Proposed residential development at Dolcain House, Monastery Road, Clondalkin, Dublin 22

Parking and Mobility Management Plan

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1.0 INTRODUCTION

Dr Martin Rogers has been commissioned to complete a Traffic and Transport and for a proposed 130-unit apartment development at Dolcain House, Monastery Road, Clondalkin, Dublin 22.

The development comprises 130 No. apartment units.

The apartment breakdown is as follows:

- 1-Bedroom units 61 No.
- 2-Bedroom units 59 No.
- 3-bedroom units 10 No.

It is proposed to provide 78 No. car parking spaces, including 5 No. car club spaces, 4 No. motorcycle spaces and 310 No. cycle parking spaces.

The permitted development thus involves a car parking provision of 0.60 No. spaces per dwelling unit, 0.56 No. spaces per unit excluding the communal car club spaces.

It is assumed that the proposed development will open in 2024.

The purpose of the report is as follows:

- Propose a restricted car parking provision for the residential component of the development, arguing that the proposed provision is entirely sustainable given the current modal splits for the journey to work for existing residents living close to the subject site, and
- Given this restricted parking provision, demonstrate the sustainability in transportation terms of residents utilising non-car based forms of travel by demonstrating the high level of service that is provided by the transport infrastructure in place at the site with regards to, walking, cycling, public bus services, national rail, and other Services (taxis, Car-club)
- Identify both physical elements and strategies to be incorporated within the proposed new development which will facilitate and create incentives for both residents of and visitors to the development to use the available modes of public transport along with walking and cycling in preference over private car use.

Section 2 of this report will estimate the car and cycle parking requirement for the overall development. While the full cycle parking requirements will be achieved, a restricted car parking provision will be proposed. The sustainability of this level of car parking provision will be demonstrated using 2016 Census data.

Section 3 details the policy documents at national and local level relaying to mobility management.

Sections 4 to 9 contain the mobility management plan for the proposed development.

Section 10 makes some overall concluding comments.

Figure 1-1 details the available access point from the development onto the Monastery Road / Woodford Hill Roundabout.

Figure 1-2 indicates the location of the Dolcain House site relative to the local road network (Monastery Road / M50 Red Cow Interchange)

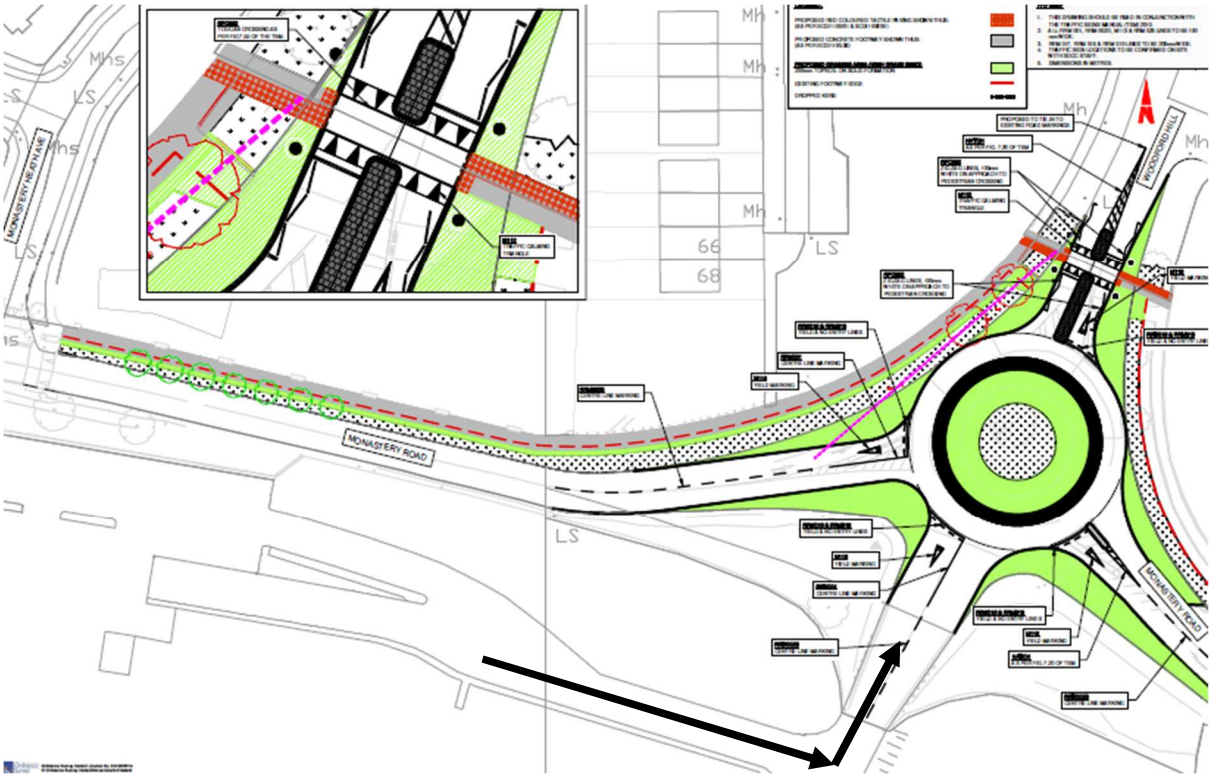

Figure 1-1: Site access onto the Monastery Road / Woodford Hill Roundabout

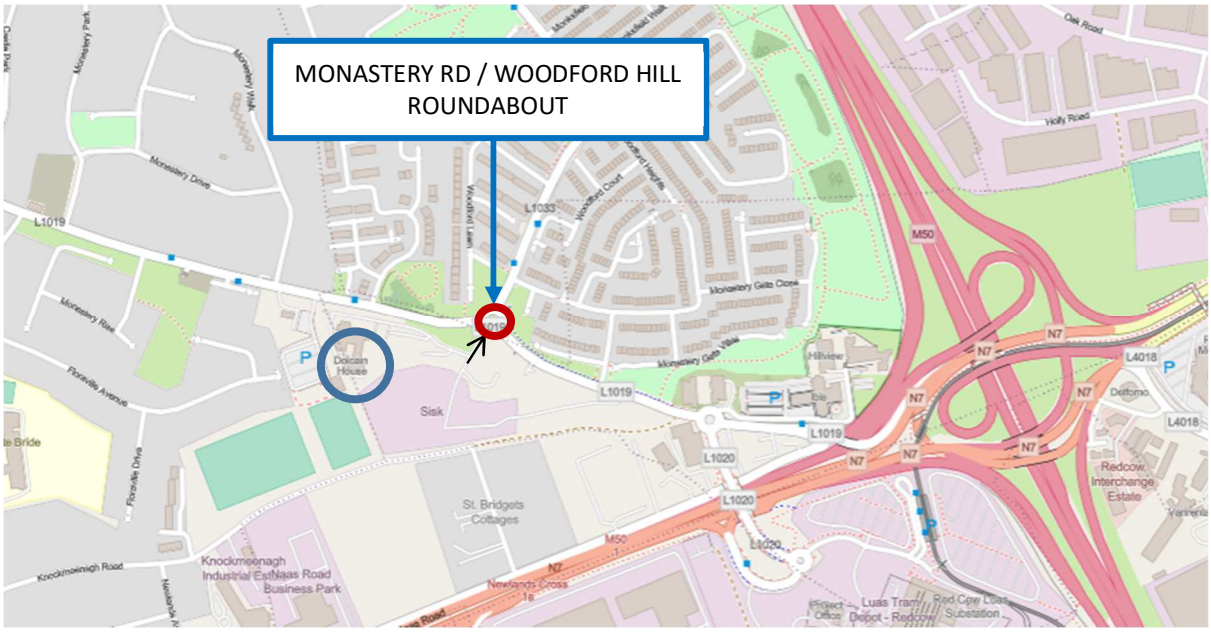

Figure 1-2: Location of site relative to local road network together with the location of the survey at the Monastery Road / Woodford Hill Roundabout.

2.0 SUSTAINABILITY OF CAR PARKING PROVISION AT THE PROPOSED DEVELOPMENT

2.1 INTRODUCTION

This section of the report will detail the car and cycle parking requirements for the proposed development based on the South Dublin Development Plan 2016-2022 and the Sustainable Urban Housing: Design Standards for New Apartments (Guidelines for Planning Authorities) was published by the Department of Housing, Planning and Local Government in December 2020.

The proposed car and cycle parking provision on site will then be detailed, highlighting in particular the intended lower level of provision in relation to car parking for the residential component of the proposed development.

It will be argued that the proposed residential parking provision is entirely sustainable given the current modal splits for the journey to work / college for existing residents living close to the subject site.

This lower level of provision is also seen as being completely consistent with the mobility targets for Dublin city as detailed within the Dublin City Transport Plan. It is also consistent both with minimising the traffic impact of nearby already congested junction (as detailed within the accompanying traffic impact assessment) and with maximising patronage of the extensive public transport and soft mode options (as detailed within this mobility plan).

2.2 CAR AND CYCLE PARKING REQUIREMENTS AS PER SOUTH DUBLIN COUNTY DEVELOPMENT PLAN 2016 - 2022

2.2.1 PROVISION VERSUS MAXIMUM REQUIREMENTS

Table 2-1 below details the maximum car and bicycle parking standards for South Dublin County Council based on the rates contained within their 2016 - 2022 Development Plan Written Statement for the residential and mixed use / commercial components of the proposed development respectively:

Development type	Area / units	Maximum car parking standards	Maximum parking required
Apartments 1-bed	61 No.	1.0 per unit	61
Apartments 2-bed	59 No.	1.25 per unit	74
Apartments 3-bed	10 No.	1.50 per unit	15
TOTAL			150
		Bike parking standards	Parking required
Apartments	130 No.	1 private secure bicycle space per 5 No. apartments + 1 visitor bicycle space per 10 No. apartments	26 + 13 = 39

Table 2-1: Parking required under South Dublin County Development Plan Standards

It is proposed to provide 78 No. car parking spaces for the residential component, equating to 0.60 No. car spaces per residential unit, reducing to 0.56 if the communal car club spaces are excluded.

This level of provision is 52% of the quantum required under the South Dublin County Development Plan maximum standards. However, this provision must also be viewed in relation to the New Apartment Guidelines, the level of compliance with which is detailed within the mobility management plan in a separate submitted report.

In terms of cycle parking provision, it is intended to provide 310 No. cycle parking spaces, nearly eight times the requirements stated within the South County Dublin Development Plan.

The National Cycle Manual requires 274 No. cycle spaces. The provision of 310 No. spaces is thus 113% of this onerous requirement.

2.2.2 PROVISION OF DEDICATED CAR CLUB PARKING SPACES

Use of private car is seen within this report as relating to its use for the journey to and from work during the morning and evening peaks. However, in many cases, residents require access to a parking space in order to have a car available to make non-work related trips for shopping and leisure purposes. Such trips can be very infrequent, therefore, the provision of dedicated car parking spaces for such usage constitutes an inefficient use of such resources.

Therefore, an alternative approach is proposed in order to cater for the non-trip-to-work-related car demand of residents at the proposed development. It is proposed to initially provide 10 No. car club vehicle spaces within the basement car park, available exclusively for residents.

The demand will be monitored on an ongoing basis by those managing the development, and the number of spaces can be increased as required.

Car clubs typically operate with residents signing up to the service being able to reserve the use of the vehicle at certain times / days, paying a rental fee to do so, but saving the user the necessity of owning either a car or a parking space at the development.

It is the intention of the developer to discuss the potential for a car club base at the subject site with GoCar, and established car club operator in the Dublin area.

Results of surveys carried out by GoCar indicate that use is predominantly for private rather than business use, with just less than 60% using the service to replace a private car. The average car is rented out for 1 hour per day. Shopping and leisure related trips were listed as top uses for GoCar.

The provision of 5 No. car club spaces will result in a number of benefits for residents at the proposed development:

- Elimination of the necessity to own a car (and the associated expense) where use of it will be relatively infrequent
- Access to car transport for those using a car infrequently

The provision of car club spaces is also consistent with section 4.23 of the 2018 Design Standards for New Apartments which states that 'for all types of location, where it is sought to eliminate or reduce car parking provision, … 'provision is to be made for alternative mobility solutions including facilities for car sharing club vehicles.'

2.3 CAR PARKING REQUIREMENTS BASED ON NEW APPARTMENT GUIDELINES

The most recent version of Sustainable Urban Housing: Design Standards for New Apartments (Guidelines for Planning Authorities) was published by the Department of Housing, Planning and Local Government in December 2020.

Chapter 4 of this report refers specifically to revised car parking requirements for new apartment developments.

Its recommendations can be summarised as follows:
The quantum of car parking is dependent primarily on the location of the subject site. Three categories of location are defined:

Central and/or Accessible Urban Locations:

Apartments in central locations that are well served by public transport, in which situation car parking provision to be wholly eliminated or substantially reduced. These locations are most likely to be in cities, within 15 minutes walking distance of city centres or centrally located employment locations. These locations include sites within 10 minutes walking distance of DART, commuter rail or Luas stops or within 5 minutes walking distance of high frequency (min 10 minute peak hour frequency) bus services.

Intermediate Urban Locations
This applies to apartments in suburban/urban locations served by public transport or close to town centres or employment areas and particularly for housing schemes with more than 45 dwellings per hectare. For this category, planning authorities may consider a reduced overall car parking standard.
Peripheral and/or Less Accessible Urban Locations

It is reasonable to assume that the subject site comes within the first category – a central location, within 10 minutes' walk of the Red Cow LUAS stop, the sites designation within the first classification is entirely appropriate.

Based on this classification, it was concluded that a provision of 0.6 parking spaces in total would be appropriate for the proposed development.

The section immediately below uses mobility information from the 2016 Census to justify this level of car parking provision at the proposed development.

2.4 PROJECTED CAR USAGE IN GENERAL PROXIMITY TO PROPOSED DEVELOPMENT USING 2016 CENSUS DATA

Modal split data from the 2016 Census for Electoral Districts close to the subject site can assist in providing a case for the sustainability in transportation terms of only 60% of residents having access to a car space.

Such evidence can help demonstrate that potential overspill onto the local road network will not occur with the proposed level of car parking provision in place.

In order to demonstrate that the proposed quantum of car parking is sustainable and will not result in overspill, this report will assess existing demand for car travel within the general environs of the subject site using 2016 Census data.

This data enables the proportion of households in the general vicinity of the subject site who do not own a car to be established as well as the proportion of commuters presently living in the area using the private car for their journey to work.

Data has been obtained for the following 5 No. Electoral Districts in the general vicinity of the subject site:

- Clondalkin - Monastery (ED containing proposed development)
- Clondalkin – Ballymount
- Clondalkin Village
- Clondalkin - Dunawley
- Clondalkin - Moorfield

The outline of these 5 No. Electoral Districts are illustrated within Figure 2-1.

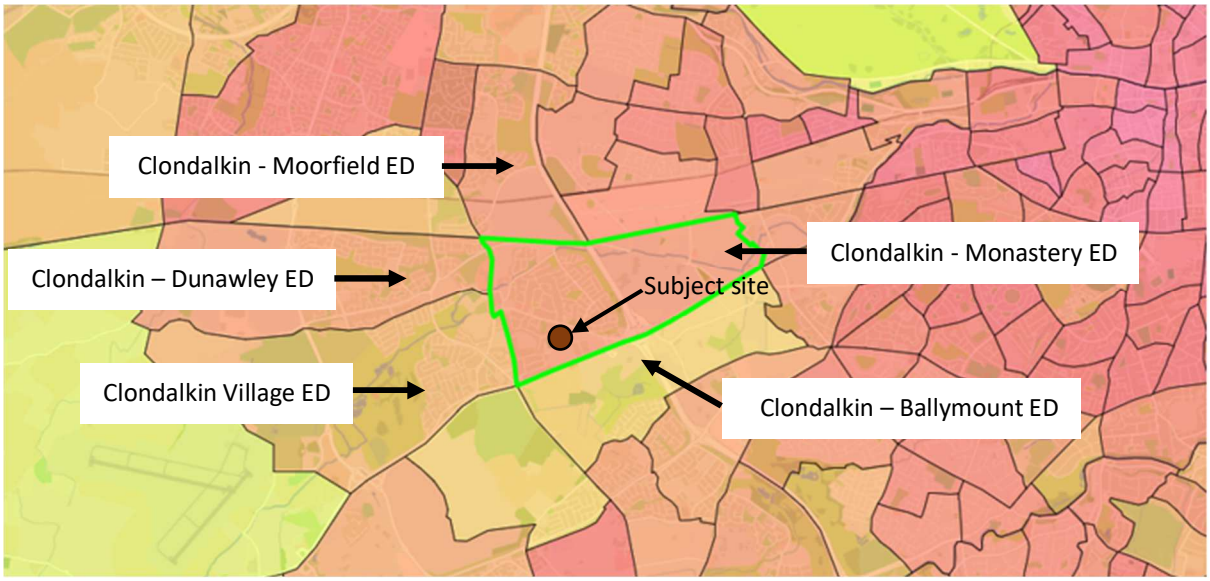

Figure 2-1: 5 No. Electoral Districts analysed (ED containing subject site highlighted)

subject site.

Mode	CAR DRIVER (%)	CAR PASSENGER (%)	BUS (%)	LUAS/TRAIN (%)	CYCLING (%)	WALKING (%)	Not stated / van / motorbike / home (%)
Clondalkin Monastery ED	54	5	12	7	4	7	11 (5/4/1/1)
Clondalkin Ballymount ED	58	4	4	11	2	5	16 (8/7/0/1)
Clondalkin Village ED	59	5	12	2	3	5	13 (6/5/1/2)
Clondalkin Dunawley ED	57	6	14	1	3	6	13 (6/5/1/1)
Clondalkin Moorefield ED	51	5	16	1	4	9	14 (7/6/1/0)
Average	56	5	12	4	3	6	13 (6/5/1/1)
Average (excluding 'not stated')	60	5	12	5	3	7	7 (5/1/1)

Table 2-2: Modal splits for electoral districts in vicinity of subject site

Thus, for the existing inhabitants in 5 No. Electoral Districts closest to the subject site, excluding those not stating a mode preference for the journey to work, 65% commute by private car as detailed within the 2016 Census, with 17% commuting by bus, train or LUAS and 10% cycling or walking.

These modal splits will form the basis for the day-of-opening values used within this report for the proposed apartment development.

2.5 CONCLUDING COMMENT

This section of the report demonstrates that, given existing travel patterns close to the subject site, and its designation within the New Apartment Guidelines as a 'central / accessible area' within close proximity to a high frequency bus line, a parking provision of 0.6 No. car parking spaces per dwelling unit is sustainable. The allocation of 5 No. dedicated car club spaces will further aid the sustainability of this parking provision.

This relatively low provision will have the effect of minimising the traffic impact of the proposal, an effect referred to in detail within the accompanying traffic assessment. This is very significant given the levels of congestion at the major roundabout junction adjacent to the proposed development.

However, providing a limited number of car parking spaces places an onus on the applicant to demonstrate that the site is configured in such a manner that enables all residents at the proposed development to commute to work by means of a sustainable mode of travel other than the private car.

The remaining sections of this document seek to demonstrate that such is the case for the proposal at the Monastery Road site.

3.0 GUIDANCE DOCUMENTS ON MOBILITY MANAGEMENT PLANNING

3.1 INTRODUCTION

A Mobility Management Plan (MMP) is a long-term management strategy covering a selected location with the aim to promote and deliver sustainable transport objectives. A Mobility Management Plan consists of a package of measures put in place by an applicant in order to encourage and support more sustainable travel patterns among both residents and visitors at the proposed development.

The package usually includes measures to promote and improve attractiveness of using public transport, cycling, walking, car-sharing / car clubs. It should be considered a dynamic process where a package of measures are identified, piloted and monitored on an ongoing basis.

A MMP prepared at planning stage, before the development is built and occupied, can only highlight potential issues to be included in a subsequent MMP to be prepared once the development has obtained a grant of planning permission and is built and occupied.

The environmental and congestion impacts of car-based transport has resulted in policy changes where the priority of more sustainable forms of travel has increased. The MMP helps to encourage use of modes of travel other than the private car.

The proposed development is located adjacent to both the heavily loaded Monastery Road / Woodford Hill Roundabout intersection and the high frequency 13 bus route.

MMP's are intended to bring the following benefits:

- Greater accessibility of the site.
- Encouraging of safe and viable alternatives for accessing the site.
- Pragmatic initiatives based on appraisal of residents' and visitors travel patterns.
- Reduced overall vehicle mileage and trip volumes.

3.2 GUIDANCE AND POLICY DOCUMENTS

This report was developed with guidance from the documents listed below;

3.2.1 NATIONAL POLICY

Smarter Travel A Sustainable Transport Future 2009 – 2020 (Department of Transport, 2009)
The governments transport policy for the future that targets transportation. It promotes greater integration between spatial planning and transport policy. The aim is to reduce car based commuting from 65% to 45% by 2020.

Regional Spatial and Economic Strategy (Eastern and Midland Regional Assembly, 2019)
This document notes the trends within the Region that indicate an overreliance on the private car for travel to work and education, stating that approximately 46% of Dublin's population commute by private car. Regional Planning Objective 8.7 within this document aims to promote the use of mobility management and travel plans to bring about behaviour change and more sustainable transport use.

National Cycle Policy Framework 2009 (Department of Transport, 2009)
The National Cycle Policy Framework NCPF sets out a national policy for cycling to create a stronger cycling culture and a friendlier environment for cyclists.

Making Residential Travel Plans Work (Department for Transport, UK, 2007)
UK document providing a framework for residential travel plans, detailing the content to be contained within the Travel Plan. This document incorporates the structure advocated by this document.

Sustainable Urban Housing: Design Standards for New Apartments - Guidelines for Planning Authorities (Department of Housing, Local Government and Heritage, December 2020)
This document details new levels of car and cycle parking provision for apartment developments in urban areas.

3.2.2 LOCAL POLICY

South Dublin Development Plan 2016-2022
Section 6.4.2 states that Traffic and Transport Assessments and/or Workforce Travel Plans (also known as Mobility Management Plans) will be required to support development proposals that have the potential to generate significant traffic movements, to demonstrate that there is public transport carrying capacity and road capacity to serve the development. The Council is also committed to the provision of a Traffic Management Centre for the Greater Dublin Area, in association with the NTA.

Transportation Strategy for the Greater Dublin Area 2016-2035 (NTA, 2016)
This document states that development within the existing urban footprint of the Metropolitan Area should be consolidated to achieve a more compact urban form. Policy should allow for the accommodation of a greater population than at present, with much-enhanced public transport system, with the expansion of the built up areas providing for well-designed urban environments linked to high quality public transport networks, enhancing the quality of life for both residents and workers.

Dublin City Centre Transport Study (NTA, 2016)
The Study seeks to address major transport issues facing the core city-centre area, to facilitate the implementation of the Dublin City Council Development Plan, and to safeguard the future growth of the city, specifically in terms of new transport infrastructure. The construction and operation of Luas Cross City will require a significant reconfiguration of current transport arrangements. This study addresses these issues and proposes measures to counter long-standing constraints of the existing City Centre transport network. This will ensure that capacities are in place to meet the demands of future growth in the City, as well as optimising the use of the City Centre's limited road space to maximise the benefits for people living, working and visiting Dublin City Centre. The key objectives include increasing the capacity, reliability and use of public transport into and within the City Centre as well as improving the quality of service for cycling and walking, with particular emphasis on the 'core' City Centre;

The Study advocates significant reductions in the modal split for private cars for the journey to work over the short to medium term in the Greater Dublin Area.

The achievement of these targets requires developments such as the one proposed at the proposed development to advocate sustainable modes of transport for residents travelling to work and college. Achievement of the objectives and targets as outlined within this document. The residential travel plan framework will be entirely consistent with the aims of the Dublin City Centre Transport Study.

Cycling Policy
The National Cycle Manual, adopted in 2011, provides local guidelines on cycle parking provision.

4.0 THE TRAVEL PLAN PYRAMID

The UK document 'Making Residential Travel Plans Work' details the travel plan pyramid that helps demonstrate how successful plans are built on the firm foundations of a good location and site design. A Plan should also combine hard measures – such as new bus stops and cycle ways, and soft measures – such as discounts on season tickets and help with individual journey planning. All measures should be integrated into the design, marketing and occupation of the site. In addition, parking restraint is often crucial to the success of the plan in reducing car use.

An image of the pyramid is contained within Appendix 1.

The travel pyramid, as detailed within 'Making Residential Travel Plans Work', contains the following five key concepts that are central to a good RTP:

- Location - Residents need to be within easy reach of shops and services – so that walking or cycling becomes the natural choice
- Built Environment – Low-density developments are hard work to get round by bike and foot. Encouraging compact development that is walking and cycling friendly, with low parking allowances, is crucial in encouraging sustainable travel choices.
- Travel Plan Coordinator - Successful travel plans need people. The Coordinator plays a crucial role in developing the plan and working with residents and management to ensure the plan meets their needs for access and evolves over time
- Services and facilities - Good public transport and a car club can help reduce the need for on-site parking. Other measures, such as broadband internet access and home deliveries can reduce the need to travel off site.
- Promotional strategy - Welcome packs, public transport discounts and cycling incentives can all help introduce the travel plan to residents and build enthusiasm.

In terms of location and built environment, one can see the significant advantages of the subject site, within easy access of bus facilities, with the layout of the proposed development making cycling and walking safer and more efficient.

This report will demonstrate the central role that will be undertaken by the Travel Plan Coordinator in setting targets, updating the Travel Plan, monitoring use of car club spaces and maximising the circulation of promotional material among residents.

5.0 MONASTERY ROAD APARTMENT DEVELOPMENT MOBILITY STRATEGY

Section 6 of this report will summarise the existing public transport and cycling facilities at the subject site.

Section 7 takes the existing commuter travel patterns for the area and proposes year-of-opening modal splits for the proposed development. It also contains proposed future improvements public transport, cycling and walking facilities nearby which will assist in the attainment of the stated targets.

Section 8 details the objectives of the Travel Plan Strategy and lists a suite of measures planned to be implemented to facilitate the achievement of these objectives.

Section 9 details the central role of the Travel Plan Coordinator in the attainment of the objectives as set out within Section 8.

6.0 EXISTING PUBLIC TRANSPORT AND CYCLING FACILITIES

6.1 EXISTING BUS INFRASTRUCTURE

There are a number of bus stops located along Monastery Road, Clondalkin, Dublin 22.

The bus routes that stop at the development along Monastery Road are:

- Route 68 From Hawkins St. to Newcastle/ Greenogue Business Park
- Route 69 from Hawkins St. to Rathcoole

The bus route that travels along Woodford Hill, through the roundabout and towards the Red Cow is:

- Route 13 from Harristown to Grange Castle

The frequency of each bus located along Monastery Road / Woodford Hill is detailed in Table 6-1:

ROUTE	ORIGIN	DESTINATION	FREQUENCY AM PEAK
Route 13	GRANGE CASTLE	HARRISTOWN	6 PER HOUR
Route 68	GREENOGUE BUSINESS PARK	HAWKINS STREET	2 PER HOUR
Route 69	RATHCOOLE	HAWKINS STREET	2 PER HOUR
TOTAL			**10 PER HOUR**

Table 6-1 - Dublin Bus Route Frequencies close to proposed development

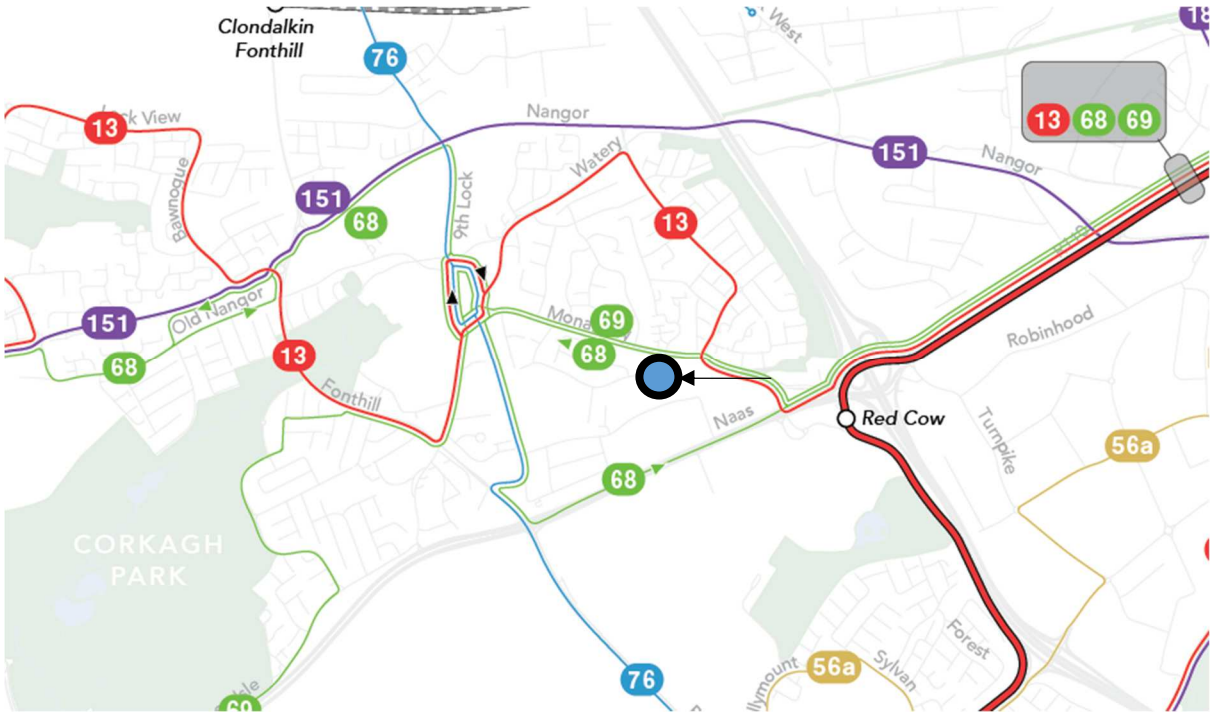

Figure 6-1: Existing bus routes 13, 68/a and 69

Figure 6-1 details the routes taken by the 13, 68 and 69 in close proximity to the site of the proposed development.

6.2 EXISTING CYCLING INFRASTRUCTURE

Figure 6-2 details the existing cycle facilities close to the site:

Figure 6-2: Cycling facilities in proximity to the Dolcain House site

There is an existing cycle lane on the northern side of Monastery Road opposite the site.

7.0 PREDICTED POST-DEVELOPMENT TRAVEL PATTERNS

7.1 INTRODUCTION

Table 7-1 below indicates a target profile for the future residents at the Monastery Road SHD on the projected day of opening.

These modal split estimates are based on information within section 2 of this report for the Electoral Districts in the general vicinity of the subject site, excluding not-stated modal preferences and assuming 15% of the car commuter modal share is allocated to car club use.

Transport Mode	Commuter Usage (%) (day-of-opening)
Car driver	35
Car passenger	5
Car Club User	15
Public transport	17
Cycle	13
Walk	7
Other	8

Table 7-1 - Future Target Modal Splits for Belgard Road / Airton Road SHD

The 15% modal split for car club users is based on the provision of 5 No. Car Club spaces, catering for approximately 20 No. apartment units (15% of 130 No. apartment units). This is a very conservative estimate, given GoCar's assertion that 1 No. car club space has the potential to service up to 15 No. residential units.

The remaining 68 No spaces will cater for 90% of the 130 No. apartment units.

The cycling modal split is increased from the 3% figure in the census to 13%, on the basis of the significant available on-site parking for residents and the significant increase for cycling in the Greater Dublin area in recent years.

The 35% car driver plus 15% car club user modal splits (50% total vehicle driver modal split) is 10% below the car driver modal split derived from 2016 Census data within section 2 above, and allows for a reasonable level of car storage at the proposed development (residents owning vehicle but not using it for the journey to work). This will help minimise unauthorised on-street car parking in the vicinity of the proposed development.

The section below details the improvements planned to the bus and cycle network that will help insure that the proposed day-of-opening modal splits for the development are maintained if not improved upon into future years.

7.2 FUTURE PLANNED PUBLIC TRANSPORT AND CYCLING NETWORK IMPROVEMENTS

7.2.1 BUS CONNECTS

Figure 7-1 details the Bus Connects proposals, indicating that the D3 route on the high frequency D spine replacing the existing routes.

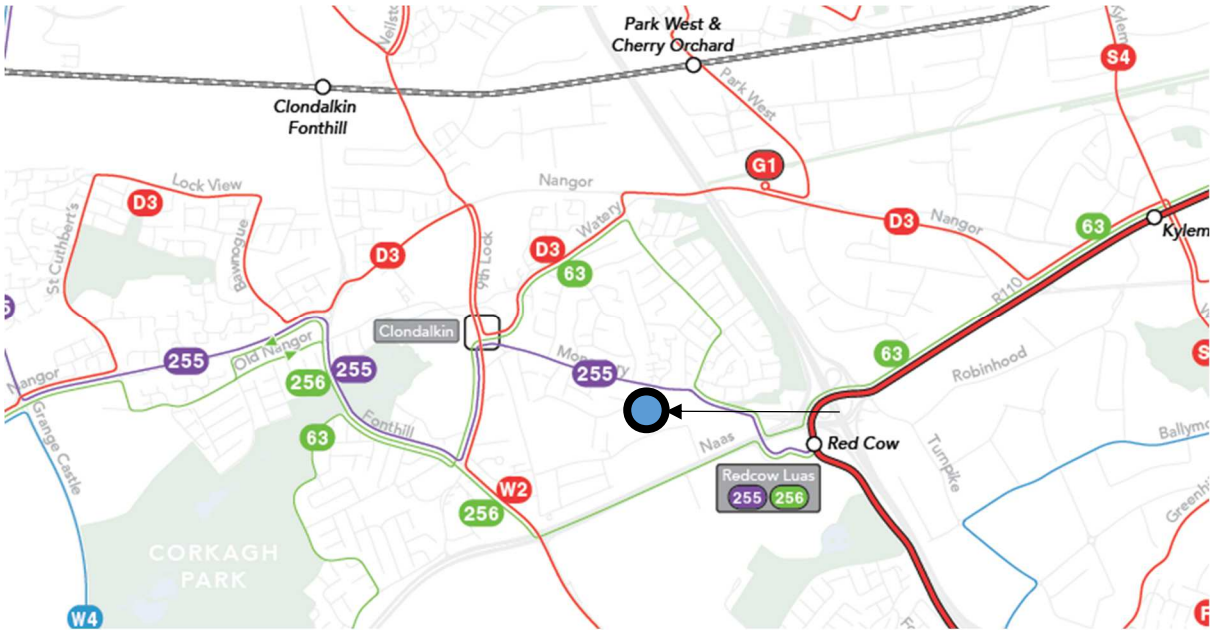

Figure 7-1: Proposed 255 and 63 routes close to Monastery Road

The 255 route along Monastery Road will replace routes 68 and 69.

The general pattern of today's Route 13 remains as the D3 branch, with service every 15 minutes all day, 10 during the peak period. This route differs from the current route mainly in following Nangor Road west of Kylemore, reducing duplication with the Luas Red Line.

Route 255, running every 20 minutes, is the direct link from Redcow to Clondalkin Village but then continues west along Fonthill and Nangor Road and north on Grange Castle Road to connect with the Kildare Line, the W4 orbital and the C1+C2 branch of the C Spine, for ready access to Lucan and Liffey Valley. ST.

Appendix 2 contains the text for the Inner West area from the Bus Connects Report.

7.2.2 GDA CYCLE PLAN

Figure 7-2 details the facilities planned within the GDA Cycle Network Plan.

Figure 7-2: Cycle lane improvements detailed within the GDA Cycle Plan

Residents of the proposed development can gain access to the city via the "7E" route, the secondary route on Monastery Road, with a feeder route along Woodford Hill.

Route 7E links into Route 8A in Walkinstown and runs towards Clondalkin via Ballymount, involving the construction of a new bridge over the M50 south of Red Cow.

Appendix 3 contains the text from the GDA Cycle Network Plan for the Dublin South West Sector.

8.0 OBJECTIVES OF TRAVEL PLAN STRATEGY

8.1 INTRODUCTION

A Travel Plan Framework is a tool that brings together site management issues relating to transport in a coordinated manner. This document puts in place the objectives of the mobility management strategy for the subject site and the specific measures designed to achieve these objectives.

As the proposal includes relative limited on-site car parking, this strategy aims to provide sustainable transport choices for residents and visitors at the site, thus continuing to minimise private car use for the trip to and from the workplace. Specific measures for achieving effective modal shift away from the private car will be detailed.

The aim of this strategy is thus to introduce measures which will maximise the chances that the modal split targets for year of opening are met and maintained thereafter.

The objectives of the Travel Plan Strategy for the proposed development in order to meet the stated targets for the subject site are as follows:

- To manage the availability of the private car for residents (non-work purposes) (Objective No. 1);
- To encourage residents to use public transport by providing information on the services available as well financial incentives to use public transport. New public transport schemes coming on stream will further aid the achievement of this objective (Objective No. 2);
- To encourage residents to cycle to work, if appropriate, by providing safe parking and general information on the health benefits of cycling (Objective No. 3);
- To encourage to walk to work if appropriate, by providing all necessary information on this mode of travel (Objective No. 4).

A number of the proposals listed to achieve and maintain the modal splits detailed within Table 7-1 above are easy and inexpensive to implement. Other measures require initial co-operation and co-ordination both within and between organisations.

The general morale of residents will be, to an extent, dependent on their general state of health and fitness, particularly where, for some, long periods are spent behind a desk working with computers when they get to their workplace. The profile of their journey to work can be a significantly beneficial factor in regard to increased fitness and wellbeing.

8.2 OBJECTIVE NO. 1 - MANAGE PRIVATE CAR AVAILABILITY FOR RESIDENTS (WORK AND NON-WORK PURPOSES)

The promotion of car sharing among residents using the development website can help decrease the car driver modal share and increase the car passenger percentage for work-related purposes.

Rather than all residents requiring access to a parking space in order to have a car available to make non-work related trips for shopping and leisure purposes, an alternative and more sustainable approach is proposed involving the provision of information on car clubs to residents in order to cater for the non-trip-to-work-related car demand.

It is proposed that the Travel Plan Co-ordinator will provide information on the availability of car club vehicles for residents within the development, with 5 No. spaces being provided initially.

Such actions will have the effect of reducing the modal split for car drivers to 35% for the journey to work, with 15% of commuters using the car club facilities.

8.3 OBJECTIVE NO. 2 - ENCOURAGING GREATER USE OF PUBLIC TRANSPORT FOR THE JOURNEY TO WORK

8.3.1 GENERAL

Public transport will be a favoured transport option for a predicted 17% of residents at the proposed development on its day of opening.

The Bus Connects development, in the longer term, will significantly improve public transport services at the subject site.

8.3.2 PUBLIC TRANSPORT INFORMATION

It is vital that timetable information is available to residents in order to encourage maximum usage of the public transport system. Dublin Bus and LUAS timetables should be posted on the notice board within the apartment complex and / or the web site to be set up by on-site management.

8.4 OBJECTIVE NO. 3 - ENCOURAGING MORE RESIDENTS TO CYCLE TO WORK

Cycling will be a favoured transport option for a predicted 13% of residents at the proposed development on its day-of-opening. There is significant scope to increase this modal share further once the GDA cycle plan is implemented.

The provision of 310 No. cycle parking spaces on site will also help both achieve and strengthen this modal split, providing the possibility of cycle ownership for all residents.

8.5 OBJECTIVE NO. 4 - ENCOURAGING MORE RESIDENTS TO WALK TO WORK

Walking will be a favoured transport option for a predicted 7% of residents at the proposed development on its day of opening.

Maintenance of this modal share will be facilitated by noticeboard and website information on quickest routes to town, nearby districts and closest bus stops / LUAS stop.

9.0 ROLE OF THE TRAVEL PLAN COORDINATOR FOR THE PROPOSED RESIDENTIAL DEVELOPMENT

9.1 APPOINTMENT OF TRAVEL PLAN COORDINATOR

It will be the intention of on-site management at the proposed development' that a Travel Plan Coordinator be appointed to administer, implement, monitor and review travel plan management issues within the residential component of the proposed development. The coordinator will also liaise with the local authority, public transport companies and facility managers on issues relevant to the maximisation by commuters of non-car based journeys to work.

9.2 DUTIES OF THE TRAVEL PLAN COORDINATOR

The application is founded on minimal use of the private car by all residents and the maximization of travel by soft modes and public transport.

The co-ordinator will have a vital role in encouraging and enabling residents at the subject site to adopt the measures listed within the document to achieve the objectives listed above within section 8. The duties of the co-ordinator are detailed below under the following headings:

- Promoting the environmental and health benefits of their travel choices
- Promoting bike use
- Promoting walking to work
- Promoting rail and bus based travel
- Monitoring the modal splits for residents' journey to work

9.2.1 Promoting the environmental and health benefits of their travel choices

It will be the duty of the coordinator to make residents aware of the environmental and health consequences of their travel choices. Various media should be employed in order to communicate this message. These could include a newsletter and a mobility website, and providing information on issues such as available public transport services, where to buy a bike, and the health benefits of cycling / walking.

9.2.2 Promoting bike use

The coordinator can promote the use of this mode of travel using other measures such as the setting-up of a cycle users group so that experienced cyclists within the development can help encourage newcomers to the mode of travel. The coordinator can also help by keeping tool kits and spare parts on site for cyclists to avail of. The web site and newsletter could also be an aid to encouraging the mode of travel by encouraging the potential timesavings involved. In addition, the coordinator can keep in contact with the local authority to monitor the progress in implementation of the proposed cycle track network in the locality.

It would also be possible for management at the proposed residential development to agree a group bicycle insurance scheme for residents at preferential rates in order to maximise its use as a mode of travel to work.

In addition, management might subsidise the cycling mode by purchasing an initial stock of bicycles to loan to residents at preferential rates. Such a scheme would not be expensive and would have the added benefit of raising awareness of it as a mode of travel and generally encouraging cycle use.

9.2.3 Promoting walking to work

As with cycling, the coordinator should promote the health and fitness benefits of walking and its general viability as a method of getting to work. The coordinator can also liaise with the local authority on work being done near the candidate site to make the local road network more pedestrian friendly.

9.2.4 Promoting rail and bus based travel

The coordinator will promote a public transport culture among residents. The coordinator can use the newsletter and website to provide information on public transport, in particular timetable information, fares, bus and / LUAS stop location and route planning, together with information on annual and monthly public transport tickets, carrying potential tax benefits for commuters.

9.2.5 Monitoring the modal splits for the residents' journey to work

In order to maximise the effectiveness of the Travel Plan, the coordinator should be responsible for the ongoing monitoring of the modal splits within the plan, including the carrying out on a regular basis of travel surveys of all on-site residents.

10.0 CONCLUDING COMMENT

This Travel Plan is required to insure the sustainability of the limited provision of car parking at the subject site, consistent with the New Apartment Guidelines but below the maximum provision as detailed by the planning authority.

This report has demonstrated that the proposed reduced car parking provision for the residential development is entirely sustainable based on current car ownership and modal splits for the journey to work for existing residents living within Electoral Districts close to the subject site. It is also entirely in line with recommendations on parking provision set out in the *'Sustainable Urban Housing: Design Standards for New Apartments (Guidelines for Planning Authorities): March 2018'*

A parking provision of 0.6 spaces per apartment unit is sustainable, given that car usage for the journey to work is projected to be in the region of 35% on the proposed day of opening of the development, 5% travelling as car passengers and 15% as car club users (car storage will be available to 10% of residents).

A split of 27% is predicted for public transport / slow mode usage, with 13% allocated to the cycling mode based on the significant quantum of parking provided on-site for residents.

The Residential Travel Plan within this report aims to achieve a sustainable travel culture for residents at the residential development by outlining a travel strategy, by listing measures to achieve its objectives and by committing to appoint a travel plan coordinator to oversee and monitor progress towards the target modal splits predicted for the site on its day of opening.

The measures within this document will help reduce private car usage to 0.35 trips per apartment unit, from its present value of 60%, thus minimising the traffic impact of the proposed development on the adjacent Monastery Road / Woodford Hill roundabout. This is significant given the existing congestion at this junction. Hence, the implementation of the measures within this document is a significant mitigating factor, aimed at minimising the traffic impact of the proposal.

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APPENDIX 1 TRAVEL PLAN PYRAMID


The travel plan pyramid
Promotional Strategy
Services & Facilities
public transport; car clubs; parking management; sub-site travel plans etc.
Coordinator
To develop further measures and oversee the plan on an ongoing basis
Built Environment
Site design; public transport infrastructure; facilities to reduce the need to travel; parking provision; off-site measures
Location
Proximity to existing facilities and services

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APPENDIX 2 BUS CONNECTS - TALLAGHT

H3: Map E9, P9 Inner West

In this area, we worked to simplify overly complex routing, improve frequencies, introduce new orbital service, and add service to developing areas, especially in Adamstown.

The proposed interchange on the north side of Liffey Valley Shopping Centre, adjacent to the pedestrian bridge to the bus stops on the N4 motorway, will dramatically expand connection opportunities and thus the destinations that can be reached.

Orbitals

The most dramatic improvement is in orbital service.

New orbital Route W2 is generally the existing Route 76 from Liffey Valley to Tallaght, but upgraded to 15 minute frequency. The new connections at Liffey Valley will also make this route useful to reach more places.

Route W4 forms a new direct link between Blanchardstown and Liffey Valley, then continues south on Grange Castle Road, serving a Kildare Line station and onward to City West and Tallaght. This service is designed to provide useful access to several concentrations of employment, and to make many connections so that these destinations can be reached from all over the west side of the city. The route would run every 30 minutes all day, but every 15 minutes during peak commute hours.

Finally, the frequent orbital (every 10 minutes) **Route S4** is designed to create direct service from Liffey Valley and Ballyfermot across the southern side of Dublin, including Crumlin, Terenure, Milltown, and finally UCD.

Lucan and Ballyfermot

The **C Spine**, running every 6 minutes all day and every 3 minutes during the peak period, is the main service from the city centre to Lucan and all points west and south. At Grange Castle Road it splits into two patterns.

- **Branches C1 and C2, which are every 12 minutes when together**, turn south along **Ballyowen Road**, then split further to cover the two sides of Griffeen Valley and all parts of Adamstown (similarly to existing Routes 25a and 25b). These end at Adamstown station, providing new opportunities for access to Lucan from the points on the commuter rail line.
- **Branches C3 and C4, also every 12 minutes when together, proceed west through Lucan Village and on to Leixlip,** where they branch further to serve both Maynooth and Celbridge.

In addition to C Spine service, several overlaying services (Routes 320 to 326) provide additional peak hour capacity to the city centre and UCD.

Route G2, a frequent branch of the G Spine is identical to today's Route 40 in this area. It provides a radial path from Neilstown and Ballyfermot into the city centre. At the west end, it loops around to end at Liffey Valley, providing direct service to Liffey Valley from all of the neighbourhoods to the south. The other branch of the G Spine serves the Park West area.

Lucan also features two infrequent local services:

- **Route 251** operates once an hour between Adamstown and Liffey Valley Shopping Centre. Its primary function is as an occasional link between residential neighbourhoods and shopping destinations, in some ways replacing the southern portion of existing Route 238.
- **Route 252** provides service every 30 minutes between Adamstown and Lucan Village, ensuring that Dodsborough and Weston Estate are connected to the all-day network. Every other bus on Route 252 continues from Lucan Village to Blanchardstown via Clonsilla.

Clondalkin

Clondalkin service is only modestly streamlined. **The general pattern of today's Route 13 remains as the D3 branch,** with service every 15 minutes all day, 10 during the peak period. This route differs from the current route mainly in following Nangor Road west of Kylemore, reducing duplication with the Luas Red Line.

Lower-demand parts of Clondalkin would be local routes feeding into the Luas Red Line at Redcow. **Route 255, every 20 minutes, is the direct link from Redcow to Clondalkin Village** but then continues west along Fonthill and Nangor Road and north on Grange Castle Road to connect with the Kildare Line, the W4 orbital and the C1+C2 branch of the C Spine, for ready access to Lucan and Liffey Valley.

The lowest demand areas are served by an hourly local, Route 256, and hourly radial route 63. Both routes mostly cover areas that are within walking distance of a more frequent service. The routes exist to serve the very small areas where this is not the case. As a result, the market for these services is even smaller than it may appear, and the low frequency is proposed as a result

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APPENDIX 3

GDA CYCLE PLAN – SOUTH WEST

3.6. Dublin South West Sector

The Dublin South West Sector extends outward from the twin corridors of Camden Street and Clanbrassil Street in the city centre, through the inner suburbs of Rathmines and Harold's Cross, to serve the areas of Terenure, Kimmage, Walkinstown, Tallaght, Firhouse and Rathfarnham. There is considerable overlap between the West and South West sectors, with interconnecting routes between the two. Some radial cycle routes originate in one sector at the city centre but end up in the neighbouring sector.

Refer to Maps E1, E6 and E7 in Part 2 for illustration of the existing main cycle routes in this sector. The existing cycle traffic flows in this sector are shown on Map DD3 in Part 7.

3.6.1 Dublin South West - Proposed Cycle Route Network

The cycle route hierarchy is shown on Maps N1, N6 & N7 in Part 4a.

Radial Routes in the Dublin South West Sector

Due to the peculiarities of the general road network in this sector, which lacks high capacity main traffic arteries unlike most of the rest of the city, the cycle route network is quite complex. The main cycle routes in this sector form a web of criss-crossing routes, with various spurs and cross links, as follows:

Route 7

Route 7E is a cross-link from the West sector into the South West sector. It branches off Route 7D on the Naas Road at Kylemore and follows Robinhood Road through the Ballymount industrial area to **cross the M50 on a new bridge** between Junctions 9 and 10 at Ballymount Cross, and then outward through the areas of Kingswood, Belgard, Cookstown, Fettercairn and Cheeverstown at the northern edge of the Tallaght suburbs.

Route 8 from South Great George's Street via the Coombe area and Dolphin's Barn to the junction of Crumlin Road and Sundrive Road (Route SO2);

Route 8A follows Crumlin Road past the Children's Hospital, Bunting Road to Walkinstown, through Ballymount to cross the M50 at Junction 10 and out to Citywest / Fortunestown via Belgard;

Route 8B branches off Route 8A midway along Crumlin Road at Windmill Road and follows a slightly meandering route mainly along minor residential streets through Crumlin Cross and Greenhills to Tymon Park and onward to Tallaght via the outer end of the Greenhills Road. It is a much better alternative to the existing route via the very busy and intimidating Walkinstown Roundabout and the narrow section of Greenhills Road along the edge of the Ballymount industrial area; and

Route 8C from Donore Avenue south of Cork Street via Clogher Road and Kildare Road through the heart of the Crumlin residential district to Our Lady's Children's Hospital on Crumlin Road where it crosses Route 8A; then along Drimnagh Road and Long Mile Road to cross the Naas Road (at a very difficult junction), and then via Nangor Road to the Park West area, with two branches towards Palmerstown to the north and to outer Clondalkin further west

Route 9 towards Tallaght along Clanbrassil Street and through Harold's Cross, where it branches into two main spurs;

Route 9A follows Kimmage Road to the Kimmage Cross Roads (KCR), then Fortfield Road and Wainsfort Road to join the N81 Templeogue Road and onward out to Tallaght town centre. (The section of this route through Kimmage and Harold's Cross is poor for cyclists with minimal and part-time advisory cycle lanes. There is no scope for improvement due to the narrowness of the road and close proximity of buildings. A better alternative is available via the proposed *River Poddle Greenway* as described later, which follows closely parallel to the west of the road. West of the KCR the route improves considerably for cyclists with better cycle lanes or cycle tracks);

Route 9B splits from Route 9A at Harold's Cross and follows Terenure Road through Terenure Cross and then Templeogue Road through Templeogue Village to re-join Route 9A at Templeogue Bridge. This route provides inter-connection with Route 10 towards the southeast city centre via Rathmines;

Route 9C is an alternative to the Harold's Cross route from Route 8C at Clogher Road via Stannaway Road west of Kimmage and then along Wellington Lane to join Route 9A at Spawell to connect to Tallaght. It also provides a continuation from Route 9A west of Tallaght via Fortunestown and Citywest to Saggart;

Route 9D would provide a traffic-free option branching off Route 9A at Kimmage Cross Roads and following the *River Poddle* Greenway to Tymon Park where **a new bridge is required over the M50** in the centre of the park to connect with Castletymon Road and rejoin Route 9A. West of Tallaght it provides a loop through Jobstown along the N81 and then northward into Citywest; and

Route 10 from Camden Street through Rathmines, Rathgar and Terenure to Rathfarnham, where it splits into several branches. South of Rathfarnham there are 3 branch routes that extend southward through the surrounding suburban area to connect with Orbital Route SO6 along Grange Road and Taylor's Lane;

Route 10A turns south-westward along Butterfield Avenue (also on Route SO4) and runs parallel to the River Dodder to Firhouse and Oldcourt beside Old Bawn Bridge on Orbital Route SO6. Knocklyon Road and Ballycullen Road are local secondary routes that branch off southward at various points. There are also northward links across the River Dodder to Radial Route 9 at Spawell and Templeogue Bridge;

Route 10B follows Willbrook Road and Ballyboden Road southward;

Route 10C along Grange Road; and

Route 10D along Nutgrove Avenue for a short section and then turns south via Stonemason's way to Ballinteer.

Traffic data for the radial routes indicates peak period volumes ranging from about 800 cyclists on Route 10 at Rathmines Road, nearly 700 cyclists on Route 9 at Clanbrassil Street and 150 cyclists on both Route 8C at Clogher Road and Route 8A at Crumlin Road. Further out in the suburbs, the cycle traffic model indicates moderately strong demand of 200 to 400 cyclists on Routes 9 and 10 out to just beyond Rathfarnham and Templeogue. Otherwise there are fairly low flows in the range of 100 to 200 on the various secondary routes in the South West sector, and also on Primary Route 9 to Tallaght, which is about 10km from the edge of the city centre. There are likely to be more local trips on the various routes that are not reflected in the model.

Orbital Routes in the Dublin South West Sector

There are six orbital routes in this sector that provide cross-links between the radial routes and give access to destinations within this sector, and in the adjoining West and South Central sectors:

Route SO1: Grand Canal Route linking from Rialto eastwards via Harold's Cross Bridge and Portobello Bridge to the Dublin 2 and Docklands office district;

Route SO2: From Kilmainham in the northwest through Crumlin, Kimmage, Harold's Cross and Rathmines to Ranelagh and Ballsbridge via Sundrive Road, Kenilworth Road and Castlewood Avenue;

Route SO3: From Rathgar and Dartry to Milltown, Clonskeagh and Ballsbridge, mostly along the proposed *Dodder Valley Greenway*. This route links to UCD at Clonskeagh. There is a connection from Tallaght via Route 9A at Oldbridge Road in Templeogue;

Route SO4: from Dundrum, Churchtown and Nutgrove through Rathfarnham and Templeogue to Greenhills and Walkinstown;

Route SO5: Dundrum to Tallaght via Ballyboden and Knocklyon and Firhouse. It will require new permeability links between Nutgrove, Ballyboden and Templeroan. Otherwise the route could overlap with SO6 for a short section along Taylor's Lane; and

Route SO6: Dun Laoghaire to Tallaght via Ballycullen and Old Bawn.

Other Secondary Cycle Routes in the Dublin South West Sector

In addition to the numbered radial and orbital cycle routes named above, there are also several other local secondary cycle routes that extend the network across the wide suburban area. Examples are Ballyroan Road in the Rathfarnham area, Knocklyon Road, Ballycullen Road, Kiltipper Road and Cookstown Road with a link to Fortunestown Way in the Tallaght area. Route numbers are not proposed for these routes as they are of local function only and do not form part of the long distance cycle routes that extend across the wider city area.

Existing Permeability for Cyclists in the Dublin South West Sector

The cycle network maps N6 and N7 show where cyclists can permeate through blocks within the road network by using quiet streets and roads that do not require cycling facilities due to the low volume and speed of traffic. Most residential areas in the southwest are quite permeable with a dense network of local roads that provide many convenient route options for cyclists. This feature did give rise to some difficulties of inappropriate through traffic and traffic calming has been installed on many roads in areas such as Crumlin and Templeogue.

Where there are obstacles to permeability, there are several good examples of pedestrian and cycle links as follows:

- Cowper Link from Dartry to Sandford: This crosses the Luas Green line at the Cowper stop and follows quiet residential streets for form an orbital connection between the Dartry/Rathgar area at Highfield Road and Sandford Road in the southern part of Ranelagh;
- River Poddle crossing at Bangor Road: There is a footbridge that provides a link between the Crumlin area and Kimmage Road Lower;
- Templeogue Woods link to Templeogue Road and Cypress Grove Road; and
- In the outer areas of this sector, there are many open public green areas that enable walking and cycling links between housing estates. Good examples are in the areas of Cookstown and Fortunestown as shown on Map N6. Formal cycle tracks are proposed through these green areas with dished kerb accesses and toucan crossings of main roads such as shown in the following photograph.

Existing Greenways in the Dublin South West Sector & Problems at Public Parks

There are no formal greenways at present in the Dublin South West sector, although there is great scope to provide an extensive network of such traffic-free cycle routes through public parks and less formal open green spaces. South Dublin County Council has provided barriers at most entry points to certain parks in the county, which in some cases limit cyclists' access to an extensive network of parks with potential for pleasant and safe cycling away from traffic. The situation is similar in the older parts of this sector within the Dublin City Council area, such as at Eamonn Ceannt Park and Stannaway Park in Crumlin.

Route 9C: Barrier at Entrance to Eamonn Ceannt Park on Sundrive Road

The proposed cycle route network includes a suggested feeder cycle route along Stannaway Road and through Eamonn Ceannt Park to link to Secondary Radial Route 8C at Clogher Road. This would pass through the gate shown in the photo above.

A good example of cycle-friendly access is shown in the following photograph of the edge of Bushy Park alongside Templeogue Road where there is a formally designated shared footpath and cycleway.

Shared Walkway/Cycleway at Bushy Park, Templeogue Road, Terenure

3.6.2 Dublin South West - Proposals for Cycle Route Network Additions and Improvements

A cycle network study for the Tallaght area was previously prepared by South Dublin County Council (SDCC) in 2011. This study addressed the cycle access routes to the central county town of Tallaght and links towards Dublin City Centre. These proposals include the following key routes:

(a) New cycle facilities along parts of Radial Cycle Route 9A from Templeogue to Tallaght, and the N81 Blessington Road dual carriageway adjoining westward to the R136 Cookstown Road junction;

(b) Dodder Valley Greenway from Templeogue to Bohernabreena: a joint study (along with NTA, DCC and DLRCC) was completed in late 2012;

(c) Wellington Lane cycle route from Spawell to Templeville Road at Greenhills (Route 9C);

(d) Tallaght to Ballyboden cycle route along Old Bawn Road and via the Dodder Valley Park and Knocklyon with a new bridge across the River Dodder (Route SO5);

(e) Upgrades to Orbital Cycle Route SO6 between Scholarstown and Old Bawn via the Ballycullen area;

(f) Upgrades to Orbital Cycle Route SO5 along the Belgard Road between Tallaght and Clondalkin;

(g) Upgrades to Greenhills Road, which forms part of Radial Cycle Route 8B from Tallaght towards the city centre via Tymon Park and Greenhills. North of the M50 bridge crossing Greenhills Road becomes very narrow and bendy with increasing frontage constraints nearer to Walkinstown. This section of road is proposed as a feeder route only, with a better through route 8B available to the south that avoids the very busy Walkinstown Roundabout;

(h) Upgrades along Whitestown Way and Cookstown Way, a local Secondary Cycle Route that passes just west of Tallaght Town Centre;

(i) Jobstown Stream Greenway from Sean Walsh Park on Old Bawn Road through the Killinarden area to Jobstown;

(j) New cycle facilities and upgrades along the Route 9C at Fortunestown Way/Lane towards Saggart; and

(k) Improvements on Orbital Route SO6 at Kingswood Interchange on the N7 Naas Road crossing (linking to Radial Routes 7C and 7D).

The current proposals by Dublin City Council for additional or improved cycle routes in this sector consist of the following:

(a) Grand Canal Greenway extension westward from Portobello Bridge to Blackhorse;

(b) New cycling facilities along Radial Cycle Route 8C from South Circular Road along Clogher Road and Kildare Road to Crumlin Hospital;

(c) Improvements to cycle lanes along Bunting Road (Route 8A) from Crumlin Hospital to Walkinstown Roundabout;

(d) New cycle facilities along Orbital Route SO4 from Walkinstown Roundabout to Kylemore and Ballyfermot;

(e) Upgrades to Radial Cycle Route 9B along Harold's Cross Road, Terenure Road and Templeogue Road; and

(f) Upgrades to Radial Cycle Route 10 along from Portobello Bridge on the Grand Canal along Rathmines Road and Rathgar Road to Terenure Cross.

Additional Cycle Route Network Proposals

A gap analysis has confirmed that the existing local authority proposals are quite comprehensive and there is limited need for significant additions to the proposed cycle network in this sector as follows:

(a) Missing section of Radial Route 10A along Butterfield Avenue to Rathfarnham as an extension of the existing cycle tracks along Firhouse Road;

(b) Radial Route 9D along the Blessington Road from Jobstown westwards to Citywest;

(c) Radial Route 8A from Fortunestown to Walkinstown: Complete missing sections and upgrade this route that crosses the M50 at Junction 10, Ballymount, for access to the major employment area;

(d) New traffic-free cycle crossing of the M50 on route 7E from Ballymount to Clondalkin and Belgard;

(e) Radial Route 8B from Tallaght to Greenhills and Crumlin via Tymon Park (New radial route to bypass Walkinstown Roundabout);

(f) Tallaght Town Centre Cycle Network; and

(g) Local route permeability in Tallaght through large blocks of industrial estates:

(i) Mayberry Road Link to Broomhill Road, which connects to Airton Road, into the grounds of I.T. Tallaght and through to Tallaght Village centre;

(ii) Belgard through Cookstown Industrial Estate to Tallaght Hospital and onward to Tallaght Town Centre at Belgard Square North, plus an eastward spur to Airton Road via the Belgard Retail Park; and

(iii) Kingswood to Ballymount Link across the M50 on a new bridge.

New Greenways in Dublin South West Sector

The following new greenway routes are proposed in the Dublin South West Sector so as to avail of the natural corridors for a mix of amenity and commuter cycling:

(a) ***Dodder Valley way:*** This major greenway will extend for a distance of 18km from the City Centre at the Docklands south-westwards to the Dublin Mountains at Bohernabreena.

(b) **River Poddle way & Tymon Park Greenways**

Alternative for Radial Route 9A/9D that is severely constrained in the Harold's Cross and Kimmage areas due to the narrow road corridor. The river corridor is mostly open and accessible between Mount Argus in Harold's Cross and Tymon Park between Greenhills and Tallaght. At Tymon Park there are numerous possibilities for link routes into the surrounding residential areas, with crossings of the M50 on two existing footbridges and one new bridge.

River Poddle at Kimmage Manor

(c) **Jobstown Stream Greenway**: along a tributary of the River Dodder just west of the M50 at Junction 11 and extending westwards for 5km through the southern part of the Tallaght areas of Killinarden and Jobstown to Fortunestown.

(d) **Western Parkway Greenway:** Orbital greenway for cycling along the M50 motorway corridor from the Dodder Valley way at the southern end to the Grand Canal way at the northern end. This route would also provide a second connection between the Tallaght area and the Clondalkin area as an alternative to the busy traffic route of Belgard Road.

(e) **Slade Valley Trail:** a potential route southward from the villages of Rathcoole and Saggart along the upper reaches of the Camac River to Brittas at the edge of the Dublin Mountains. This route is an alternative to the very busy N81 Blessington Road and opens up access to a network of quiet rural roads in West Wicklow.

Bike & Ride to Public Transport Corridors in the Dublin South West Sector

The main radial public transport corridor in the western part of this sector is the Luas Red Line light rail service that extends from the city centre to Tallaght, with a branch from Belgard westwards to Saggart. This light rail line runs generally parallel to Radial Cycle Routes 7B, 7D and 7E. There is a small number of cycle parking stands at each light rail stop, but these lack shelter. Each light rail stop is comfortably accessible by bicycle with cycle tracks along busy access routes, or quiet local roads to stops like Kingswood and Cookstown. At all locations, cycle parking quantum and security will need to be assessed.

In the eastern part of this sector, the main public transport services are bus routes through Terenure and Kimmage. Cycle parking is not provided at bus stops along these routes. Consideration should be given to provision of a few cycle parking stands at key stops along these routes close to intersections with designated main cycle routes.

Rural Cycle Links from the Dublin South West Sector

National Cycle Network Routes in the Dublin South West Sector

Long-distance National Cycle Route No.10 will link Dublin to Cork and Waterford via Kilkenny as outlined in the National Cycle Network (NCN) Scoping Study published in 2010. While no formal route selection studies have yet been undertaken for this route, it is reasonable to assume that it may follow the Grand Canal towpath in the Dublin and north Kildare area because of the very high quality existing facility that is already in place from the city out to Adamstown, which will coincide with Dublin Radial Cycle Route 7B.

Cycle Routes to Rural Towns and Villages in Southwest Dublin

The nearest large towns beyond the Dublin area in this sector are Naas in County Kildare and Blessington in County Wicklow. There are several villages between these towns and the edge of Dublin at Tallaght. Two main routes extend in a south-westerly direction from the city towards these towns as follows:

(a) **Naas Route:** From Naas, cyclists have a choice of two routes to get to Dublin. The most attractive route in terms of Quality of Service will be along the Grand Canal way at Sallins, once it is paved for National Cycle Route 9, even though this is slightly the longer of the two options. The more direct route is generally along the corridor of the existing N7 Naas Road, the main traffic route to the city. This main road is currently unsuitable for cyclists as, apart from the M50 motorway, it is the busiest national route in the country with a high-speed dual 3-lane carriageway and mostly grade-separated junctions.

Cyclists are currently better off following an alternative route via parallel local roads from Naas through the villages of Johnstown and Kill, where there is a good quality shared cycleway/footway provided between the urban areas. East of Kill the local road network is of a lesser quality, without cycle tracks, and deviates southward away from the Naas Road. Traffic volumes are low, however, and cyclists can follow these rural roads towards the Dublin suburb of Rathcoole via the Kiltiel Road. This route is shown on the proposed Inter-Urban Cycle Routes Map Sheet RN5 as K4/K14 from Kill to the Dublin County Boundary and then on Map RN10 as D5 into Rathcoole and Saggart, where it connects with Route 8A towards Dublin city via Ballymount, and Route 9C towards Tallaght and the city via Terenure.

(b) **Blessington Route:** The direct route from Tallaght to Blessington is along the N81 national secondary road, which is a very poor route to cycle because of heavy traffic and lack of hard shoulders for much of the distance in the section between Jobstown and Brittas. A large amount of construction material is supplied from the Blessington area to the Dublin market and there is a significant number of trucks hauling gravel and concrete products along the N81 route. A better route to Blessington is proposed via the R114 regional road that extends from Firhouse via Bohernabreena and over the Ballinascorney Gap. This route is shown on the proposed Inter-Urban Cycle Routes Map Sheet RN8 as W18 through Kilbride to the Dublin County Boundary and then on Map RN10 as D5 into Oldbawn and Firhouse, where it connects with the *Dodder Greenway* or Route 10A towards Dublin city via Rathfarnham.

(c) **Saggart / Rathcoole / Newcastle:** These 3 villages at the south-western edge of the city have grown substantially in recent decades and now form moderately significant dormitories. There is also a large logistics and warehouse park at Greenogue between Rathcoole and Newcastle that attracts trips by staff as well as numerous truck movements. Rural cycle route D5 is shown on Map RN10 as a link between these 3 satellite settlements along the R120 road and onward via city Route 8A to the greater Tallaght area at Fortunestown. This route continues north-westward along the R405 road from Newcastle to Hazelhatch railway station on the Dublin to Cork line, and from there connects into Celbridge in County Kildare. Route D6 links Newcastle north-eastward along the R120 road to Grange Castle and onward to either Clondalkin via Route 8C2 or to Lucan via Route SO7. These two regional roads (R120 and R405) are not comfortable for cycling due to narrow carriageway, bendy alignment and busy traffic including many trucks. Segregated cycle tracks would be required.

Cycling Access Routes to the Dublin Mountains

This sector is bounded to the south by the Dublin Mountains and includes the area of foothills at the northern and north-western side of the mountains. The mountains attract large numbers of recreational cyclists, especially at weekends, who enjoy the challenges of the steep climbs, quiet roads and rugged weather conditions.

Access for cyclists to the mountains is principally available on 3 routes in addition to the Blessington Route at Ballinascorney Gap:

(a) Upper Dodder Valley, Glenasmole;

(b) The *Military Road* from Rathfarnham along the spine of the Dublin and Wicklow Mountains through the Sally Gap to Laragh and beyond. This is shown as Route D2 on Map RN10; and

(c) The Rockbrook Route is a variation on the Route D2 Military Road that is less direct and carries less traffic. There is a branch eastwards to Glencullen that allows a shorter return route to the city via Kilternan or Stepaside in the South East sector. This is shown as Route D2a on Map RN10.

These routes can be combined as a parallel *Dublin Mountain Cycleway* that follows roughly the same line as the *Dublin Mountain Way* walking route. It could form a great loop for a cycling day trip from Dublin City to the mountains via the Dodder Valley (18km), across the northern edge of the mountains to the sea at Shankill (30km) and then back to the city along the East Coast Trail (18km) to make an overall trip of roughly 70km. This is shown as Route D4/D3/D5 on Map RN10. In the westward direction Route D6 extends from the mountains towards Kildare and the village of Rathcoole.

3.6.3 Dublin South West Sector - Existing Quality of Service

The existing Quality of Service (QoS) was assessed for the primary cycle routes and a sample of the secondary routes in the Dublin South West sector. The QoS is mostly in the range of D and C in the eastern and older parts of this sector. There are extensive lengths of QoS level B on the newer roads in the southern and western areas, mostly along the lightly used orbital routes.