

O'Flynn Construction Co. Unlimited
Company

**Old Fort Road, Ballincollig -
Strategic Housing Development**

Outline Mobility Management Plan

REP/002

Issue 1 | 23 April 2020

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 273486-00

Ove Arup & Partners Ireland Ltd

Arup
One Albert Quay
Cork
T12 X8N6
Ireland
www.arup.com

ARUP

Document verification

Job title		Old Fort Road, Ballincollig - Strategic Housing Development		Job number		273486-00	
Document title		Outline Mobility Management Plan		File reference		4-04-02	
Document ref		REP/002					
Revision	Date	Filename	267978-00_2020-03-28_Old Fort Road Ballincollig_Outline MMP_D1.docx				
Draft 1	28 Mar 2020	Description	First Draft				
			Prepared by	Checked by	Approved by		
		Name	Niamh O'Regan	Clifford Killeen	Tony Lynch		
		Signature					
Issue 1	23 Apr 2020	Filename	267978-00_20200423_Old Fort Road Ballincollig_Outline MMP_Issue 1.docx				
		Description	Final Issue				
			Prepared by	Checked by	Approved by		
		Name	Niamh O'Regan	Clifford Killeen	Tony Lynch		
		Signature	<i>NORgan</i>	<i>Clifford Killeen</i>	<i>Tony Lynch</i>		
		Filename					
		Description					
			Prepared by	Checked by	Approved by		
		Name					
		Signature					
		Filename					
		Description					
			Prepared by	Checked by	Approved by		
		Name					
		Signature					

Issue Document verification with document



Contents

	Page
1 Introduction	1
1.1 General	1
1.2 Objectives and Vision	1
1.3 Benefits of an MMP	2
1.4 Structure of the Report	2
2 Receiving Environment	3
2.1 General	3
2.2 Site Access	4
3 Planning Context	5
3.1 Cork County Development Plan 2014 / Cork City Development Plan 2015-2021	5
3.2 Ballincollig-Carrigaline Municipal District Local Area Plan	5
3.3 Parking	6
4 Accessibility	8
4.1 Public Transport Accessibility	8
4.2 Walking Accessibility	11
4.3 Cycling Accessibility	13
5 Outline Mobility Management Plan Commitments	15
5.1 General	15
5.2 Commuter Information Hub	15
5.3 Car-Pooling	16
5.4 Public Transport	16
5.5 Cycling	16
5.6 Miscellaneous	17

1 Introduction

1.1 General

Arup has been appointed by O'Flynn Construction to prepare an Outline Mobility Management Plan (MMP) for a proposed residential development on Old Fort Road, Ballincollig, Co. Cork. It is intended to apply for permission for the proposed development through the Strategic Housing Development process via An Bord Pleanála. The development site is located within Ballincollig Town Centre, within the Cork City Western Environs sub-area of the Ballincollig-Carrigaline Municipal District. It lies in the jurisdiction of Cork City Council.

This Outline MMP has been prepared to encourage accessibility to the site by alternative and more sustainable travel modes as opposed to single-person car-based trips, in turn minimising the potential impact of residents' commuter travel movements, and travel movements for other purposes, on the surrounding road network.

Post-completion, the principles and outline recommendations contained in this Outline MMP will be adopted by the future occupants of the development and will form the basis of a Mobility Management Strategy for the development.

Following occupation, the Mobility Management Strategy will be reviewed and assessed on an ongoing basis to examine the effects on residents and visitors' travel patterns, and new targets and actions will be agreed upon in an iterative process throughout the life of the development.

Mobility management plans for residential developments seek to reduce car use originating from these developments and are a useful tool to communicate the benefits of sustainable travel to all stakeholders.

A robust residential MMP is principally founded on initial design and location choices for the development. For example, developments that are located in sites that can readily avail of high-quality facilities and services, and that adopt a proactive design approach from the outset (e.g. permeability and accessibility, provision of facilities for alternative travel modes) will be well-positioned to implement and benefit from a successful plan.

1.2 Objectives and Vision

The main objectives of this Outline Mobility Management Plan are to:

- Reduce car dependency and demand for car-based trips;
- Promote sustainable modes of transport and high accessibility to and from the site;
- Create awareness of alternative modes of transportation available, and their proximity to the development;

- Reduce the environmental effects associated with increased car use such as congestion, parking impacts, longer journey times and increased pollution;
- Establish reasonable modal split targets based on strategies to improve the use of alternative modes of transport; and
- Provide a basis for a full MMP to monitor and actively promote more sustainable modes of travel for residents and visitors to and from the site.

1.3 Benefits of an MMP

Mobility Management Plans are intended to bring the following benefits:

- Alleviating concerns about the level of traffic generated by the development and parking problems which could arise by influencing the travel choices of the residents;
- Enabling higher density of developments (where possible);
- Potentially reducing the need for spending on new transport infrastructure;
- Improving travel options;
- Offering better access for residents to essential services and places of work;
- Reducing potential traffic impact associated with the development; and
- Creating sustainable, vibrant local communities and promoting healthy lifestyles.

1.4 Structure of the Report

- Chapter 1: Introduction;
- Chapter 2: Receiving Environment;
- Chapter 3: Planning Context;
- Chapter 4: Accessibility; and
- Chapter 5: Outline Mobility Management Plan Commitments.

2 Receiving Environment

2.1 General

The proposed development will be a residential development with associated crèche facility in the suburban town of Ballincollig, approximately 9km west of Cork City.

The site is located to the north of an existing shopping centre and borders an existing residential development to the west and a medical centre to the east. It is currently a greenfield site which is accessed from the Old Fort Road. The site location is presented in **Figure 1** below.



Figure 1: Site Location – Local Context

2.2 Site Access

A brief description of the local road network near the proposed development is provided below. The layout of the local road network is also presented in **Figure 2** below.



Figure 2: Local Road Network

Main Street Ballincollig (R608): The R608 is a regional single-carriageway two-way route, which acts as the primary east-west route in Ballincollig. It connects Cork City with the western regions in its own right or via the N22. Footpaths are provided on both sides of the main street, with on-street parking also provided on both sides.

As part of the Green Route improvements in recent years comprising urban realm improvements in Ballincollig town, upgrading junctions and provision of bus lanes, cycle lanes and new footpaths, a signalised junction replaced the old Muskerry Roundabout on the R608. The Muskerry Estate signalised junction provides accessibility to the proposed site via Old Fort Road. The R608 widens locally at this junction, with an eastbound bus lane through the junction, a westbound cycle lane on the western side of the junction, and additional lanes on the immediate approaches to facilitate vehicular turning movements.

Old Fort Road: This single-carriageway two-way route provides access to the proposed development site from the Muskerry signalised junction and acts as one of the main routes for the area coming to/from the N22 and N40. It also acts as a distributor road for the north side of the town. This road has one vehicular lane in each direction with a two-way cycle facility provided on the northern side and a footpath on the southern side.

Innishmore Lawn: This road has one vehicular lane in each direction with a segregated cycle facility provided on the northern side and footpaths on both sides. It runs parallel to the main street through the western part of Ballincollig.

3 Planning Context

3.1 Cork County Development Plan 2014 / Cork City Development Plan 2015-2021

The site of the proposed development is bounded to the west by Waltham Abbey, an existing residential development, to the north by Ballincollig GAA grounds and the Ballincollig Waste Water Treatment Plant, to the east by a medical centre and community nursing unit, and to the south by Old Fort Road. It is located approximately 9km from Cork City Centre.

The site is located within the administrative boundary of Cork City Council and was incorporated into the Cork City South West Local Electoral Area in June 2019. As the City Development Plan predates the boundary extension to include this site, it is not referenced within the plan. At the time of development of the Local Area Plans, it formed part of Cork County Council's jurisdiction and therefore the relevant planning guidance, following the Cork County Development Plan 2014, is the Ballincollig-Carrigaline Municipal District LAP, which was finalised in 2017. The site lies within the 'Cork City Southern Environs' portion of this Municipal District.

3.2 Ballincollig-Carrigaline Municipal District Local Area Plan

There are currently no specific zoning objectives for the site set out in the LAP. The site is zoned as 'Town Centre'. The LAP includes objectives for town centres, including the following:

“1.7.43: ...Cork County Council recognises the key strategic and important cultural/economic/societal role town centres play in sustainable communities. Furthermore, the successful delivery of well-conceived town centre development will deliver public realm and physical improvements which can in-turn improve quality of life factors and help increase economic activity.

1.7.44: To help address town centre vibrancy issues and to assist communities, property owners and prospective applicants develop the most appropriately designed investment at the optimum town centre locations, targeted supports will be required. The LAP formulation process provides an opportunity to initiate a Town Centre Improvement Scheme that will provide suggested approaches to help inform decisions that can contribute to improved town centre functionality and public realm improvements.

1.7.45: It is intended in the first instance, that the Town Centre Improvement Scheme will consider locations within the towns of Carrigtwohill, Ballincollig, Passage West and Carrigaline and will seek to do the following:

- *Provide guidance on the future land use and public realm improvement priorities within the town centre;*
- *Identify key buildings to be protected within the town centre;*

- Provide guidance for developers/public on the key aspects of the town's urban character which need to be respected/reinterpreted in future applications (building height, roofscape, materials, building lines, plot depth, signage);
- Provide a people-focussed movement and public realm strategy which defines the gateways/ sense of arrival within the town; enhances connectivity and permeability between the town centre and housing/employment growth areas ...; rationalises on-street parking on the main streets; widens and improves the quality of the pavement within the defined retail core; introduces traffic calming measures and additional safe pedestrian crossing points at key locations (near schools etc);
- Identify opportunity sites for single or multi-use developments within the existing streetscape; and
- Devise an urban structure for the future expansion of the town, including identifying the location of new streets, positioning of building lines, height parameters, plot divisions etc in line with the Best Practice Urban Design Manual as read with the Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas.

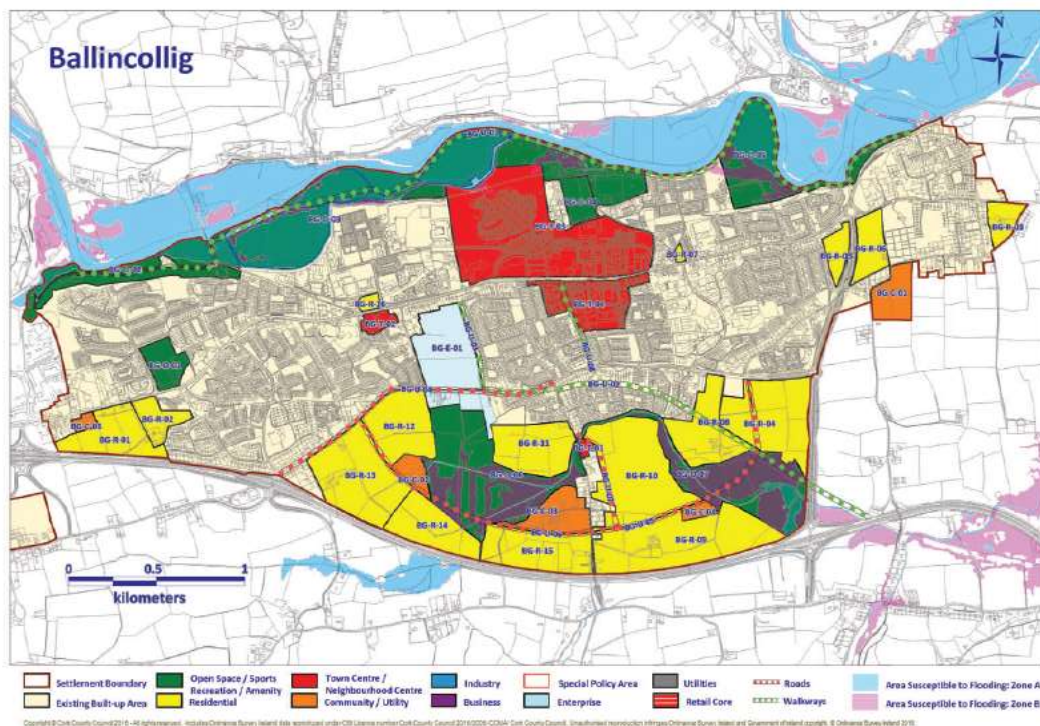


Figure 3: Ballincollig-Carrigaline MD LAP – Current Zoning ('Town/Neighbourhood Zoning')

3.3 Parking

Under the Cork County Development Plan the maximum allowable parking for the proposed development is 151 parking spaces.

However, in an effort to capitalise on the site location and proximity to Ballincollig Town Centre and a nearby high-frequency bus service, as well as upgraded pedestrian and cyclist facilities in the vicinity of the development, a total of 98 car parking spaces is proposed which will include disabled parking spaces and electric vehicle charge points.

4 Accessibility

This section of the report examines the accessibility of the site for pedestrians, cyclists, public transport users and vehicular traffic.

4.1 Public Transport Accessibility

Figure 4 and **Figure 5** below present Accessibility Maps which demonstrate how accessible the proposed development site is in terms of public transport. The maps plot 15-minute journey time contours to and from the site including time taken walking to a public transport stop, wait time, and the subsequent journey. A catchment area of up to 90 minutes is shown for the morning and evening peak periods respectively. These infographics have been produced using GIS Network Analyst, which is a multi-modal transport accessibility tool utilising nationwide general transit feed specification (GTFS) data. The AM figure is based on leaving the site at 08:00 and the PM figure is based on arriving at the site at 18:30.

The model identifies the accessibility and integration of transport facilities from the perspective of pedestrian users. The model calculates how accessible every transport facility is from each part of the street network (i.e. each bus stop and train station where applicable). The resultant time interval contours give an indication of how accessible a location is by public transport and allows for a portion of walking time to the stop to be included.

It can be seen in the below figures that a significant portion of Cork City and Metropolitan Area is accessible from the development within an hour's travel on public transport.

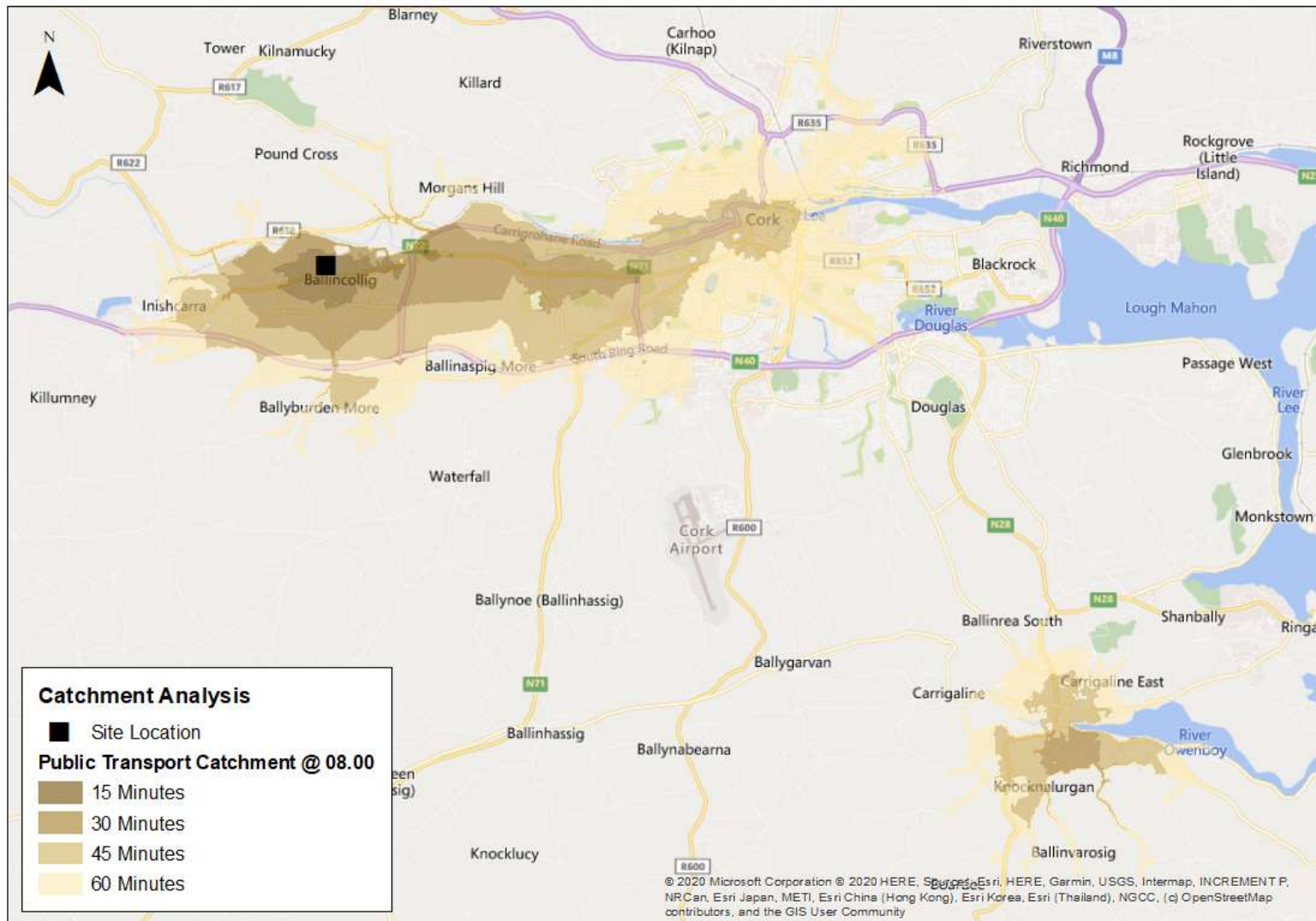


Figure 4: AM Peak Public Transport Journey Times from the Development

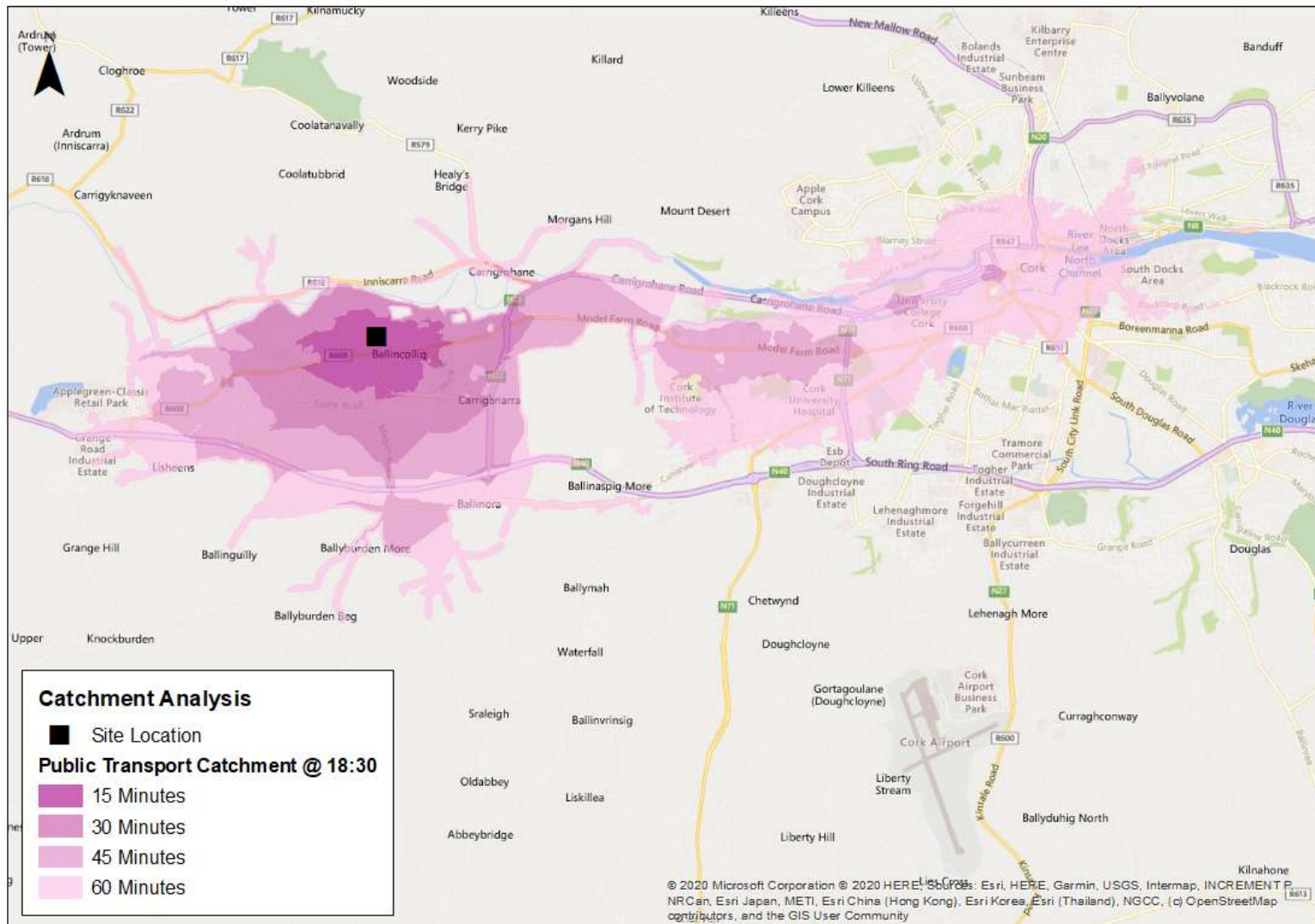


Figure 5: PM Peak Public Transport Journey Times to the Development

4.1.1 Existing Public Transport Services

The site is very well served by public transport. The closest bus stop is located on the R608 Main Street, approximately 300m to the south of the site as shown in **Figure 2**. A bus shelter is provided for both eastbound routes.

The bus stops are served by the number 220 and 220X Carrigaline-Cork-Ballincollig and the number 233 Cork-Ballincollig-Ballingeary regional bus services. The approximate frequency of these services is presented in **Table 1**.

The 220 service operates on a 24-hour basis with increased frequency during the day (every 15 minutes for the majority of the typical day). Bus Éireann has confirmed that a 60% increase in customer journeys has been observed since these changes were implemented. This is the first 24-hour service in Cork City and indeed in Ireland. It provides excellent connectivity for the proposed development to Cork City and its surrounding suburban areas and has been considered a resounding success since implementation.

Table 1: Public Transport Service Frequencies

Bus Service	Approximate Frequency
Bus No. 220/220X Carrigaline – Cork – Ballincollig	24-hour service operating every 15 mins from 06.15-23.30; every 30 mins outside of these times
Bus No. 233 Cork – Ballincollig – Ballingeary	Westbound: 07.42, 07.45, 09.12, 09.05, 13.00, 13.32, 15.58, 22.48. Eastbound: 06.48, 07.53, 08.22, 11.03, 13.38, 15.18, 16.50, 16.53, 18.38, 19.13.

4.2 Walking Accessibility

The site of the proposed development is centrally located in the town of Ballincollig. As can be seen in **Figure 6** below, pedestrians can access most areas of Ballincollig town centre within 20 minutes. **Figure 6** shows the areas within a 10, 20, and 30-minute walking catchment of the proposed site.

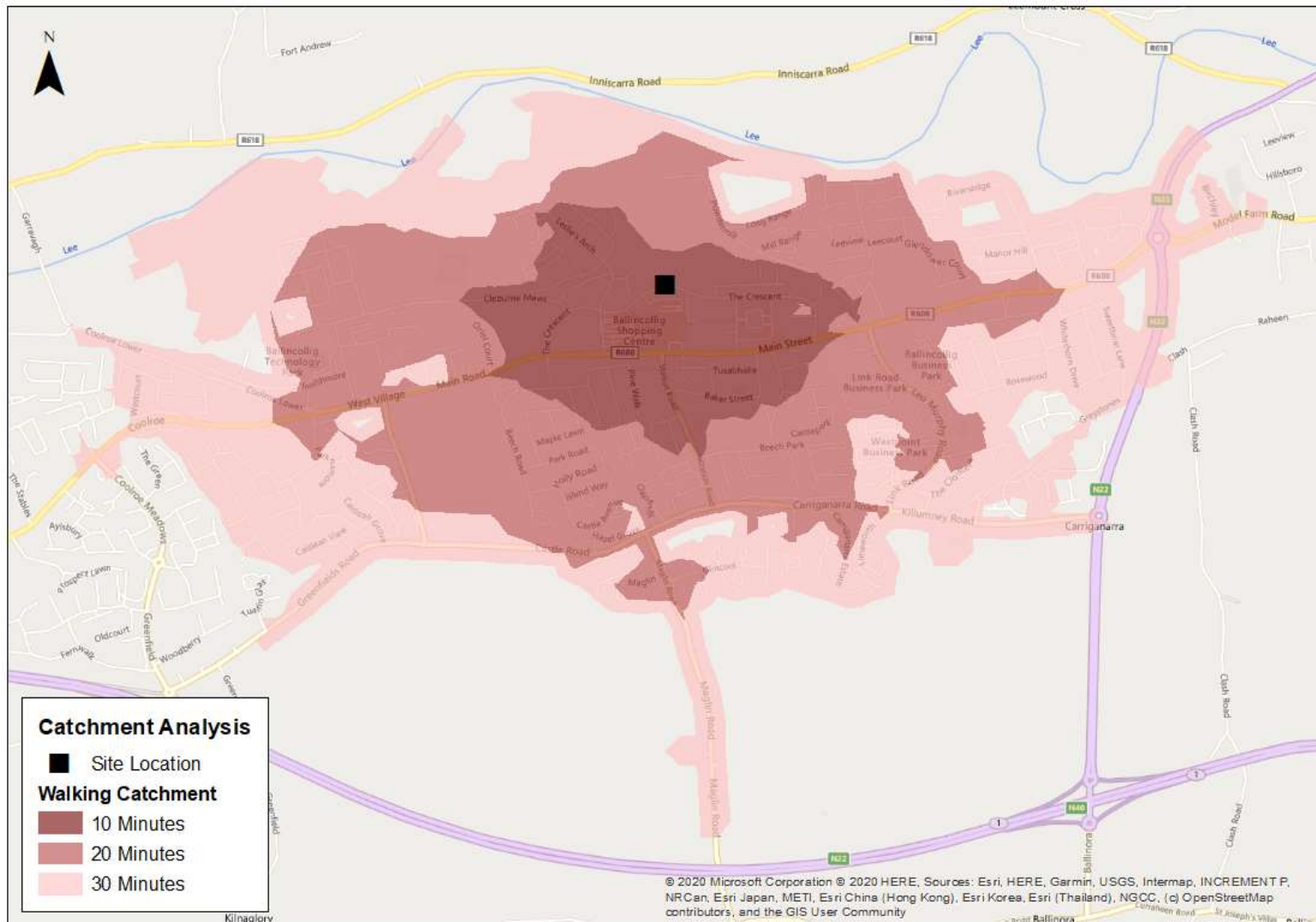


Figure 6: Walking Journey Times to and from the Development

4.3 Cycling Accessibility

There is currently dedicated cyclist-priority infrastructure directly serving the development along Old Fort Road, which will be continued along the site frontage. Cycle lanes are also present on the R608 at either end of Old Fort Road.

Figure 7 shows the areas within a 10, 20, and 30-minute cycle of the proposed site. For example, all of Ballincollig and the western suburbs of Cork City, including University College Cork, lie within a 30-minute cycle of the site.

The below accessibility mapping illustrates the potential that this site has to promote more sustainable modes of transport to the residents of the proposed development and for minimising single-occupancy, car-based commuter trips.

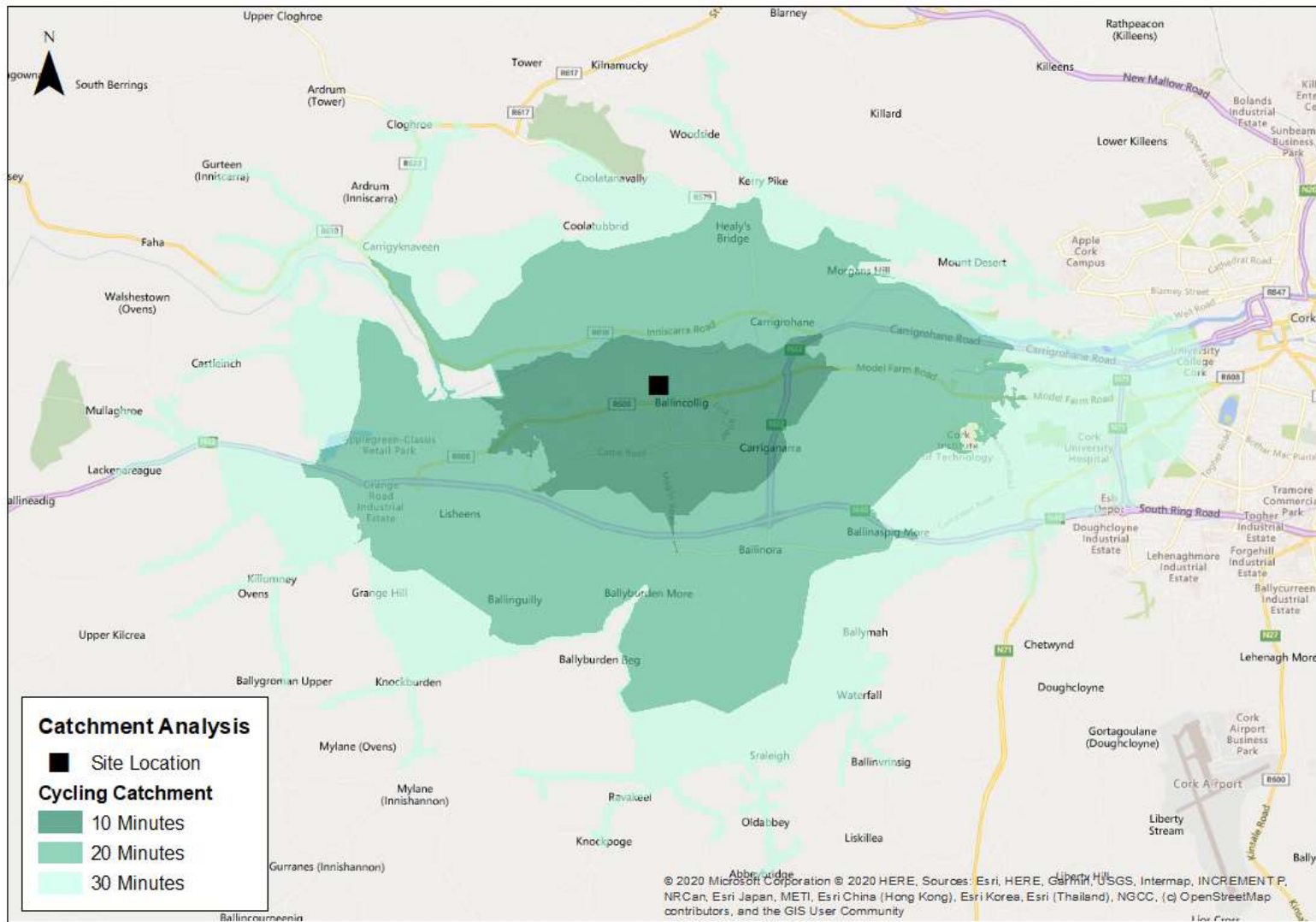


Figure 7: Cycling Journey Times to and from the Development

5 Outline Mobility Management Plan Commitments

5.1 General

The following section details the various measures which the proposed residential development will include within this Outline Mobility Management Plan, to reduce the potential impact of the proposed development on the transport environment in the vicinity. These measures will form part of a Mobility Management Strategy developed for the overall development, which will assist Building Management in progressing formal Mobility Management proposals. Building Management will in turn liaise with future tenants and provide them with the relevant information to enable them to make informed travel choices.

It is envisaged that the following commitments will be progressed through to implementation during the first 12 months of the initial occupation of the proposed residential development.

5.2 Commuter Information Hub

It will be an objective for Building Management to implement a building-wide 'hub' from which all relevant mobility information can be accessed. This would be available to all tenants and any employees within the building, either on a dedicated development-wide website, or disseminated to the various tenants for their own internal use. Furthermore, to complement this, a dedicated notice-board/information hub area may also be considered within the development.

It will be an objective of Building Management to set up an information hub for tenants and to promote alternative modes of transport and disseminate information at a single point of contact.

It will also be an objective to develop a Commuter Notice Board at a physical location within the building, to disseminate information. This will provide a 'one-stop shop' for tenants and any employees and will be used to promote alternative modes of transport.

It will provide information on bus timetables, discounted bus ticket fares available through the LEAP card scheme, discounted cycle purchases and all other relevant promotions, incentives and information which can be used by tenants.

It will also provide details (if relevant) of different parking areas available including bicycle parking, motorcycle parking and preferential parking for members of any car-pooling clubs as well as disabled and electric vehicle parking areas.

5.3 Car-Pooling

It will be an objective for Building Management to investigate the feasibility of implementing or facilitating a Car-Pooling System. If feasible, tenants will be encouraged to either implement a car-pooling scheme or to sign up to a development-wide car-pooling scheme. In the event of this scheme being established, Building Management will make specific provisions to provide a quantum of priority parking for tenants who are participating in a car-pooling scheme.



5.4 Public Transport

The site is well-served by public transport. There are eastbound and westbound bus stops within 300m walk of the site which are served by multiple bus services including the 24-hour 220 service.

This will allow tenants ready access to a high-frequency service with dedicated onward priority to the city.



The details of train and bus timetables, routes, bus stop locations and fares will be displayed at appropriate locations throughout the proposed development. In addition, 'travel packs' including the above information and how to avail of the reduced ticket prices (e.g. via the LEAP card) will be provided to tenants.

5.5 Cycling

The development site is located close to Ballincollig town centre and is well served by dedicated cycling facilities.

To maximise the number of cyclists commuting to and from the site, the following Outline Mobility Management Plan measures will be implemented:

Building Management will encourage tenants to set up and promote a resident cycle user group.

274 Cycle parking spaces will be provided within the development.

Building Management will investigate the feasibility of facilitating regular cycling events and initiatives.

A cycling 'fact sheet' will be prepared and circulated to all residents, outlining the dedicated facilities in the site vicinity.

Cork City and County Councils have developed a Cycle Strategy for the Cork Metropolitan Area and it is proposed that a target modal share should be 10% by bicycle in line with National Cycle Policy Framework (NCPF) and 11% in line with the Cork Cycle Network Plan (CCNP). The provision of 272 cycle parking spaces and the reduced quantum of proposed parking spaces for cars will allow Building Management to seek modal share in excess of these targets.



5.6 Miscellaneous

5.6.1 Electric Vehicle Charge Points

The developer recognises the sustainable nature of Electrical Vehicles and acknowledge that the Drive-4-Zero campaign is being strongly promoted throughout Cork City and County. To this end, three designated Electric Vehicle charging spaces will be provided at the outset as part of the 98 parking spaces, and provision will be made to allow future conversion of other spaces to EV-compatible spaces.

Three Electric Vehicle charge points will be provided within the total parking provision of 98 spaces at the proposed development with the remaining spaces future-proofed for future conversion to EV compatible spaces.

5.6.2 Appointment of Mobility Manager

The role of Mobility Manager will be assigned to a member of Building Management staff who will be responsible for the implementation of the aforementioned commitments and who will ensure that future targets are achieved and monitored. This will be done by carrying out travel surveys every two years (in conjunction with tenants) to assess the success of the Outline Mobility Management Plan and revise the plan as and when required, to suit the evolving nature of commuting to and from the development.

The role of Mobility Manager will be assigned to a Building Management member of staff who will be responsible for the implementation of the aforementioned commitments and who will ensure that future targets, set as a result of travel surveys, are achieved and monitored.

The Mobility Manager shall also be responsible for providing regular updates to all tenants regarding improvements to walking, cycling and public transport facilities in proximity to the site, and to raise awareness of promotion events associated with same.

5.6.3 Parking Provision

The proposed residential development includes car parking provision below the maxima allowed for in the County Development Plan. These standards are specifically intended to constrain car trip generation and promote patronage of 'green' modes of transport.

5.6.4 Mobility Management Policy

Building Management will be encouraged to establish a development-wide policy on Sustainable Travel Methods aimed at minimising single occupancy car-based commute trips where possible, as well as promoting the Outline Mobility Management Plan to all tenants including the promotion of same to all new tenants within 'Welcome Packs' provided as part of occupation.