

MOBILITY MANAGEMENT PLAN

Residential Development At Kilbarry Cork June 2022



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1.0 INTRODUCTION

- 1.1 MHL Consulting Engineers have been engaged by Cork County GAA Board to prepare a Mobility Management Plan (MMP) in support of a planning application for a proposed residential development on lands in Kilbarry, Cork. The MMP has been prepared with the objective of developing a sustainable transportation policy for residents within the proposed development.
- 1.2 This draft MMP has been prepared in accordance with the requirements of the Cork Metropolitan Area Transport Strategy 2040 (CMATS).
- 1.3 Sources including the Dublin Transportation Office's Advice Note on Mobility Management Plans, and the National Transport Authority document titled "Achieving Effective Workplace Travel Plans: Guidance for Local Authorities", were used as guidance to complete this MMP.
- 1.4 A mobility management plan is best described as a package of measures put in place to promote and support sustainable and active travel patterns amongst the users of the proposed development. The aim of a MMP is to reduce the demand and use of the car and to highlight and facilitate the use of alternative modes of transport. The focus in this instance is on commuting residents as well as employees and users of the creche with the following objectives:
- To inform the user of alternative modes of travel available to them for their journeys.
 - To promote healthier, stress-free, and cheaper options of commuting for residents.
 - Enhance the environment of the development, improve accessibility, and outline the potential advantages to residents of using sustainable transport solutions.
 - To reduce trip generation to and from the site thus reducing parking demand and traffic flow.
- 1.5 The proposed development will consist of a strategic housing development of 319no. residential dwellings comprising of 85no. semi-detached units (comprising of 17no. 4-bed units and 68no. 3-bed units), 118no. terraced units (comprising of 8no. 4-bed units, 60no. 3-bed units and 50no. 2-bed units), 53no. duplex units (comprising of 26no. 1-bed units, 25no. 2-bed units and 2no. 3-bed units) and 63no. apartments (in 3no. part 4 storey and part 5-storey blocks and comprising 15no. 1-bed units and 48no. 2-bed units). The development also includes the provision of a crèche facility (519sqm) and a riverside amenity park to the north and northeast of the site.
- 1.6 The proposed development is located in proximity to working centres and amenities. Existing services within 20 mins walk of the development include the St. Aidan's Community College, SouthDoc Blackpool, Aldi, Woodies, Planet Entertainment Centre, and Planet Health Club. Blackpool Shopping Centre and Office Complex is within 25 mins walk of the development. Kilbarry Business & Technology Park, and Kilbarry Enterprise Centre are significant areas of employment and are within 10mins walk of the site.

Existing facilities for pedestrians are minimal at present but are set to significantly improve with the implementation of CMATS and BusConnects.

2.0 MOBILITY MANAGEMENT PLAN?

- 2.1 There are many benefits associated with the use of alternative modes of travel including improved accessibility, reduced commuter costs, more reliable journey times and less congestion on the network for those who have no choice but to use the car (school runs prior to work etc.). In addition, there are also health benefits for those walking and cycling as well as an overall decrease in stress levels associated with driving and waiting in traffic.
- 2.2 Peak hour congestion on our roads network is now an accepted norm with up to 90% of car journeys having a single occupier and 80% of all car journeys to and from work are by private car. Car-sharing, public transport use or walking even once a week could dramatically change this figure.
- 2.3 To facilitate the necessary change in our approach to commuting, the travelling public will be required to make changes. Alternative modes of travel need to be actively promoted and participation in car-pooling, cycling, and walking groups supported by a Mobility Management Plan Steering Committee. The public must be presented with an alternative to using the motor car and encouraged to do so.
- 2.4 National strategy for sustainable transport is set out in the Smarter Travel Document A *Sustainable Transport Future* the document sets out the following aims by 2020:
- To support sustainable travel, future population and employment growth will have to predominantly take place in sustainable compact urban areas or rural areas, which discourage dispersed development and long commuting.
 - Work-related commuting by car will be reduced from a current modal share of 65% to 45%, which will mean that between 500,000 and 600,000 commuters nationally will be encouraged to take means of transport other than car driver (of these 200,000 would be existing car drivers). Change in personal behaviour will also be necessary for other travel purposes as most travel relates to non-commuting.
 - Car drivers will be accommodated on other modes such as walking, cycling, public transport and car sharing (to the extent that commuting by these modes will rise to 55% by 2020) or through other measures such as e-working.

3.0 EXISTING PUBLIC TRANSPORT INFRASTRUCTURE

3.1 The proposed lands are in close proximity to a number of high frequency bus services. The following figures are taken from the BusConnects online network map and indicate the bus services presently available via bus stops located within 15-min walking distance of the development lands.

The 207 Donnybrook to Glenheights bus route which operates 7 days a week running a 30min service, serves Donnybrook, Douglas, Ballyvolane, and Cork City Centre.

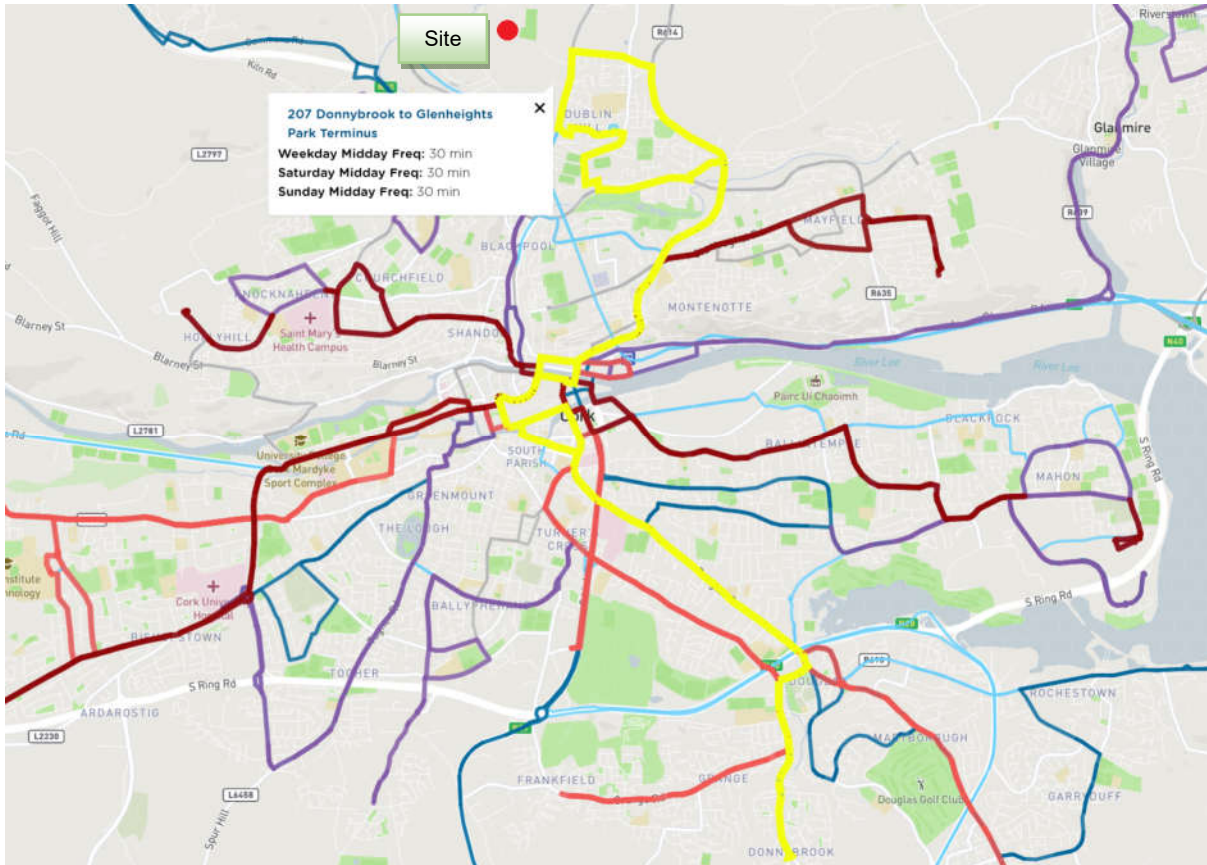


Figure 3.1: 207 Service – Donnybrook to Glenheights

The 207A Glenthorn to Merchants Quay bus route operates 7 days a week running a 60min service travelling via Blackpool and Glen Ave.

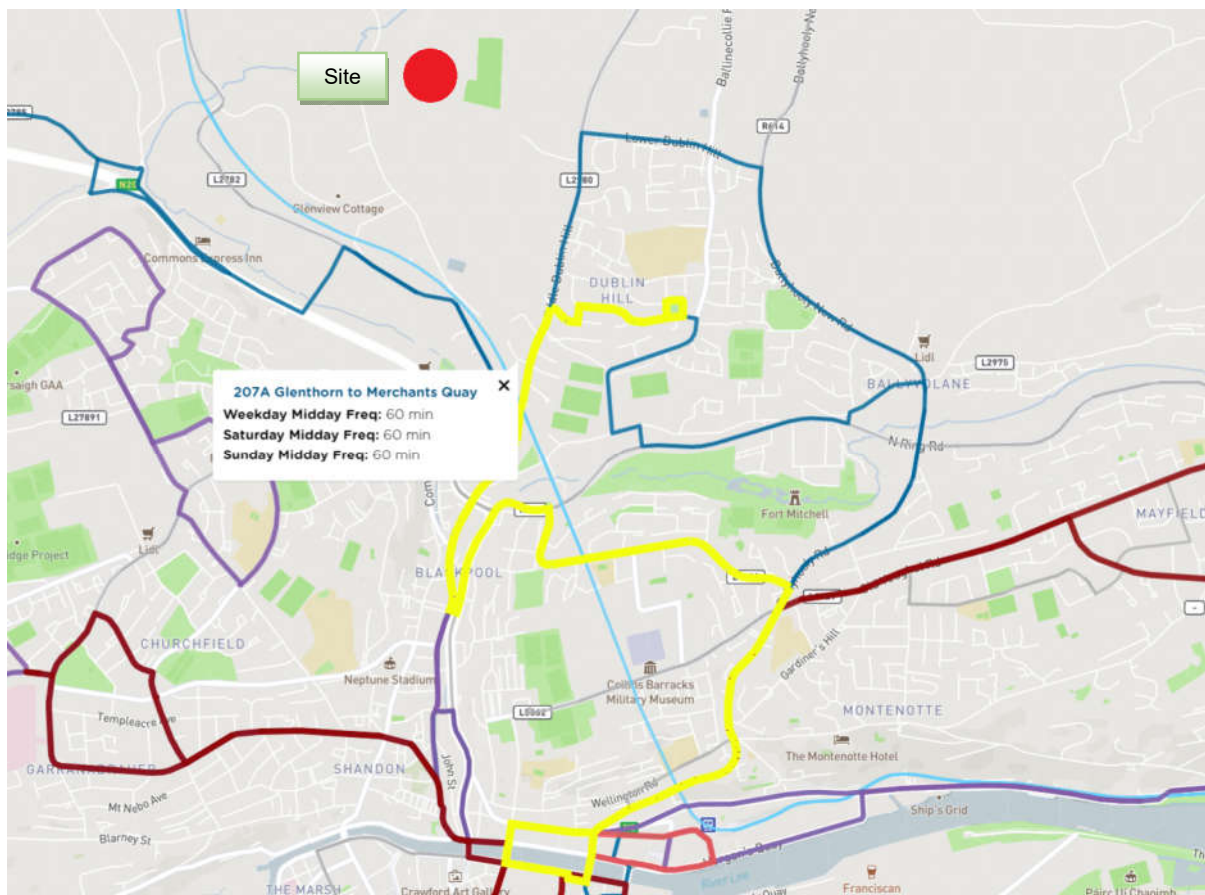


Figure 3.2: 207A Service – Glenthorn to Merchants Quay

The 215-bus service runs a 30min service and serves Blarney, Cork City Centre and Mahon Point. This service runs 7 days a week.

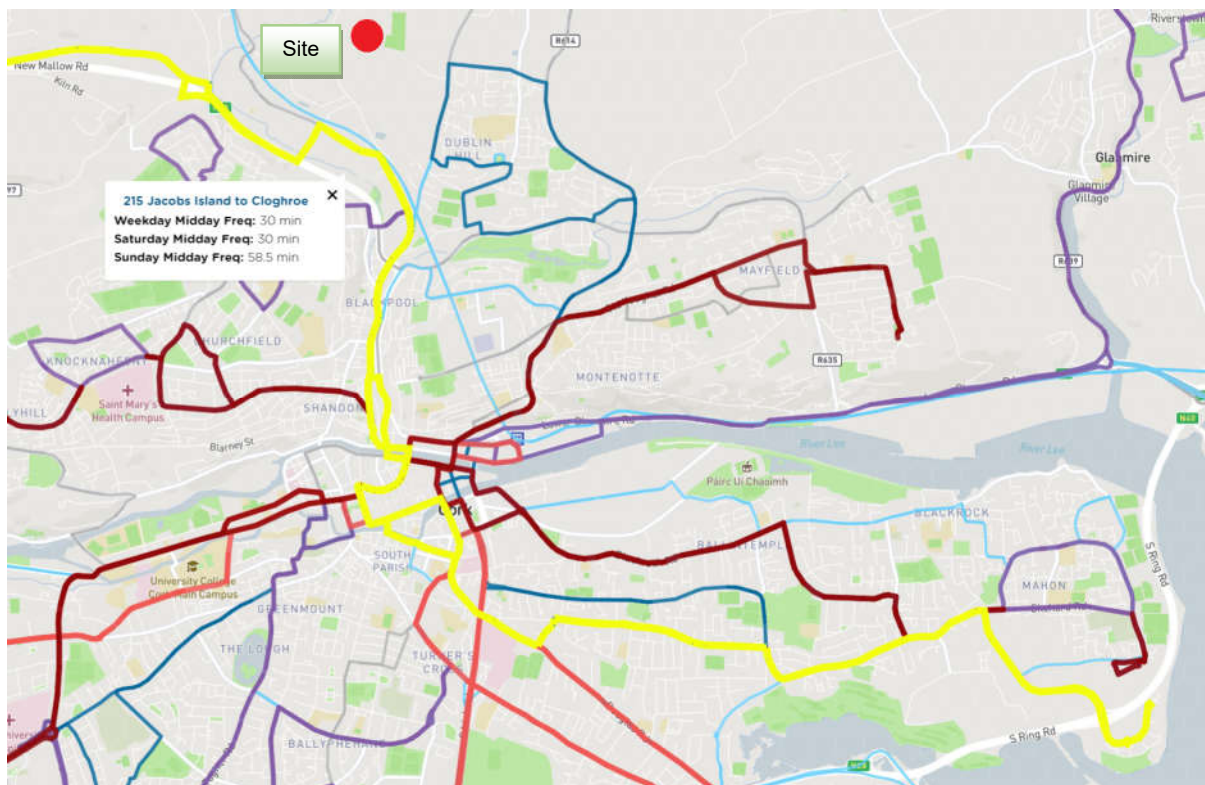


Figure 3.3: 215 Service – Jacobs Island to Cloghroe

Within 25-min walk from the development, the 203 Manor Farm to Fairhill bus route operates a 20min service Monday to Saturday and a 30min service on Sundays.

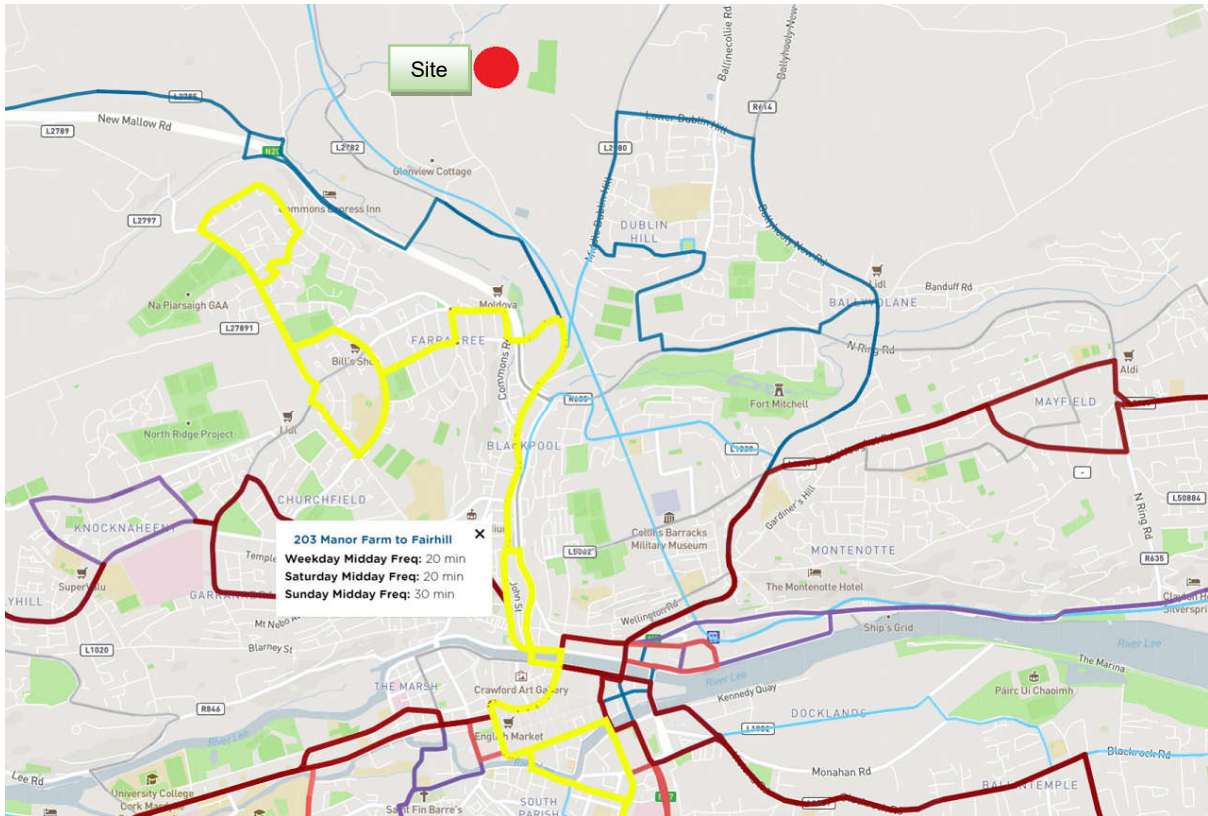


Figure 3.4: 203 Service – Manor Farm to Fairhill

3.2 The following image, taken from the BusConnects website, highlights (in grey) the 60-min travel time from the development site utilising the existing BusConnects network.

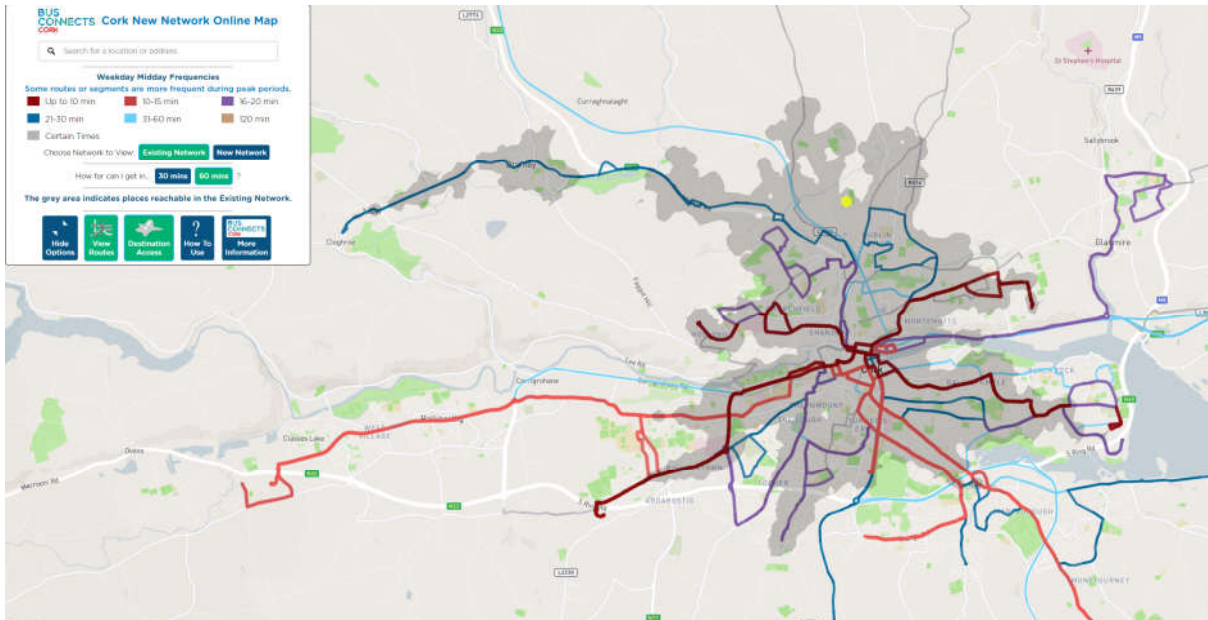


Figure 3.5: BusConnects existing network – 60 mins travel area

3.3 The following isochrone map shows the areas currently accessible by public transport based on time of travel from the site.

Note: The distances include transfers to different services so are indicative only (delay may be experienced during transfer).

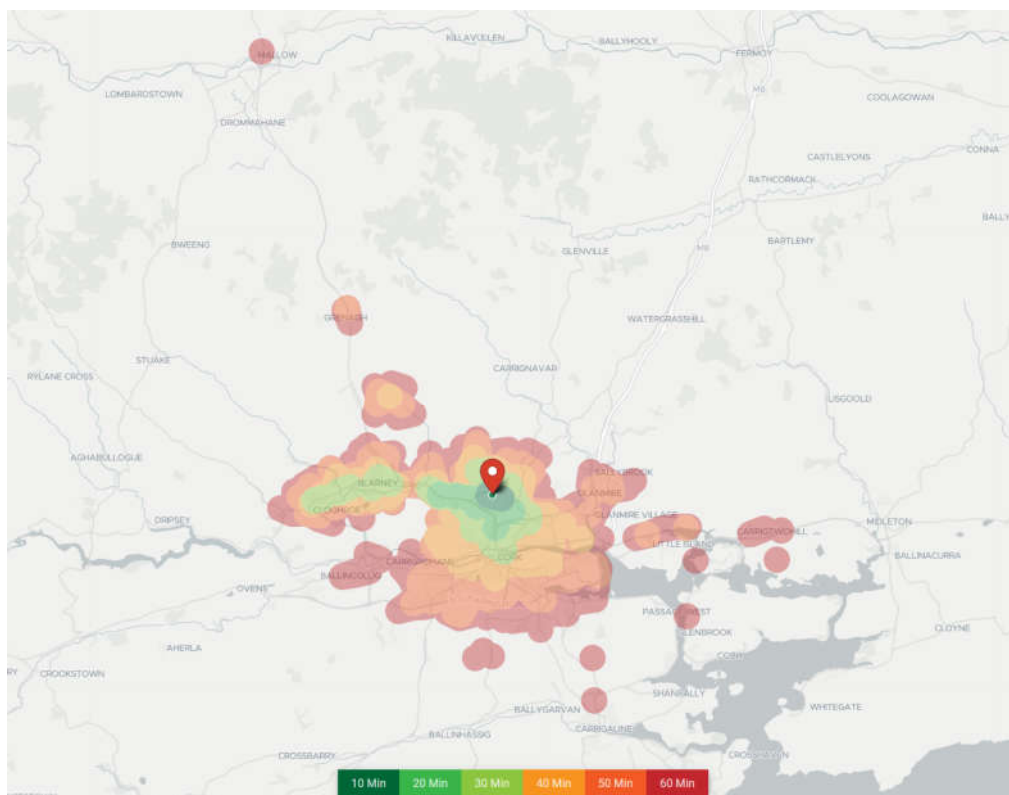


Figure 3.6: Time of travel by Public Transport Options

3.4 Evident from the above figures is that current public transport provision in the area allows travel to a wide area within 60 mins, with many of the main employment centres being within the 40 mins range. A commute time by public transport in excess of 45 mins results in a change in behavioural preference away from public transport. It can be concluded that the proposed development site, by its location, will encourage the use of public transport in-line with national policy.

4.0 FUTURE COMMITTED PUBLIC TRANSPORT INFRASTRUCTURE

4.1 The National Transport Authority (NTA) has launched its new design for the Cork Metropolitan Bus Network. The new network, part of BusConnects Cork, is intended to transform the public transport network across the Cork Metropolitan Area. The new network will involve the creation of new bus routes and improved bus frequencies to help transform the public transport network to meet anticipated growth and future demand in the region.

The new BusConnects network, proposed for implementation starting in 2023, displays a larger coverage area which should help change the transport behaviour away from the private car as more employment centres fall within the 60-min range. According to BusConnects, the new Cork network includes an additional 9,000+ jobs within a 60-min travel time from the development.

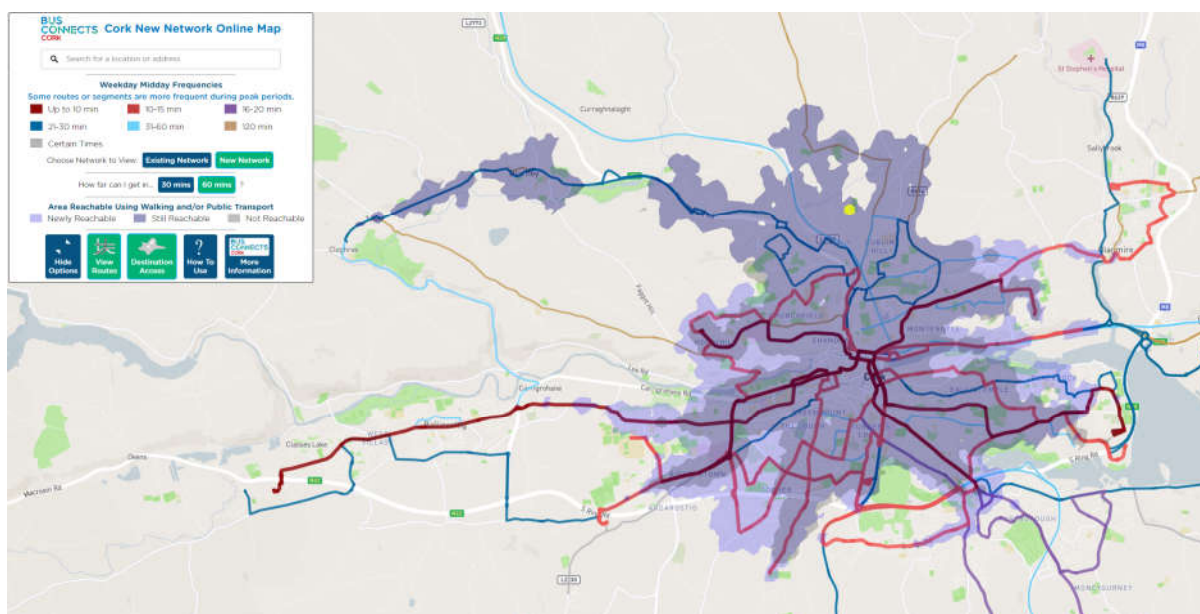


Figure 4.1: BusConnects new network – 60 mins travel area (Site location indicated by yellow dot)

4.2 The Cork Metropolitan Area Transport Strategy 2040 (CMATS) proposes further significant improvements to the public transport facilities in addition to what is proposed through BusConnects. The proposed Blackpool/Kilbarry train station, included as part of the proposed suburban rail network, will offer an alternative more sustainable mode of travel for residents with the proposed station as shown in CMATS located approximately 20-minutes' walk from the site. The train station should have a large impact on the commuter habits of the area by offering a reliable and comfortable travel option into Cork City. According to CMATS, the proposed frequency of trains between the Blackpool/Kilbarry and Kent stations will be 5 minutes. This will provide the fastest option for residents when travelling into the city.

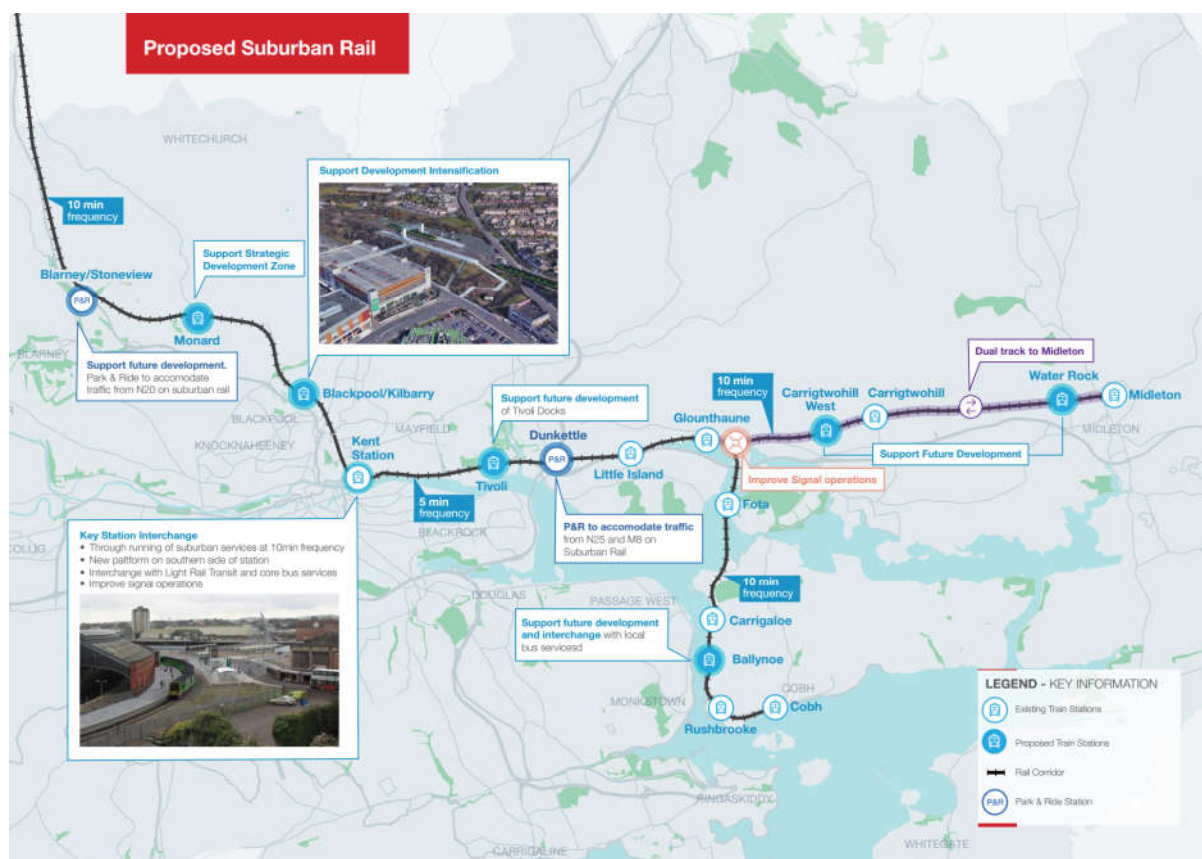


Figure 4.2: CMATS – Proposed Suburban Rail

The above figure, taken from the CMATS report, depicts the proposed Suburban Rail network as well as the proposed location for the Blackpool/Kilbarry station. Access to the proposed station by car is from Dublin Hill, with an additional access from Redforge Rd. for pedestrians and cyclists.

- 4.3 With the provision of these facilities and other incentives as part of national policy, it is anticipated that a shift to public transport will occur. CMATS has provided more certainty for the delivery of these enhancements.
- 4.3 The aforementioned travel times, as shown in **Figure 3.5**, are set to significantly improve as a result of CMATS which will include bus priority at junctions, additional on-road facilities such as covered shelters, real-time arrival departure boards and an increase in frequency of service.
- 4.4 The future Northern Distributor Road, as proposed in CMATS, should result in a significant reduction of pass-thru traffic movements in the area. This will reduce queueing times experienced at junctions in the area resulting in faster travel times.

5.0 ACCESSIBILITY & INTEGRATION

5.1 A desktop assessment of permeability for cyclists and pedestrians from the site was carried out. Presented in the following isochrone maps are the range of distances, for both pedestrians and cyclists, based on travel time. Pedestrians have the benefit of footpaths, but cyclists in most cases are required to use the existing roads and share with other vehicles.

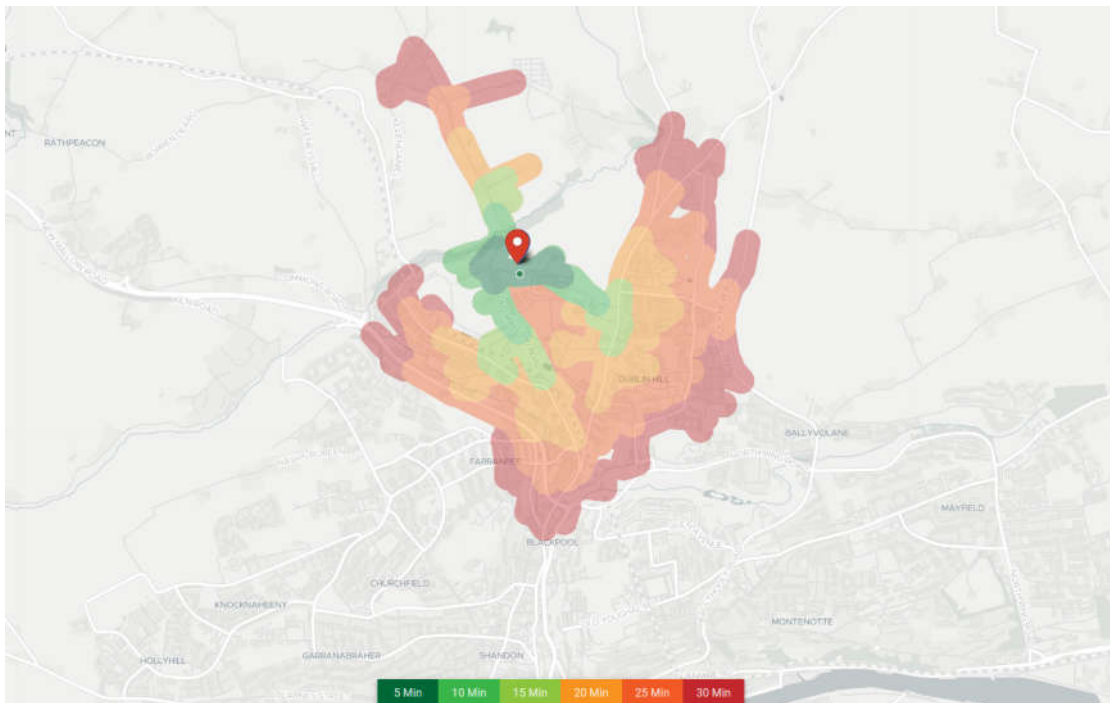


Figure 5.1: Proposed Development: Walking distance to local area

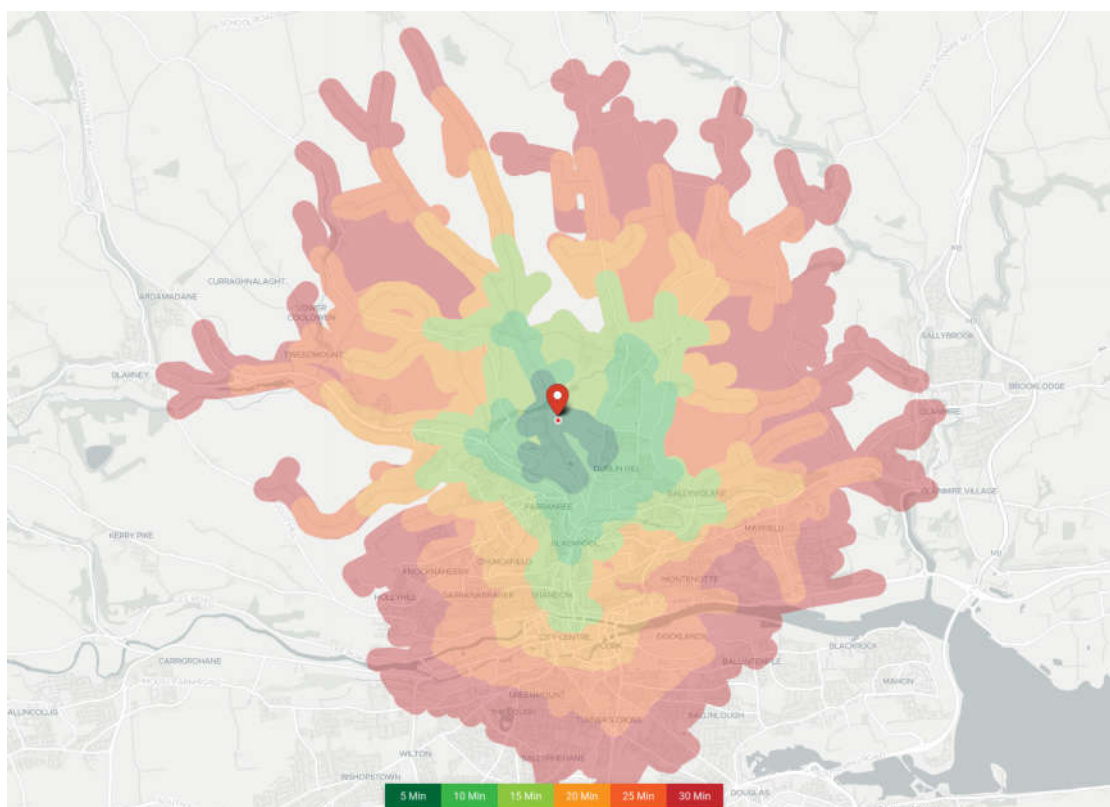


Figure 5.2: Proposed Development: Cycle distance to local area

4.2 Within 5 mins walk time from the site:

- Delany's GAA

Within 20 mins walk time from the site:

- Kilbarry Business & Technology Park
- Kilbarry Enterprise Centre
- St. Aidan's Community College
- Aldi Blackpool
- Woodies Blackpool
- SouthDoc Blackpool
- Planet Entertainment Centre
- Planet Health Club

Blackpool Shopping Centre in its entirety falls within 25 minutes' walk from the site.

4.3 The cycle range is presented in similar terms and relates to the average distance travelled in a specific time (16-19 kmh). Cork City Centre falls within the 20 min category based on unrestricted flow through junctions.

Note: The travel speed used is on the low side, an experienced cyclist would have a 26-30kph average speed, however the speed used is more reflective of the topography in and around the site lands.

6.0 PARKING PROVISION

6.1 The following tables outline the proposed parking provision for the site. Two car spaces have been provided for each house, with a mix of on curtilage and shared parking. One car space is provided for each apartment and duplex apartment, all of which is shared.

CARPARKING PROVISION		MOTORBIKE PARKING	
Housing on curtilage parking @2 spaces per dwelling	182	Block A	2
Housing Shared parking @2 spaces per dwelling	224	Block B	1
Apartments Block E	21	Block C	1
Apartments Block F	21	Block D	1
Apartments Block G	21	Block E	2
Duplex Block A	22	Block F	2
Duplex Block B	9	Block G	2
Duplex Block C	10	Creche	1
Duplex Block D	12	Total	12
Creche	12		
Total	534		

Table 6.1: Breakdown of Car and Motorbike Parking

The following extract from the Cork City Draft Development Plan 2022-2028 indicates that the provision of car parking on-site is in accordance with this plan.

Land Use Category	Zone 1	Zone 2	Zone 3	Zone 4
	City Centre & Inner City	Ballincollig, City Suburbs and areas accessible to mass transit (existing or proposed LRT, Core Bus Network)	Blarney, Glanmire, Tower, Rochestown	Hinterland and Hinterland Villages.
Maximum Standards: 1 space for each unit of gross floor area sq m unless otherwise indicated				
Residential				
Residential (1-2 Bedroom)	0.5	1.0	1 + 0.25 Spaces for Visitor Parking	Case by Case
Residential (3 - 3+ Bedroom)	1.0	2.0	2 + 0.25 Spaces for Visitor Parking	2 plus 0.25 Spaces for Visitor Parking
Docklands	These areas have different car parking standards. Please refer to Chapter 10.			
Tivoli				
Elderly Person Dwellings				
Warden Supervised Group Housing Schemes	0.25	0.5	0.5	1.0
Sheltered Housing				
Residential Institution	None	1 per 20 Bed Spaces	1 per 10 Bed Spaces	1 per 10 Bed Spaces
Student Housing	None	1 per 20 Bed Spaces	1 per 30 Bed Spaces	Case by Case

Table 6.2 Extract from Cork City Draft Development Plan (Table 11.13)

6.2 The following table outlines the bicycle parking provision for the site. There are internal bike storage areas proposed in each of the 3 apartments Blocks E, F and G, along with covered bike storage for the 4 duplex blocks, and some additional bike storage at the crèche.

BICYCLE PARKING PROVISION	
Block A & B	16
Block C	8
Block D	10
Block E	28
Block F	28
Block G	28
Creche	6
Total	124

Table 6.3: Breakdown of Bicycle Parking

7.0 ALTERNATIVES

7.1 The development location allows the user a modal choice for commuting to and from the site. The benefits to the development site are direct and measurable however additional benefits to the wider community should not be ignored. A reduction in car trips implies reduced traffic congestion, enhanced air quality and reduced noise to the surrounding neighbourhood.

7.2 The types of modal choice investigated as part of the Traffic & Transport Assessment carried out include:

- Pedestrian and cycling facilities near the site
- Public transport

7.3 In general, car usage patterns can be grouped between city centre sites and out of town sites. City centre or suburbs would range from 25% to 35% car usage with out-of-town sites higher at 65% to 90%. This scheme would fall into the later category however national policy related to climate change and sustainable travel are expected to impact on the current norms. This scheme is compatible with such policy.

7.4 Pedestrians & Cyclists

Upon implementation, the MMP will promote walking and cycling as part of a daily exercise routine and will provide information on routes, journey times and calories burned. Indeed, the location of this particular proposed development is convenient for most pedestrians.

The proposed development includes pedestrian access to the existing footpaths along Old Whitechurch Rd. and on Kilbarry Enterprise Centre Rd leading to Upper Dublin Hill granting access to the wider footpath network and bus service.

In relation to cycling, the site does not benefit from existing cycle facilities on the surrounding road network and cyclists will be required to share the road until a time when public realm connectivity improvements are developed and delivered.

*“ 30 minutes of aerobic activity, such as a brisk walk,
per day helps reduce the risk of heart disease’*

(Reference, ‘The Route to Sustainable Commuting, An Employers Guide to Mobility Management Plans produced by the Dublin Transportation Office, Kilkrees Metropolitan Council and the Irish Energy Centre)

7.5 Public Transport

The proposed development is well served by regular bus routes as noted in Section 3.0 of this plan. The availability of a public transport system allows users of the proposed development an alternative mode of travel. The mobility management plan developed for the completed scheme will include for incentives such as;

- Monthly/annual commuter ticket schemes/offers
- Timetables, routes, and maps
- Journey time indicators
- Government supported programs to encourage people to use public transport

As highlighted in Section 4.0, future committed proposals per CMATS and BusConnects include the Blackpool/Kilbarry train station and an improved bus network in close proximity to the development. These projects upon completion will provide more public transport options for residents.

8.0 CONCLUSIONS & RECOMMENDATIONS

- 8.1 In conclusion, the site location is well situated for the implementation of a Mobility Management Plan promoting alternative modes of transport especially for commuters travelling in to Cork City.
- 8.2 The proposed development is in proximity to a number of frequent bus services providing access to a number of major employment centres, included Cork City Centre, all within a 40-minute travel time. Major employment centres such as Blackpool Retail/Office Park, Kilbarry Business Park and the Kilbarry Enterprise Centre are all within walking distance of the site.
- 8.3 All sustainable modes of transport will be promoted as part of a marketing campaign for the site which will include actively encouraging public transport, walking, and cycling as viable modes of transport for residents.
- This can be achieved via the circulation of useful information such as routes, exercise plans etc. Cycle Planner Apps are useful in planning routes that avoid roads with heavy traffic and avoid difficult turns at busy junctions. Walking & cycling societies could be formed to create a community culture around the activity. Attention should also be drawn to the regular bus route from the city centre. A bulletin board could be placed in the lobby of apartment blocks or other such communal areas where information on all alternative transport modes could be posted.
- 8.4 There are no existing cycling facilities in the area around the development. At present, cyclists will be required to share the road with vehicles. Both the access from Old Whitechurch Rd. and from Dublin Hill are within the 50kph speed limit.
- 8.5 The proposed Blackpool/Kilbarry train station, to be located approximately 20-minutes' walk from the site, will have a large influence on traffic patterns in the area. The promise of high frequency (5-minute), reliable service in comfortable surroundings will be very attractive for residents travelling to the city centre and beyond.
- 8.6 The new BusConnects network, anticipated to start in 2023, will provide an enhanced bus service offering to residents. This should further encourage residents to use public transport as their primary mode of travel, in particular for travelling to major employment centres.
- 8.7 The continued dependence on the motor car is not sustainable into the future. Planning and development of new residential schemes should go hand in hand with a transport strategy limiting the dependability on the private motor car. Current national policy supports this premise for the development of residential areas. The proposed development meets all of the criteria associated with this policy.
- 8.8 An aerial view of the proposed development can be found in **Appendix A**.

9.0 REFERENCES

The Route to Sustainable Commuting, An Employer's Guide to Mobility Management Plans
published by Dublin Transportation Office, Kirklees Metropolitan Council, Irish Energy Centre.

The Traffic Management Guidelines
published by the Dublin Transportation Office

2020 Vision-Sustainable Travel and Transport: Public Consultation Document
published by the Department of Transport

Cork Metropolitan Area Draft Transport Strategy 2040 (CMATS)
published by the National Transport Authority

New Bus Network Map for Cork Metropolitan Area (BusConnects)
Online map provided by the National Transport Authority

APPENDIX A
Proposed Site Layout



Figure: Proposed Site Layout (refer DMNA Architects drawing no. 19012-1002-2-PA-Overall Site Plan)