

Mixed Use Development, Carrigaline, Co Cork.



Mobility Management Plan

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1.0 INTRODUCTION

Martin Hanley Ltd. Consulting Engineers have been engaged by Reside Investments Ltd. to prepare a Mobility Management Plan in support of a planning application for a proposed mixed-use Development at Carrigaline, Co. Cork. This report has been prepared as part of the planning application.

The proposed development consists of 202 apartments and 22 Townhouse as well as a large retail outlet and 2 No small retail units and a creche with associated underground parking. Parking for the facility will be located in the basement of the complex as well as a small number at surface level. Access to the proposed development will be from the new Carrigaline Western Relief Road (CWRR) which is currently under construction.

Parking for the facility will be primarily underground with a small number of parking spaces above ground. It is intended that 255 No. car parking spaces will be provided for the residential and commercial development as well as 503 No. bicycle stands split between external and covered.

1.1 Local Road Network

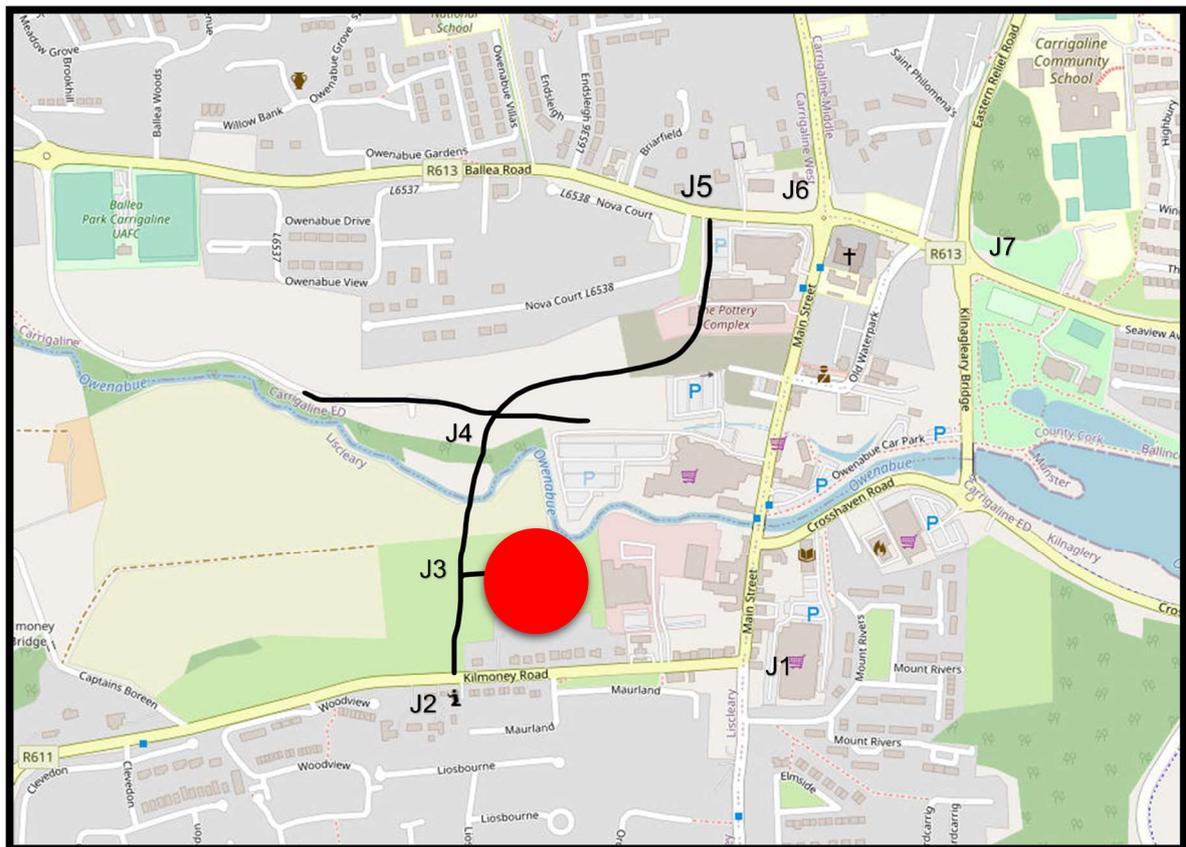


Fig 1.1: Site location in red shown within Carrigaline Environs.

The proposed development will be supported by a Mobility Management Plan (formally Mobility Management Plan) as a suitable mechanism by which the future development site can support the objectives of sustainable development and the achievement of reduced car dependency. The present document is intended to serve as a template for the implementation of a Mobility Management Plan (MMP) once the proposed development is completed and operational. The implementation of the final version of the TP shall be the responsibility of the Mobility Management Plan Manager for the development, who shall also monitor its performance and review the Plan at regular intervals.

This Preliminary Mobility Management Plan has been prepared in accordance with the requirements of the Cork County Council Development Plan 2014. Consideration was also given to the 2022-2028 Draft Development Plan, as well as pertinent national guidance documents.

A Mobility Management Plan is best described as a package of measures put in place to encourage and support sustainable travel patterns amongst the users of the proposed development. The aim 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 with the following objectives:

- To inform residents 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.
- To reduce trip generation to and from the site thus reducing parking demand and traffic flow. Restricting car park parking is one of the key ways of reducing trip generation from the Development.

2.0 PURPOSE OF A MOBILITY MANAGEMENT PLAN

A Mobility Management Plan can be described as a transport demand management mechanism, that seeks to provide for the transportation needs of people and goods. It can be applied as a strategic demand management tool or as a site-specific (or area-specific) measure. The aim is to reduce demand for and use of cars by increasing the attractiveness and practicality of other modes of transport.

Within Ireland, transport demand management is becoming well established through the initiatives and strategies identified in documents such as ***A Platform for Change*** and ***Smarter Travel: A Sustainable Future – A New Transport Policy for Ireland 2009-2020***. Within these documents, numerous actions have been proposed which aim to foster improved sustainable travel habits for Ireland.

A Mobility Management Plan (MMP) is a management tool that brings together transport, user, and site management issues in a coordinated manner. A successful plan generally includes measures to promote and improve the attractiveness of using public transport, cycling, walking, car-sharing, flexible working, or a combination of these as alternatives to drive-alone journeys. It should be considered as a dynamic process where a package of measures and campaigns are identified, piloted, and monitored on an on-going basis. The nature of the plan therefore changes during its implementation and measures that prove successful are retained, while those that are not supported are discarded.

It is important that the plan retains the support of users and receives continuous monitoring. Feedback and active management of the plan are required for it to continue to be successful.

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.

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.

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.

The Government also has a role to play in changing current commuting practices. The provision of a better public transport system by fast tracking bus quality corridors, the provision of cycle lane facilities and the implementation of tax saver policies on commuter tickets are just some of the areas

where the Government can play their part. There are many examples in other cities and towns around the world where the use of the car is penalised, be it a city centre roads tax or the taxing of car spaces as benefit in kind. Policies such as these may seem dramatic however they do have an overall benefit to the moving goods and people within the city/town environ. The resulting savings to business and habitants can be significant as congestion and journey times reduce.

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 private car (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 POLICY CONTEXT

3.1 Introduction

In order to demonstrate that the development of the site complies with current national and local transport planning policy, a review was undertaken of the following documents:

- Cork County Council Development Plan 2022-2028 (Draft)
- Cork County Council Development Plan 2014
- Urban Design Manual: A Best Practice Guide 2009
- Smarter Travel - A Sustainable Transport Future 2009-2020
- Spatial Planning & National Roads – Guidelines for Planning Authorities 2012

3.2 Urban Design Manual: A Best Practice Guide 2009

This guide “focuses on creating well-designed, sustainable neighbourhoods that will stand the test of time”. This can also extend to industrial developments and provides a strong foundation for the design of such sites in relation to their accessibility – in particular, walking and cycling. The manual follows a set of criteria of which the following are directly linked to this Transport Assessment.

- There are attractive routes in and out for pedestrians and cyclists.
- The development is located in or close to a mixed-use centre.
- The development’s layout makes it easy for a bus to serve the scheme.
- The layout links to existing movement routes and the places people will want to get to
- Appropriate density, dependant on location, helps support efficient public transport.

The manual recognises the need for planners to facilitate connections between new and existing developments, as well as key locations around the sites. These connections should be of high quality, direct, safe, and secure and facilitate existing movement and desired routes. Furthermore, public transport and sustainable transport is prioritised over private cars. Quality interchanges are highly

desirable in promoting the uptake of public transport, including integration with sustainable transport modes, such as cycle parking/storage.

The proposed development will be well served by good public transport services with several bus services available within a short walking distance. These services include the 220, 220X, & 225 bus services. The site is ideally located in the centre of Carrigaline within close proximity to schools, shopping, and local services. All of these services can be accessed by pedestrians and cyclists. The site is only 500m walking distance to the town centre of Carrigaline.

3.3 Smarter Travel – A Sustainable Transport Future 2009-2020

Smarter Travel is “designed to show how Ireland can reverse current unsustainable transport and travel patterns and reduce the health and environmental impacts of current trends and improve our quality of life”. The plan outlines the current transport trends and statistics in Ireland and focuses on policies which aim to increase transport sustainability by 2020.

Key goals of the policy include.

- Improving quality of life and accessibility to transport for all and, in particular, people with reduced mobility and those who may experience isolation due to lack of transport.
- Improving economic competitiveness through maximising the efficiency of the transport system and alleviating congestion and infrastructure bottlenecks.
- Minimising the negative impacts of transport on the local and global environment through reducing localised air pollutants and greenhouse gas emissions.
- Reducing overall travel demand and commuting distances travelled by the private car.

In Chapter 3 of the Smarter Travel Document the Government reaffirms its vision for sustainability in transport and sets out five key goals:

- (i) to reduce overall travel demand,
- (ii) to maximise the efficiency of the transport network,
- (iii) to reduce reliance on fossil fuels,
- (iv) to reduce transport emissions and
- (v) to improve accessibility to transport.

To achieve these goals and to ensure that we have sustainable travel and transport by 2020, the Government sets the following key targets:

- Future population and employment growth will predominantly take place in sustainable compact forms, which reduce the need to travel for employment and services.
- 500,000 more people will take alternative means to commute to work to the extent that the total share of car commuting will drop from 65% to 45%
- Alternatives such as walking, cycling and public transport will be supported and provided to the extent that these will rise to 55% of total commuter journeys to work.
- The total kilometres travelled by the car fleet in 2020 will not increase significantly from current levels.
- A reduction will be achieved on the 2005 figure for greenhouse gas emissions from the transport sector.

An effective Mobility Management Plan should be informed by and founded upon the following:

- A travel survey of development occupants for existing businesses, to establish the origins and destinations of trips to and from the development.
- An outline of specific schemes/measures implemented to discourage car-dependent transport to and from the site.
- Any comments/suggestions on travel that have been offered by development occupants.
- A set of targets, to be set out in accordance with approved guideline documents.
- An outline of the specific schemes that the development plans to make available to its occupants, in order to encourage the desired travel patterns to and from the site. These might include, for example: cycle facilities, public transport subsidies, walking groups, cycle groups, communication, and consultation, etc.

It is intended that the Mobility Management Plan for the proposed development will follow the above guidelines. The success of the Mobility Management Plan depends on the co-operation of all parties; the appointment of a coordinator and a steering group is vital for the success of the plan. This Mobility Management Plan will need to be reviewed on a regular basis by the steering group, with updates implemented as improvements to the transport network in the vicinity of the development site are carried out.

Cork County Council Development plan requires that for developments of 50 employees or more, residential developments over 100 units, all education facilities, community facilities, health facilities, as well as major extensions to existing such uses developers will be required to prepare mobility management plans (Mobility Management Plans), There should be a strong emphasis on sustainable travel modes consistent with published NTA guidance to promote safe, attractive and convenient, alternative sustainable modes of transport as part of the any planning application proposal.

4.0 CARRIGALINE TRANSPORT AND PUBLIC REALM ENHANCEMENT PLAN

The recently adopted ‘Carrigaline Transportation and Public Realm Enhancement Plan’ (CTRPEP) identifies the future transportation requirements of Carrigaline and considers them in the context of urban realm enhancement opportunities. The Plan endeavours to create an attractive urban environment celebrating the assets of the town and providing high quality spaces for people to meet others, sit, talk, enjoy being outdoors, all of which will facilitate town centre businesses to grow and flourish. The development of this site has been designed to be consistent with this plan to help in creating the CTRPEP vision for Carrigaline.

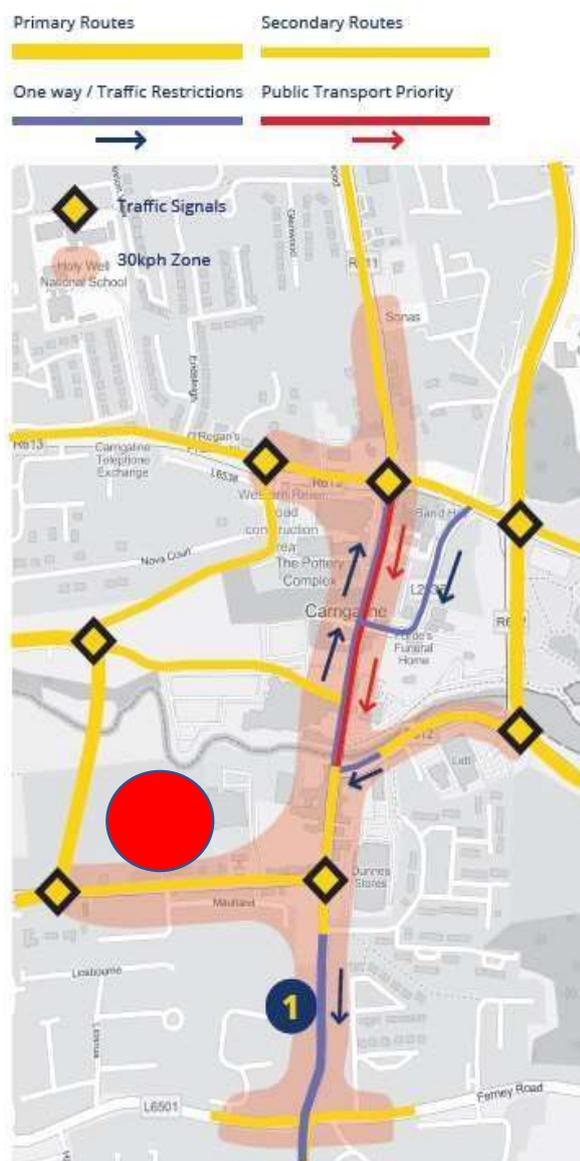


Figure 4.1 Proposed Interventions & Traffic Management measures within Carrigaline (post construction of Inner Western Relief Road).

Figure 4.1 above shows the proposed interventions & traffic management measures within Carrigaline proposed under CTRPEP. The location of the proposed development site is shown in red.



Figure 4.2 Proposed Pedestrian and Cycle Network under the TPREP - to be implemented within 5 years.

Figure 4.2 above shows the proposed the cycle networks including primary secondary and feeder routes to be provided under 'Carrigaline Transportation and Public Realm Enhancement Plan' TPREP. The proposed development site is shown in red.

5.0 PROPOSED DEVELOPMENT

The proposed development consists of the construction of a new six storey Apartment Development. The apartment development will contain 1-bed, 2-bed and 3-bed units totalling 202 units. The development will also contain a large retail outlet, 2No small retail units and a creche.

The parking for the development will be in the basement and ground floor. See drawings No. CM-RL-P01 of Appendix E for the site layout plan. This drawing has been provided by Henry J. Lyons Architects. The following is a detailed breakdown of the proposed development,

- 1-bed (94 units)
- 2 bed (96 units)
- 3 bed 12 units)

- Large retail shopping unit 3000sqm
- Unit 1 small retail unit 67sqm
- Unit 2 small retail unit 91sqm
- Creche Unit 184sqm.

Parking will be provided as per Section 9.0 of this report.
A layout drawing of the development provided by Henry J Lyons Architects is shown below,



Fig 5.1: Proposed Development Layout.

6.0 PUBLIC TRANSPORT FACILITIES

As part of this Mobility Management Plan, an assessment of the existing public transport infrastructure in the area was undertaken. The existing bus routes within the proximity of the development were identified. The figures below show the walking routes to the existing bus stop on Main Street and Kilmoney Road. It is highly probable that Bus Eireann will reroute some existing bus services along the new Carrigaline Western Relief road once construction is complete.

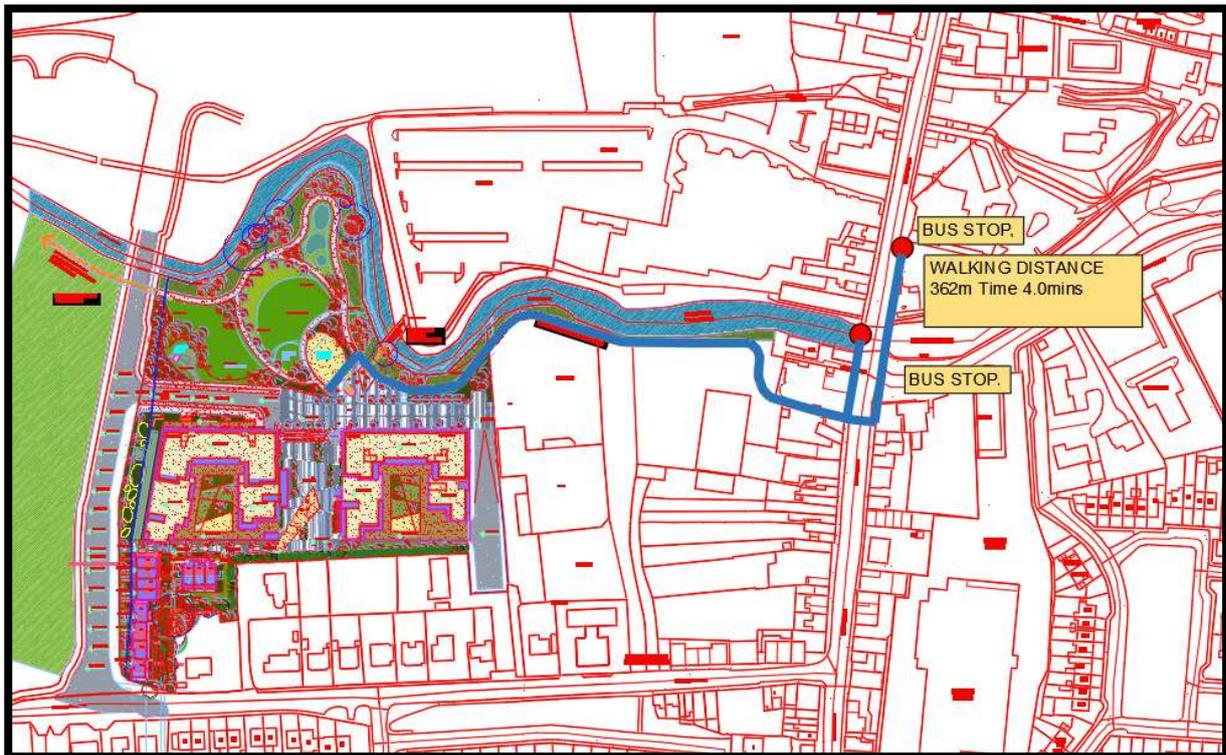


Figure 6.1 Location of existing Bus Routes on Main Street Bridge Carrigaline southbound & Northbound

Figure 6.1 above show the proximity of the proposed Development to Bus services 220, 220X & 225 on Mian Street indicating a 4min walk time from the proposed development along the route of the new pedestrian cycle route.

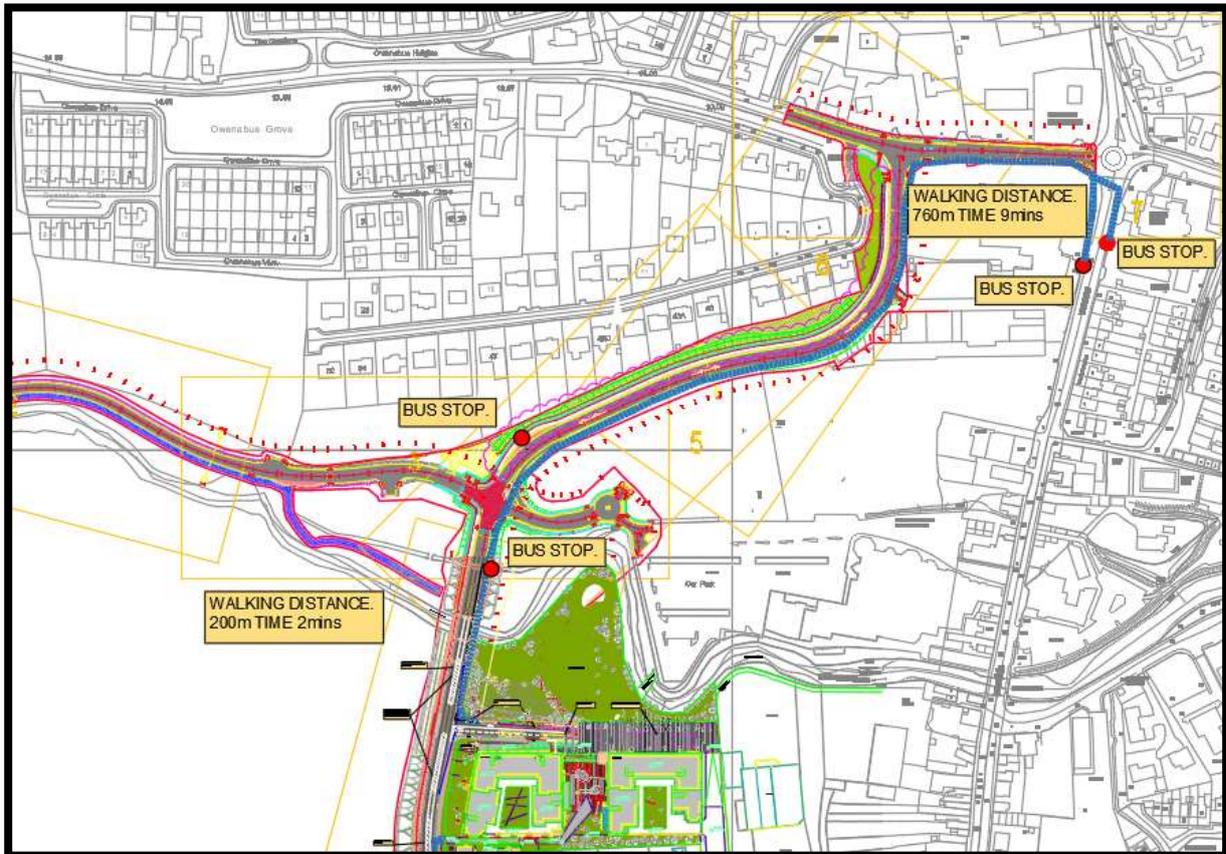


Figure 6.2 Location of existing Bus Routes on Main Street Carrigaline & Proposed Bus Stops on the Western Relief Road.

Figure 6.2 above show the proximity of the proposed Development to northbound Bus services 220, 220X & 225 indicating a 9min walk time from the proposed development. The figure also show the proximity of the development to two new bus stops on the Western Relief Road indicating a 2min walk tie.



Figure 6.3 Location of existing Bus Routes on Kilmoney Road Carrigaline westbound & eastbound.

Figure 6.3 above show the proximity of the proposed Development to westbound Bus services 220, 220X indicating a 3min walk time heading westbound.

Figure 6.3 above show the proximity of the proposed Development to both eastbound Bus services 220, 220X indicating a 4 min walk time for heading eastbound. See Appendix A for full bus timetables and route maps.

7.0 PEDESTRIAN FACILITIES

Pedestrian facilities along Main Street, Ballea Road and Kilmoney Road are currently adequate. Footpaths are available on both side of the road connecting to the Bus Stops on Main Street and Kilmoney Road. Carrigaline Transportation and Public Realm Enhancement Plan' (CTRPEP) identifies the future transportation requirements of Carrigaline and considers them in the context of urban realm enhancement opportunities. The plan proposes improvement to pedestrian facilities along Ballea Road, Main Street and Church Road.



Figure 7.1 Existing Pedestrian Facilities along Kilmoney Road.



Figure 7.2 Existing Pedestrian Facilities along Ballea Road.



Figure 7.3 Existing Pedestrian Facilities along Main Street Carrigaline.

8.0 CYCLE FACILITIES

The proposed Development will be serviced by a dedicated cycle route along the Carrigaline Western Relief Road. These will connect with the existing cycle facilities currently available along the Crosshaven Road and further cycle routes planned towards Raffeen to the north of Carrigaline.



Figure 8.1 Proposed Pedestrian and Cycle Network under the TPREP.

Figure 8.1 above shows the proposed the cycle networks including primary secondary and feeder routes to be provided under TPREP. The proposed development site is shown in red.

9.0 PARKING PROVISION

Parking inevitably remains an integral element of overall land use and transportation policy. The purpose of parking standards is to ensure that a considered and appropriate level of parking is provided to serve new development. Restricting car park parking is one of the key ways of reducing trip generation from the Development.

9.1 Car Parking

Car Parking

Cork County Council Development Plan 2022 gives guidance on car parking standards for new developments. Table 12.6 of the Plan sets the car space allocation for various types of development including apartments.

Table 9.1 below shows a schedule of car parking spaces as set out by the Development Plan.

Land Use Category	Cork County Development Plan 2022-2028 Car Parking Requirement	Total Spaces Per Unit	Total Units	Spaces required
Apartment 202No	1 .25 spaces per Apartment	1.25	202	253
Townhouses 22No	2.0 spaces per Townhouse	2	22	44
Large Retail Including 2No small retail units 3,158sqm	1 space per 20sqm	1	158	158
Childcare 184 sqm	1 space per 3 staff	1	3.33	3
10 staff	+ 1 space per 10 children	1	1	1
Total			386	459

Table 9.1: Car parking requirement under Cork County Council Development Plan 2022-2028.

The design and layout of the car park is mindful of ensuring that the space provides a safe and efficient environment and is convenient for all those who use it. It is intended that all parking for the development will be facilitated within the site, in the basement and a small number at surface level.

The total number of parking spaces provided will be 255 spaces for the proposed residential and commercial development including 245 internal and 10 external spaces. The parking provision in the development plan is considered to be a maximum and given the proximity of the good Bus services as well as the proximity of the proposed Development to center of Carrigaline this level of parking is considered to be adequate.

All car parking spaces are required to be a minimum 2.4m x 4.8m in size. According to the Development Plan 5% of car parking spaces provided shall be suitable for use by disabled persons for non-residential developments. 10% of car parking spaces provided should be set aside for parent and child car parking in non-residential developments. One motorcycle space should be provided for every ten car parking spaces. 10% of car parking spaces provided should be set aside for battery powered vehicles with fast charging outlets.

This is equivalent to 13 disabled parking bays. Parking bay widths suitable for people with disabilities shall be a minimum of 3.0 m wide and 4.9m in depth.

9.2 Car Park Strategy

The total number of parking spaces provided will be 255 spaces for the proposed residential and commercial development including 245 internal and 10 external spaces. The car park layout will include 140 spaces dedicated for residential use at ground floor and first floor level. The balance of 115 spaces will be allocated for retail shoppers. The residential spaces will be accessed via an electronic barrier system to prevent any unauthorised parking.

The main retail car park will also be monitored to prevent any illegal parking.

Appendix C shows the proposed Car Park Layout at ground & first floor levels.

Land Use Category	Spaces	Land Use Category	Spaces
Residential Parking		Retail Parking	
Total Residential Car Parking Provided	140	Total Retail Car Parking Provided	115
EV Parking with charge points 10%	14	Parent and Child spaces 10%	12
Disabled Parking 5%	7	EV Parking with charge points 10%	12
Motorcycle Parking 1 in 10 spaces	14	Disabled Parking 5%	6
		Motorcycle Parking 1 in 10 spaces	12

Table 9.2: Car parking allocation for both residential and commercial use.

9.3 Bicycle Parking

Cork County Council Development Plan 2022 gives guidance on cycle parking standards for new developments. Table 12.8 of the Plan sets the cycle space allocation for various types of development including apartments. The requirement for cycle parking in the 2022 Development plan complies with the requirements for cycle parking contained in the *Sustainable Urban Housing Design Standard for New Apartments 2020*.

Table 9.2 below shows a schedule of required bicycle parking as set out by the development plan at 503 spaces.

Land Use Category	Cork County Development Plan 2022-2028 Cycle Parking Requirement	Total Spaces Per Unit	Total Units	Spaces required
Aptartment 202No	1 long stay space per bedroom	1	321	321
	1 visitor space per 2 Apartment	1	101	101
Townhouses 22No	1 long stay space per unit	1	22	22
	1 visitor space per 5 units	1	4.4	4
Large Retail Including 2No small retail units 3,158sqm	1 long stay space per 5 staff	1	20	20
	1 visitor space per 5 100sqm GTA	1	31.58	32
Childcare 184 sqm 10 staff	1 long stay space per 10 staff	1	1	1
	1 visitor space per 10 children	1	2	2
Total			503	503

Table 9.2: Bicycle parking requirements from Development Plan 2022-2028

Dropped kerbs, dished footpaths, raised pedestrian crossings and tactile paving will be provided at appropriate locations such as at the entrances to the Development and pedestrian crossing points. A total of 503 bicycle stands will be provided as part of the Development.

10.0 OBJECTIVES OF THE MOBILITY MANAGEMENT PLAN

The objectives of the Mobility Management Plan for the proposed development are as follows:

Objective 1

To promote and increase the use of public transport, walking and cycling for residents, staff, and visitors, and to facilitate travel by walking, cycling, and Bus.

The encouragement and increased use of other modes of transport, which are less damaging to the environment in terms of congestion and emissions, are directly linked to operating a lower-car-use development. Apart from the environmental benefits, the use of more sustainable modes of transport provide the following benefits to the individual:

- Savings in personal costs. Walking is free, cycling does not incur any fuel costs and buying a bicycle or using public transport is cheaper and can benefit from Government tax incentives.
- Health benefits. Levels of fitness and wellbeing increase with the practice of exercise, which is directly related to walking and cycling. The use of public transport avoids the stress of driving, traffic congestion, seeking parking spaces, etc.

Objective 2

To integrate Mobility Management Plans into the development decisions, policies, and practices and to work closely with governing bodies on matters of access and transport services around the vicinity of the development site.

Mobility Management Plans and sustainable transport cannot be addressed in isolation, but as part of a more general approach towards the development of a sustainable organisation whose functions deliver significant benefits to the community and the environment, together with economic savings. Regular communication with the Local Authorities on further improving facilities in and around the vicinity of the development can establish good policies and practices when developing decisions, within the Mobility Management Plan.

Objective 3

To provide information on sustainable modes of travel and to have resources readily available to increase awareness of these amongst development users.

The Mobility Management Plan has a significant role to play in the provision of information and resources both to people within the development and to the wider community. Information should be made readily available, and the benefits of sustainable travel should be widely promoted throughout the development when completed. Information positioned correctly can influence attitudes, which in turn can influence behaviour.

11.0 INITIAL TARGETS OF THE MOBILITY MANAGEMENT PLAN

Smarter Travel (2009-2020), the Government’s sustainable transport policy, set mode share targets for work related commuting – targets which are reflected in the Regional, Spatial and Economic Strategy for the Southern Region (RSES). The Smarter Travel policy document is currently under review, and should the updated policy set sustainable transport targets these will apply in County Cork. CMATS also included am peak mode share targets to 2040 for the entire Metropolitan Area. CMATS sets out that the daily demand for travel in 2040 will have increased by 56% over 2011 levels. The Cork Metropolitan Area Cycle Network Plan, which now forms a component of CMATS, has individual cycle mode share targets for employment and education commuting purposes, to 2025, for Cork Metropolitan Towns, with total cycle mode share for work and education in 2025 ranging from 5% to 7%.

The 2028 mode share target for commuting to work’ table below takes walking targets for Metropolitan Cork published in CMATS as a starting point and establishes a walking mode share target for each town by applying the CMATS 21% 2040 metropolitan Cork target to each town. The individual town target for walking varies depending on the town’s 2016 baseline. 60% and 4% mode shares from ‘driving a private car’ and ‘cycling’, respectively, are generally applied for each town. Assuming that the census modes of travel of ‘passenger in a car’, ‘lorry’, ‘van’ or ‘other’ remain relatively static the balance in each town will need to be met by public transport.

These targets represent minimum targets, and it is hoped that an even greater modal shift, particularly to cycling, will be achieved with the increased level of recent investment in active travel infrastructure and with future investment. This is particularly important given the scale of the impact of transport on climate change. While ultimately it is hoped to achieve the targets for private car and sustainable travel mode shares set out in Smarter Travel, the town targets identified here seek to be realistic, reflecting the very high 2016 level of car use in the County. Table 11.1 below sets out the modal split of trips from 2016 Census data for Carrigaline. The Smarter Mobility Management Plan set out the modal shift expected in the future year 2028 & 2040.

Mode	Assumed Starting Proportion of Trips 2016	Suggested Initial Modal Split Targets by 2028	Suggested Initial Modal Split Targets by 2040
On foot	7.78%	13%	21%
Bicycle	1.21%	4%	4%
Bus	2.15%	8%	25.7%
Car Travel	73.6%	60%	49.3%
TOTAL	100%	100%	100%

Table 11.1: Modal split targets for commuting for Carrigaline.

Currently, monitoring of modal shift is largely dependent on Census data which details commuting patterns to work and education. More timely data, ideally in relation to a range of trip purposes, will be required to fully assess progress over the lifetime of this plan. The CSO National Travel Survey, 2016 showed that 71% of adult daily journeys are not for work purposes. Modal shift for other trip purposes, and not just commuting to work (or school), is the desired outcome of transport policy. The Council currently monitors usage of its active travel infrastructure, and it will continue to ensure that sustainable transport infrastructure use is regularly monitored as this will provide a measure of change of transport culture in the County. Increases in active travel, even for recreational purposes, can ultimately lead to increases in active travel choices for other trip purposes. In recognition of the importance of monitoring and the need to build on our evidence base going forward the Council will explore other data sources including the generation of additional primary transport data. It will also monitor use of digital/remote working hubs. Air quality measures will also be of relevance to modal shift monitoring.

The duration of the first phase of the Mobility Management Plan during which the initial target modal splits shall be pursued, will be decided by the Mobility Manager once the development is operational. A phase duration of 2 years is suggested, after which time the first Mobility Management Plan review may be conducted and the initial targets revised, if appropriate.

As part of on-going monitoring and review, the percentage shares of individual modes such as walking, cycling and public transport will be monitored to understand how successful implementation of targeted programs have been.

The targets set will require ongoing work and commitment from the development as a whole, without which they will not be achieved. It is recognised that some people will be easier to convert to alternative modes of transport than others and that there are those who have no choice but to use the car (school runs prior to work etc.) however the more that is done to facilitate the use of alternative modes, the more they will be used. As it has already been noted, a Mobility Management Plan is an ongoing process and targets that are achieved should be replaced by further targets.

12.0 MOBILITY MANAGEMENT PLAN MEASURES

The measures identified are a mixture of policies and incentives designed to encourage changes in travel behaviour and sustain a minimal rate of single-occupant car use. The measures are designed to be implemented over a period of time, allowing costs to be spread and ensuring that policies and incentives are implemented together. While little may be observed in terms of travel behaviour in the short term, as implementation gains momentum so will the impact in terms of travel behaviour. The Mobility Management Plan measures in the plan can be grouped under the following headings:

- Marketing and Communications
- Walking & Cycling
- Public Transport
- Car Sharing
- Implementation / Consultation / Monitoring

Marketing & Communications

The education of staff and visitors on the mobility plan initiatives and the importance of contribution is extremely important. The services available must be communicated in a consistent and continuous manner to sustain behaviour change. Communications will include promotional initiatives and activities aimed at informing staff and visitors of the existing and proposed transport networks. Such initiatives and activities will include:

- Promoting the Mobility Management Plan through both internal communications and external avenues.
- Developing an Access Map to show public transport facility locations and to highlight safe walking and cycling routes. In addition to this, travel information points should be established at dedicated on-site locations, to make users aware of the modal choices available in and around the development site. The travel information points should be conspicuously located at reception areas and provide travel and mobility information such as maps, public transport routes timetables and leaflets, etc.
- Preparing a formalised sustainable travel information pack, which is to be provided to all new residents. The pack will contain all the information relating to the Mobility Management Plan, including the Mobility Access Map and the locations of cycle parking, etc.
- Developing a digital travel information point for the development, to provide details of travel choice to the site, as well as linking to external websites relevant to the development.

Walking & Cycling

The feasibility of measures that promote cycling and walking will be influenced by factors such as the safety and ease of cycling to and from the site. Generally speaking, a distance of up to 4 km is considered reasonable for walking, and up to 10 km for cycling. These distances are only indicative but can help to define target groups.

All pertinent safe walking and cycling routes should be identified within a radius of at least 5km around the development site.

The health benefits of these activities in particular should be promoted throughout the development.

The bicycle parking should be secure and sheltered and maintain a toolkit containing puncture repair equipment, pump, etc. for use in emergencies and should be made available to all bicycle users.

Public Transport

It must be ensured that the information supplied in the development access map, sustainable travel pack and travel information points includes the location of stops, routes, timetables, walking times to main public transport facilities, etc. Changes and improvements to public transport provision must be publicised as well.

Residents, staff & visitors should be offered specific advice on combining public transport with other modes of transport, for instance travelling by bicycle. Information should be provided on the conditions under which standard or folding bicycles may be carried on bus and rail services.

Financial incentives can be an effective tool in the promotion of public transport use. This can be done through the provision of low interest or interest-free loans for the purchase of public transport season tickets. Some companies have instigated a scheme which offered travel passes to staff in lieu of annual pay increments, a measure that is not subject to benefit in kind taxation (in certain countries), and thus represents a significant tax saving for employees.

Car Sharing

Car sharing contributes to sustainable transport because it is a less car intensive means of urban transport, and according to The Economist, carsharing can reduce car ownership at an estimated rate of one rental car replacing 15 owned vehicles.

The Development can provide a number of car share spaces for GoCar or similar provided.

Carsharing can provide numerous transportation, land use, environmental, and social benefits. Neighbourhood carsharing is often promoted as an alternative to owning a car where public transit, walking, and cycling can be used most of the time and a car is only necessary for out-of-town trips, moving large items, or special occasions. It can also be an alternative to owning multiple cars for households with more than one driver. A long-term study of City CarShare members found that 30 percent of households that joined sold a car; others delayed purchasing one. Public transport use, cycling and walking also increased among members. A study of driving behaviour of members from major carsharing organizations found an average decline of 27% in annual vehicle kilometres travelled.

Car sharing can have a significant impact on vehicle numbers travelling to and from a development and can offer a practical alternative for those who feel that public transport is not a viable option. Car sharing is flexible and can be used occasionally or regularly as suits. Encouragement of car sharing can entail marketing and promotion, provision of a registration and matching service, and possibly provision of specific incentives.

GoCar is a car sharing club where members can book cars, SUVs, and vans online or via an app for as little as an hour. Much of the GoCar fleet is made up of electric vehicles. GoCar now has over 10,000 members and operates a fleet of over 300 cars across 200+ locations in Ireland.

Implementation / Consultation / Monitoring

The Mobility Management Plan is a document that evolves over time and depends upon ongoing implementation, management, and monitoring. Its successful implementation requires organisational support, an internal Mobility Manager and financial resourcing. To implement the Travel Plan the following inputs are required:

- Management Company support and commitment.
- A Mobility Management Plan manager as the plan coordinator.
- A steering group to oversee the plan.
- Working groups on various related issues.
- Consultations with development occupants and external organisations.

To secure effective results from any initial sustainable travel investment, it is imperative to obtain the agreement of all the stakeholders and the support of external partners, such as the Local Authority, public transport operators, etc.

Ideally, the Mobility Management Plan will be managed by a Mobility Management Plan manager or Mobility Management Plan coordinator with the clear mandate to implement and evolve the plan. The Mobility Management Plan manager will also be best suited to monitor the results of the plan. This role may for example be performed by a member of the development Management Company. Travel surveys of staff (and of visitors, if practicable) should be carried out in the early stages and repeated annually, to monitor the initial success of the Mobility Management Plan and to gain a better understanding of travel habits. These survey results can also serve as a sustainable travel performance benchmark to indicate how the Mobility Management Plan is performing in comparison to previous years and against the sustainable travel targets initially outlined in the plan.

13.0 SUMMARY

In conclusion, the proposed development is well located for the implementation of a Mobility Management Plan promoting alternative modes of transport. The proposed development has access to bus routes and is within a short walking & cycling distance from significant employment hubs such as the Carrigaline town centre.

The proposed development will be well served by good public transport services with several bus services available within a short walking distance. These services include the 220, 220X, & 225 bus services. The site is ideally located in the centre of Carrigaline within close proximity to schools, shopping, and local services. All of these services can be accessed by pedestrians and cyclists. The site is only 500m walking distance to the town centre of Carrigaline.

All sustainable modes of transport should be promoted in a Mobility Management Plan. In particular, walking & cycling should be actively encouraged. 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 services. A bulletin board could be placed in the lobby of apartment blocks and shopping center or other such communal areas where information on all alternative transport modes could be posted.

The recommended measures to be implemented as part of the Mobility Management Plan are summarised as follows:

General

- Put in place a formal Mobility Management Plan.
- Appoint a Mobility Management Plan manager.
- Create an access map.
- Provide a dedicated on-site travel information point.
- Provide travel information to staff, in the form of a sustainable travel Information pack.
- Monitor the operation of the plan by residents, staff, and visitors, through travel surveys.
- Revise and update the plan as required.

Walking and Cycling

- Maintain and promote facilities for walkers and cyclists.

Public Transport

- Provide information on locations of stops, routes, timetables, walking/cycling times to main public transport facilities, etc.
- Provide tailored advice on multi-modal journeys to include public transport.

Car Sharing

- Provide information e.g., benefits of car sharing, annual cost savings, map of bases in locality, links to website etc.

The continued dependence on the motor car is not sustainable into the future. Planning and development of new commercial and residential schemes should go hand in hand with a transport strategy limiting the dependability on the private motor car. The proposed development located in the center of Carrigaline meets the requirement for sustainable transport

A Site Plan of the proposed development can be found in **Appendix B**.

14.0 REFERENCES

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A bus service operated by Bus Éireann

Monday 4 October 2021

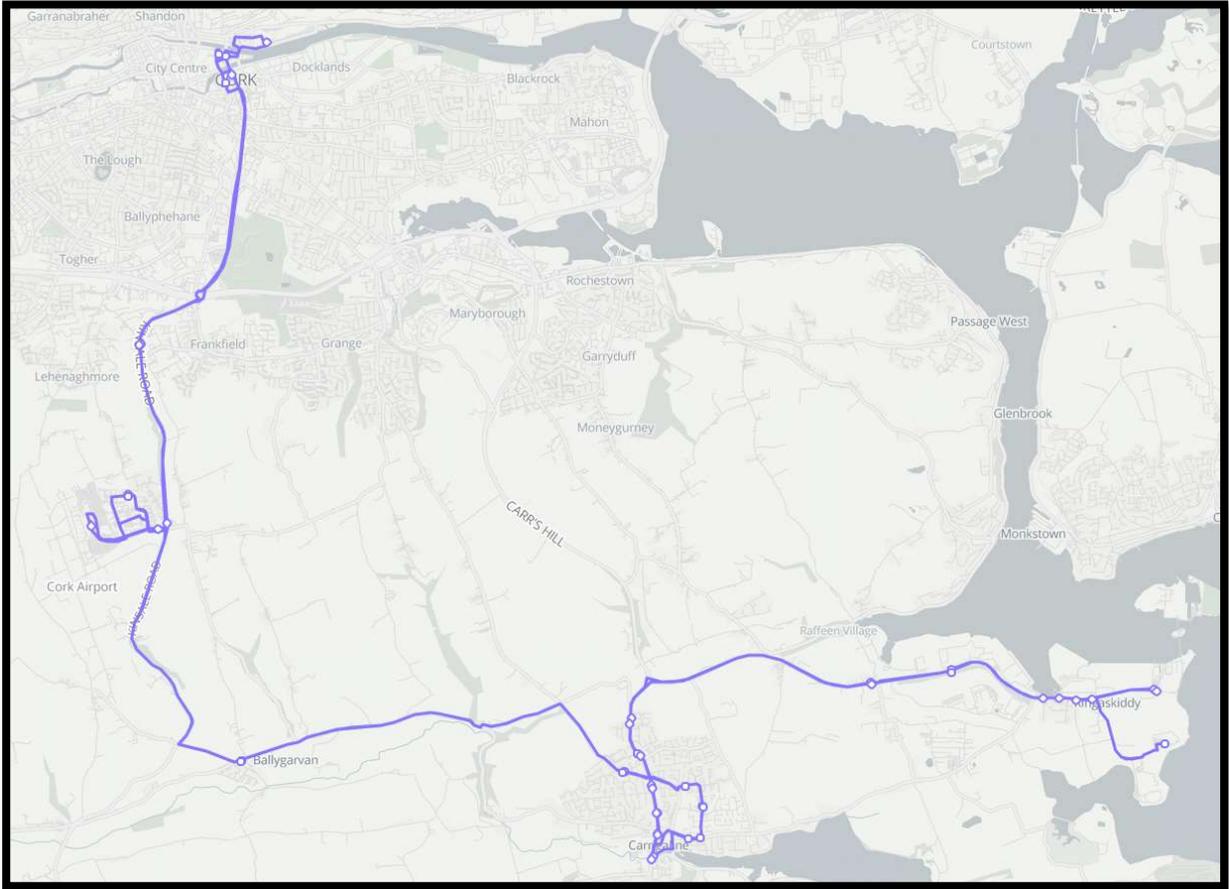
Fort Camden - Grange Road Terminus

Carrigaline Stop No. 247261	05:25	06:10	06:40	07:10	07:40	08:10	08:40	09:10	09:40	10:10	10:40	11:10	11:40	12:10	12:40	13:10	13:40	
Crosshaven Fort Casade	05:45	06:15	06:45	07:15	07:45	08:15	08:45	09:15	09:45	10:15	10:45	11:15	11:45	12:15	12:45	13:15	13:45	
Camden Road	05:45	06:15	06:45	07:15	07:45	08:15	08:45	09:15	09:45	10:15	10:45	11:15	11:45	12:15	12:45	13:15	13:45	
Camden Road, stop 247261	05:45	06:15	06:45	07:15	07:45	08:15	08:45	09:15	09:45	10:15	10:45	11:15	11:45	12:15	12:45	13:15	13:45	
Point Lane Ainc	05:45	06:15	06:45	07:15	07:45	08:15	08:45	09:15	09:45	10:15	10:45	11:15	11:45	12:15	12:45	13:15	13:45	
Camden Rd Int, stop 247851	05:47	06:17	06:47	07:17	07:47	08:17	08:47	09:17	09:47	10:17	10:47	11:17	11:47	12:17	12:47	13:17	13:47	
Crosshaven	05:47	06:17	06:47	07:17	07:47	08:17	08:47	09:17	09:47	10:17	10:47	11:17	11:47	12:17	12:47	13:17	13:47	
Crosshaven Backlins Pub	05:48	06:18	06:48	07:18	07:48	08:18	08:48	09:18	09:48	10:18	10:48	11:18	11:48	12:18	12:48	13:18	13:48	
Crosshaven Boat Yard	05:48	06:18	06:48	07:18	07:48	08:18	08:48	09:18	09:48	10:18	10:48	11:18	11:48	12:18	12:48	13:18	13:48	
Crosshaven The Glend	05:49	06:19	06:49	07:19	07:49	08:19	08:49	09:19	09:49	10:19	10:49	11:19	11:49	12:19	12:49	13:19	13:49	
Crosshaven Royal Cork Yacht C	05:49	06:19	06:49	07:19	07:49	08:19	08:49	09:19	09:49	10:19	10:49	11:19	11:49	12:19	12:49	13:19	13:49	
Kilgobney Rd	05:54	06:24	06:54	07:24	07:54	08:24	08:54	09:24	09:54	10:24	10:54	11:24	11:54	12:24	12:54	13:24	13:54	
Carrigaline Int Est	05:55	06:25	06:55	07:25	07:55	08:25	08:55	09:25	09:55	10:25	10:55	11:25	11:55	12:25	12:55	13:25	13:55	
Fernlea Hill, stop 248201	05:28	05:58	06:28	06:58	07:28	07:58	08:28	08:58	09:28	09:58	10:28	10:58	11:28	11:58	12:28	12:58	13:28	13:58
Carrigaline Fernlea	05:28	05:58	06:28	06:58	07:28	07:58	08:28	08:58	09:28	09:58	10:28	10:58	11:28	11:58	12:28	12:58	13:28	13:58
Carrigaline Liscara	05:29	05:59	06:29	06:59	07:29	07:59	08:29	08:59	09:29	09:59	10:29	10:59	11:29	11:59	12:29	12:59	13:29	13:59
Carrigaline Hillcrest	05:30	06:00	06:30	06:45	07:00	07:15	07:30	07:45	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15
Carrigaline Kilnecree Road Upper	05:30	06:00	06:30	06:45	07:00	07:15	07:30	07:45	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15
Carrigaline Lower Cleendon	05:31	06:01	06:16	06:31	06:46	07:01	07:16	07:31	07:46	08:01	08:16	08:31	08:46	09:01	09:16	09:31	09:46	10:01
Carrigaline, stop 247971	05:31	06:01	06:16	06:31	06:46	07:01	07:16	07:31	07:46	08:01	08:16	08:31	08:46	09:01	09:16	09:31	09:46	10:01
Carrigaline	05:32	06:02	06:17	06:32	06:47	07:02	07:17	07:32	07:47	08:02	08:17	08:32	08:47	09:02	09:17	09:32	09:47	10:02
Carrigaline Hotel	05:32	06:02	06:17	06:32	06:47	07:02	07:17	07:32	07:47	08:02	08:17	08:32	08:47	09:02	09:17	09:32	09:47	10:02
Carrigaline Cook Road	05:33	06:03	06:18	06:33	06:48	07:03	07:18	07:33	07:48	08:03	08:18	08:33	08:48	09:03	09:18	09:33	09:48	10:03
Carrigaline Glenview	05:33	06:03	06:18	06:33	06:48	07:03	07:18	07:33	07:48	08:03	08:18	08:33	08:48	09:03	09:18	09:33	09:48	10:03
Carrigaline Heavens Wood	05:34	06:04	06:19	06:34	06:49	07:04	07:19	07:34	07:49	08:04	08:19	08:34	08:49	09:04	09:19	09:34	09:49	10:04
Carrigaline Carrig na Cora	05:34	06:04	06:19	06:34	06:49	07:04	07:19	07:34	07:49	08:04	08:19	08:34	08:49	09:04	09:19	09:34	09:49	10:04
Hilltown	05:36	06:06	06:21	06:36	06:51	07:06	07:21	07:36	07:51	08:06	08:21	08:36	08:51	09:06	09:21	09:36	09:51	10:06
Roadside	05:39	06:09	06:24	06:39	06:54	07:09	07:24	07:39	07:54	08:09	08:24	08:39	08:54	09:09	09:24	09:39	09:54	10:09
Liscadd	05:40	06:10	06:25	06:40	06:55	07:10	07:25	07:40	07:55	08:10	08:25	08:40	08:55	09:10	09:25	09:40	09:55	10:10
Maybrough Hill	05:41	06:11	06:26	06:41	06:56	07:11	07:26	07:41	07:56	08:11	08:26	08:41	08:56	09:11	09:26	09:41	09:56	10:11
The Paddocks	05:42	06:12	06:27	06:42	06:57	07:12	07:27	07:42	07:57	08:12	08:27	08:42	08:57	09:12	09:27	09:42	09:57	10:12
Douglas Shopping Ctr	05:45	06:15	06:30	06:45	07:00	07:15	07:30	07:45	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15
Douglas Rd Slip Rd	05:45	06:15	06:30	06:45	07:00	07:15	07:30	07:45	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15
Douglas Behnders Lane	05:46	06:16	06:31	06:46	07:01	07:16	07:31	07:46	08:01	08:16	08:31	08:46	09:01	09:16	09:31	09:46	10:01	10:16
Bullfinch Scoll Bridge	05:46	06:16	06:31	06:46	07:01	07:16	07:31	07:46	08:01	08:16	08:31	08:46	09:01	09:16	09:31	09:46	10:01	10:16
Douglas Aulfield	05:47	06:17	06:32	06:47	07:02	07:17	07:32	07:47	08:02	08:17	08:32	08:47	09:02	09:17	09:32	09:47	10:02	10:17
Bullfinch Rosebank	05:47	06:17	06:32	06:47	07:02	07:17	07:32	07:47	08:02	08:17	08:32	08:47	09:02	09:17	09:32	09:47	10:02	10:17
Bullfinch Whitehorns	05:48	06:18	06:33	06:48	07:03	07:18	07:33	07:48	08:03	08:18	08:33	08:48	09:03	09:18	09:33	09:48	10:03	10:18
Bullfinch Bally Incline	05:48	06:18	06:33	06:48	07:03	07:18	07:33	07:48	08:03	08:18	08:33	08:48	09:03	09:18	09:33	09:48	10:03	10:18
Bullfinch St Flannan's Hoop	05:49	06:19	06:34	06:49	07:04	07:19	07:34	07:49	08:04	08:19	08:34	08:49	09:04	09:19	09:34	09:49	10:04	10:19
Bullfinch Southern Road	05:49	06:19	06:34	06:49	07:04	07:19	07:34	07:49	08:04	08:19	08:34	08:49	09:04	09:19	09:34	09:49	10:04	10:19
Cork City Infieldway Road	05:50	06:20	06:35	06:50	07:05	07:20	07:35	07:50	08:05	08:20	08:35	08:50	09:05	09:20	09:35	09:50	10:05	10:20
Cork City South Terrace	05:51	06:21	06:36	06:51	07:06	07:21	07:36	07:51	08:06	08:21	08:36	08:51	09:06	09:21	09:36	09:51	10:06	10:21
Cork City Georges Quay	05:51	06:21	06:36	06:51	07:06	07:21	07:36	07:51	08:06	08:21	08:36	08:51	09:06	09:21	09:36	09:51	10:06	10:21
Cork City Grand Parade	05:52	06:22	06:37	06:52	07:07	07:22	07:37	07:52	08:07	08:22	08:37	08:52	09:07	09:22	09:37	09:52	10:07	10:22
Cork City Washington Street	05:57	06:27	06:42	06:57	07:12	07:27	07:42	07:57	08:12	08:27	08:42	08:57	09:12	09:27	09:42	09:57	10:12	10:27
Lancaster Quay	06:00	06:30	06:45	07:00	07:15	07:30	07:45	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15	10:30
UCC Western Rd	06:01	06:31	06:46	07:01	07:16	07:31	07:46	08:01	08:16	08:31	08:46	09:01	09:16	09:31	09:46	10:01	10:16	10:31
Western Rd Glanmole	06:02	06:32	06:47	07:02	07:17	07:32	07:47	08:02	08:17	08:32	08:47	09:02	09:17	09:32	09:47	10:02	10:17	10:32
Cardville Apts	06:03	06:33	06:48	07:03	07:18	07:33	07:48	08:03	08:18	08:33	08:48	09:03	09:18	09:33	09:48	10:03	10:18	10:33
Western Gateway UCC	06:03	06:33	06:48	07:03	07:18	07:33	07:48	08:03	08:18	08:33	08:48	09:03	09:18	09:33	09:48	10:03	10:18	10:33
Victoria Cross	06:04	06:34	06:49	07:04	07:19	07:34	07:49	08:04	08:19	08:34	08:49	09:04	09:19	09:34	09:49	10:04	10:19	10:34
Bullfinch Model Farm Road	06:05	06:35	06:50	07:05	07:20	07:35	07:50	08:05	08:20	08:35	08:50	09:05	09:20	09:35	09:50	10:05	10:20	10:35
Bullfinchsystem Park	06:06	06:36	06:51	07:06	07:21	07:36	07:51	08:06	08:21	08:36	08:51	09:06	09:21	09:36	09:51	10:06	10:21	10:36
Bullfinchsystem Paratonia Park	06:06	06:36	06:51	07:06	07:21	07:36	07:51	08:06	08:21	08:36	08:51	09:06	09:21	09:36	09:51	10:06	10:21	10:36
Bullfinchsystem Dept of Agriculture	06:07	06:37	06:52	07:07	07:22	07:37	07:52	08:07	08:22	08:37	08:52	09:07	09:22	0				

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Classen Lake	0534	0614	0629	0644	0659	0714	0730	0745	0801	0815	0829	0844	0859	0914	0929	0944	0959	1014	1029	1044	1059	1114	1129	1144	1159	1214	1229	1244	1259	1314	1329	1344	1359
Ballycollig Aghbary	0535	0615	0630	0645	0700	0715	0731	0746	0802	0816	0830	0845	0900	0915	0930	0945	1000	1015	1030	1045	1100	1115	1130	1145	1200	1215	1230	1245	1300	1315	1330	1345	1400
Old Quarry	0535	0615	0630	0645	0700	0715	0731	0746	0802	0816	0830	0845	0900	0915	0930	0945	1000	1015	1030	1045	1100	1115	1130	1145	1200	1215	1230	1245	1300	1315	1330	1345	1400
Cookes Heights	0536	0616	0631	0646	0701	0716	0732	0747	0803	0817	0831	0846	0901	0916	0931	0946	1001	1016	1031	1046	1101	1116	1131	1146	1201	1216	1231	1246	1301	1316	1331	1346	1401
Ballycollig City West Newc	0536	0616	0631	0647	0702	0717	0733	0748	0804	0818	0832	0847	0902	0917	0932	0947	1002	1017	1032	1047	1102	1117	1132	1147	1202	1217	1232	1247	1302	1317	1332	1347	1402
Ballycollig Bays Road Junc	0537	0617	0632	0647	0702	0717	0734	0749	0805	0819	0833	0848	0903	0918	0933	0948	1003	1018	1033	1048	1103	1118	1133	1148	1203	1218	1233	1248	1303	1318	1333	1348	1403
Ballycollig	0537	0617	0632	0648	0703	0718	0735	0750	0806	0820	0834	0849	0904	0919	0934	0949	1004	1019	1034	1049	1104	1119	1134	1149	1204	1219	1234	1249	1304	1319	1334	1349	1404
Ballycollig Town C	0538	0618	0633	0648	0703	0718	0736	0751	0808	0821	0835	0850	0905	0920	0935	0950	1004	1019	1034	1049	1104	1119	1134	1149	1204	1219	1234	1249	1304	1319	1334	1349	1404
Ballycollig Fr Seaton Park	0540	0620	0635	0650	0705	0720	0738	0753	0811	0823	0837	0852	0907	0922	0937	0952	1006	1021	1036	1051	1106	1121	1136	1151	1206	1221	1236	1251	1306	1321	1336	1351	1406
Ballycollig Rosewood	0541	0621	0636	0651	0706	0721	0739	0754	0812	0824	0838	0853	0908	0923	0938	0953	1007	1022	1037	1052	1107	1122	1137	1152	1207	1222	1237	1252	1307	1322	1337	1352	1407
Hillane	0542	0622	0637	0652	0707	0722	0740	0755	0814	0825	0839	0854	0909	0924	0939	0954	1008	1023	1038	1053	1108	1123	1138	1153	1208	1223	1238	1253	1308	1323	1338	1353	1408
Hilton Estate	0542	0622	0637	0653	0708	0723	0740	0755	0814	0825	0839	0854	0909	0924	0939	0954	1008	1024	1039	1054	1109	1124	1139	1154	1209	1224	1239	1254	1309	1324	1339	1354	1409
Inchaggle	0543	0623	0638	0654	0709	0724	0741	0756	0815	0826	0840	0855	0910	0925	0940	0955	1010	1025	1040	1055	1110	1125	1140	1155	1210	1225	1240	1255	1310	1325	1340	1355	1410
Carrigrohane Road, stop 246441	0544	0624	0639	0655	0710	0725	0742	0757	0816	0827	0841	0856	0911	0926	0941	0956	1011	1026	1041	1056	1111	1126	1141	1156	1211	1226	1241	1256	1311	1326	1341	1356	1411
Bishopscourt Lindwood Estate	0545	0625	0640	0656	0711	0726	0744	0759	0818	0829	0842	0857	0912	0927	0942	0957	1012	1027	1042	1057	1112	1127	1142	1157	1212	1227	1242	1257	1312	1327	1342	1357	1412
Bishopscourt DA Model Farm	0545	0625	0640	0657	0712	0727	0745	0800	0819	0830	0843	0858	0913	0928	0943	0958	1013	1028	1043	1058	1113	1128	1143	1158	1213	1228	1243	1258	1313	1328	1343	1358	1413
Bishopscourt Dept of Agriculture	0546	0626	0641	0657	0712	0727	0746	0801	0820	0831	0844	0859	0914	0929	0944	0959	1014	1029	1044	1059	1114	1129	1144	1159	1214	1229	1244	1259	1314	1329	1344	1359	1414
Bishopscourt Farnside Park	0546	0626	0641	0658	0713	0728	0747	0802	0821	0832	0844	0859	0914	0929	0944	0959	1014	1029	1044	1059	1114	1129	1144	1159	1214	1229	1244	1259	1314	1329	1344	1359	1414
Bishopscourt Park	0547	0627	0642	0658	0713	0728	0748	0803	0822	0833	0845	0860	0915	0930	0945	1000	1014	1029	1044	1059	1114	1129	1144	1159	1214	1229	1244	1259	1314	1329	1344	1359	1414
Bishopscourt Deerparks Cross Junc	0547	0627	0642	0659	0714	0729	0749	0803	0822	0833	0845	0860	0915	0930	0945	1000	1015	1030	1045	1100	1115	1130	1145	1200	1215	1230	1245	1300	1315	1330	1345	1400	1415
Bishopscourt Deerparks Cross	0548	0628	0643	0659	0714	0729	0749	0804	0823	0834	0846	0861	0916	0931	0946	1001	1015	1030	1045	1100	1115	1130	1145	1200	1215	1230	1245	1300	1315	1330	1345	1400	1415
Bishopscourt Victoria Cross	0548	0628	0643	0700	0715	0730	0749	0804	0823	0834	0846	0861	0916	0931	0946	1001	1016	1031	1046	1101	1116	1131	1146	1201	1216	1231	1246	1301	1316	1331	1346	1401	1416
UCC Western Gateway	0550	0630	0645	0702	0717	0732	0751	0806	0826	0836	0848	0863	0918	0933	0948	1003	1018	1033	1048	1103	1118	1133	1148	1203	1218	1233	1248	1303	1318	1333	1348	1403	1418
Corkville Apts	0551	0631	0646	0703	0718	0733	0752	0807	0827	0837	0849	0864	0919	0934	0949	1004	1019	1034	1049	1104	1119	1134	1149	1204	1219	1234	1249	1304	1319	1334	1349	1404	1419
UCC Gard Cross	0551	0631	0646	0703	0718	0733	0752	0807	0827	0837	0849	0864	0919	0934	0949	1004	1019	1034	1049	1104	1119	1134	1149	1204	1219	1234	1249	1304	1319	1334	1349	1404	1419
University College	0552	0632	0647	0703	0718	0733	0753	0808	0828	0838	0849	0864	0919	0934	0949	1004	1020	1035	1050	1105	1120	1135	1150	1205	1220	1235	1250	1305	1320	1335	1350	1405	1420
Marlyle Walk	0552	0632	0647	0704	0719	0734	0753	0808	0829	0838	0850	0865	0920	0935	0950	1005	1021	1036	1051	1106	1121	1136	1151	1206	1221	1236	1251	1306	1321	1336	1351	1406	1421
Preservation College	0553	0633	0648	0704	0719	0734	0754	0809	0829	0839	0850	0865	0920	0935	0950	1005	1022	1037	1052	1107	1122	1137	1152	1207	1222	1237	1252	1307	1322	1337	1352	1407	1422
Cork City Mercy Hospital	0553	0633	0648	0705	0720	0735	0755	0810	0830	0840	0851	0866	0921	0936	0951	1006	1023	1038	1053	1108	1123	1138	1153	1208	1223	1238	1253	1308	1323	1338	1353	1408	1423
Cork City Grand Parade	0555	0635	0650	0707	0722	0737	0757	0812	0832	0842	0853	0868	0923	0938	0953	1008	1025	1040	1055	1110	1125	1140	1155	1210	1225	1240	1255	1310	1325	1340	1355	1410	1425
Cork City South Hill	0556	0636	0651	0708	0723	0738	0758	0814	0834	0844	0855	0910	0925	0940	0955	1010	1027	1042	1057	1112	1127	1142	1157	1212	1227	1242	1257	1312	1327	1342	1357	1412	1427
Cork City Hall	0559	0639	0655	0712	0727	0744	0805	0820	0841	0850	0900	0915	0930	0945	1000	1015	1031	1046	1101	1116	1131	1146	1201	1216	1231	1246	1301	1316	1331	1346	1401	1416	1431
Cork City North	0559	0639	0655	0713	0728	0745	0806	0821	0842	0851	0901	0916	0931	0946	1001	1016	1032	1047	1102	1117	1132	1147	1202	1217	1232	1247	1302	1317	1332	1347	1402	1417	1432
Ballyhugh Southern Road	0601	0641	0657	0715	0730	0747	0808	0823	0844	0853	0903	0918	0933	0948	1003	1018	1034	1049	1104	1119	1134	1149	1204	1219	1234	1249	1304	1319	1334	1349	1404	1419	1434
Ballyhugh St Finbar's Hosp	0602	0642	0658	0716	0731	0748	0809	0824	0845	0854	0904	0919	0934	0949	1004	1019	1035	1050	1105	1120	1135	1150	1205	1220	1235	1250	1305	1320	1335	1350	1405	1420	1435
Ballyhugh Balka Estate	0603	0643	0659	0716	0731	0748	0809	0824	0846	0854	0904	0919	0934	0949	1004	1019	1035	1050	1105	1120	1135	1150	1205	1220	1235	1250	1305	1320	1335	1350	1405	1420	1435
Ballyhugh Cross Douglas Road	0603	0643	0659	0717	0732	0749	0810	0825	0847	0855	0905	0920	0935	0950	1005	1020	1036	1051	1106	1121	1136	1151	1206	1221	1236	1251	1306	1321	1336	1351	1406	1421	1436
Ballyhugh Westlawn Park	0604	0644	0700	0717	0732	0749	0811	0826	0848	0856	0905	0920	0935	0950	1005	1020	1037	1052	1107	1122	1137	1152	1207	1222	1237	1252	1307	1322	1337	1352	1407	1422	1437
Ballyhugh Ardflin	0604	0644	0700	0716	0731	0748	0810	0822	0849	0857	0906	0921	0936	0951	1006	1021	1037	1052	1107	1122	1137	1152	1207	1222	1237	1252	1307	1322	1337	1352			



Route Map Bus Service 225

10/4/21, 8:39 PM

225 - Outside Kent Station Cork - Haulbowline (NMCI) – Bus Éireann – bustimes.org

225 - Outside Kent Station Cork - Haulbowline (NMCI)

A bus service operated by Bus Éireann

Monday 4 October 2021

Outside Kent Station Cork - Haulbowline (NMCI)

Banduff Kent Station	05:20	06:20	07:20	08:20	09:20	10:20	11:20	12:20	13:20	14:20	15:20	16:20	17:20	18:20	19:20	20:20	21:20	22:20
Clontarf Street, stop 247811	05:23	06:23	07:23	08:23	09:24	10:24	11:24	12:24	13:24	14:24	15:24	16:24	17:24	18:23	19:23	20:23	21:23	22:23
Cork City Hall	05:25	06:25	07:25	08:25	09:25	10:25	11:25	12:25	13:25	14:25	15:25	16:25	17:25	18:25	19:25	20:25	21:25	22:25
Airport Road	05:30	06:30	07:32	08:32	09:31	10:31	11:31	12:31	13:31	14:31	15:33	16:33	17:33	18:30	19:30	20:30	21:30	22:30
Farmers Cross	05:32	06:32	07:34	08:34	09:34	10:34	11:34	12:34	13:34	14:34	15:37	16:37	17:37	18:32	19:32	20:32	21:32	22:32
Airport Business Pk	05:34	06:34	07:36	08:36	09:36	10:36	11:36	12:36	13:36	14:36	15:39	16:39	17:39	18:34	19:34	20:34	21:34	22:34
Cork Airport	05:37	06:37	07:39	08:39	09:39	10:39	11:39	12:39	13:39	14:39	15:42	16:42	17:42	18:37	19:37	20:37	21:37	22:37
Farmers Cross	05:38	06:38	07:41	08:41	09:41	10:41	11:41	12:41	13:41	14:41	15:44	16:44	17:44	18:39	19:39	20:38	21:38	22:38
Ballygarvan	05:44	06:44	07:47	08:47	09:46	10:46	11:46	12:46	13:46	14:46	15:50	16:50	17:50	18:45	19:45	20:44	21:44	22:44
Carrigmore	05:51	06:51	07:54	08:54	09:54	10:54	11:54	12:54	13:54	14:54	15:58	16:58	17:58	18:52	19:52	20:51	21:51	22:51
Carrigaline Cork Road	05:52	06:52	07:56	08:56	09:55	10:55	11:55	12:55	13:55	14:55	15:59	16:59	17:59	18:53	19:53	20:52	21:52	22:52
Carrigaline Cork Road Clinic	05:52	06:52	07:57	08:57	09:55	10:55	11:55	12:55	13:55	14:55	16:00	17:00	18:00	18:53	19:53	20:52	21:52	22:52
Carrigaline Church	05:53	06:53	07:58	08:58	09:56	10:56	11:56	12:56	13:56	14:56	16:02	17:02	18:02	18:54	19:54	20:53	21:53	22:53
Carrigaline	05:53	06:53	07:59	08:59	09:57	10:57	11:57	12:57	13:57	14:57	16:04	17:04	18:04	18:55	19:55	20:53	21:53	22:53
Carrigaline Waterpark	05:56	06:56	08:01	09:01	09:59	10:59	11:59	12:59	13:59	14:59	16:06	17:06	18:06	18:57	19:57	20:56	21:56	22:56
Waterpark Preschool, stop 248001	05:57	06:57	08:02	09:02	10:00	11:00	12:00	13:00	14:00	15:00	16:07	17:07	18:07	18:58	19:58	20:57	21:57	22:57
Waterpark Preschool, stop 248011	05:58	06:58	08:03	09:03	10:01	11:01	12:01	13:01	14:01	15:01	16:08	17:08	18:08	18:59	19:59	20:58	21:58	22:58
Carrigaline Herons Wood	05:59	06:59	08:05	09:05	10:03	11:03	12:03	13:03	14:03	15:03	16:10	17:10	18:10	19:01	20:01	20:59	21:59	22:59
Carrigaline Carrig na Curra	06:00	07:00	08:06	09:06	10:04	11:04	12:04	13:04	14:04	15:04	16:11	17:11	18:11	19:02	20:02	21:00	22:00	23:00
Ringskiddy Shanbally	06:04	07:04	08:10	09:10	10:08	11:08	12:08	13:08	14:08	15:08	16:15	17:15	18:15	19:06	20:06	21:04	22:04	23:04
Ringskiddy Pfizers	06:05	07:05	08:11	09:11	10:09	11:09	12:09	13:09	14:09	15:09	16:16	17:16	18:16	19:07	20:07	21:05	22:05	23:05
Ringskiddy	06:07	07:07	08:12	09:12	10:10	11:10	12:10	13:10	14:10	15:10	16:17	17:17	18:17	19:08	20:08	21:07	22:07	23:07
Ringskiddy St Joseph's	06:08	07:08	08:14	09:14	10:12	11:12	12:12	13:12	14:12	15:12	16:19	17:19	18:19	19:10	20:10	21:08	22:08	23:08
DePuy Synthes	06:11	07:11	08:16	09:16	10:14	11:14	12:14											
NMCI	06:13	07:13	08:19	09:19	10:17	11:17	12:17	13:13	14:13	15:13	16:20	17:20	18:20	19:11	20:11	21:09	22:09	23:09

Haulbowline (Opp MMCI) - Outside Kent Station Cork

Haulbowline	06:25	07:25	08:25	09:25	10:25	11:25	12:25	13:25	14:25	15:25	16:25	17:25	18:25	19:25	20:25	21:25	22:25	23:25
DePuy Synthes							12:28	13:28	14:28	15:28	16:28	17:28	18:28	19:28	20:28	21:28	22:28	23:28
Ringskiddy	06:26	07:26	08:26	09:26	10:26	11:26	12:31	13:31	14:31	15:31	16:31	17:31	18:31	19:31	20:31	21:31	22:31	23:31
Ringskiddy Deep Water Berth	06:27	07:27	08:27	09:27	10:27	11:27	12:32	13:32	14:32	15:32	16:32	17:32	18:32	19:32	20:32	21:32	22:32	23:32
Ringskiddy Pfizers	06:28	07:28	08:28	09:28	10:28	11:28	12:34	13:34	14:34	15:34	16:34	17:34	18:34	19:34	20:34	21:34	22:34	23:34
Shanbally Church	06:29	07:29	08:29	09:29	10:29	11:29	12:35	13:35	14:35	15:35	16:35	17:35	18:35	19:35	20:35	21:35	22:35	23:35
Carrigaline Carrig na Curra	06:33	07:33	08:33	09:33	10:33	11:33	12:38	13:38	14:38	15:38	16:38	17:38	18:38	19:38	20:38	21:38	22:38	23:38
Carrigaline Herons Wood	06:34	07:34	08:34	09:34	10:34	11:34	12:39	13:39	14:39	15:39	16:39	17:39	18:39	19:39	20:39	21:39	22:39	23:39
Bridgemount Southbound, stop 248211	06:35	07:35	08:35	09:35	10:35	11:35	12:41	13:41	14:41	15:41	16:41	17:41	18:41	19:41	20:41	21:41	22:41	23:41
Waterpark Southbound, stop 248221	06:36	07:36	08:36	09:36	10:36	11:36	12:41	13:41	14:41	15:41	16:41	17:41	18:41	19:41	20:41	21:41	22:41	23:41
Carrigaline Seaview	06:37	07:37	08:37	09:37	10:37	11:37	12:42	13:42	14:42	15:42	16:42	17:42	18:42	19:42	20:42	21:42	22:42	23:42
Carrigaline	06:39	07:39	08:39	09:39	10:39	11:39	12:45	13:45	14:45	15:45	16:45	17:45	18:45	19:45	20:45	21:45	22:45	23:45
Carrigaline Hotel	06:40	07:40	08:40	09:40	10:40	11:40	12:45	13:45	14:45	15:45	16:45	17:45	18:45	19:45	20:45	21:45	22:45	23:45
Carrigaline Cork Road	06:40	07:40	08:40	09:40	10:40	11:40	12:46	13:46	14:46	15:46	16:46	17:46	18:46	19:46	20:46	21:46	22:46	23:46
Carrigaline Glenview	06:41	07:41	08:41	09:41	10:41	11:41	12:46	13:46	14:46	15:46	16:46	17:46	18:46	19:46	20:46	21:46	22:46	23:46
Glenwood Court, Stop 247492	06:42	07:42	08:42	09:42	10:42	11:42	12:47	13:47	14:47	15:47	16:47	17:47	18:47	19:47	20:47	21:47	22:47	23:47
Ballygarvan	06:49	07:49	08:49	09:49	10:49	11:49	12:55	13:55	14:55	15:55	16:55	17:55	18:55	19:55	20:55	21:55	22:55	23:55
Cork Airport	06:57	07:57	08:57	09:57	10:57	11:57	13:03	14:03	15:03	16:03	17:03	18:03	19:03	20:03	21:03	22:03	23:03	00:03
Airport Business Pk	07:00	08:00	09:00	10:00	11:00	12:00	13:06	14:06	15:06	16:06	17:06	18:06	19:06	20:06	21:06	22:06	23:06	00:06
Farmers Cross	07:01	08:01	09:01	10:01	11:01	12:01	13:07	14:07	15:07	16:07	17:07	18:07	19:07	20:07	21:07	22:07	23:07	00:07
Forge Hill Junction	07:04	08:04	09:04	10:05	11:05	12:05	13:11	14:11	15:11	16:11	17:11	18:11	19:10	20:10	21:10	22:10	23:10	00:10
Cork City Eglinton Street	07:11	08:11	09:11	10:15	11:12	12:12	13:18	14:18	15:18	16:18	17:18	18:18	19:17	20:17	21:17	22:17	23:17	00:17
Parnell Place, stop 246801	07:14	08:14	09:14	10:17	11:15	12:15	13:20	14:20	15:20	16:20	17:20	18:20	19:19	20:19	21:19	22:19	23:19	00:19
Banduff Kent Station	07:22	08:22	09:22	10:27	11:23	12:23	13:29	14:29	15:29	16:29	17:29	18:29	19:27	20:27	21:27	22:27	23:27	00:27

Timetable data from Transport for Ireland, 9 September 2021

Bus Éireann

<https://bustimes.org/services/225-county-cork-cork-airport>

1/2

16.0 APPENDIX B – SITE PLAN A3



Carrigaline Western Relief Road
Currently Under Construction by Cork
County Council.

Junction sight distance of 49m to the
east and west measured at 2.4m back
from the road edge in accordance with
the Design Manual for Urban Roads and
Streets for a design speed of 50km/hr.

Pedestrian Access to upper
level Podium



NOTES:
All dimensions in metres.
Do not scale from drawing.
For any discrepancies found please consult with design office.
This drawing should be read in conjunction with all contract
drawings, documents and specifications.

Rev/By	Date	Description

Drawing Status: **PLANNING**
NOT CERTIFIED FOR CONSTRUCTION

Project Title:
**Mixed Use Residential Development
Carrigaline, Co Cork.**

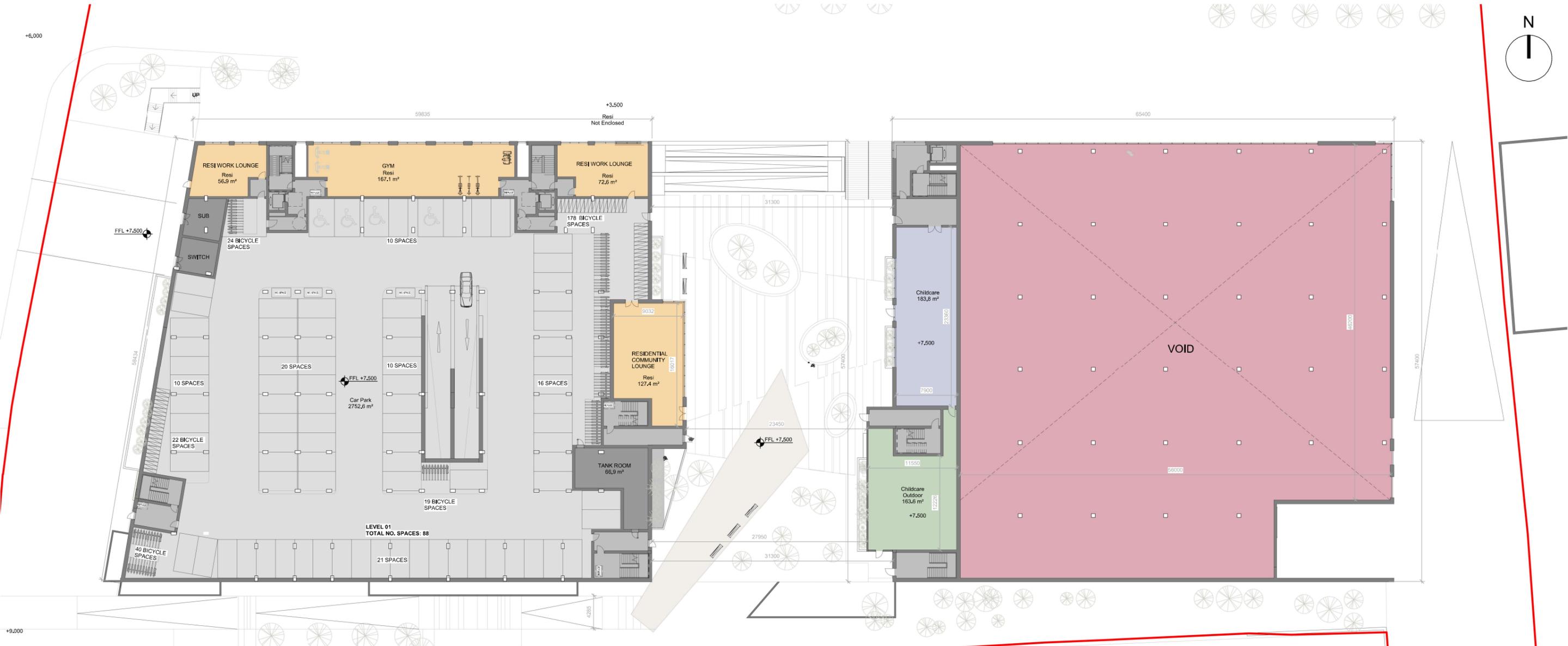
Drawing Title:
Roads Layout

Client:
Reside Investments Ltd.

Martin Hanley
Traffic & Transportation
Consulting Engineers.
70 Lissdaill,
Manyborough Hill,
Douglas, Cork. Tel: 021-4857959
E-Mail: martinhanley1@gmail.com

Designed: MH	Date: April 2022
Scale: 1/500 at A3	Revision:
Job No: 21-014TT	Drawing No: CM-RL-P01

17.0 APPENDIX C – CAR PARK LAYOUT A3



GA - 01 - FIRST FLOOR PLAN
 1: 250

LEVEL 00: 157 CAR SPACES
 LEVEL 01: 88 CAR SPACES
TOTAL INTERNAL CARPARK SPACES: 245
EXTERNAL CARPARK SPACES: 10

OVERALL TOTAL CARPARK SPACES: 255

LEVEL 00: 220 BICYCLE SPACES
 LEVEL 01: 283 BICYCLE SPACES
TOTAL INTERNAL BICYCLE SPACES: 503

- RESIDENTIAL
- RETAIL
- CHILDCARE

REV	DATE	De.	CHK	DRN
P3	24/09/2021	DT	KMM	HL
P2	17/09/2021		KMM	HL
P1	19/07/2021		KMM	HL

STATUS CODE DESCRIPTION
SUITABLE FOR INFORM.

CLIENT
RESIDE INVESTMENTS LTD.

PROJECT
CARRIGLINE SHD

DRAWING
GA - 01 - FIRST FLOOR PLAN

PROJECT NUMBER: 950829 DATE: 17/09/2021
 SCALE@ A1: As indicated DRAWN/CHECKED: HJ/KMM

STATUS CODE:	DRAWING NUMBER	REVISION
S2	950829-HJL-00-01-DR-A-1011	P3