

MOBILITY MANAGEMENT PLAN

BELGARD GARDENS,
BELGARD SQUARE, TALLAGHT, DUBLIN 24

Atlas GP Ltd.
Project No. A557
19th December 2018



OCSC

O'CONNOR | SUTTON | CRONIN

Multidisciplinary
Consulting Engineers



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DOCUMENT CONTROL & HISTORY

OCSC Job No.: A557	Project Code	Originator	Zone Volume	Level	File Type	Role Type	Number	Status / Suitability Code	Revision
	A557	OCSC	XX	XX	RP	C	0004	A1	C05
Rev.	Status	Authors	Checked	Authorised	Issue Date				
C05	A1	P. Raggett	A. Horan	T. Horan	19.12.2018				
C04	A1	P. Raggett	A. Horan	T. Horan	26.10.2018				
C03	A1	P. Raggett	A. Horan	T. Horan	16.10.2018				
C02	A1	P. Raggett	A. Horan	T. Horan	28.09.2018				
C01	A1	P. Raggett	A. Horan	T. Horan	19.06.2018				
P02	S3	P. Raggett	A. Horan	T. Horan	13.06.2018				
P01	S3	P. Raggett	A. Horan	T. Horan	08.06.2018				

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ATLAS GP LTD

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19TH DECEMBER 2018

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1. INTRODUCTION

O'Connor Sutton Cronin and Associates have been appointed to prepare a Mobility Management Plan (MMP) as part of the planning application for a residential development to be located at the Belgard Gardens site in Tallaght, Dublin 24. The exact site location is shown in *Figure 1* below.

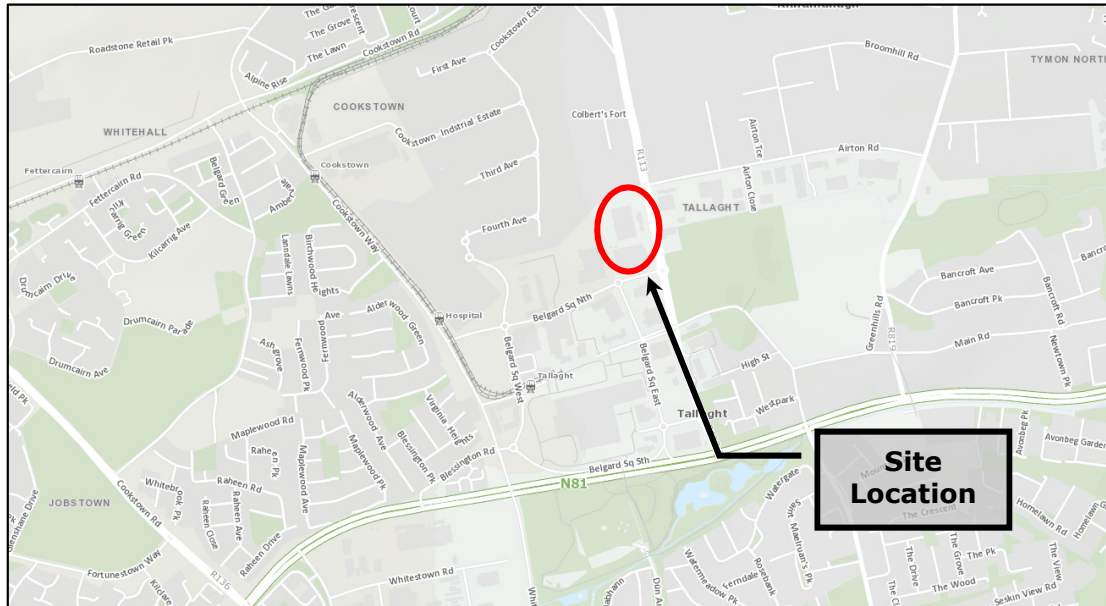


Figure 1: Site Location Map

The proposed masterplan development will consist of approximately c. 1,548 residential units and a 403 bed student accommodation with ancillary childcare, commercial and community facilities. The proposed development subject to this application relates to infrastructure associated with the masterplan development along with Phase 1 of the residential units. However, this plan will consider the overall masterplan development as a whole.

Given the primarily commercial and residential nature of the masterplan development, it is expected that the majority of trips will be by commuters travelling during the normal peak travel hours of 08:00 – 09:00 and 17:00 – 18:00.

This plan is being prepared as a transportation demand management tool for the site. This will have the aim of reducing car use and the need for car use by employees and residents at the site, by increasing the attractiveness and practicality of other modes of transport and by reducing the need to travel.

The MMP targets set out herein will take account of future potential improvements in sustainable transport infrastructure over and above those currently in operation. In this context, the MMP will set targets into the future which will be flexible and reflective of the maximum achievable modal split at any time dependent on a variety of factors including actual local infrastructure and other facilities available.

2. CONTENT OF THE TRAVEL PLAN

Guidance has been sought from the National Transport Authority and similar best practice guidance with regard to the appropriate content of this plan. On that basis, this plan aims to meet the following requirements:

- Provide a comprehensive outline of public transport services (existing and proposed) available to the future residents, employers and employees;
- Prepare a statement on the nature and extent of facilities that will be considered for provision, and that would serve to encourage walking and cycling;
- Set out the anticipated targets with respect to modal choice;
- Provide an outline of the various schemes that may be appropriate to facilitate a positive change in travel patterns at the site.

Thus, based on the above, this report is a statement of the broad objectives in respect of Mobility Management for the site as a whole. The plan sets out targets and objectives along with the mechanisms, including both hard and soft measures, which could be put in place to support a positive modal shift.

However, at this stage the plan is intended to be preliminary and will be revised accordingly once more detailed information regarding the final occupiers becomes available. Moving forward from this, the plan will continue to be regularly updated based on experience gained from its implementation and operation. Reviews will also be held on a regular basis in consultation with both employer, employee and resident representatives.

3. EXISTING PUBLIC TRANSPORT, CYCLE & PEDESTRIAN FACILITIES

There are a wide variety of public transport services and pedestrian/cycle facilities in the vicinity of the proposed development site including Luas and Dublin Bus services as well as a variety of cycle and pedestrian infrastructure making the site highly accessible by more sustainable means of transport.

RAIL

The Luas Red Line terminus at Tallaght is located approximately 400m (5 minutes) walk from the development site. The Luas is a semi-segregated light rail tram service which operates at street level but generally receives priority over normal traffic at junctions.

The Red Line provides a regular service between The Point/Connolly Station and Tallaght/Saggart with intermediate stops at key locations including Busáras, Heuston Station, the Red Cow and Citywest. Normal operating hours are from 05:30 – 12:00.

The recently extended Green Line now provides a good degree of connectivity with the Red Line with their respective stops and O'Connell Street and Abbey Street located within very close proximity of one another. The Green Line provides a service between Sandyford and Broombridge with intermediate stops at St. Stephens Green, Westmoreland, Cabra, Phibsborough and Broadstone DIT. Normal operating hours are from 05:30 – 12:00.

The complete Luas network including the new Luas Cross City can be seen in *Figure 2* overleaf.

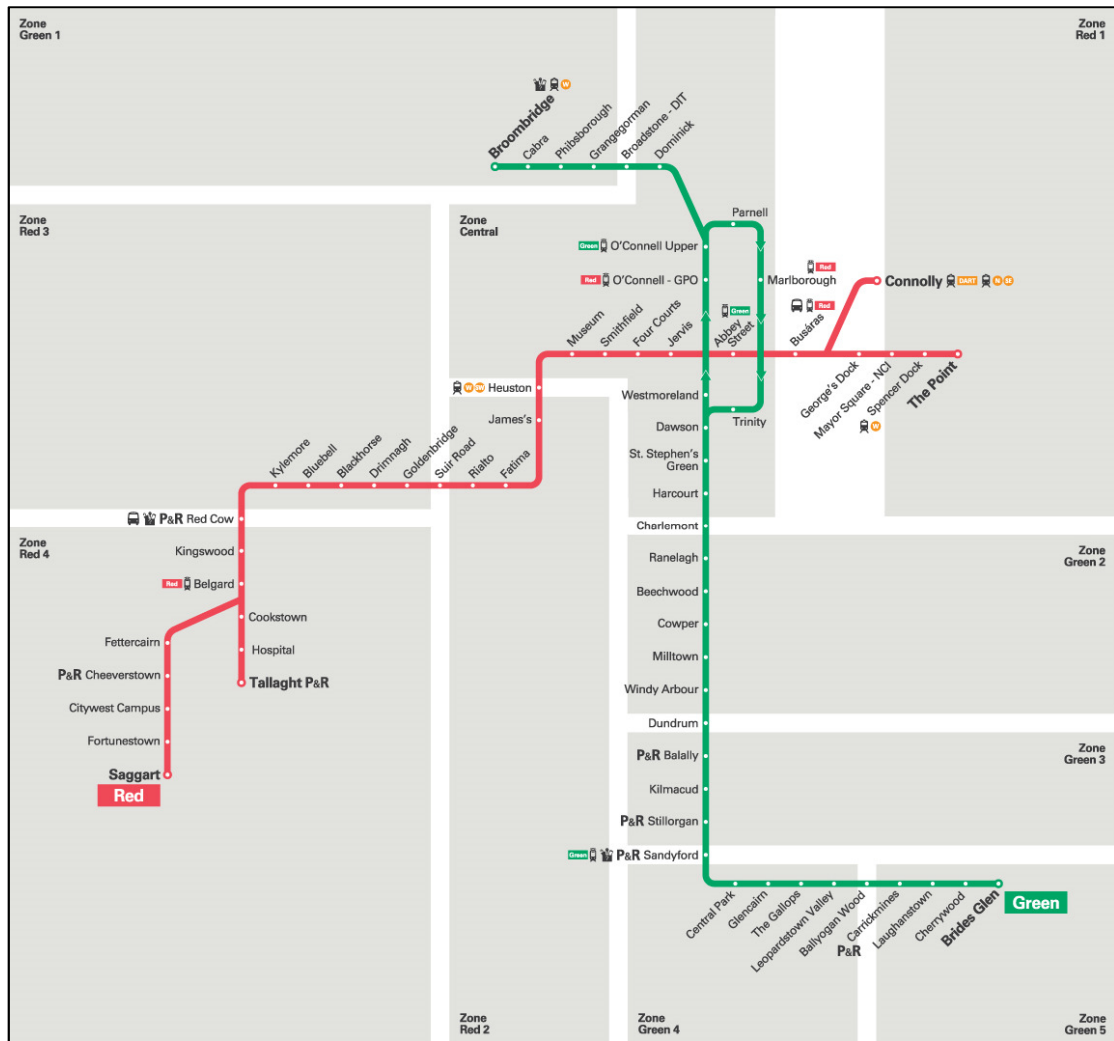


Figure 2: Luas Network Map¹

The Luas does not run on a fixed timetable however, it operates based on a frequency of service which changes depending on the time of day to adequately cater for demand. The service frequencies for the Luas are detailed following in Figure 3.

¹ Source: www.rpa.ie

Monday - Friday				Saturday				Sunday & Bank Holidays			
	Min	Avg	Max		Min	Avg	Max		Min	Avg	Max
05:30-07:00	10	14	20	06:30-10:00	12	15	20	07:00-12:00	10	13	20
07:00-10:00	3	8	10	10:00-16:00	12	12	13	12:00-19:00	10	10	11
10:00-16:00	9	9	10	16:00-19:00	10	11	13	19:00-23:00	10	11	12
16:00-19:00	9	9	10	19:00-00:00	3	11	15				
19:00-00:00	6	10	15								

Figure 3: Luas Tallaght Stop Operating Frequencies²

The Luas also provides good connectivity with other rail services including both Intercity, commuter and DART services operating out of Heuston Station and Connolly Station, both of which are directly served by the red line.

BUS

There are a number of Dublin Bus stops operating in the local area with the closest stops relative to the development site located on Belgard Square North and Belgard Road. The routes serving within a 10 minute walking distance are detailed in *Table 1*.

Route	Description
27	Clare Hall – Jobstown
49	Pearse Street – Tallaght (The Square)
54a	Pearse St. – Ellensborough / Kiltipper Way
56a	Ringsend Rd. – Tallaght (The Square)
65	Poolbeg St. – Blessington / Ballymore
75	The Square Tallaght – Dun Laoghaire
76	Chapelizod – Tallaght (The Square)
76a	Blanchardstown Centre – Tallaght (The Square)
77a	Ringsend Rd. – Citywest

Table 1: Local Dublin Bus Services

² Source: www.luas.ie

A map detailing the core Dublin Bus routes can be found in *Appendix A* of this report while full details of all Dublin Bus services can be found on www.dublinbus.ie.

Bus Éireann also has a stop on Belgard Square which is served by Route No. 132, operating between Dublin Connolly Station and Bunclody. Busáras is also accessible via the Luas Red Line and provides access to a variety of commuter and intercity services to and from numerous locations across Ireland, as well as a number of locations in Britain. Maps detailing the primary Bus Éireann services can be found in *Appendix B* of this report while more detailed information on all services is available at www.buseireann.ie.

CYCLE

The National Transport Authority (NTA) has surveyed the cycle facilities for the Greater Dublin Area (GDA) as part of the *Greater Dublin Area Cycle Network Plan*. An extract from this plan showing the existing facilities in the vicinity of the proposed development is shown in *Figure 4* overleaf. A larger, more detailed version of this map can be found in *Appendix C* of this report.

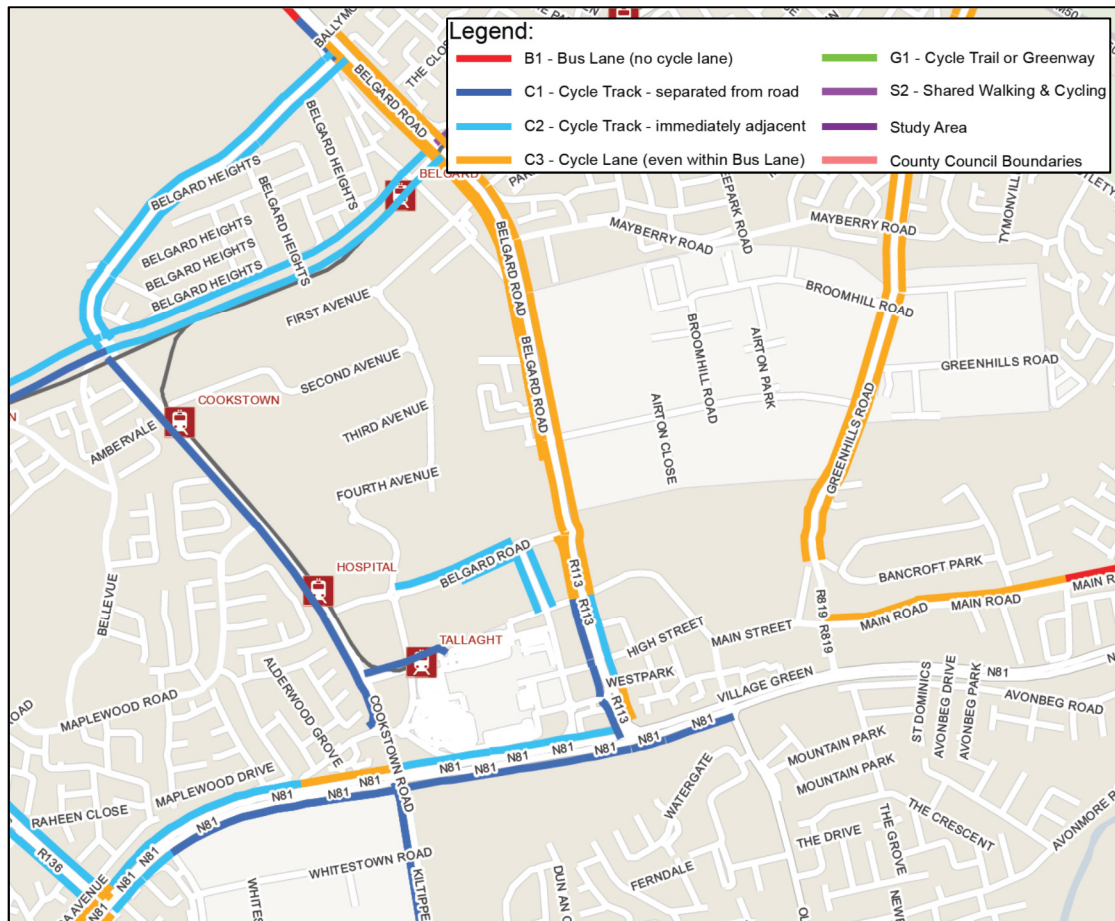


Figure 4: Local Cycle Infrastructure³

As can be seen three are dedicated facilities on Belgard Road, the N821 and sections of Belgard Square North. This will be further improved as part of the proposed development along its frontage along with a new crossing facility on the northern arm of the Belgard Road/Belgard Square North roundabout.

Also of note is the recent dockless bike initiatives that have begun operation. In particular, BleeperBikes has been operating in South Dublin County Council since 2017. Similar to the hugely popular Dublinbikes scheme, the dockless bikes initiative provides an accessible, short term, bike rental scheme across the area which would encourage and facilitate a positive modal shift.

³ Source: Greater Dublin Area Cycle Network Plan

Users of these schemes have access to rental bikes stored on public cycle parking stands and can return them to other approved public locations for a small fee. Such a facility has an additional benefit over the Dublinbikes scheme given the flexibility of not requiring docking stations to be constructed and preventing associated queues often experienced at pickup when waiting for a bike to become available or when dropping off when waiting for a dock to become available.

There are a number of locations permitted to drop off and collect dockless bikes in Tallaght, including many around Belgard Square within a short walking distance of the development site.

PEDESTRIAN

With regard to pedestrians, there are well lit, good quality footpaths along all links locally with dedicated pedestrian crossing facilities at all major junctions nearby.

The location of the development site provides considerable opportunity for a high pedestrian modal split. The proximity of the proposed student residences to both Tallaght IT and Tallaght University Hospital means walking will be an attractive option for the majority. In addition, the nearby facilities within a short walking distance of the development site, such as The Square Shopping Centre, reduces the need to travel long distances for common, everyday trips which in turn will facilitate a positive modal shift.

Overall, the development site is seen to be well served by a variety of transport options which should facilitate the objective to encourage and promote more sustainable means of transport.

4. FUTURE PUBLIC TRANSPORT, CYCLE & PEDESTRIAN FACILITIES

There are a number of future improvements to the public transport system and cycle/pedestrian infrastructure which will provide further improvements to the facilities outlined in the previous section. These include proposals set out in the following:

- Greater Dublin Area (GDA) Transport Strategy 2016 – 2035;
- National Development Plan 2018 – 2027;
- Greater Dublin Area Cycle Network Plan;
- South Dublin County Council Development Plan 2016 – 2022.

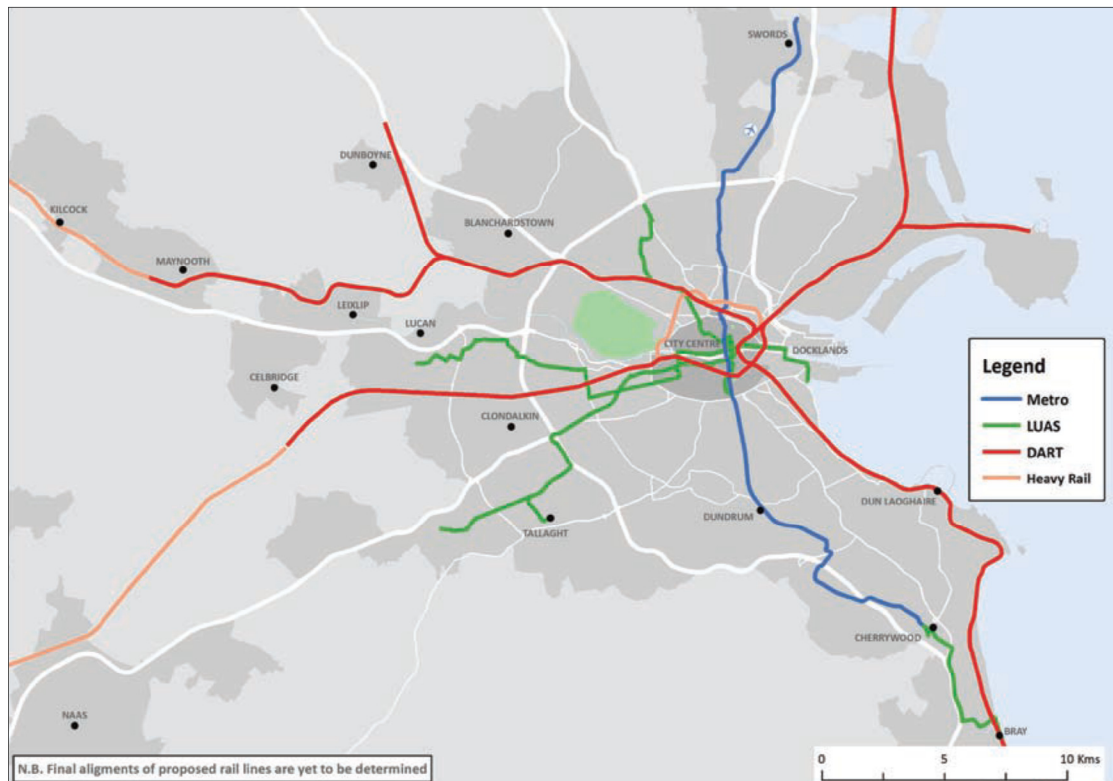
The key proposals relative to the development site are discussed in more detail in the following paragraphs.

RAIL

While there are no direct rail infrastructure projects planned for the immediate area, it is noted that the connectivity to other rail service provided by the nearby Luas Red Line means the following will be of relevance:

- Metro Link – A new, fully segregated light rail service operating between Swords and Dublin City where it will utilise an upgraded section of the current Luas Green Line to continue services to Sandyford. This will link with the Luas Red Line at O'Connell Street;
- Luas Green Line Extension – An extension of the existing Green Line to Finglas and Bray;
- Luas Red Line Extension – An extension of the existing Red Line from its terminus at The Point to Poolbeg;
- Luas Lucan Line;
- DART Expansion Programme – Including the DART Underground project consisting of an underground link through the city centre expanding DART services to Kildare as well as electrification on parts of the

Northern, Kildare and Sligo/Maynooth lines to provide increased services.



*Figure 5: NTA Proposed Future Rail Network*⁴

These projects, through their connections with the local rail and bus services, will help create a wider, integrated transportation network with increased connectivity and serviceability.

BUS

The GDA Transport strategy defines the Core Bus Network which will significant origin and destinations points and provide enhanced connectivity with alternate transport option. The routes which form part of this network are intended to be given increased priority for buses to allow for an enhanced, more efficient and more effective service.

⁴ Source: *Greater Dublin Area Transport Strategy 2016 - 2035*

The identified Core Bus Network routes relative to the development site are identified as follows:

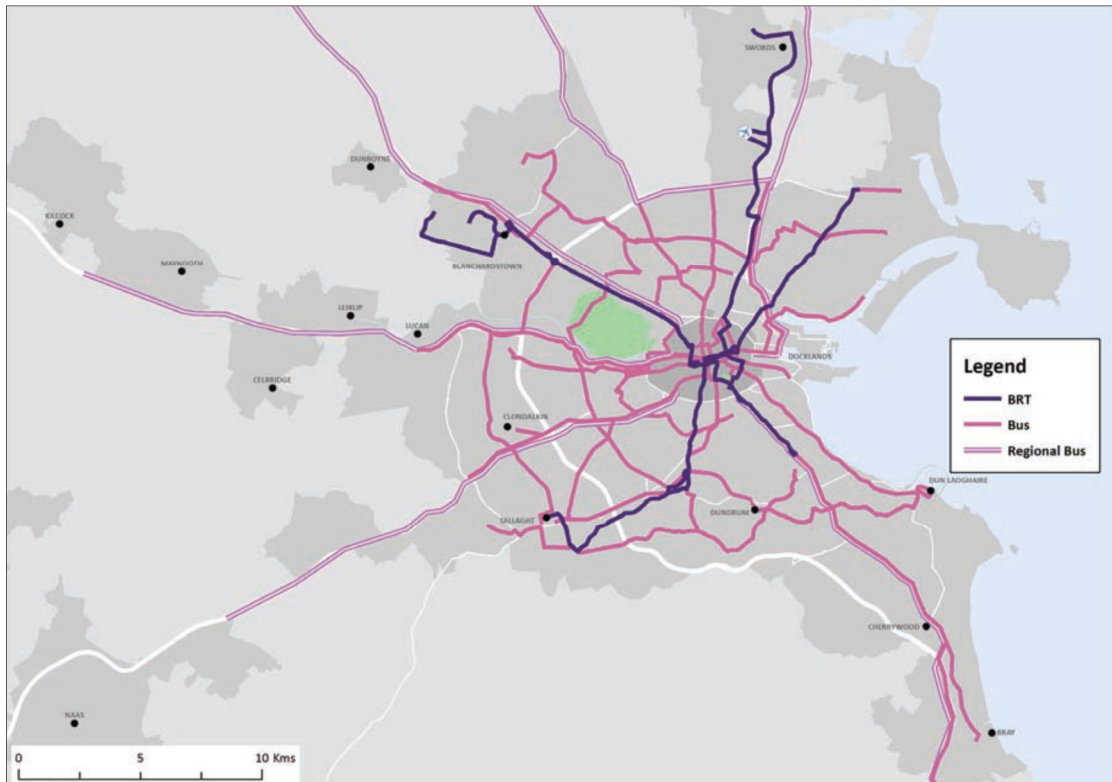
- Tallaght – Walkinstown – Crumlin (Radial);
- Tallaght – Rathfarnham – Terenure (Radial);
- Dundrum / UCD – Tallaght (Orbital).

The Transport Strategy also sets out proposals for a Bus Rapid Transit (BRT) System for Dublin, known as Swiftway, will operate over three separate routes as follows:

- Blanchardstown – UCD;
- Clongriffin – Tallaght.

In many ways a hybrid of the existing Dublin Bus and Luas services, Swiftway, offers a higher frequency and capacity bus service using dedicated lanes and higher quality stops which allow for improvements over existing bus services such as off-board ticketing and full priority at traffic signals.

The above are expected to be delivered as part of the Buc Connects programme which is currently being tendered. The proposed GDA bus network is shown in *Figure 6*.



*Figure 6: NTA Proposed Future Core Bus Network*⁵

In addition to the above and in line with more local objectives, the proposed development has been designed to allow for adequate setback to permit the provision of a bus corridor along Belgard Square North, allowing for an increased quality of service directly adjacent the development site.

CYCLE/PEDESTRIAN

The GDA Cycle Network Plan sets out proposals for improvements to the existing cycle network infrastructure locally. These are set out in *Figure 7* following.

⁵ Source: *Greater Dublin Area Transport Strategy 2016 - 2035*



Figure 7: Proposed Future Local Cycle Infrastructure⁶

As can be seen it is proposed to have a number of primary, secondary and feeder routes bordering the development site directly and creating a high quality network of cycle routes throughout the local area which will in turn connect to a comprehensive plan for the GDA.

In addition, it is proposed to upgrade the existing cycle track along the site boundary with Belgard Square North to provide a higher quality, segregated cycle facility along this section. This will be further complimented by a toucan crossing to be provided on the northern arm of the Belgard Road/IT Tallaght/Belgard Square North roundabout as well as toucan crossings on each arm of the upgraded Belgard Square North/Belgard Square East junction.

These facilities will also be of significant benefit to pedestrians, providing more priority when crossing key routes in the area.

⁶ Source: *Greater Dublin Area Cycle Network Plan*

5. OBJECTIVES OF THE TRAVEL PLAN

The primary goal of this plan will be to facilitate and encourage a positive modal shift at the development towards sustainable modes of transport. Taking this above into account, the objectives of this MMP are as follows:

- To reduce the dependence on the private car as a means of travel;
- To discourage the use of the private car in those circumstances where car use does occur;
- To increase and facilitate the number of people choosing to walk, cycle or travel by public transport to/from the development;
- To develop an integrated and unified approach to traffic management for the site which will include public transport, private vehicles, business fleet management and suppliers of commercial services;
- To work closely with the Local Authority, the National Transport Authority, Irish Rail, Dublin Bus, Transport Infrastructure Ireland, Bus Éireann and all other relevant stakeholders in a partnership model to promote an increased uptake in public transport.

In order to achieve the foregoing objectives, the targets set out hereunder are proposed in specific key areas. These targets are based on current information pertaining to existing and proposed infrastructural investment locally. The targets are intended to be preliminary only and will be refined in the light of ongoing experience gained from the implementation of this plan.

PARKING PROVISION

A key aspect of facilitating travel by car is through the provision of car parking. As a result, it is an objective of this plan to persist in limiting the level of parking available on-site wherever possible. This will also continue to take into consideration the necessary demand so as to prevent overspill parking in nearby areas.

It is noted that this is in line with the Department of Housing, Planning and Local Government's recently published *Guidelines for Planning Authorities, Design Standards for New Apartments (March 2018)*. Section 4.19 of this document states:

"In larger scale and higher density developments, comprising wholly of apartments in more central locations that are well served by public transport, the default policy is for car parking provision to be minimised, substantially reduced or wholly eliminated in certain circumstances. The policies above would be particularly applicable in highly accessible areas such as in or adjoining city cores or at a confluence of public transport systems such as rail and bus stations located in close proximity"

It is an objective to ensure that sufficient cycle parking is provided to meet demand at the site to ensure cycling is considered a viable option where possible.

CAR TRAVEL & OCCUPANCY

It is an objective of this plan to minimise the numbers using private cars and in cases where it does occur, to increase the number of people travelling as passengers.

BUS

There are currently numerous bus services which serve stops within a 10 minute walk of the development site. It is an objective of this plan to increase awareness of these services and encourage their use as a viable and convenient alternative to private car travel where possible.

It is also an objective to inform of any changes to these services and any new services that come on line.

RAIL

The nearby Luas service provides direct access to a number of areas across Dublin as well as linking with a variety of other rail services.

It is an objective of this plan to increase awareness of existing and future services and encourage their use as a viable, convenient alternative to travel by private car wherever possible.

It is also an objective to inform of any changes to these services and any new services that come on line.

CYCLING/ WALKING

The proposed development site is well served by good quality cycle and pedestrian infrastructure, with significant improvements also planned for the future.

It is an objective of this plan to promote cycling/walking as viable means of transport and to facilitate their use wherever possible.

MODAL SPLIT

Existing modal split data for the Tallaght area has been obtained from the Census 2016 results. This has been combined with the proposals in relation to car parking, cycle parking, the measures set out in this plan to facilitate positive modal shift and the proposed infrastructural improvements for the local area to develop an series of overall modal split targets for the masterplan development, as set out in *Table 2* following.

Mode	Modal Share
On Foot	42%
Bicycle	3%
Public Transport	37%
Car Driver	3%
Car Passenger	15%

Table 2: Preliminary Target Modal Splits

It is noted that once the development is occupied, it is proposed to carry out detailed travel surveys after 6 months in order to establish a more detailed picture of travel patterns at the site. This information will then be used to update the above targets accordingly.

6. SPECIFIC MEASURES

In order to achieve the objectives and modal split targets set out in *Section 5*, a number of specific measures are proposed to be put in place.

Primarily it is intended that the development will participate in the Smarter Travel Workplaces programme. This programme assists companies in encouraging staff to travel by means other than by car through various schemes and plans and the information obtained from this will also be applied to the residential elements of the development where possible. More information on this programme can be found at www.smartertravelworkplaces.ie and www.nationaltransport.ie.

MANAGEMENT AND CO-ORDINATION

A Mobility Manager/Travel Co-ordinator will be appointed at the development. The duties of the Mobility Manager will include inter alia:

- Conducting travel surveys at regular intervals once the development is completed and operational. These surveys will provide detailed and up-to-date information on travel habits which can be used to develop new strategies that encourage travel by alternate modes;
- Implementation of various schemes/plans aimed at encouraging the uptake of more sustainable means of travel;
- Acting as an information point;
- Negotiating with public transport companies and other service providers;
- Setting up and administering registers for particular measures such as taxis if the need arises;
- Branding of the plan;
- Ongoing promotion and marketing of the plan through various mediums;
- Evaluation and adaptation of the plan in the light of experience.

CAR SHARING

The Mobility Manager will ensure that car sharing would be promoted throughout via schemes such as establishing a car sharing database or encouraging the use of existing car sharing services, an action which forms part of the Smarter Travel Workplaces programme. Staff/residents will be able to avail of this service in order to get in contact with other people who are travelling to and from similar destinations with the aim of sharing the costs and increasing the number of people travelling as passengers.

Car-sharing could be further promoted through various other means such as reserved parking specifically for car-sharers.

Taxis also provide an opportunity for people who require the flexibility of car travel while also removing the requirement to travel to and from work via car. Information on local taxi services will be provided and the possibility of negotiating deals/discounts with providers will also be investigated by the Mobility Manager.

BUS USE

The Mobility Manager for each stage will encourage and facilitate the use of the numerous existing bus facilities operating in the local area and any future services that may come on-stream.

Timetables and information on routes, ticket prices etc. will be kept on hand at all times and made available. The Mobility Manager will also promote and distribute information on any special tickets available such as tax-saver tickets, integrated ticket systems etc. on an ongoing basis. All information will be updated on a regular basis, with staff/residents being informed of any changes/disruptions to services.

The Mobility Manager will also keep in contact with all bus service providers working in the area with the aim of improving/creating new services locally where possible. Furthermore, the possibility of having local service

providers set up on-site at various times in order to promote their services and any special offers available will also be investigated.

RAIL USE

The Mobility Manager for each stage will keep information on hand at all times regarding ticket prices, frequency of services, routes etc. for all existing services. Again, information on any ticket offers such as tax-saver tickets, integrated ticket systems etc. will be made available and promoted on an ongoing basis. All information will continue to be updated regularly, with staff/residents being informed of any changes/disruptions to services or any new services which may come on line.

As with the other public transport services, the Mobility Manager will keep in contact with all rail service providers working in the area with the aim of improving/promoting these services where possible. The possibility of having these local service providers set up on-site at various times in order to promote their services and any special offers available will also be investigated.

CYCLE/PEDESTRIAN FACILITIES

Phase 1 of the masterplan development will include the provision of 1227 cycle parking spaces which is significantly in excess of the current Development Plan requirements. These spaces will be located in secure and sheltered areas.

The site Mobility Manager will continue to promote cycling through various schemes and promotions which may include:

- 'Bike to Work Week';
- Cycle safety training;
- Site visits from trained mechanics to check/repair bikes;
- Discounts on bikes and accessories from various stores;
- On-site pool bike scheme;

- Provision of high visibility vests.

The Mobility Manager will also investigate the possibility of setting up a 'buddy' cycle database, where people choosing to begin cycling can get in touch and travel with more experienced cyclists with the aim of increasing confidence and safety. Further schemes such as the Cycle to Work Scheme will also be continually promoted at the development.

Similarly, walking will also be promoted through various schemes such as the Pedometer Challenge, as part of the Smarter Travel Work Place programme. The provision of cycle parking is discussed in further detail in the Traffic Impact Assessment submitted as part of this application.

CAR PARKING PROVISION

The completed development will provide a total of 129 car parking spaces to serve the Phase 1 development, with 104 to be dedicated for use by residents, 3 to be provided for use by car clubs to be established on-site and 22 at surface level for set down and visitor parking.

The proposed 3 no. car club spaces will be help facilitate a cultural shift away from car ownership and, by association, car travel, by maintaining access to a car for resident's occasional use while more sustainable modes are used for day to day travel needs. This facility will be monitored in terms of usage and demand and the number of vehicles available increased as appropriate.

Alternative parking options locally are available but come at an associated cost will serve as a disincentive to travel by private car.

The provision of car parking is discussed in further detail in the Traffic Impact Assessment submitted as part of this application.

MANAGEMENT OF STUDENTS

At the start and end of each college year/term, there is expected to be a relatively large number of students arriving and departing the site within a short time period. Given the nature of the activity, this is likely to result in significant numbers of students being brought to the development by car to transport belongings in bulk.

In order to prevent an influx of vehicles to the site at any one time, an appointment system will be put in place by the management company whereby tenants are allocated a specific time interval for arrival and unloading/loading and departure at the site. This will be cognisant of respective start/end of terms dates for different tenants and continuously be monitored by on-site staff for the duration of these periods.

During these peak periods, it is envisioned that the surface visitor car parking can be temporarily re-allocated to serve the tenants drop off/collection.

USE OF TECHNOLOGY

Recent advancements in technology present a number of additional opportunities in relation to encouraging positive modal shift. As part of this MMP staff/residents at the completed development will be informed of a variety of potentially useful tools including the following:

- *The NTA Journey Planner* – Available on the NTA website and as a downloadable app, the journey planner provides a comprehensive list of travel options available from any origin/destination point in the country. Most notably, this is not limited to a single mode of travel and includes routes which consider multiple modes and multiple public transport services while also providing details such as journey times and distances for each option;
- *Public Transport Providers* – Each of the major public transport providers, including Dublin Bus, Bus Éireann and Irish Rail, now have

their own dedicated app that can be downloaded to a smartphone and/or tablet. These contain detailed information on all services offered including timetables and also allow for real time up-dates on changes or disruptions to services;

- RealTime Ireland – An application available for download to smartphones and tablets, this app provides real time arrival and departure listings for a range of public transport options from major rail stations to individual bus stops. This app also links with the aforementioned NTA Journey Planner to provide a comprehensive travel planning tool;
- Taxi Apps – There are various apps available at present which simplify the process of booking taxis considerably to provide a much more accessible service.

The above are just a few examples of the services available which would be of significant use in promoting more sustainable means of transport. The availability of such services will be promoted amongst employees on a regular basis and information on any new services that become available will also be provided.

SUMMARY

Overall, the location of the proposed development, along with the measures considered, will aim to ensure that travel by public transport, by bike or by foot is a preferred alternative to travel by private car for a significant portion of travellers.

7. PHASING & MONITORING

A critical part of any MMP is ongoing monitoring. It is proposed that an initial evaluation of the operation of the plan will take place 6 months into its operation. The plan will be appropriately adjusted at that stage based on the results.

The MMP will be monitored and regularly reviewed on a minimum yearly basis with regular travel surveys being carried out. In particular the demand for cycle parking at the site will be closely monitored with a view to increasing the amount as required. In general, the overall plan will be refined based on experience and consultations with the respective stakeholders.

Patrick Raggett B.E., CEng MIEI, MCIHT
Chartered Civil Engineer
O'Connor Sutton Cronin & Associates

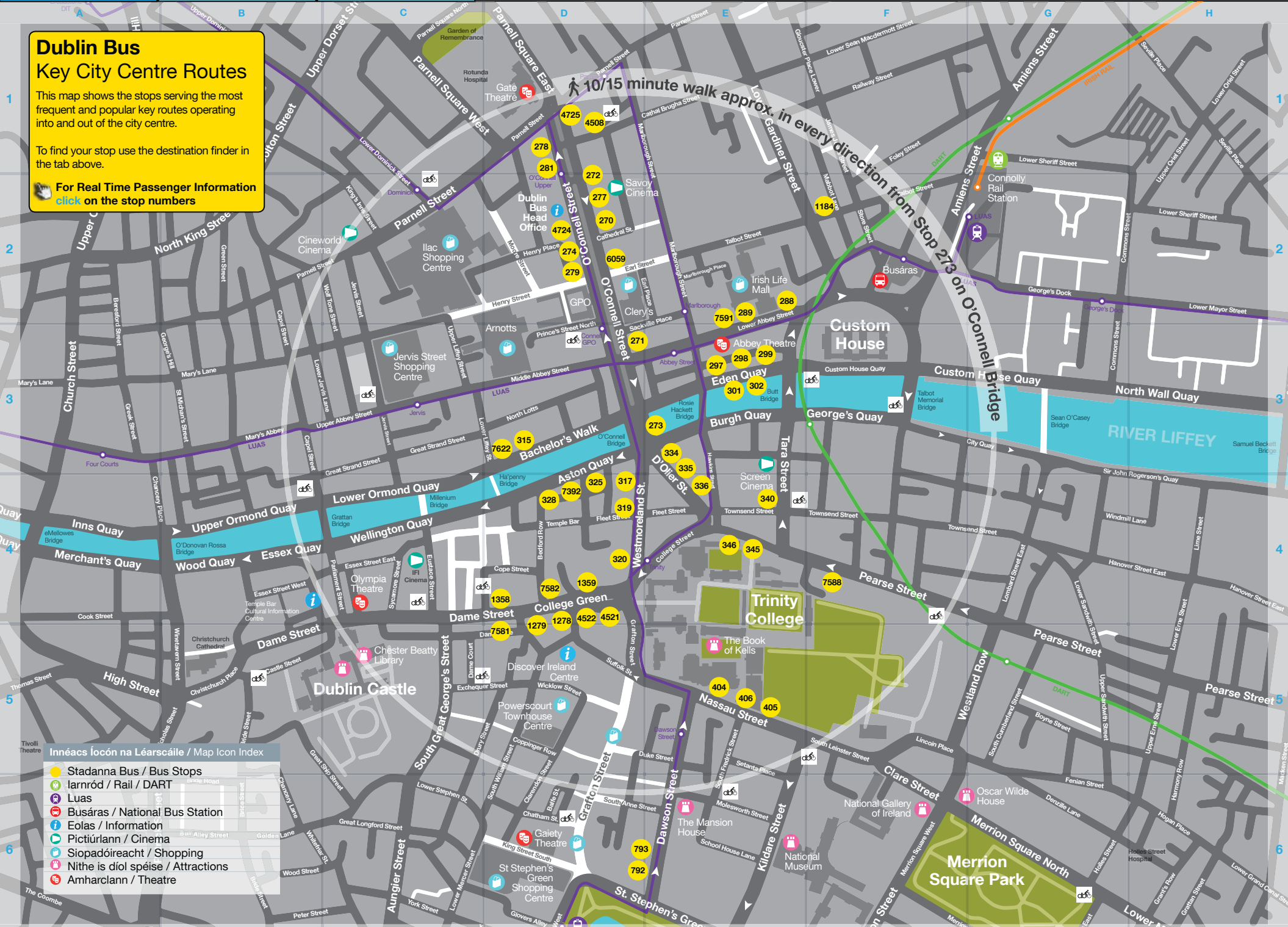
APPENDIX A: DUBLIN BUS ROUTE MAP

Dublin Bus Key City Centre Routes

This map shows the stops serving the most frequent and popular key routes operating into and out of the city centre.

To find your stop use the destination finder in the tab above.

For Real Time Passenger Information
[click on the stop numbers](#)



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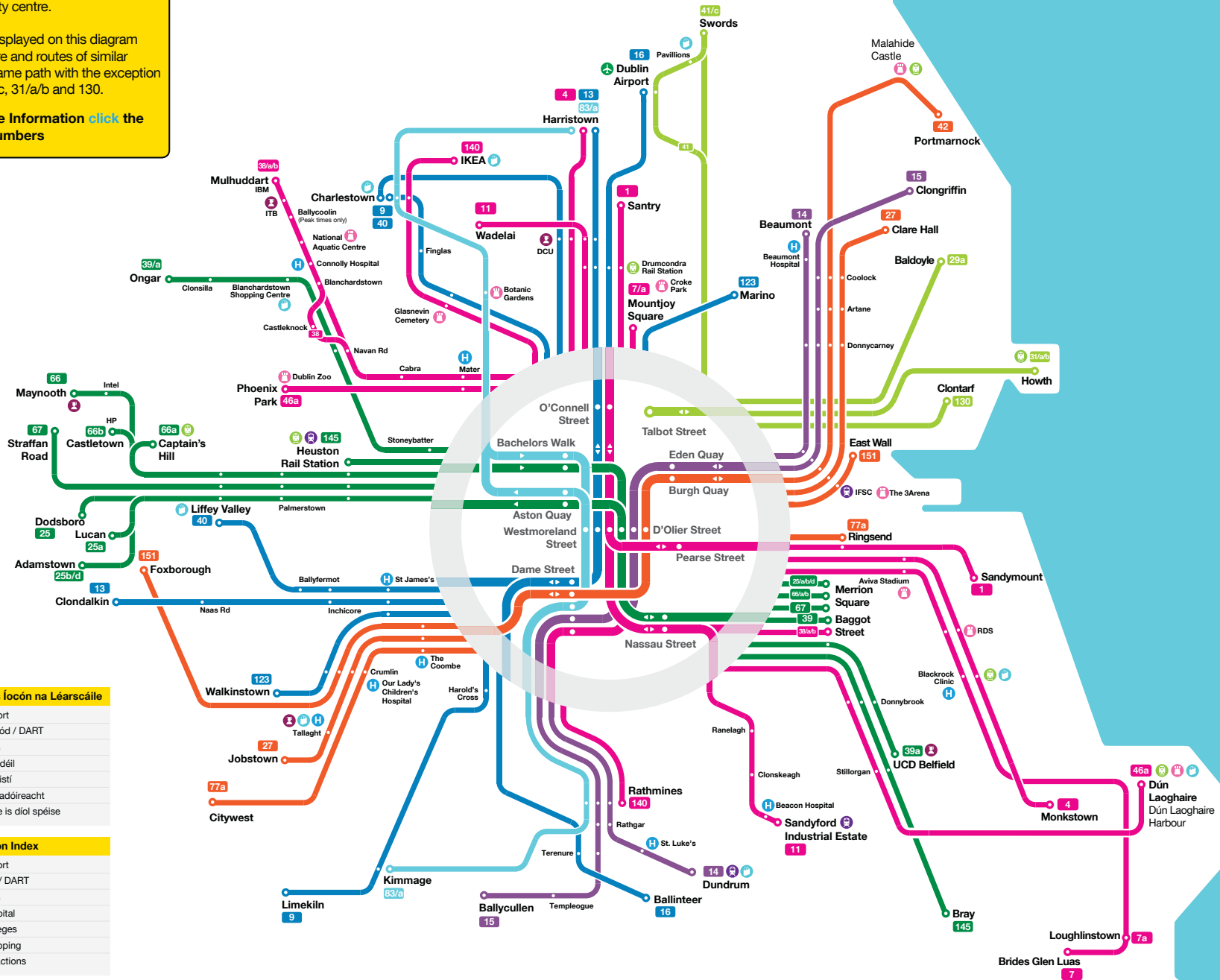
- Stadanna Bus / Bus Stops
- Iarnród / Rail / DART
- Luas
- Busáras / National Bus Station
- Eolas / Information
- Pictiúrlann / Cinema
- Siopadóireacht / Shopping
- Nithe is díol spéise / Attractions
- Amharclann / Theatre

Dublin Bus Core Dublin Bus Routes

This diagram shows the core routes operating in and out of the city centre.

Most bus routes displayed on this diagram cross the city centre and routes of similar colour follow the same path with the exception of Routes 29a, 41/c, 31/a/b and 130.

For Timetable Information [click the Bus Route numbers](#)



Innéacs íocón na Léarscáile

- Aerfort
- Iarnród / DART
- Luas
- Ospidéal
- Coláistí
- Siopadóireacht
- Nithe na díol spéise

Map Icon Index

- Airport
- Rail / DART
- Luas
- Hospital
- Colleges
- Shopping
- Attractions

APPENDIX B: BUS ÉIREANN ROUTE MAP

NETWORK MAP

Also includes Ulsterbus Goldline Network



1850 836 611
www.buseireann.ie
 e-mail: customer@buseireann.ie
 @buseireann
www.facebook.com/buseireann

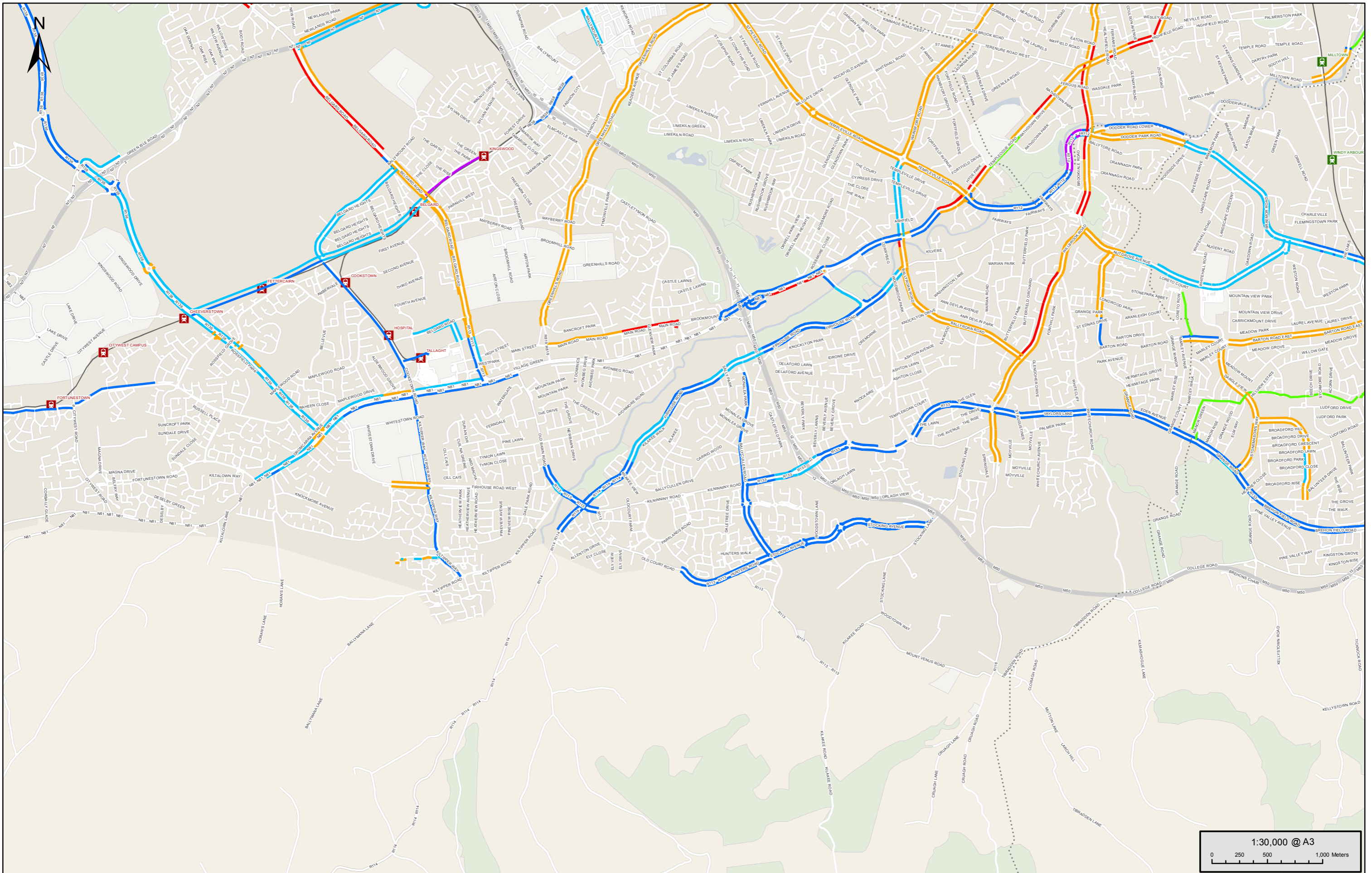
Numbers shown beside routes refer to table number in the Bus Éireann National Timetable. Where a number is underlined e.g. 132 the service runs less than 5 days a week. Where a number is boxed e.g. 252 the service operates for the summer period only. See relevant table for exact dates.

To aid clarity, certain local bus services operated by Bus Éireann have been omitted from this network map.

KEY

- Bus Éireann Expressway Coach Service - year round
- Bus Éireann Expressway Coach Service - Summer Only
 Note: Expressway Services stop only at locations listed in the relevant section of the timetable
- Bus Éireann Local Bus Service - Year Round
- Bus Éireann Local Bus Service - Summer Only
 Note: Local Bus Services stop on request at all points on route
- Expressway Service - Operated in conjunction with Ulsterbus
- Ulsterbus Goldline Service - Tel: +44 (028) 90 66 66 30
 Note: Ulsterbus also operate an extensive network of local bus services in Northern Ireland
- Bus Éireann Local Town and City Service
- Principal Bus Éireann Information Offices
- Airports
- Local Car / Passenger Ferry
- Northern Ireland Border
- County Border




APPENDIX C: LOCAL CYCLE NETWORK MAP



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

Title:
**EXISTING CYCLE FACILITY TYPE
 DUBLIN SOUTH WEST
 SHEET E6**

Legend:

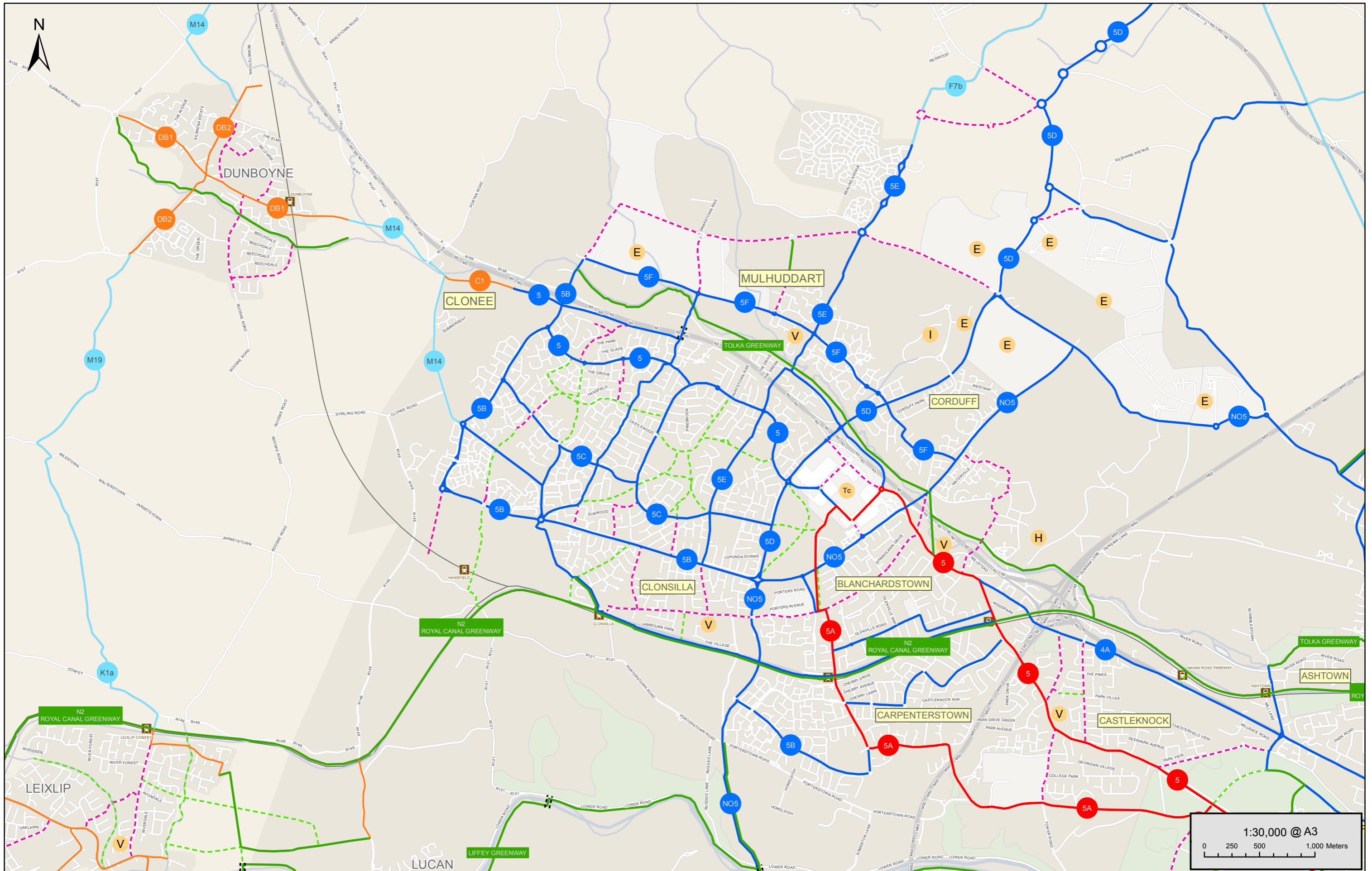
— B1 - Bus Lane (no cycle lane)	— G1 - Cycle Trail or Greenway	 Greenline Tram Stops
— C1 - Cycle Track - separated from road	— S2 - Shared Walking & Cycling	 Redline Tram Stops
— C2 - Cycle Track - immediately adjacent	— Study Area	 Stations
— C3 - Cycle Lane (even within Bus Lane)	— County Council Boundaries	







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 Dublin 4
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 Fax: +353 (0)1 238 3199
 www.aecom.com



Project:
CYCLE NETWORK PLAN FOR THE GREATER DUBLIN AREA

Title:
PROPOSED CYCLE NETWORK DUBLIN NORTH WEST SHEET N4

Legend:

Primary	Inter-Urban	Greenway	Primary/Secondary	Feeder	Minor Greenway	New Cycle Bridge	Permeability Link	Gateway	Employment Zones	Hospitals	Institute of Technology	Shopping Centre	Town Centre	University	Village Centre	Greenline Tram Stops	Redline Tram Stops	Stations
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Udarás
Náisiúnta Iompair
 National Transport Authority

AECOM

Roughan & O'Donovan

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