick's Street (including pedestrian footbridge to Sullivans Quay)

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with a shared/mixed street traffic environment.

Key Locations Served:
Cork City Centre including retail and commercial premises, provides a link across the River Lee and connects to the east/west Primary Route at St. Patricks Street / Washington Street.

Pinch Points/Constraints:
Appropriate signage, traffic management and road markings will be required to alert motorists to the presence of cyclists.

ROUTE CODE: CCC-U21

Road Name:
Bishop Street/Proby's Quay

Section (where applicable):
South Main Street to Sharman Crawford Street

Existing Facility and Quality of Service:
There is currently an eastbound contra flow cycle lane along this link with a QoS of B.

Proposed QoS:
It is proposed to maintain a QoS of at least B on this link.

Proposed Infrastructure Type:
This is proposed as a primary route utilising the existing contra flow cycle lane in an eastbound direction. West bound cyclists will share the street with vehicular traffic.

Key Locations Served:
St. Fin Barre's Cathedral, St. Maries of the Isles Primary School, CIT Crawford College of Art and Design.

Pinch Points/Constraints:
Appropriate signage, traffic management and road markings will be required to alert motorists to the presence of cyclists at junctions and on-street shared section.

ROUTE CODE: CCC-U22

Road Name:
Bishop Street/Gilabbey Street

Section (where applicable):
Sharman Crawford Street to St. Finbarr's Road

Existing Facility and Quality of Service:
There are currently no dedicated cycle facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with a mixed street environment. The low speed nature of traffic along this route will accommodate a mixed street environment.

Key Locations Served:
CIT Crawford College of Art and Design, St Maries of the Isles Primary School, St. Finbarrs National School and St.Aloysuis secondary school.

Pinch Points/Constraints:
Appropriate signage, traffic management and road markings will be required to alert motorists to the presence of cyclists at junctions and on mixed street sections.

ROUTE CODE: CCC-U23

Road Name:
College Road

Section (where applicable):
St. Finbarr's Road to Magazine Road Roundabout

Existing Facility and Quality of Service:
There are currently no dedicated cycle facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with a mixed street environment. The low speed nature of traffic along this route will accommodate a mixed street environment.

Key Locations Served:
Connects Cork City Centre with UCC

Pinch Points/Constraints:
Appropriate signage, traffic management and road markings will be required to alert motorists to the presence of cyclists at junctions and on mixed street sections.

ROUTE CODE: CCC-U24

Road Name:
Glasheen Road/Bandon Road

Section (where applicable):
Hartland's Avenue to Lough Road

Existing Facility and Quality of Service:
There are currently no dedicated cycle facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with a mixed street environment. The narrow road width and low speed nature of traffic along this route will accommodate a mixed street environment.

Key Locations Served:
Connects Cork City Centre with UCC

Pinch Points/Constraints:
Appropriate signage, traffic management and road markings will be required to alert motorists to the presence of cyclists at junctions and on mixed street sections.

ROUTE CODE: CCC-U25

Road Name:
Gaol Walk

Section (where applicable):
College Road to Western Road

Existing Facility and Quality of Service:
There are currently no dedicated cycle facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with a mixed street environment. The narrow road width and low speed nature of traffic along this route will accommodate a mixed street environment.

Key Locations Served:
Connects UCC to Primary and Greenway Network links to the City Centre.

Pinch Points/Constraints:
Appropriate signage, traffic management and road markings will be required to alert motorists to the presence of cyclists at junctions and on mixed street sections.

ROUTE CODE: CCC-U26

Road Name:
Hartland's Avenue

Section (where applicable):
Glasheen Road to The Lough

Existing Facility and Quality of Service:
There are currently no dedicated cycle facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with a mixed street environment. The narrow road width and low speed nature of traffic along this route will accommodate a mixed street environment.

Key Locations Served:
UCC, provides an north/south connection between two east/west Primary Routes connecting to the city centre (CCC-U23 and CCC-U24).

Pinch Points/Constraints:
Appropriate signage, traffic management and road markings will be required to alert motorists to the presence of cyclists at junctions and on mixed street sections.

ROUTE CODE: CCC-U27

Road Name:
Barrack Street/Bandon Road

Section (where applicable):
Lough Road to Sullivan's Quay

Existing Facility and Quality of Service:
There are currently no dedicated cycle facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with a mixed street environment. The narrow road width and low speed nature of traffic along this route will accommodate a mixed street environment.

Key Locations Served:
Cork City Centre including commercial and retail premises, connects to the pedestrian footbridge at Sullivan's Quay.

Pinch Points/Constraints:
Appropriate signage, traffic management and road markings will be required to alert motorists to the presence of cyclists at junctions and on mixed street sections.

ROUTE CODE: CCC-U28

Road Name:
Gould Street/Deerpark Road/St. Patrick's Road

Section (where applicable):
Lough Road to Evergreen Road

Existing Facility and Quality of Service:
There are currently no dedicated cycle facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with a mixed street environment and dedicated cycle lanes where possible. The narrow road width and low speed nature of traffic along this route will accommodate a mixed street environment where road widening and reconfiguration is not possible.

Key Locations Served:
Surrounding residential areas, Deerpark Christian Brothers School, Scoil Naisiunta Mhuire Na nGras, alternative route to UCC.

Pinch Points/Constraints:
Appropriate signage, traffic management and road markings will be required to alert motorists to the presence of cyclists at junctions and on mixed street sections.

ROUTE CODE: CCC-U29

Road Name:
Parliament Street Bridge and Father Mathew Quay

Section (where applicable):
George's Quay to Trinity Bridge

Existing Facility and Quality of Service:
There are currently no dedicated cycle facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with a mixed street environment including the existing footbridge that links from College of Commerce to Union Quay.

Key Locations Served:
Cork City Centre, Cork College of Commerce, incorporates two connections across the River Lee.

Pinch Points/Constraints:
Appropriate signage, traffic management and road markings will be required to alert motorists to the presence of cyclists and manage driver behaviour particularly in the context of the perpendicular parking that currently occurs along this route. Significant parking on river side of this link could be relocated to provide a more attractive environment to cyclists.

ROUTE CODE: CCC-U30

Road Name:
Copley Street

Section (where applicable):
George's Quay to Anglesea Street

Existing Facility and Quality of Service:
There are currently no dedicated cycle facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route providing an east bound cycle lane linking to the two way cycle track on Anglesea Street.

Key Locations Served:
CIT, School of Music and Anglesea Street Courthouse

Pinch Points/Constraints:
Traffic and car parking management will be required to implement cycle lane and maintain two way traffic.

ROUTE CODE: CCC-U31

Road Name:
Hibernian Road/Rockboro Road

Section (where applicable):
Infirmary Road to Victoria Road

Existing Facility and Quality of Service:
There are currently no dedicated cycle facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route providing a cycle route through Hibernian Road with a mixed Street environment on Rockboro Road, Shalom Park and Albert Road.

Key Locations Served:
Provides a link between the City Centre and the Greenway Network to the east.

Pinch Points/Constraints:
Traffic and car parking management required to implement two way cycle lane along Hibernian Buildings.

ROUTE CODE: CCC-U32

Road Name:
Summerhill South and Langford Row

Section (where applicable):
Evergreen Road to Southern Road

Existing Facility and Quality of Service:
There are currently dedicated cycle lanes northbound with a QoS of B and cycle lanes within a bus lane southbound along this route with a QoS of C.

Proposed QoS:
It is proposed to provide a QoS of at least B both directions along this route.

Proposed Infrastructure Type:
This is proposed as a primary route utilising the existing dedicated cycle lanes, cycle lanes within bus lanes and shared street environment. The provision of dedicated cycle lanes for the length of this route should be explored.

Key Locations Served:
St. John's Central College, connects the Cork City Centre and Cork South East Networks.

Pinch Points/Constraints:
Traffic and car parking management required to implement dedicated cycle lanes in both directions.

ROUTE CODE: CCC-U33

Road Name:
Anglesea Street and Infirmary Road

Section (where applicable):
Langford Row to Terrence McSwiney Quay

Existing Facility and Quality of Service:
There is a segregated two way cycle track with a QoS of A and dedicated cycle lanes with a QoS of C along this route.

Proposed QoS:
It is proposed to provide maintain the QoS A on the segregated cycle track and provide at least QoS B on the cycle lanes.

Proposed Infrastructure Type:
This is proposed as a primary route utilising the existing dedicated cycle lanes between Langford Row and Hibernian Road and the segregated two way cycle track between Hibernian Road and Terrence McSwiney Quay.

Key Locations Served:
Anglesea Road Courthouse, Cork City Council, St. John's Central College.

Pinch Points/Constraints:
No major constraints given existing nature of facilities at this location.

ROUTE CODE: CCC-U34

Road Name:
Tower Street / Windmill Road

Section (where applicable):
Barrack Street to Douglas Road

Existing Facility and Quality of Service:
There are currently no dedicated cycle facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street facility providing improved signage and road markings to alert motorists to cyclists.

Key Locations Served:
East-west link between Douglas and UCC.

Pinch Points/Constraints:
Narrow road width will require adequate road signage and traffic calming measures to provide safety for cyclists.

ROUTE CODE: CCC-U35

Road Name:
Evergreen Street/ Abbey Street/ Douglas Street

Section (where applicable):
Barrack Street to Sumerhill South

Existing Facility and Quality of Service:
There are currently no dedicated cycle facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street facility providing improved signage and road markings to alert motorists to cyclists.

Key Locations Served:
East-west link between Douglas and UCC.

Pinch Points/Constraints:
Narrow road width will require adequate road signage and traffic calming measures to provide safety for cyclists.

ROUTE CODE: CCC-U36

Road Name:
Sawmill Street

Section (where applicable):
South Terrace to Infirmary Road

Existing Facility and Quality of Service:
There are currently no dedicated cycle facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street facility providing improved signage and road markings to alert motorists to cyclists.

Key Locations Served:
Colaiste Daibheid, provides a west-east link alternative to one-way South Terrace.

Pinch Points/Constraints:
Narrow road width will require adequate road signage and traffic calming measures to provide safety for cyclists.

ROUTE CODE: CCC-U37

Road Name:
Union Quay

Section (where applicable):
Copley Street to Anglesea Street

Existing Facility and Quality of Service:
There are currently no dedicated cycle facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street facility providing improved signage and road markings to alert motorists to cyclists.

Key Locations Served:
Cork College of Commerce and College of Music, connects to two bridges across the River Lee.

Pinch Points/Constraints:
Significant parking on both sides of this link could potentially be relocated to provide dedicated cycle lanes instead of a mixed street environment along this link.

ROUTE CODE: CCC-U38

Road Name:
Morrison's Quay

Section (where applicable):
Father Mathew Quay to South Mall

Existing Facility and Quality of Service:
There are currently no dedicated cycle facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street facility providing improved signage and road markings to alert motorists to cyclists.

Key Locations Served:
Cork College of Commerce, City Centre commercial premises.

Pinch Points/Constraints:
Significant parking on river side of this link could be relocated to provide a more attractive environment to cyclists.

ROUTE CODE: CCC-U39

Road Name:
McCurtain Street and Alfred Street

Section (where applicable):
Bridge Street to Railway Street

Existing Facility and Quality of Service:
There are currently no dedicated cycle facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with a mixed street facility providing improved signage and road markings to alert motorists to cyclists and providing an alternative link to the train station.

Key Locations Served:
Cork City Centre including entertainment venues and tourist accommodation, Kent Station.

Pinch Points/Constraints:
Shared street facility will need to be incorporated with proposed changes to road layout as put forward within the City Centre Movement Strategy.

ROUTE CODE: CCC-U40

Road Name:
Sharman Crawford Street/Wandesford Quay

Section (where applicable):
Bishop Street to Lancaster Quay

Existing Facility and Quality of Service:
There are currently no dedicated cycle facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street facility providing improved signage and road markings to alert motorists to cyclists will be required.

Key Locations Served:
St. Aloysius Secondary School, St. Maries of the Isles Primary School, Crawford College of Art and Design.

Pinch Points/Constraints:
No major constraints given existing road width and one-way system on Sharman Crawford Street.

ROUTE CODE: CCC-U42

Road Name:
Mardyke Walk

Section (where applicable):
Dyke Parade to Thomas Davis Bridge

Existing Facility and Quality of Service:
There are currently no dedicated cycle facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with a mixed street facility providing a two way link along Mardyke Walk. Improved signage and road markings to alert motorists to cyclists will be required. On the section of the R846 between Mardyke Walk and Thomas Davis Bridge, traffic calming and narrowing of traffic lanes should be investigated.

Key Locations Served:
Tyndall National Institute, Presentation Brothers College, St. Joseph's National School, Fitzgerald Park, Mardyke Sports Grounds (UCC).

Pinch Points/Constraints:
Parking south of Thomas Davis Bridge

ROUTE CODE: CCC-U43

Road Name:
Bachelors Quay

Section (where applicable):
Grenville Place to North Main Street

Existing Facility and Quality of Service:
There are currently no dedicated cycle facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street environment. Improved signage and road markings to alert motorists to cyclists will be required.

Key Locations Served:
Cork City Centre, UCC, Mercy Hospital

Pinch Points/Constraints:
Road width is an issue here, espeacially with the on-street parking. The extension of this route along Grenville Place to Sheare's Street will need to be considered in conjunction with the City Centre Movement Strategy.

ROUTE CODE: CCC-U44

Road Name:
Coal Quay, Lavitt's Quay, Merchant's Quay

Section (where applicable):
Griffith Bridge to Brian Boru Bridge

Existing Facility and Quality of Service:
There are currently dedicated cycle lanes in both directions at Kyrls Quay with a QoS of C.

Proposed QoS:
It is proposed to provide a QoS of at least B on facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route providing cycle lanes in each direction. Existing facilities at Kyrl's Quay should be upgraded and extended where possible.

Key Locations Served:
Cork Opera House, retail and commercial premises, provides an east/west Primary Route along the southern bank of the River Lee.

Pinch Points/Constraints:
Provision of cycle lanes will require the removal of one traffic lane along this link, which is already constrained during peak times.

ROUTE CODE: CCC-U45

Road Name:
Grattan Street

Section (where applicable):
Bachelor's Quay to Sheares Street

Existing Facility and Quality of Service:
There are currently no dedicated cycle facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with a mixed street environment. Improved signage and road markings to alert motorists to cyclists will be required.

Key Locations Served:
Cork City Centre, UCC, Mercy Hospital

Pinch Points/Constraints:
Junctions with Bachelor's Quay and Sheares Street will need to be upgraded to provide for safe cyclist turning.

ROUTE CODE: CCC-U46

Road Name:
Noonan Road and Gregg Road

Section (where applicable):
Gilabbey Street to Barrack Street

Existing Facility and Quality of Service:
There are currently no dedicated cycle facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street environment. Improved signage and road markings to alert motorists to cyclists will be required.

Key Locations Served:
UCC, surrounding residential

Pinch Points/Constraints:
Adequate signage and road markings required to provide for cyclist safety on this street that accommodates cars and buses.

City Centre Greenway Routes

ROUTE CODE: CCC-GW1

Road Name:
Fitzgerald Park Greenway

Section (where applicable):
Mardyke Walk to Western Road

Existing Facility and Quality of Service:
There is currently a segregated pedestrian/cycle path along this route with a QoS of A.

Proposed QoS:
It is proposed to maintain the QoS of at least A along this route.

Proposed Infrastructure Type:
This is an existing greenway route along the banks of the River Lee and over Daly's Bridge that can tie into the existing and proposed greenway network further to the west.

Key Locations Served:
Fitzgerald Park, UCC including Mardyke Sports Ground, links to the City Centre Network.

Pinch Points/Constraints:
No major constraints given existing nature of this route.

ROUTE CODE: CCC-GW2

Road Name:
SLí Cumann na mBan

Section (where applicable):
Mardyke to North Mall

Existing Facility and Quality of Service:
There is currently a segregated pedestrian/cycle path along this route with a QoS of A.

Proposed QoS:
It is proposed to maintain the QoS of at least A along this route.

Proposed Infrastructure Type:
This is an existing route that requires appropriate signage and road markings to direct cyclists and promotes this route for leisure and commuter trips.

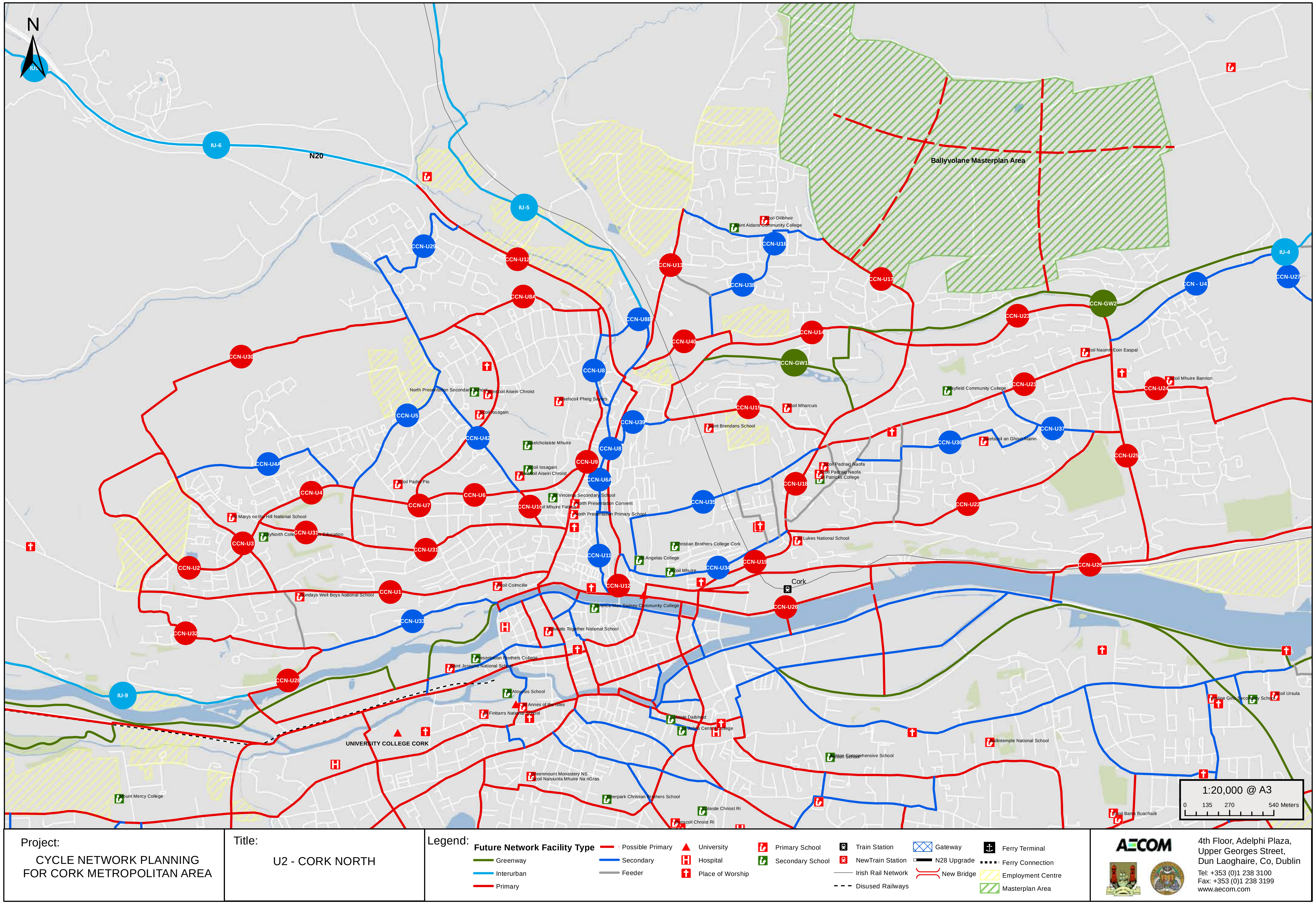
Key Locations Served:
UCC (north of the River Lee), provides a connection across the River Lee.

Pinch Points/Constraints:
Early closing of access will need to be addressed.

07

Cork City North

Map U2 Proposed Future Network - Cork City North



07 Cork City North

7.1 Introduction

The Cork City North Area is focused on the areas of Blackpool, Mayfield, The Glen, Fair Hill and Knocknaheeny.

The area extends to provide links to the Monard development site to the north-west and the Ballyvolane Masterplan site in the north east.

The area is served by the N20, the primary road link between Cork and Limerick City. Other main road links in the area include the Northern Ring Road, The Old Youghal Road and the Lower Glanmire Road that all feed into Cork City from the east. Map E2 illustrates the existing cycling infrastructure in place in the area that consists mainly of cycle lanes in the Hollyhill and Knocknaheeny area. Map U2 illustrates the proposed network in the North City area.

The main trip generators in the north City are the employment locations at Hollyhill, Blackpool employment area, various schools, the Cork Gaol at Sundays Well as well as the Department of Defence at Collins Barracks. Ballyvolane and Monard sites to the north will also be major trip generators in future.

The main demand corridors shown for the North City area include the Old Youghal Road and Summerhill north from the north east of the city, the N20 corridor, Blarney Road, Shanakiel Road, Sundays Well Road and Fair Hill. These routes specifically highlight that the most direct route is taken in the demand model as some of these routes are not favourable for cycling due to gradient differences.

One of the main difficulties facing the development of a cycling network in this area is the challenging topography which results in a number of very steep routes to and from this part of the city. In some cases the routes proposed in this section may be more suitable in one direction than another.

The main objective of network development in the north side of the city is to provide direct and convenient access to the city centre and major trip generators.

7.2 Route Descriptions

The following sections outline the proposals for the future proposed network in Cork north City in more detail.

The future network in the north city area will aim to serve the main employment areas of Blackpool, Apple in Knocknaheeny, Ballyvolane, the Old Youghal Department of defence and the Cork Gaol as well as all local schools. The main routes proposed are the following:

CCN-U1 – Collector route extending from Shandon Street in the east to Harbour View Road in the west along Blarney Street.

CCN-U9 – North-south link on Shandon Street from Cork City Centre west to a number of schools including North Mon., North Presentation convent and primary as well as St Vincent's Primary and Secondary. This route also links to CCN-U6 on Saint Colmcille's Road that is intended to cut across the steep north south gradient in this part of the city and provide a high quality corridor that can be accessed from many surrounding land uses;

CCN-U12 – Direct and functional commuter route into city centre achieved by reassignment of road space to accommodate bi-directional segregated cycling facilities on the N20 from Assumption Road into the city. Access will also be provided further north linking to Blarney and the future Monard development site;

CCN-U18, U19 and U21 - At Summerhill North to Old Youghal Road it is proposed to prioritise uphill cycle lanes providing a north-south connection to schools and substantial residential areas from the City; and

CCN-U26 – A vital inter-urban and urban cycling route is proposed along Lower Glanmire Road. This route will provide a high quality link between Glanmire and the City and longer east-west journeys to areas beyond the Dunkettle Interchange.

ROUTE CODE: CCN-U1

Road Name:
Blarney Street

Section (where applicable):
Shandon Street to Harbour View Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a primary route in a mixed street environment between Shandon St and Strawberry Hill, similar to the recent upgrades at Barrack Street in the south city but incorporating suitable surface treatments for cycling. West of Strawberry Hill, the additional width may allow for the provision of on road cycle lanes. There is a lot of car parking on this road currently.

Key Locations Served:
City Centre, surrounding residential areas along street, Hollyhill Employment area, Apple

Pinch Points/Constraints:
Traffic and car parking management will be required to provide adequate safety and comfort for cyclists along this route.

ROUTE CODE: CCN-U2

Road Name:
Kilmore Heights, Tadhg Barry Road, David McCarthy Road

Section (where applicable):
Hollyhill Lane to O'Neill Park

Existing Facility and Quality of Service:
There are currently advisory cycle lanes at Harbour View Road and Tadhg Barry Road with a QoS of C and segregated cycle tracks on David McCarthy Road with a QoS of B.

Proposed QoS:
It is proposed to upgrade the advisory cycle lanes to mandatory including resurfacing that will provide at least a QoS of B along this route.

Proposed Infrastructure Type:
This is proposed as a primary route incorporating, upgrading and maintaining the existing facilities.

Key Locations Served:
Apple Distribution Centre, surrounding residential area, Hollymount Industrial Estate

Pinch Points/Constraints:
No major constraints on this route given existing nature of facilities.

ROUTE CODE: CCN-U3

Road Name:
Hollyhill Lane and Ardcullen Grove

Section (where applicable):
Blarney Street to Kilmore Heights

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a primary route with a segregated shared cycle and pedestrian path. This path already exists but may require widening and upgrade works such as resurfacing, lighting and signage to facilitate cyclists. It is anticipated that this path will facilitate southbound cyclists as the road is currently one way northbound.

Key Locations Served:
Surrounding residential area, Hollyhill Shopping Centre, St. Mary's on the Hill Primary School.

Pinch Points/Constraints:
Upgrade works including lighting and signage is required to provide adequate safety and comfort for cyclists.

ROUTE CODE: CCN-U4

Road Name:
Harbour View Road

Section (where applicable):
Hollyhill Lane to Baker's Road

Existing Facility and Quality of Service:
There is currently a length of cycle lane on the approach to Bakers Road with a QoS of C.

Proposed QoS:
It is proposed to upgrade and provide new facilities along this route with a QoS of at least B.

Proposed Infrastructure Type:
This is proposed as a primary route incorporating the existing cycle lanes on Harbour View Road which require upgrade to mandatory cycle lanes where possible. Cycle lanes can also be implemented in a westbound direction within the existing road width.

Key Locations Served:
Surrounding residential area, Knocknaheeny Community Centre.

Pinch Points/Constraints:
Traffic and car parking management will be required to provide cycle lanes in a westbound direction.

ROUTE CODE: CCN-U4A

Road Name: Kilmore
Heights/Knocknaheeny Avenue

Section (where applicable):
Kilmore Heights to Harbourview Road

Existing Facility and Quality of Service:
There are currently advisory cycle lanes on each side of this link with a QoS of C.

Proposed QoS:
It is proposed to upgrade these facilities to provide at least a QoS of B.

Proposed Infrastructure Type:
This is proposed as a secondary route with the existing cycle lanes on Knocknaheeny Avenue maintained and upgraded to mandatory cycle lanes where possible. Along Kilmore Heights parking management and the removal of the central median will allow sufficient space to continue cycle lanes along this link.

Key Locations Served:
Surrounding residential area, Knocknaheeny Community Centre.

Pinch Points/Constraints:
Traffic and car parking management will be required to provide cycle lanes at Kilmore Heights and Knocknaheeny Avenue.

ROUTE CODE: CCN-U5

Road Name:
Cronins Field/Mount Agnes Road/Upper Fairhill

Section (where applicable):
Harbour View Road to Fairfield Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with on-road cycle lanes in each direction.

Key Locations Served:
Churchfield Industrial Estate, surrounding residential area.

Pinch Points/Constraints:
Some road widening is required to provide adequate road width for cycle lanes. Junction treatment is required to provide adequate safety for cyclists at locations such as the junction of Upper Fairhill and Fairfield Road shown below.

ROUTE CODE: CCN-U6

Road Name:
Bakers Road, St. Colmcilles Road, Sunvalley Drive, North Monastery Road

Section (where applicable):
Harbour View Road to Watercourse Road

Existing Facility and Quality of Service:
There is currently a cycle lane eastbound on St. Colmcilles Road with a QoS of B.

Proposed QoS:
It is proposed to maintain any existing facilities to a QoS B and provide at least the same level of service for new facilities along this link.

Proposed Infrastructure Type:
This is proposed as a primary route with a segregated two way shared pedestrian and cycle track on the north side of the carriageway from Harbour View Road to the junction with Great William O'Brien Street. From Great William O'Brien Street junction cyclists will join a mixed street environment where existing property boundaries will limit the potential to widen the road and provide dedicated facilities.

Key Locations Served:
Surrounding residential area, primary and secondary schools, local parks and football pitches, Neptune Stadium.

Pinch Points/Constraints:
The need for town and residential parking may present issues.

ROUTE CODE: CCN-U6A

Road Name:
Watercourse Road and Cathedral Walk

Section (where applicable):
North Monastery Road to N20

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a secondary route which will provide continuity between routes CCN-U8 and CCN-U11. The street currently has a narrow cross section and parking on both sides. The current narrow cross section should be adequate to maintain low traffic speeds therefore it is proposed that a mixed street arrangement is provided along here.

Key Locations Served:
Surrounding residential area, potential linkage to the N20, Blackpool and City Centre areas

Pinch Points/Constraints:
On street parking, section of Cathedral Walk currently one way eastbound preventing access from N20 for cyclists.

ROUTE CODE: CCN-U7

Road Name:
Knockfree Avenue and Knockpogue Avenue

Section (where applicable):
St. Colmcilles Road to Fairfield Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a primary route with widening of the existing footpath on either side of the road to provide shared pedestrian and cycle paths.

Key Locations Served:
Surrounding residential area, primary and secondary schools.

Pinch Points/Constraints:
Crossing points will need to be of a sufficient standard to allow cyclists to cross safely such as at the intersection of Knockfree Avenue/Knockpogue Avenue with Fairhill and at the entrances to the primary and secondary schools from Knockpogue Avenue where there is already some crossing facilities in place for pedestrians.

ROUTE CODE: CCN-U8

Road Name:
Watercourse Road and Commons Road

Section (where applicable):
North Monastery Road to Railway Bridge (Thomas Davis St.) and Commons Road from Thomas Davis Street to Pophams Road.

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street environment. This route will compliment, and act as an alternative to, the primary north-south artery (CCN-U12) on the N20. Limited road width would restrict the possibility of implementing dedicated cycle facilities.

Key Locations Served:
Surrounding residential area, Blackpool employment area.

Pinch Points/Constraints:
Traffic and car parking management would be required to provide adequate safety for cyclists in this mixed street environment.

ROUTE CODE: CCN-U8A

Road Name:
Fairfield Avenue/Fairfield Road/Commons Road

Section (where applicable):
Upper Fairhill to Pophams Road

Proposed Infrastructure Type:
This is proposed as a primary route with a segregated two way cycle track along the north side of the road from Upper Fairhill Road to Commons Road. A short section of road east of the junction of Fairfield Road with Glenwood Drive (shown below) has a restricted road width due to the location of properties close to the road. It should be noted that there can be high numbers of HGV's using this road.

This section could be a mixed street environment with adequate road signage and markings to provide safety for cyclists. This road is already low speed so would be suitable for a mixed street facility. On-road cycle lanes are proposed along Commons Road with the uphill direction a priority if adequate road space cannot be provided along this link.

Key Locations Served:
Surrounding residential areas and links to Blackpool Employment area.

Pinch Points/Constraints:
Some path widening may be required to provide adequate width for a segregated cycle track which should be available within the existing green verge to north of Fairfield Road. Junction treatment required to provide adequate safety for cyclists at locations such as the junction of Glenwood Drive with Upper Fairhill Road and the Junction of Upper Fairhill Road with Fairhill Road. Steep topography. HGV's.

Figure 7.1 Junction of Glenwood Drive and Fairfield Road where junction treatment for segregated cycle track is required to safely join carriageway. (Source: Google Maps)

Figure 7.2 Junction of Fairfield Road and Fairfield Avenue where junction treatment is required to safely link to two-way cycle track. (Source: Google Maps)

ROUTE CODE: CCN-U8B

Road Name:
Pophams Road, Redforge Road, Dublin Street, Thomas Davis Street

Section (where applicable):
Dublin Street to Watercourse Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with on-road cycle lanes in each direction on Redforge Road. This area is currently dominated by cars and access to the retail area via any other mode can be difficult. There is an opportunities to reduce lane widths and speeds in the area with the introduction of on-road facilities. On Dublin Street and Thomas Davis Street the environment is sufficiently calm and road widths sufficiently narrow to introduce mixed use.

Key Locations Served:
Surrounding residential area, Blackpool Shopping Centre.

Pinch Points/Constraints:
Some road width redistribution would be required for the introduction of cycling facilities on Redforge Road. Congestion at peak times.

ROUTE CODE: CCN-U9

Road Name:
Shandon Street, Gerald Griffin Street, Great William O'Brien Street, Brocklesby Street

Section (where applicable):
North Monastery Road to Commons Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a primary route with a proposed mixed street environment along Gerald Griffin Street and Great William O'Brien Street. This route will provide an additional north south link and will provide direct access to the western city centre. An uphill cycle lane on Shandon Street / Gerald Griffin Street should be provided. The remainder of the route should be mixed street with traffic calming, it is assumed extensive residential car parking will need to remain in place.

Key Locations Served:
Primary and secondary schools, surrounding residential area, Blackpool Medical Centre and City Centre.

Pinch Points/Constraints:
Car parking and traffic management will be required to implement a mixed street environment and to facilitate space for cycle lanes along Shandon Street. Gradients.

ROUTE CODE: CCN-U10

Road Name:
Cathedral Road and Wolfe Tone Street

Section (where applicable):
Gerald Griffin Street to North Monastery Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a primary route that would be suitable for a mixed street/home zone type treatment considering its width, residential nature and relatively low traffic volumes. Rat running on this street should be discouraged if possible. This link provides an important connection to schools along North Monastery Road with linkages to the City Centre.

Key Locations Served:
Schools, surrounding residential area and City Centre.

Pinch Points/Constraints:
High Traffic volumes at school times. Traffic management measures should be designed with input from the local community.

ROUTE CODE: CCN-U11

Road Name:
Upper John Street

Section (where applicable):
Pope's Quay to Cathedral Walk

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street designation incorporating appropriate traffic management and signage measures.

Key Locations Served:
Surrounding residential area, part of secondary north-south link to City Centre.

Pinch Points/Constraints:
Significant traffic management measures will be required to implement a mixed street environment for the full length of this street.

ROUTE CODE: CCN-U12

Road Name:
N20

Section (where applicable):
Pope's Quay to Assumption Road and Commons Road to junction with Lower Kileens Road.

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This route is proposed as a primary route connecting the northern environs of the city and interurban route IU-6 (to Blarney) directly with the city centre. The route is currently a traffic dominated urban dual carriageway with no cyclist facilities. This directness of this road providing a connection directly to Cork City Centre from the north is an advantage which should be exploited for the benefit of cyclists, it will be a functional, direct route which will improve journey times for cyclists, increase safety for all road users by reducing vehicular speeds, improve the overall environment of an area currently dominated by traffic and also reduce vehicular emissions and noise by reducing speeds. The current layout of the road, with a hatched central median, wide traffic lanes and grass verges means there is a lot of underutilised roadspace which should be exploited in order to provide high quality segregated cyclist facilities in both directions. This approach has been implemented elsewhere where an urban dual carriageway, also a National Primary route, has had high quality segregated cyclist facilities retrofitted by reducing traffic lane widths and utilising previously underutilised roadspace. Figure 7.3 below illustrates the underutilised space currently on the N20 while Figure 7.4 provides an example of a high quality segregated cycle track which has been retro fitted to an urban dual carriageway. Figure 7.5 shows a potential future cross section for the N20.

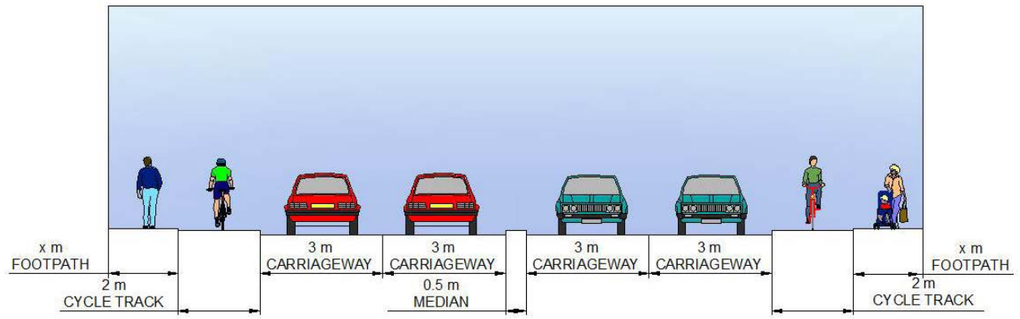
Key Locations Served:
Surrounding residential area, primary and secondary schools, Blackpool Shopping Centre, IU6 to Blarney and the city centre

Pinch Points/Constraints:
Strategic standing of N20 as a national primary route, although precedent has been set in establishing cycle tracks on National primaries in other locations.

Figure 7.3 Underutilised Roadspace on N20

Figure 7.4 Segregated Cycle Track Retrofitted to Urban Dual Carriageway

Figure 7.5 Potential future cross section for the N20



POTENTIAL CROSS SECTION_N20

ROUTE CODE: CCN-U13

Road Name:
Dublin Hill Middle

Section (where applicable):
Railway Bridge to Thorndale Estate

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a primary route with on-road cycle lanes. A cycle lane in the uphill direction should be prioritised where road space is limited.

Key Locations Served:
Surrounding residential area, Blackpool Shopping Centre, City North Business Park and Railway Bridge.

Pinch Points/Constraints:
Some road widening and car parking management may be necessary to provide adequate road width for cycle lanes in each direction. Road width under the railway bridge is a pinch point.

ROUTE CODE: CCN-U14

Road Name:
North Ring Road

Section (where applicable):
Glen Avenue to Ballyhooly Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a primary route with the provision of either on-road cycle lanes or a segregated cycle track. This can be achieved through a reconfiguration of road markings to provide space for cycle lanes as well as utilisation of grass verging. A suitable crossing (e.g. toucan) should be provided to allow cyclists going in an east-bound direction to access the Glen route (CCN-GW1).

Key Locations Served:
Surrounding residential area, Blackpool, City North Business Park.

Pinch Points/Constraints:
Adequate road markings and signage will be required to provide necessary safety and comfort for cyclists along this route.

ROUTE CODE: CCN-U15

Road Name:
Glen Avenue

Section (where applicable):
North Ring Road to Ballyhooly Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a primary route with the provision of on-road mandatory cycle lanes. This will require some road redistribution along this route. This would also help to reduce speeds by widening footpaths narrowing road widths. Consideration to be given to shared facilities.

Key Locations Served:
Surrounding residential area, St. Brendans and St. Marks School, The Glen Resource Centre.

Pinch Points/Constraints:
Road widening may be required to provide cycle lanes in both directions along this route. This should be available within the existing grass verges along this route.

ROUTE CODE: CCN-U16

Road Name:
Thorndale Estate, Glenthorne Mews and Mervue Lawn

Section (where applicable):
Dublin Hill Middle to Ballyhooly Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a secondary route through the residential area which provides a less trafficked east/west route for cyclists. Traffic calming should be the main focus in implementation. A segregated link is required between Thorndale Estate and Glenthorne Mews.

Key Locations Served:
Surrounding residential area, primary and secondary schools.

Pinch Points/Constraints:
A mixed street, traffic calmed environment with junction treatments to alert motorists to cyclists can easily be implemented here.

ROUTE CODE: CCN-U17

Road Name:
Ballyhooly Road

Section (where applicable):
Glen Avenue to Mervue Lawn

Existing Facility and Quality of Service: There are
currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a primary route with on-road cycle lanes that will require road widening and management of on-street car parking. Some sections of this route have limited road space. An uphill cycle lane should be prioritised where road space is limited. This route could be extended further north to serve other areas of the Ballyvolane Master Plan site if required in the future.

Key Locations Served:
Surrounding residential area, Ballyvolane Master Plan site, Ballyvolane Shopping Centre.

Pinch Points/Constraints:
Traffic and car parking management will be required in order to provide adequate road width for dedicated cycle lanes. A mixed street, traffic calmed environment with junction treatments to alert motorists to cyclists can be implemented if the necessary road width cannot be provided along this route.

ROUTE CODE: CCN-U18

Road Name:
Ballyhooly Road

Section (where applicable):
Middle Glanmire Road to Glen Avenue

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This will be a primary route with on-road cycle lanes that will require management of on-street car parking to provide necessary width for cycle lanes. Some sections of this route have limited road space. An uphill cycle lane should be prioritised where road space is limited. This could form part of a one way loop with Gardiners Hill to the east. A segregated cycle link to St. Patricks Primary and Secondary Schools can be provided from this link at Harrington Row.

Key Locations Served:
Surrounding residential area, link to the City Centre, St. Patricks Primary and Secondary Schools (700 pupils).

Pinch Points/Constraints:
Traffic and car parking management will be required in order to provide adequate road width for dedicated cycle lanes. A mixed street, traffic calmed environment with junction treatments to alert motorists to cyclists can be implemented if the necessary road width cannot be provided along this route.

ROUTE CODE: CCN-U19

Road Name:
Summerhill

Section (where applicable):
MacCurtain Street to Middle Glanmire Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a primary route with on-road cycle lanes that will require management of on-street car parking to provide necessary width for cycle lanes and potentially will require a portion of the existing footpath at particularly constrained locations. An uphill cycle lane should be prioritised where road space is limited.

Key Locations Served:
Surrounding residential area, link to the City Centre, St, Luke's School (via Victoria Terrace).

Pinch Points/Constraints:
Traffic and car parking management will be required in order to provide adequate road width for dedicated cycle lanes. A mixed street, traffic calmed environment with junction treatments to alert motorists to cyclists may be implemented if the necessary road width cannot be provided at some points along this route.

ROUTE CODE: CCN-U21

Road Name:
Old Youghal Road

Section (where applicable):
Ballyhooly Road to North Ring Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a primary route with on-road cycle lanes where sufficient road space is currently available or can be provided through road widening. A mixed street, traffic calmed environment with junction treatments to alert motorists to cyclists may be implemented if the necessary road width cannot be provided at some points along this route.

Key Locations Served:
Surrounding residential area, Mayfield Community College, Mayfield Sports Complex, Mayfield Business Park, St. Josephs Primary School.

Pinch Points/Constraints:
Road widening, traffic and car parking management will be required in order to provide adequate road width for dedicated cycle lanes. Substantial traffic calming measures will be required where mixed street environment is implemented.

ROUTE CODE: CCN-U22

Road Name:
Middle Glanmire Road, Colmcille Avenue

Section (where applicable):
Approximately 100 metres west of Tracton Avenue to Summerhill North

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a primary route with a mixed street environment. Due to the very limited road width available, focus should be on speed reduction and improving driver awareness of cyclists.

Key Locations Served:
Surrounding residential area, local primary schools.

Pinch Points/Constraints:
Road widening, traffic and car parking management will be required in order to provide adequate road width for dedicated cycle lanes.

ROUTE CODE: CCN-U23

Road Name:
North Ring Road

Section (where applicable):
From Ballyhooly Road connecting to Greenway CCN-GW2 and on to Colmcille Avenue.

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a primary route with a widened footpath providing a segregated, shared path adjacent to the existing carriageway. A two way segregated cycle track is proposed on the east side of the North Ring Road linking with greenway CCN-GW2 as far as the Old Youghal Road and a segregated track on both sides of the road south of Youghal Road that will be shared with pedestrians.

Key Locations Served:
Surrounding residential area, Mayfield Business Park, St John the Apostle Primary School and links to the Greenway Network to north.

Pinch Points/Constraints:
Footpath widening is required to provide shared cycle and pedestrian path.

ROUTE CODE: CCN-U24

Road Name:
Boherboy Road

Section (where applicable):
North Ring Road to Glanmire Wood Amenity Route

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a primary route through the residential area. Road widening and management of on-street parking and traffic speeds would enable dedicated cycle lanes to be implemented, however a mixed street environment should be sufficiently safe for cyclists along this link.

Key Locations Served:
Surrounding residential area, Schoil Mhuire Banríon.

Pinch Points/Constraints:
Traffic and car parking management will be required in order to provide adequate road width for dedicated cycle lanes. A mixed street, traffic calmed environment with junction treatments to alert motorists to cyclists can be implemented if the necessary road width cannot be provided.

ROUTE CODE: CCN-U25

Road Name:
North Ring Road

Section (where applicable):
From Junction with N8 to Colmcille Avenue

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a primary route with a segregated cycle track on both sides of the road that will be shared with pedestrians. Where the necessary width cannot be provided a cycle track in an uphill direction should be prioritised.

Key Locations Served:
Surrounding residential area, link to the City Centre via Lower Glanmire Road.

Pinch Points/Constraints:
Footpath widening will be required to provide a shared cycle and pedestrian path. There is a significant gradient in a northbound direction.

ROUTE CODE: CCN-U26

Road Name:
Lower Glanmire Road

Section (where applicable):
Dunkettle Roundabout to Penrose Quay

Existing Facility and Quality of Service:
This route incorporates the existing two way cycle track to the train station that has a QoS of B.

Proposed QoS:
It is proposed to maintain existing facilities and provide a QoS of at least B on new facilities proposed on this route.

Proposed Infrastructure Type:
This is proposed as a primary route with on-road cycle lanes where sufficient road space is available or can be provided through car parking management or road widening using the existing central median. Some sections of the Lower Glanmire have limited road width where a mixed street arrangement may be necessary if adequate road width cannot be provided for dedicated cycle lanes. This route may also incorporate a two way cycle track on the Penrose Quay section to complete an amenity link for the full length of the north quays. This route can form part of the Eurovelo network picking up IU-1 from Midleton at Dunkettle Roundabout. The route can connect with the greenway network to Ballincollig and the west via the proposed City Centre cycling network along the City Quays.

Key Locations Served:
Surrounding residential area, links to City Centre and East Cork, Kent Station.

Pinch Points/Constraints:
Road widening, traffic and car parking management is required in order to provide adequate road width for dedicated cycle lanes. Substantial traffic calming measures will be required where a mixed street environment is implemented. Safe crossings will be required at North Ring Road on and off slips. A significant pinch point exists at the Skew Bridge that will require adequate traffic management or a cyclist bridge to provide safety and comfort for cyclists at this section. It may be possible that Port or Cork lands could be developed for the provision of an off road cycle track which would avoid the need to use the constrained and potentially hazardous Skew Bridge, consultation required.

ROUTE CODE: CCN-U27 (PLEASE SEE INTER-URBAN ROUTE MAP FOR FULL EXTENT OF THIS ROUTE)

Road Name:
Glanmire Wood Amenity Route

Section (where applicable):
From Greenway CCN-GW2 to Boherboy Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is a proposed secondary route that will take the form of an amenity/greenway route that will travel via Glanmire Woods to Boherboy Road. The existing path should be upgraded to facilitate cyclists.

Key Locations Served:
Leisure/amenity cyclists.

Pinch Points/Constraints:
Land ownership and access may be an issue along this route.

ROUTE CODE: CCN-U28

Road Name:
Sundays Well Road

Section (where applicable):
Thomas Davis Bridge to Shanakiel Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a primary route in a mixed street environment. Road cross sections on this section of the route fluctuate and combined with the prevalence of residential parking, it would difficult to implement facilities on this route. It is proposed that this route is a mixed street where the narrowing of traffic lanes should be considered as well as the formalisation of parking arrangements. Future use as an amenity use could be looked due to its proximity to the river.

Key Locations Served:
The Mardyke, Sacred Heart College Church, Cork Gaol, surrounding residential area

Pinch Points/Constraints:
Inconsistent cross section, residential parking, gradients at some locations

ROUTE CODE: CCN-U29

Road Name:
Upper Fairhill

Section (where applicable):
N20 to Fairfield Road via Fairhill Drive

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with some road widening required to provide cycle lanes in each direction between Fairhill Drive and Fairfield Road. The section through Fairhill Drive and Parklands Drive will be mixed street through residential housing estates.

Key Locations Served:
Surrounding residential area, Hollyhill employment area, links to Blarney Greenway route.

Pinch Points/Constraints:
Traffic and car parking management will be required to provide adequate safety and comfort for cyclists along this route. Some road widening may also be necessary to provide cycle lanes.

ROUTE CODE: CCN-U30

Road Name:
Nash's Boreen

Section (where applicable):
Upper Fairhill to Kilmore Heights

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a primary route/amenity route with a portion of the route - from the junction of Nash's Boreen with Upper Fairhill to approximately 1km west along Nash's Boreen – shared with limited on-road vehicular traffic. The remainder of the route from here to Kilmore heights is an informal segregated walking path as shown below. The path should be upgraded and signed as necessary to encourage cycle usage.

Key Locations Served:
Surrounding residential area, Hollymount Industrial Area, Apple Distribution Centre.

Pinch Points/Constraints:
Signage, lighting and road markings will be required to provide adequate safety and comfort for cyclists along this route.

ROUTE CODE: CCN-U31

Road Name:
Cathedral Road/Baker's Road

Section (where applicable):
Saint Colmcilles Road to Wolfe Tone Street and Baker's Road to Harbour View Road via St. Mary's Health Campus

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a primary route with a mixed street environment. The existing low-impact traffic setting along this link makes it a suitable for cyclist to use as an alternative east-west route to the primary route along St. Colmcilles Road. A cycle/pedestrian route through St. Mary's Health Campus should be explored as part of this route.

Key Locations Served:
Surrounding residential area, St Mary's Health Campus, links to local primary and secondary schools

Pinch Points/Constraints:
Low impact traffic environment along this link is suitable for cycling. The environment can be improved for cyclists with adequate signage and road markings.

ROUTE CODE: CCN-U32

Road Name:
Shanakiel Road/Blarney Road

Section (where applicable):
Strawberry Hill to Harbour View Road via Mile Stream

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a primary route with a mixed street environment where the potential to widen the existing carriageway is limited by the locations of existing properties. The low impact traffic setting along this link and through residential housing estates will facilitate a secondary route for cyclists wishing to access Hollyhill Industrial Estate and surrounding residential areas.

Key Locations Served:
Surrounding residential area, links to Hollymount employment area.

Pinch Points/Constraints:
Low impact traffic environment along this link is suitable for cycling. The environment can be improved for cyclists with adequate signage and road markings.

ROUTE CODE: CCN-U33

Road Name:
Sunday's Well Road

Section (where applicable):
North Mall to Strawberry Hill

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street environment providing a link to Cork Gaol.

Key Locations Served:
Surrounding residential area, Cork Gaol and the Apple site.

Pinch Points/Constraints:
The low impact traffic environment along this link is suitable for cycling. The environment can be improved with adequate signage and road markings.

ROUTE CODE: CCN-U34

Road Name:
Wellington Road via Bridge Street and St. Patricks Hill south

Section (where applicable):
Bridge Street to Summerhill North

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with a shared on-road facility. Alternatively, much of the parking on Wellington Road is perpendicular / angular, if this could be converted to parallel and uphill cycle lane could be provided. The link at St. Patricks Hill could incorporate a groove for bicycles to be pulled alongside steps for a more convenient route for cyclists.

Key Locations Served:
Surrounding residential area, primary and secondary schools, links to City Centre.

Pinch Points/Constraints:
Low impact traffic environment along this link is suitable for cycling. The environment can be improved for cyclists with adequate signage and road markings.

ROUTE CODE: CCN-U35

Road Name:
Old Youghal Road

Section (where applicable):
Richmond Hill to Ballyhooly Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street environment. The width of the street varies along this route with some sections being wide enough to introduce dedicated facilities but due to the low-impact traffic setting along this section a mixed street arrangement would be sufficient.

Key Locations Served:
Surrounding residential area, primary and secondary schools, links to City Centre.

Pinch Points/Constraints:
Low impact traffic environment along this link is suitable for cycling. The environment can be improved for cyclists with adequate signage and road markings.

ROUTE CODE: CCN-U36

Road Name:
Murmount Avenue/ Murmont Road

Section (where applicable):
Colmcille Avenue to Gardiner's Hill

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street environment within residential streets.

Key Locations Served:
Surrounding residential area

Pinch Points/Constraints:
Low impact traffic environment along this link is suitable for cycling. The environment can be improved for cyclists with adequate signage and road markings.

ROUTE CODE: CCN-U37

Road Name:
Colmcille Avenue

Section (where applicable):
Old Youghal Road to North Ring Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street environment along streets with a low-impact traffic setting.

Key Locations Served:
Surrounding residential area, Mayfield Community College.

Pinch Points/Constraints:
Low impact traffic environment along this link is suitable for cycling. The environment can be improved for cyclists with adequate signage and road markings.

ROUTE CODE: CCN-U38

Road Name:
Ballinecollie Road/Glenheights Road

Section (where applicable):
Mervue Lawn to Spring Lane

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street environment through residential streets to provide a secondary north south link between residential areas and primary and secondary schools to the north.

Key Locations Served:
Surrounding residential area, primary and secondary schools.

Pinch Points/Constraints:
Low impact traffic environment along this link is suitable for cycling. The environment can be improved for cyclists with adequate signage and road markings.

ROUTE CODE: CCN-U39

Road Name:
Assumption Road

Section (where applicable):
Glen Avenue to N20

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street environment that is an alternative north-south route to the constrained section of the N20.

Key Locations Served:
Surrounding residential area.

Pinch Points/Constraints:
Low impact traffic environment along this link is suitable for cycling. The environment can be improved for cyclists with adequate signage and road markings. Junctions with North Ring Road and N20 will need to be high quality with provision of a toucan crossing for cyclists to connect conveniently.

ROUTE CODE: CCN-U40

Road Name:
Spring Lane

Section (where applicable):
N20 to North Ring Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a primary route with a mixed street environment. This route will provide a route to bypass the constrained section of the N20, which is currently dangerous for cyclists with limited opportunities for re-designation of road space due to the volumes of traffic accommodated along this section of the route.

Key Locations Served:
Surrounding residential area, Blackpool Shopping Centre.

Pinch Points/Constraints:
Low impact traffic environment along this link is suitable for cycling. The environment can be improved for cyclists with adequate signage and road markings. Junctions with North Ring Road and N20 will need to be high quality to allow convenient crossings for cyclists.

Figure 7.6`
Example of wheel ramp for cyclists to push bike up or down steps

ROUTE CODE: CCN-U41

Road Name:
Old Youghal Road

Section (where applicable):
Tinkers Cross to Church Hill

Existing Facility and Quality of Service:
There is no existing infrastructure on this link.

Proposed Infrastructure Type:
The section of the Old Youghal Road between Tinkers Cross and Church Hill is a single carriageway road with a cross sectional width of approximately 7m. The road is a regional road and the primary route to Glanmire for traffic travelling from the northeast of the city. Reserve width is available at the western end of the road near Tinkers Cross which could be used to provide additional width for cycle facilities however, the width of the route is constrained further east and this would not be possible. This route has been identified as a strong corridor of future demand and is therefore classed as a primary route. Where road widening is possible it should be carried out to provide dedicated facilities and where it is not traffic calming and appropriate signing and lining will need to be implemented. Narrowing the traffic lanes and providing an uphill cycle lane for outbound cyclists on the steepest section of the road should be the priority on this route.

Key Locations Served:
Mayfield, Mayfield Business Park, west Glanmire

Pinch Points / Constraints:
The road narrows the further east is travelled. Traffic speeds may be an issue due to the rural nature of the road. Moderate to steep gradient at one point of the road.

ROUTE CODE: CCN-U42

Road Name:
Fair Hill

Section (where applicable):
Sunvalley Drive to Mount Agnes Road

Existing Facility and Quality of Service:
There is no existing infrastructure on this link.

Proposed Infrastructure Type:
Fair Hill is proposed as a secondary route on the future route network. The road is mainly residential in nature with a lot of on street parking. The focus on this route is to provide for cyclists travelling uphill as there is not sufficient room to provide for cyclists in both directions. Southbound cyclists will be travelling downhill and their speed will be comparable with vehicular traffic therefore facilities are not required. Where possible, 2m wide mandatory cycle lane should be provided with parking being consolidated to one side of the street where possible. Due to width constraints at the southern end of the road, this may only be possible north of Innishannon Road. In addition, the layout of the roundabout at the junction of Knockfree Avenue and Knockpogue Avenue should be revised and made more cycle friendly in accordance with the mini roundabout or shared roundabout designs outlined in the National Cycle Manual.

Key Locations Served:
North Monastery Secondary School, Scoil Mhuire Fatima, Gaelchloáiste Mhuire, Na Pairsigh GAA, Farranree Community Library, surrounding residential area.

Pinch Points / Constraints:
Extensive on street parking which, judging by demand, may be consolidated to one side of street. Width constraints between North Monastery Road and Innishannon Road.

City North Greenway Routes

ROUTE CODE: CCN-GW1

Road Name:
The Glen Greenway

Section (where applicable):
North Ring Road to Ballyhooly Road and North Ring Road

Existing Facility and Quality of Service:
Although there is an existing path along this route it is not specifically designated for cycling and therefore no QoS assessment has been carried out.

Proposed Infrastructure Type:
This is an existing route that requires appropriate signage and road markings to direct cyclists. This route is an effective alternative for east-west trips to the busy North Ring Road. Potential exists to link through Riverview Estate to connect to North Ring Road and CCN-GW2, this should increase permeability in the area and would serve the Riverview residential area well.

Key Locations Served:
The Glen, Mayfield, Kilbarry, Riverview residential areas

Pinch Points/Constraints:
No major constraints given the existing nature of this route. Signage, safety upgrades and route information required to promote this as a suitable cycling route.

ROUTE CODE: CCN-GW2

Road Name:
Mayfield Greenway

Section (where applicable):
Ballyhooly Road to Rathcooney Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
Provision of two way segregated cycle track within this existing public open space. This route may incorporate a future link to Ballyvolane Master Plan site

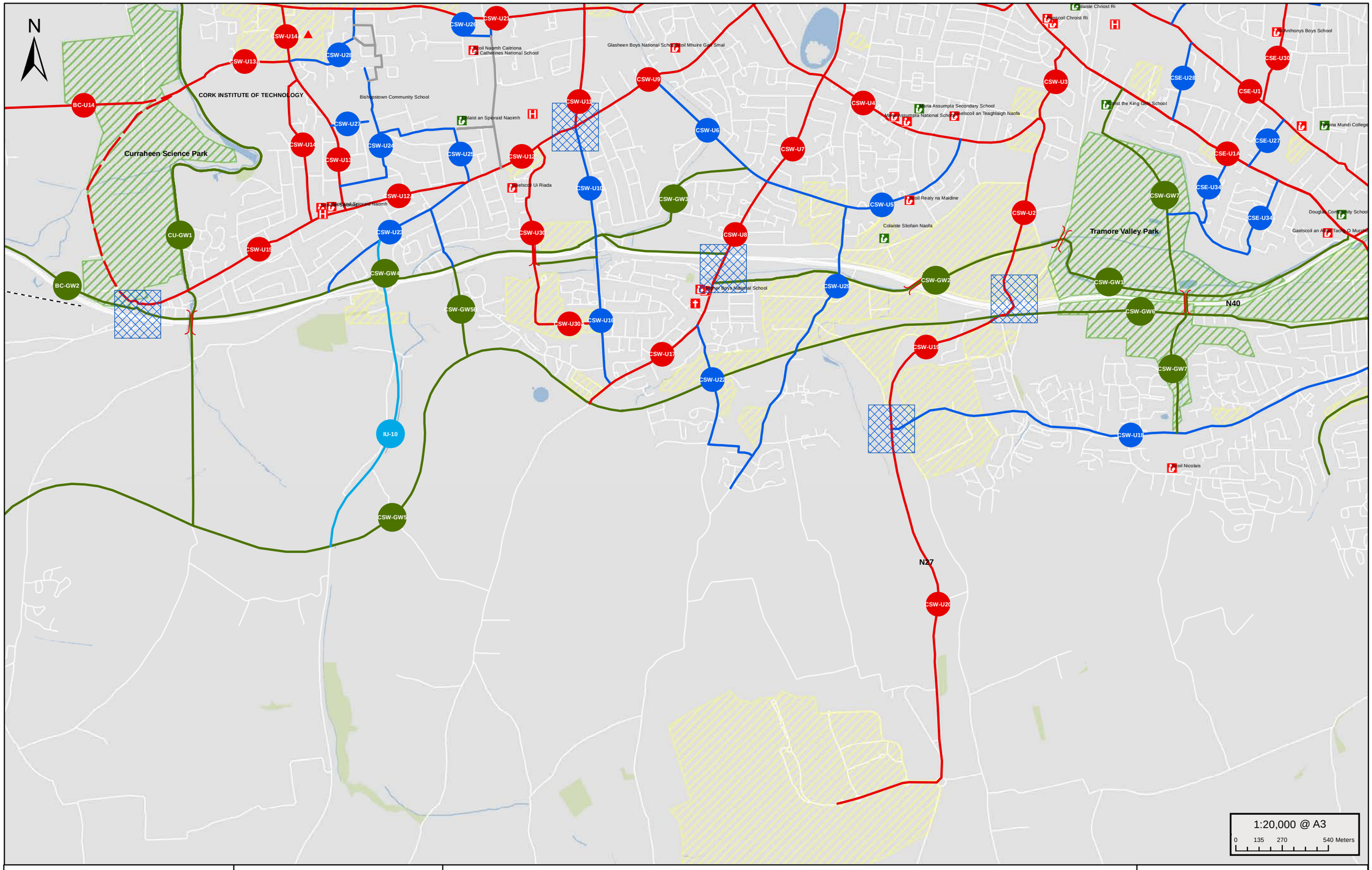
Key Locations Served:
Mayfield, Ballyvolane

Pinch Points/Constraints:
No major constraints given the greenfield nature of this site. Appropriate environmental issues will need to be considered where necessary.

08

Cork City South West

Map U3 Proposed Future Network - Cork City South West



Project:	Title:	Legend:
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	U3 - CORK CITY SOUTHWEST & ENVIRONS	**Future Network Facility Type**: Greenway, Interurban, Primary, Possible Primary, Secondary, Feeder; University, Hospital, Place of Worship; Primary School, Secondary School; Train Station, NewTrain Station, Irish Rail Network, Disused Railways; Gateway, N28 Upgrade, New Bridge; Ferry Terminal, Ferry Connection, Employment Centre, Masterplan Area

AECOM
4th Floor, Adelphi Plaza,
Upper Georges Street,
Dun Laoghaire, Co, Dublin
Tel: +353 (0)1 238 3100
Fax: +353 (0)1 238 3199
www.aecom.com

08 Cork City South West

8.1 Introduction

The main cycling infrastructure in place in the Cork City South West area currently is at Curraheen River Greenway, N27 to and from the airport, Sarsfield and Wilton Road and Kinsale Road.

Apart from the Curraheen River Greenway that has a QoS of A+ the majority of the cycling infrastructure in this area is of a lower standard with a QoS of C or D. Map E3 illustrates the existing cycling infrastructure in place in the Cork City South West area.

The main trip generators in the area include CIT, Wilton Shopping Centre, employment areas in Doughcloyne and Togher, Cork University Hospital and in the future Curraheen Science Park.

The main demand corridors in the City South West area in future years are on Model Farm Road and Glasheen Road. Additional flow clusters are forecast at Leesdale, around Cork University Hospital, Old Kinsale Road and Sarsfield Road.

A considerable network of greenway routes are proposed in this area that will facilitate an orbital route from the west to the east of the city.

An east-west Greenway route is proposed from Curraheen to Douglas via Tramore Valley Park (CSW-GW1 to GW4). This will ultimately connect the Curraheen River Greenway in the west with the Passage West Greenway beyond Douglas and Rochestown. Other important routes will provide direct access to the City from Togher, Wilton and Bishopstown, connect to CIT and provide an additional east-west route to serve the residential areas and schools in Togher.

Connecting the network across the N40 and providing arterial routes to and from the City Centre are two additional elements of the proposals in the Cork South West Area. Cycling connections across the N40 are proposed at Bishopstown Court, Sarsfield Road Roundabout (to Togher Industrial Estate) and at the N27/N40 intersection. Existing crossings will be utilised where possible particularly the recent upgrade to the Sarsfield Road crossing, upgrade of the existing underpass at Togher Industrial Park and on-road crossings at Togher Road. Crossings of the main arterial routes will also be required to facilitate east-west journeys along the Greenway parallel to the N40. The main arterial routes into the City Centre from the South West area will be along Glasheen Road, Model Farm Road (connecting CIT to the City), Lough Road and Kinsale Road – which joins with a main south east arterial route on South Douglas Road.

The main routes proposed in the Cork City South West area are the following:

– Greenway routes CSW-GW1 to GW8 – these routes will provide an important leisure and tourism function as well as an alternative route for commuter cyclists;

– CSW-U4 – The east-west route at Pearse Road provides an important collector function for east-west trips to destinations such as CIT and UCC;

– CSW-U7, U11 and U21 – These three routes provide the main arterial routes into the City from the south western suburbs.

Other important elements of the route network in this area will include the resolution of safety issues for cyclists at the Wilton Roundabout, the connection of CSW-GW2 with CSW-GW3 at Togher Road, the Kinsale Road crossing of the N40 and junction treatments at the intersection of Airport Road and Kinsale Road for safe cycling movement.

The descriptions below should be read in conjunction with Map U3 which sets out the proposed network in this area.

8.2 N40 Corridor

The N40 carriageway is an important factor when planning cycle linkages between the City area and the County area which is broadly divided by this corridor. Within the Cork City South West network area, the N40 stretches from the Curraheen Road interchange in the west to Tramore Valley Park in the east.

Three 'gateways', or important intersections, are highlighted on Map U3 along the N40 within the South West area. These gateways are highlighted at:

– The Curraheen Road Interchange;

– Togher Road flyover; and

– The South Link Interchange.

Each of these gateways will require specific investigation to determine a suitable arrangement for safe cyclist movements. This may include grade separated crossings, at-grade crossing arrangements, road signage and road markings.

A number of additional crossings are proposed north-south across the N40 that will provide strategic links across this barrier. These crossings are:

– Proposed greenway overbridge crossing as part of CSW-GW5B providing a link to a proposed greenway on the disused Kinsale Rail Line and linking to existing east-west greenway CSW-GW4;

– Proposed overbridge crossing linking Doughcloyne industrial estate to Bishopstown, Cork University Hospital and east-west greenway CSW-GW4;

– Existing at-grade crossing at Sarsfield roundabout;

– On-road, mixed street crossing on Lower Pouladuff Road;

– Upgrade of existing N40 underpass as part of CSW-GW2; and

– Proposed greenway crossing as part of redevelopment of Tramore Valley Park.

These crossings will provide significant benefits to cycle trips across the N40.

8.3 Route Descriptions

The following sections outline decries the routes in the proposed network in Cork City South West area in more detail.

ROUTE CODE: CSW-U2

Road Name:
Kinsale Road

Section (where applicable):
N40 intersection to Tramore Road

Existing Facility and Quality of Service:
There is currently a two-way cycle path along this route with a QoS of D.

Proposed QoS:
It is proposed to increase the QoS to at least B on this route through surface and junction treatments.

Proposed Infrastructure Type:
This primary route will incorporate the existing two-way cycle lane. The route is currently badly maintained and in need of minor upgrades. Additional signage at junctions warning drivers of cyclists is recommended. A crossing of Kinsale Road for the east-west Greenway (CSW-GW2) is proposed at River Tramore. Crossing of N40 would occur at grade beneath the N40 push button signals to connect with CSW-GW5 (Greenway) and CSW-U19 (Kinsale Road).

Key Locations Served:
Blackash Industrial Estate, South Ring West Business Park and surrounding employers and residential areas.

Pinch Points/Constraints:
Junction treatments and/or signage will be required where two way cycle path crosses entrances and access roads to improve cyclist safety.

ROUTE CODE: CSW-U3

Road Name:
Curragh Road

Section (where applicable):
South Douglas Road to Pearse Road.

Existing Facility and Quality of Service:
Some short sections of cycle lane at junction with

Proposed QoS:
It is proposed to increase the QoS to at least B on this route through extended cycle lanes and a mixed street environment that will accommodate a safe and comfortable cycle route.

Proposed Infrastructure Type:
This is proposed as a primary route that will require the removal of car parking, central median (closer to South Douglas Road) and/or widening of footpaths to provide a shared pedestrian/cyclist route. Where road widening cannot be achieved a high quality mixed street environment is proposed.

Key Locations Served:
Surrounding residential area and employment zones, Cork City Football Club and links to Douglas and the City Centre via South Douglas Road.

Pinch Points/Constraints:
Existing wide footpaths can be widened to provide a shared footpath/cycle path. The reduced road width will contribute to traffic calming. The transition from cycle path to mixed street environment should be carefully considered.

ROUTE CODE: CSW-U4

Road Name:
Pearse Road

Section (where applicable):
Kinsale Road to Togher Road

Existing Facility and Quality of Service:
There is currently no cycling infrastructure along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with mandatory cycle lanes in both directions. A portion of footpath width will be required to provide the necessary width for cycle lanes.

Key Locations Served:
Surrounding residential area, primary and secondary Schools, Musgrave Park.

Pinch Points/Constraints:
The designation of a portion of the road space to cycle lanes may be an issue but can be alleviated by the use of green verges and generous footpath widths along this route.

ROUTE CODE: CSW-U5

Road Name:
Connolly Road

Section (where applicable):
Pearse Street to Lower Pouladuff Road

Existing Facility and Quality of Service:
There is currently no cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street environment is proposed if car parking cannot be removed, which would be suitable given the low impact nature of the traffic along this route.

Key Locations Served:
Surrounding residential area, Colaiste Stiofáin Naofa

Pinch Points/Constraints:
Restricted road width caused by on-street parking means a mixed street may be the only viable option to provide for improved cyclist safety. This can be achieved through appropriate signage, road marking and traffic management measures.

ROUTE CODE: CSW-U6

Road Name:
Vicars Road

Section (where applicable):
Lower Pouladuff Road to Togher Road

Existing Facility and Quality of Service:
There is currently a section of cycle lane westbound on this route with a QoS of C.

Proposed QoS:
It is proposed to increase the QoS to at least B on this route through surface and junction treatments.

Proposed Infrastructure Type:
This is proposed as a secondary route with the existing westbound cycle lane maintained and a similar facility implemented in an eastbound direction.
The existing footpath could be widened to provide a shared pedestrian/cycle path.

Key Locations Served:
Surrounding residential area, employment locations (QDS, South Cork Industrial Estate).

Pinch Points/Constraints:
Junction treatment required where proposed path crosses entry points and access roads.

ROUTE CODE: CSW-U6

Road Name:
Clashduv Road

Section (where applicable):
Togher Road to Glasheen Road

Existing Facility and Quality of Service:
There is currently a short section of cycle lane at Clashduv Park westbound with a QoS of B.

Proposed QoS:
It is proposed to maintain a QoS of at least B on this route through surface and junction treatments.

Proposed Infrastructure Type:
This is proposed as a secondary route with the existing westbound cycle lane maintained and a similar facility implemented in an eastbound direction. Removal of the central ghost island and use of the existing verge would provide sufficient space for eastbound cycle lane. This route could be extended to link with an existing off-road path along the Glasheen River that also links to Model Farm Road.

Key Locations Served:
Surrounding residential area, Clashduv Park, Lidl.

Pinch Points/Constraints:
Junction treatment required where proposed path crosses entry points.

ROUTE CODE: CSW-U7

Road Name:
Togher Road

Section (where applicable):
Clashduv Road to Lough Road/The Lough

Existing Facility and Quality of Service:
There are currently no cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with mandatory cycle lanes in both directions. Existing car parking will need to be removed at some locations to provide adequate road space. Existing pedestrian footpath at The Lough could be widened to provide shared cycling/walking path.

Key Locations Served:
Surrounding residential area, The Lough, links to UCC and the City Centre.

Pinch Points/Constraints:
Relocation of car parking may be an issue, however the majority of residential properties have parking available in driveways and as this is a strategic cycling link into the city parking management should be considered in order to provide adequate road width. Road width on approach to the junction with Hartland's Avenue may also be limited but adequate traffic management and junction treatment would negate the need for cycle lanes at this point.

ROUTE CODE: CSW-U8

Road Name:
Togher Road

Section (where applicable):
Clashduv Road to Greenwood Estate

Existing Facility and Quality of Service:
There are currently no cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with mandatory cycle lanes in both directions. Sufficient road width for cycle lanes in both directions between Clashduv Road

Figure 8.1 Existing cycle lane at Clashduv Road

Pearse Road with a QoS of C.

and Woodlawn Mews can be provided by replacing the existing green verge that runs along the western edge of much of this route. A mixed street and traffic managed environment from Woodlawn Mews and along the bridge over the N40 would be the most suitable option here given the restricted road width. This would improve the traffic environment at this neighbourhood centre that has local shops and a GAA complex further to the west.

Key Locations Served:
Surrounding residential area, neighbourhood shops, St. Finbarrs GAA, Togher Scout Hall, linking to east-west Greenway (CSW-GW2 and CSW-GW3 off Clashduv Road).

Pinch Points/Constraints:
Limited road space in the vicinity of the Togher Road/ Deanrock Cottages/N40 crossing may restrict the amount of hard infrastructure that can be put in place at this location. A mixed street arrangement with significant traffic calming measures would provide a suitable environment for cyclists to move about safely. Bridge widening and land acquisition is the other alternative to provide enough width for cycle lanes.

ROUTE CODE: CSW-U9

Road Name:
Glasheen Road

Section (where applicable):
Wilton Road to Tara Lawn

Existing Facility and Quality of Service:
There are currently no cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with limited road space to provide hard infrastructure. It is proposed to provide on-street signage and road markings to reduce traffic speeds and provide improved safety for cyclists in a mixed street environment.

Key Locations Served:
Surrounding residential area, Cork University Hospital.

Pinch Points/Constraints:
There is limited road space available to provide hard infrastructure so it may be more efficient to designate this route as mixed street and provide traffic management measures to allow cyclists to use it.

ROUTE CODE: CSW-U10

Road Name:
Sarsfield Road

Section (where applicable):
Glasheen Road to N40

Existing Facility and Quality of Service:
There is currently a segregated cycle track northbound with a QoS of D and a similar facility southbound with a QoS of C.

Proposed QoS:
It is proposed to provide a QoS of at least B along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route maintaining the existing segregated cycle path in both directions. Crossing of the N40 should be incorporated with a suitable crossing for CSW-GW3 in an east-west direction. This could take the form of a combined at-grade signal crossing and/or overbridge. An overbridge crossing of the N40 may be provided further to the west causing a slight diversion for north-south routes that require a crossing of the N40 (See CSW-U30 for more details on crossing).

Key Locations Served: Surrounding residential area, Cork University Hospital, Wilton Shopping Centre.

Pinch Points/Constraints:
The previous overpass crossing has been removed and replaced with at-grade crossing facilities. A suitable grade separated crossing arrangement in conjunction with the proposed Greenway would increase usage numbers and can be justified to provide adequate cyclist safety.

ROUTE CODE: CSW-U11

Road Name:
Wilton Road

Section (where applicable):
Model Farm Road to Glasheen Road

Existing Facility and Quality of Service:
There is currently a segregated cycle lane northbound with a QoS of C. Quality of existing surface is poor.

Proposed QoS:
It is proposed to provide a QoS of at least B along this route.

Proposed Infrastructure Type:
This is proposed as a primary route maintaining the existing cycle lane within bus lane in the north bound direction. Limited road space means that provision of a cycle lane in a southbound direction will require property acquisition within 1-2 metres of the front gardens of approximately 40 properties along this route. Surface quality on this section has been revised as an issue.

Key Locations Served:
Surrounding residential area, Cork University Hospital, Bishopstown Credit Union, Sports Grounds.

Pinch Points/Constraints:
There is limited road space available to provide cycle lanes in a south bound direction, which means property acquisition would be necessary to provide a cycle lane southbound along this route. An alternative segregated path exists along the eastern boundary of the Presentation Brothers Sports Grounds that could be promoted as the southbound connection in this area.

ROUTE CODE: CSW-U12

Road Name:
Bishopstown Road

Section (where applicable):
Wilton Road to Curraheen Road

Existing Facility and Quality of Service:
There are advisory cycle lanes on Bishopstown Road on the approach to Wilton Roundabout. These cycle lanes have a QoS of C.

Proposed QoS:
It is proposed to provide a QoS of at least B along this route.

Proposed Infrastructure Type:
This is proposed as a primary route that will utilise the existing cycle facilities within bus lanes and advisory cycle lanes on approach to the Wilton roundabout and improve where possible. The road space is limited through Bishopstown where a mixed street environment is encouraged.

Key Locations Served:
Surrounding residential area, Cork University Hospital, Wilton Shopping Centre.

Pinch Points/Constraints:
Limited road width within Bishopstown Village proposed as a mixed street environment. The constrained road width along this section is shown below.

ROUTE CODE: CSW-U12 A

Road Name:
Curraheen Road

Section (where applicable):
Bishopstown Road to Melbourn Road

Existing Facility and Quality of Service:
There are currently no cycle facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with a segregated cycle track in each direction. It is proposed to widen the existing footpaths using the grass verge to provide the necessary width for a cycle track.

Key Locations Served:
Surrounding residential area, Bishopstown Shopping Centre, CIT and local schools.

Pinch Points/Constraints:
Narrow road width at Bishopstown Bar and junction with Bishopstown Road will require a suitable junction treatment to cater for cyclists. There is some scope for road widening at this location to provide cycle lanes on approach to junction.

ROUTE CODE: CSW-U13

Road Name:
Melbourn Road

Section (where applicable):
Curraheen Road to CIT/Leisure World Roundabout

Existing Facility and Quality of Service:
There are currently no dedicated cycle facilities on this link.

Proposed Infrastructure Type:
This is proposed as a primary route with mandatory cycle lanes in each direction. The existing footpaths could be widened to provide shared pedestrian and cycling paths, which may result in some loss of limited on-street car parking that currently takes place along this route.

Key Locations Served:
Surrounding residential area, primary and secondary schools, CIT, feeder routes through residential areas can link to Bishopstown GAA to the east and the Curragheen River Greenway in the west.

Pinch Points/Constraints:
There are limited constraints with this proposal. The loss of green verge will not have a major impact given generous provision in this regard currently.

ROUTE CODE: CSW-U13A

Road Name:
CIT/Leisure World Access Road

Section (where applicable):
Melbourn Road Roundabout to Curragheen River Greenway

Existing Facility and Quality of Service:
There is currently a segregated cycle track eastbound with a QoS of A and a similar facility westbound with a QoS of B.

Proposed QoS:
It is proposed to provide a QoS of at least A along this route.

Proposed Infrastructure Type:
This is proposed as a primary route providing a permanent link to the Curragheen River greenway from CIT. Existing segregated cycle ways along this link should be improved and extended further to the west. The cycle lanes could potentially link into the greenway via the Sports Complex car park to the south of the CIT GAA field.

Key Locations Served:
Surrounding residential area, CIT, Leisure World, Curraheen River Greenway.

Pinch Points/Constraints:
There are limited constraints with this proposal given the existing segregated cycle way along this link. Some level differences between CIT and Curragheen River will need to be addressed to provide a suitable access to Greenway.

ROUTE CODE: CSW-U14

Road Name:
Rossa Avenue

Section (where applicable):
Melbourn Road to Curraheen Road

Existing Facility and Quality of Service:
There is currently an advisory cycle lane northbound (partially contra flow towards south end) with a QoS of D for the southern section and C for the northern section. There is a short section of advisory cycle lane in

Figure 8.2 Potential to provide cycle facilities at Melbourn Road (Source: Google Maps).

a southbound direction with a QoS of D.

Proposed QoS:
It is proposed to provide a QoS of at least B along this route.

Proposed Infrastructure Type:
This is proposed as a primary route providing an alternative link to CIT. Existing advisory cycle lanes along this link should be upgraded to mandatory where possible. Additional traffic calming measures should be implemented to improve cyclist safety along this route. Additional feeder routes through residential areas can also potentially link to Curragheen River Greenway and Cork University Hospital via Melbourn Road.

Key Locations Served:
Surrounding residential area, CIT, Leisure World, primary and secondary schools.

Pinch Points/Constraints:
There is limited road width available at the southern end of this link where a contra flow cycle lane is in place in a northbound direction. With a Primary Route proposed parallel at Melbourn Road it is not considered necessary to provide cycle lanes in both directions for the full length of Rossa Avenue.

ROUTE CODE: CSW-U14A

Road Name:
Rossa Avenue

Section (where applicable):
Model Farm Road to CIT/Leisure World Roundabout

Existing Facility and Quality of Service:
There are currently no cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with mandatory cycle lanes in each direction. The existing footpaths could be widened to provide shared pedestrian and cycling paths.

Key Locations Served:
Surrounding residential area, primary and secondary schools, CIT, feeder routes through residential areas can link to Bishopstown GAA to the east and the Curragheen River Greenway in the west.

Pinch Points/Constraints:
There are limited constraints with this proposal. Loss of green verge as a result of widened footpaths will not have a major impact given the generous provision in this regard currently.

ROUTE CODE: CSW-U145

Road Name:
Curraheen Road

Section (where applicable):
Melbourn Road to University Technology Centre

Existing Facility and Quality of Service:
There is currently a cycle lane within the inbound bus lane along this link. The facility has a QoS of C.

Proposed QoS:
It is proposed to provide a QoS of at least B along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with cycle lanes between University Technology Centre and Rossa Avenue. The existing cycle lane within the city-bound bus lane will be maintained, with a new mandatory cycle lane proposed in an out-bound direction. This may take the form of a widened footpath to provide a shared cycle/pedestrian path where appropriate. The currently constrained road width between Rossa Avenue and Melbourn Road offers limited opportunities for dedicated cycle facilities. Removal of car parking along this section would provide some additional road width. Alternatively a mixed street environment with considerable traffic calming measures would allow cyclists to travel through this section of Curraheen Road more safely. An alternative east-west route (that also serves Scoil an Spioraid Naomh) via Foxford Avenue residential area to the north would be a much more traffic calmed environment and may act as a suitable alternative route for some trips.

Key Locations Served:
Surrounding residential area, Curraheen Science Park.

Pinch Points/Constraints:
Limited road width available between Rossa Avenue and Melbourn Road, however some alternative options exist to accommodate cyclists such as removal of on-street parking, a mixed street environment or an alternative route to the north through residential areas.

ROUTE CODE: CSW-U16

Road Name:
Sarsfields Road

Section (where applicable):
Togher Road to Sarsfield Roundabout

Existing Facility and Quality of Service:
There are currently no existing cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with shared cycle and walking tracks on both sides of the road. It is proposed to widen the existing footpath using the green verge to provide sufficient width. Crossing of the N40 will be via the new at-grade crossings at Sarsfield Roundabout and also via a potential overbridge linking directly to CSW-GW4 (see CSW-U30 for more details). This will require a short length of segregated cycle track and a toucan crossing or similar for cyclists to cross Sarsfield Road.

Key Locations Served:
Surrounding residential area, Doughcloyne Industrial Estate, links to east-west Greenway (CSW-GW3 and GW4).

Pinch Points/Constraints:
There are limited constraints with this option. Provision of crossings will require detailed investigation of impacts on Sarsfield Road.

ROUTE CODE: CSW-U17

Road Name:
Togher Road

Section (where applicable):
Disused Kinsale Railway Corridor to Greenwood Estate

Existing Facility and Quality of Service:
There are currently no cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a primary route with a mixture of shared cycle/pedestrian paths and on-road mandatory cycle lanes. Existing footpaths will need to be widened where road width is limited between Sarsfield Road and Togher Cross. On road mandatory cycle lanes will be provided between Togher Cross and Greenwood Estate.

Key Locations Served:
Surrounding residential area, Doughcloyne neighbourhood centre, primary schools, Links greenway CSW-GW5 and CSW-GW2.

Pinch Points/Constraints:
The limited road width will require traffic calming and reduced speed limits in conjunction with widened footpaths between Sarsfield Road and Togher Cross to improve cyclist safety.

ROUTE CODE: CSW-U18

Road Name:
Donnybrook Hill via. Grange Road

Section (where applicable):
Kinsale Road to Donnybrook Hill (for end point see south east map)

Existing Facility and Quality of Service:
There is currently a cycle lane within the bus lane on the approach to the junction with Douglas Road West with a QoS of C. There is also a short section of bus lane with an inclusive cycle lane in a west bound direction on Grange Terrace with a QoS of B.

Proposed QoS:
It is proposed to provide a QoS of at least B on infrastructure along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with on-road cycle lanes and upgraded cyclist facilities at junctions as recommended in the Douglas Land Use and Transportation Study. Greenway route CSW-GW7 through

The Marlings and other residential areas will provide links to east-west Greenway CSW-GW6 and on to Tramore Valley Park.

Key Locations Served:
Surrounding residential area, Douglas Village, Business and Industrial Parks.

Pinch Points/Constraints:
Road widening may be necessary at Airport Road to provide necessary road width for dedicated cycle facilities. Existing grass verge to be used where possible and some land acquisition may be necessary. Specific treatment of junction with N27 will be necessary to provide adequate cyclist safety.

ROUTE CODE: CSW-U19

Road Name:
Kinsale Road

Section (where applicable):
Airport Road to N40

Existing Facility and Quality of Service:
There is currently a segregated cycle track southbound with a QoS of D. The cycle lanes within the bus lane provided northbound on this link have a QoS of C.

Proposed QoS:
It is proposed to provide a QoS of at least B along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with the existing cycle facilities in bus lane, on-road mandatory and segregated cycle track maintained. Crossing of N40 will take place at-grade. The route will link with east-west greenway (CSW-GW6) into Douglas Village and a future greenway on the isused Kinsale Rail Line (CSW-GW5).

Key Locations Served:
Surrounding residential area, Douglas Village, Business and Industrial Parks.

Pinch Points/Constraints:
Crossing of N40 at N27 intersection is not the most convenient method for cyclists but will provide a direct route in a north south direction. Consideration should be given to the provision of crossing facilities similar to the Sarsfield Road Roundabout.

ROUTE CODE: CSW-U20

Road Name:
Kinsale Road

Section (where applicable):
Airport Road to Airport

Existing Facility and Quality of Service:
There is currently mandatory cycle lanes in both directions on this link that has a current QoS of C.

Proposed QoS:
It is proposed to provide a QoS of at least B along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with existing cycle facilities upgraded to segregated where possible, resurfaced and maintained.

Key Locations Served:
Airport Business Park.

Pinch Points/Constraints:
No major constraints given existing nature of facilities.

ROUTE CODE: CSW-U21

Road Name:
Model Farm Road

Section (where applicable):
Curragheen River Greenway to Wilton Road

Existing Facility and Quality of Service:
There is currently a section of segregated cycle/pedestrian track eastbound at the frontage of Boston Scientific with a QoS B. There is also advisory cycle lanes on both sides of the road further west with a QoS of C.

Proposed QoS:
It is proposed to provide a QoS of at least B along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with existing cycle facilities maintained and upgraded where possible west of Rossa Avenue. The possibility of providing a shared cycle/pedestrian track in both directions between Rossa Avenue and Bishopstown Avenue should be explored (eastbound shared path already in place for a section of this road). The approach to the Wilton Road junction from Model Farm Road is of limited width. The currently constrained road width offers limited opportunities for dedicated cycle facilities. A mixed street environment with considerable traffic calming measures would allow cyclists to travel through this section of Model Farm Road more safely. An alternative east-west route (that also serves Mount Mercy College) via Farranlea Park/ Road residential area to the north would be a much more traffic calmed environment and may act as a suitable alternative route for some trips to avoid the busy Model Farm Road/Wilton Road junction.

Key Locations Served:
Model Business Park employment area, surrounding residential.

Pinch Points/Constraints:
Traffic management and road configurations may need to be altered to provide a continuous cycling facility along this route.

ROUTE CODE: CSW-U22

Road Name:
Togher Road

Section (where applicable):
Doughcloyne Road to Fernwood Crescent

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixture of dedicated cycle lanes where the road width allows and mixed street on-road facilities. The approach to the junction with Doughcloyne Road is constrained by a narrow bridge width and property boundary walls. A mixed street environment would be suitable along this section of the link.

Key Locations Served:
Surrounding residential area, employment areas, links to proposed Disused Kinsale Rail Line Greenway (CSW-GW5).

Pinch Points/Constraints:
Road widening will be required to provide cycle lanes for the full length of this link. Road width is mainly available from pedestrian crossing on approach to Doughcloyne Road junction to Fernwood Crescent.

ROUTE CODE: CSW-U23

Road Name:
Waterfall Road

Section (where applicable):
Curraheen Road to N40

Existing Facility and Quality of Service:
There are currently no cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street on-road environment. The road width is limited along this route, therefore opportunities to provide dedicated cycling facilities are restricted. A connection to greenway CSW-GW5B can be provided through Woodhaven which is a low traffic impact residential street. Considering this route will serve primarily a residential catchment a mixed street environment is considered suitable.

Key Locations Served:
Surrounding residential area, employment areas, links to Greenway CSW-GW4.

Pinch Points/Constraints:
Traffic management, signage and road markings will be required along this link to provide adequate safety for cyclists.

ROUTE CODE: CSW-U24

Road Name:
Melbourn Avenue/Westgate Road

Section (where applicable):
Melbourn Road to Bishopstown Community College

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street on-road environment through low-impact residential streets.

Key Locations Served:
Surrounding residential area, Bishopstown Community College.

Pinch Points/Constraints:
Traffic management, signage and road markings will be required along this link to provide adequate safety for cyclists.

ROUTE CODE: CSW-U25

Road Name:
Merlyn Lawn and Firgrove Lawn

Section (where applicable):
Bishopstown Road to Westgate Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street on-road environment through low-impact residential streets whose catchment will be a large residential area and Colaiste Sporaid Naomh. This route will connect through to CSW-U24 on Firgrove Lawn.

Key Locations Served:
Surrounding residential area, local schools.

Pinch Points/Constraints:

Traffic management, signage and road markings will be required along this link to provide adequate safety for cyclists.

ROUTE CODE: CSW-U26

Road Name:
Convent Lane/Bishopstown Avenue

Section (where applicable):
Model Farm Road loop

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street on-road environment providing a loop to St. Catherine's Primary School.

Key Locations Served:
Surrounding residential area, St. Catherine's Primary School.

Pinch Points/Constraints:
Traffic management, signage and road markings will be required along this link to provide adequate safety for cyclists.

ROUTE CODE: CSW-U27

Road Name:
N/A

Section (where applicable):
Link through park to provide access from Melbourn Road to Bishopstown Community College.

Existing Facility and Quality of Service:
There is currently no dedicated cycling facilities along this link.

Proposed Infrastructure Type:
This is proposed as a secondary route utilising an existing segregated pedestrian track through the park and removing barriers that restrict cycling access.

Key Locations Served:
Bishopstown Community College.

Pinch Points/Constraints:
Signage and road markings will be required along this link to provide adequate safety and legibility for cyclists to use and find this route.

ROUTE CODE: CSW-U28

Road Name:
Leesdale/Parkway Drive

Section (where applicable):
Rossa Avenue to Model Farm Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street on-road environment providing a link between Model Farm Road and CIT

Key Locations Served:
Surrounding residential area, CIT

Pinch Points/Constraints:
Traffic management, signage and road markings will be required along this link to provide adequate safety and legibility for cyclists to use and find this route.

ROUTE CODE: CSW-U29

Road Name:
Pouladuff Road/Lower Pouladuff Road

Section (where applicable):
Disused Kinsale Rail Line Greenway (CSW-GW5) to Laurel Brook

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street environment with limited availability of road space to provide dedicated facilities particularly at the N40 over-bridge. A feeder route through Brook Lane should be investigated to provide a link to CSW-U22.

Key Locations Served:
Sitecast Industrial Estate, Southside Industrial Estate, Togher Industrial Estate.

Pinch Points/Constraints:
Traffic management, signage and road markings will be required along this link to provide adequate safety and legibility for cyclists to use and find this route. Adequate treatment of the roundabout junction south of the N40 will be required to provide safe crossing for cyclists.

ROUTE CODE: CSW-U30

Road Name:
Cardinal Court/Doughcloyne Industrial Estate

Section (where applicable):
Bishopstown Road to Sarsfield Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This is proposed as a primary route that will utilise a mixed street environment within residential streets at Cardinal Court between Bishopstown Road and the N40. An over-bridge is proposed to provide a crossing of the N40 that will also connect to the east-west greenway CSW-GW4 on the north side of the N40 and a short segregated cycle track on the south of the N40 that links to the primary cycle route on Sarsfield Road.
South of the N40 the route can be a mixed street or existing footpaths can be widened to provide shared cycling/pedestrian paths through the Doughcloyne Industrial Estate.

Key Locations Served:
Gaeilscoil Ui Riada, surrounding residential, Bishopstown, Wilton Shopping Centre, Doughcloyne Industrial Estate.

Pinch Points/Constraints:
No major constraints with this proposal given existing road widths and available land for bridge crossing. Adequate junction with Sarsfield Road required to connect with primary route along this link.

City South West Greenway Routes

ROUTE CODE: CSW-GW1

Road Name:
Tramore Valley Park

Section (where applicable):
Willow Park to Kinsale Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This path will form part of the Tramore Valley Park regeneration as a shared walking and cycling Greenway similar to other Greenway facilities in Cork City. Two crossings will be required at the South Link Road and at Kinsale Road to connect to the existing Greenway located to the west of Kinsale Road (CSW-GW2). These crossings ideally should be grade separated to provide the most convenient route for cyclists.

Key Locations Served: Douglas,
Tramore Valley Park, Greenway Network

Pinch Points/Constraints:
There are no major constraints given planned upgrade of Tramore Valley Park. Crossing of north-south vehicle carriageways will require a suitable resolution for a Greenway.

ROUTE CODE: CSW-GW2

Road Name:
Togher Greenway

Section (where applicable):
Togher Road to Kinsale Road

Existing Facility and Quality of Service:
There is currently a segregated cycling and walking path in place for a portion of this route with a QoS of A.

Proposed QoS:
It is proposed to maintain at least a QoS of A along this route.

Proposed Infrastructure Type:
This is an existing path that requires some upgrade works to provide a higher Quality of Service along this route. Resurfacing and widening of the path will be required at a minimum. The path crosses under the N40 and other roads at Togher Industrial Estate and these underpasses (example shown below) will require improvement works to enhance safety and amenity for cyclists and pedestrians along this route.

Key Locations Served:
Surrounding residential area, employment locations, Tramore Valley Park, links to surrounding Greenway Network.

Pinch Points/Constraints:
This Greenway does not link directly to the Greenway Network to the west and will require cyclists to travel via on-road cyclist facilities at Lower Pouladuff Road to re-join the Greenway Network. This can be accommodated through specific signage directing cyclists to the next section of Greenway.

ROUTE CODE: CSW-GW3

Road Name:
Clashduv Park

Section (where applicable):
Clashduv Road to Sarsfield Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This route utilises an existing off-road path through Clashduv Park and travels through residential area streets at Sandymount Avenue to connect to the west. The existing at-grade crossing of Sarsfield road links directly to the Greenway route CSW-GW4.

Key Locations Served:
Surrounding residential area, employment locations, Wilton Shopping centre, St. Finbarrs GAA.

Pinch Points/Constraints:
The cycle route through residential area streets will require signage and road markings rather than a dedicated cycle lane. This can achieve a suitable cycling environment in an already traffic calmed area. Directional signage will be important to provide cyclists information on where the route is located.

ROUTE CODE: CSW-GW4

Road Name:
Bishopstown South (Parallel to north side of N40)

Section (where applicable):
Sarsfield Road to Twopot River

Existing Facility and Quality of Service:
There is currently a section of segregated shared cycling and walking path along this route with a QoS of A.

Proposed QoS:
It is proposed to maintain at least a QoS of A along this route.

Proposed Infrastructure Type:
This route utilises an existing off-road path from Sarsfield Road to Bandon Road. A crossing of Bandon Road will need to be provided. From Bandon Road westwards it is proposed to provide a segregated pathway on the north side of the N40 as close to the carriageway as possible to avoid residential properties to the north. This will be a high quality corridor completely segregated from traffic. This will link in with the Curragheen River Greenway at Twopot River and Curraheen Road.

Figure 8.3 Example of underpass along existing route south of N40.

CSW-GW4 can potentially provide two north south cycling/pedestrian crossings to link areas either side of the N40 corridor. One crossing is possible at Brampton Court where there is available greenspace to provide a bridge crossing linking to Bishopstown Court. A second crossing is possible from Cardinal Court to Doughcloyne Industrial Estate.

Key Locations Served:
Surrounding residential area, employment locations, Wilton Shopping centre, link to Curragheen River Greenway, tourism/leisure cyclists.

Pinch Points/Constraints:
There are some restrictions on available land between the N40 and residential properties along this proposed route.

ROUTE CODE: CSW-GW5

Road Name:
Disused Kinsale Rail Line

Section (where applicable):
From Kinsale Road westwards

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
It is proposed to provide a shared cycling/walking facility along the disused rail line ultimately linking to Kinsale.

Key Locations Served:
Tourism/Leisure cyclists

Pinch Points/Constraints:
Land ownership and farming uses along this route may make this a difficult route to achieve but with sufficient detailed planning and consultation a suitable proposal could be developed. Even a short section along the boundary of the city limits would provide a substantial amenity benefit.

ROUTE CODE: CSW-GW5B

Road Name:
West of Eagle Valley

Section (where applicable):
Disused Kinsale Rail Line Greenway to Greenway CSW-GW4

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This will provide a new greenway link to provide an alternative east-west route to greenway CSW-GW2 and CSW-GW3, where cyclists would have to leave the greenway and use Togher Road for a section. The proposed route will be a two way shared pedestrian and cycle path linking over the N40 via an over bridge.

Key Locations Served:
Surrounding residential area, employment locations, Douglas Village.

Pinch Points/Constraints:
Confirmation of land ownership along this route may be necessary to provide the land for a dedicated Greenway. This link will only be relevant if the disused Kinsale Rail Line Greenway can be built (at least as far as this point).

ROUTE CODE: CSW-GW6

Road Name:
Kinsale Road Roundbaout to Alden

Section (where applicable):
Kinsale Road to Douglas Road West (for end point of this route see south east map)

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
This route utilises an existing informal path parallel to the south side of the N40 corridor. It is proposed to upgrade this path to a shared cycling/pedestrian pathway linking to Douglas Village in the east.

Key Locations Served:
Surrounding residential area, industrial estate employment locations, Douglas Village.

Pinch Points/Constraints:
Confirmation of land ownership along this route may be necessary to provide the land for a dedicated Greenway.

ROUTE CODE: CSW-GW7

Road Name:
Tramore Valley Park

Section (where applicable):
Willow Park to South Douglas Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this route.

Proposed Infrastructure Type:
It is proposed to provide a shared cycling/walking facility through Tramore Valley Park providing an alternative off-road route to South Douglas road. This route also incorporates an overbridge of the N40.

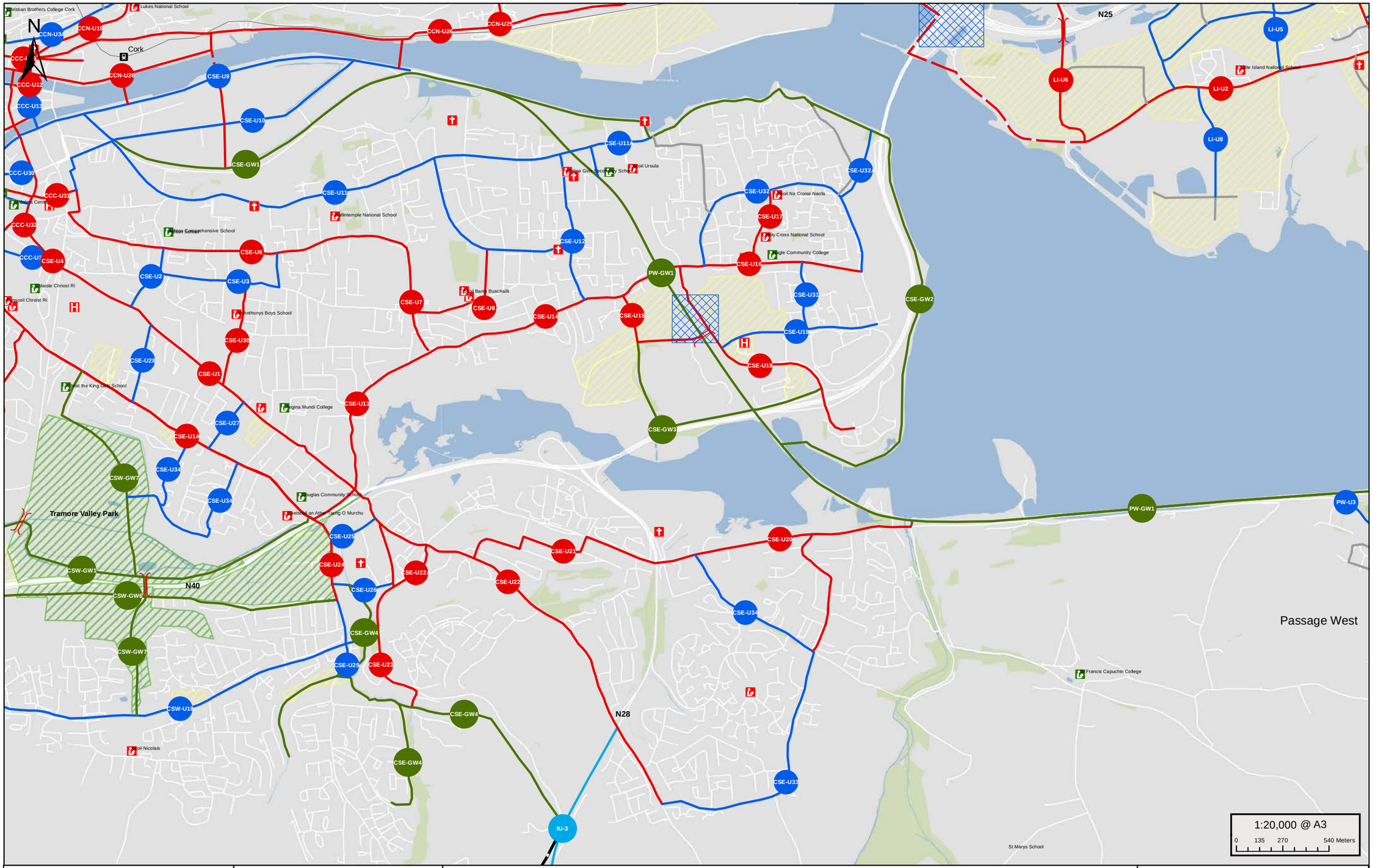
Key Locations Served:
Tramore Valley Park Masterplan site, Douglas Village, Schools, surrounding residential

Pinch Points/Constraints:
There are no major constraints with this route given the planned redevelopment of Tramore Valley Park.

09

Cork City South East

Map U4 Proposed Future Network - Cork City South East



Project:	Title:	Legend:
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	U4 - CORK CITY SOUTHEAST & ENVIRONS	**Future Network Facility Type**: Greenway, Interurban, Primary, Possible Primary, Secondary, Feeder; University, Hospital, Place of Worship; Primary School, Secondary School; Train Station, NewTrain Station, Irish Rail Network, Disused Railways; Gateway, N28 Upgrade, New Bridge; Ferry Terminal, Ferry Connection, Employment Centre, Masterplan Area

AECOM
4th Floor, Adelphi Plaza,
Upper Georges Street,
Dun Laoghaire, Co, Dublin
Tel: +353 (0)1 238 3100
Fax: +353 (0)1 238 3199
www.aecom.com

09 Cork City South East

9.1 Introduction

The Cork City South East Area is bounded by the River Lee to the north, Lough Mahon to the east, the South Link Road to the west and extends to Douglas Golf Club in the south.

The area is served by the Jack Lynch Tunnel and the N40 that runs through the area in an east-west direction. Other major routes to run through the area include the N28 to Ringaskiddy.

Map E4 illustrates the existing cycling infrastructure in place in the area with the Passage West Greenway being the main cycling route through the area and some facilities on Douglas Road, South Douglas Road, Mahon Point Link Road and Skehard Road.

Some of the main trip generators in the area include: Douglas Village and Rochestown, Mahon and associated employment areas and Blackrock including the various schools located in these areas.

The main demand corridors in future years are identified as South Douglas Road, Douglas Road and Passage West Greenway. Other routes with high demand include Blackrock Road, Skehard Road, Boreenmanna Road and Rochestown Road.

Future development proposals for this area include development of the South Docks LAP and the associated road network changes that will complete the connection from the southeast into the city.

The main routes proposed in Cork City South East area are the following:

- Cork South East-Urban Route 1 (Code CSE-U1 on maps) – At Douglas Road outbound it is proposed to upgrade existing cycle lanes and provide clearly defined mixed street sections where the road width cannot be provided for dedicated facilities. This route will provide a key link to Douglas from the City Centre and serve a number of schools;
- CSE-U1A – At South Douglas Road inbound it is proposed to upgrade existing cycle lanes and provide clearly defined mixed street sections where the road width cannot be provided for dedicated facilities. This route will provide a key link from Douglas to the City Centre to key east-west routes across the City and off road cycle tracks through Tramore Valley Park. A number of large schools are served by this route. CSE-U1 and U1A is proposed as a one way loop for cyclists going to and from the City Centre from Douglas;
- CSE-U14 – At Skehard Road it is proposed to provide a mixture of cycle lanes and a segregated cycle track where space allows. The link will provide a key east west link between Douglas Village and Mahon Point and surrounding residential areas;
- CSE-U18 – This will provide an important cycle link along Mahon Point Road providing access to a number of employment areas. A key objective of this route should be to provide a direct connection to the Passage West Greenway;
- CSE-U9, CSE-U10 and CSE-GW1 – At South Docks LAP lands it is proposed that key linkages from the Passage West Greenway into the City Centre will be provided when this area of land is developed. CSE-GW1 is outside the South Docks LAP land and could be developed in advance of the LAP lands if that development is delayed for any reason;
- CSE-U20 and CSE-U21 - These two routes will provide an important east-west link from Douglas Village to the Passage West Greenway. The route will be a mixture of dedicated cycle facilities and through low traffic residential streets in a mixed street arrangement;
- CSE-U7 – Although the demand modelling plot shows the more northerly Blackrock Road as having a higher demand in future years it is proposed to promote Boreenmanna Road as the primary route serving this area owing to the available road width that can provide a more appropriate environment for cyclists. This route serves a substantial residential area and links to a number of spurs to local schools; and
- CSE-U24, CSE-U25 and CSE-U26 – These routes are a series of mixed street environment proposed to promote cycling within Douglas Village. The existing narrow streets and low speed traffic environment should be suitable for cyclists with appropriate interventions such as signage and traffic management.

The descriptions below should be read in conjunction with Map U4 which sets out the proposed network in this area.

9.2 N40 Corridor

Within the Cork City South East network area, the N40 stretches from Tramore Valley Park to the Mahon Point Link Road.

Three crossings are proposed north-south across the N40 within the Cork City South east area that will provide strategic links across this barrier. These crossings are:

- Proposed upgrade of South Douglas and Douglas road to provide inbound and outbound cycling facilities respectively;
- Existing greenway crossing provided as part of Passage West Greenway; and
- Existing Mahon Point Link Road crossing linking to Long Shore Drive.

These crossings will provide significant benefits to cycle trips across the N40 providing direct, safe links to and from the City Centre.

9.3 Route Descriptions

The following sections outline the proposals for the future proposed network in Cork City South East in more detail.

ROUTE CODE: CSE-U1

Road Name:
Douglas Road

Section (where applicable):
N40 to N27

Existing Facility and Quality of Service:
The existing infrastructure consists of cyclist road markings with narrow lane markings and poor surface treatments (QoS D) causing confusion in terms of what sections are for cyclists. Both mandatory and advisory cycle lanes on the southern half of this road in a south bound direction (QoS C) are also provided.

Proposed Quality of Service:
Proposed QoS minimum of B through the upgrade of surfacing on cycle lanes and a clearer definition of mixed street sections.

Proposed Infrastructure Type:
This will be a primary route to Douglas Village from Cork City. This route is currently quite constrained in terms of road width and with high traffic volumes. It is proposed that, where possible, facilities are introduced in an outbound direction and combined with a mixed street approach in an inbound direction. This route will operate as part of a loop system where it is expected outbound cyclists will use the Douglas Road and inbound cyclists will use the South Douglas Road (CSE-U1A). Routes linking Douglas and South Douglas Road are also proposed as secondary links. These are mainly routes through residential areas which have low traffic speeds (see CSE-U27 and U28). This approach is consistent with Figure 10.3 of the Cork City South East Strategic Corridor Transport Study which identifies the Douglas and South Douglas Roads as strategic corridors for walking and cycling where on-road cycle facilities are to be provided.

Key Locations Served:
Douglas Village, primary and secondary schools, key route to the City Centre and to the Passage West Greenway via Rochestown, St. Finbars Hospital.

ROUTE CODE: CSE-U1A

Road Name:
South Douglas Road

Section (where applicable):
N40 to N27

Existing Facility and Quality of Service:
Cyclist road markings and poorly surfaced cycle lanes (QoS D) are provided along this route. Both mandatory and advisory cycle lanes, with limited widths are also provided at various locations along this route (QoS C).

Proposed Quality of Service:
Proposed QoS minimum of B through the upgrade and re-surfacing of existing cycle lanes and a clearer definition of mixed street sections.

Proposed Infrastructure Type:
This is proposed as a primary route to Cork City from Douglas village. This route is currently quite constrained in terms of road width and has high traffic volumes. It is proposed that, where possible, facilities are introduced in an inbound direction and combined with a mixed street approach in an outbound direction and where width does not exist for the provision of an inbound cycle lane. This route will operate as part of a loop system where it is expected outbound cyclists will use the Douglas Road (CSE-U1) and inbound cyclists will use the South Douglas Road. Routes linking Douglas and South Douglas Road are also proposed as secondary links. These are mainly routes through residential areas which have low traffic speeds (see CSE-U27 and U28). This approach is consistent with Figure 1.3 of the Cork City South East Strategic Corridor Transport Study which identifies the Douglas and South Douglas Roads as strategic corridors for walking and cycling where on-road cycling facilities are to be provided.

Key Locations Served:
Douglas Village, primary and secondary schools, route to City Centre, St. Finbars Hospital, connection to Tramore Valley Park Greenway

Pinch Points/Constraints:
Traffic management and upgrade works required to provide improved facilities along this link.

ROUTE CODE: CSE-U2

Road Name:
Bellair Estate and Wallaces Avenue

Section (where applicable):
Douglas Road to Borrenmanna Road

Existing Facility and Quality of Service:
There is no existing cycling infrastructure on this link.

Proposed Infrastructure Type:
This is proposed as a secondary route to provide access to Our Lady of Lourdes National School. The route will also provide a connection for the residential area to the north of the Douglas Road primary route. The route will require a mixed street approach with traffic management measures to give priority to cyclists. The low speed residential traffic environment will be suitable for this type of mixed street providing access to the school.

Key Locations Served:
Surrounding residential area, Our Lady of Lourdes National School

Pinch Points/Constraints:
Traffic management measures and signage will be required for implementation of a mixed street environment.

ROUTE CODE: CSE-U3

Road Name:
Ballinlough Road, Beechwood Park and Oakfield Lawn

Section (where applicable):
Bellair Estate to Borrenmanna Road

Existing Facility and Quality of Service:
There is no existing cycling infrastructure on this link.

Proposed Infrastructure Type:
This is proposed as a secondary route which takes advantage of a segregated route through Beechwood Park and provides access to St Anthony's Boys School. The route will also incorporate a mixed street environment through residential areas at Willow Lawn and Ballinlough Road to link with the proposed primary route on Boreenmanna Road. On the segregated section, there may be a need for improved security. The on-road sections experience relatively low traffic volumes but some traffic management measures may be required.

Key Locations Served:
Surrounding residential area, St Anthony's Boys School, link to primary routes north and south.

Pinch Points/Constraints:
Traffic management and signage required to implement mixed street environment. Improved lighting and security measures may be required through Beechwood Park.

ROUTE CODE: CSE-U4

Road Name:
Southern Road

Section (where applicable):
N27 to Old Blackrock Road

Existing Facility and Quality of Service:
Outbound cycle lane with a QoS B

Proposed QoS:

It is proposed to maintain the existing QoS of B on the outbound cycle lane and a similar QoS on the downhill section provided through signage and other appropriate measures.

Proposed Infrastructure Type:
This is proposed as a primary route with the existing arrangement of a cycle lane in an outbound direction maintained.

Key Locations Served:
Link to and from city.

Pinch Points/Constraints:
Limited road width means an additional cycle lane cannot be provided in the inbound direction, however this is not considered necessary in a downhill direction. Additional signage and road markings will allow cyclists to use this route safely.

ROUTE CODE: CSE-U6

Road Name:
Boreenmanna Road, Rock Borough Road

Section (where applicable):
Churchyard Lane junction to Rock Borough Road / Hibernian Road junction

Existing Facility and Quality of Service:
There is no existing cycling infrastructure on this link.

Proposed Infrastructure Type:
Bi-directional mandatory cycle lanes will be required on Boreenmanna Road in line with this routes primary route status. Utilisation of existing verges and reduction in widths of ghost islands and central hatching areas will provide the necessary width. A short section of Old Blackrock Road will be utilised to connect with Rock Borough Road and route CCC-U18. Both these sections of road will be mixed street with traffic calming and speed reduction measures in place.

Key Locations Served:
Ballintemple National School, Scoil Aislinn, Rockboro Primary School, surrounding residential area

Pinch Points/Constraints:
Parking and school traffic on Boreenmanna Road. Width constraints on western section of Boreenmanna Road and Rock Borough Road.

ROUTE CODE: CSE-U7

Road Name:
Churchyard Lane to Boreenmanna Road

Section (where applicable):
Boreenmanna Road to Skehard Road

Existing Facility and Quality of Service:
There is a short section of cycle lane at the junction with Crab Lane with a QoS of C.

Proposed Quality of Service:
Proposed QoS minimum of B through the provision of cycle lanes along the length of this route.

Proposed Infrastructure Type:
This is proposed as a primary route with proposed mandatory cycle lanes in each direction. Road widening using the existing verge may be required to provide necessary road width at some locations. One short section west of Crab Lane may not have available land for road widening so a mixed street arrangement may be more appropriate.

Key Locations Served:
Surrounding residential area, Cork Constitution RFC

Pinch Points/Constraints:
Road widening required at some locations.

ROUTE CODE: CSE-U8

Road Name:
Woodvale Road/Beaumont Lawn

Section (where applicable):
Churchyard Lane to Beaumont Drive

Existing Facility and Quality of Service:
There is no existing cycling infrastructure on this link.

Proposed Infrastructure Type:
This is proposed as a primary route with a proposed mixed street environment linking to Scoil Barra Buachailli through local playing fields.

Key Locations Served:
Surrounding residential area, Scoil Barra Buachailli

Pinch Points/Constraints:
Traffic management and appropriate signage required to provide adequate safety for cyclists.

ROUTE CODE: CSE-U9

Road Name:
Albert Quay/Kennedy Quay

Section (where applicable):
Pairc Ui Chaoimh to Parnell Place

Existing Facility and Quality of Service:
There is no existing cycling infrastructure on this link.

Proposed Infrastructure Type:
This is proposed as a secondary route with proposed cycle lanes in both directions. The route will connect to a contra flow bus lane along Albert Quay to provide direct access to the City Centre from the Passage West Greenway along the water front. This route will also include a north/south connection through the South Docks LAP area in line with the final road layout put forward.

Key Locations Served:
South Docks LAP Area, Passage West Greenway, City Centre

Pinch Points/Constraints:
No major constraints are expected given the brown field nature of the site.

ROUTE CODE: CSE-U10

Road Name:
Centre Park Road, Victoria Road, Rock Borough Road

Section (where applicable):
Pairc Ui Chaoimh to South Link Road pedestrian overbridge

Existing Facility and Quality of Service:
There is no existing cycling infrastructure on this link.

Proposed Infrastructure Type:
This is proposed as a secondary route with cycle lanes in both directions in line with development of the South Docks LAP Area and the Cork South East Strategic Corridor Study. The route will connect to a contra flow bus lane at Victoria Road to provide direct access to the City Centre from the South Docks area. Significant scope exists to provide high quality segregated cycle facilities on Victoria Road. This route will serve as a significant development area in future years. This is consistent with the South Dock Lap which proposes Centre Park Road/ Victoria Road as a strategic pedestrian/ cycle linkage.

Key Locations Served:
South Docks LAP area, Passage West Greenway, City Centre

Pinch Points/Constraints:
No major constraints are expected given the brown field nature of the site.

ROUTE CODE: CSE-U11

Road Name:
Victoria Road and Blackrock Road

Section (where applicable):
Centre Park Road Roundabout to Post Office Avenue junction

Existing Facility and Quality of Service:
There is no existing cycling infrastructure on this link.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street designation incorporating traffic management measures where necessary and signage. This route will provide an important collector function for cyclists to schools and into the city centre but does not have the scope for road widening to provide dedicated cycle lanes.

Key Locations Served:
Surrounding residential area, primary and secondary schools, Passage West Greenway.

Pinch Points/Constraints:
Traffic management measures are required to implement mixed street for the full length of this street.

ROUTE CODE: CSE-U11A

Road Name:
Blackrock Road and Post Office Avenue

Section (where applicable):
Eastern section of Blackrock Road to the marina and Post Office Avenue

Existing Facility and Quality of Service:
There is no existing cycling infrastructure on this link.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street designation incorporating traffic management measures and signage which will provide a new direct connection between the Passage West and Waterfront / Lough Mahon Greenways via Post Office Avenue. This will be safer for cyclists and pedestrians particularly at night and will require a new permeability linkage into each of the greenways as well as appropriate surface treatments.

Key Locations Served:
Surrounding residential area, Passage West and Lough Mahon Greenways.

Pinch Points/Constraints:
Traffic management and signage required to implement mixed street arrangement.

ROUTE CODE: CSE-U12

Road Name:
Beaumont Drive, Upper Beaumont Drive, Marian Park and Church Road, Beaumont Lawn

Section (where applicable):
Loop to/from Blackrock Road

Existing Facility and Quality of Service:
There is no existing cycling infrastructure on this link.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street designation incorporating traffic management measures where possible and signage. This route will provide an important collector function for cyclists to schools and is considered suitable given the low impact residential nature of the streets.

Key Locations Served:
Surrounding residential area, primary and secondary Schools, Blackrock GAA Club.

Pinch Points/Constraints:
Traffic management measures are required to implement mixed street for the full length of this street.

ROUTE CODE: CSE-U13

Road Name:
Well Road

Section (where applicable):
Churchyard Lane to Douglas Road

Existing Facility and Quality of Service:

There is no existing cycling infrastructure on this link.

Proposed Infrastructure Type:
This is proposed as a primary route with a mixed street designation incorporating traffic management measures and signage. This route does not have the scope for road widening to provide cycle lanes but will provide an important east-west link for cyclists travelling to Douglas Village and further west via the Greenway Network.

Key Locations Served:
Surrounding residential area, Douglas Village.

Pinch Points/Constraints:
Traffic management measures are required to implement mixed street for the full length of this street.

ROUTE CODE: CSE-U14

Road Name:
Skehard Road

Section (where applicable):
Churchyard Lane to Mahon Link Road

Existing Facility and Quality of Service:
There is a short section of cycle lanes to the east of the junction with Churchyard Lane with a QoS of B and C and a circa 400 metre section of cycle lane west of Mahon Link road in a westbound direction with a QoS of D.

Proposed QoS:
It is proposed to increase the QoS to at least B.

Proposed Infrastructure Type:
This is proposed as a primary route with cycle lanes and segregated cycle track at suitable locations. Some redistribution of road space may be required to provide these sufficient facilities. This could be accommodated through the removal of central ghost islands, on-street car parking and through replacement of the existing grass verge.

Key Locations Served:
Surrounding residential area, Mahon Point, Passage West Greenway.

Pinch Points/Constraints:
Road widening and traffic management measures are required to support introduction of facilities along this route.

ROUTE CODE: CSE-U15

Road Name:
Bessboro Road

Section (where applicable):
Skehard Road to Mahon Point via Cork Heritage Park

Existing Facility and Quality of Service:
There is no existing cycling infrastructure on this link.

Proposed Infrastructure Type:
This is proposed as a primary route with either on-road cycle lanes or a continuation of the segregated cycle track from Skehard Road. The link will also utilise the proposed public transport overbridge access to Mahon Point at this location.

Key Locations Served:
Surrounding residential area, Mahon Industrial Estate, Mahon LAP Lands.

Pinch Points/Constraints:
No major constraints with continuation of cycle track using the existing grass verge. This will serve a more intense development area when this area is developed in accordance with the Mahon LAP objectives.

ROUTE CODE: CSE-U16

Road Name:
Skehard Road

Section (where applicable):
Mahon Link Road to Ringmahon Road (east)

Existing Facility and Quality of Service:
There are some short sections of cycle tracks along this link with a QoS of B.

Proposed QoS:
It is proposed to upgrade this link to a QoS of A with a segregated cycle track for the full length of the route.

Proposed Infrastructure Type:
This is proposed as a primary route with the existing segregated cycle track maintained and extended where possible. Extension of the segregated cycle track may be facilitated in a two way track on the southern edge of this carriageway where substantial green verge space exists.

Key Locations Served:
Surrounding residential area, links to Mahon Point and City Gate, Nagle Community College.

Pinch Points/Constraints:
Some carriageway widening may be necessary to accommodate segregated cycle track but this can be achieved within the existing grass verges.

ROUTE CODE: CSE-U17

Road Name:
Avenue De Rennes

Section (where applicable):
Skehard Road to Ringmahon Road (north)

Existing Facility and Quality of Service:
There is no existing cycling infrastructure on this link.

Proposed Infrastructure Type:
This is proposed as a primary route with a proposed two way segregated cycle track on the west side of the carriageway where sufficient space is available to provide this facility without the need for road widening.

Key Locations Served:
Surrounding residential area, Scoil Na Criosa Naofa, Gaeilscoil Mhachan

Pinch Points/Constraints:
Junction treatment will be necessary to ensure safe crossing for cyclists particularly those cycling to school.

ROUTE CODE: CSE-U18

Road Name:
Mahon Link Road

Section (where applicable):
Skehard Road to Long Shore Drive

Existing Facility and Quality of Service:
There are cycle lanes on either side of this link primarily with a QoS of C and with a short section with a QoS of D.

Proposed QoS:
It is proposed to increase the QoS to at least B along this link through improvement to surface treatments at a minimum.

Proposed Infrastructure Type:
This is proposed as a primary route that will upgrade the existing facilities to the crossing of the N40 and extend these facilities to serve the residential area to the south of the N40 at Long Shore Drive where a segregated two way facility could potentially be facilitated on the east side of this route. A direct link from Mahon Point to the Passage West Greenway should also be incorporated to and from this route for employees and visitors to this area.

Key Locations Served:
Surrounding residential area, Mahon Point, City Gate, Greenway Network

Pinch Points/Constraints:
Junction treatment will be necessary to ensure safe crossing for cyclists particularly those cycling to school.

ROUTE CODE: CSE-U19

Road Name:
St. Michael's Drive

Section (where applicable):
Mahon Link Road to Meelagh Drive Roundabout

Existing Facility and Quality of Service:
There is no existing cycling infrastructure on this link.

Proposed Infrastructure Type:
This is proposed as a secondary route with cycle lanes in each direction providing a collector function to the primary route on Mahon Link Road.

Key Locations Served:

Surrounding residential area, City Gate, Mahon Point, Links to Greenway Network

Pinch Points/Constraints:
Junction treatment will be necessary to ensure safe crossing for cyclists.

ROUTE CODE: CSE-U20

Road Name:
Rochestown Road

Section (where applicable):
N28 to Passage West Greenway

Existing Facility and Quality of Service:
There is no existing cycling infrastructure on this link.

Proposed Infrastructure Type:
This is proposed as a primary route with existing footpaths widened to provide a high quality segregated shared cycle and pedestrian track on each side of the road. Some road widening may be required to facilitate the necessary width but this is considered feasible.

Key Locations Served:
Surrounding residential area, Links to Greenway Network

Pinch Points/Constraints:
Road widening necessary at some points along this route.

ROUTE CODE: CSE-U21

Road Name:
Rochestown Road, Lislee Road, Lime Trees Road

Section (where applicable):
N28 to Maryborough Hill

Existing Facility and Quality of Service:
There is no existing cycling infrastructure on this link.

Proposed Infrastructure Type:
This is proposed as a primary route with the existing advisory west bound cycle lane on Rochestown Road upgraded and the existing footpaths in an east bound direction widened to provide a high quality segregated shared cycle and pedestrian track on this side of the road. Through Lislee Road and Lime Trees Road this will be a mixed street environment with traffic calming and signage to provide cyclist safety. It is not considered necessary to provide on-street infrastructure given the low speed nature of these residential streets.

Key Locations Served:
Surrounding residential area, links to Greenway Network and Douglas Village

Pinch Points/Constraints:
Re-location of on-road parking at Lime Trees Road would be required to facilitate the introduction of cycle lanes.

ROUTE CODE: CSE-U22

Road Name:
Maryborough Hill

Section (where applicable):
N28 to Rochestown Road Roundabout

Existing Facility and Quality of Service:
There is an existing outbound cycle lane along this route with a QoS of B.

Proposed QoS:
It is proposed to maintain the existing QoS of B in an outbound direction and provide a similar facility in an inbound direction.

Proposed Infrastructure Type:
This is proposed as a primary route with the existing southbound cycle lane maintained for the length of this link. A new segregated cycle track or lane is proposed in a north bound direction towards Douglas that can mainly be provided within the existing grass verge. Road widening may be required at pinch points along the route.

Key Locations Served:
Surrounding residential area, Links to Greenway Network and Douglas Village

Pinch Points/Constraints:
Some road widening may be required to implement northbound cycle lane or track.

ROUTE CODE: CSE-U22A

Road Name:
Carrigaline Road

Section (where applicable):
Fingerpost Roundabout to Carrigaline Road

Existing Facility and Quality of Service:
There is no existing cycling infrastructure on this link.

Proposed Infrastructure Type:
This is proposed as a primary route with cycle lanes on both sides of the road that is considered feasible given the existing road width.

Key Locations Served:
Surrounding residential area, Links to Douglas Village

Pinch Points/Constraints:
Junction treatments necessary to provide sufficient cyclist safety.

ROUTE CODE: CSE-U23

Road Name:
Carrigaline Road, Douglas Street East

Section (where applicable):
Douglas Village to Berkeley (Proposed Greenway CSE-GW3)

Existing Facility and Quality of Service:
There is no existing cycling infrastructure on this link.

Proposed Infrastructure Type:
This is proposed as a primary route with cycle lanes provided on each side of the carriageway. Some road widening will be required to accommodate cycle lanes along the full extent of this route. It is proposed to provide a cycle lane in a one-way direction along the section of Carrigaline Road that is currently one-way for vehicular traffic. The opposite direction will be provided along Douglas East for cyclists exiting the village. Co-ordination of the street layout in Douglas Village will enable cycle lanes to be accommodated in both directions.

Key Locations Served:
Surrounding residential area, Douglas Village.

Pinch Points/Constraints:
Traffic and car parking management may be necessary along both one-way links to provide a safe cycling lane along these links.

ROUTE CODE: CSE-U24

Road Name:
West Douglas Street

Section (where applicable):
Church Road to N40

Existing Facility and Quality of Service:
There is no existing cycling infrastructure on this link.

Proposed Infrastructure Type:
This is proposed as a primary route. From Church Road to the N40 the restricted road width will limit the available road space for dedicated cycle facilities. Therefore a mixed street environment is proposed along this link incorporating suitable traffic management measures to increase cyclist safety and reduce traffic speeds.

Key Locations Served:
Surrounding residential area, Douglas Village.

Pinch Points/Constraints:
Traffic and car parking management may be necessary along village centre link to provide adequate levels of cyclist safety and comfort.

ROUTE CODE: CSE-U25

Road Name:
Church Street

Section (where applicable):
Douglas Street East to Douglas Street West

Existing Facility and Quality of Service:

There is no existing cycling infrastructure on this link.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street environment incorporating suitable traffic management measures to increase cyclist safety and reduce traffic speeds.

Key Locations Served:
Surrounding residential area, Douglas Village.

Pinch Points/Constraints:
Traffic and car parking management may be necessary along this link to provide adequate levels of cyclist safety and comfort.

ROUTE CODE: CSE-U26

Road Name:
Church Road

Section (where applicable):
Douglas Street West to Carrigaline Road

Existing Facility and Quality of Service:
There is no existing cycling infrastructure on this link.

Proposed Infrastructure Type:
This is proposed as a primary route with a mixed street environment along this link incorporating suitable traffic management measures to increase cyclist safety and reduce traffic speeds.

Key Locations Served:
Surrounding residential area, Douglas Village, St. Luke's School

Pinch Points/Constraints:
Traffic and car parking management may be necessary along this link to provide adequate levels of cyclist safety and comfort.

ROUTE CODE: CSE-U27

Road Name:
Rathmore Lawn

Section (where applicable):
South Douglas Road to Douglas Road

Existing Facility and Quality of Service:
There is no existing cycling infrastructure on this link.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street environment along this link incorporating suitable traffic management measures to increase cyclist safety and reduce traffic speeds. The link will provide an important link for school cyclists utilising the one way cycling system proposed along South Douglas and Douglas roads

Key Locations Served:
Links to Douglas Road / South Douglas Road, surrounding residential area, primary and secondary schools

Pinch Points/Constraints:
Traffic and car parking management may be necessary along this link to provide adequate levels of cyclist safety and comfort. A high quality crossing treatment is required on South Douglas Road and Douglas Road to integrate with facilities along these links.

ROUTE CODE: CSE-U28

Road Name:
Cross Douglas Road

Section (where applicable):
South Douglas Road to Douglas Road

Existing Facility and Quality of Service:
There is no existing cycling infrastructure on this link.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street environment along this link incorporating traffic management measures to increase cyclist safety and reduce traffic speeds. The link will provide an important link for school cyclists utilising the one way cycling system proposed along South Douglas and Douglas Roads.

Key Locations Served:
Links to Douglas Road / South Douglas Road, surrounding residential area, primary and secondary schools

Pinch Points/Constraints:
Traffic and car parking management may be necessary along this link to provide adequate levels of cyclist safety and comfort. A high quality crossing treatment is required on South Douglas Road and Douglas Road to integrate with facilities along these links.

ROUTE CODE: CSE-U29

Road Name:
Donnybrook Hill

Section (where applicable):
Donnybrook Commercial Centre to Church Road

Existing Facility and Quality of Service:
There is no existing cycling infrastructure on this link.

Proposed Infrastructure Type:
This is proposed as a secondary route with cycle lanes provided on each side of the carriageway from Donnybrook Commercial Centre to Church Road. Some road widening and detailed design will be required to accommodate cycle lanes along the full extent of this route but this is feasible without the need for major land acquisition.

Key Locations Served:
Surrounding residential area, Link to Douglas Village, Donnybrook Commercial Centre.

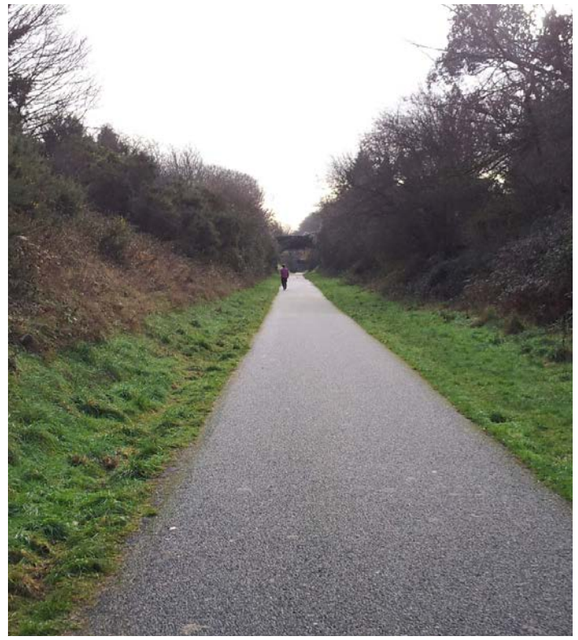
Pinch Points/Constraints:
Some road widening may be necessary but should be achievable within existing road reservation.

ROUTE CODE: CSE-U30

Road Name:
Beechwood Park

Section (where applicable):
Beechwood Park extending south through to Douglas Road

Figure 9.1 Section of Passage West Greenway



Existing Facility and Quality of Service:
There is no existing cycling infrastructure on this link.

Proposed Infrastructure Type:
This is proposed as a primary route providing a connection between the Douglas Road and Ballinlough Road to the north. Cycle lanes will be possible along the Beechwood Park section of the route while further south adjacent existing playing fields the route will be a mixed street. This section of the route is quiet and ideal for mixed use currently only appearing to serve the Ardfallen Grove housing shelter. Connection to Douglas Road will need to be provided through the Gus Healy swimming pool and this will be subject to consultation.

Key Locations Served:
Direct link to Douglas Road, Large residential catchment between Ballinlough and Douglas Roads. St Anthonys Boys School.

Pinch Points/Constraints:
Providing access to Douglas Road through grounds of swimming pool. Consultation will be required to determine whether this is possible.

ROUTE CODE: CSE-U32

Road Name:
Ringmahon Road

Section (where applicable):
Full length of road between both Skehard Road junctions.

Existing Facility and Quality of Service:
There is no existing infrastructure on this link.

Proposed Infrastructure Type:
This route is proposed as a secondary route which will act as a collector route for the surrounding residential areas and schools, connecting with the Skehard Road distributor route and both ends. The road is consistent in cross section at between 9.5m and 11m. Reserve widths provide the opportunity to widen if necessary. It is proposed that 2m wide bi-directional segregated cycle tracks are provided on the road with 3m traffic lanes maintained in each direction. It is proposed that informal parking is banned on the road although some form of set down / collection arrangement may need to be maintained at the primary school on the road.

Key Locations Served:
Surrounding residential areas, Skehard Road and the local school

Pinch Points / Constraints:
Removal of on street parking

ROUTE CODE: CSE-U32A

Road Name:
Passage West Greenway Connection

Section (where applicable):
Connection from Ringmahon to Passage West Greenway

Existing Facility and Quality of Service:
There is no existing infrastructure on this link.

Proposed Infrastructure Type:
This route will be of a greenway standard supporting both pedestrian and cyclists movements onto and off of the Passage West Greenway from the Mahon area. The route will pass through the grounds of the Cork Camogie Grounds although impact on the pitches themselves will need to be minimised.

Key Locations Served:
Mahon residential area, Passage West Greenway

Pinch Points / Constraints:
Consultation will be required with Cork Camogie

ROUTE CODE: CSE-U33

Road Name:
L2472

Section (where applicable):
Junction of Maryborough Hill in southwest to Rochestown Road junction in northeast

Existing Facility and Quality of Service:
There is no existing infrastructure on this link.

Proposed Infrastructure Type:
This route is approximately 2.3km long with an inconsistent cross section, very narrow in places and very steep gradients. The route is fronted directly onto in numerous locations by residential properties and it is considered that the provision of dedicated facilities with the desired coherency and continuity would be prohibitively expensive. It is considered that due to these factors, this route will most likely only be used by fit, experienced cyclists. A signing and lining strategy should be developed for the road in order to raise awareness amongst motorists to the potential presence of cyclists.

Key Locations Served:
Residential areas of Maryborough, Broadale, Mount Oval and Belmont

Pinch Points / Constraints:
Inconsistent cross sections (very narrow in places) and very steep gradients in both directions.

ROUTE CODE: CSE-U34

Road Name
Greenhills Court and Ivy Crescent

Section (where applicable):
Greenhills Court connection to Tramore Valley Park

Existing Facility and Quality of Service:
There is no existing infrastructure on this link.

Proposed Infrastructure Type:
The route from the junction of the South Douglas Road on Greenhills Court and Ivy Crescent will be low speed and low volume. Due to the prevalence of on street car parking and the relatively narrow cross section of the road it is proposed that the route is designated as shared use and signed as such.
At the southern extent of the Greenhills Court cul de sac, there is an existing pedestrian and cycle link which will be upgraded. Beyond this, the existing stream bounding the eastern edge of the park will be culverted and this path extended across to connect into another existing path which will be upgraded also. This greenway link will then connect into the main north-south link through Tramore Valley Park. From the end of the Ivy Crescent cul de sac a new green route will be constructed to connect into the end of Greenhills Court. Potential exists to extend this path eastwards to connect into a neighbouring residential cul de sac at Ivy Crescent which will provide additional permeability in the area.

Key Locations Served:
Tramore Valley Park, South Douglas Road, Greenhills Court / Ivy Crescent residential area

Pinch Points / Constraints:
Culverting / bridging across existing watercourse on

eastern side of Tramore Valley Park.

City South East Greenway Routes

ROUTE CODE: PW-GW1

Road Name:
Passage West Greenway

Section (where applicable):
Monahan Road to Passage West

Existing Facility and Quality of Service:
There is currently a two-way shared pedestrian/cycle path along this route with a QoS of A+.

Proposed QoS:
It is proposed to maintain the QoS of A+ through ongoing maintenance of this route.

Proposed Infrastructure Type:
It is proposed to maintain the existing facilities and provide additional/upgraded access ramps at Blackrock Road and Mahon Link Road/City Gate. It is also proposed to provide the missing c.200m link of this Greenway at Rochestown. The possibility of continuing this link along the waterfront should be investigated.

Pinch Points/Constraints:
Limited land availability at location of missing link at Rochestown will require detailed investigations to identify most suitable location of Greenway along this section.

ROUTE CODE: CSE-GW1

Road Name:
Passage West Greenway extension/Monahan Road

Section (where applicable):
Existing end point of Passage West Greenway to Victoria Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities on this link.

Proposed Infrastructure Type:
It is proposed to provide a two way segregated cycle track within northern green verge of Monahan Road. An appropriate crossing of Victoria Road will be required to provide convenient access to the City Centre network.

Key Locations Served:
Links Greenway Network to City Centre

Pinch Points/Constraints:
Existing recycling facilities are currently located close to the carriageway of Monahan Road and may need to be re-located to accommodate the proposed Greenway corridor at this location.

ROUTE CODE: CSE-GW2

Road Name:
River Lee/Lough Mahon Waterfront Greenway

Section (where applicable):
Pairc Ui Chaoimh to Jacob's Island connection to Passage West Greenway.

Existing Facility and Quality of Service:
There is currently a two-way shared pedestrian/cycle path along this route with a QoS of A+. There are currently no dedicated facilities at Castle Road and The Marina.

Proposed QoS:
It is proposed to maintain the QoS of A+ through ongoing maintenance of this route and provide a minimum QoS of B along the mixed street element of the route.

Proposed Infrastructure Type:
It is proposed to maintain existing facilities that provides a shared walking and cycling path along the water front. Castle Road and The Marina form part of this route, which are sufficiently traffic calmed to facilitate cyclists in a mixed street environment.

Key Locations Served:
Leisure/Tourism Cyclists, Blackrock Castle, Residential areas in north Blackrock

Pinch Points/Constraints:
Cyclists will share the road with vehicles at the Marina and Castle Road, which is sufficiently traffic calmed to allow cyclists to use these links safely. Some additional signage and road markings would assist with legibility.

ROUTE CODE: CSE-GW3

Road Name:
Cork Heritage Park

Section (where applicable):
Mahon Link Road to Bessboro Road

Existing Facility and Quality of Service:
There is currently a two-way shared pedestrian/cycle path along this route with a QoS of A+.

Proposed QoS:
It is proposed to maintain the QoS of A+ through ongoing maintenance of this route.

Proposed Infrastructure Type:
It is proposed to maintain this existing route that travels in an east-west direction north of the N40 before turning north along the eastern boundary of Mahon Golf Club.

Key Locations Served:
Links to the Primary and Greenway Network.

Pinch Points/Constraints:
This route should be developed in conjunction with Mahon LAP lands.

ROUTE CODE: CSE-GW4

Road Name:
Ballybrack Valley Greenway.

Section (where applicable):
Carr's Hill to Donnybrook Old Village

Existing Facility and Quality of Service:
There is currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed new Greenway route linking from Domans Wood, across the north of Donnybrook Commercial centre, crossing the R851 and travels along the south west boundary of the Douglas Golf Club before connecting with a future Inter-urban route on the N28. The route links in with phase 1 (constructed) and phase 2 (not yet constructed) of the Ballybrack Valley cycle route.

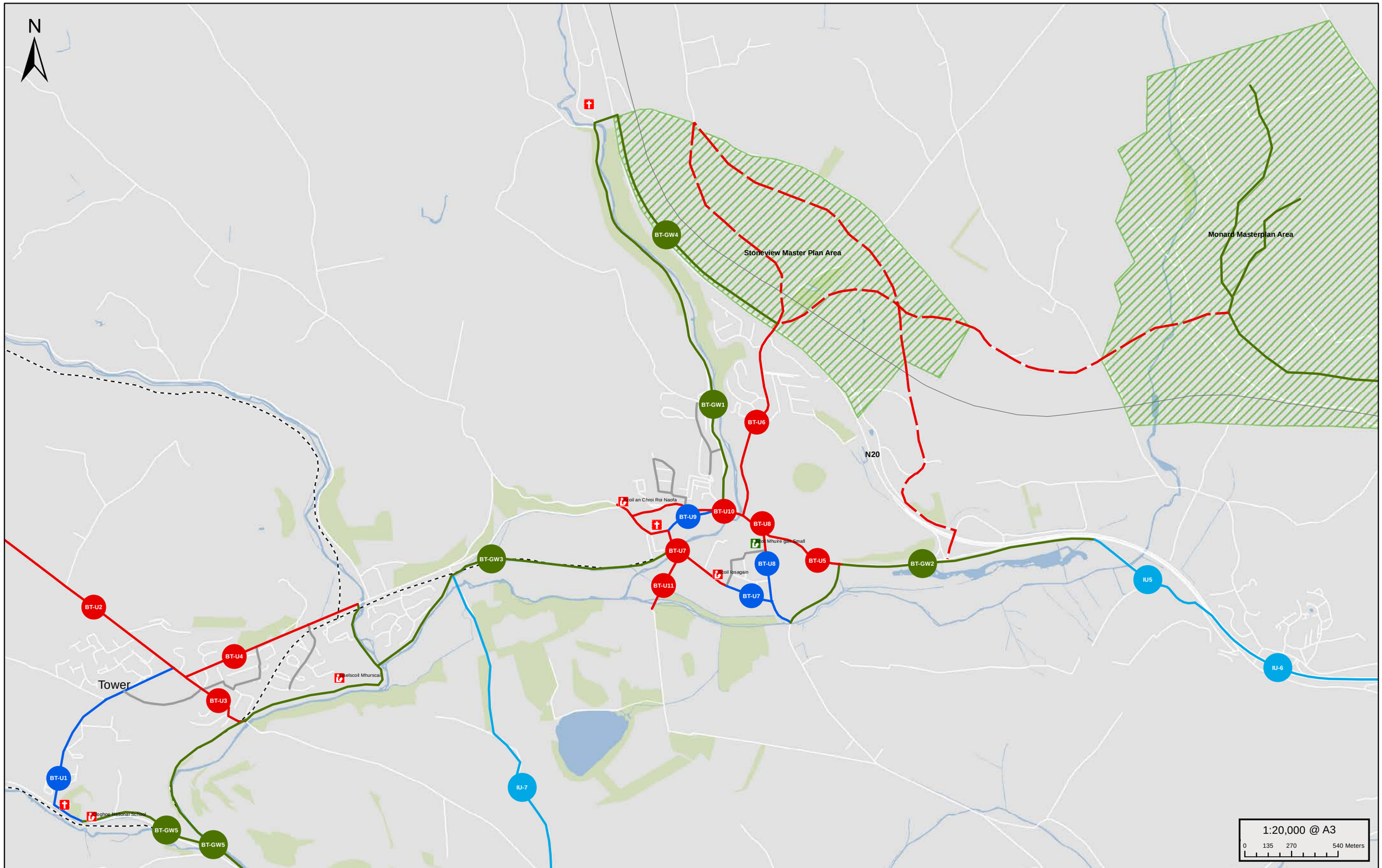
Key Locations Served:
Surrounding residential area, Douglas Golf Club, links to Primary Route Network into Douglas village and Inter-urban Network to Carrigaline/Ringaskiddy

Pinch Points/Constraints:
No major restrictions with this proposal provided necessary land can be acquired.

10

Blarney and Tower

Map U5 Proposed Future Network -Blarney and Tower



Project:
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA

Title:
U5 - BLARNEY & TOWER

Legend:

Future Network Facility Type

- Greenway
- Interurban
- Primary
- Possible Primary
- Secondary
- Feeder
- University
- Hospital
- Place of Worship
- Primary School
- Secondary School
- Train Station
- NewTrain Station
- Irish Rail Network
- Disused Railways
- Gateway
- N28 Upgrade
- New Bridge
- Ferry Terminal
- Ferry Connection
- Employment Centre
- Masterplan Area

AECOM
4th Floor, Adelphi Plaza,
Upper Georges Street,
Dun Laoghaire, Co, Dublin
Tel: +353 (0)1 238 3100
Fax: +353 (0)1 238 3199
www.aecom.com

10 Blarney and Tower

10.1 Introduction

Blarney and Tower are located approximately 10km to the north of Cork City. Tower is the smaller of the towns in terms of population and is located circa 3km to the west of Blarney.

The towns are linked by the R617 which is a relatively narrow road of rural character. This route is subject to significant levels of traffic travelling to/from the N22 national primary route immediately east of Blarney. Blarney is a well-known tourist destination with such attractions as Blarney Castle and Gardens and the Blarney Woollen Mills.

Map E5 illustrates the existing cycling infrastructure in place in both towns/villages, which is limited to two segregated paths in Blarney. Refer to Map U5 for the network maps.

The future demand flows for commuter cyclists is relatively low for Blarney and Tower. Potentially 50-60 cyclists might utilise the main corridors to and from the City in a typical 2025 am peak period. It is considered that there will be significant leisure and amenity benefits to be derived from providing improved cycling links to Blarney and Tower.

In terms of network planning, the neighbouring towns of Blarney and Tower have been considered together due to their close proximity. It is proposed to link Tower and Blarney via a shared greenway route, as well as provide a network of cycling routes within each town centre to improve access to schools and other key destinations. Interurban routes are also proposed, which will provide a connection from each of the towns to Cork City Centre. Much of future cycling traffic to and from Blarney and Tower is expected to be tourism and leisure cyclists.

A detailed description of each proposed route in Cork City South East is provided below. **The descriptions below should be read in conjunction with Map U5 which sets out the proposed network in this area.**

10.2 Route Descriptions

The following sections outline the proposals for the future proposed network in Blarney and Tower in more detail.

ROUTE CODE: BT-U1

Road Name:
R617 and R579 to Cloghroe National School

Road Section:
R617 from Kerry Road to R579 and section of R579 to Cloghroe National School, Tower.

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route providing on-road cycle lanes or a segregated cycle track if possible.

Key Locations Served:
Cloghroe National School, residential areas, town centre.

Pinch Points/Constraints:
The school drop-off/pick-up location can become congested at peak times and will require an adequate connection to cyclist facilities that can be accessed at all times.

ROUTE CODE: BT-U2

Road Name:
Kerry Road

Road Section:
Blarney Hotel Resort to Tower Town Centre

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route providing on-road cycle lanes, with westbound (uphill) a priority if road widening is an issue.

Key Locations Served:
Blarney Hotel and Golf Resort, surrounding residential area and Town Centre.

Pinch Points/Constraints:
Road widening may be difficult to achieve with existing boundary walls on Kerry Road on the way out of Tower village (approximate carriageway width currently 6.5m).

ROUTE CODE: BT-U3

Road Name:
Muskerry Heights/Glenview Terrace

Road Section:
Tower Bridge to Tower Town Centre

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route providing on-road cycle lanes with westbound (uphill) a priority if road widening is an issue.

Key Locations Served:
Surrounding residential area, Town Centre, connecting to Greenway.

Pinch Points/Constraints:
Road widening difficult to achieve with existing boundary and historical walls at edges of road (approximate carriageway width currently 6m). Therefore, traffic management measures are recommended which will increase driver awareness of cyclists and improve driver behaviour.

ROUTE CODE: BT-U4

Road Name:
St. Anne's Hill

Road Section:
Kerry Road to Riverview Estate

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route providing on-road cycle lanes.

Key Locations Served:
Surrounding residential area, Town Centre, connecting to Greenway.

Pinch Points/Constraints:
There are limited constraints with this proposal. There are some narrow sections of road where the use of grass verges can be maximised to provide width for cycle lanes.

ROUTE CODE: BT-U5

Road Name:
R617

Road Section:
Station Road to Shean Lower

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route providing on-road mandatory cycle lanes or a segregated cycle track. Uphill cycle lanes should be a priority if enough road width cannot be provided for cycle lanes in both directions.

Key Locations Served:
Surrounding residential area, Town Centre, connecting to Greenway.

Pinch Points/Constraints:
Road width along this route may not be sufficient for cycle lanes in both directions. It is recommended to prioritise the northern side of the road, as this

will provide continuity with the link to the R617 east of Station Road, as well as being uphill for cyclists travelling from the town centre to the eastern edge of the town.

ROUTE CODE: BT-U6

Road Name:
Station Road

Road Section:
Town Centre to Stoneview Master Plan area

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route providing on-road mandatory cycle lanes or segregated cycle tracks.

Key Locations Served:
Surrounding residential area, Town Centre, Stoneview Master Plan Area.

Pinch Points/Constraints:
The bridge over the N25 is a constraint and road width along the route south of the N25 may not be sufficient for a continuous cycle lane. Therefore a mixed street environment (see Network Planning Section) is recommended for this section of the route, with complementary traffic management measures to increase awareness of cyclists and improve driver behaviour. Once development commences at the future growth site north of the N25, priority should be given to providing appropriate infrastructure for cyclists along Station Road. This route will link with the Stoneview Master Plan site and associated cycle network that is shown indicatively on Map U5. BT-U6 will also link further on to the Monard Development site to the north east in the future.

ROUTE CODE: BT-U7

Road Name:
The Square East and Castle Close Road

Road Section:
The Square to Castle Close Lawn

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route providing a mixed street (see Network Planning Section) with a reduced speed limit and traffic management measures to provide adequate cyclist safety. From the junction of Castel View to Castle Close Lawn is proposed as a secondary route where cyclists will travel on road with vehicles.

Key Locations Served:
Surrounding residential area, Town Centre, Scoil Iosagain.

Pinch Points/Constraints:
Based on existing road widths, there is a potential opportunity to introduce a shared cycle / pedestrian path on the southern side of this street, with a toucan crossing provided at Scoil Iosagain. This would provide improved access to the school and town centre. Traffic management and road signage will be required to provide adequate safety on mixed street section.

ROUTE CODE: BT-U8

Road Name:
Castle Close Lawn

Road Section:
R617 to Castle Close Avenue

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route providing a mixed street (see Network Planning Section) with a reduced speed limit and traffic management measures to provide adequate cyclist safety.

Key Locations Served:
Surrounding residential area, Town Centre, Scoil Mhuire Gan Smál.

Pinch Points/Constraints:
Implementation of mixed street format in the existing street will require management of driver behaviour/ speeds including signage and road markings.

ROUTE CODE: BT-U8

Road Name:
Castle Close Lawn

Road Section:
Castle Close Avenue to Castle Close Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route providing a mixed street (see Network Planning Section) with a reduced speed limit and suitable traffic management measures to provide adequate cyclist safety.

Key Locations Served:
Surrounding residential area, Town Centre.

Pinch Points/Constraints:
Implementation of mixed street format in the existing street will require management of driver behaviour and speeds.

ROUTE CODE: BT-U9

Road Name:
The Square North and Millstream Row

Road Section:
The Square North to R617

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route providing mixed street (see Network Planning Section) with reduced speed limit and suitable traffic management measures.

Key Locations Served:
Surrounding residential area, Town Centre including schools.

Pinch Points/Constraints:
Implementation of mixed street format will require management of driver behaviour/speeds.

ROUTE CODE: BT-U10

Road Name:
R617

Road Section:
R617 (Sunberry) to Station Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route providing on-road mandatory cycle lanes or a segregated cycle track if possible.

Key Locations Served:
Surrounding residential area, Town Centre, Scoil an Chroi Roi Naofa, connecting to Greenway.

Pinch Points/Constraints:
Road width along route may not be sufficient for cycle lanes in both directions. A cycle lane on the northern side of the road should be prioritised as Scoil an Chroi Roi Naofa is located on this side.

ROUTE CODE: BT-U11

Road Name:
Blarney Castle Access Road*

Road Section:
The Groves to Blarney Castle

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route providing on-road mandatory cycle lanes or a segregated cycle track. The existing low-speed traffic environment on this road is also suitable for a mixed street arrangement.

Key Locations Served:
Blarney Castle.

Pinch Points/Constraints:
This route is on a private road to Blarney Castle. A cycling link could be accommodated on the existing traffic calmed vehicular road.

*Cycle routes proposed on private roads are subject to agreement from landowner

Blarney and Tower Greenway Routes

ROUTE CODE: BT-GW1

Road Name:
Waterloo Road

Road Section (where applicable):
R617 to extent of developed area extending informally on-road to link with route parallel to N40

Existing Facility and Quality of Service:
There is an existing segregated shared path along this route with a QoS of A+.

Proposed QoS:
It is proposed to maintain the QoS of A+ on the existing section of this route and a similar QoS for new sections.

Proposed Infrastructure Type:
This link is proposed as a two-way segregated cycle track as existing.

Key Locations Served:
This route will also provide a two-way link to the proposed new development site north of the town via the River Martin at Stoneview. It will also serve leisure / recreational cyclists, an important sector given Blarney's status as a popular tourist destination.

Pinch Points/Constraints:
The existing greenway will need to be extended north incorporating road widening to provide adequate width.

ROUTE CODE: BT-GW2

Road Name:
Killard Road and Pedestrian Route at Blarney Bog

Road Section (where applicable):
Gothic Bridge to Cork City (north)

Existing Facility and Quality of Service:
There is an existing segregated shared path along this route with a QoS of A.

Proposed QoS:
It is proposed to maintain the QoS of A on the existing section of this route and a similar QoS for new sections.

Proposed Infrastructure Type:
It is proposed to upgrade this existing pedestrian facility to two-way shared pedestrian/cycle track and extend to provide inter-urban/greenway link to Cork City.

Key Locations Served:
Leisure/recreation cyclists, Blarney, Tower and North Cork City.

Pinch Points/Constraints:
Land ownership along N20 will need to be confirmed to obtain the necessary land to provide route.

ROUTE CODE: BT-GW3

Road Name:
n/a – off-road

Road Section (where applicable):
n/a

Proposed Infrastructure Type:
This is proposed a two-way segregated recreational route along the banks of River Shournagh and via St. Anne's Road.

Key Locations Served:
Leisure/recreation cyclists, Blarney and Tower (including Gaelscoil Mhurscai and Blarney United Football Club)

Pinch Points/Constraints:
Private land ownership along river bank may be an issue along this route (there may be an existing informal link on this route).

ROUTE CODE: BT-GW4

Road Name:
Parallel to N40

Road Section (where applicable):
Parallel to N40

Proposed Infrastructure Type:
This is proposed as a two-way segregated cycle and walking track.

Key Locations Served:
This route is an existing in-formal route used locally that can be upgraded as part of the Stoneview development site.

Pinch Points/Constraints:
Link back to BT-GW1 will require construction of a new section of off-road facility.

ROUTE CODE: BT-GW5

Road Name:
Disused railway line

Road Section (where applicable):
Parallel to R579

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
It is proposed to provide a shared cycle/walking facility, utilising part of the disused rail line, linking from the proposed BC-GW5 greenway to Tower. New pedestrian/ cycle bridges will be required where the route crosses the River Shournagh and River Lee.

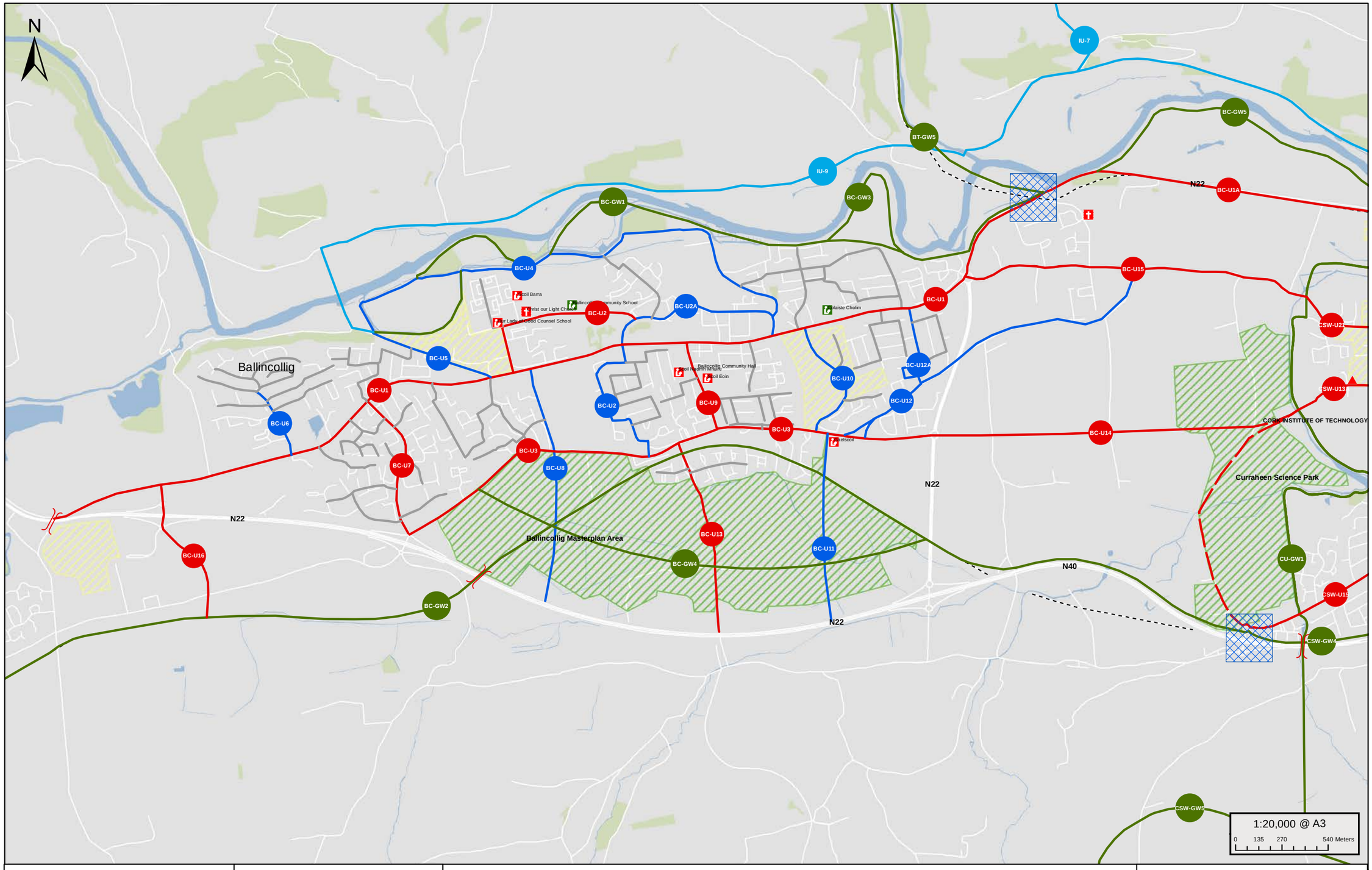
Key Locations Served:
Tower, Carrigrohane

Pinch Points/Constraints:
Land ownership along this route will need to be addressed when a suitable proposal is being developed.

11

Ballincollig

Map U6 Proposed Future Network - Ballincollig



Project:	Title:	Legend:
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	U6 - BALLINCOLLIG	**Future Network Facility Type**: Greenway, Interurban, Primary, Possible Primary, Secondary, Feeder; University, Hospital, Place of Worship; Primary School, Secondary School; Train Station, NewTrain Station, Irish Rail Network, Disused Railways; Gateway, N28 Upgrade, New Bridge; Ferry Terminal, Ferry Connection, Employment Centre, Masterplan Area

AECOM
4th Floor, Adelphi Plaza,
Upper Georges Street,
Dun Laoghaire, Co, Dublin
Tel: +353 (0)1 238 3100
Fax: +353 (0)1 238 3199
www.aecom.com

11 Ballincollig

11.1 Introduction

Balincollig is bounded by the N22 to the south and the River Lee to the north. The Ballincollig study area extends from the EMC Campus west of the town to the CIT campus and includes elements of the Curragheen River Greenway.

Map E6 illustrates the existing cycling infrastructure in place in the town. Ballincollig has existing cycling facilities along the R608 Main Street, the Link Road which serves a number of business parks as well as the residential area of Coolroe Meadows. The Old Fort road to the north of the town centre has facilities and there is also an existing greenway route through Ballincollig Regional Park. These facilities consist of cycle lanes within bus lanes (along R608), cycle tracks (Old Fort Road and Regional Park) and dedicated cycle lanes on Link Road.

Outside of Ballincollig town centre the profile of development is predominantly residential to the north and south of the R608. There are several industrial and business parks located at Link Road in the east of the town and Ballincollig Technology Park to the west.

The major schools in the area are the Ballincollig Community School and Coláiste Choilm, both of which are second level education facilities and have a combined attendance of approximately 2,000 students. Both are located in close proximity to the town centre and accessed from the R608. There are also four primary schools located in the town. With the exception of Gael Scoil Uí Riordaín, all primary schools are located within residential areas.

The commercial and retail core of the town is located on the southern margins of the R608 Main Street in the town centre and accommodates Time Square Shopping Centre and other established retail and commercial premises including financial services, cinemas and other community services. The more recent Ballincollig Shopping Centre is also located in this area, on the north side of the R608 Main Street.

Ballincollig Regional Park is located on the southern banks of the River Lee and provides a major recreational facility for the local and regional population. In the context of Ballincollig, access to the park is provided from the R608 Main Street via Inniscarra Road and the access road to the GAA pitch.

The proposed future cycling network for Ballincollig is shown below and is attached as Map U6 in Volume B. In terms of a future cycling network, two main primary routes are proposed as the basis of the network, BC-U1 and BC-U3. These will both run in an east-west direction respectively with a number of inter-linking secondary routes. BC-U1 will build on existing infrastructure in place along the R608 Main Street with an extension of existing cycle lanes where possible and the provision of a mixed street environment through the town centre area where cars and bicycles share equal priority in a low speed traffic environment. BC-U3 will be a more long–term objective that can be progressed in conjunction with the development of the major Master Plan site to the south where road widening will facilitate the implementation of cycle lanes in both directions.

Important linkages from Ballincollig to Cork City will be along the Carrigrohane Road, Model Farm Road and a future road that will link directly to Curraheen Science Park from Ballincollig Link Road.

The secondary route network will provide a collector function from surrounding schools, residential areas and key employment centres interlinking the two primary routes in future years as well as linking to the greenway routes proposed north and south of the town. Map U6 illustrates the proposed network.

The foundation of a Greenway network has already been laid in Ballincollig with Greenway BC-GW1 and BC-U4 through Ballincollig Regional Park. These routes form important recreation routes for residents of the town and will be built upon through the development of routes BC-GW2 and BC-GW4 to the south of the town which will pass through the Ballincollig Masterplan area. Greenway BC-GW5 and BC-GW3 are proposed greenways along the River Lee to provide an alternative off-road route to Carrigrohane Road. Both of these facilities will intersect with a number of secondary routes providing quality linkages to the town centre.

The descriptions below should be read in conjunction with Map U6 which sets out the proposed network in this area.

11.2 Route Descriptions

The following sections outline the proposals for the future proposed network in Ballincollig in more detail.

ROUTE CODE: BC-U1A

Road Name:
Carrigrohane Road/N22

Road Section:
N22 Roundabout to Lee Fields

Existing Facility and Quality of Service:
There is an existing segregated shared path eastbound along this route with a QoS of B and a cycle lane westbound with a QoS of C.

Proposed QoS:
It is proposed to provide a QoS of at least B on this route.

Proposed Infrastructure Type:
This is proposed as a primary route, providing an upgrade of existing facilities along this route. Considering the high traffic speeds along this route suitable segregated cycling facilities should be considered. An alternative off-road cycle route is proposed along the banks of the River Lee to the north (BC-GW5).

Key Locations Served:
Ballincollig, Cork City Centre, UCC.

Pinch Points/Constraints:
Limited road width and a number of property access points may not be sufficient to provide adequate segregated facilities along this link. Upgrade of existing facilities to improve level of comfort including surfacing should be considered at a minimum.

ROUTE CODE: BC-U1

Road Name:
R608

Road Section:
N22 to Classes Lake

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route, providing extension of cycle lanes further east to where existing hard shoulders are in place up to pedestrian bridge over N22 that links to residential development at Grange Manor and EMC on south side of N22.

Key Locations Served:
Lakewood Sports Complex, EMC, connects to secondary network that serves residential areas.

Pinch Points/Constraints:
No major constraints with this proposal. Cycle lanes are feasible within the existing hard shoulder along this route section.

ROUTE CODE: BC-U1

Road Name:
R608

Road Section:
Classes Lake to Coolroe Junction

Existing Facility and Quality of Service:
There is cycle lanes within the bus lane along this route with a QoS of C.

Proposed QoS:
It is proposed to improve the QoS to at least B along this route through resurfacing and improved cyclist priority.

Proposed Infrastructure Type:
This is proposed as a primary route, maintaining the existing cycle lane within the bus lane.

Key Locations Served:
Residential, Ballincollig Technology Park, LIDL

ROUTE CODE: BC-U1

Road Name:
R608/Main Street

Road Section:
Coolroe Junction to Old Fort Road

Existing Facility and Quality of Service:
There is cycle lanes within the bus lane along this route with a QoS of C.

Proposed QoS:
It is proposed to improve the QoS to at least B along this route through resurfacing and improved cyclist priority.

Proposed Infrastructure Type:
This is proposed as a primary route, maintaining the existing cycle lane within the bus lane.

Key Locations Served:
Town Centre and secondary network that links to surrounding residential areas and schools.

Pinch Points/Constraints:
No major constraints given that existing facilities are already in place.

ROUTE CODE: BC-U1

Road Name:
R608/Main Street

Road Section:
Link Road to N22 Roundabout

Existing Facility and Quality of Service:
There are cycle lanes along this route with a QoS of B.

Proposed QoS:
It is proposed to maintain the existing QoS B at a minimum.

Proposed Infrastructure Type:
This is proposed as a primary route, maintaining existing cycle lanes in both directions.

Key Locations Served:
Town Centre and secondary network that serves surrounding residential, schools and employment centres. Also links to inter-urban route.

Pinch Points/Constraints:
No major constraints given the existing facilities are already in place.

ROUTE CODE: BC-U2

Road Name:
Inishmore Lawn

Road Section (where applicable):
Western section of Inishmore Lawn to Main Street

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route, widening the existing footpath to provide shared segregated pedestrian/cycle path.

Key Locations Served:
Town Centre, Community School, technology park, surrounding residential area.

Pinch Points/Constraints:
This route will require a portion of the grass verge for path widening. This is considered acceptable in the context of the infrastructure being proposed.

ROUTE CODE: BC-U2A

Road Name:
Old Fort Road

Road Section (where applicable):
Old Fort Road and Inishmore Lawn to Community School.

Existing Facility and Quality of Service:
There is a shared pedestrian and cycling path along this route with a QoS C.

Proposed QoS:
It is proposed to improve the QoS to at least B along this route through resurfacing and improved cyclist priority.

Proposed Infrastructure Type:
This is proposed as a secondary route, providing on road cycle lanes westbound. This route will extend to Inishmore Lawn providing access to Ballincollig Community School.

Key Locations Served:
Town Centre, Community School

Pinch Points/Constraints:
Introduction of cycle lane may reduce lane widths that are currently approximately 7.2metres. With the existing segregated shared cycle/pedestrian track on the north side of this road, a westbound cycle lane on-road will leave sufficient width for two way vehicular traffic.

ROUTE CODE: BC-U3

Road Name:
Kilumney Road

Road Section:
Coolroe Meadows to Station Road

Existing Facility and Quality of Service:
There is a shared pedestrian and cycling path along this route with a QoS B.

Proposed QoS:
It is proposed to maintain QoS B on existing facilities and provide at least the same on any new facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with road widening and on-road mandatory cycle lanes in conjunction with the existing facilities and the development of the Master Plan site to the south.

Key Locations Served:
Surrounding residential area and future Master Plan site.

Pinch Points/Constraints:
Existing road is narrow (5 metres at some points) and could therefore require some land take. This can be achieved through development contributions from the Master Plan development site to the south.

ROUTE CODE: BC-U3

Road Name:
Kilumney Road

Road Section:
Station Road to Poulavone Link Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route, maintaining the existing eastbound segregated shared pedestrian/cycle route and providing an on-road cycle lane westbound.

Key Locations Served:
Surrounding residential, future Master Plan site, Gaelscoil.

Pinch Points/Constraints:
This route requires a portion of existing road-width (currently approximately 6.2 metres at Castleview House). If the necessary road width cannot be achieved, consideration should be given to widening the shared path on north side of road to provide two way cycling.

ROUTE CODE: BC-U4

Road Name:
Powdermill and Regional Park Greenway

Road Section (where applicable):
Ballincollig Regional Park to Old Fort Road

Existing Facility and Quality of Service:
There is a shared pedestrian and cycling path along this route with a QoS A+.

Proposed QoS:
It is proposed to maintain a QoS A+ along this existing route and at least a QoS B on proposed additional sections.

Proposed Infrastructure Type:
This is proposed as a secondary route utilising the existing segregated track through Ballincollig Regional Park and a mixed street environment and reduced speed limit to 30kph along the residential street to Old fort Road. It is proposed to provide traffic management to reduce speeds and improve cyclist safety.

Key Locations Served:
Town centre, Regional Park, GAA Grounds and surrounding residential areas.

Pinch Points/Constraints:
No major constraints considering existing low-speed traffic environment along this route. Additional traffic and speed management measures will also improve this link for cyclists.

ROUTE CODE: BC-U5

Road Name:
Coolroe

Road Section (where applicable):
Main Road to Ballincollig Regional Park

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed secondary route providing on road cycle lanes. Uphill direction should be prioritised where there is insufficient space for cycle lanes in both directions.

The option to provide an off road facility between Coolroe and Innishmore Lawn will also be explored.

Key Locations Served:
Technology park, surrounding residential areas and Regional Park.

Pinch Points/Constraints:
Road width for cycle lanes will be difficult to achieve with existing historical wall on northern side. Therefore the uphill, northbound cycle lane should be prioritised.

ROUTE CODE: BC-U6

Road Name:
Residential Access Road (Classes Lake)

Road Section (where applicable):
R608 Junction to The Elms

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed secondary route providing on-road cycle lanes in both directions.

Key Locations Served:
Surrounding residential areas.

Pinch Points/Constraints:
No major constraints given existing road widths and low-speed traffic environment along this route.

ROUTE CODE: BC-U7

Road Name:
Coolroe Meadows

Road Section (where applicable):
Main Road to Kilumney Road.

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed primary route providing off-road cycle tracks in parallel to the existing segregated footpaths.

Key Locations Served:
Surrounding residential areas.

Pinch Points/Constraints:
Crossing of a roundabout junction along this link will require adequate treatment to improve cyclist safety.

ROUTE CODE: BC-U8

Road Name:
Barry's Road

Road Section (where applicable):
Main Road to Kilumney Road.

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route providing a mixed street and reduced speed limit to 30kph. Traffic management measures will be required to keep speeds down.

Key Locations Served:
Surrounding Residential

Pinch Points/Constraints:
On-road nature of proposed route may require change in attitudes to driving through this section. Signage and road markenings can be utilised to improve dirver's awareness of cyclists.

ROUTE CODE: BC-U8

Road Name:
Barry's Road

Road Section (where applicable):
Kilumney Road to N22

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed secondary route providing on-road cycle lanes or segregated cycle tracks within new Master Plan Development site.

Key Locations Served:
Master Plan site

Pinch Points/Constraints:
No major constraints given the greenfield nature of site at present.

ROUTE CODE: BC-U9

Road Name:
Station Road

Road Section (where applicable):
Main Road to Kilumney Road.

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed primary route providing a mixed street and reduced speed limits to 30kph. Traffic management measures will be required to keep speeds down and improve safety for cyclists.

Key Locations Served:
Surrounding Residential, Scoil Eoin, Scoil Naomh Mhuire

Pinch Points/Constraints:
On-road nature of proposed route may require change in attitudes to driving through this section. Traffic management and signage can be utilised to improve driver awareness and cyclist safety.

ROUTE CODE: BC-U10

Road Name:
Link road

Road Section (where applicable):
Main Road to Kilumney Road.

Existing Facility and Quality of Service:
There are currently dedicated cycling lanes along this route with a QoS C.

Proposed QoS:
It is proposed to upgrade the cycle lanes along this route to provide at least a QoS B.

Proposed Infrastructure Type:
This is a proposed secondary route extending the existing cycle facilities to the signalised junction at Kilumney Road and providing stacking lanes.
The existing cycle lanes should be improved/widened where possible.

Key Locations Served:
Surrounding residential areas, Link Road Business Park, Westpoint Business Park, Powderville Industrial Park and the Skate Rink.

Pinch Points/Constraints:
Signalised junction at Kilumney Road currently does not provide for cyclists. Stacking lanes should be implemented at a minimum and cycling lanes extended to junction where possible.

ROUTE CODE: BC-U11

Road Name:
Local Access Road

Road Section (where applicable):
Connection to Master Plan site in future years

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed secondary route providing on-road cycle lanes or segregated cycle tracks within the new Master Plan Development site.

Key Locations Served:
Gael Scoil, future Master Plan site

Pinch Points/Constraints:
No major constraints given greenfield nature of development site.

ROUTE CODE: BC-U12

Road Name:
Carrignarra Road

Road Section (where applicable):
Kilumney Road/Link Road to Greystones

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed secondary route providing on-road cycle lanes.

Key Locations Served:
Surrounding residential areas.

Pinch Points/Constraints:
Boundary walls on north east section (broadly at Greystones Housing Development Entrance) may impact road widening requirements – currently the road width is approximately 8 metres which should be sufficient to at least provide a cycle lane in an eastbound direction.

ROUTE CODE: BC-U12A

Road Name:
Whitethorn Avenue

Road Section (where applicable):
Kilumney Road to Main Road/R608.

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed secondary route with a mixed street environment with traffic calming to reduce speeds to 30kph.

Key Locations Served:
Surrounding residential area.

Pinch Points/Constraints:
No major constraints with this proposal. This proposal will require adequate traffic management and signage to improve cyclist safety.

ROUTE CODE: BC-U13

Road Name:
Maglin Circuit

Road Section (where applicable):
Kilumney Road to N22 over bridge

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed primary route providing on-road cycle lanes or segregated cycle tracks within the new Master Plan Development site.

Key Locations Served:
Master Plan Development site and Greenway BG-GW2.

Pinch Points/Constraints:
No major constraints given green field nature of development site.

ROUTE CODE: BC-U14

Road Name:
New Link Road to CIT and Curraheen Scinece Park

Road Section (where applicable):
N22 to Cork City West

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed primary route providing segregated cycle tracks in conjunction with a new road layout including a suitable crossing of the N22. This link may also include a link to the Curraheen River Greenway in future.

Key Locations Served:
East Ballincollig and West Cork City and new Science Park.

Pinch Points/Constraints:
This link is dependent on the development of a new road linking to Curraheen Science Park.

ROUTE CODE: BC-U15

Road Name:
Model Farm Road

Road Section (where applicable):
N22 to Curragheen River Greenway

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed primary route providing on-road cycle lanes, which will require road widening and associated property acquisition.

Key Locations Served:
East Ballincollig and West Cork City.

Pinch Points/Constraints:
Significant road widening will be necessary to provide cycle lanes along this link.

ROUTE CODE: BC-U16

Road Name:
Access Road

Road Section (where applicable):
N22 to Greenway BC-GW2

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed primary route providing an on-road mixed street environment.

Key Locations Served:
EMC, greenway network and links to Ballincollig Town Centre.

Pinch Points/Constraints:
Signage and road markings will be required to improve cyclist safety along this link.

Ballincollig Greenway Routes

ROUTE CODE: BC-GW1

Road Name:
Ballincollig Regional Park

Road Section (where applicable):
South Bank of River Lee connecting to Old Fort Road at Town Centre.

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a two-way cycle track.

Key Locations Served:
Leisure/recreation cyclists.

Pinch Points/Constraints:
Access to land along river bank may be difficult depending on land ownership.

ROUTE CODE: BC-GW2

Road Name:
Abandoned Rail Line

Road Section (where applicable):
Abandoned rail line connecting to Cork City. Additional route proposed through Master Plan site connecting to future primary route (BC-U3) at Kilumney Road.

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed two-way cycle track. Greenway to Cork City may run north of N40 to avoid crossings and link directly to Curaheen Science Park.

Key Locations Served:
Leisure/recreation cyclists, Master Plan site, Science Park

Pinch Points/Constraints:
N22 crossing south and east will require implementation of over/under bridge.

ROUTE CODE: BC-GW3

Road Name:
Ballincollig Regional Park

Road Section (where applicable):
South Bank of River Lee connecting park to Carrigrohane Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a two-way cycle track.

Key Locations Served:
Leisure/recreation cyclists, residential areas, potential commuter cyclists

Pinch Points/Constraints:
Access to land along river bank may be difficult.

ROUTE CODE: BC-GW4

Road Name:
Ballincollig Masterplan Site

Road Section (where applicable):
New Greenway to be developed through masterplan area.

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a two-way cycle track.

Key Locations Served:
Future users of masterplan site and residents at western end of proposed greenway

Pinch Points/Constraints:
There should be no constraints to the development of this facility as it will be integrated into the masterplan proposals from the outset.

ROUTE CODE: BC-GW5

Road Name:
River Lee Greenway

Road Section (where applicable):
New Greenway to be developed through lands parallel to River Lee.

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a two-way segregated cycle track. This route can form part of the Eurovelo route network from Waterford via Cork City Centre and linking to the west.

Key Locations Served:
This is proposed as a key greenway link between Ballincollig and Lee Fields Greenway linking to cork City

Pinch Points/Constraints:
There are no major constraints with this proposal given it is included in Macroom LAP as an objective.

ROUTE CODE: CU-GW1

Road Name:
Curragheen River Greenway

Road Section (where applicable):
Existing Greenway roughly along alignment of Curagheen River

Existing Facility and Quality of Service:
This is currently a segregated pedestrian/cycle path with a QoS of A+.

Proposed QoS:
It is proposed to maintain the existing QoS of A+ along this route.

Proposed Infrastructure Type:
Primarily proposed to maintain the existing facilities along this route. A bridge link or a similar high quality crossing facility at Model Farm Road will improve the continuity and usability of this greenway. If a bridge cannot be provided, a high quality at-grade crossing should be implemented with a 2-way cycle link on Model Farm Road to provide access to the Greenway through Rossbrook Estate.

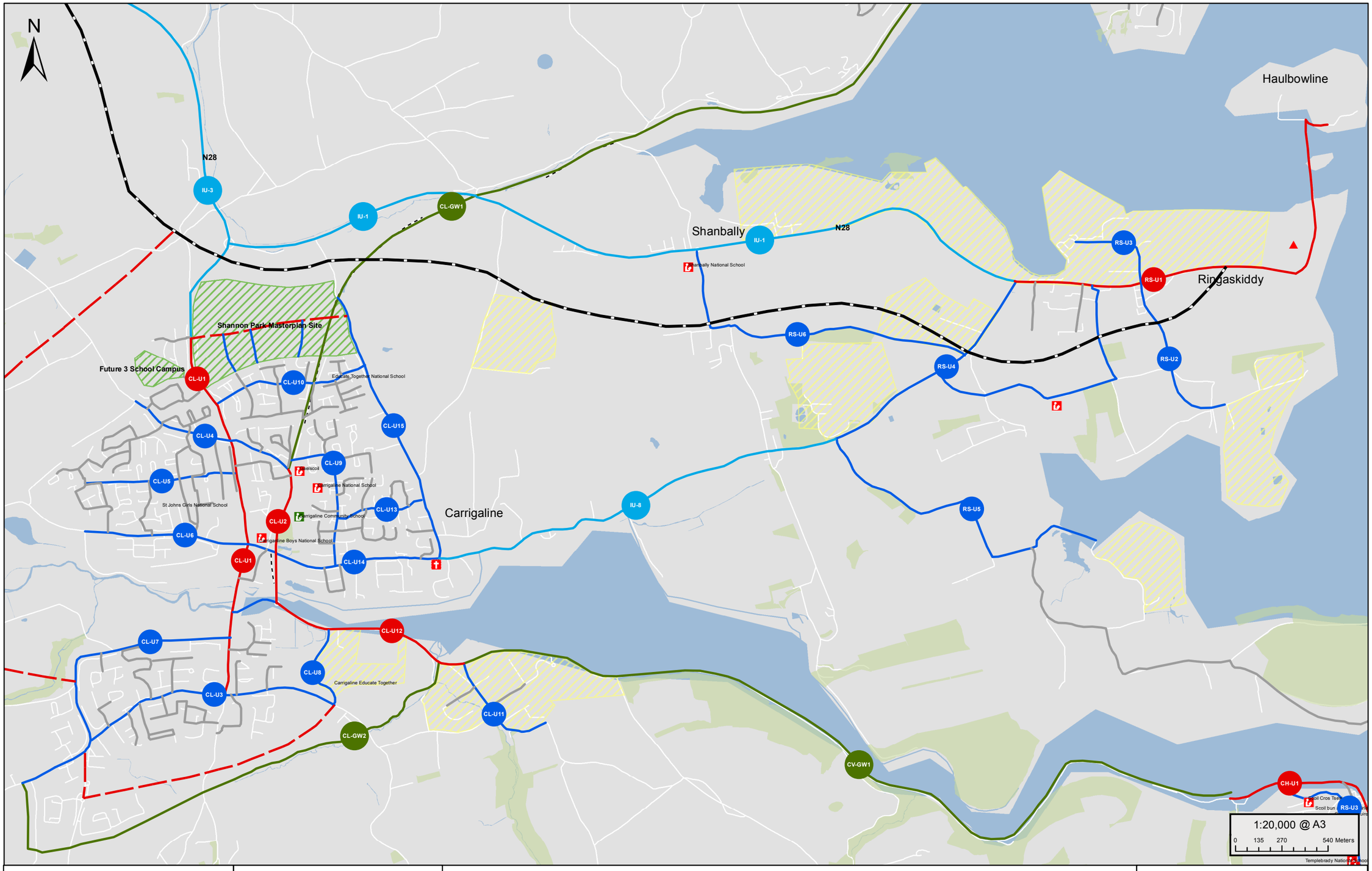
Key Locations Served:
A number of residential areas, schools, colleges and employment centres. This route links Ballincollig with much of the western area of the City via Carrigrohane Road and Model Farm Road.

Pinch Points/Constraints:
Obtaining the land required for a bridge structure either side of Model Farm Road may be an issue. This crossing could be facilitated through the development of the science park adjacent to this greenway.

12

Carrigaline and Ringaskiddy

Map U11 Proposed Future Network - Carrigaline and Ringaskiddy



Project:	Title:	Legend:
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	U11 - CARRIAGLINE & RINGASKIDDY	**Future Network Facility Type**: Greenway, Interurban, Primary; Possible Primary, Secondary, Feeder; University, Hospital, Place of Worship; Primary School, Secondary School; Train Station, NewTrain Station, Irish Rail Network, Disused Railways; Gateway, N28 Upgrade, New Bridge; Ferry Terminal, Ferry Connection, Employment Centre, Masterplan Area

AECOM
4th Floor, Adelphi Plaza,
Upper Georges Street,
Dun Laoghaire, Co, Dublin
Tel: +353 (0)1 238 3100
Fax: +353 (0)1 238 3199
www.aecom.com

12 Carrigaline and Ringaskiddy

12.1 Introduction

Both Carrigaline and Ringaskiddy are accessed primarily by the N28 which originates in Cork City and terminates in Ringaskiddy.

It is a single carriageway road from which the R611 spur provides access to Carrigaline. Both of these routes, the N28 in particular, experience very high traffic volumes and high levels of HGV traffic in particular. The primary purpose of the route is as a traffic distributor route and as such, while footpath provision exists closer to the towns, no dedicated cyclist facilities presently exist. In addition to the N28, there are a handful of local and regional roads which also provide access to Carrigaline but also lack any provision for vulnerable road users. The R613 provides an alternative vehicular link between Carrigaline and Ringaskiddy themselves but again, this route is unsuitable for vulnerable road users with no facilities being present.

Carrigaline is a relatively large town of approximately 15,000 people. The R611 travels through the centre of the town, forming the town main street. Examination of 2011 census data indicates that many of the work trips made to Ringaskiddy originate in Carrigaline and as such there is a relatively strong demand lines between the two areas. Almost all of these trips are currently made by car.

There is a shared pedestrian and cycle path which extends the length of the inner relief road connecting cyclists to the R611 in the north and the R612 in the south. This continuity continues along the R612 where these facilities are connected to the Crosshaven Greenway via another shared pedestrian / cycle path. In addition to these there are also cycle lanes on Waterpark Close.

Ringaskiddy is a heavily industrialised area which has a large ferry port and is a hub for employment with a number of large pharmaceutical companies long established in the area. There is a minimal amount of housing in the area, most of which is concentrated near the ferry terminal and forms the centre of the village. There are two national schools in the area as well as the National Maritime College of Ireland. The N28 forms the Main Street of the village which is very wide and provides pedestrian provision on one side of the road. There are no cycling facilities in the area at present. Map E11 illustrates the existing cycling infrastructure in place in the two towns. Refer to Map U11 to view the proposed network in the two towns.

Proposals for the area focus around provision in Carrigaline and include a primary route CL-U1 along the R611 through the town centre around which the other routes in the town network will focus. This route will serve many of the key trip generators in the town centre along the High Street and distribute these trips north and south to the main residential developments and schools in the town (existing and future). CL-U2 is the other primary route in the town and will connect the existing Crosshaven Greenway (CH-GW1) with the future greenway north of Carrigaline, CL-GW1. The remainder of the routes in the town will focus on capturing the residential bicycle traffic and distributing this radially onto the two primary routes and subsequently the wider greenway and interurban network.

The future proposed network in Ringaskiddy focuses on the primary route RS-U1 which serves the main street of the village and picks up most of the residential catchments in the village and will also take in the local Maritime College. Developing off this will be a number of secondary routes serving the main employment areas south of the village centre as well as the ferry terminal. Route RS-U1 will connect into a future interurban route which will provide access to Carrigaline as well as Cork City Centre in the longer term. In addition, this interurban route will intersect with the proposed route CL-GW1 which will provide linkages with Monkstown, Passage West and also Cobh via a ferry crossing.

The descriptions below should be read in conjunction with Map U11 which sets out the proposed network in this area.

12.2 Route Descriptions

A description of each of the proposed routes is provided below.

Carrigaline Urban Routes

ROUTE CODE: CL-U1

Road Name:
R611 (Church Hill/Cork Road)

Section (where applicable):
Herons Wood to Ballea Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with on-road cycle lanes or segregated cycle facilities north of Carrigaline Service Station to planned school campus.

Key Locations Served:
Surrounding residential areas

Pinch Points/Constraints:
Section immediately north of Ballea Road junction is more constrained in terms of width than further north and cycle lanes will need to be used here. Two roundabouts will need to be upgraded in future to provide greater protection for cyclists.

ROUTE CODE: CL-U1

Road Name:
R611 (Church Hill/Cork Road)

Section (where applicable):
Ballea Road to Kilmoney Road Upper

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with a combination of a mixed street arrangement for shared vehicular and cyclist traffic and cycle lanes between the junctions of Kilmoney Road Upper and Lower.

Key Locations Served:
Surrounding residential and Town Centre.

Pinch Points/Constraints:
There are width constraints on Cork Road through the town centre with on-street parking therefore a mixed street type of arrangement will be necessary if parking is to be maintained.

ROUTE CODE: CL-U2

Road Name:
Boher Guidel

Section (where applicable):
R611 to Crosshaven Road

Existing Facility and Quality of Service:
There is an existing segregated cycle track northbound for the northern section of this route and southbound for the southern section. Both facilities have a QoS of B.

Proposed QoS:
It is proposed to maintain the existing QoS B and upgrade if possible.

Proposed Infrastructure Type:
This is proposed as a primary route that will improve existing off road shared pedestrian/cyclist facility to both sides of the road.

Key Locations Served:
Surrounding residential, Town Centre and linking two Greenways CL-GW1 and CH-GW1.

Pinch Points/Constraints:
Width constraints north of church road with a rock outcrop mean existing facilities will need to be upgraded, with segregated facilities on rest of the road where width permits.

ROUTE CODE: CL-U3

Road Name:
Kilmoney Road Upper

Section (where applicable):
From the junction of Kilmoney Road Lower to the

roundabout junction of Laburnum Avenue.

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route that will provide on-road advisory cycle lanes.

Key Locations Served:
Surrounding residential areas, connects to primary route CL-U1 running north-south through the Town Centre.

Pinch Points/Constraints:
Just west of Church Hill junction, the road width reduces to approximately 6m, parts of the adjacent verge will need to be reclaimed to provide width for cycle lanes. On the eastern section approaching Laburnum junction the road width reduces again over an approximately 200m section. Traffic calming and mixed street arrangements should be considered here to provide complete route.

ROUTE CODE: CL-U4

Road Name:
Western Avenue/Ballinrea Road

Section (where applicable):
From the junction of R611 to Carrig Court Residential development.

Existing Facility and Quality of Service:
There is currently an existing shared pedestrian/cycle path east of the R611 junction with a QoS of B.

Proposed QoS:
It is proposed to maintain the existing QoS of B on current facilities and provide at least the same level of service on proposed facilities.

Proposed Infrastructure Type:
This is proposed as a secondary route that will provide on-road advisory cycle lanes. East of R611 junction, existing shared pedestrian / cycle path should be upgraded to provide some form of segregation for cyclists.

Key Locations Served:
Surrounding residential areas, connects to main north-south route through Town Centre and future Greenway CL-GW1.

Pinch Points/Constraints:
Road width is approximately 7 metres which is not sufficient for mandatory cycle lanes however; there is an adjacent verge along most of the route which should be reclaimed to provide the required width.

ROUTE CODE: CL-U5

Road Name:
Glenwood Grove westwards

Section (where applicable):
From the junction of R611 to The Pines Residential development.

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route that will upgrade the existing pedestrian link to provide a shared cycle/pedestrian facility with a mixture of on-road mixed facilities and a fully segregated route through green areas.

Key Locations Served:
Surrounding residential areas, Scoil Mhuire, connects to main north-south route through Town Centre

Pinch Points/Constraints:
There are no major constraints through existing residential area with this proposal. A mixed street facility will require appropriate signage and road markings to enhance cyclist safety.

ROUTE CODE: CL-U6

Road Name:
Ballea Road to Roundabout at Sports ground

Section (where applicable):
From the junction of R611 to The Sports Ground.

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route that will provide on-road cycle lanes.

Key Locations Served:
Surrounding residential areas, Sports Ground, connects to main north-south route through Town Centre.

Pinch Points/Constraints:
Should be achievable within existing road width. Roundabout junction with R611 should be upgraded to signals in future to increase cyclist and pedestrian safety.

ROUTE CODE: CL-U7

Road Name:
Kilmoney Road Lower

Section (where applicable):
From the junction of R611 to Kilmoney Road Upper.

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route that will be mixed between cyclists and motorists.

Key Locations Served:
Surrounding residential areas, connects to main north-south route through Town Centre.

Pinch Points/Constraints:
Current road width (approximately 7 metres) not sufficient for cycle lanes. The route will be signed and lined as per the NCM guidance on mixed streets, particularly to warn motorists of the presence of slow moving, uphill cyclists.

ROUTE CODE: CL-U8

Road Name:
kilnagerly Link Road

Section (where applicable):
Ferney Road to Crosshaven Road

Existing Facility and Quality of Service:
There is an existing shared walking/cycling path along this route with a QoS of A+.

Proposed QoS:
It is proposed to maintain the existing QoS of A+ along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route that will utilise existing shared walking/cycling facilities on both sides of the road. This route could be extended when the full southern relief road is in place.

Key Locations Served:
Educate Together school, Kilnageary Business Park.

Pinch Points/Constraints:
There are no constraints given the presence of existing facilities along this route.

ROUTE CODE: CL-U9

Road Name:
Mount Rivers Close

Section (where applicable):
R613 (Church Road) to Heatherfield Lawn

Existing Facility and Quality of Service:
There are currently existing advisory cycle lanes along this route with a QoS of B.

Proposed QoS:
It is proposed to provide maintain at least the existing QoS B along this route.

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route that will utilise existing advisory cycle lanes.

Key Locations Served:
St. Mary's National School, Community School and surrounding residential

Pinch Points/Constraints:
There are no constraints given the presence of existing facilities along this link.

ROUTE CODE: CL-U10

Road Name:
Heron's Wood

Section (where applicable):
Herrons Wood

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route that will provide on-road cycle lanes from Herons Wood residential area to CL-U1. On road cycle lanes will be possible here through the reclamation of central hatching and grass verges. Consideration should be given to removal of centre line along here which would calm traffic by increasing motorist's awareness. A more detailed on site survey will be required to confirm the suitability of removing the centre line from this link.

Key Locations Served:
Surrounding residential

Pinch Points/Constraints:
Existing road cross section is not sufficient for cycle lanes however removal of central hatching and reclamation of some verges will provide this width.

ROUTE CODE: CL-U11

Road Name:
Kilnageary Road

Section (where applicable):
R612 to Connemara Business Park

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route that will provide on-road cycle lanes to access the business park.

Key Locations Served:
Connemara Business Park

Pinch Points/Constraints:
This proposal should be achievable given the existing road width at this location.

ROUTE CODE: CL-U12

Road Name:
R612

Section (where applicable):
Lidl Roundabout to Crosshaven Greenway

Existing Facility and Quality of Service:
There is an existing shared walking and cycling path in the Crosshaven direction with a QoS of C.

Proposed QoS:
It is proposed to upgrade the QoS on this route to at least B.

Proposed Infrastructure Type:
This is proposed as a primary route that will provide an important connection between Carrigaline Town Centre and the Crosshaven Greenway. The possibility of a segregated cycle track along this route should be investigated and implemented where possible.

Key Locations Served:
Carrigaline Town Centre, Kilnagleary Business Park, Crosshaven Greenway

Pinch Points/Constraints:
The limited road width along this link will need to be expanded to provide segregated cycle track or on-road cycle lanes.

ROUTE CODE: CL-U13

Road Name: Cedarwood Road

Section (where applicable): Mount Rivers Close to Fernhill Road

Existing Facility and Quality of Service: There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type: This is proposed as a secondary route that will provide mixed street environment through residential estates.

Key Locations Served: Connection from residential areas to Carrigaline Town Centre and schools

Pinch Points/Constraints: The low impact traffic nature of this route is suitable for a mixed street environment, however additional signage and road markings are recommended to improve cyclist safety.

ROUTE CODE: CL-U14

Road Name:
R613/Church Road

Section (where applicable):
Cork Road to Fernhill Road

Existing Facility and Quality of Service:
There is currently a shared cycling and walking path eastbound and advisory cycle lanes westbound along this route. Both have a QoS of C.

Proposed QoS:
It is proposed to upgrade facilities along this route to QoS B.

Proposed Infrastructure Type:
This is proposed as a secondary route that will provide an upgrade of existing facilities facilitating an advisory route to the inter-urban route to Ringaskiddy.

Key Locations Served:
Connection from residential areas to/from Carrigaline Town Centre and linking to Ringaskiddy inter-urban route.

Pinch Points/Constraints:
The low impact traffic nature of this route is suitable for a mixed street environment, however additional signage and road markings are recommended to improve cyclist safety.

ROUTE CODE: CL-U15

Road Name:
Fernhill Road/Rock Road

Section (where applicable):
N28 to Church Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a fully segregated two way cycle track serving the eastern Carrigaline area as a secondary route.

Key Locations Served:
Carrigaline and surrounding services and amenities, Link to Passage West Greenway and to Ringaskiddy

Pinch Points/Constraints:

Land acquisition may be necessary to provide full length of segregated cycle track.

Carrigaline Greenway Routes

ROUTE CODE: CL-GW1

Road Name:
N/A

Section (where applicable):
Carrigaline to Passage West

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a fully segregated two way cycle track along the disused rail line.

Key Locations Served:
Passage West, Carrigaline, Cork City

Pinch Points/Constraints:
The crossing of N28 will require a significant structure for cyclists to cross safely.

ROUTE CODE: CL-GW2

Road Name:
N/A

Section (where applicable):
R612 to Mountain Road

Proposed Infrastructure Type:
This is proposed as a fully segregated two way cycle track serving the south Carrigaline Residential areas.

Key Locations Served:
Carrigaline and surrounding services and amenities, Link to Crosshaven

Pinch Points/Constraints:
Area subject to flooding which may limit usage of this greenway.

ROUTE CODE: CH-GW1

Road Name:
N/A

Section (where applicable):
Carrigaline to Crosshaven

Existing Facility and Quality of Service:
This is an existing two way cycle track along the disused rail line connecting Carrigaline to Crosshaven with a QoS A+.

Proposed QoS:
It is proposed to maintain the existing QoS on this route.

Proposed Infrastructure Type:
This is an existing two way cycle track along the disused rail line connecting Carrigaline to Crosshaven.

Key Locations Served:
Passage West, Carrigaline, Cork City

Pinch Points/Constraints:
This route currently lacks a legible connection for cyclist into Carrigaline Town Centre. A suitable link (CL-U12) should be prioritised to provide a logical, continuous link to and from Carrigaline to make the most of this amenity.

Ringaskiddy Urban Routes

ROUTE CODE: RS-U1

Road Name:
N28 (Main Street)

Section (where applicable):
Ringaskiddy Ferry Port to National Maritime College

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with segregated cycle tracks along the existing N28 corridor.
This proposal will be more feasible when the N28 upgrade is put in place.

Key Locations Served:
Surrounding residential, Ferry Port, Maritime College, Rafeen River Golf Course

Pinch Points/Constraints:
There are no major constraints with this proposal considering existing road width and verge availability. Traffic volumes may be a deterrent to cyclists currently but these should reduce with upgrade of N28.

ROUTE CODE: RS-U2

Road Name:
Loughbeg Road

Section (where applicable):
Ringaskiddy Village to De Puy / Hovione

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with advisory cycle lanes providing a cycling link to the Pfizer plant, which is a major employer in the area.

Key Locations Served:
Ringport Business Park, DePuy, Hovione Limited

Pinch Points/Constraints:
Some road widening may be required which will be possible through the reclamation of adjacent verges.

ROUTE CODE: RS-U3

Road Name:
Port of Cork Internal Spine Road

Section (where applicable):
Ferry Port to Main Street

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with on-road advisory cycle lanes linking to the Ferry Port. This will provide the opportunity for cycling tourists to immediately access the cycling network and should be considered a key entry point.

Key Locations Served:
Ferry Port.

Pinch Points/Constraints:
This proposed route is on private land and will require the agreement of the landowners before being implemented. Traffic management to provide cyclist safety from HGV traffic should be considered.

ROUTE CODE: RS-U4

Road Name:
R613

Section (where applicable):
N28 to Raheens East

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with advisory cycle lanes providing access to a number of key employment locations.

Key Locations Served:
Novartis, Carbon Group, Janssen Biologics

Pinch Points/Constraints:
Some road widening may be required however there

should be sufficient verge width present along this link to facilitate this.

ROUTE CODE: RS-U6

Road Name:
Currabinny Road

Section (where applicable):
R613 to Glaxo Smith Kline

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as an advisory cycle route part of the secondary network with appropriate signage and road markings alerting vehicles of cyclists. This route will provide an alternative route to access key employment locations from the N28.

Key Locations Served:
Glaxo Smith Kline

Pinch Points/Constraints:
Traffic management and reduced speeds will be required to provide sufficient safety for cyclists.

ROUTE CODE: RS-U7

Road Name:
Shanbally Mews/Marian Terrace

Section (where applicable):
R613 to N28

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This will be an advisory cycle route part of the secondary network with appropriate signage and road markings to alert vehicles of cyclists.

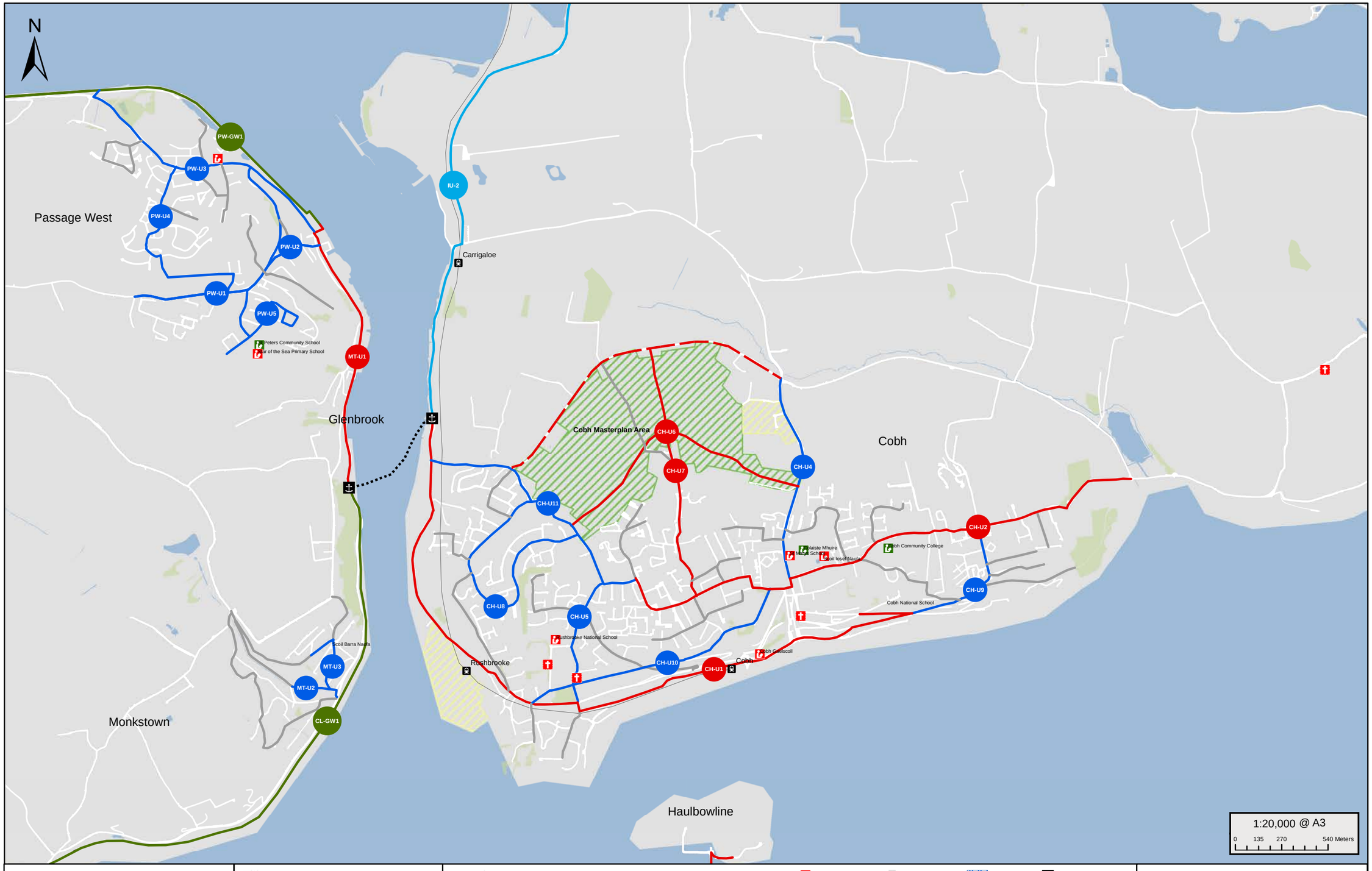
Key Locations Served:
Alternative route to Novartis and Carbon Group

Pinch Points/Constraints:

13

Passage and Monkstown

Map U10 Proposed Future Network - Cobh and Passage West



Project:	Title:	Legend: Future Network Facility Type						
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	U10 - COBH & PASSAGE WEST	Greenway Interurban Primary	Possible Primary Secondary Feeder	University Hospital Place of Worship	Primary School Secondary School	Train Station NewTrain Station Irish Rail Network Disused Railways	Gateway N28 Upgrade New Bridge	Ferry Terminal Ferry Connection Employment Centre Masterplan Area

AECOM
4th Floor, Adelphi Plaza,
Upper Georges Street,
Dun Laoghaire, Co, Dublin
Tel: +353 (0)1 238 3100
Fax: +353 (0)1 238 3199
www.aecom.com

13 Passage and Monkstown

13.1 Introduction

Passage West is located only 14km south of Cork City and 6km south of Cork City suburbs. The settlement is located on the western shores of Cork Harbour. The area is made up of Passage West, Glenbrook and Monkstown. Passage West and Glenbrook overlook the West Channel, through which Lough Mahon funnels into the lower harbour. Monkstown, further downstream at the mouth of the West Channel, overlooks Lower Cork Harbour.

The settlements of Passage West, Glenbrook and Monkstown grew as nineteenth century port towns in Cork Harbour. Only in Passage West does any notable commercial activity remain. Monkstown is a significant centre for water-based leisure activities and there is a cross-river ferry from Glenbrook to Carriagaloe which provides easy access to Great Island and East Cork. All of the residential settlements to the west of river front are on elevated topography with notably steep gradients to access the riverfront.

The primary access route to and from Passage West is the R610 which connects with Rochestown on the outskirts of the city and passes through the centre of the village, from here it continues south towards Monkstown before joining the N28 south of Monkstown. Access to Passage West by sustainable transport modes to and from Cork City is currently very good with the Passage West Greenway providing a direct link to the eastern Cork City suburbs from the village. This is a long established connection which serves as a recreational route for pedestrians and cyclists as well as a viable commuter route. Aside from the Greenway there are no other existing cycle facilities within the village. Map E10 illustrates the existing cycling infrastructure in place in the two towns. Map U10 illustrates the proposed network in Passage West and Monkstown.

Future proposals for the area are based around the existing greenway PW-GW1 and connections to the city and building on these. This Greenway will connect with the proposed Greenway CL-GW1 coming north from Carrigaline via a primary link MT-U1 which will provide an important direct linkage between Carrigaline and the city through Monkstown and Passage West. It will also provide access to Cobh by interconnecting with the Passage West ferry.

Connecting the Greenway to the town will be facilitated via a number of secondary links which in turn will be fed by a number of feeders routes from residential areas.

The following section outlines the proposals for the future proposed network in Passage West and Monkstown. The descriptions below should be read in conjunction with Map U10 which sets out the proposed network in this area.

13.2 Route Descriptions

A description of each of the proposed routes is provided below.

ROUTE CODE: MT(MONKSTOWN)-U1

Road Name:
Passage West Main Street

Section (where applicable):
Main Street to Ferry Terminal (Victoria Terrace)

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed primary route through the village of Passage West. It is proposed that the existing footpath is widened to provide a shared pedestrian and cycle path that would link the greenways north and south of the village. This would also require traffic management measures including raised crossing and junction treatments to allow for convenient cycling access through the town. A Greenway route is to be provided along the disused railway to the south of the village where appropriate and achievable considering land ownership and harbour constraints.

Key Locations Served:
Passage West town centre, Ferry Terminal

Pinch Points/Constraints:
Traffic management is required in the town centre to reduce speeds and enhance cyclist safety.

ROUTE CODE: MT-U2

Road Name:
Glen Road

Section (where applicable):
R610

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed secondary route with traffic calming measures to reduce traffic speeds to 30kph in a mixed street arrangement.

Key Locations Served:
Monkstown Tennis Club, surrounding residential

Pinch Points/Constraints:
Traffic management will be required to improve cyclist safety.

ROUTE CODE: MT-U3

Road Name:
Gordon Villas

Section (where applicable):
R610

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed secondary route with a mandatory uphill cycle lane along Gordon Villas and significant traffic calming measures to reduce traffic speeds to 30kph. Traffic management could include making Gordon Villas one way for vehicular traffic in a downhill direction (southbound).

Key Locations Served:
Surrounding residential, Scoil Barra Naofa

Pinch Points/Constraints:
Traffic management will be required to improve cyclist safety.

ROUTE CODE: PW (PASSAGE WEST)-U1

Road Name:
The Back Road

Section (where applicable):
R610 to Church Hill

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed secondary route with a mixed street arrangement reduced speeds limits and improved public amenity — lighting etc.

Key Locations Served:
Surrounding residential

Pinch Points/Constraints:
Restricted road width (approx. 5 metres) with historical walls either side of the road that means a mixed use street is the only viable option to provide for improved cyclist safety. This can be achieved through appropriate signage, road marking and traffic management measures.

ROUTE CODE: PW-U1

Road Name:
Barr an Bhaile

Section (where applicable):
Old Church Road to Primary School

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed secondary route with mandatory cycle lanes or a mixed street arrangement with traffic calming.

Key Locations Served:
Surrounding residential, Community School, Star of the Sea Primary School, GAA pitch

Pinch Points/Constraints:
Steep Gradients. Road widening may be required to accommodate cycle lanes.

ROUTE CODE: PW-U2

Road Name:
Church Hill

Section (where applicable):
Dock Street to Avondale

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed secondary route with a mixed street arrangement due to narrow road widths.

Key Locations Served:
Surrounding residential, links to Town Centre

Pinch Points/Constraints:
Restricted road width means a mixed use street is the only viable option to provide for improved cyclist safety. This can be achieved through appropriate signage, road marking and appropriate traffic management measures.

ROUTE CODE: PW-U3

Road Name:
R610

Section (where applicable):
From Car Park at Greenway to Cork Street

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed secondary route with on-road advisory cycle lanes to provide direct access to greenway for residential areas surrounding this route.

Key Locations Served:
Surrounding residential, Football pitches, link to greenway

Pinch Points/Constraints:
Junction treatment required for safety at roundabouts, medium gradient existing from Town Centre.

ROUTE CODE: PW-U4

Road Name:
Pembroke

Section (where applicable):
R610 to Pembroke Heights

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed secondary route with on-road advisory cycle lanes and a segregated cycle track linking Pembroke Heights to Bloomingdale to improve linkages to schools and GAA pitch to south.

Key Locations Served:
Surrounding residential

Pinch Points/Constraints:
Junction treatment required for safety at roundabout junction with R610. Level differences between Pembroke Heights and Bloomingdale will need to be addressed in the provision of new link.

ROUTE CODE: PW-U5

Road Name:
Maulbaun

Section (where applicable):
Old Church Road to GAA Pitch

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed secondary route with on-road advisory cycle lanes and a segregated cycle track linking to schools and the GAA pitch to south.

Key Locations Served:
Surrounding residential, schools and GAA pitch

Pinch Points/Constraints:
Adequate road signage and traffic management required to provide safe mixed street environment for cyclists.

Passage West And Monkstown Greenway Routes

ROUTE CODE: PW-GW1

Section (where applicable):
Passage West to Rochestown

Existing Facility and Quality of Service:
There is an existing share pedestrian cycle path along this route with a QoS A+.

Proposed QoS:
It is proposed to maintain the existing QoS along this route.

Proposed Infrastructure Type:
This is an existing fully segregated pedestrian/cycle route.

Key Locations Served:
Passage West, Carrigaline, Cork City

Pinch Points/Constraints:
No major constraints given existing facilities are in place.

ROUTE CODE: CL-GW1

Section (where applicable):
Passage West to Carrigaline/N28

Proposed Infrastructure Type:
This is a proposed fully segregated pedestrian/cycle route along the route of the disused railway.

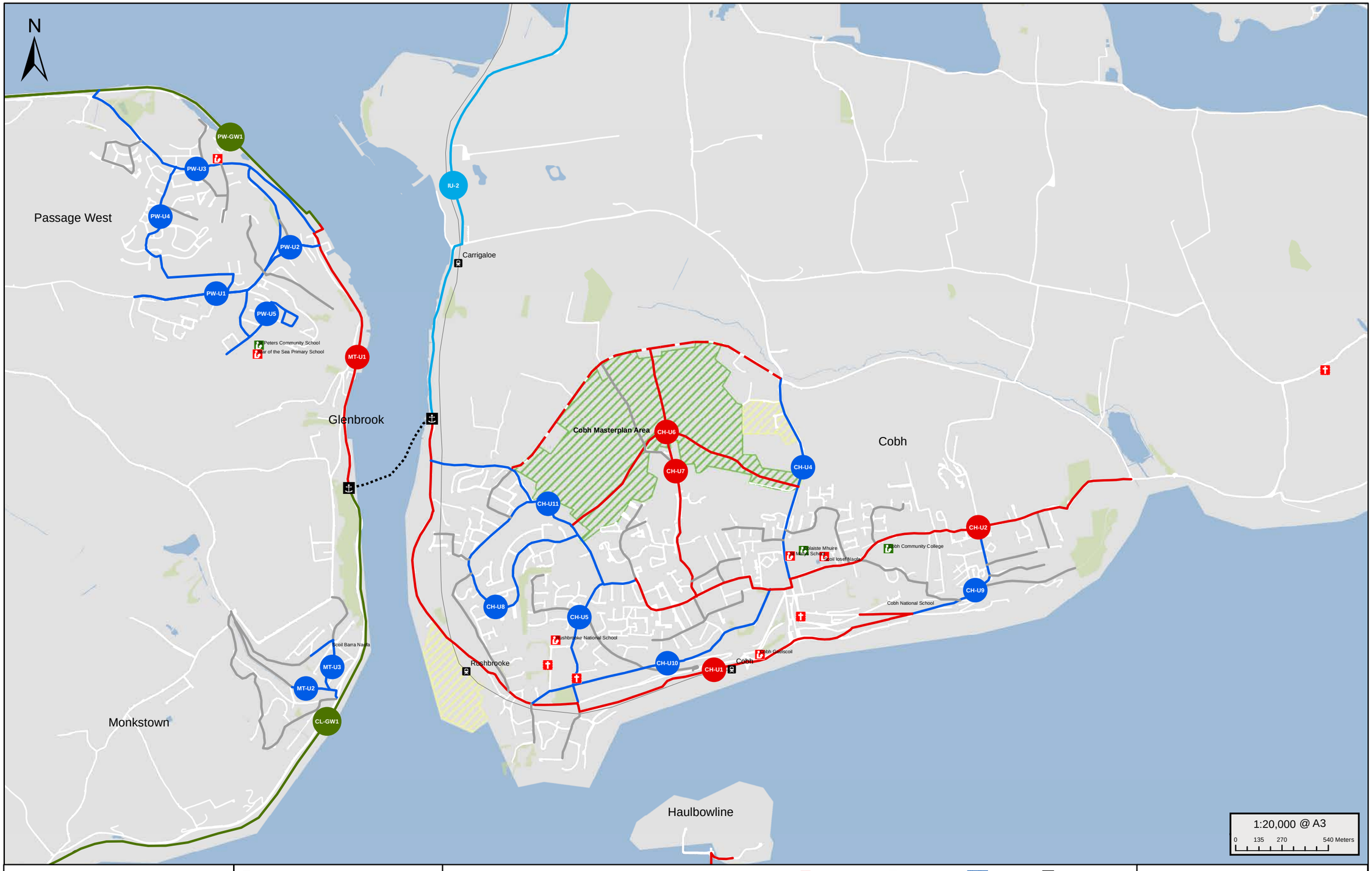
Key Locations Served:
Passage West, Carrigaline, Cork City

Pinch Points/Constraints:
Crossing of the N28 further south will require significant intervention.

14

Cobh

Map U10 Proposed Future Network - Cobh and Passage West



Project:	Title:	Legend: Future Network Facility Type					
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	U10 - COBH & PASSAGE WEST	Greenway Interurban Primary	Possible Primary Secondary Feeder	University Hospital Place of Worship	Primary School Secondary School	Train Station NewTrain Station Irish Rail Network Disused Railways	Gateway N28 Upgrade New Bridge Ferry Terminal Ferry Connection Employment Centre Masterplan Area

AECOM
4th Floor, Adelphi Plaza,
Upper Georges Street,
Dun Laoghaire, Co, Dublin
Tel: +353 (0)1 238 3100
Fax: +353 (0)1 238 3199
www.aecom.com

14 Cobh

14.1 Introduction

Cobh is located on the southern side of Great Island in Cork Harbour. The main route to the town from Cork is via the R624 from Fota / Belvelly along the western side of Great Island and into Cobh town via Rushbrooke. This route passes both Rushbrooke and Cobh train stations and also links with the ferry connection to Passage West. There is an alternative route into Cobh from Belvelly Bridge where the L2989 route can be taken, passing the Ticknock Retail Park and entering the town at the elevated level via Midleton Street.

Belvelly Bridge is the primary access point to Great Island, however access can also be achieved by the Cross River Ferry from Passage West and by train from Cork's Kent Station. The main town centre is located along the waterfront in a relatively flat environment. The topography of the town is characterised by this flat area at the waterfront with steeply rising gradients to the residential areas to the north of the town centre. Map E10 illustrates the existing cycling infrastructure is non-existant in Cobh.

Proposals for the cycle network in Cobh are based on improving access to the Town Centre from the Passage West Ferry Terminal as well as surrounding residential areas. Access to secondary schools within the area is prioritised. While the distance between Cobh and Cork City is currently considered too great for regular commuter cyclists, improvements to the cycling network will encourage commuters to consider using the Passage West Ferry and adjoining infrastructure as a viable means to travel. Map U10, with the Passage West Map illustrates the proposed cycling network for the Cobh area.

14.2 Route Descriptions

A description of each of the proposed routes is provided below.

ROUTE CODE: CH-U1

Road Name:
R624/Lower Road/Harbour Row/Harbour View

Road Section:
From Ferry Port to Town Centre

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed primary route with a mixed street environment with reduced speed limits and improved driver awareness of cyclists, particularly to Cobh National School.

Key Locations Served:
Town Centre, Gaeilscoil Cobh, Cobh Railway Station, Cobh National School.

Pinch Points/Constraints:
Perpendicular parking arrangements in the Town Centre may present safety issues for cyclists. Limited road width from Ferry Port to Town Centre may limit possibility of implementing cycle lanes. A mixed street, traffic calmed environment will provide a suitable level of safety and amenity for cyclists using this route.

ROUTE CODE: CH-U2

Road Name:
Pat O'Brien Close/Plunkett Terrace

Road Section:
Newtown Road to Midleton Street

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed primary route with advisory cycle lanes.

Key Locations Served:
Cobh Ramblers FC, Norwood Park, Hilltop and Ballyvoloon residential areas.

Pinch Points/Constraints:
The alignment of Newton Road is quite wide and should permit the introduction of facilities along most of its length. Where there are pinch points, one traffic lane will be possible to allow a continuation of cycling facilities.

ROUTE CODE: CH-U2

Road Name:
Midleton Street

Road Section:
Edmund Rice Crescent to Park View

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed primary route. A contra flow cycle lane uphill and mixed street downhill is proposed.

Key Locations Served:
Town Centre and surrounding residential.

Pinch Points/Constraints:
One way traffic system in place. A contra flow lane would result in loss of on-street car parking which is considered acceptable.

ROUTE CODE: CH-U1

Road Name:
Bishop Street

Road Section:
Midleton Street to College Gate

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed primary route with on road cycle lanes and mixed streets with reduced speed limits to 30kph.

Key Locations Served:
Town Centre and cluster of schools (Scoil Josef Naofa, St. Mary's School and Colaiste Mhuire).

Pinch Points/Constraints:
Advisory cycle lanes will be possible on Bishop Street for a large section of the route. Where there are narrower sections, a mixed street approach should be implemented.

ROUTE CODE: CH-U1

Road Name:
Carrignafoy Avenue

Road Section:
College Gate to Tay Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed primary route with advisory cycle lanes.

Key Locations Served:
Cobh Community College, GAA Club, surrounding residential and link to Tay Road amenity route.

Pinch Points/Constraints:
There is sufficient road width available on this road section and as such advisory cycle lanes should be achievable.

ROUTE CODE: N/A

Road Name: Tay Road

Road Section: R624 to Carrignafoy Avenue

Existing Facility and Quality of Service: There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed future primary route with the introduction of cycling infrastructure should be prioritised along Tay Road as the proposed Masterplan Site develops, this would provide a connection to the Town Centre using route CH-U6 and U4.

Key Locations Served:
Proposed Masterplan Site.

Pinch Points/Constraints:
Prior to development of the Masterplan Site, the introduction of facilities along the Tay Road may be difficult considering the narrow and rural nature of the route. The introduction of lighting and road widening would significantly improve the route.

ROUTE CODE: CH-U4

Road Name:
Ticknock Road

Road Section:
Tay Road to Bishop Street

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed secondary route with advisory cycle lanes.

Key Locations Served:
Ticknock Shopping Centre, Hilltop Residential and access to Town Centre.

Pinch Points/Constraints:
Some road redistribution may be required in sections to ensure facilities can be delivered.

ROUTE CODE: CH-U5

Road Name:
Norwood Park

Road Section:
High Road to Newtown Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed secondary route with advisory cycle lanes.

Key Locations Served:
Rushbrooke Tennis Club, Rushbrooke National School, Surrounding residential areas.

Pinch Points/Constraints:
The restricted road width in some sections will mean a facility in just one direction can be provided. In this instance, the uphill direction should be prioritised.

ROUTE CODE: CH-U6

Road Name:
New route through development area

Road Section:
East-west link from Ticknock Road to Newton Road.

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
CH-U6 is a proposed primary route to be developed in conjunction withteh Master Plan site. The route will be a segregated cycle track or greenway through the proposed Masterplan Site.

Key Locations Served:
Future Development Area.

Pinch Points/Constraints:
This proposal is dependent on delivery of Masterplan Site.

ROUTE CODE: CH-U7

Road Name:
Ballyleary Road

Road Section:
Tay Road to Plunkett Terrace

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed secondary route (possible future primary route). An upgrade of the existing road to provide on-road cycle lanes is proposed.

Key Locations Served:
Future Development Area.

Pinch Points/Constraints:
This proposal is dependent on delivery of Masterplan Site.

ROUTE CODE: CH-U8

Road Name:
Rushbrooke Park/Ballynoe Park

Road Section:
Loop to and from Ballynoe Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street with reduced traffic speeds to 30kph. Low speed residential streets make this a suitable route for cycling trips feeding onto the main network

Key Locations Served:
Ballynoe and Riverside Residential Development areas.

Pinch Points/Constraints:
Junction treatment with Ballynoe Road would be required.

ROUTE CODE: CH-U9

Road Name:
East Hill

Road Section:
R624 to Newtown Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed secondary route. This section will require a traffic management approach to improving safety for cyclists. The low speed traffic environment will facilitate cycling trips without any major interventions.

Key Locations Served:
Surrounding residential

Pinch Points/Constraints:
Restricted road width means that dedicated facilities in this area are unlikely to be achievable. However, it is proposed that improved management of speeds, visibility and lighting along the route will improve the environment significantly for cyclists.

ROUTE CODE: CH-U10

Road Name:
Grove Garden/Lake Road

Road Section:
Grove Garden to Lake Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed secondary route. This section will require a traffic management approach to improving safety for cyclists. The low speed traffic environment will facilitate cycling trips without any major interventions.

Key Locations Served:
Surrounding residential, Tennis Club

Pinch Points/Constraints:
Restricted road width means that dedicated facilities in this area are unlikely to be achievable. However, it is proposed that improved management of speeds, visibility and lighting along the route will improve the environment significantly for cyclists.

ROUTE CODE: CH-U11

Road Name:
Ballynoe Road

Road Section:
R624 to Newtown Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed secondary route. This section will require a traffic management approach to improving safety for cyclists.

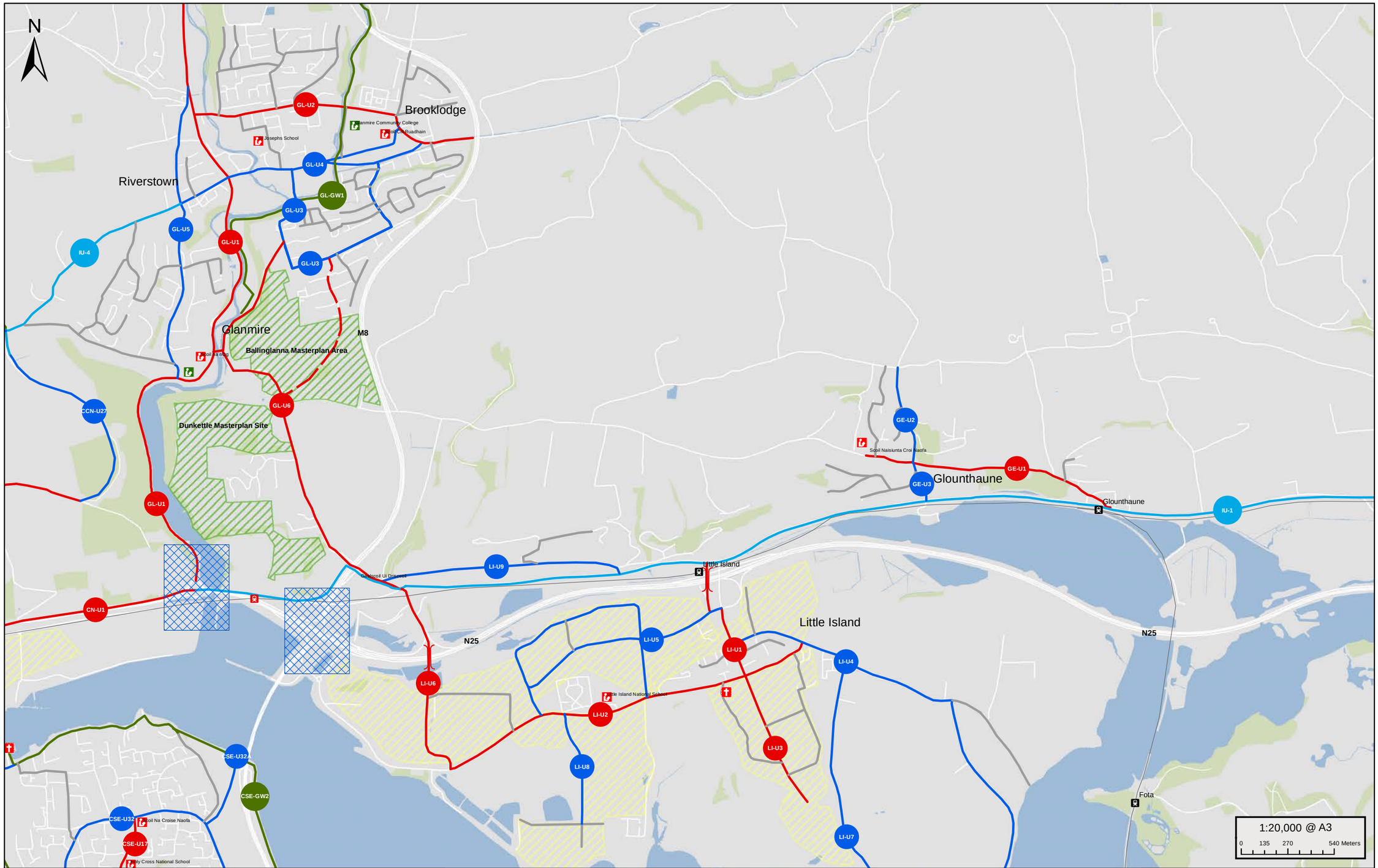
Key Locations Served:
Cobh Rugby Club, Riverside, Ballynoe residential areas, alternative route to ferry terminal.

Pinch Points/Constraints:
Restricted road width means that dedicated facilities in this area are unlikely to be achievable. However, it is proposed that improved management of speeds, visibility and lighting along the route will improve the environment significantly for cyclists.

15

Glanmire, Glounthane and Little Island

Map U7 Proposed Future Network - Little Island and Glanmire



Project:	Title:	Legend:
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	U7 - LITTLE ISLAND & GLANMIRE	**Future Network Facility Type**: Greenway; Interurban; Primary; Possible Primary; Secondary; Feeder; University; Hospital; Place of Worship; Primary School; Secondary School; Train Station; NewTrain Station; Irish Rail Network; Disused Railways; Gateway; N28 Upgrade; New Bridge; Ferry Terminal; Ferry Connection; Employment Centre; Masterplan Area

AECOM
4th Floor, Adelphi Plaza,
Upper Georges Street,
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Fax: +353 (0)1 238 3199
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15 Glanmire, Glounthane and Little Island

15.1 Introduction

Glanmire is located approximately 5km to the northeast of Cork City. The town is bounded by steep hills to the west and the M8 motorway to the east. The town comprises the villages of Glanmire to the south, Riverstown and Sallybrook to the north.

The area is currently accessed primarily via the two regional routes, the R639 or R615 from Cork City. The R639 is a wide, high capacity single carriageway road which does not support any infrastructure for vulnerable road users other than a narrow footpath along some of its length adjacent to the Glashaboy River. Similarly, the R615 does not offer any existing provision for cyclists however, there is a relatively consistent footpath running on the northern side of the road most of the distance between Mayfield and Glanmire although this is narrow in places. In addition to this there are steep gradients on the route which, in addition to the lack of provision, makes it an unappealing route for cyclists in its present form.

Little Island is dominated by commercial land use and is located to the east of Cork City. The area is quite isolated in its location and this reflected in the general lack of access routes with the N25 acting as a boundary to the north while to the east and south is Cork Harbour and Fota Island can be accessed across a channel to the west. Presently the area can only be accessed via the Dunkettle interchange at its westernmost extent, slip lanes on and off the N25 and an overbridge which connects it with the Old Dublin Road north of the N25. The only route from which it can currently be accessed by vulnerable road users is via this overbridge to and from the Old Dublin Road. There are currently no dedicated cycling facilities going to or from the Island.

Glounthaune is a mainly residential settlement located to the north east of Little Island on the north side of the N25 national route 10km from Cork City. Glounthaune is primarily accessible from the Old Dublin Road to the south with a single, isolated junction connecting the two. The village is also connected to Glanmire via a narrow residential, local road. As there are no footpaths or cycle facilities on the Old Dublin Road, access to Glounthaune from the wider area for vulnerable road users is poor. Map E7 illustrates the lack of any existing cycling infrastructure in place in these areas. Map U7 illustrates the proposed cycling network for these areas.

The cycling network proposals for the area include a primary route GL-U1 north-south through the centre of Glanmire with another, GL-U2, running perpendicular to this. A series of secondary routes will connect into these two primary routes. The R615 and R639 mentioned above will provide interurban links to the city centre.

Little Island will have three main primary routes, LI-U1, LI-U2 and LI-U3, which will run in north-south and east-west directions respectively with three secondary routes interlinking with these. LI-U1 will form a primary connection across the existing overbridge to the Old N25 while a new link to west of the Island will span across the N25 to connect into two interurban routes extending to Glanmire and the future Glanmire masterplan site as well as an inter-urban route which connects directly with the city centre to the west and Carraigtwohill and Midleton to the east. It is an objective of this Plan to identify a high quality direct cycle link between the Tivoli area of Cork City and Little Island. While no specific route has been identified at this stage, it remains an objective of this Plan to make provision for such a link.

Glounthaune will have a primary east-west link, GE-U1, which will collect most of the cycling traffic within the village and will connect to the Old N25 in two locations, at the existing junction between the village and the Old N25 and also further to the east at Glounthaune train station. The village will connect to Glanmire and the wider city area via a proposed east — west interurban link which will also provide access to the proposed Glanmire masterplan site.

The descriptions below should be read in conjunction with Map U7 which sets out the proposed network in this area.

15.2 Route Descriptions

A description of each of the proposed routes is provided below.

Glanmire Urban Routes

ROUTE CODE: GL (GLANMIRE)-U1

Road Name:
Glanmire Road

Road Section:
Dunkettle Roundabout to Lower Glanmire

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with on-road mandatory cycle lanes or a segregated cycle track.

Key Locations Served:
Key link between Glanmire and Cork City Route.

Pinch Points/Constraints:
Sufficient road width and existing grass verge to provide two way segregated cycle track parallel to Glashaboy River.

ROUTE CODE: GL-U1

Road Name:
Glanmire Road

Road Section:
Lower Glanmire to L2999

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with a mixed street environment with reduced speed limits.

Key Locations Served:
Scoil na Nóg, surrounding residential.

Pinch Points/Constraints:
Road width too narrow (6.5–7m approx.) to provide mandatory/dedicated cycle lanes therefore this will be achieved through traffic calming measures with associated signage and road lining which will highlight the presence of cyclists to motorists resulting in behavioural change.

ROUTE CODE: GL-U1

Road Name:
Glanmire Road

Road Section:
L2999 to Sallybrook Bridge

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route providing on-street mandatory cycle lanes with uphill a priority if road widening is an issue.

Key Locations Served:
Town Centre, surrounding residential.

Pinch Points/Constraints:
Road width may be too narrow at some locations at which point a mixed street is recommended where traffic calming will be implemented in advance with large cycle symbols used on the carriageway surface to reinforce the presence of cyclists to motorists in these areas.

ROUTE CODE: GL-U2

Road Name:
Hazelwood Centre

Road Section:
Glanmire Road (R639) to M8

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route

Proposed Infrastructure Type: This is proposed as a primary route providing mandatory on-road cycle lanes along here. Segregation of cyclists should be considered if width is adequate and continuity of a segregated facility can be achieved.

Key Locations Served:
Town Centre, large surrounding residential catchment, primary and secondary schools.

Pinch Points/Constraints: Mandatory on-road cycle lanes will be possible along here with segregation of cyclists to be considered if width is adequate and continuity of the facility can be achieved.

ROUTE CODE: GL-U3

Road Name:
Glyntown/Marwood

Road Section:
Glanmire Road (R639) to Glyntown and MArwood

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed secondary route that may be suitable for provision of cycle lanes with widening of this road. This will provide dedicated facilities from Glanmire Town Centre to Little Island employment area via Dunkettle Road which is seen as a potentially major demand corridor. On site traffic and topographical surveys would need to be carried out to confirm the suitability of this proposal.

Key Locations Served:
Surrounding residential.

Pinch Points/Constraints:
Existing green verge will be required to facilitate the necessary road width for cycle lanes to be implemented.

ROUTE CODE: GL-U4

Road Name:
Old Youghal Road, Oldcourt

Road Section:
Glanmire Road to Brooklodge Grove via Riverstown Village

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed secondary route providing a mixed street and reduced speed limits to 30kph.

Key Locations Served:
Surrounding residential John O'Callaghan Park, Sarsfields GAA ground.

Pinch Points/Constraints:
Provision of mixed street facility will require traffic management measures to calm traffic and alter driver behaviour in relation to sharing the street with cyclists.

ROUTE CODE: GL-U5

Road Name:
Castlejane Court and Glanmire Park

Road Section:
Church Hill to Sallybrook

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed secondary route providing a combination of on road cycle lanes and mixed street. On the northern half of the road mixed street arrangements is proposed while on the lower half of the route (up to the approach to Glanmire village) there is a noticeable widening of the road where mandatory cycle lanes can be implemented.

Key Locations Served:
Surrounding residential areas

Pinch Points/Constraints:
On the narrower northern section of the route, traffic management measures will be required to implement a mixed street with associated changes in driver behaviour.

ROUTE CODE: GL-U3

Road Name:
Dunkettle Road

Road Section:
East Cliff Road to Old N25

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed primary route with a combination of on road cycle lanes and a mixed street. This route will also incorporate a new bridge to link with the Glanmire Road over the Glashboy River. The development of a number of Master Plan sites in this area should allow for sufficient road width to provide for dedicated cycling facilities along this link.

Key Locations Served:
Surrounding residential and Master Plan areas

Pinch Points/Constraints:
On the narrower northern section of the route, traffic management measures will be required to implement a mixed street with associated changes in driver behaviour necessary.

Glounthaune Urban Routes

ROUTE CODE: GE-U1

Road Name:
Ballynaroon Grove

Road Section:
National School to Old Dublin Road

Proposed Infrastructure Type:
This is a proposed primary route providing a mixed street with associated traffic calming and reduced speed limits through the centre of Glounthaune Village. The route will connect with the proposed inter-urban route along the old N25 corridor providing strong linkages to Carrigtwohill and Little Island.

Key Locations Served:
Scoil Nasiunta Na Chroi Naofa, surrounding residential, Glounthaune Station.

Pinch Points/Constraints:
The road width is too narrow (Approx. 5.5m) to provide dedicated cycle lanes on majority of this road section, therefore a mixed street environment is considered acceptable given the low impact traffic environment in terms of volumes and speeds.

ROUTE CODE: GE-U2

Road Name:
Glounthaune Road

Road Section:
Lackenroe Cross Roads to Johnstown Close

Existing Facility and Quality of Service: There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type: This is a proposed secondary route with a mixed street environment with reduced speed limits.

Key Locations Served:
Surrounding residential.

Pinch Points/Constraints:
The road is too narrow (Approx. 7m) to provide dedicated cycle lanes, therefore a mixed street approach is proposed. Traffic management and road signage will be required to create an adequate mixed street environment for safe cycling movement.

ROUTE CODE: GE-U3

Road Name:
The Highlands

Road Section:
Ballynaroon Grove to Glounthaune Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed secondary route providing a mixed street with reduced speed limits. The route will provide a north south link through Glounthaune providing access to the inter-urban route along the old N25 corridor.

Key Locations Served:
Surrounding residential.

Pinch Points/Constraints:
The road width is too narrow (approx. 7m) to provide dedicated cycle lanes, therefore a mixed street approach is proposed. Traffic management and road signage will be required to create an adequate mixed street environment for safe cycling movement.

Little Island Urban Routes

ROUTE CODE: LI-U1

Road Name:
R623

Road Section:
Island Cross to the Railway Station

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed primary route providing a pedestrian/cycling bridge from Little Island train station to east gate and on-road mandatory cycle lanes south to the junction with Island Corporate Park.

Key Locations Served:
Eastgate business and retail park, Euro Business Park, Little Island Train Station.

Pinch Points/Constraints:
Existing crossing of the N25 is constrained in capacity and road width availability so new crossing is proposed from Train Station to provide for the possibility of multi modal trips.

ROUTE CODE: LI-U2

Road Name:
R623

Road Section:
Eastgate Entrance to St. Lappans Church/Island Cross

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed primary route with a mixed street environment with a reduced speed limit of 30kph east of St Lapans church and on-road mandatory cycle lanes west of here. A mixed street will require significant traffic management measures to reduce speeds and enhance cyclist safety.

Key Locations Served:
Surrounding residential, Golf Club, Eastgate.

Pinch Points/Constraints:
There is a pinch point outside Castleview housing estate where it may be difficult to provide road widening (shown below).

A mixed street approach is proposed here if road widening cannot be facilitated for cycle lanes. A short section of mixed street is considered acceptable along this link provided adequate traffic calming can be implemented. It is proposed that in advance of this location, traffic will be calmed in both directions so the relative speed difference between motorists and cyclists is reduced through this pinch point.

ROUTE CODE: LI-U3

Road Name:
Access Road

Road Section:
Island Cross to Site Industrial Estate

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route replacing the verge between the road and footpath with on-road mandatory cycle lanes and reducing traffic speed to improve cyclist safety.

Key Locations Served:
Sitecast Industrial Estate, GB Business Park

Pinch Points/Constraints:
Junction treatments will be required to provide for cyclist safety as well as additional traffic management and road signage to alert motorists and HGV's to the presence of cyclists.

ROUTE CODE: LI-U4

Road Name:
Courtown

Road Section:
R623 to Harbour Point Business Park

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with on-road mandatory cycle lanes providing a strong link to major employment locations along this link.

Key Locations Served:
Harbour Point Business Park, residential, Euro Business Park

Pinch Points/Constraints:
No major road constraints with this proposal given the existing road width along this link. It is proposed to reduce the road width for vehicular traffic to provide cycle lanes.

ROUTE CODE: LI-U5

Road Name:
Eastgate Avenue, Eastgate Drive, Eastgate Road

Road Section:
To R623 east and south

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with on-road mandatory cycle lanes to provide a good level of service for cyclists accessing the Eastgate employment area. A link to LI-U2 is proposed along the western edge of Little Island Sports Complex.

Key Locations Served:
Eastgate employment area

Pinch Points/Constraints: There are no major constraints with this proposal given the existing road and verge widths along this route.

ROUTE CODE: LI-U6

Road Name:
Future Link to Dunkettle Interchange

Road Section:
To R623

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with a fully segregated two-way cycle track that will be delivered as part of the Dunkettle Interchange upgrade. This proposal will require new overbridge crossing of N25 as per emerging preferred scheme for cyclists through Dunkettle Interchange.

Key Locations Served:
Link to and from Dunkettle Interchange, east-west greenway, Glanmire and Cork City beyond.

Pinch Points/Constraints:
The delivery of this proposal is dependent on the final preferred design for cyclists through the Dunkettle Interchange.

ROUTE CODE: LI-U7

Road Name:
Clash Road

Road Section:
Ballytrasna Park to Harbour Point Business Park

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed secondary route providing a mixed on-road facility with reduced speed limits and traffic management to improve cyclist safety through this link.

Key Locations Served:
Golf Course, Residential, alternative route to Harbour Point Business Park.

Pinch Points/Constraints:
Traffic management and road signage will be required to provide adequate safety and comfort for cyclists along this link.

ROUTE CODE: LI-U7

Road Name:
Wallingstown Road

Road Section:
R623 to Water Front Business Park

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed secondary route with a widened footpath providing a segregated shared pedestrian and cycling path to provide a good link to the employment areas along this link.

Key Locations Served:
Wallingstown Industrial Estate, Water Front Business Park.

Pinch Points/Constraints:
The existing footpath along this link can be easily upgraded to provide necessary width for a shared cycling and pedestrian path.

ROUTE CODE: LI-U9

Road Name:
Factory Hill

Road Section:
Dunkettle Road to Old N25

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed secondary route with a mixed street environment with reduced speed limits.

Key Locations Served:
Fire Hill and Tower Hill residential areas.

Pinch Points/Constraints:
Restricted road width (5.5 metres approximately) along this link limits what new infrastructure can be implemented. The residential nature of street will allow a mixed street environment to be facilitated. Traffic management and road signage will be required to alert motorists and provide adequate safety for cyclists.

ROUTE CODE: LI-U10

Road Name:
Little Island to Lower Glanmire Road

Road Section:
From Dunkettle Interchange Link to Dunkettle Roundabout via waterfront

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a possible primary route with a fully segregated waling/cycling path along the waterfront. This is suggested as an amenity route to complement and provide an alternative to the main east-west cycling corridor through the Dunkettle Interchange. The route would also maximise the value of amenity presented by harbour views within Little Island. Development of this route would be subject to detailed environmental impact assessment.

Key Locations Served:
Little Island, Cork City, Tourism/Leisure Cyclists.

Pinch Points/Constraints:
Environmental constraints in the harbour area may limit development potential in this area. The route is a more circuitous east-west route than the direct route along the old N25 corridor, therefore it will be considered more as an amenity route than a utility/commuter route.

Glanmire Greenway Routes

ROUTE CODE: GL-GW1

Road Name:
N/A

Section (where applicable):
Adjacent to Butlerstown River

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed shared pedestrian / cyclist greenway which will be developed adjacent to the Butlerstown River. The path exists in some locations and will require upgrading. The greenway will directly connect Riverstown and Glanmire and will provide an additional crossing of the M8 for vulnerable road users.

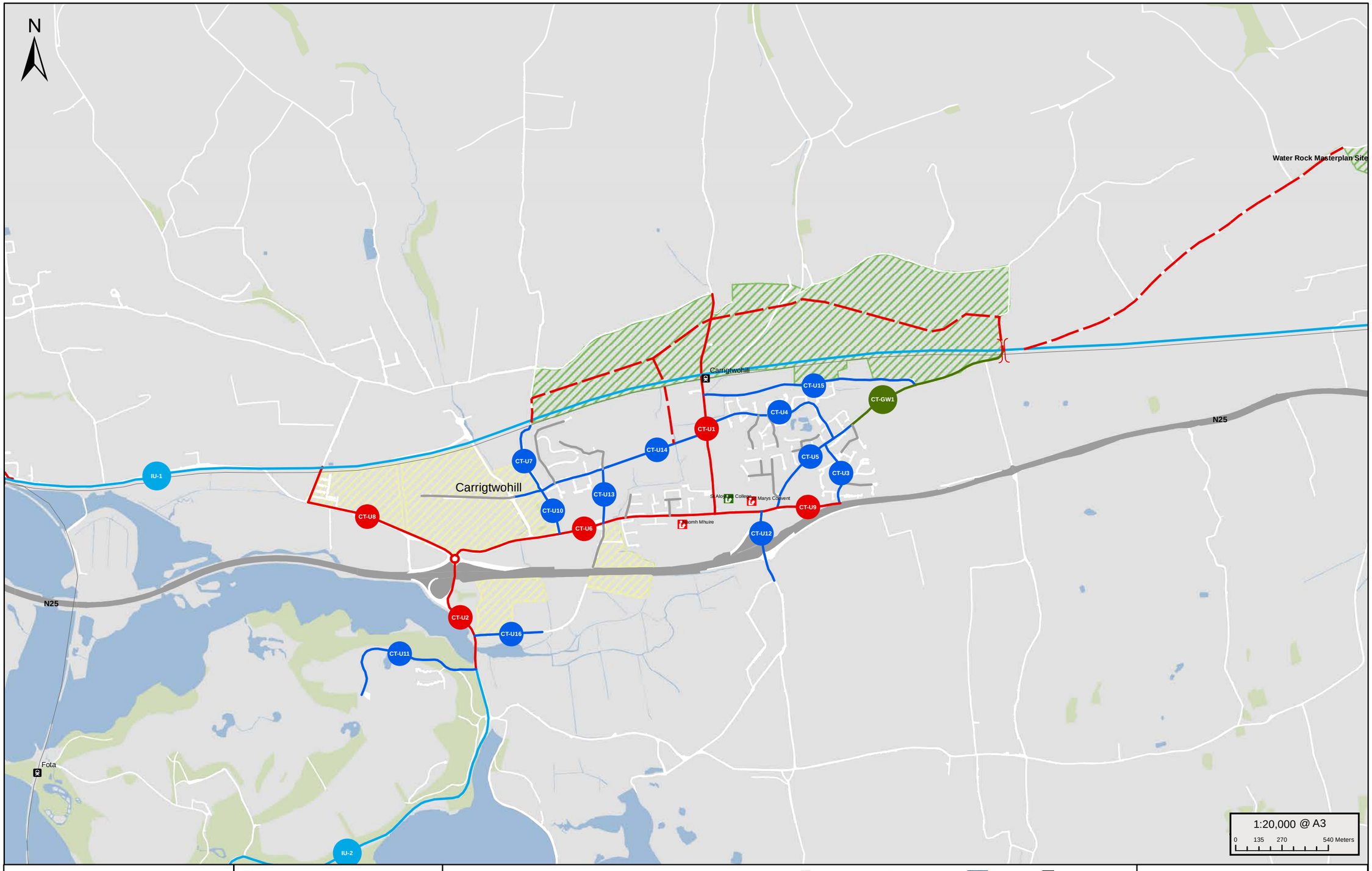
Key Locations Served:
All local amenities in Riverstown and Glanmire.

Pinch Points/Constraints:
Further investigation of route feasibility is required to identify all constraints.

16

Carrigtwhohill

Map U8 Proposed Future Network - Carrigtwohill



Project:	Title:	Legend:
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	U8 - CARRIGTWOHILL	**Future Network Facility Type**: Greenway, Interurban, Primary, Possible Primary, Secondary, Feeder; University, Hospital, Place of Worship; Primary School, Secondary School; Train Station, NewTrain Station, Irish Rail Network, Disused Railways; Gateway, N28 Upgrade, New Bridge; Ferry Terminal, Ferry Connection, Employment Centre, Masterplan Area

AECOM
4th Floor, Adelphi Plaza,
Upper Georges Street,
Dun Laoghaire, Co, Dublin
Tel: +353 (0)1 238 3100
Fax: +353 (0)1 238 3199
www.aecom.com

16 Carrigtwohill

16.1 Introduction

The Carrigtwohill area extends from the west of Fota Retail Park (the intersection of Killahora Road with the railway line) to the western edge of Ballyadam in the east (the intersection of Carrigane Road with the railway line). It encompasses the land from the R624 / Cois Fota intersection to the south of the town to approximately 0.5km north of Carrigtwohill Train Station.

Map E8 illustrates the existing cycling infrastructure in place in the town. There are some dedicated off-road cycle tracks provided in the newer housing estates but they do not form a coherent cycle network.

The IDA business park at the western end of the town is one of the main employment areas in the town. Outside of the town centre, the remainder of development in the area is mainly categorised as residential.

The target population for Carrigtwohill is 12,000 people by 2020. The majority of new development is planned to take place on the north side of the railway track to the north of the existing town.

Network plan proposals for Carrigtwohill include one main primary route through the existing town centre and connecting with Fota Island to the south and the IDA business park to the north. Primary routes CT-U6, CT-U8 and CT-U9 form the main east-west primary route through the town. The route provides access into the town centre as well as primary and secondary schools.

The secondary route network will connect the primary network to the existing town centre, residential areas, and existing employment areas at Carrigtwohill Industrial Park and IDA Business Park to the west and to Fota Island Resort.

An inter-urban route is proposed to run along the northern periphery of the existing town area that will connect with Midleton and Cork City via a parallel route along the existing rail line. While acting as an Inter-Urban connector this link will primarily be a greenway route giving leisure cyclists the option of travelling via a segregated route between Cork City and east cork.

A greenway route from the eastern boundary of the town is proposed to connect with the inter-urban/greenway route from Midleton with an additional connection at the west end of Carrigtwohill from the Primary Route CT-U8. The descriptions below should be read in conjunction with Map U8 which sets out the proposed network in this area.

16.2 Route Descriptions

A description of each of the proposed routes is provided below.

Carrigtwohill Urban Routes

ROUTE CODE: CT-U1

Road Name:
Station Road

Section (where applicable):
From Main Street to approximately 0.5km north of the Train Station.

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route and is the main north south route from the town centre to the train station and Master Plan area to the north of the rail line. The road width is relatively constrained with limited opportunity for widening to accommodate dedicated cycle facilities. As such, a traffic management/signage approach is recommended where a mixed street environment can be implemented. CT-U1 will link with the cycle network of the master plan site where indicative cycle routes have been illustrated on map U8. An additional cycle link may also be established along rural roads to the east connecting to the Water Rock Master Plan area. This could provide an alternative east-west route if the greenway parallel to the rail line cannot be established.

Key Locations Served:
Carrigtwohill Train Station; Main Street; adjacent residential areas and future development sites north of the rail line (Terry's Land).

Pinch Points/Constraints:
Constrained road width along majority of route, particularly at southern end. Property acquisition would be required to extend width to provide dedicated cycle lanes and this is unlikely to be possible along the entire route — preventing the provision of a continuous link. Therefore a mixed street with reduced traffic speeds, parking management and appropriate signage is recommended to provide adequate safety for cyclists.

ROUTE CODE: CT-U2

Road Name:
R624

Section (where applicable):
From the R624 / N25 interchange to the intersection at Fota Island (approximately 1km south of the R624/ N25 interchange)

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route, proposed to provide on-road cycle lanes along both sides of the road with improved public lighting, as well as reduced speed limits from 80kmph to 60kmph. This route will link to a feeder route (designated as a Secondary Route) west into Fota Island.

Key Locations Served:
Fota Island Resort; industrial zones south of the N25.

Pinch Points/Constraints:
The major constraints on this route will be the bridges over the N25 and over the Slatty Water Estuary. It is recommended that dedicated cycles lanes are to be provided in the existing hard shoulders.

ROUTE CODE: CT-U3

Road Name:
Fota Rock Estate

Section (where applicable):
From Midleton Road to Carrigane Road

Existing Facility and Quality of Service:
There are currently dedicated off-road cycle tracks along this route with a QoS of B.

Proposed QoS:
It is proposed to maintain the existing QoS along this route.

Proposed Infrastructure Type:
This route is proposed as a secondary route connecting the Fota Rock residential area with the Midleton Road link to the town centre. As dedicated off-road cycle tracks are currently provided along this track, no interventions are necessary.

Key Locations Served:
Fota Rock residential area

Pinch Points/Constraints:
No major constraints given existing facilities provided.

ROUTE CODE: CT-U4

Road Name:
Cul Ard

Section (where applicable):
From Station Road to Carrigane Road

Existing Facility and Quality of Service:
There are currently dedicated off-road cycle tracks along this route with a QoS of B.

Proposed QoS:
It is proposed to maintain the existing QoS along this route.

Proposed Infrastructure Type:
No intervention proposed as this is an existing secondary route with off-road cycle tracks on both sides.

Key Locations Served:
Rocklands and Ashbrook residential areas.

Figure 16.1 Existing Segregated Cycle Track at An Guagan

Pinch Points/Constraints:
No major constraints given that existing facilities are already provided.

ROUTE CODE: CT-U5

Road Name:
Carrigane Road

Section (where applicable):
From Rocklands Estate to Middleton Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
The following interventions are proposed on this secondary route which traverses the Rocklands, Ashbrook and Fota Rock residential areas:

– Provide toucan crossing and short cycle track to connect existing off-road cycle tracks in Cáil Ard and Fota Rock residential areas).

– Provide traffic calming along this section of Carrigane Road. This is appropriate as this road primarily functions as an access route to residential developments.

– Upgrade the junction of Carrigane / Midleton Road to a signalised junction.

Key Locations Served:
Fota Rock / Ashbrook / Rocklands residential areas.

Pinch Points/Constraints:
There is a need to ensure sufficient distance between the junction at Cúl Ard and junction at Fota Rock to safely provide a toucan crossing mid-block (approximately 60m between junctions). The existing road width at this section of Carrigane Road (between Cáil Ard and Fota Rock) is approximately 8m, with a footpath on either side. There is a narrow landscaped verge separating the footpath and carriageway on the southern side — it is likely to be necessary to remove this in order to accommodate a dedicated cycle track on both sides. It may be necessary to acquire part of the landscaped area which is part of the residential estate north of the northern footpath. South of Fota Rock, Carrigane Road becomes more constrained, particularly on approach to Midleton Road and therefore traffic calming measures are recommended to improve the mixed street environment for cyclists.

ROUTE CODE: CT-U6

Road Name:
Main Street / Western Distributor Road (Cork Road)

Section (where applicable):
From intersection with Maryville Estate to the IDA Business Park

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route and to provide on road cycle lanes on both sides of the road, upgrade the existing Castlelake / Midleton Road junction to a signalised intersection and extend the 50kph speed limit to past the IDA Business Park.

Key Locations Served:
IDA industrial park, Castlesquare retail development, Main Street and adjacent residential areas.

Pinch Points/Constraints:
The southern side of the road is relatively constrained however the overall road reserve and land on the northern side should allow sufficient capacity for on road cycle lanes. There may potentially be pinch points immediately west of the entrance to Maryville estate as the road here is constrained by property boundaries and landscaped verges (between Maryville and Ryan and Ahern Place), there is potential for the use of a short existing off-road pedestrian/cycle track at this location. There are currently right turning pockets on the Western Distributer Road (Cork Road), which reduce the available road space, however there should still be sufficient road space to provide cycle lanes in both directions at these locations.

ROUTE CODE: CT-U7

Road Name:
Chestnut Crescent

Section (where applicable):
From Railway Bridge to Oakbrook

Existing Facility and Quality of Service:
There are currently dedicated off-road cycle tracks along the east side of this route with a QoS of C.

Proposed QoS:
It is proposed to upgrade the QoS on this route to at least B should volumes and demand increase with the development of the area.

Proposed Infrastructure Type:
This route is proposed as a secondary route and serves residential areas adjacent to Chestnut Crescent. There is an existing off-road cycle track on the eastern side of the street. Although there is sufficient space for this to be widened to a two-way track, current cyclist (and pedestrian) volumes are low and so no intervention is recommended at this stage, acknowledging that it may become desirable in the future if volumes increase, particularly given the proposals for development at the master plan site to the north.

Key Locations Served:
Residential areas adjacent to Chestnut Crescent.

Pinch Points/Constraints:
No major constraints given provision of existing facilities.

ROUTE CODE: CT-U8

Road Name:
Western Distributor Road (Cork Road) / Kilahora Road

Section (where applicable):
Old N28 to Fota Retail Park

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route, connecting to the CT-U6 link to the town centre. It is proposed to provide on road cycle lanes on both sides of the road and reduce the speed limit form 80kmph to 60kmph.

Key Locations Served:
IDA industrial park, Fota Retail and Business Park.

Pinch Points/Constraints:
The Western Distributor Road (Cork Road) becomes more constrained on approach to the N25 intersection and if feasible, it may be desirable to provide an off-road cycle track approaching and crossing this intersection (connecting west towards Fota Business Park) to remove the need for cyclists to navigate the roundabout. On approach to the railway bridge the road is constrained by property boundaries and dedicated on-road cycle lanes may not be feasible on this section of the route. Advisory cycle lanes or suitable traffic management measures may be a more appropriate solution to make this a more cycle friendly link to and from the proposed greenway to and from Midleton/Cork City.

ROUTE CODE: CT-U9

Road Name:
Main Street / Midleton Road

Section (where applicable):
From the western end of Main Street to Fota Rocks Estate.

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route with a mixed street environment. It is proposed to upgrade the Main Street / Barryscourt Road to a signalised junction with pedestrian crossing facilities, and to introduce a ban on HGVs on Main Street west of Barryscourt Road.

Key Locations Served:
Naomh Mhuire Primary School; St Aloysius College, St Mary's Convent, Carraigtwohill GAA grounds, Main Street, Carrigtwohill Shopping and Business Centre and adjacent residential areas including Maryville Estate and Fota Rock.

Pinch Points/Constraints:
Middleton Road to the east of Main Street is constrained in terms of road width and therefore dedicated cycle lanes would not be feasible and are not recommended. The feasibility of the proposed ban on HGV traffic on Main Street between Barryscourt Road and Station Road may need to be further examined — although there are no large scale commercial / retail sites on the Main Street west of Barryscourt Road, there are a number of small commercial, retail and licensed premises. The impact on deliveries to these premises will need to be investigated. The potential implications of HGV traffic taking alternative routes should also be considered i.e. if there are options for rear loading for premises on Main Street this may push HGV traffic to alternative side roads which are not suitable for such vehicles. Limiting HGV access times (e.g. to restrict HGV access during school / commuter travel times) or banning HGV through-traffic (as the N25 is a more appropriate route for HGV through traffic) may be a more suitable solution.

ROUTE CODE: CT-U10

Road Name:
Chestnut Crescent

Section (where applicable):
From Oakbrook to the Western Distributor Road (Cork Road)

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This route is proposed as a secondary route, and the introduction of cycling facilities on this section of the road would complete a desirable link from the existing off road cycle track north of Oakbrook to the Western Distributor Road (Cork Road). It is therefore recommended to continue the existing one-way off road cycle track on the eastern side of the street.

Key Locations Served:
Residential areas adjacent to Chestnut Crescent and (adjacent trucking businesses at the southern end of the street).

Pinch Points/Constraints:
The road is somewhat constrained however it should be feasible to provide a one-way cycle track on the eastern side, utilising the existing grass / landscaped verges. It may also require impediment on the existing hard shoulder on the western side of the road. It is also likely to require the reconfiguration (or removal) of a small number of parking spaces close to the Chestnut Crescent / Western Distributor Road (Cork Road) intersection (outside of D. Dennehy Ltd.trucking company). There are two wide accesses to trucking companies on the eastern side of the road. It is also important that there is appropriate treatment and maintenance of cycle tracks across the access points, particularly if there are high volumes of large vehicles such as HGVs crossing the cycle tracks at these points. There are existing trees to the north of a wide access to the more northerly trucking premises (CDE) — these may need to be removed as there may be safety implications relating to visibility and sightlines. These trees are located at the main pinch point on this section of the road, and their removal would also be beneficial in regard to providing additional space for the cycle tracks.

ROUTE CODE: CT-U11

Road Name:
Fota Island

Section (where applicable):
R624 to Fota Island Resort

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route. No intervention is proposed pending confirmation of road ownership.

Key Locations Served:
Fota Island Resort

Pinch Points/Constraints:
This may be a private road — public right of way to be confirmed. Traffic speeds are generally low along this link, therefore cyclists can use this route without much infrastructure required.

ROUTE CODE: CT-U12

Road Name:
Barryscourt Road

Section (where applicable):
Between Midleton Road and the access road to Barryscourt Castle (approximately 120m south of the Barryscourt Road / N25 intersection)

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route, and provides a link between the town centre and a feeder route to Barryscourt Castle.

Key Locations Served:
Barryscourt Castle; Town Centre

Pinch Points/Constraints:
The existing road is relatively narrow with pinch points at the bridge over the N25 and the large roundabout at N25 slip roads. A 'mixed street' with traffic management measures to reduce speeds and improve cyclist safety will be necessary.

ROUTE CODE: CT-U13

Road Name:
Maple Crescent

Section (where applicable):
Full extent of street

Existing Facility and Quality of Service:
There are currently dedicated off-road cycle tracks along this route with a QoS of B.

Proposed QoS:
It is proposed to at least maintain the existing QoS along this route.

Proposed Infrastructure Type:
This route is proposed as a secondary route between Midleton Road and the intersection with Oakbrook, and as a Greenway feeder route north of Oakbrook. It is proposed to provide a continuous link along the extent of this street to Midleton Road. This would involve extending the existing off-road cycle track on the eastern side south to Midleton Road. There is sufficient space for this extension.

Key Locations Served:
Castlelake residential area and adjacent retail developments including Castlesquare.

Pinch Points/Constraints:
It may be desirable to provide a crossing point from the eastern side cycle track to the western side of the street, particularly to provide a safer and more attractive alternative crossing point to the existing roundabout at the Maple Crescent / Oakbrook junction which is not ideal for cyclists. It may be possible to provide a crossing midblock and an off-road cycle track adjacent to the existing development site on the south-west corner of the roundabout.

ROUTE CODE: CT-U14

Road Name:
New Link

Section (where applicable):
From Castlelake Road to Station Road

Existing Facility and Quality of Service:
There are currently dedicated off-road cycle tracks along this route with a QoS of C.

Proposed QoS:
It is proposed to upgrade to QoS B through appropriate surface treatments.

Proposed Infrastructure Type:
This is proposed as a new cyclist / pedestrian link that will extend existing facilities and be a secondary collector route.

Key Locations Served:
Castlelake residential area (existing and future developments), Station Road

Pinch Points/Constraints:
As this is a future development area it should be feasible to plan for and provide attractive cyclist facilities along this route, including two-way off road cycle tracks. Given that this area is proposed as a largely residential development, this would be an appropriate treatment.

ROUTE CODE: CT-U15

Road Name:
Bog Road

Section (where applicable):
From Station Road Junction to Carrigane Road Junction

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This route is proposed as a secondary route and it is proposed to a provide cyclist (and pedestrian) connection between Station Road and Bog Road. Shared running of cyclists and traffic is proposed with adequate traffic management put in place to ensure cyclists safety.

Key Locations Served:
Ashbrook and Rocklands residential areas and new development sites (Terry's Land East)

Pinch Points/Constraints:
The route along Ashbrook Road is constrained and it will be difficult to provide two way cycle lanes. A one-way cycle lane may be feasible on the south side adjacent to the existing footpath if the existing grass verge and landscaping was removed, however this removal of trees etc. is likely to negatively impact on the amenity of the route. Moving east along the Bog Road, the route becomes further constrained, and advisory cycle lanes are recommended. These upgrades could be implemented in conjunction with the development of the development site to the north.

ROUTE CODE: CT-U16

Road Name:
Local Road

Section (where applicable):
From Cork Road to Slatty Park

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This route is proposed as a secondary advisory route providing a connection Merck Millipore (amployment location) and Slatty Park (recreational park)

Key Locations Served:
Merck Millipore and Slatty Park

Pinch Points/Constraints:
Traffic management and road signage will be required to allow cyclists to safely share the road with motorists.

Carrigtwohill Greenway Routes

Road Name:
Carrigane Road

Section (where applicable):
From Rocklands Estate to the railway line

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed greenway route providing a segregated two-way cycle track

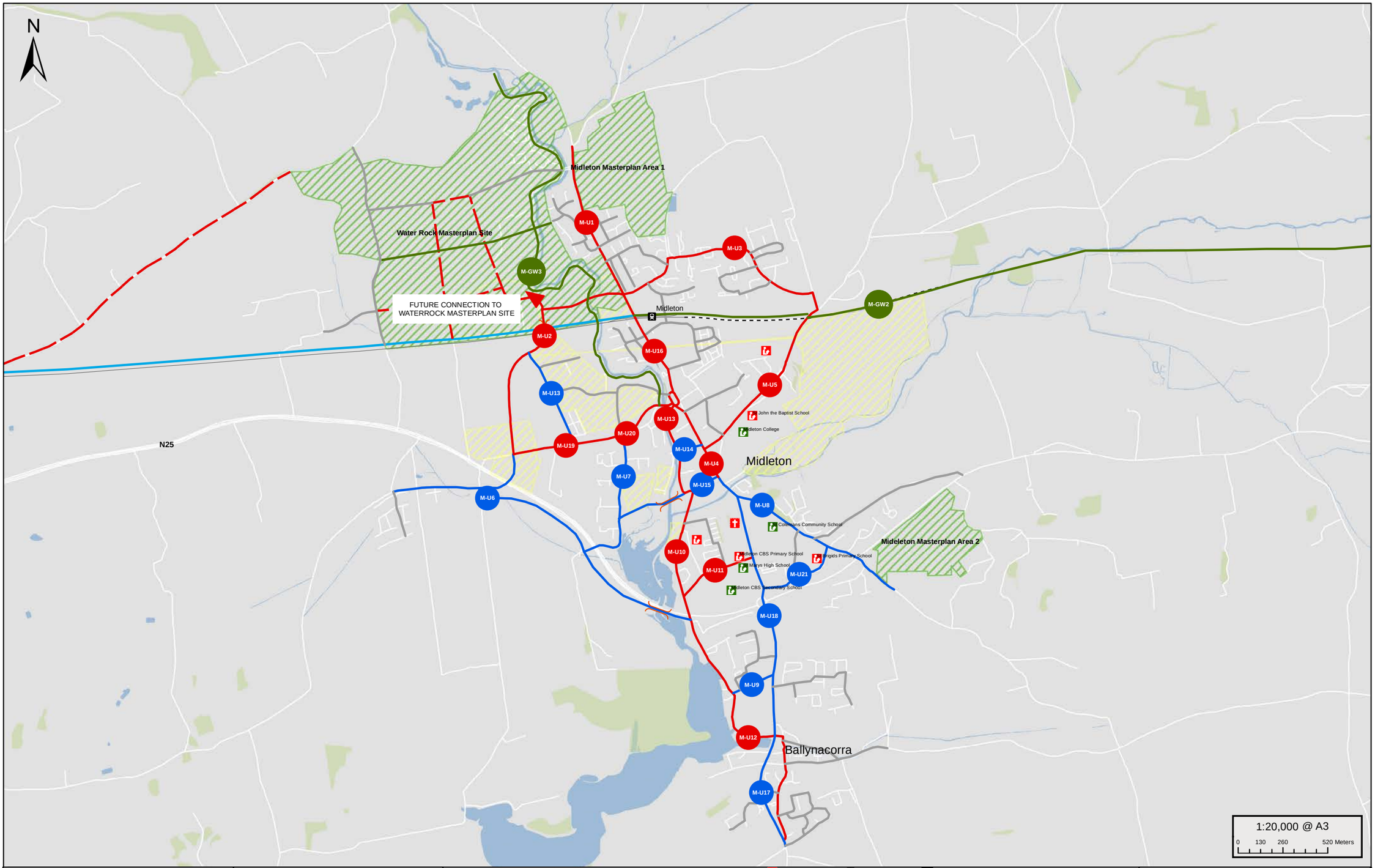
Key Locations Served:
Rocklands Estate, Ballyadam Park (Carrigtwohill United Football Club), interurban cycle routes, new development sites (Terry's Land East)

Pinch Points/Constraints:
There is currently a constrained road width along this link. Widening could be facilitated in conjunction with the development of the Master Plan site to the north

17

Midleton

Map U9 Proposed Future Network - Midleton



Project:
CYCLE NETWORK PLANNING
FOR CORK METROPOLITAN AREA

Title:
U9 - MIDLETON

Legend:

Future Network Facility Type

- Greenway
- Interurban
- Primary
- Possible Primary
- Secondary
- Feeder
- University
- Hospital
- Place of Worship
- Primary School
- Secondary School
- Train Station
- NewTrain Station
- Irish Rail Network
- Disused Railways
- N28 Upgrade
- Existing Bridge
- Ferry Terminal
- Ferry Connection
- Employment Centre
- Masterplan Area

AECOM

4th Floor, Adelphi Plaza,
Upper Georges Street,
Dun Laoghaire, Co, Dublin
Tel: +353 (0)1 238 3100
Fax: +353 (0)1 238 3199
www.aecom.com

17 Midleton

17.1 Introduction

The Midleton network plan area extends from west of Castle Rock residential area to the eastern boundary of the Midleton Distillery. It encompasses land from the intersection of the R630 (Ballinacurra Road) with The Maples south of the town to the north of Water Rock Golf Course. Map E9 in Volume B illustrates the existing cycling infrastructure in place in the town. The proposed cycling network map for Midleton is illustrated on Map U9.

There is an existing segregated cycle track along the Midleton Northern Relief Road that serves the business and industrial parks on the periphery of the town. There are segregated cycling facilities in Broomfield residential estate also.

The main population of Midleton is located along the main north-south spine of the town with the majority of the population located on the north side of the N25. A significant residential population also exists on the south side of the N25.

Jameson Distillery is the main employer in the town. Located to the east of the town centre the distillery is a major tourist attraction. There a number of business parks and industrial estates located in the west of the town whilst the town centre itself is a main employment centre.

The main cluster of schools is located between the Bailick Road and Youghal Road serving secondary school population of over 1,200 pupils and over 1,200 primary school pupils.

Network plan proposals for Midleton include one main north-south primary route and one primary route serving the Owenacurra Business Park and the Nordic Business Park area to the north west of the town. Due to the constrained nature of Midleton Town Centre, the north-south primary route (MU1, MU16, MU4, MU18 and MU17) will consist of a variety of measures and infrastructure types that respond to the specific nature of each road section. A number of secondary routes are proposed to serve established schools, residential areas and employment centres as well as a future Master Plan site to the south east of the town on the south side of the N25. A potential greenway can be developed along the rail line connecting Midleton to Youghal in the east and Cork City in the west. The proposed cycling network map for Midleton is illustrated on Map U9.

17.2 Route Descriptions

A description of each of the proposed routes is provided below.

ROUTE CODE: M-U1

Road Name:
R626 (Mill Road)

Section (where applicable):
Broomfield Ridge to Northern Relief Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route. It is proposed to restrict the speed limit to 50kph from north of Broomfield Ridge to the Inner Relief Road and provide cycle lanes along the route to the south side of the Inner Relief Road junction.

Key Locations Served:
Adjacent residential areas, the employment / industrial site at the intersection with the Inner Relief Road and masterplan development areas to the north of the town.

Pinch Points/Constraints:
Lack of width on some sections. Numerous residential access points

ROUTE CODE: M-U2

Road Name:
Northern Relief Road

Section (where applicable):
Cork Road to Mill Road

Existing Facility and Quality of Service:
There are currently segregated cycle tracks on the Northern Relief Road with a QoS C.

Proposed QoS:
It is proposed to upgrade and extend the existing facilities to provide a least a QoS B.

Proposed Infrastructure Type:
This is proposed as a primary route given it will serve the Water Rock Master Plan site in the future. It is proposed to extend the existing cycle tracks on the Northern Relief Road south to the intersection with the Cork Road. This route will link with M-GW3 with an appropriate connection at the intersection of these two routes. Where verge narrows it may be possible to provide a shared pedestrian / cycle track over a short distance.

Key Locations Served:
Completes the cycle link on the Northern Relief Road, important for continuity of routes.

Pinch Points/Constraints
Narrowing of route at southern end. Potential need to share facilities with pedestrians.

Figure 17.1: Existing Cycle Track on Northern Relief Road

ROUTE CODE: M-U3

Road Name:
Broomfield Village / Avoncore Place

Section (where applicable):
R626 to R627 Dungourney Road

Existing Facility and Quality of Service:
There are currently segregated cycle tracks in Broomfield Court with a QoS B.

Proposed QoS:
It is proposed to maintain and extend the existing facilities to provide at least a QoS B.

Proposed Infrastructure Type:
This is proposed as a primary route, and it is proposed to provide cycle lanes on the new section of the Inner Relief Road being developed between the R626 and Broomfield, with an option to provide a short cut cycle route direct from Broomfield to the train station via Hollygrove and Forrest Hill Estate. The existing laneway to the north of the rail station would provide a link to the town centre via Mill Road, avoiding the Inner Relief Road / R626 junction.

Key Locations Served:
Residential areas to the north west of the town, Midleton train station.

Pinch Points/Constraints:
None of note

ROUTE CODE: M-U4

Road Name:
R630 (Main Street)

Section (where applicable):
Gyratory to St Mary's Road Junction

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route, and is proposed as a mixed street with the speed limit restricted to 30kph and other appropriate traffic calming measures.

Key Locations Served:
Retail and commercial area, the courthouse and limited residential properties.

Pinch Points/Constraints:
On street car parking, loading, business access, potential for pedestrian conflicts.

ROUTE CODE: M-U5

Road Name:
Connolly Street / Dungourney Road

Section (where applicable):
Main Street to Meadowlands Lane

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route. It is proposed to restrict the speed limit to 30kph and other appropriate traffic calming measures.

Key Locations Served:
Midleton College, St John the Baptist School, Midleton Rugby Club, adjacent residential areas and adjacent retail / commercial sites.

Pinch Points/Constraints:
Railway bridge, narrow carriageway cross section in places

ROUTE CODE: M-U6

Road Name:
Castle Rock

Section (where applicable):
Castle Rock to Ballyannan woods

Existing Facility and Quality of Service:
There are currently a section of segregated cycle tracks between Castle Rock and Cork Road via the N25 overpass with a QoS C.

Proposed QoS:
It is proposed to at least provide a QoS B along this route through the upgrade of existing surface treatments and new dedicated facilities.

Proposed Infrastructure Type:
This is proposed as a secondary route. It is proposed to provide a two-way cycle track on the south side of the road, providing access to the town centre, via the sewage plant access road, N25 underpass and Dwyers Road. An alternative solution is for cyclists to travel via the main roundabout west of the N25 and via the N25 overpass. The proposed route also incorporates cycle lanes on the route to the south to provide access to Ballyannan Woods and an existing bridge crossing that will allow a link to the south of the town.

Key Locations Served:
Castle Rock residential area, Ballyannan Woods

Pinch Points/Constraints:
None of note

ROUTE CODE: M-U7

Road Name: Dwyers Road

Section (where applicable):
N25 Underpass to Cork Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route and is proposed as a mixed street. The route will link to Broderick Street/ Riverside Way via an existing short span bridge to provide combined pedestrian and cyclist access

Key Locations Served:
Residential and limited commercial / employment sites (i.e. Midleton Business and Enterprise Park) adjacent to Cork Road, connecting to the link to Castle Rock residential area to the west.

Pinch Points/Constraints:
Ownership of land to be established before link to Broderick Street can be formalised.

ROUTE CODE: M-U8

Road Name:
R907 (Youghal Road)

Section (where applicable):
From The Oaks to St Mary's Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route. It is proposed to widen the footpath in the vicinity of the school — subsequent road narrowing as a result of cycle lanes should reduce traffic speed and improve conditions for cyclists. Consideration should be given to the implementation of on-road cycle lanes, in particular to see if these can be incorporated in the proposed narrower road design.

Key Locations Served:
St Coleman's Community College, St Brigid's Primary School.

Pinch Points/Constraints:
Potentially high vehicular speeds, numerous residential accesses on road

ROUTE CODE: M-U9

Road Name:
Dark Road

Section (where applicable):
L3621 to R630

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with cycle lanes and traffic calming. It is recommend to realign the junction with Bailick Road to reduce junction radii and improve sightlines northwards on Bailick Road.

Key Locations Served:
Adjacent residential areas.

Pinch Points/Constraints:
None of note

ROUTE CODE: M-U10

Road Name:
Bailick Road

Section (where applicable):
Broderick Street to the N25

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route. It is proposed to provide traffic calming measures and a mixed street environment, with the potential to realign and signalise the Bailick Road / Broderick Street / Riverside Way intersection (identified in the 2010 Midleton and Carrigtwohill Transportation Study).

Key Locations Served:
Residential areas south of the N25, town centre, limited adjacent retail and residential properties north of the N25.

Pinch Points/Constraints:
Narrow cross section in places, potentially high vehicular speeds

ROUTE CODE: M-U11

Road Name:
Rosary Place

Section (where applicable):
St Mary's Road to Bailick Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route and is proposed as a mixed street to service the schools along this street.

Key Locations Served:
St Mary's High School, Midleton CBS Primary School limited residential properties.

Pinch Points/Constraints:
Gradients, accesses to school and graveyard

ROUTE CODE: M-U12

Road Name:
Bailick Road

Section (where applicable):
N25 to Ballincurra Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route. It is proposed to provide a 'mixed street' environment and traffic calming measures to reduce traffic speeds or advisory cycle lanes along this route.

Key Locations Served:
Residential areas south of the N25, town centre, limited adjacent retail and residential properties north of the N25.

Pinch Points/Constraints:
Poor sight lines in places

ROUTE CODE: M-U13

Road Name:
Riverside Way

Section (where applicable):
Gyratory to Broderick Street

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with a mixed street environment and the speed limit restricted to 30kph.

Key Locations Served:
Limited retail and adjacent residential areas, riverside access

Pinch Points/Constraints:
Residential parking

ROUTE CODE: M-U14

Road Name:
Church Lane

Section (where applicable):
Full extent from main street to Riverside Way

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with the speed limit restricted to 30kph to provide a safe and attractive environment for cyclists.

Key Locations Served:
Limited retail, church access.

Pinch Points/Constraints:
Narrow, a lot of on street parking, potential for pedestrian conflicts

ROUTE CODE: M-U15

Road Name:
Broderick Street

Section (where applicable):
Main Street to Bailick Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with the speed limit restricted to 30kph.

Key Locations Served:
Retail and commercial area, provides an important two-way east-west link across the town centre.

Pinch Points/Constraints:
A lot of on street parking on the eastern section of the route

ROUTE CODE: M-U16

Road Name:
R626 (Mill Road)

Section (where applicable):
Inner Relief Road to Gyratory

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route. It is proposed to restrict the speed limit to 30kph and introduce appropriate further traffic management measures to reduce speeds along this route to provide an adequate mixed street environment. Key Locations Served: Midleton Train Station, Midleton GAA, adjacent residential areas, retail and commercial sites

Pinch Points/Constraints:
On street parking

ROUTE CODE: M-U17

Road Name:
R630 (Ballinacura Road)

Section (where applicable):
Rose Lawn to Lakeview

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route, with the following interventions proposed:

- Maple Woods to Bailick Road: Two-way cycle track on the western side and conversion of existing zebra crossing to Toucan Crossing. Provision of a raised crossing at intersection of Grotto View and Sound Quay, with reduced junction radii.
- Orchard Grove: Toucan crossing to two-way cycle track on western side leading to Dark Road. Dark Road junction to be redesigned to reduce entry and exit radii.

Key Locations Served:
Adjacent residential areas.

Pinch Points/Constraints:
Potentially high traffic speeds

ROUTE CODE: M-U18

Road Name:
R630 (St Mary's Road)

Section (where applicable):
Lakeview Roundabout to Youghal Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route with mandatory cycle lanes on each side of the road within the existing carriageway width that has generous hard shoulders where cycle lane can be implemented. Crossing the N25 will for a significant as pect of implementing this route. Consideration should be given to the implementation of a "fully segregated roundabout" design as shown in the National Cycle Manual. This type of junction provides a safe route through the roundabout for cyclists and pedestrians and has a limited effect on vehicular capacity.

Key Locations Served:
St Mary's High School, Midleton CBS Primary School, adjacent residential properties and limited retail.

Pinch Points/Constraints:
Potentially hight traffic speeds

ROUTE CODE: M-U19

Road Name:
Cork Road

Section (where applicable):
Roundabout / N25 Overpass to Dwyers Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route. It is proposed to provide cycle lanes along this route.

Key Locations Served:
Residential and limited commercial properties adjacent to Cork Road, connecting to the link to Castle Rock residential area to the west.

Pinch Points/Constraints:
Poor surface quality in some locations, high traffic volumes, narrow cross section in places.

ROUTE CODE: M-U20

Road Name:
Cork Road

Section (where applicable):
Dwyers Road to Gyratory

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a primary route. This link is proposed as a mixed street with appropriate signage and road markings to provide for cyclist safety.

Key Locations Served:
Residential and limited commercial properties adjacent to Cork Road, connecting to the link to Castle Rock residential area to the west.

Pinch Points/Constraints:
Lots of on street parking, high traffic volumes

ROUTE CODE: M-U21

Road Name:
Ashlin Road

Section (where applicable):
Youghal Road to St Mary's Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a secondary route and is proposed as a mixed street environment with adequate traffic management and road signage to alert motorists to the presence of school and other cyclists.

Key Locations Served:
St Mary's High School, Midleton CBS Primary School limited residential properties.

Pinch Points/Constraints:
School access and set down areas

Midleton Greenway Routes

ROUTE CODE: M-GW2

Road Name:
Midleton to Youghal Greenway

Section (where applicable):
N/A

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed greenway located along the disused rail line. This greenway could also run parallel to the existing rail line between Midleton and Cork provided sufficient land can be provided.

Key Locations Served:
Midleton and Youghal

Pinch Points/Constraints:
Further investigation will be required to confirm land availability and overall feasibility.

ROUTE CODE: M-GW3

Road Name:
Owenacurra River Greenway

Section (where applicable):
Water Rock Master Plan area to Gyratory

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed greenway located along the river bank from Water Rock into Midleton Town Centre providing an attractive off-road alternative to pedestrians and cyclists. This route will link with M-U2 with an appropriate connection at the intersection of these two routes.

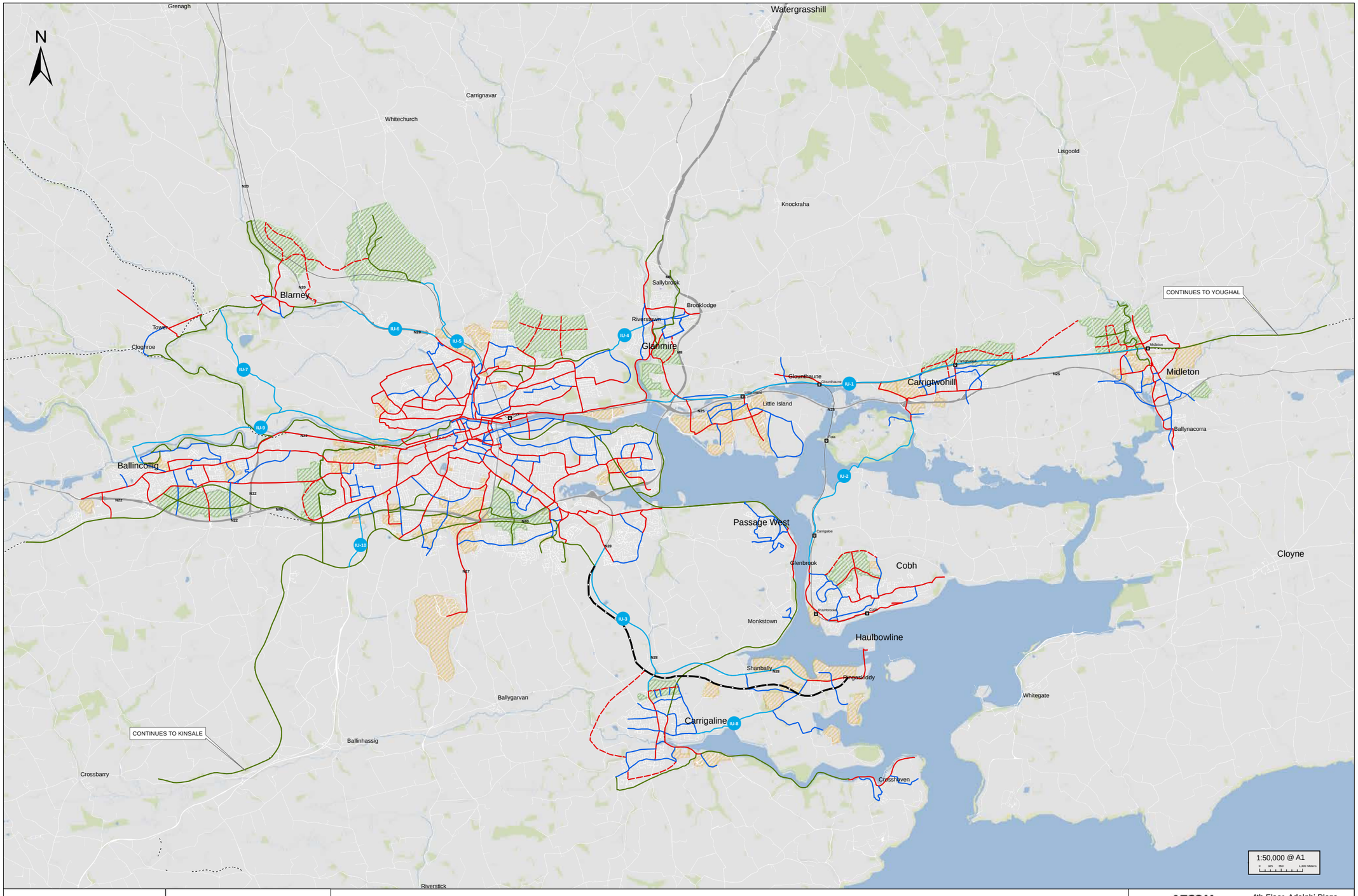
Key Locations Served:
Water Rock Master Plan area to Midleton Town Centre

Pinch Points/Constraints:
This link is associated with the development of the Water Rock site and the delivery of this route is therefore tied to the program for development of that site

18

Inter Urban Network

Map CN1 Proposed Future Network - Cork Inter-urban Route Network



Project: CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	Title: CN1 - CORK INTER-URBAN ROUTE NETWORK	Legend: Greenway; Interurban; Primary; Potential Primary; Secondary; Employment Centre; Masterplan Area; Train Station; Irish Rail Network; Disused Railways; N28 Upgrade	AECOM 4th Floor, Adelphi Plaza, Upper Georges Street, Dun Laoghaire, Co, Dublin Tel: +353 (0)1 238 3100 Fax: +353 (0)1 238 3199 www.aecom.com

18 Inter Urban Network

18.1 Introduction

The inter-urban cycle route proposals consist of links between the Metropolitan towns and Cork City. The rural sections of these routes, which are remote from main towns (>5km), would mostly serve recreational cycling on rural roads, which is a leisure activity despite the lack of formal identification of suitable cycle routes.

This study has where possible selected minor rural roads with low volumes of traffic and moderate speeds for identification as suitable cycle routes that can be promoted through cycle directional signs, similar to the current provisions in the tourist cycling hubs around the country. In some cases there may be several suitable route options available and further study will be required at local level to select the preferred route.

The rural cycle routes interconnect with the town cycle networks and in some instances greenway routes can also act as an inter-urban connector route. Unfortunately not all cycle routes can be directed along low-volume and low speed roads due to the limitations of the local road network. An example is between Carrigaline and Cork City, where the most direct route available is along the busy and fast N28. An upgrade of the N28 to motorway standard is proposed that will take much of the heavy traffic off the existing N28 route. This provides the opportunity to improve the environment for cyclists by widening the road and designating some of the road width along this corridor to cycling. In such cases it is proposed to provide a rural cycle track along the road verge as in Denmark, Germany and other European countries. Such cycling facilities have been provided on a number of recent national secondary route improvements in Galway, Mayo and Donegal as shown in the following example.

A number of inter-urban routes are proposed to formalise the cycling connection between metropolitan towns and between metropolitan towns and Cork City. The Inter-Urban route network map is shown on Map CN1. The details of each Inter-Urban route are provided below.

18.2 Route Descriptions

A description of each of the proposed routes is provided below.

ROUTE CODE: IU-1

Road Name:
Parallel to Midleton Rail Corridor and Old N25

Section (where applicable):
Midelton to Dunkettle Roundabout/Lower Glanmire Road

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This will be a fully segregated cycle track parallel to the rail line from Midleton to the west of Carrigtwohill village where it is proposed to provide a two way segregated cycle track within the corridor of the old N25. This route can form part of the Eurovelo Network between Waterford and Kerry, connecting to the west through the proposed network in the City Centre.

Key Locations Served:
Midleton, Carrigtwohill, Glounthaune, Little Island, Cork City

Pinch Points/Constraints: Additional land may be required parallel to the rail corridor between Carrigtwohill and Midleton to provide sufficient width for a two way segregated cycle track. The existing rail corridor at Midleton and Carrigtwohill is shown below.

ROUTE CODE: IU-2

Road Name:
R624

Section (where applicable):
Cobh (Passage West Ferry Terminal) to Fota Island Resort

Existing Facility and Quality of Service: There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type: This will be an advisory route shared on-road with vehicular traffic. The limited road width available restricts the possibility of providing dedicated on-road cycling facilities with Lough Mahon on the west side and properties along the east side of the carriageway.

Appropriate signage and road markings can provide an adequate level of comfort for cyclists, which are expected to be mainly tourism and leisure cyclists along this route. An alternative route to the city is provided by the passenger ferry that links directly with Passage West and into Cork City Centre.

Key Locations Served:
Cobh, Fota Island, Carrigtwohill

Pinch Points/Constraints: Limited road width restricts the possibility of providing dedicated cyclist facilities. Traffic management and road signage is required to improve safety for cyclists along this route. Long term plans to provide a new road along the harbour may eventually free up this road space to provide dedicated cyclist facilities.

ROUTE CODE: IU-3

Road Name:
N28 and R611

Section (where applicable):
N28 from Ringaskiddy to proposed greenway at Carrigaline Road (CSE-GW4) and R611 from Carrigaline north to N28.

Figure 18.1 Cycle Track alongside the N59 at Newport, County Mayo

Figure 18.2 Rail Corridor at Midleton (left) and Carrigtwohill (right) — Additional land may be required outside of rail corridor for provision of two-way cycle path

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is proposed as a greenway route providing a fully segregated cycle track either side of the carriageway or a two way track on one side. The delivery of this greenway is dependent on the upgrade of the N28 to motorway standard, which will reduce the level of traffic on this link facilitating a more cycling friendly environment.

Key Locations Served:
Ringaskiddy, Carrigaline, Douglas, City Centre

Pinch Points/Constraints:
There is a significant gradient at Carr's Hill that will not suit all types of cyclists. To access the Passage West Greenway at Rochestown, cyclists will have to travel through Douglas village which is a circuitous/indirect route; however this route is considered the most direct route from Ringaskiddy/Carrigaline to the City Centre and therefore cyclists using this route are expected to continue on their journey into the City Centre via South Douglas Road.

ROUTE CODE: IU-4

Road Name:
Old Youghal Road

Section (where applicable):
West of Glanmire Village to Banduff Road where it connects with two proposed greenway/amenity routes

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This will be an advisory route shared on-road with vehicular traffic. The steep hill from Glanmire towards the north city/Mayfield will limit the number of cyclists that will use this route and therefore no dedicated on road cycling facilities are proposed. This link will be primarily a leisure or tourism cycling route. Traffic management and road signage will be required to improve safety for cyclists along this route by alerting motorists to cyclists.

Key Locations Served:
Glanmire, Mayfield, North City Area

Pinch Points/Constraints:
There is a significant gradient at from Glanmire towards the north city therefore limiting the likelihood of cyclists using this link without significant infrastructure (cycle lanes/segregated track). The route will be therefore primarily an advisory route for leisure cyclists.

ROUTE CODE: IU-5

Road Name:
Redforge Road, Malow Road, Old Mallow Road

Section (where applicable):
Blackpool to Monard Development Site

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This will be an advisory route shared on-road with vehicular traffic. Some gradients may limit the number of cyclists that will use this route and therefore it is not considered feasible to provide dedicated cycling facilities in the short term at least. Traffic management and road signage will be required to improve safety for cyclists along this route. This link will be primarily a leisure or tourism cycling route with the possibility of cyclists wishing to access the City Centre from Monard having the option of utilising the train to get to Kent Station as part of a multi modal trip.

Key Locations Served:
Monard Development Site, North City Area

Pinch Points/Constraints:
There is limited road width along this route which will have an impact on attractiveness for cycling for everyday commuters. Dedicated facilities are recommended if this is to become a high frequency cycle route. The route will be primarily an advisory route for leisure cyclists in the short term.

ROUTE CODE: IU-6

Road Name:
N20, Local Access Road, Blarney Bog path **Section (where applicable):**
Old Mallow Road intersection on N20 to Blarney Village

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed segregated cycling track along the N20 Corridor, parallel to local access roads and upgrading the existing Blarney Bog path to a shared pedestrian and cycling path (currently pedestrian only). A segregated cycle track is proposed on each side of the carriageway of the N20 from the Old Mallow Road intersection to Kileens Cross where the tracks will merge into a proposed two way track parallel to a local access road (name unknown).

Key Locations Served:
Blarney, Kileens Cross, North City Area

Pinch Points/Constraints:
The segregated cycle path will then join the existing Blarney Bog path that will require minimal upgrades to facilitate cyclists. The N20 section of this route will require significant segregation to facilitate cyclists. The section parallel to the local access road will require a portion of the green verge along this route (shown below).

ROUTE CODE: IU-7

Road Name:
R579/R618

Section (where applicable):
Carrigrohane Road to Clogrhoe Primary School

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a proposed segregated cycling track along the disused rail corridor between the R579 and River Shournagh. This route could provide a useful link to the proposed greenway between Ballincollig and the Lee Fields.

Key Locations Served:
Ballincollig, Tower, Cork City

Pinch Points/Constraints:
Land ownership and existing structures at Leemount Cross and Healy's Bridge will need to be investigated in more detail to determine feasibility of continuous segregated track at these locations. If a continuous track cannot be accommodated short sections of road widening should be considered to provide road side tracks as an alternative to forcing cyclists to sharing this narrow carriageway with motorists.

ROUTE CODE: IU-8

Road Name:
R613

Section (where applicable):
Fernhill/Rock Road to Raheens East

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This will be an advisory route shared on-road with vehicular traffic. Traffic management and road signage will be required to improve safety for cyclists along this route. This link will be primarily a leisure or tourism cycling route with the possibility of providing cycle lanes if road widening can be accommodated. This would provide a direct and safe route for cyclists travelling to and from Carrigaline/Ringaskiddy on a regular basis.

Key Locations Served:
Carrigaline, Ringaskiddy

Pinch Points/Constraints:
Traffic management and road signage will be required to provide adequate safety for cyclists. Widening of the road to accommodate cycle lanes in each direction should be explored to provide an improved route for cyclists.

ROUTE CODE: IU-9

Road Name:
Lee Road and Inniscarra Road

Section (where applicable):
Sunday's Well Road to Ballincollig Regional Park

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This will be an advisory route shared on-road with vehicular traffic. A signage strategy will need to be adopted to alert motorists to the potential presence of cyclists. In addition to this, traffic management should be incorporated where appropriate on any speed limited sections of the road. This link is viewed primarily as a recreation route between Ballincollig and the city although it may also perform a commuter function.

Key Locations Served:
Ballincollig, Atkins Apartments, Lifetime Lab

Pinch Points/Constraints:
Road signage will be required to alert motorists to the presence of cyclists and help provide a passive form of safety. There are additional routes on the Metropolitan Cycling Network that can also serve as inter-urban routes. These routes include greenways from Passage West to the east City, Carrigaline to Ringaskiddy Greenway and the proposed greenway from Ballincollig to the City via the Leefields. These links are described in more detail in previous sections. Additional long distance inter-urban routes are also possible to towns such as Fermoy, Mallow and Kinsale forming part of the national cycle network but these routes are beyond the scope of this study.

ROUTE CODE: IU-10

Road Name:
N71 Bandon Road

Section (where applicable):
Bishopstown Road to disused railway

Existing Facility and Quality of Service:
There are currently no dedicated cycling facilities along this route.

Proposed Infrastructure Type:
This is a national secondary route with a speed limit of 100km/h. Facilities on this road will need to be fully segregated from the existing traffic regime. The road has a wide cross section with adequate verge width which can be exploited to provide bi-directional segregated cycle tracks. At the N40, cyclists will cross using a series of at grade toucan crossings (similar to Sarsfield interchange). On the Bandon Road north of the N40 junction, bi-directional cycle lanes can be provided by narrowing the wide existing traffic lanes to a maximum of 3m.

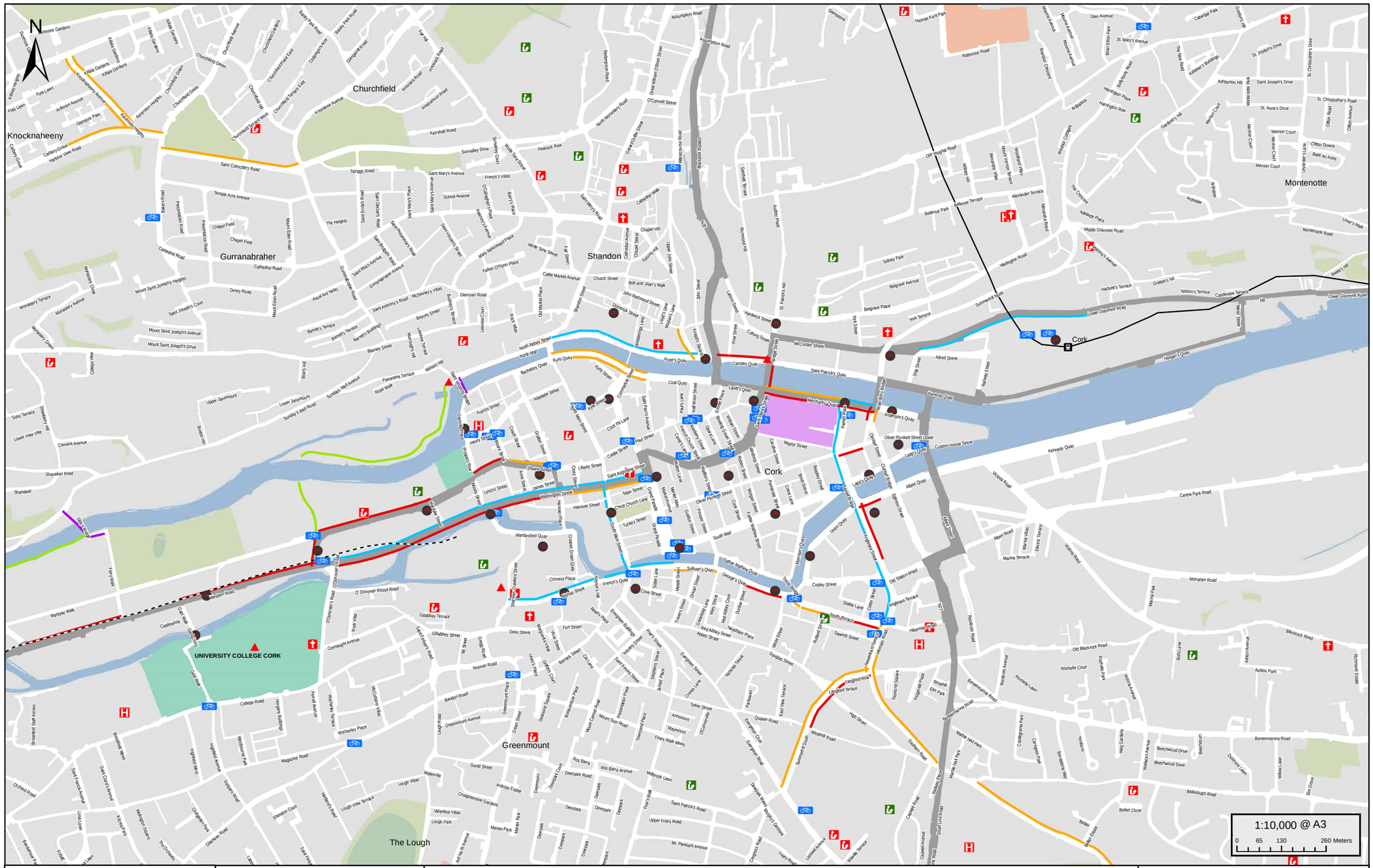
Key Locations Served:
Future route CSW-GW5, Bishopstown Court shopping centre, residents north of N40 cordon

Pinch Points/Constraints:
The N71 section of the Bandon is high speed (100 km/h speed limit), any facilities provided on this link must be fully segregated. Crossing of N40 interchange.

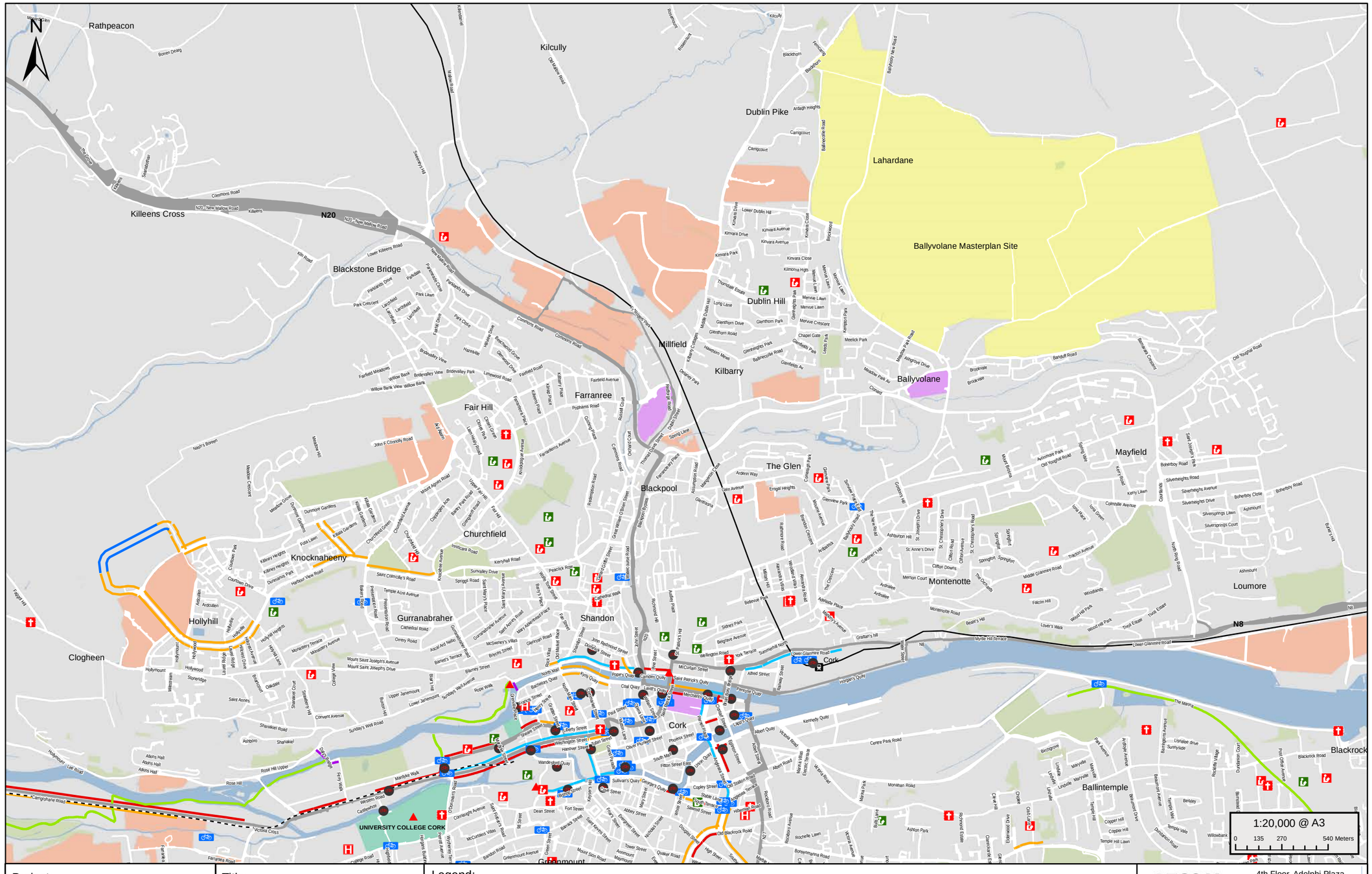
There are additional routes on the Metropolitan Cycling Network that can also serve as inter-urban routes. These routes include greenways from Passage West to the east City, Carrigaline to Ringaskiddy Greenway and the proposed greenway from Ballincollig to the City via the Leefields. These links are described in more detail in previous sections. Additional long distance inter-urban routes are also possible to towns such as Fermoy, Mallow and Kinsale forming part of the national cycle network but these routes are beyond the scope of this study.

Appendix 1

Existing Facilities Maps



Project:	Title:	Legend:	
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	E1 - CORK CITY CENTRE	B1 - Bus Lane (no cycle lane) C1 - Cycle Track - Separated from Road C2 - Cycle Track - Immediately adjacent C3 - Cycle Lane (even within Bus Lane) G1 - Cycle Trail or Greenway S2 - Shared Walking & Cycling University Hospital Place of Worship Primary School Secondary School Public Bikes Bike Parking (≥ 8 spaces) Irish Rail Stations Business Park / Industrial Masterplan Area Shopping Centre University / College Park	AECOM 4th Floor, Adelphi Plaza, Upper Georges Street, Dun Laoghaire, Co, Dublin Tel: +353 (0)1 238 3100 Fax: +353 (0)1 238 3199 www.aecom.com



Project:	Title:	Legend:
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	E2 - CORK NORTH	B1 - Bus Lane (no cycle lane) C1 - Cycle Track - Separated from Road C2 - Cycle Track - Immediately adjacent C3 - Cycle Lane (even within Bus Lane) G1 - Cycle Trail or Greenway S2 - Shared Walking & Cycling University Hospital Place of Worship Primary School Secondary School Public Bikes Bike Parking (≥ 8 spaces) Irish Rail Stations Business Park / Industrial Masterplan Area Shopping Centre University / College Park

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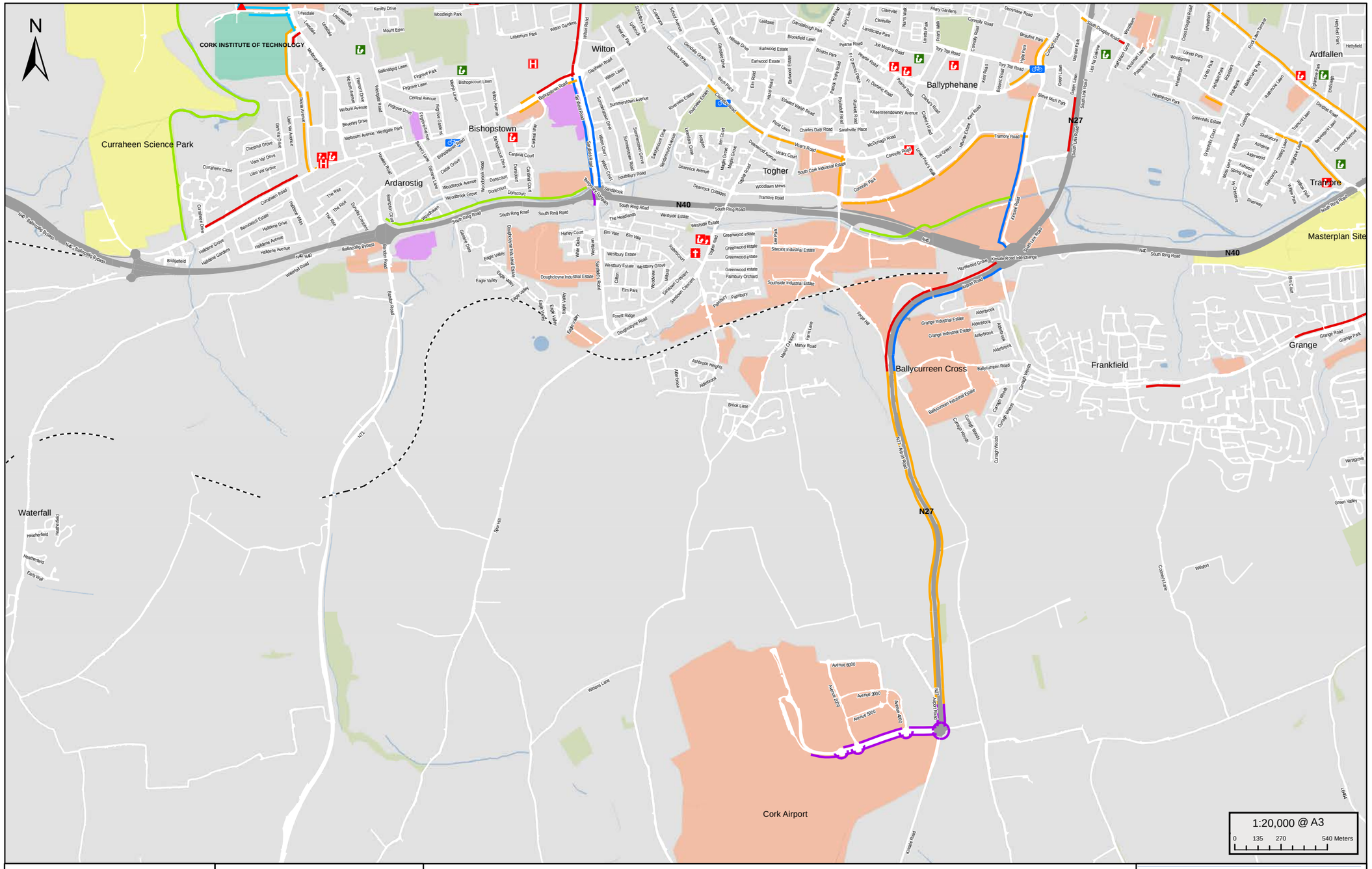

Project:	Title:	Legend:
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	E3 - CORK SOUTHWEST	B1 - Bus Lane (no cycle lane) C1 - Cycle Track - Separated from Road C2 - Cycle Track - Immediately adjacent C3 - Cycle Lane (even within Bus Lane) G1 - Cycle Trail or Greenway S2 - Shared Walking & Cycling University Hospital Place of Worship Primary School Secondary School Public Bikes Bike Parking (≥ 8 spaces) Irish Rail Stations Business Park / Industrial Masterplan Area Shopping Centre University / College Park

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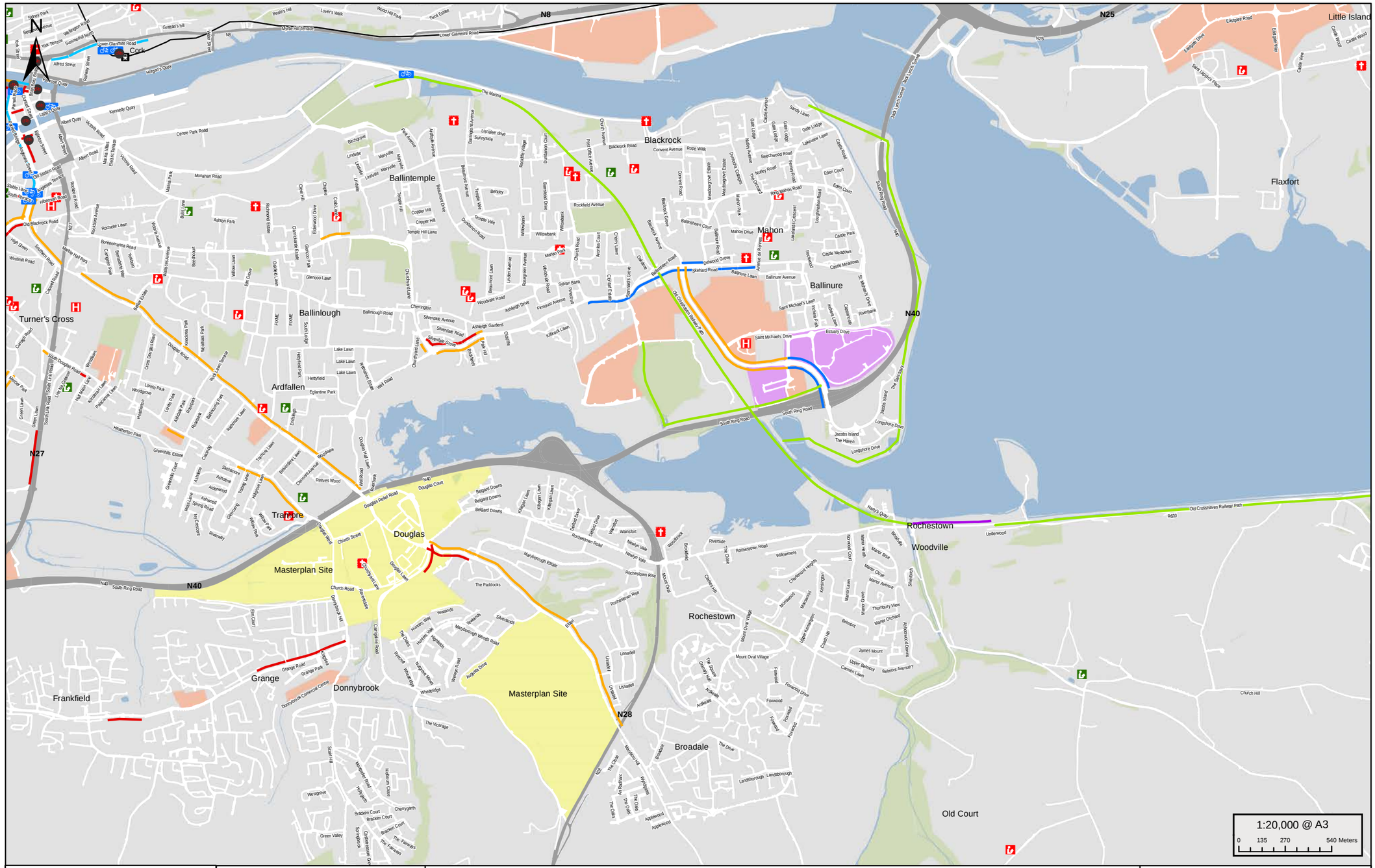

Project:	Title:	Legend:
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	E4 - CORK SOUTHEAST	B1 - Bus Lane (no cycle lane) C1 - Cycle Track - Separated from Road C2 - Cycle Track - Immediately adjacent C3 - Cycle Lane (even within Bus Lane) G1 - Cycle Trail or Greenway S2 - Shared Walking & Cycling University Hospital Place of Worship Primary School Secondary School Public Bikes Bike Parking (≥ 8 spaces) Irish Rail Stations Business Park / Industrial Masterplan Area Shopping Centre University / College Park

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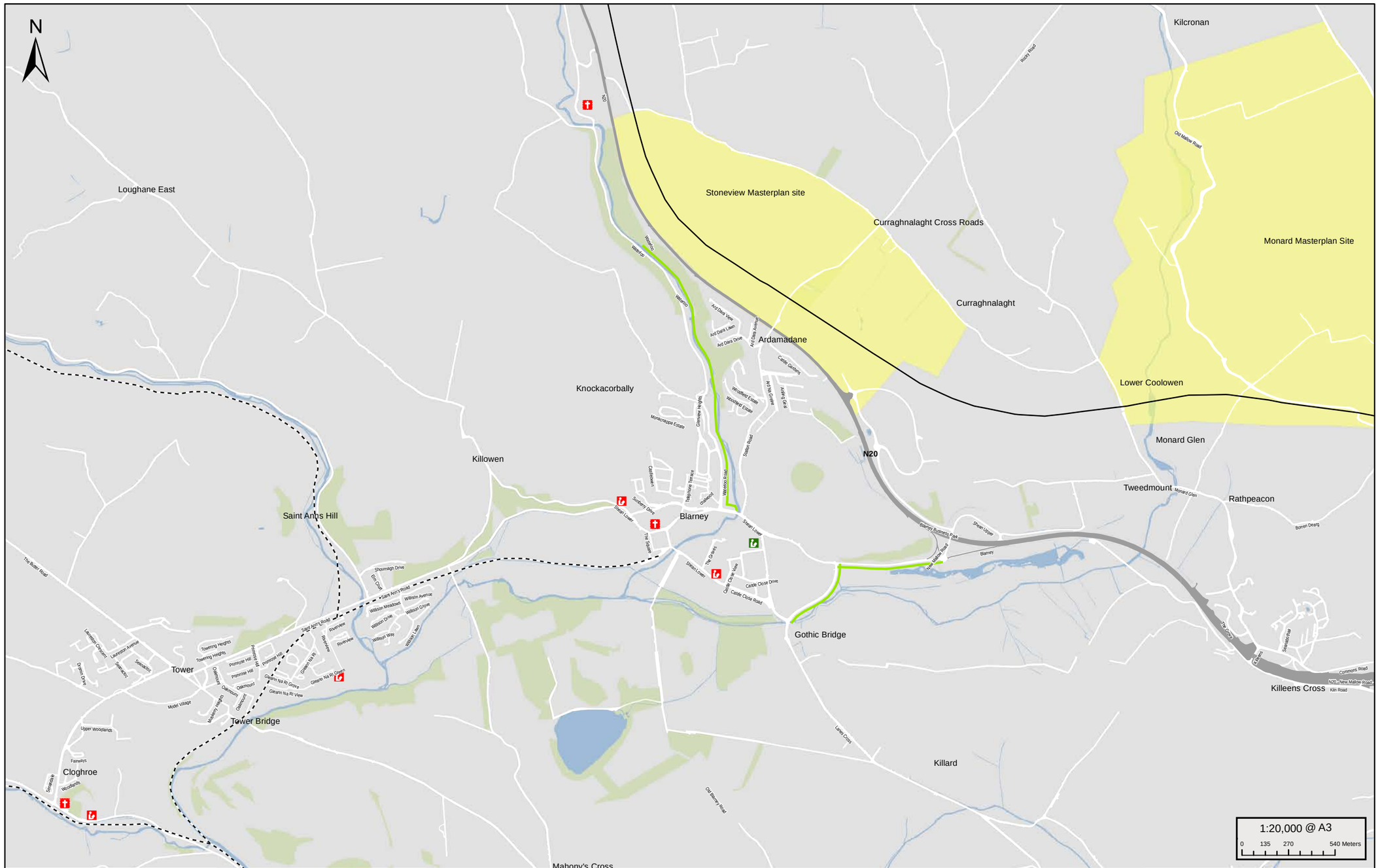

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CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	E5 - BLARNEY & TOWER	B1 - Bus Lane (no cycle lane) C1 - Cycle Track - Separated from Road C2 - Cycle Track - Immediately adjacent C3 - Cycle Lane (even within Bus Lane) G1 - Cycle Trail or Greenway S2 - Shared Walking & Cycling University Hospital Place of Worship Primary School Secondary School Public Bikes Bike Parking (≥ 8 spaces) Irish Rail Stations Business Park / Industrial Masterplan Area Shopping Centre University / College Park

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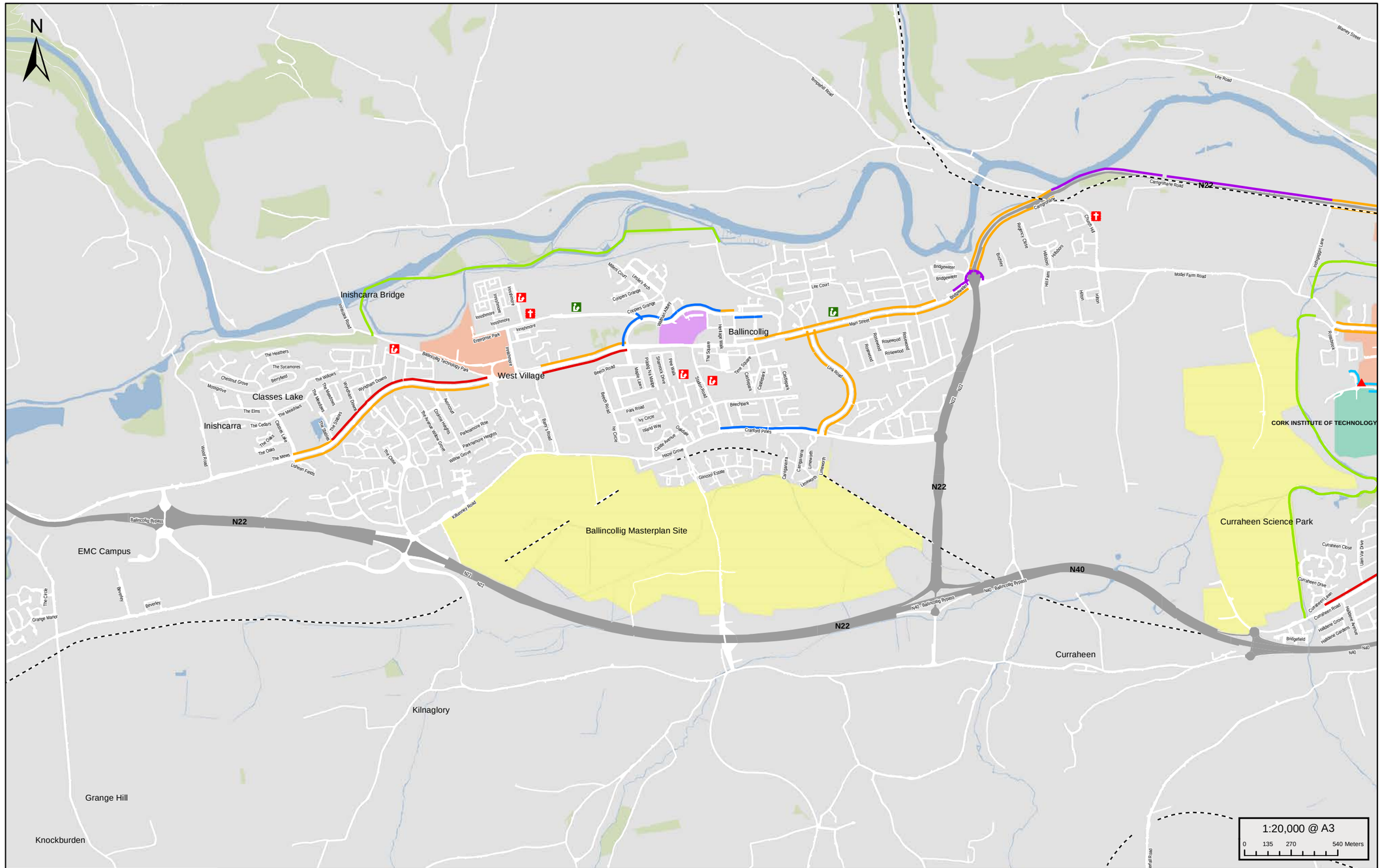
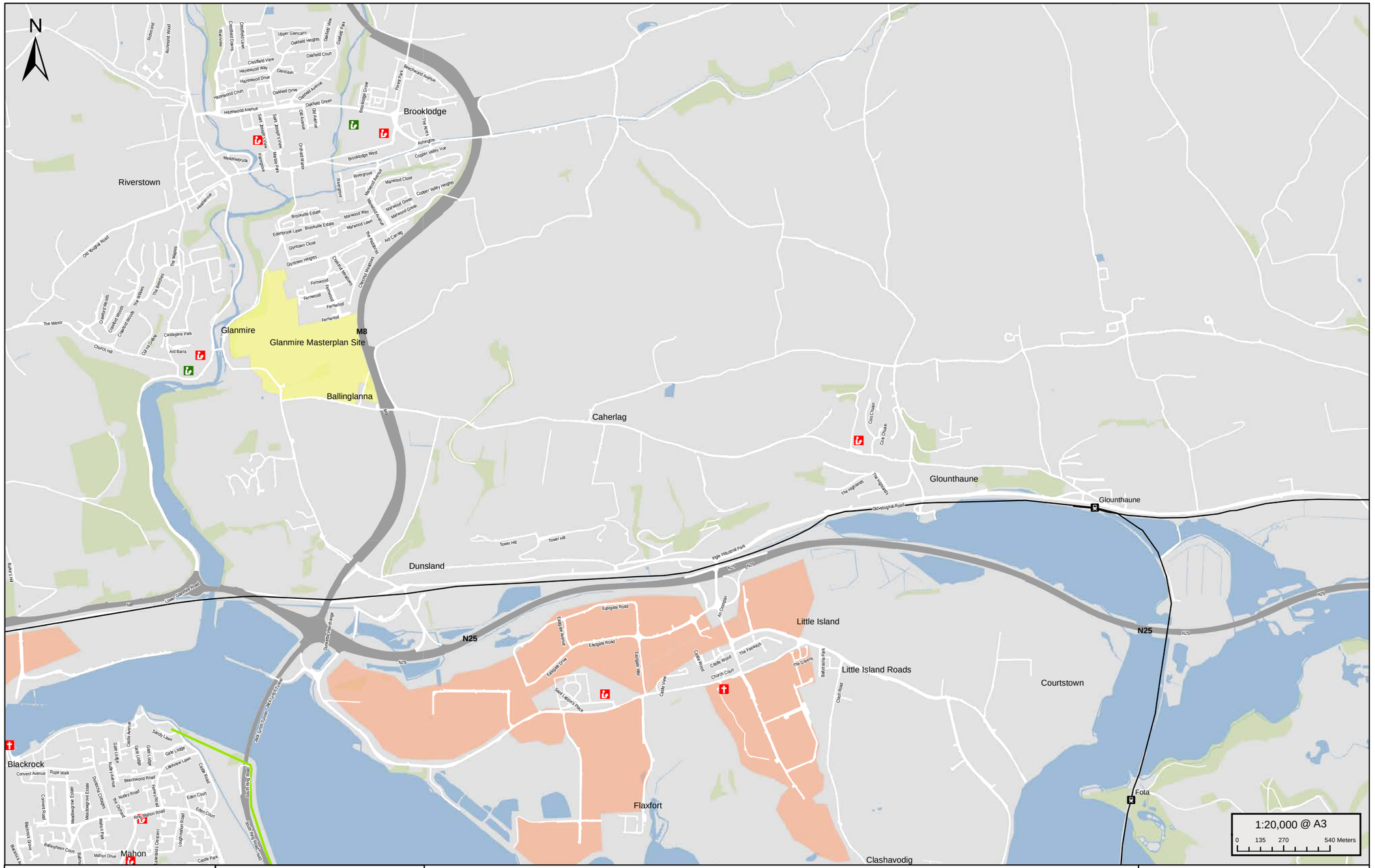
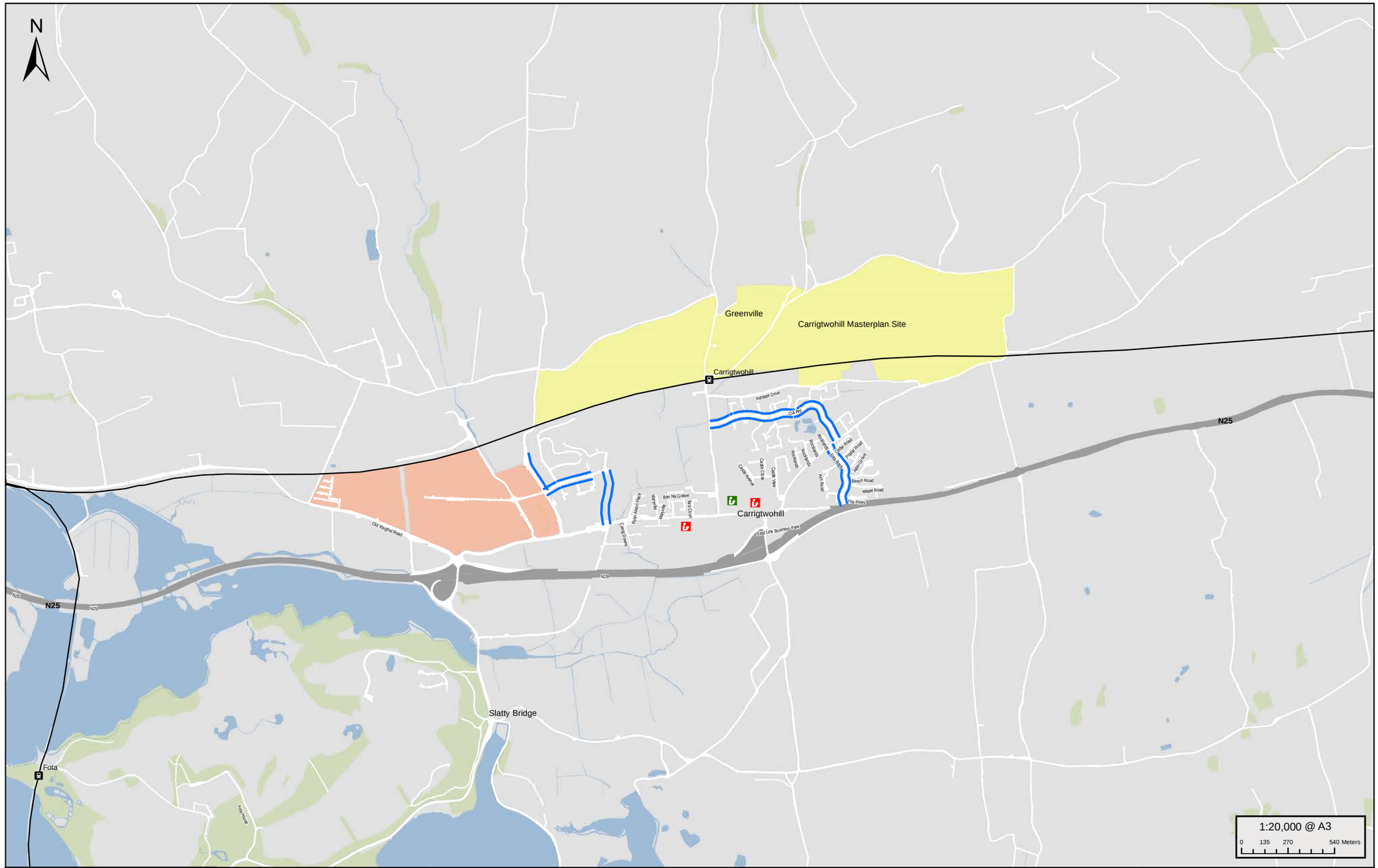


Project:	Title:	Legend:	
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	E6 - BALLINCOLLIG	B1 - Bus Lane (no cycle lane) C1 - Cycle Track - Separated from Road C2 - Cycle Track - Immediately adjacent C3 - Cycle Lane (even within Bus Lane) G1 - Cycle Trail or Greenway S2 - Shared Walking & Cycling University Hospital Place of Worship Primary School Secondary School Public Bikes Bike Parking (≥ 8 spaces) Irish Rail Stations Business Park / Industrial Masterplan Area Shopping Centre University / College Park	AECOM 4th Floor, Adelphi Plaza, Upper Georges Street, Dun Laoghaire, Co, Dublin Tel: +353 (0)1 238 3100 Fax: +353 (0)1 238 3199 www.aecom.com



Project:	Title:	Legend:	
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	E7 - LITTLE ISLAND & GLANMIRE	B1 - Bus Lane (no cycle lane) C1 - Cycle Track - Separated from Road C2 - Cycle Track - Immediately adjacent C3 - Cycle Lane (even within Bus Lane) G1 - Cycle Trail or Greenway S2 - Shared Walking & Cycling University Hospital Place of Worship Primary School Secondary School Public Bikes Bike Parking (≥ 8 spaces) Business Park / Industrial Masterplan Area Shopping Centre University / College Park	AECOM 4th Floor, Adelphi Plaza, Upper Georges Street, Dun Laoghaire, Co, Dublin Tel: +353 (0)1 238 3100 Fax: +353 (0)1 238 3199 www.aecom.com



Project:	Title:	Legend:
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	E8 - CARRIGTWOHILL	B1 - Bus Lane (no cycle lane) C1 - Cycle Track - Separated from Road C2 - Cycle Track - Immediately adjacent C3 - Cycle Lane (even within Bus Lane) G1 - Cycle Trail or Greenway S2 - Shared Walking & Cycling University Hospital Place of Worship Primary School Secondary School Public Bikes Bike Parking (≥ 8 spaces) Irish Rail Stations Business Park / Industrial Masterplan Area Shopping Centre University / College Park

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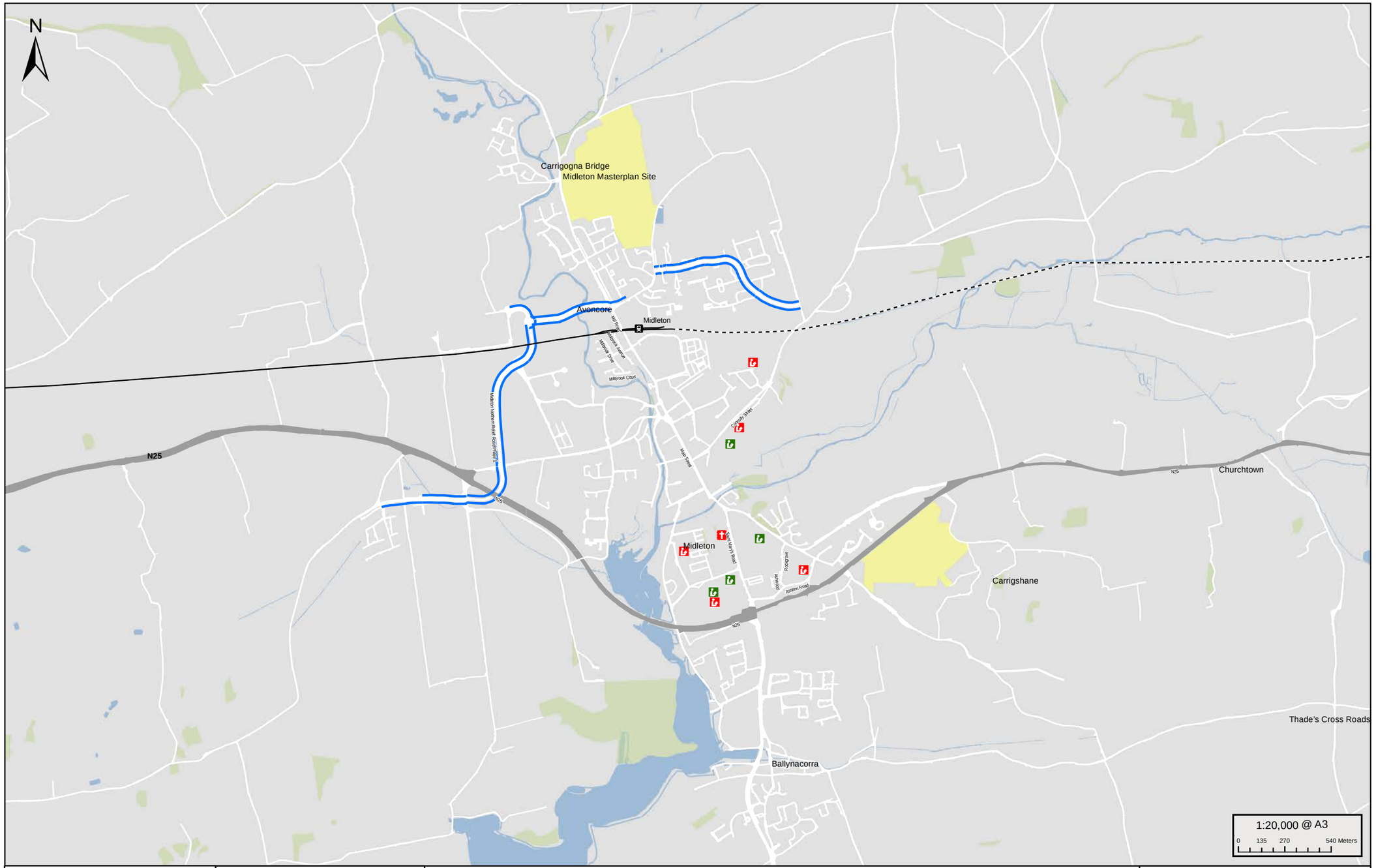

Project:
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA

Title:
E9 - MIDLETON

Legend:

- B1 - Bus Lane (no cycle lane)
- C1 - Cycle Track - Separated from Road
- C2 - Cycle Track - Immediately adjacent
- C3 - Cycle Lane (even within Bus Lane)
- G1 - Cycle Trail or Greenway
- S2 - Shared Walking & Cycling
- University
- Hospital
- Place of Worship
- Primary School
- Secondary School
- Public Bikes
- Bike Parking (≥ 8 spaces)
- Irish Rail Stations
- Business Park / Industrial
- Masterplan Area
- Shopping Centre
- University / College
- Park

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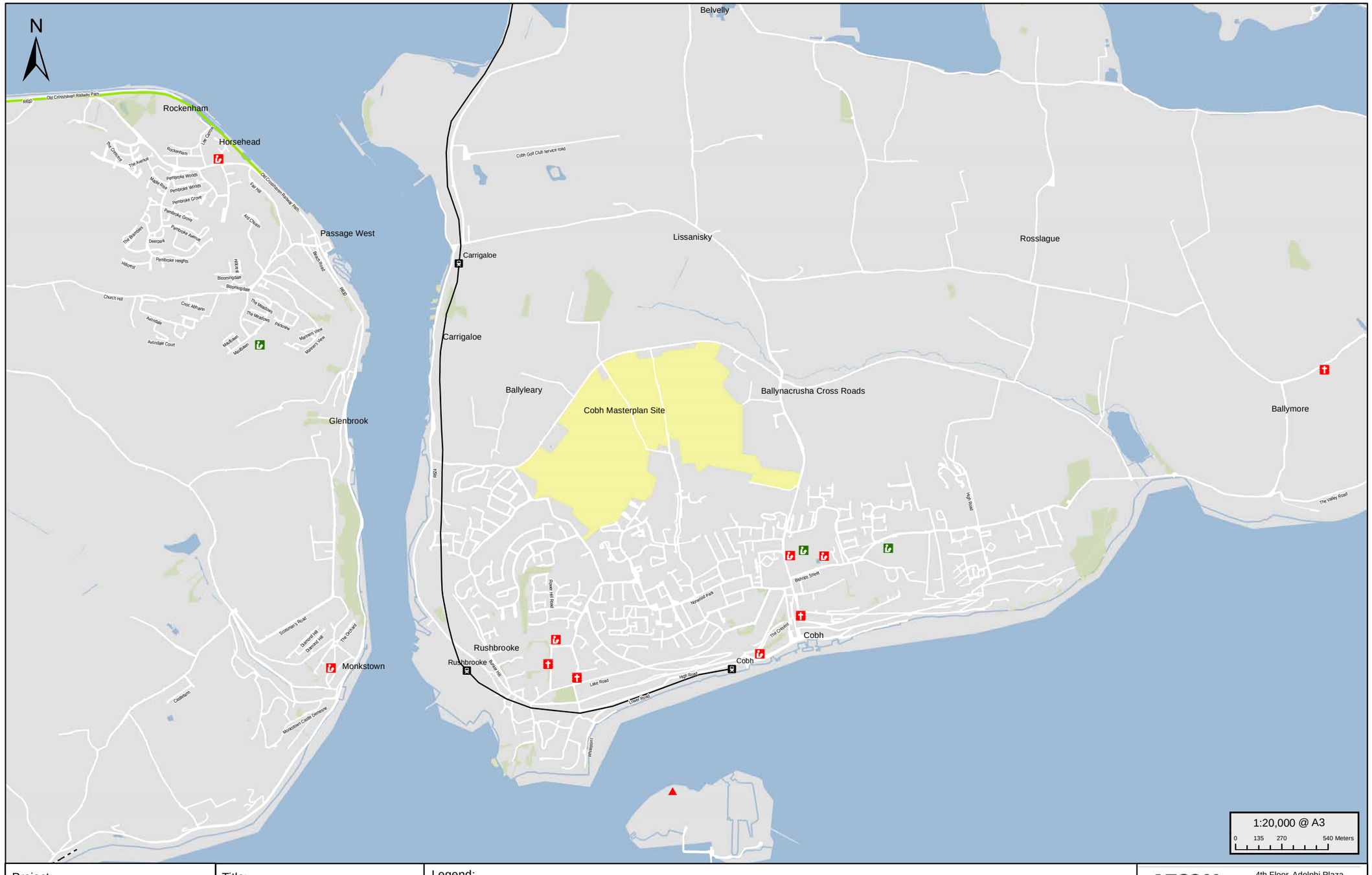

Project:	Title:	Legend:
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	E10 - COBH & PASSAGE WEST	B1 - Bus Lane (no cycle lane) C1 - Cycle Track - Separated from Road C2 - Cycle Track - Immediately adjacent C3 - Cycle Lane (even within Bus Lane) G1 - Cycle Trail or Greenway S2 - Shared Walking & Cycling University Hospital Place of Worship Primary School Secondary School Public Bikes Bike Parking (≥ 8 spaces) Irish Rail Stations Business Park / Industrial Masterplan Area Shopping Centre University / College Park

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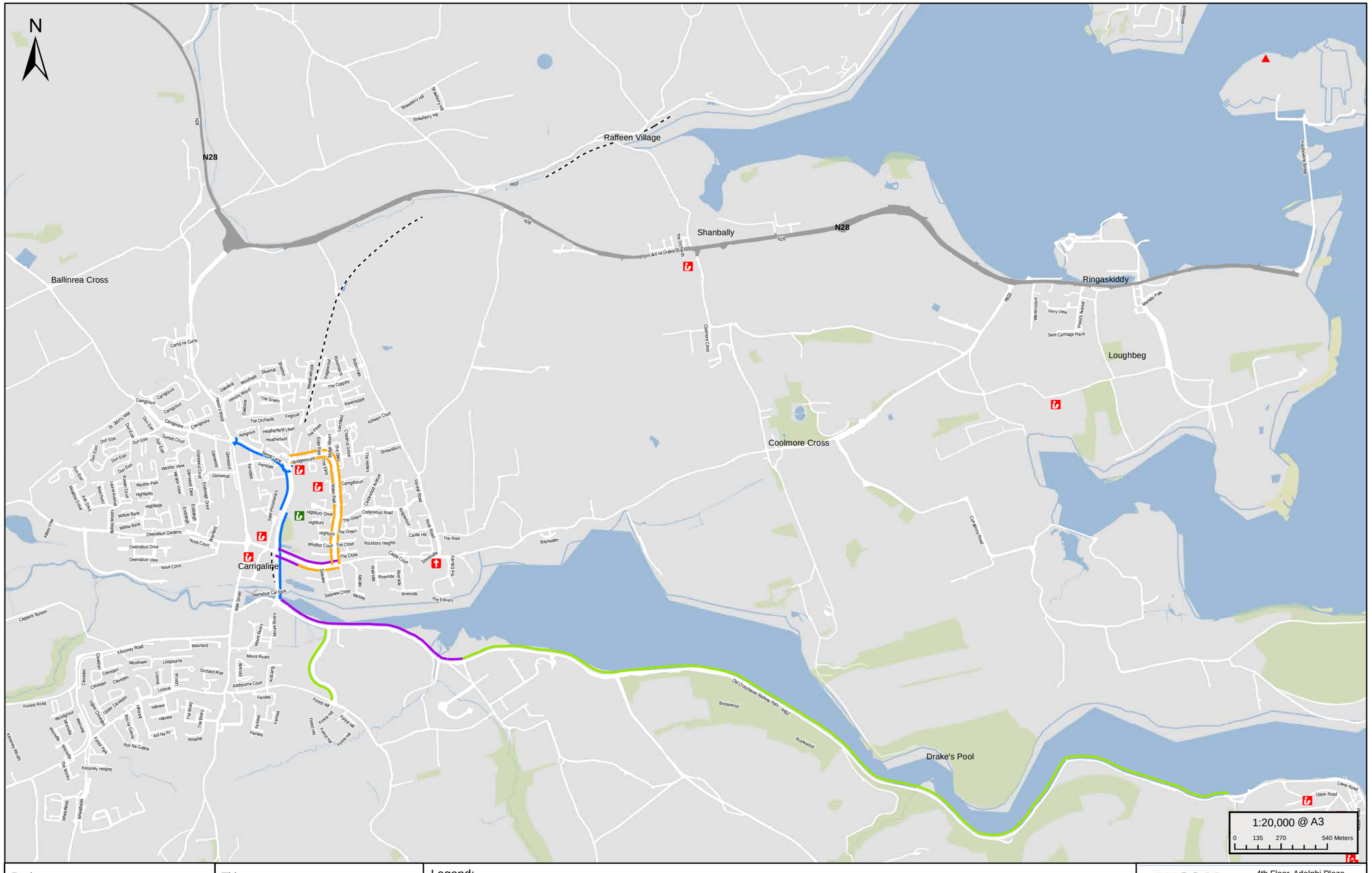
CORK CYCLE NETWORK PLAN



Project:	Title:	Legend:
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	E11 - CARRIAGLINE & RINGASKIDDY	B1 - Bus Lane (no cycle lane) C1 - Cycle Track - Separated from Road C2 - Cycle Track - Immediately adjacent C3 - Cycle Lane (even within Bus Lane) G1 - Cycle Trail or Greenway S2 - Shared Walking & Cycling University Hospital Place of Worship Primary School Secondary School Public Bikes Bike Parking (≥ 8 spaces) Irish Rail Stations Business Park / Industrial Masterplan Area Shopping Centre University / College Park

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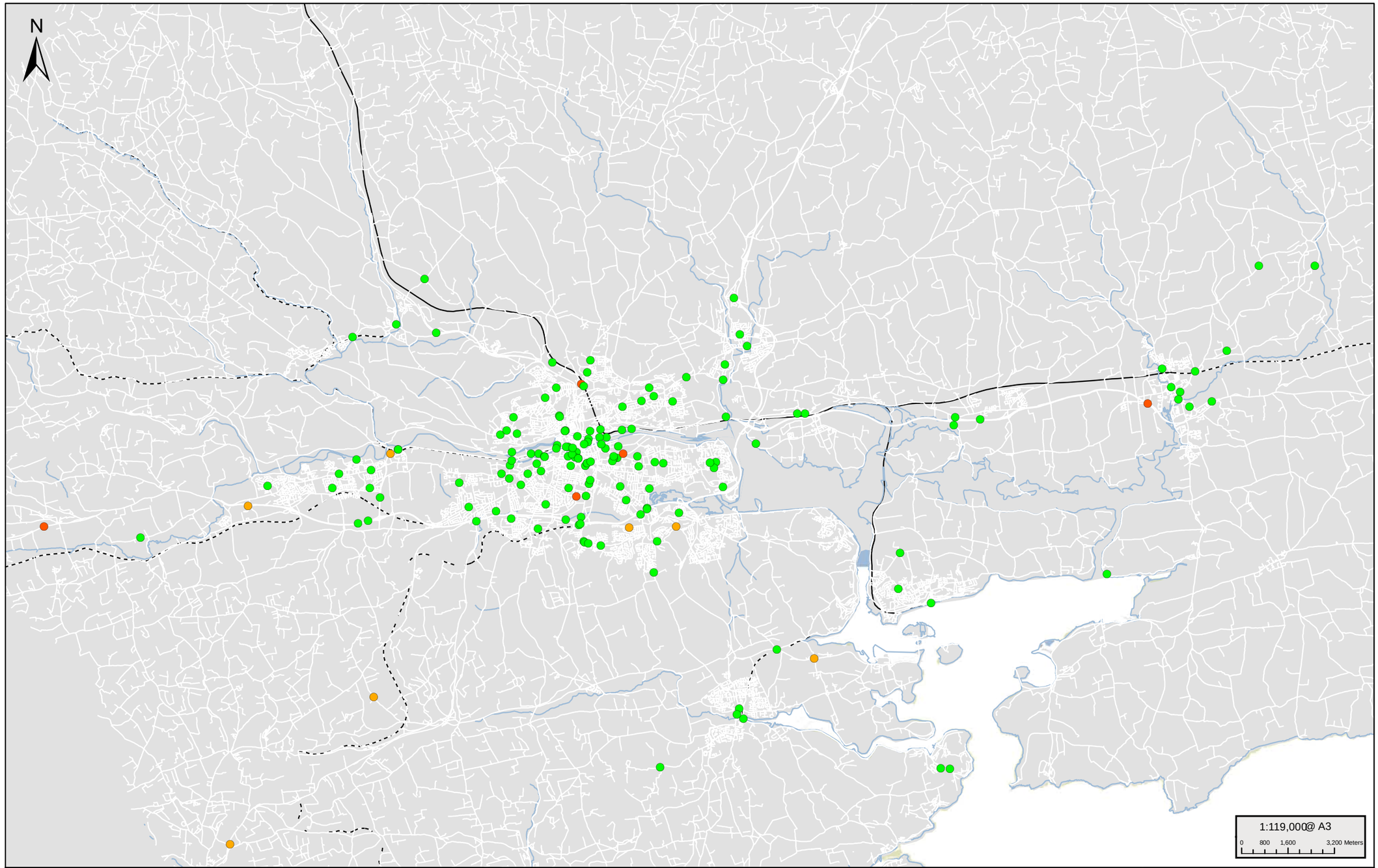
Appendix 2

Accident Mapping



Project:	Title:	Legend:
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	Cycle Collisions 2002-2012	**Cycle Collisions 2002-2012** Fatal Serious Minor

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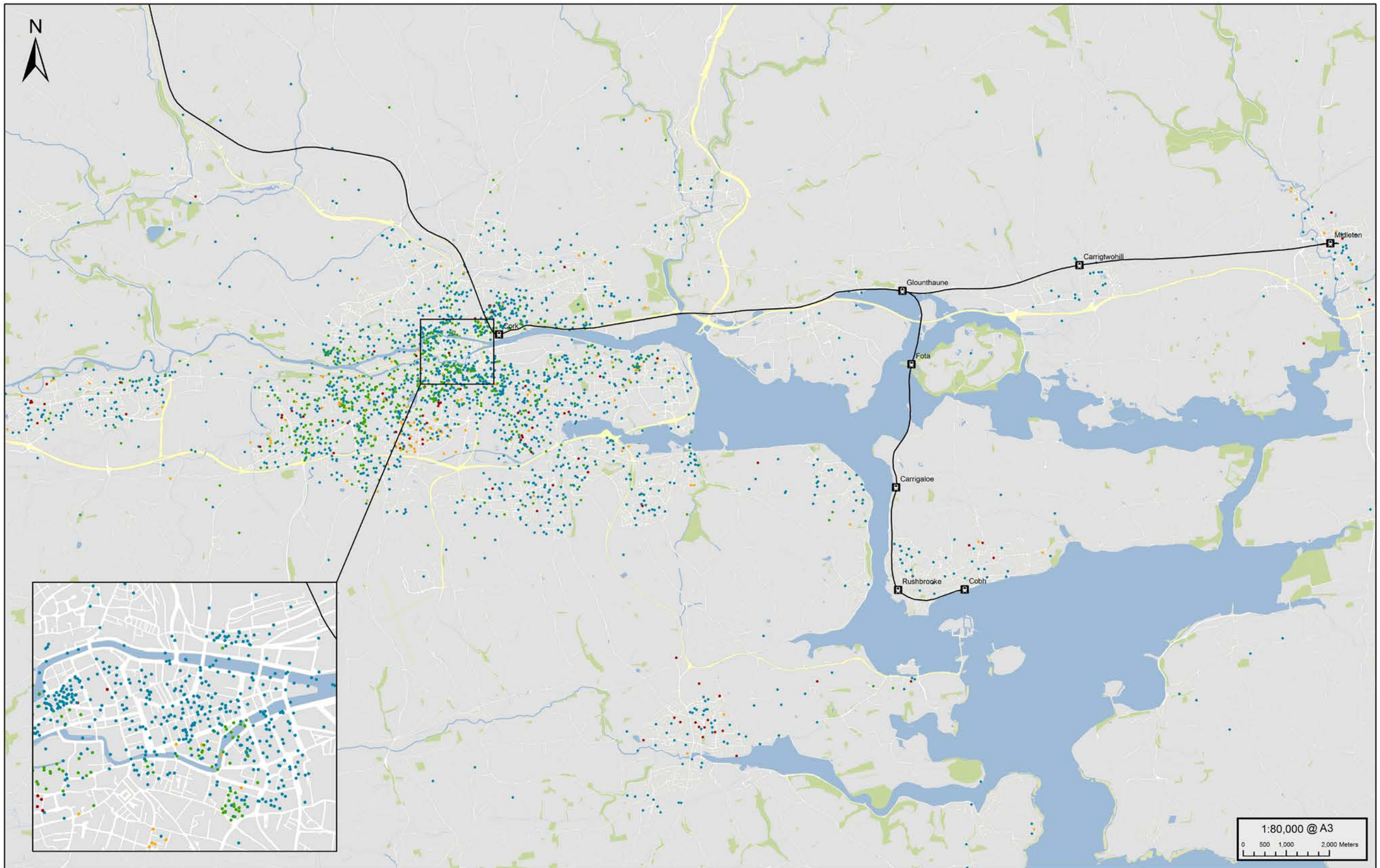
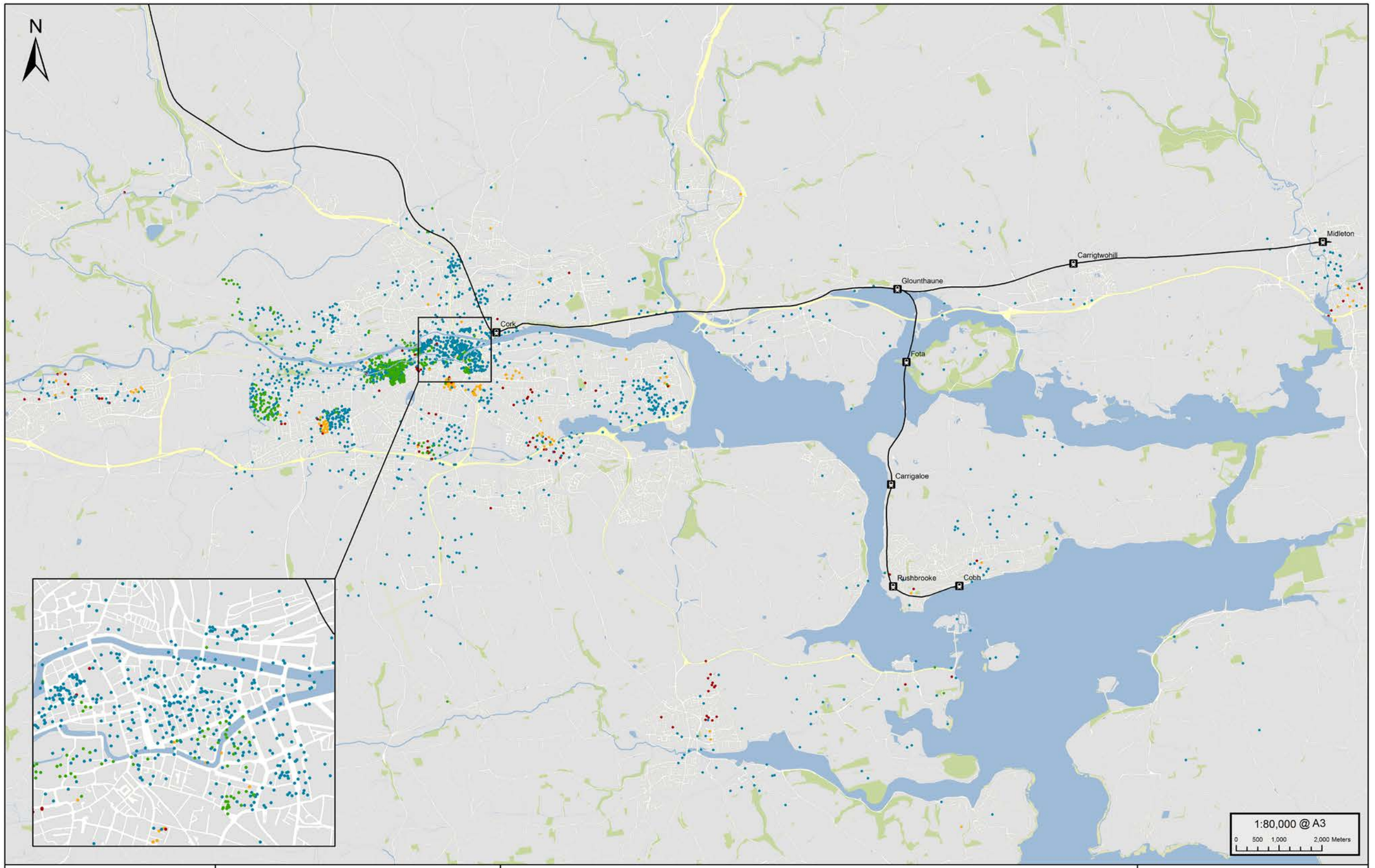
Appendix 3

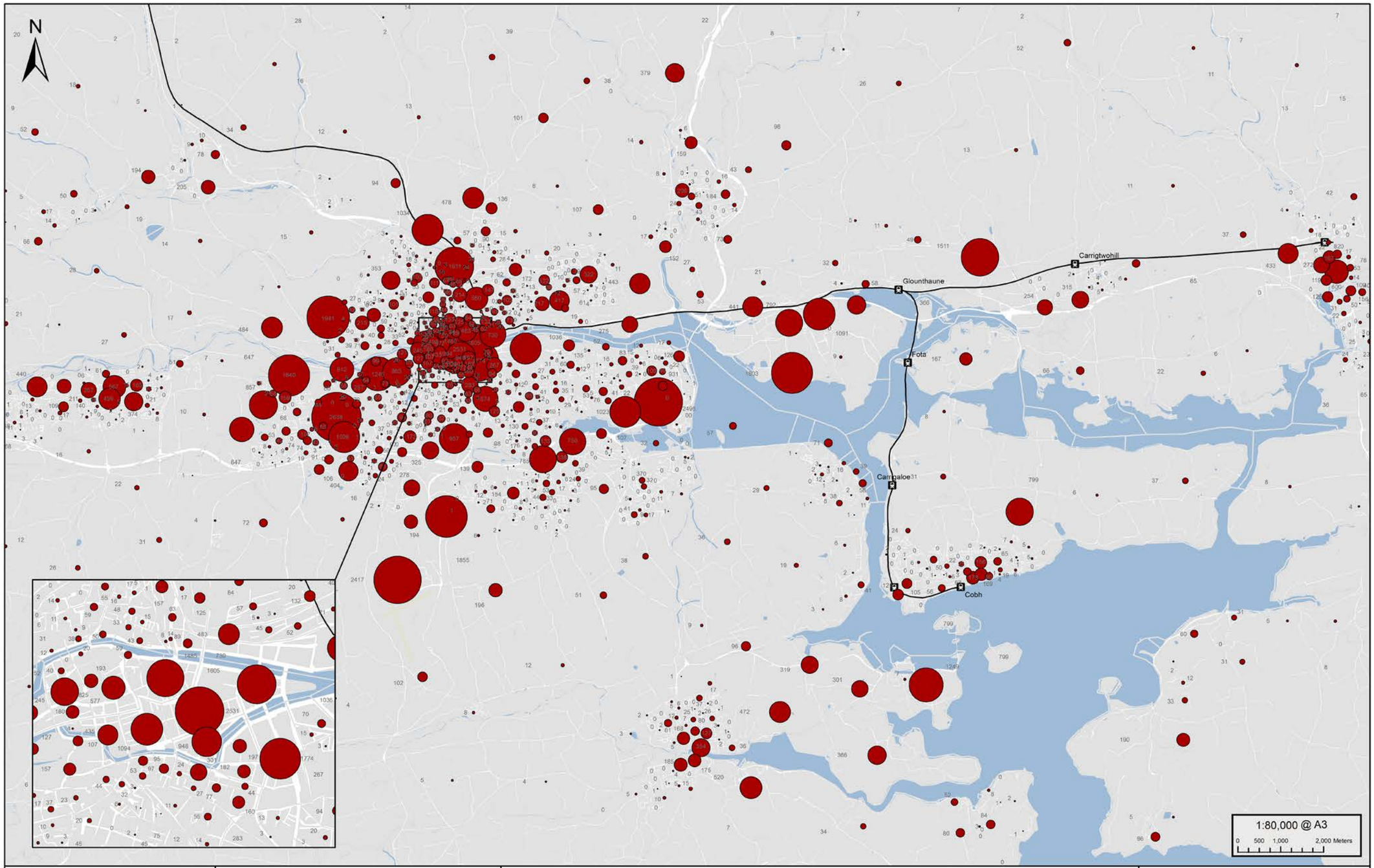
POWSCAR Mapping



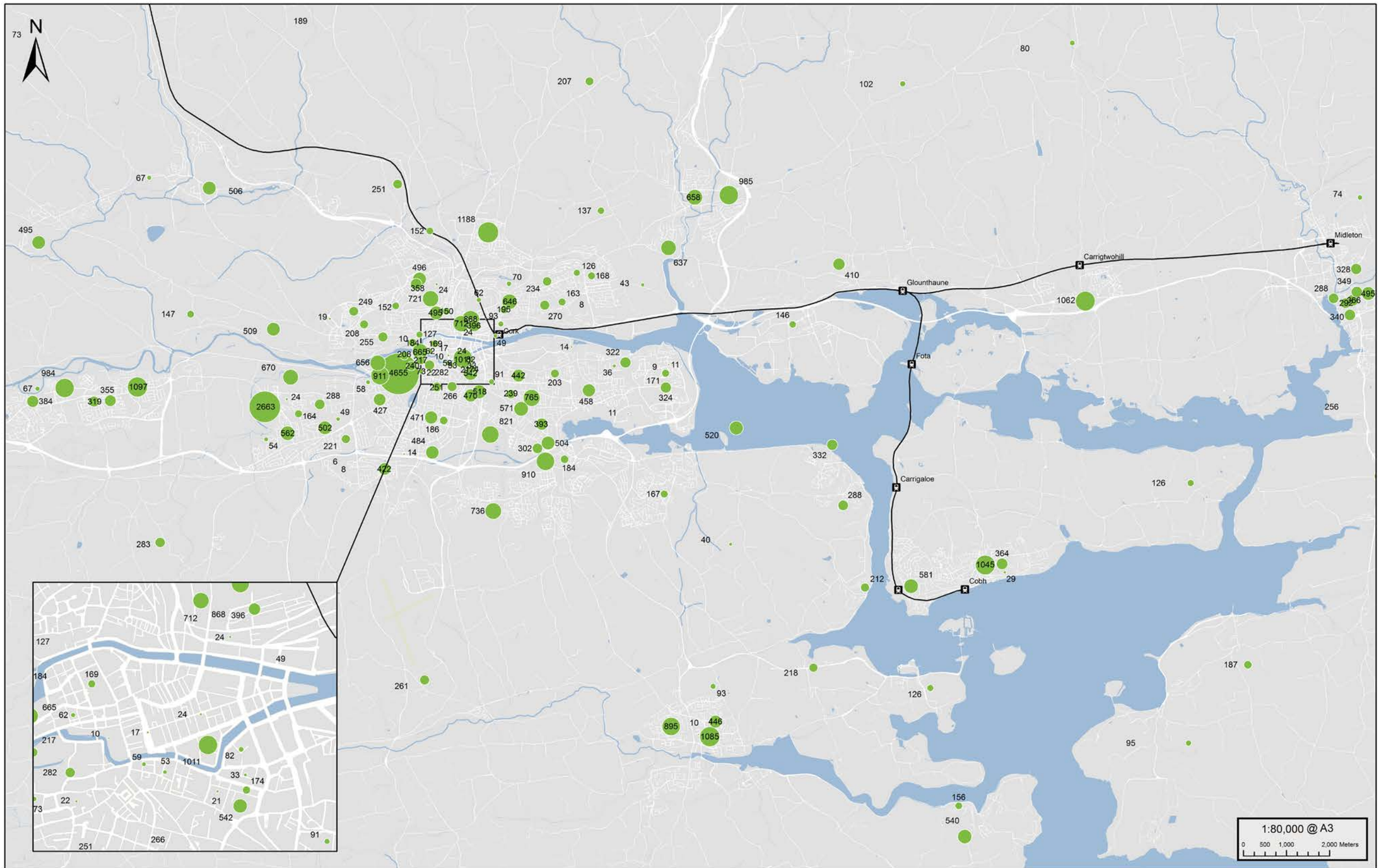
Project:	Title:	Legend:	
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	CENSUS 2011 CYCLE ORIGINS - RESIDENTS WITHIN CORK METROPOLITAN AREA	**Origins of cycling commuters (Census Small Areas)** • Cycling to Work • Cycling to Primary School • Cycling to Secondary School • Cycling to College	AECOM Grand Canal House, Upper Grand Canal Street, Dublin 4 Tel: +353 (0)1 238 3100 Fax: +353 (0)1 238 3199 www.aecom.com



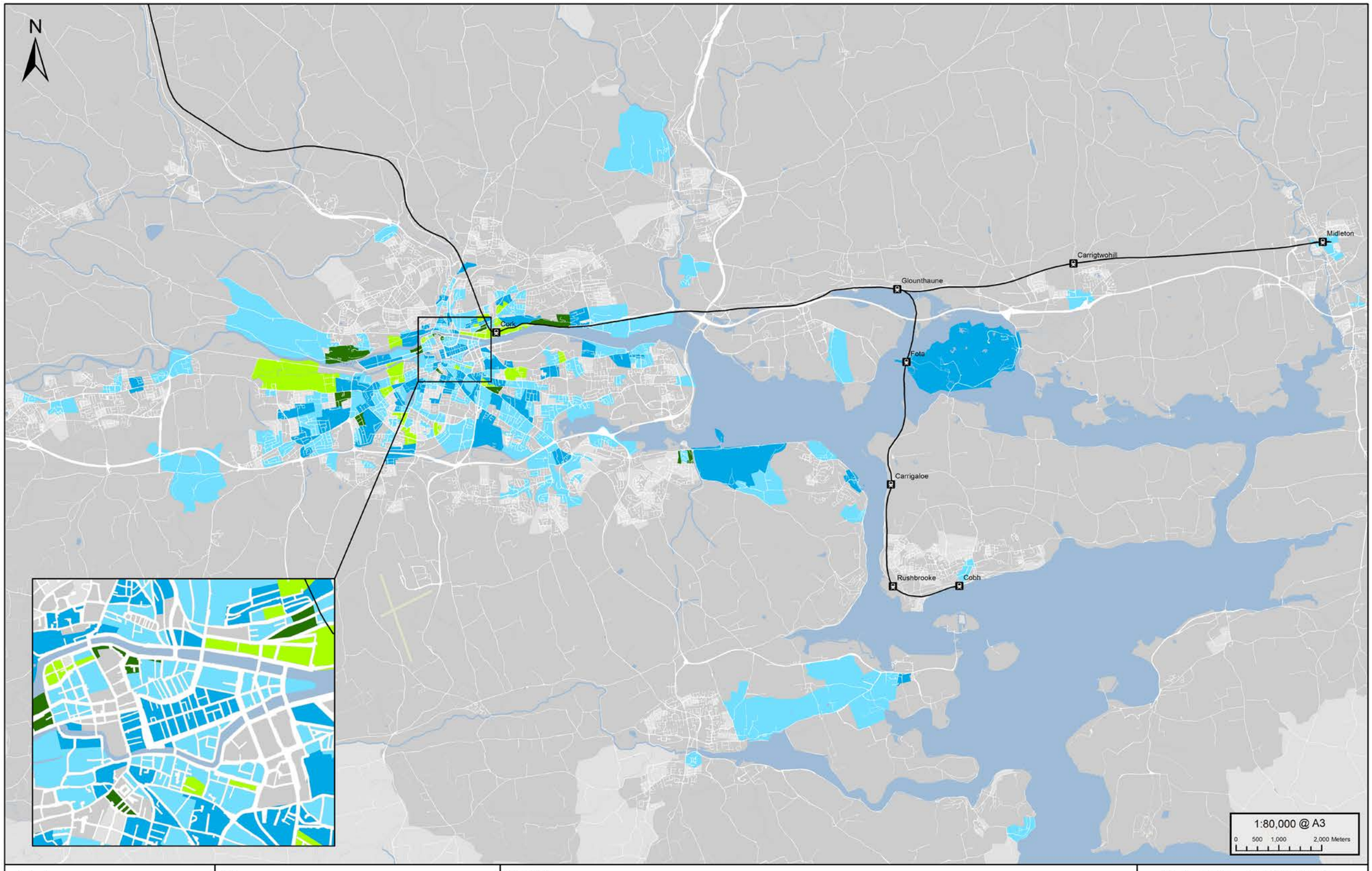
Project:	Title:	Legend:	
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	CENSUS 2011 CYCLE DESTINATIONS - RESIDENTS WITHIN CORK METROPOLITAN AREA	**Destinations of cycling commuters (Census Small Areas)** Cycling to Work · Cycling to Primary School · Cycling to Secondary School · Cycling to College	AECOM Grand Canal House, Upper Grand Canal Street, Dublin 4 Tel: +353 (0)1 238 3100 Fax: +353 (0)1 238 3199 www.aecom.com



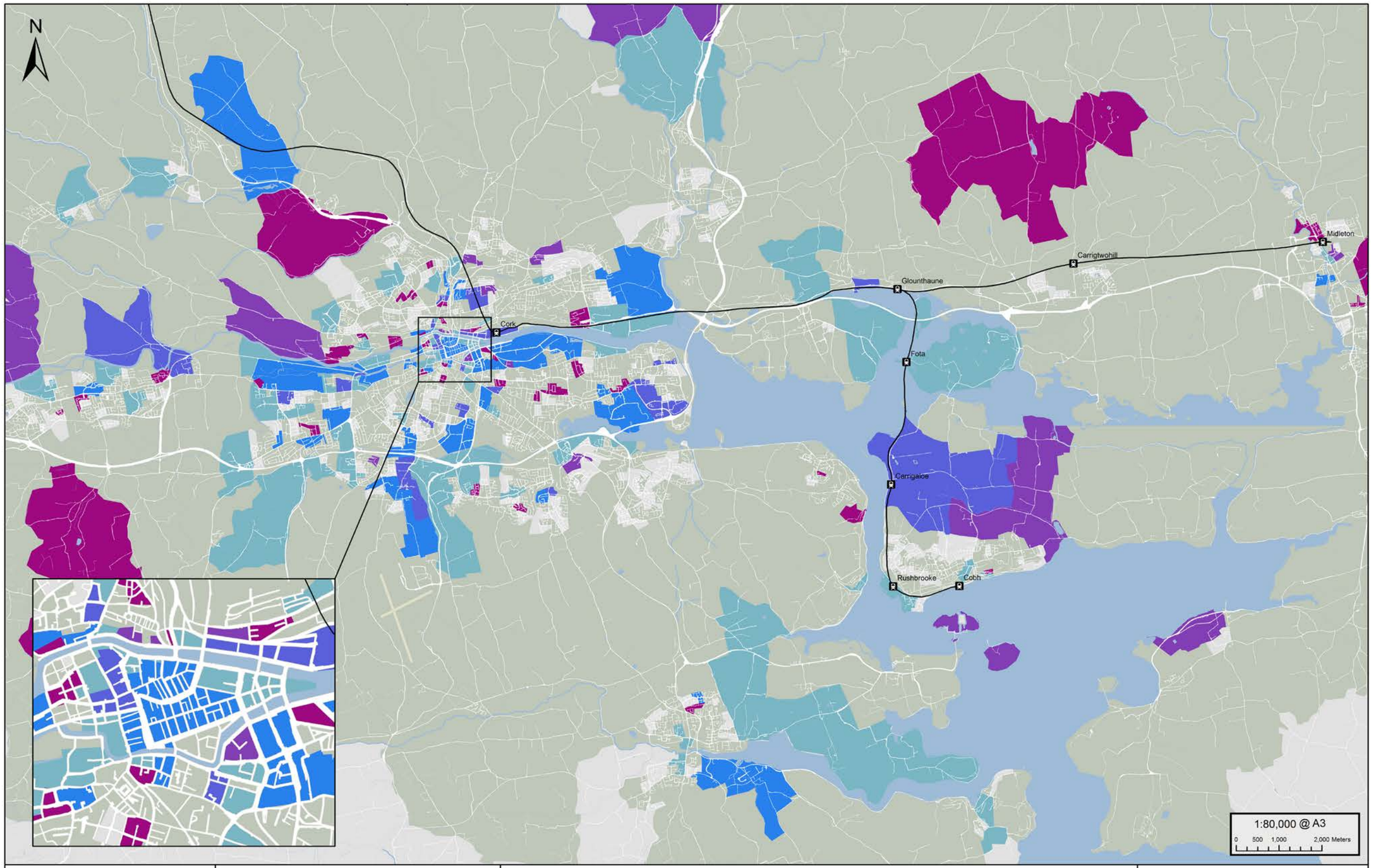
Project:	Title:	Legend:	
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	CENSUS 2011 EMPLOYMENT - RESIDENTS WITHIN CORK METROPOLITAN AREA	**Employment (workers per CSO Small Area)** · 1 • 10 ● 1,000	AECOM Grand Canal House, Upper Grand Canal Street, Dublin 4 Tel: +353 (0)1 238 3100 Fax: +353 (0)1 238 3199 www.aecom.com



Project:	Title:	Legend:	
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	CENSUS 2011 EDUCATION TRIP GENERATORS - RESIDENTS WITHIN CORK	**Students destinations (Census Small Areas)** 1 · 10 ● 100 ● 1,000	AECOM Grand Canal House, Upper Grand Canal Street, Dublin 4 Tel: +353 (0)1 238 3100 Fax: +353 (0)1 238 3199 www.aecom.com



Project:	Title:	Legend:	
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	CENSUS 2011 CYCLE MODE SHARE - RESIDENTS WITHIN CORK METROPOLITAN AREA	**Cycle mode share, journeys to work and education** <2.5% 2.5 - 5.0% 5.0 - 7.5% 7.5% - 10% >10%	AECOM Grand Canal House, Upper Grand Canal Street, Dublin 4 Tel: +353 (0)1 238 3100 Fax: +353 (0)1 238 3199 www.aecom.com



Project:	Title:	Legend:	
CYCLE NETWORK PLANNING FOR CORK METROPOLITAN AREA	CENSUS 2011 CYCLE MODE SHARE - RESIDENTS WITHIN CORK METROPOLITAN AREA	**Cycle mode share, journeys to work** <1% 1% - 2% 2% - 3% 3% - 4% 4% - 5% >5%	AECOM Grand Canal House, Upper Grand Canal Street, Dublin 4 Tel: +353 (0)1 238 3100 Fax: +353 (0)1 238 3199 www.aecom.com

Appendix 4

Cycling Modelling Methodology

Technical Note

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Project:	**Cork Cycle Network Plan**	Job No:	**60335935**
Subject:	*Development of Base Cycle Model*		
Prepared by:	**Beata Smyl**	Date:	28th January 2015
Checked by:	**Dan Brennan**	Date:	28th January 2015
Approved by	**Elaine Brick**	Date:	28th January 2015

1. Introduction

This note sets out the methodology for a demand assessment of current cycling patterns in the Cork Metropolitan Area (CMA). This assessment was undertaken by developing a base year cycling model for the CMA.

This process comprises Steps 2 and 3 of the seven step method of designing a cycle network as outlined in the NTA National Cycle Manual.

2. Sources of data used

In order to develop a detailed understanding of cycling demand in the CMA, data was collated from the following sources:

- Place of Work, School & College Census Anonymised Records (POWSCAR) from the 2011 Census;
- Central Statistics Office (CSO) Small Area Population Statistics (SAPS; and
- Various Cork Traffic Counts made available by the Client.

Data for other journey purposes including shopping, business and leisure trips was not used as these purposes comprise a very small portion of morning peak period cycling in Cork. Therefore the demand model includes work and education journey purposes only.

3. Work and Education Trips

The Census POWSCAR database was released in August 2012, and reports all journeys to work and education by District Electoral Division (DED) for 2011. This information can be extracted for input to traffic models, thereby giving good Origin-Destination information without the necessity for widespread Roadside Interview Surveys. The POWSCAR information also provides travel mode and time of departure, thereby allowing journeys by bicycle during the AM period to be isolated.

The compilation of the POWSCAR information into Journey to Work and Journey to Education trip matrices has followed the subsequent procedure:

3.1 Identifying Useable Results

According to CSO, the workforce in the Cork Metropolitan Area comprises of 115,857 persons. Some key totals are outlined below:

Total number of Journey to Work Records:	114,004
Missing records:	+ 1,853
Total:	*115,857*

Technical Note

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It is therefore necessary to factor the available dataset to account for missing records, those who did not successfully code a place of work, or those with a variable place of work. This procedure is outlined in Table 1.

Table 1: Journey to Work – Useable Records

WORK	
Total number of Journey to Work Records	114,004
Place of Work not decipherable, No place of Work	16,846
Time of Departure not given	1,081
Means of Travel not given	56
Total number of usable Census Records	*91,956*

An aggregate factor of 1.26 can therefore be applied to usable records to reflect the total journey to work trips.

A number of missing records in the Education purpose was calculated in a similar way to work records as a difference between total number of persons in education from census records and total number of journey to education records from POWCAR:

Total number of Journey to Education Records:	64,352
Assumed Missing records:	+ 2,418
Total:	*66,770*

The procedure for factoring the Journey to Education records is outlined in Table 2.

Table 2: Journey to Education – Useable Records

EDUCATION	
Total number of Education Records	64,352
Place of Education not decipherable, Home School	5,338
Time of Departure not given	526
Means of Travel not given	303
Total number of usable Census Records	*58,147*

An aggregate factor of 1.15 can therefore be applied to usable records to reflect the total journey to education trips.

3.2 Extracting Peak Trips

The CMA cycling demand assessment was undertaken for the morning peak period of 07:00-09:00. The POWSCAR data identifies the time of departure for work and education trips in half hour intervals throughout the morning modelled peak hours.

3.3 Converting to a 'Typical Day'

From preliminary assignments of the cycling trip matrices to the model network and from the experience in using POWSCAR database in modelling cycle demand, it was deemed necessary to reduce the demand matrices to take account of a number of factors outlined below.

The Census requested users to enter their usual place of work or education and mode of travel, however this information has the following limitations:

- it does not account for those who were absent from work or school on a particular day;
- it does not distinguish between those who work every day, and those who work or attend school/college on only certain days of the week and;
- it does not account for how frequently people use their bicycle on an average week.

The POWSCAR data received did not distinguish between full time and part time (e.g. 3 day week) working. On the basis of previous research, we have applied a reduction factor of 9% to reflect a full time equivalent commuting population. A further reduction of 15% was applied to reflect typical absentee rates.

Factors such as weather conditions, seasonal impacts and other travel requirements in a typical weekday would influence an individual's decision to cycle to work or education.

Research undertaken in the UK[1] and the USA[2] suggests that the average number of weekly cycling trips made by an individual is in the region of 6.25. It was assumed that the maximum number of weekday cycling trips to work or education was 10. Therefore a reduction factor of 37.5% was applied to the POWSCAR matrices to account for the frequency of bicycle usage on an average week.

3.4 Transport Zone System

For the CMA Cycle Model, Small Area boundaries were used as the transport zones. These areas were selected to achieve a balance of granularity in urban areas and sufficient detail in rural areas and with a view to managing model run times. A total of 1,159 transport zones were included in the model which is presented in Figure 1.

[1] UK Department for Transport. *National Travel Survey*. 2011

[2] Niemeier, D., Rutherford, G., and J. Ishimaru. *An Analysis of Bicyclist Survey Responses from the Puget Sound Area and Spokane*. Report 95.4, Washington State Transportation Commission, Olympica, WA,1995.

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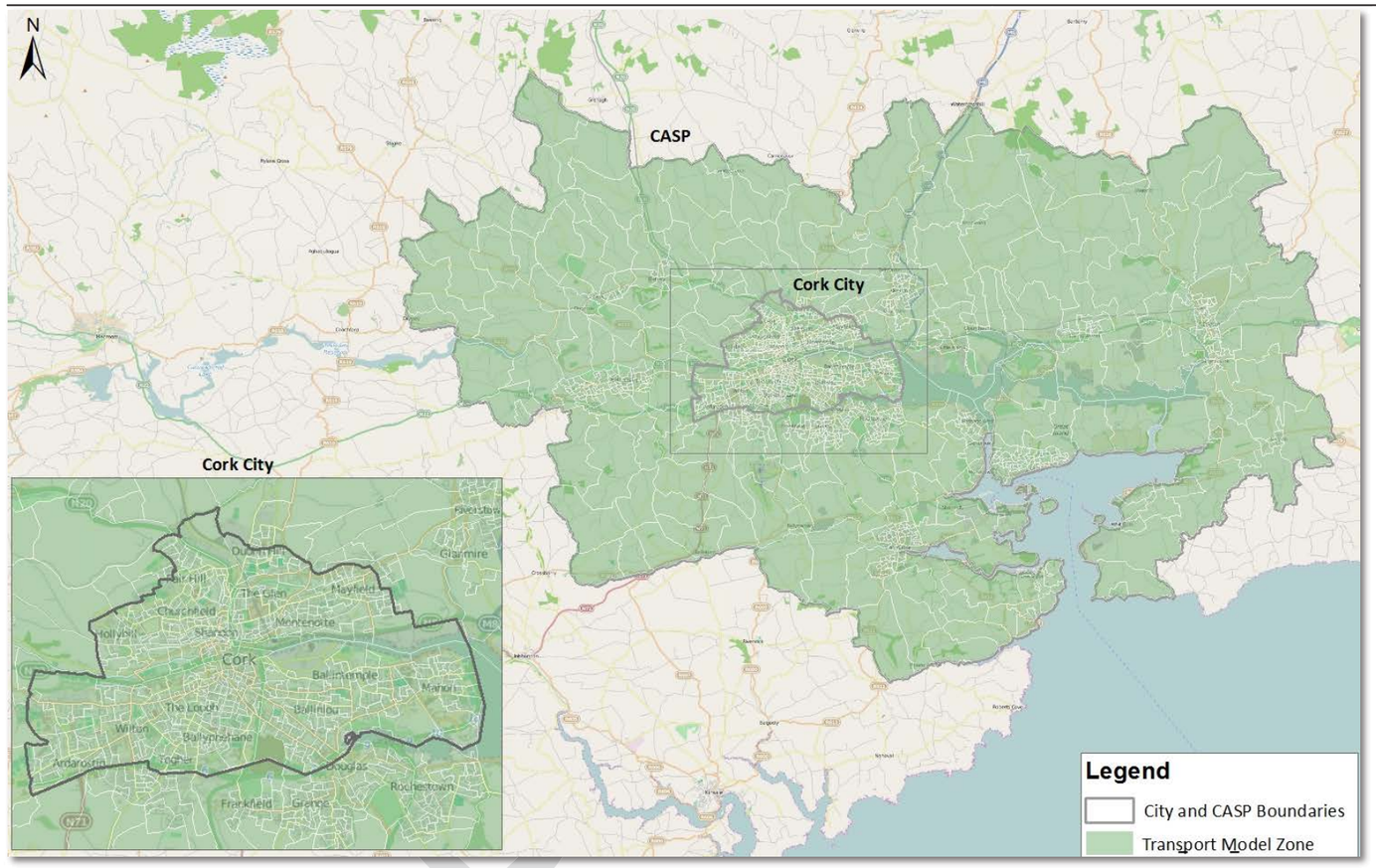


Figure 1: Cork Metropolitan Area Cycle Model Transport Zone

3.5 Trip Assignment

The cycling demand matrices were assigned onto a transport network using VISUM v13 strategic modelling software. The main source of network information for the model was taken from Ordnance Survey Ireland (OSI) vector data. Supplementary cycling network links that are not part of the road network were coded manually based on information from other vector sources.

The cycling trips were assigned to the transport network in VISUM using stochastic assignment. This method assumes that route options for individual journeys are perceived subjectively by road users. The best (lowest cost) route is generally selected by the majority of road users but some individuals will chose alternative routes based on incomplete information. A number of alternative routes to the lowest cost route are initially calculated and the demand is distributed across the alternatives based on a distribution model.

In the assignment procedure, the impedance to travel between each OD in the model was based on the network distance alone. Therefore no delay or congestion is modelled and the model does not account for complex cycling route choice decisions based on cycle provision and quality of service.

3.6 Network Calibration

An assignment of the cycle matrix to the base year model enabled a comprehensive check of the network to be undertaken. In addition, cycle count data on various locations across the city was used to compare the modelled flows to observed data.

A number of network checks were undertaken such as the locations of zone centroid connectors, zone to zone movements and route choice. As a result of this network calibration process, a closer match between modelled and observed data was achieved. No matrix estimation or other calibration procedures were undertaken on the base year cycling matrices.

As a quick network check, a comparison of observed two-way cycle flows across the major routes through the city to the modelled cycle flow is presented in Table 3.

Table 3: Comparison of Observed and Modelled 2-way Flows across Cork City

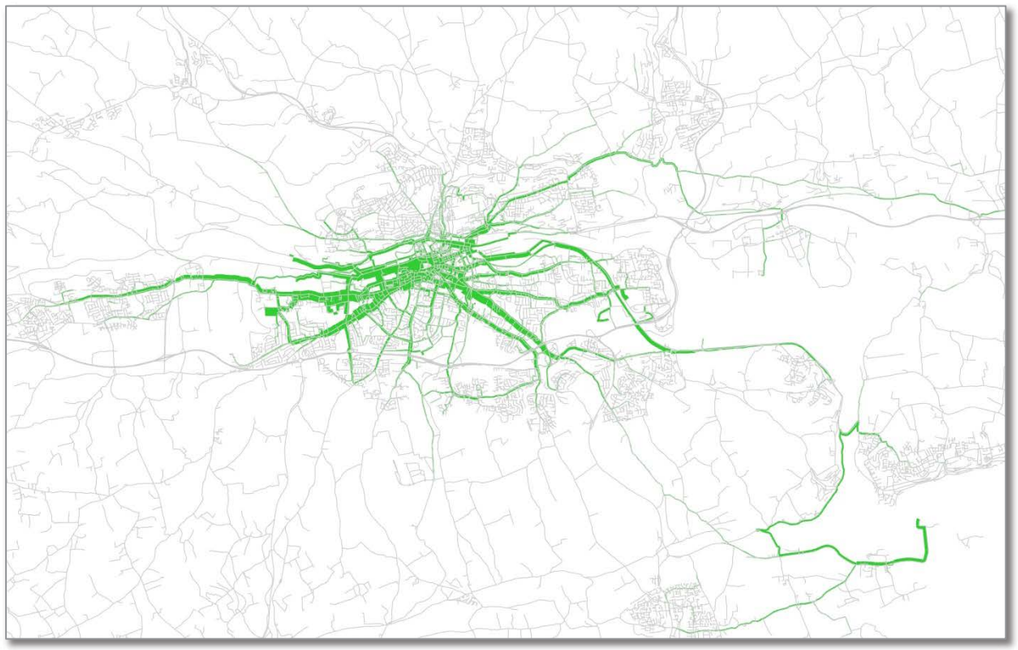
ROAD	OBSERVED	MODELLED	GEH
Model Farm Road	25	31	1.1
Rossa Avenue	16	17	0.2
Western Road	85	50	4.3
Western Road (Wood Street)	58	81	2.8
Carrigrohane Road	43	27	2.7
Western Road (UCC)	58	71	1.6
Washington Street	46	74	3.6
Washinton Street (Main Street)	25	14	2.5
Main Street	7	7	0.0
Grand Parade	16	12	1.1
North Mall	31	16	3.1
Shandon Street	3	7	1.8
Woods Street	11	7	1.3
Wandersford Quay	15	12	0.8
Shaman Crawford Street	29	12	3.8
Bishop Street	38	21	3.1
Sullivan's Quay	27	16	2.4
Albert Quay	26	17	1.9
Albert Street	27	37	1.8
Eglinton Street	3	5	1.0
South Douglas Road	22	25	0.6
Evergreen Road	42	32	1.6
Douglas Road	44	49	0.7
Douglas Road (Well Road)	31	35	0.7
Well Road	7	9	0.7
Skehard Road	24	19	1.1
Old Crosshaven Railway Path	27	21	1.2
R852 (Mahon Point)	4	10	2.3
Sarsfield Road	12	17	1.3
Togher Road	17	11	1.6
Pouladuff Road	18	20	0.5
Kinsale Road	25	9	3.9
Curraheen Road	6	6	0.0
Bishopstown Road	5	6	0.4
GEH < 5			**100%**
GEH 5 – 10			**0%**
GEH > 10			**0%**

The accuracy of the base year model has been checked using the GEH statistic. The GEH statistic is a measure of comparability that takes account of not only the difference between the observed and modelled flows, but also the significance of this difference with respect to the size of the observed flow.

When comparing assigned volumes with observed volumes a GEH parameter of 5 or less indicates an acceptable fit whilst a value greater than 10 requires closer attention. The base year model check involved comparing modelled flows against observed counts on 34 no. of links. A GEH statistic of less than 5 was achieved at 100% of these links, with no links having a GEH value in excess of 5.

A plot of the assigned base year cycling matrix to the network in VISUM is shown in Figure 2.

Figure 2: Plot of base year CMA Cycle Model assignment



3.7 Forecasting Future Cycle Demand

This aim of this project is to propose a cycle network for the CMA for a 10 year horizon period. Therefore the forecast year for the Cycle Model is 2026. Over this 10 year period, the demand for cycling in the CMA is forecast to increase due to two factors - population growth and changes to cycling mode share.

The methodology employed to forecast the growth in cycling due to these factors is outlined below.

3.7.1 Population and Employment Growth

Population and employment forecasts for the CMA were extracted from the National Transport Model developed by AECOM in conjunction with the ESRI for the National Roads Authority. These projections are fed into the model and the output transport demand matrices (for all modes) for 2011 and 2025 were made available for this study.

The model includes detailed forecasting of car ownership, trip distribution, mode choice, and hour of travel choice across the CMA which feed into the production of the 2026 demand matrices.

The CMA demand data was analysed and a set of origin and destination trip ends for each DED zone was output for 2011 and 2026. Using these forecasts, an annualised growth factor was calculated for various trip types within each zone as shown below.

Table 4: Overall Matrix Growth Factors due to Development Growth (2011-2026)

PURPOSE	FACTOR
Work	1.12
Primary school trips	1.13
Secondary school trips	1.12
Third level trips	1.09
Total	1.12

3.7.2 Mode Share Impacts

Cycling targets developed during project delivery were used to forecast future demand for cycling. These targets were developed on the basis of a bottom-up analysis of existing cycling demand within each area as well as potential for growth in cycling. The targets are shown in Table 5 below.

Table 5: CMA Cycling Targets

Trip Origin		Proposed Cycling Mode Share for AM Trips by Journey Purpose				
		Work	Primary	Second	College	TOT
Leader	City Centre	10%	5%	10%	20%	9,593 trips
	South City and South City Environs					
	North City and North City Environs					
	Sub-total "leader areas"					**11%**
Intermediate Areas	Midleton	8%	3%	9%	10%	842 trips
	Ballincollig					
	Passage West & Monkstown					
	Sub-total "Intermediate areas"					**7%**
Metropolitan Towns	Carrigaline	5%	3%	8%	1%	714 trips
	Cobh					
	Carrightwohill					
	Blarney&Towers					
	Glanmire					
	Sub-total "Towns"					**5%**
Business Parks	Ringaskiddy	5%	2%	0%	10%	292 trips
	Little Island					
	Sub-total "Business Parks"					**5%**
Other	Other	2%	0%	1%	6%	323 trips, 2%
	TOTAL	**7.9%**	**3.5%**	**9.0%**	**19.2%**	**8.2%**

The proposed targets were applied to the following separate distance bands:

- 0-2km;
- 2-5km;
- 5-10km; and
- 10km+.

Growth factors were applied to the above distance bands based on the same 2011 proportion of trips within each distance band.

3.7.3 Forecast Year Trip Matrix

The application of the development growth factors and increase in cycling mode share resulted in a set of 2026 target cycling trip ends for each zone in the model. The next step was to furness the base year matrices to these target trip ends.

Furnessing is a mathematical process by which the number of trips in each cell of the matrix is adjusted to obtain the best match with the total trip ends for each origin and destination. Where the total of the origin and destination trip ends are different, the target for the total number of trips was set to the average of the total origin and destination trips.

The breakdown of the base year and forecast year cycling matrices and the forecast growth in demand are outlined in Table 6.

Table 6: Base Year and Forecast Year Matrix Totals

	2011		2026		% Growth	
	All Modes	Cycle	All Modes	Cycle	All Modes	Cycle
All Purpose	142,999	2,419	159,808	2,599	12%	7%
Work	85,882	1,623	95,964	1,757	12%	8%
Primary	26,468	91	29,880	100	13%	10%
Secondary	17,978	136	20,138	146	12%	7%
College	12,671	569	13,827	596	9%	5%

3.7.4 Forecast Year Network

The reference network for the forecast year model was developed using data from the NRA model. This comprised current proposals for new cycle schemes. Where the proposals involved a significant new scheme which is not part of the existing road network, they were imported from GIS shapefile format into VISUM. Following the importing of the shapefiles, link, node and zone connector information was refined to ensure that schemes were properly coded into the existing network.

3.7.5 Model Forecasts

Outputs from the model have been presented graphically to demonstrate key cycling growth areas within the CMA.

Figure 3: Forecast cycling demand corridors, Cork City Centre

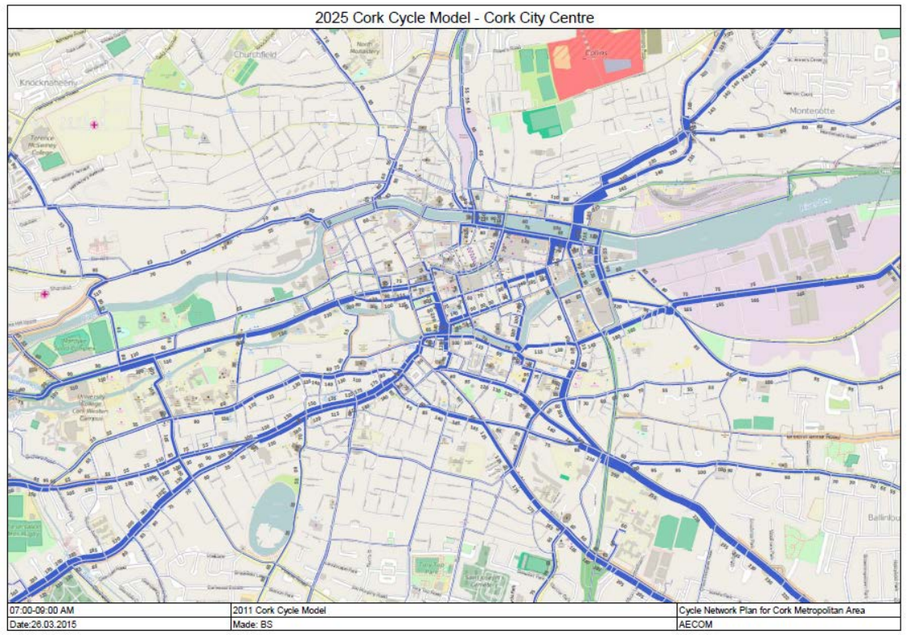


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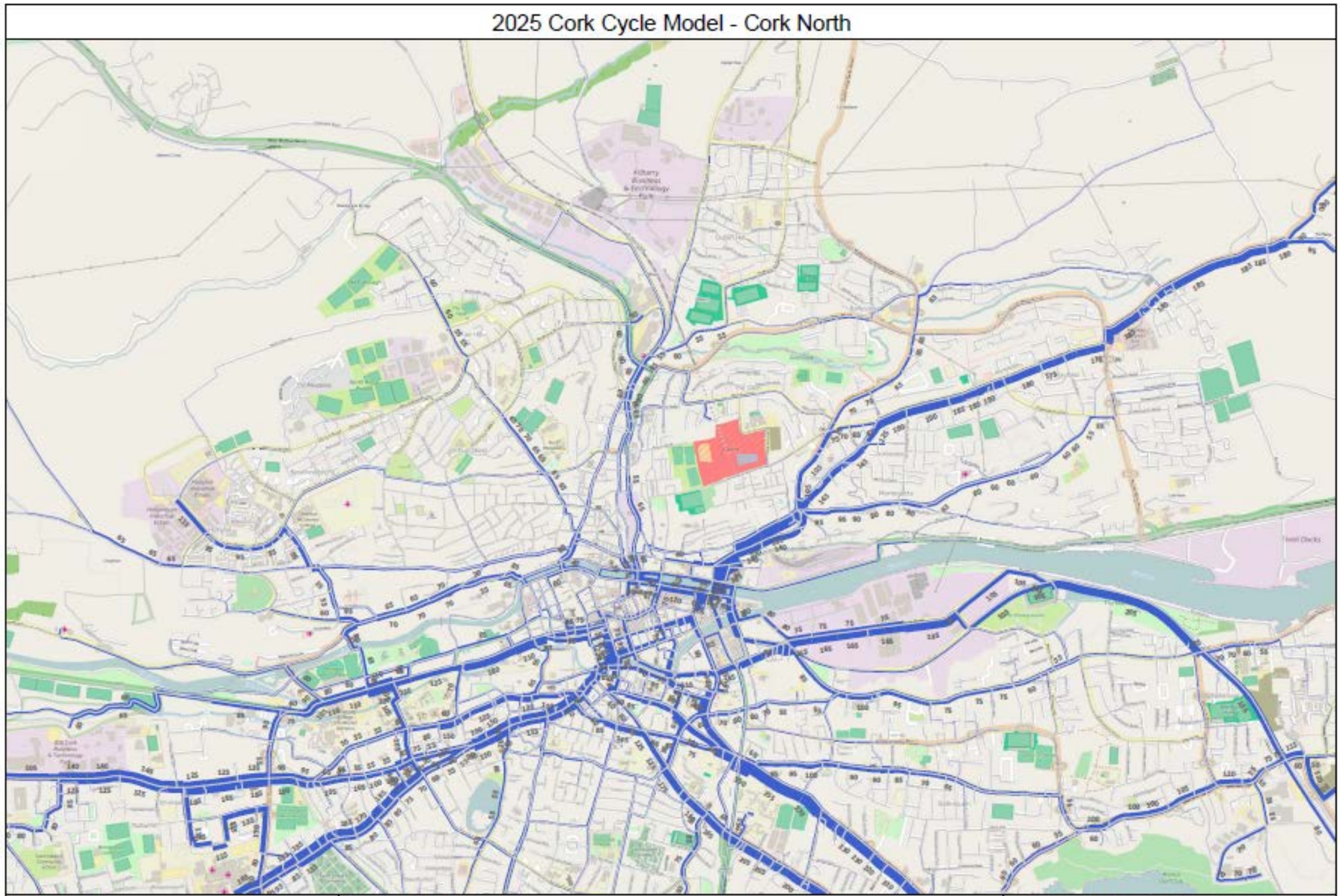
Figure 4: Forecast cycling demand corridors, Cork City North



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Date:26.03.2015	Made: BS	AECOM

11

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Figure 5: Forecast cycling demand corridors, Cork City South West

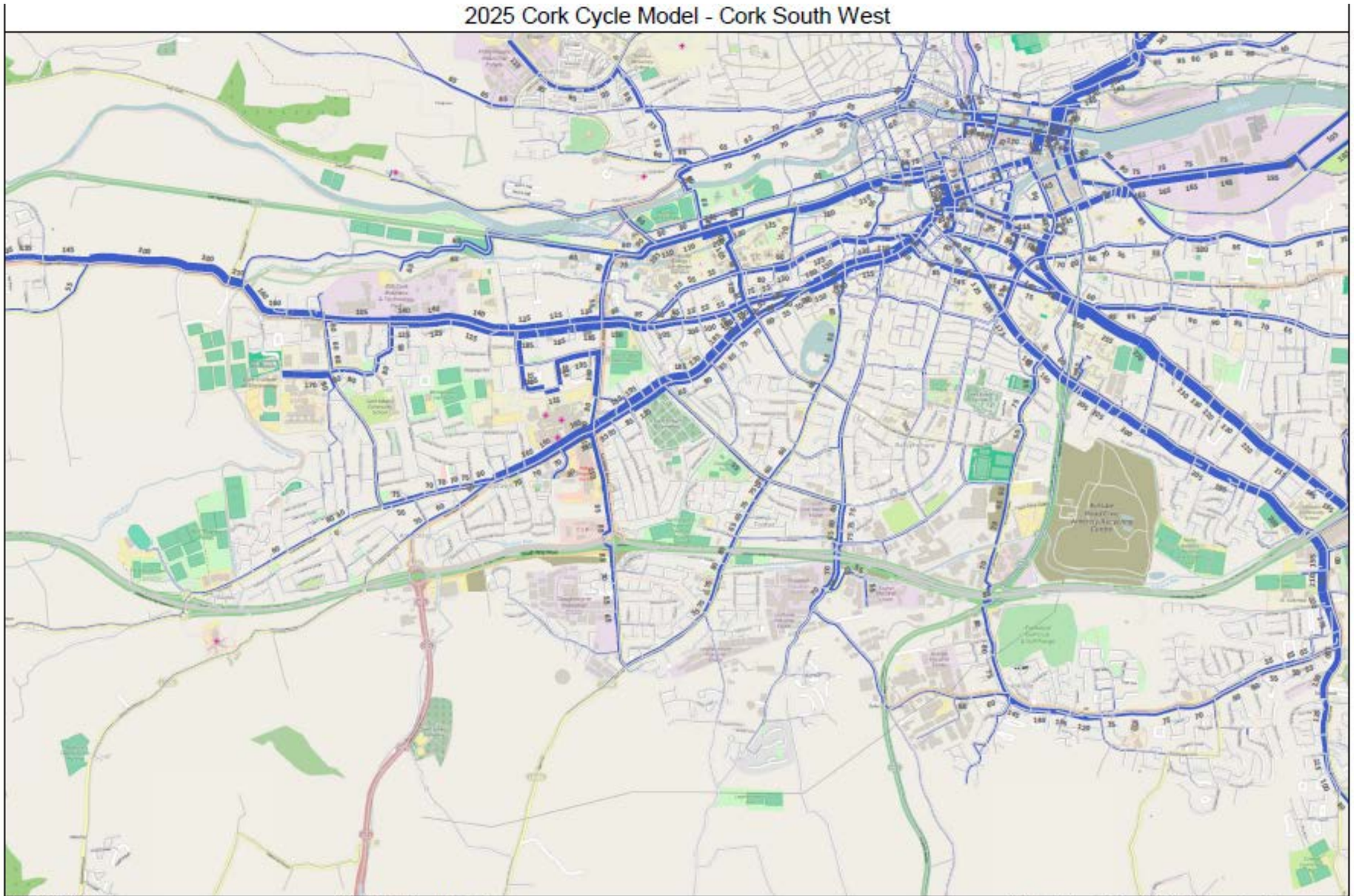

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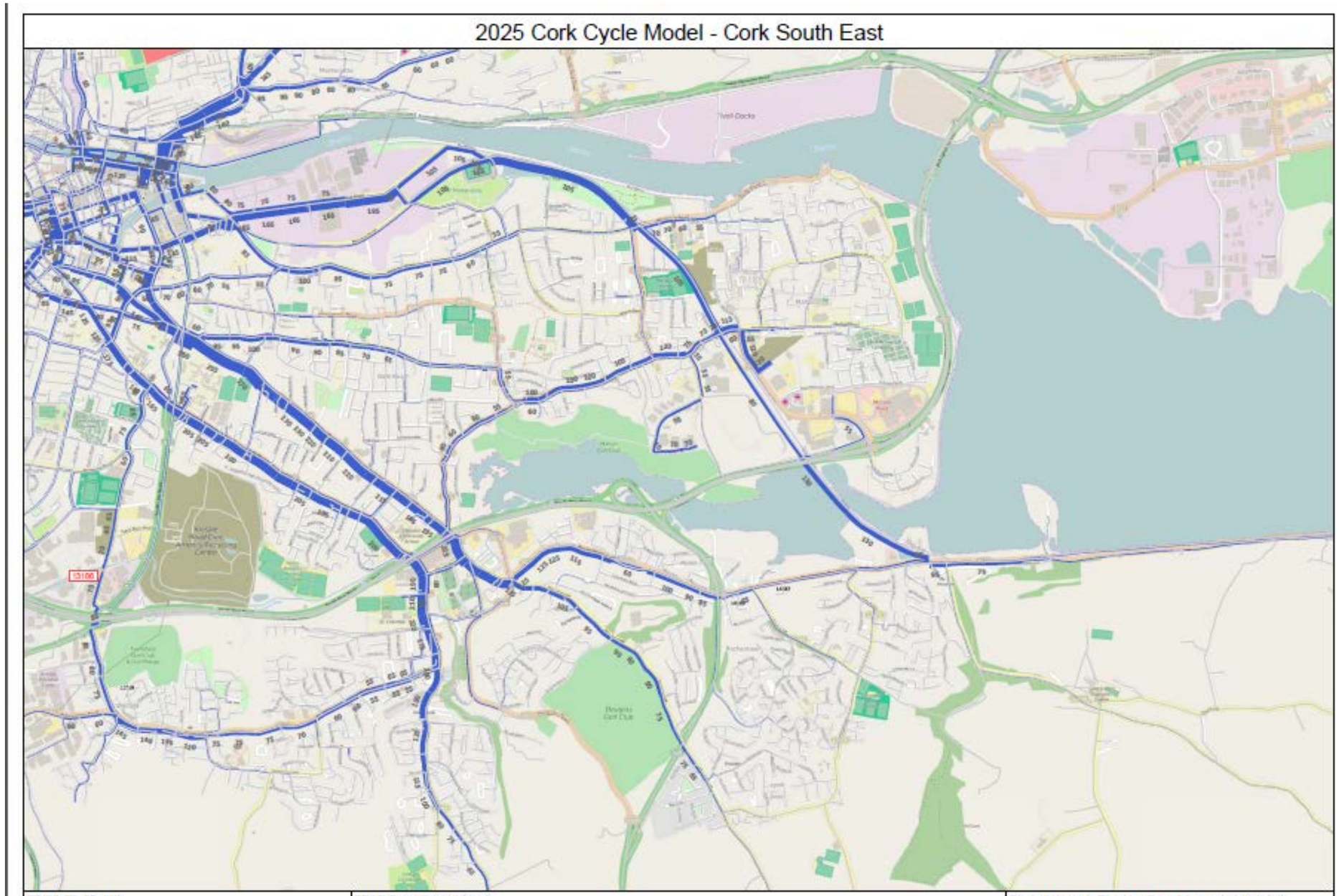
Figure 6: Forecast cycling demand corridors, Cork City South East



Technical Note

Project:	**Cork Cycle Network Plan**	Job No:	**60335935**
Subject:	*Development of Base Cycle Model*		
Prepared by:	**Beata Smyl**	Date:	28th January 2015
Checked by:	**Dan Brennan**	Date:	28th January 2015
Approved by	**Elaine Brick**	Date:	28th January 2015

1. Introduction

This note sets out the methodology for a demand assessment of current cycling patterns in the Cork Metropolitan Area (CMA). This assessment was undertaken by developing a base year cycling model for the CMA.

This process comprises Steps 2 and 3 of the seven step method of designing a cycle network as outlined in the NTA National Cycle Manual.

2. Sources of data used

In order to develop a detailed understanding of cycling demand in the CMA, data was collated from the following sources:

- Place of Work, School & College Census Anonymised Records (POWSCAR) from the 2011 Census;
- Central Statistics Office (CSO) Small Area Population Statistics (SAPS; and
- Various Cork Traffic Counts made available by the Client.

Data for other journey purposes including shopping, business and leisure trips was not used as these purposes comprise a very small portion of morning peak period cycling in Cork. Therefore the demand model includes work and education journey purposes only.

3. Work and Education Trips

The Census POWSCAR database was released in August 2012, and reports all journeys to work and education by District Electoral Division (DED) for 2011. This information can be extracted for input to traffic models, thereby giving good Origin-Destination information without the necessity for widespread Roadside Interview Surveys. The POWSCAR information also provides travel mode and time of departure, thereby allowing journeys by bicycle during the AM period to be isolated.

The compilation of the POWSCAR information into Journey to Work and Journey to Education trip matrices has followed the subsequent procedure:

3.1 Identifying Useable Results

According to CSO, the workforce in the Cork Metropolitan Area comprises of 115,857 persons. Some key totals are outlined below:

Total number of Journey to Work Records:	114,004
Missing records:	+ 1,853
Total:	*115,857*