Donore Project

Mobility Management Plan

The Land Development Agency

Project number: 60648061

November 2022

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Quality information

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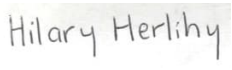			
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Revision	Revision date	Details	Authorized	Name	Position
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1. Introduction

1.1 The Brief

AECOM has been appointed by Land Development agency (LDA) to produce a Mobility Management Plan (MMP) for the Donore Project, St Teres's Gardens, Dublin 8. The MMP should be read in conjunction with the Traffic and Transport Assessment (TTA). The MMP proposes a co-ordinated and area-wide approach to manage travel to and from the site

The site is bound by Donore Avenue to the north-east, Margaret Kennedy Road to the north-west, The Coombe Women and Infants University Hospital to the west, the former Bailey Gibson factory buildings to the south-west, and the former Player Wills factory to the south-east

A MMP is a robust package of measures aimed at encouraging a shift to sustainable travel modes such as walking, cycling and public transport. The plans are developed on a bespoke basis and may recommend improvements to infrastructure as well as behavioural change measures, such as improved provision of information or promotional campaigns and events.

This is in keeping with current policies, which aim to reduce the greenhouse gas emissions related to transport, such as

- EU Transport White Paper (European Commission, 2011),
- National Sustainable Mobility Policy (Department of Transport, 2022),
- Project Ireland 2040: The National Planning Framework and the National Development Plan (Irish Government, 2022).

The benefits of supporting active mobility as part of broader strategies to improve health are also highlighted in The National Physical Activity Plan for Ireland (Department of Health and Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media, 2016).

As such, the main focus of the MMP is to identify and deliver a range of measures which encourage the use of sustainable travel modes and active travel.

This report has been prepared following consultation with the Dublin City Council Development Plan 2022 to 2028. The TTA supporting this application has been prepared in accordance with TII "Traffic and Transport Assessment Guidelines" 2014.

1.2 Report Structure

A successful MMP should be based on a detailed analysis of the issues and opportunities affecting travel to and from the proposed development site. Therefore, this report is structured as follows:

- **Section 2 Policy Context:** Examines the national and local policy context for the proposed development.
- **Section 3 Existing Transport Conditions:** Presents the current conditions of site accessibility for bus, rail, cycling, and pedestrian facilities.
- **Section 4 Existing Travel Patterns:** Presents findings from the census publication to find current mobility mode shares and set a baseline for future targets.
- **Section 5 Proposed Development:** This section provides details on what the development proposals are and how they will impact the MMP.
- **Section 6 Objectives, Targets and Measures of the MMP**: Outlines the objectives and targets of the MMP to measure the success of the plan. proposes different tools and measures that can be used to ensure that the objectives of the MMP and the plan is successful.
- **Section 7 Monitoring:** This section sets out the strategy that will be used to monitor the MMP.
- **Section 8 Summary:** Summarises and concludes the findings and the travel measure that will take place amongst the development.

2. Policy Context

2.1 Introduction

This section reviews the relevant policy and guidance for the development of the Arklow CBS MMP. Relevant aspects of the following policies, plans and programmes are discussed:

- Project Ireland 2040 (2018): The National Planning Framework and the National Development Plan.
- National Sustainable Mobility Policy (2022).
- TII National Roads -Active Travel Planning October (2021)
- Dublin City Council Development Plan 2022-2028 (2022)

2.2 2.2 National Policy

Project Ireland 2040 (2018): The National Planning Framework and the National Development Plan.

The National Planning Framework (NPF) published in February 2018 is a national document intended to guide at a high-level strategic planning and development for Ireland over the next 20+ years, so that as the population grows, that growth is sustainable (in economic, social, and environmental terms). The NPF details ten 'National Strategic Outcomes' and the National Development Plan 2018-2027 outlines how public capital investment over the next ten years aims to secure the realisation of each of these under corresponding 'Strategic Investment Priorities'.

The NPF with the National Development Plan sets the context for each of Ireland's three regional assemblies to develop their Regional Spatial and Economic Strategies taking account of and co-ordinating local County and City Development Plans in a manner that will ensure national, regional, and local plans align.

The goal of Sustainable Mobility is highlighted within the Shared Goals – Our National Strategic Outcomes section. In line with Ireland's Climate Change mitigation plan, the plan sates that the need to progressively electrify mobility systems moving away from polluting and carbon intensive propulsion systems to new technologies such as electric vehicles (EV) and introduction of electric and hybrid traction systems for public transport fleets. The goal is that by 2040 cities and towns will enjoy a cleaner, quieter environment free of combustion engine driven transport systems.

National Sustainable Mobility Policy (2022)

The National Sustainable Mobility Policy was published in April 2022 and sets out the strategic framework to 2030 for active travel and public transport to support Ireland's overall requirement to achieve a 51% reduction in carbon emissions by 2030. The targets of the policy are to increase daily active travel and public transport journeys by 500,000, as well as a 10% reduction in kilometres driven by fossil fuelled cars by 2030. This target is in line with metrics for transport set out in the Climate Action Plan 2021.

The vision of the policy is "to connect people and places with sustainable mobility that is safe, green, accessible and efficient". This vision is guided by the three key principles of: safe and green mobility, people focused mobility, and better integrated mobility. The main goals that are relevant to this MMP are the expanding availability of sustainable mobility in metropolitan, regional, and rural areas, and to encourage people to choose sustainable mobility over the private car.

The expanding of availability of sustainable mobility in metropolitan, regional, and rural areas will be improved through walking, cycling, bus, and rail infrastructure, improved transport interchange and expended public transport services. Reducing reliance on the private car will be completed through the reallocation of road space from cars to sustainable travel methods, delivering safer walking and cycling options, and reducing parking provision.

The policy is supported by an action plan to 2025. The action plan will be reviewed in 2025 to assess the delivery of the goals so far and address what further action may need to be taken for the remaining five years to 2030.

TII National Roads -Active Travel Planning October (2021)

The Transport Infrastructure Ireland (TII) National Roads – Active Planning was published in October 2021 and outlines national policy with the aim to provide guidance on how active travel planning and design principles can be embedded in all stages of a project from inception through to construction and operation. It highlights the need

to create environments where walking, wheeling, and cycling are feasible and attractive options to shift more activity towards more sustainable transport modes.

In order to do so, the publication set out several active travel planning and design principles, which include:

The provision of active travel infrastructure, or interventions, should create, or contribute to the creation of, coherent walking, wheeling, and cycling networks.

The provision of active travel infrastructure, or interventions, must be plan-led to maximise opportunities for potential benefits and usage.

Engagement with appropriate stakeholders, including community groups, is key to successful active travel infrastructure, or intervention, development, and delivery.

Several barriers to accessing active travel are also identified as factors which developers should take into consideration. These include physical barriers such as travel distance, road safety and lack of appropriate infrastructure, and other barriers such as age, health, fitness and security. All of which should be evaluated to understand why people may not currently use active travel modes.

2.3 Local Policy

- Dublin City Council Development Plan 2022-2028
- Design Standards for New Apartments – 2018
- Greater Dublin Area Transport Strategy 2020-2042

Dublin City Council Development Plan

The Development Plan 2022 - 2028 sets out the vision, policies, strategies and objectives for planning and sustainable development within the administrative area of DCC. In the context of the subject site a number of the most relevant polices include:

Movement and Transport (SMT 1) Policy Modal Shift and Compact Growth

To continue to promote modal shift from private car use towards increased use of more sustainable forms of transport such as active mobility and public transport, and to work with the National Transport Authority (NTA), Transport Infrastructure Ireland (TII) and other transport agencies in progressing an integrated set of transport objectives to achieve compact growth.

Movement and Transport (SMT 2) Policy – Decarbonising Transport

To support the decarbonising of motorised transport and facilitate the rollout of alternative low emission fuel infrastructure, prioritising electric vehicle (EV) infrastructure

Movement and Transport (SMT 3) Policy – Integrated Transport Network

To support and promote the sustainability principles set out in National and Regional documents to ensure the creation of an integrated transport network that services the needs of communities and businesses of Dublin City and the region.

Movement and Transport (SMT 4) Policy – Integration of Public Transport Services and Development

To support and encourage intensification and mixed-use development along public transport corridors and to ensure the integration of high quality permeability links and public realm in tandem with the delivery of public transport services, to create attractive, liveable and high quality urban places.

Movement and Transport (SMT 5) Policy – Mobility Hubs

To support the development of mobility hubs at key public transport locations and local mobility hubs in tandem with new developments to include shared car and micro mobility initiatives, creating a vibrant, accessible and liveable place to support the transportation experience

To require the preparation and submission of travel plans for new and existing developments as part of the planning application process including residential, school, workplace etc.

Movement and Transport (SMT 6) Policy – Mobility Management and Travel Planning

To promote best practice mobility management and travel planning through the requirement for proactive mobility strategies for new developments focussed on promoting and providing for active travel and public transport use

Movement and Transport (SMT 7) Policy – Travel Plans for New and Existing Developments

To require the preparation and submission of travel plans for new and existing developments as part of the planning application process including residential, school, workplace etc.

Sustainable Urban Housing: Design Standards for New Apartments Guidelines

The Sustainable Urban Housing: Design Standards for New Apartments Guidelines identifies 3 different location categories that are used to assess how accessible a scheme is to the surrounding sustainable forms of transport which are as follows:

- 'Central and / or Accessible Urban Locations;
- Intermediate Urban Locations; and
- Peripheral and / or Less Accessible Urban Locations.'

Based upon the review of the existing transport facilities and taking cognisance of the proposed future works as detailed in Chapter 2, the applicable location standard as per the Design Standards for New Apartment Guidelines for this development would be 'Central and / or Accessible Locations'. The Design Standards for New Apartment Guidelines defines ' 'Central and / or Accessible Locations' as follows:

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

These locations are most likely to be in cities, especially in or adjacent to (i.e. within 15 minutes walking distance of) city centres or centrally located employment locations. This includes 10 minutes walking distance of DART, commuter rail or Luas stops or within 5 minutes walking distance of high frequency (min 10 minute peak hour frequency) bus services. The quantum of car parking or the requirement for any such provision for apartment developments will vary, having regard to the types of location in cities and towns that may be suitable for apartment development, broadly based on proximity and accessibility criteria.'

Transport Strategy for the Greater Dublin Area 2022 – 2042

The Transport Strategy for the Greater Dublin Area (2022 – 2042), which has been prepared by the NTA, with the purpose of the strategy being "To provide a sustainable, accessible and effective transport system for the Greater Dublin Area which meets the region's climate change requirements, serves the needs of urban and rural communities, and supports economic growth."

Chapter 5 of the Transport Strategy for the Greater Dublin Area, sets out the "strategic infrastructure that is proposed to be delivered within the lifetime of the strategy". The strategy objectives are presented by the various modes of transport as follows:

- An enhanced Natural and Built Environment - To create a better environment and meet our environmental obligations by transitioning to a clean, low emission transport system, reducing car dependency, and increasing walking, cycling and public transport use.
- Connect Communities and Better Quality of Life - To enhance the health and quality of life of our society by improving connectivity between people and places, delivering safe and integrated transport options, and increasing opportunities for walking and cycling.

- A strong Sustainable Economy - To support economic activity and growth by improving the opportunity for people to travel for work or business where and when they need to, and facilitating the efficient movement of goods
- An Inclusive Transport System - To deliver a high quality, equitable and accessible transport system, which caters for the needs of all members of society

3. Existing Transport Conditions

3.1 Introduction

This chapter reviews the accessibility of the site for all sustainable modes of transport. It provides a description of the existing site and location, and a review of the existing walking, cycling and public transport facilities near the proposed development.

3.2 Existing Site

This section of the report gives an outline of the existing conditions surrounding the proposed development including the local road network, the characteristics of the site, any committed future road infrastructure schemes, and any committed developments in the vicinity. The subject site is situated approximately 3.5km south of Dublin City Centre, and 300m north of the Royal Canal.

The site is situated to benefit from both sustainable and active forms of transport due to its proximity to Dublin City Centre, (approx. 3km walk to O'Connell Bridge). AECOM has undertaken a desktop review via Google Maps of the surrounding road network. The following sub-headings will outline the existing facilities available to the prospective residents with respect to active travel (walking, cycling) and sustainable transport (bus, rail, car share) along with a review of the existing commuting habits for the surrounding electoral districts based on the 2016 Census data.

3.3 Existing Road Network Inclusive of Pedestrian Facilities

The proposed development is located within a network of roads that provide both pedestrian and vehicular access, the existing road network and pedestrian infrastructure is considered to be good quality and functioning well. The local road network is illustrated in in Figure 3.1 and Figure 3.2

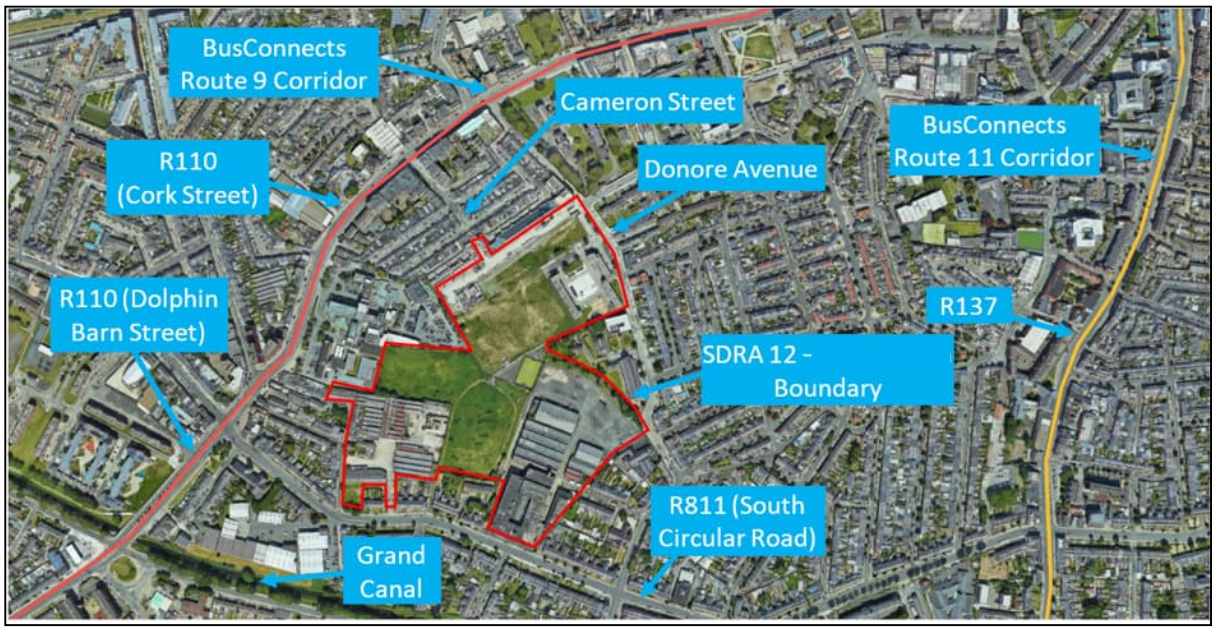

Figure 3.1 Site Location (Source: Googlemaps.com)

Figure 3.2 Proposed Site development Area within the SDRA 11 (Source: Googlemaps.com)

The following details the different roads and footways that show the proposed development is easily accessible.

3.3.1 Donore Avenue

Donore Avenue is designated as a local street which features footways along both sides of the carriageway with uncontrolled crossings provided by means of blister strip paving and raised tables. The raised tables are provided at junctions to create safer crossing facilities with speed ramps provided between the junctions to help keep vehicle speeds low. Street lighting is provided along both sides of the carriageway.

3.3.2 South Circular Road (R811)

The South Circular Road is designated as a Regional Road (R811) which features footways along both sides of the carriageway. A bus lane is provided along a section of the carriageway for buses travelling east along the South Circular Road from the R110. Bus stops are provided along both sides of the carriageway. A signal-controlled junction is provided at the Donore Avenue / South Circular Road which features designated crossing facilities on the northern and western arm (dropped kerbs and tactile paving). A signal-controlled junction is provided at the R110 / South Circular Road which features designated crossing facilities on all arms of the junction, the north and south arm are staggered crossings. Public lighting is provided along both sides of the carriageway.

3.3.3 Cork Street (R110)

The Cork Street (R110) is designated as a Regional Road and is to the west of the SDRA 11. It features footways along both sides of the carriageway with a dedicated bus and cycle lane also being provided along both sides of the carriageway. Signalised junctions with designated crossing facilities are provided at the R110 / South Circular Road and R110 / Donore Avenue / R804 junctions. A pelican crossing is provided at the Coombe Women and Infants University Hospital. Public lighting is provided along both sides of the carriageway.

3.3.4 Cameron Street

Cameron Street is a local street which features footways along both sides of the carriageway and serves as an access street to residential homes along Eugene Street, Fingal Street, Maxwell Street. A raised table with tactile paving is provided at the intersection of Cameron Street / Fingal Street / Maxwell Street. Public Lighting is provided on approach to the R110 from Cameron Street.

Figure 3.3 below illustrates the local access routes throughout the proposed scheme that create access points to the aforementioned roads and amenities known as the non-statutory plan.

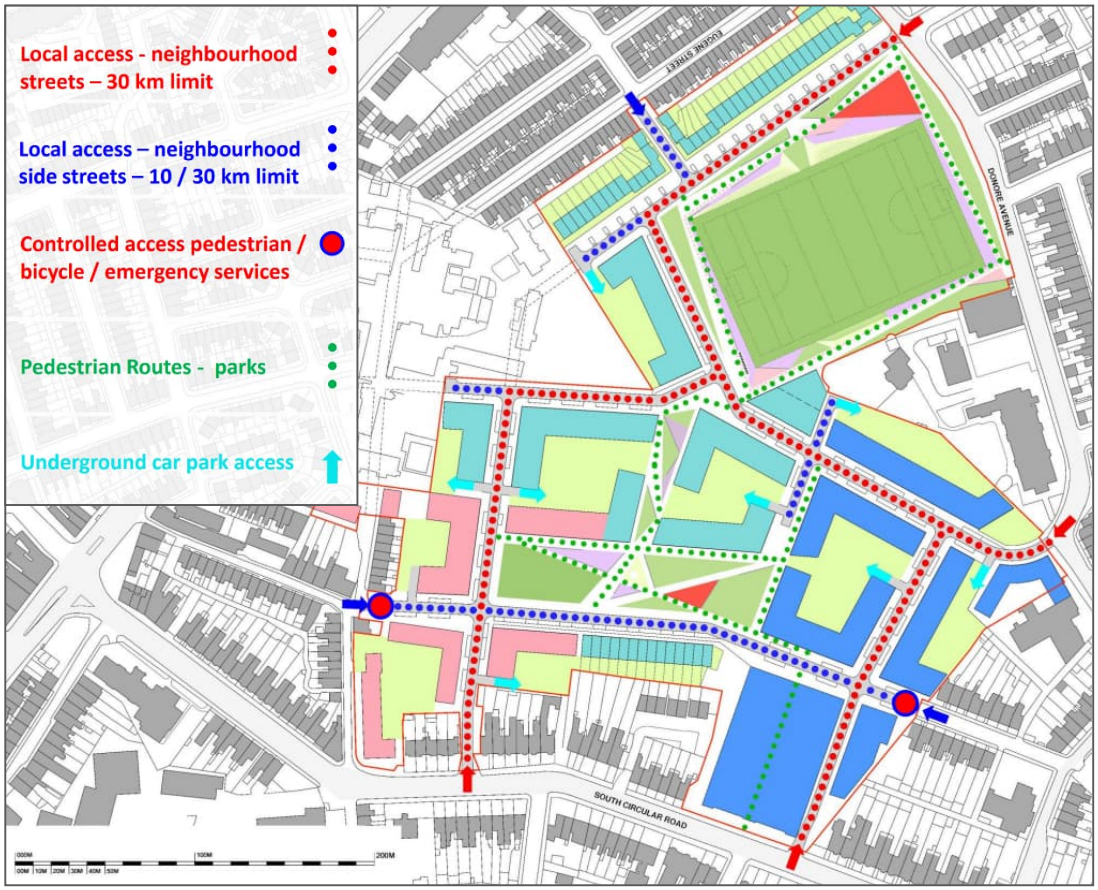

Figure 3.3 SDRA 11 Development Framework Access Strategy

The above shows that following the access strategy guidance in the above development framework there will be vehicular access to the site from the South Circular Road via the Player Wills site and Bailey Gibson developments and will be a local access neighbourhood street with a 30kph speed limit.

3.4 Cycling Facilities

In the vicinity of the subject site, dedicated cycle lanes are only provided on the R110 to the west of the development, no dedicated cycle lanes are provided on the South Circular Road or Donore Avenue. There are existing plans to upgrade the cycle lanes along the R110, Donore Avenue and the South Circular Road and it is understood that the cycle facilities to be provided along the R110 will be part of the BusConnects redesign.

While the planned future active modes of travel are relevant to the application as an observation to aid the proposed development site in future years, the current active travel facilities are what the applications impact on the available capacity will be determined against. The existing cycling facilities are illustrated in Figure 3.4

Figure 3.4 Existing Cycle Facilities Source (National Transport Authority 2013)

Figure 3.5 illustrates the current cycling facilities that exist as of 2022 based on a desktop study and site visit undertaken by AECOM locating the active cycle facilities around the proposed development site. There are no Dublin bike stations within the vicinity of the proposed development site.

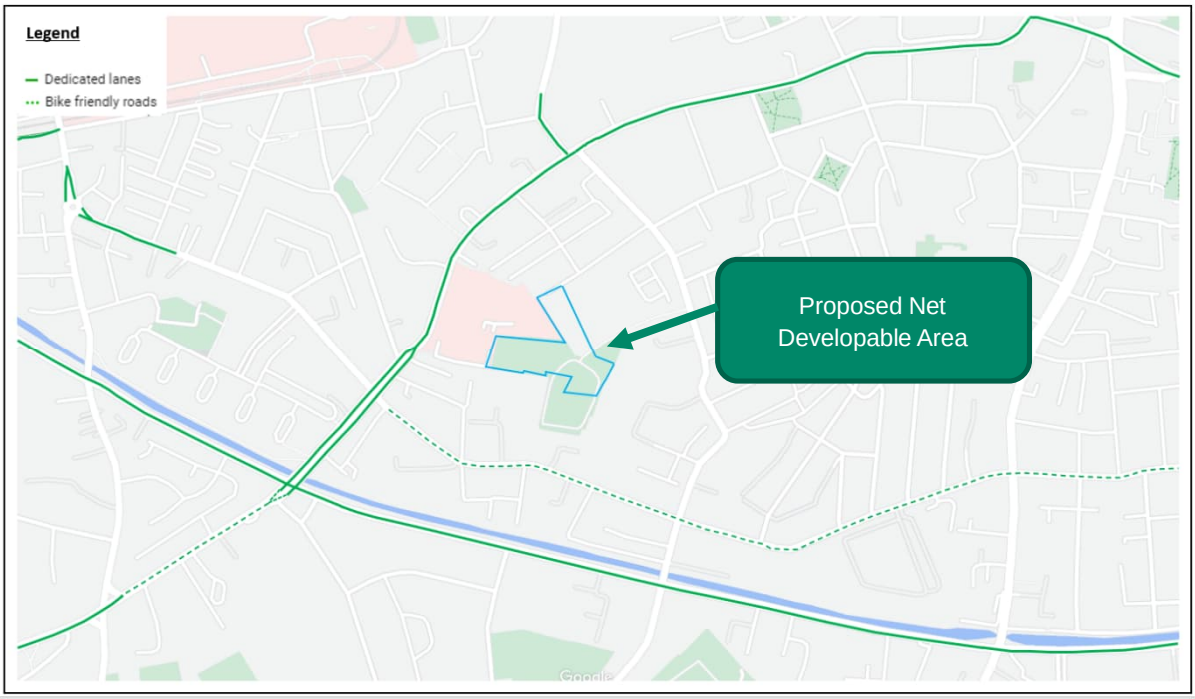

Figure 3.5 Current Cycling Facilities (AECOM)

In addition, Figure 3.6 illustrates the walking and cycling distance from the proposed development site. These distances are considered approximate due to the shapefile data AECOM had access to limiting the complete accuracy of the Isochrone.

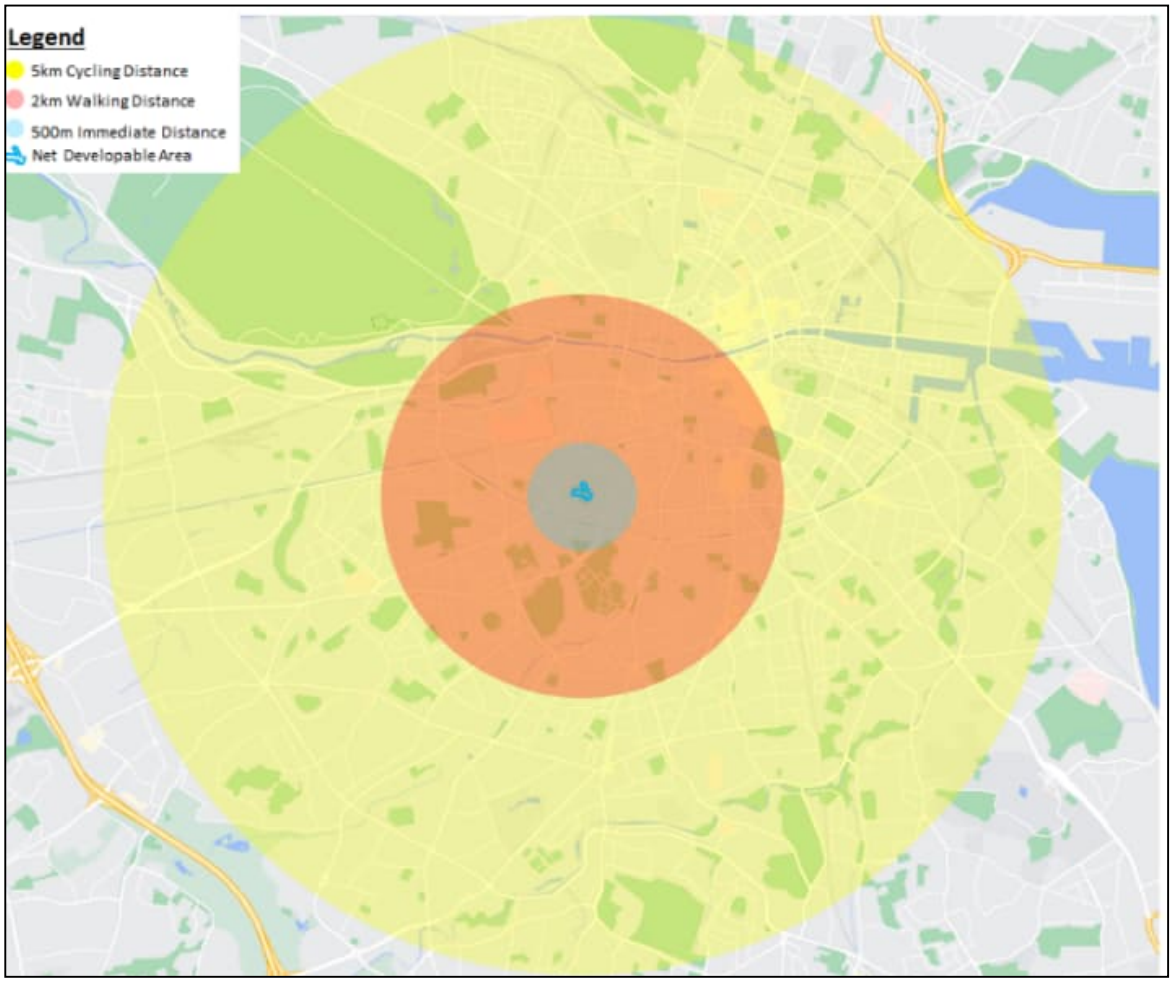

Figure 3.6 Walking and Cycling Radius Map in Relation to Dublin City

3.5 Car Club/ Car Share

Whilst it is anticipated that commuting will generally be undertaken on foot, bicycle or public transport, existing car club/car share facilities are available in proximity to the proposed development.

Car club/car share members can book cars online or via the app for durations of as little as an hour. They then unlock the car with their phone or a membership card; the keys are in the car, with fuel, insurance and city parking all included. The benefits of such car sharing services include:

- Aids the reduction of cars on the road and therefore traffic congestion, noise and air pollution;
- Has the potential to free up land traditionally used for private parking spaces;
- Encourages and potentially increases use of public transport, walking and cycling as the need for car ownership is reduced;
- Car sharing allows those who cannot afford a car the opportunity to drive, encouraging social inclusivity; and
- Car share replaces approximately 20-25 private car parking spaces.

There are four existing GoCar hire stations located within a 400m walking catchment of the subject site. AECOM has met with car sharing provider Go Car, who indicated that 25-30 vehicles would seem a maximum appropriate amount of car sharing car parking spaces to supply for the proposed development. It is anticipated that each vehicle can serve up to 20 properties. The locations of the nearest GoCar spaces are detailed in Table 3.1

Table 3.1 GoCar Bases and Distances

Site Number	GoCar Location	Distance from Subject site
1	Cork Street (Opposite Lidl) (GoCity x1)	300m
2	Donore Avenue – Rutlidge Terrace (Go Cargo x1)	180m
3	Dolphin Avenue (GoCity x1)	900m
4	Merton Avenue (GoCity x1)	500m

There are 3 existing YUKO hire stations located within a 500m walking catchment of the subject site. YUKO provide a similar service to GoCar. Booking a car can be completed through the website or their app. All rented cars must return to the location that the user set off from.

The locations of the YUKO bases are illustrated in in Table 3.2

Table 3.2 YUKO Bases and Distances

Site Number	YUKO Location	Distance from Subject site
1	1 Harmon Street, St. Catherine's, Dublin 8	400m
2	29 Donore Avenue , St. Catherine's, Dublin 8	150m
3	Salisbury Apartments, 214 South Circular Road, Dublin 8	450m

3.6 Public Transport

3.6.1 Public Bus

As graphically illustrated in Figure 3.7 the site is situated to benefit from bus transport connections allowing all site users to travel by this sustainable mode. There are 10 no. bus stops located within a 400m walking catchment of the site. These bus stops are operated by Dublin Bus.

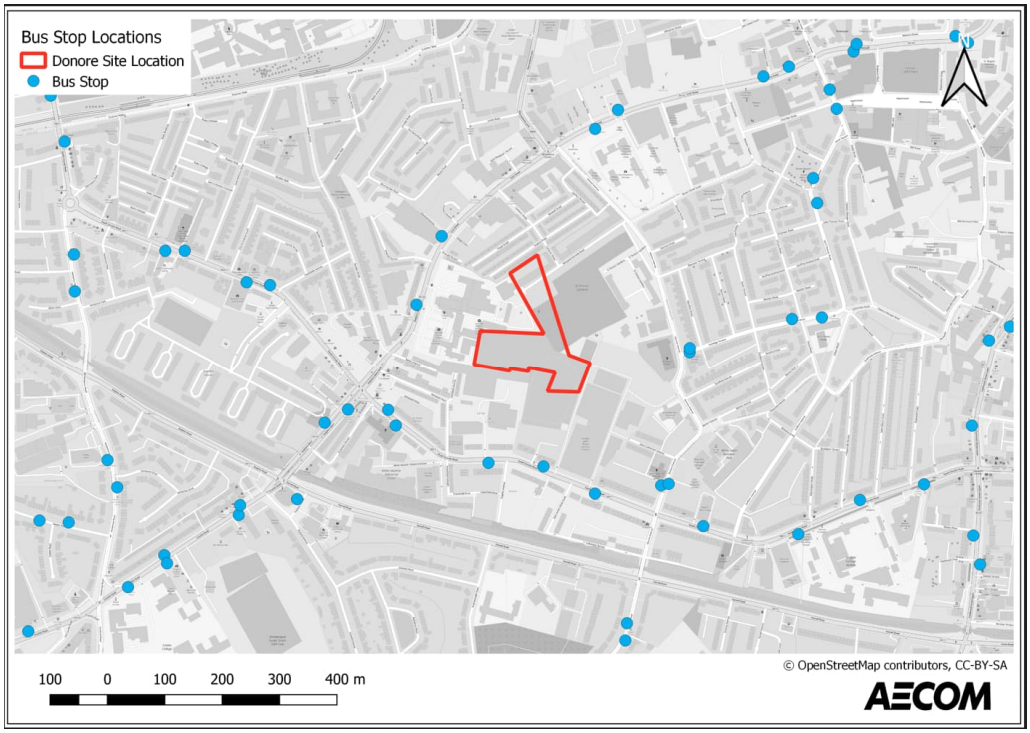

Figure 3.7 Existing Bus Stops

Services available at stops surrounding the site are shown in Table 3.3

Table 3.3 Bus Services and Routing

+R	Operator	Distance to Proposed Development Site	Route	Services Am and PM Peak Hours		
				Monday to Friday	Saturday	Sunday
17	Dublin Bus	1km (12 min walk)	Rialto -Crumlin -Nutgrove - UCD- Blackrock	1 service every 20 mins	1 service every 20 mins	1 service every 20 mins
27	Dublin Bus	350m (4 min walk)	Jobstown – Blessington Road – Cork Street- Malahide Road	1 service every 10 mins	1 service every 10 mins	1 service every 15 mins
56A	Dublin Bus	350m (4 min walk)	Tallaght – Ballymount Road – St. Luke's Avenue- Ringsend road.	1 service every 1 hours and 15 mins	1 service every 1 hours and 15 mins	1 service every 1 hours and 15 mins
68	Dublin Bus	850m (11 min walk)	Hawkins Street – Dolphins Barn -Rialto – Bluebell- Clondalkin - Greenogue	1 service every 1 hour	1 service every 1 hour	1 service every 1 hours and 15 mins
77A	Dublin Bus	350m (4 min walk)	Citywest Road – Old Blessington Road – Cork Street – Ringsend Road	1 service every 20 mins	1 service every 20 mins	1 service every 30 mins
150	Dublin Bus	250m (3 min walk)	Hawkins Street – Patrick Street – Donore Avenue - Rossmore	1 service every 20 mins	1 service every 20 mins	1 service every 30 mins
151	Dublin Bus	350m (4 min walk)	Docklands (East Road)- Dolphins Barn – Parkwest - Foxborough	1 service every 20 mins	1 service every 20 mins	1 service every 30 mins
122	Dublin Bus	850m (11 min walk)	Drimnagh Road – Herberton Road – South Circular Road – Dorset Street – Ashington Park	1 service every 15 mins	1 service every 20 mins	1 service every 20 mins

3.6.2 Light Rail - Luas

The site is situated in proximity to the Fatima LUAS stop which is part of the LUAS redline which offers services east towards Connolly Station and west towards Tallaght and Saggart. Due to the frequency of the LUAS service this is understood to adequately cater for the varying demand at peak commuter times. Red line LUAS trams operate at a frequency of 3-5 mins at peak hours and a frequency of 12 -15 mins at off peak hours. The Fatima Luas stop is situated 900m north of the subject site. Figure 3.8 details the walking route and Figure 3.9 illustrates the site location in relation to the Fatima LUAS stop.

Figure 3.8 Existing LUAS Locations

3.6.3 Heavy Rail

The closest railway station to the site is the Heuston Train Station located 2.0 km (23 min walk) north of the SDRA 11 site. Heuston Station is the terminal stop for the part of the South Western Commuter service which provides rail services west to Galway, Limerick, Waterford and Cork. Figure 3.9 illustrates the site location in relation to Heuston Train Station.

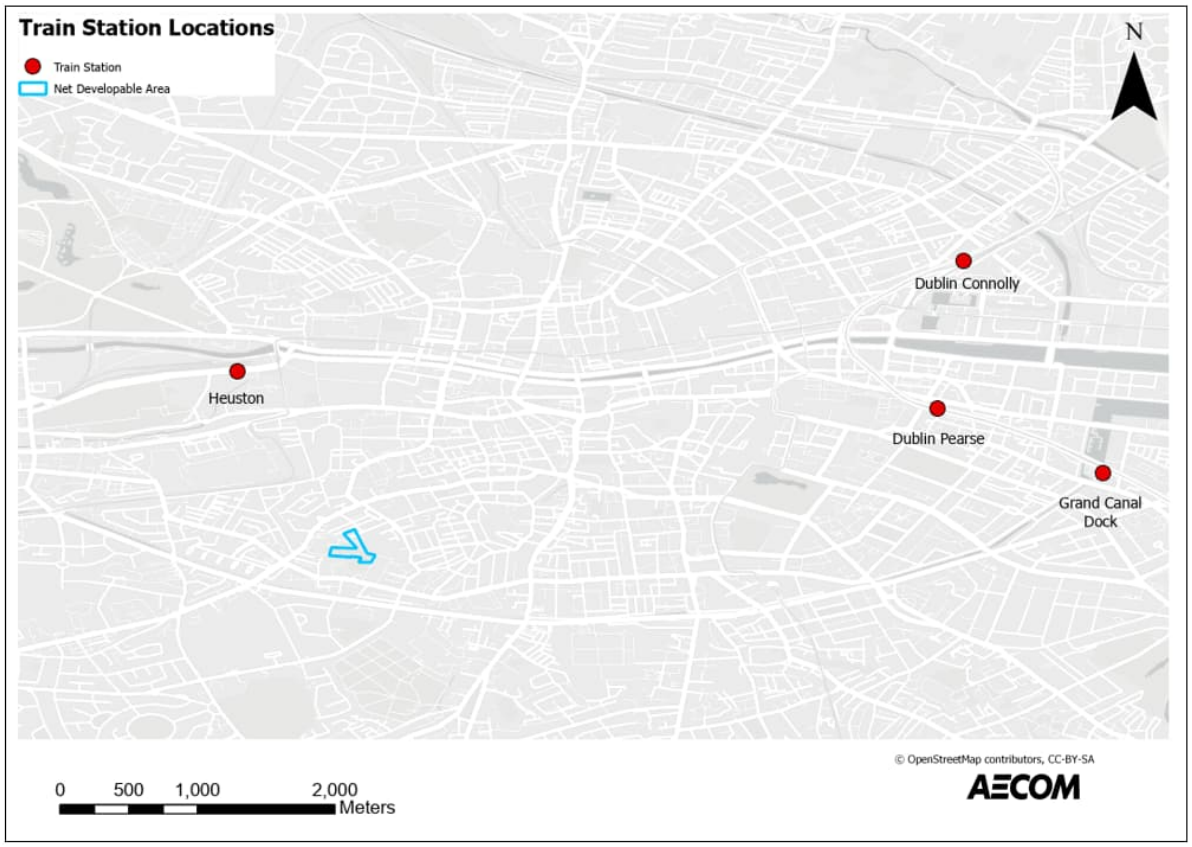

Figure 3.9 Train Station Proximity

3.7 Potential Transport Infrastructure

3.7.1 Cycle Network

In the vicinity of the subject site, it is planned to upgrade the cycle facilities along the R110, Donore Avenue and the South Circular Road. It is understood that the cycle facilities to be provided along the R110 will be part of the BusConnects redesign. The implementation of the new network will take place on a phased basis over a number of years having started in 2021.

3.7.2 Bus Network

The NTA have published BusConnects Dublin, a €2 billion scheme that comprises a strategy to develop out continuous bus lanes along a series of bus corridors across Greater Dublin. The NTA envisages that the benefits will include improved bus service frequency and reliability, whilst also providing cycling priority along key corridors in Dublin. If the Bus Connects scheme goes ahead this can be facilitated without impacting the principles of the development.

The scheme includes a series of corridors into Dublin City Centre. Of relevance to this scheme is 'Spine D' with routes D1, D2, D3, D4 and D5.

The National Transport Authority (NTA) has put forward proposals to upgrade a number of core bus corridors from the Dublin environs to the City Centre under the title 'BusConnects'. The aim of the project is to:

- 'Make bus journeys faster, predictable and reliable;
- New bus stops and better facilities;
- More efficient network, connecting more places and carrying more passengers;
- Updated ticketing systems and implementing a cashless payment system with a simpler fare structure; and
- Improving the cycling network and making it safer.'

As part of the BusConnects scheme the current bus network is to be revised and more frequent and efficient services are to be provided across the Dublin environs. The subject site is within 300m of Corridor 9 (Greenhills to

City Centre) and 1.1km of corridor 11 (Kimmage to City Centre) of the bus connects proposals corridor 9 route length is approximately 12kms. The current bus journey time along the corridor is up to 80 mins and the proposed bus connects bus journey time is 30-40 mins. In addition, a new orbital route is planned along South Circular Road which will pass directly in front of the proposed development. This route will operate at a frequency of 5-10 minutes. Figure 3.10 illustrates the proposed BusConnects routes in the vicinity of the proposed development site.

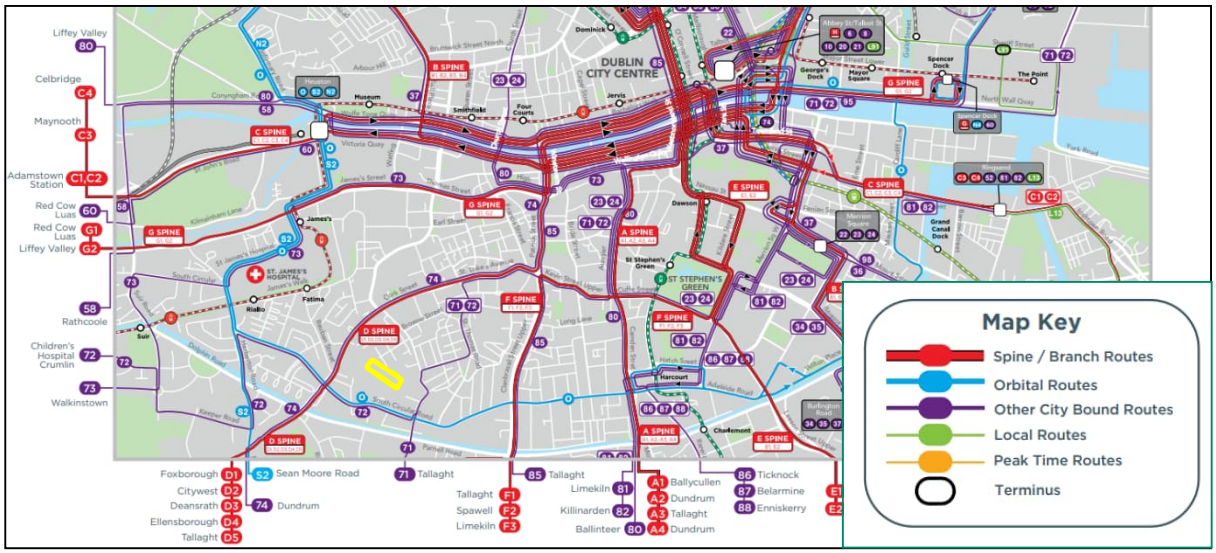

Figure 3.10 Bus Connects Local Area Map

4. Existing Travel Patterns

4.1 Census

To further understand the proposed low car development within the context of the local area, AECOM has undertaken a review of the Central Statistics Office (CSO) Small Area Populations Map (SAPMAP) tool to analyse the findings of the 2016 Census. Residential settlements that are located within close proximity to the proposed development have been analysed to determine existing commuter trends for the area based on their electoral divisions This analysis has been used to identify initial baseline travel characteristics for proposed development and is presented in Table 4.1 This demonstrates the majority of residents using sustainable travel modes for travel to work / place of study.

Table 4.1 Existing Mode Share4 CSO SAP MAP

Means of Travel	Work	School or College	Total	Mode Share (%)
On foot	1117	711	1828	34.9%
Bicycle	661	136	797	15.2%
Bus, minibus or coach	508	229	737	14.1%
Train, DART or LUAS	341	82	423	8.1%
Motorcycle or scooter	14	2	16	0.3%
Car driver	978	37	1015	19.4%
Car passenger	72	188	260	5.0%
Van	54	0	54	1.0%
Work mainly at or from home	105	3	108	2.1%
Total	**3850**	**1388**	**5238**	**100%**

4.2 TRICS

The Trip Rate Information Computer System (TRICS) has been interrogated to calculate the quantum of vehicle trips likely to be generated by a development of the scale and type proposed. Trip generation data was calculated for the morning and evening peak hours (08:00 – 09:00 and 17:00 – 18:00 respectively), so as to determine the maximum impact of the proposed development on the surrounding road network.

The proposed trip rates sourced from TRICS (version 7.9.1) for the AM and PM peaks can be found in Table 4.2

Table 4.2 Proposed People Trip Rate TRICS (version 7.9.1)

Land Use	Morning (08:15 - 09:15)		Evening (16:00 - 17:00)	
	AM Arrivals	AM Departures	PM Arrivals	PM Departures
Total People Mix of social and cost rental apartments (per unit)	0.122	0.388	0.402	0.178
Total People Creche (per 100sq.m.)	4.981	1.729	0.714	1.955
Total People café (per 100sq.m.)	5.395	2.500	1.053	5.789

4.3 Public Transport Capacity Assessment

On 13.10.22 and 18.10.22, AECOM surveyors assessed public transport capacities at various public transport stops surrounding St. Teresa's Gardens development site. These stops were monitored between peak hours of 07:00-10:00 and 16:00-19:00 and included the Fatima Luas stop and the following bus stops:

- Stops 1365, 1381and 1382 on the South Circular Road;
- Stops 2315 and 2379 on Cork Street; and
- Stop 4857 on Rutledge Terrace.

Surveyors were able to calculate the departing capacities of each of these services as well as analyse timetables and the overall frequency of services in the area. The results of this survey as well as a brief analysis of each stop are outlined in Appendix E of the Traffic and Transport Assessment.

From the results of the public transport capacity assessment report, it is evident that there is adequate capacity on the public transport system stops within walking distance of the proposed development site.

5. Proposed Development

5.1 Introduction

This MMP is submitted to support the planning application by The Land Development Agency (LDA) on behalf of Dublin City Council. The Land Development Agency, intend to apply to An Bord Pleanála for a seven year permission to An Bord Pleanála in relation to a proposed residential development at this site located on the former St. Teresa's Gardens, Donore Avenue, Dublin 8. The site is bound by Donore Avenue to the north-east, Margaret Kennedy Road to the north-west, The Coombe Women & Infants University Hospital to the west, the former Bailey Gibson factory buildings to the south-west, and the former Player Wills factory to the south-east. The development will consist of the construction of a residential scheme of 543 no. apartments on an overall site of 3.26 ha.

5.2 Development Proposals

The development will consist of the construction of a residential scheme of 543 no. apartments on an overall site of 3.26 ha.

The development (GFA of c. 53,227sqm) will be set out in 4 blocks and contains the following:

- 225 No. 1 bedroom apartments (36 no. 1-person & 189 no. 2-person);
- 274 No. 2 bedroom apartments (including 52 No. 2 bed 3 person apartments;
- 222 No. 2 bed (4 person apartments);
- 44 No. 3 bedroom 5-person apartments;
- A community, artist workspace, arts and cultural space, including a creche set out in 4 no. blocks. creche (952 sqm);
- A retail/café unit (168 sqm);
- A mobility hub (52 sqm); and

Figure 5.1 illustrates the proposed general arrangement.

Figure 5.1 Proposed General Arrangement (AECOM drawing no. STG-AEC-S1b-00-00-DR-C-0000001)

The breakdown of each block will contain the following apartments:

- Block DCC1 comprises 111 No. apartments in a block of 6-7 storeys;
- Block DCC 3 comprises 247 No. apartments in a block of 6-15 storeys;
- Block DCC5 comprises 132 No. apartments in a block of 2-7 storeys; and
- Block DCC6 comprises 53 No. apartments in a block of 7 storeys;

The development (GFA of c. 53,227sqm) contains the following mix of apartments: 225 No. 1 bedroom apartments (36 no. 1-person & 189 no. 2-person), 274 No. 2 bedroom apartments (including 52 No. 2 bed 3 person apartments and 222 No. 2 bed 4 person apartments), 44 No. 3 bedroom 5-person apartments, together with retail/café unit (168 sq.m.), mobility hub (52 sq.m.) and 952 sq.m. of community, artist workspace, arts and cultural space, including a creche, set out in 4 No. blocks.

The proposed development will also provide for public open space of 3,408 sq.m., communal amenity space of 4,417 sq.m. and an outdoor play space associated with the creche. Provision of private open space in the form of balconies or terraces is provided to all individual apartments.

The proposed development will provide 906 no. residential bicycle parking spaces which are located within secure bicycle stores. In total 5% of these are over-sized spaces which are for large bicycles, cargo bicycles and other non-standard bicycles. In addition, 138 spaces for visitors are distributed throughout the site. This is inclusive of dedicated cycle parking for creche use and café use within the proposed site.

A total of 79 no. car parking spaces are provided at podium level. Six of these are mobility impaired spaces (2 in each of DCC1, DCC3 & DCC5). In total 50% of standard spaces will be EV fitted. Up to 30 of the spaces will be reserved for car sharing (resident use only). A further 15 no. on-street spaces are proposed consisting of:

- 1 no. accessible bay (between DCC5 & DCC6)
- 1 no. short stay bay (between DCC5 & DCC6)

- 1 no. crèche set-down/ loading bay (between DCC5 & DCC6)
- 1 no. set-down / loading bay (northern side of DCC5)
- 1 no. set-down/loading bay (northern side of DCC 3)
- 10 no. short stay spaces (north-west of DCC1)

In addition, 4 motorcycle spaces are also to be provided.

Vehicular, pedestrian and cyclist access routes are provided from a new entrance to the north-west from Margaret Kennedy Road. Provision for further vehicular, pedestrian and cyclist access points have been made to facilitate connections to the planned residential schemes on the Bailey Gibson & Player Wills sites for which there are extant permissions (Ref. No.'s ABP-307221-20 & ABP-308917-20).

The development will also provide for all associated ancillary site development infrastructure including:

site clearance & demolition of the boundary wall along Margaret Kennedy Road and playing pitch on eastern side of the site and associated fencing/lighting

- The construction of foundations;
- ESB substations;
- Switch room;
- Water tank rooms;
- Storage room;
- Meter room;
- Sprinkler tank room;
- Comms room;
- Bin storage;
- Bicycle stores;
- Green roofs;
- Hard and soft landscaping;
- Play equipment;
- Boundary walls;
- Attenuation area; and
- All associated works and infrastructure to facilitate the development including connection to foul and surface water drainage and water supply.

5.3 Cycle Parking Provision

Cycle parking for the various design options has been detailed in accordance with Section 16.39 of the 'Draft DCC Development Plan 2022 – 2028' and section 4.18 of the 'Sustainable Urban Housing, Design Guidelines for New Apartments'.

DCC standards for cycle parking consist of a ratio of 1 per unit, plus visitor parking as shown in Table 5.1

Table 5.1 DCC Cycle Parking Standards

National Standards	Cycle Parking Requirements	Minimum Cycle parking standard	Number of Cycle Parking Spaces Required	Total Number of Cycle Parking Spaces Provided
DCC Development Plan Standards (2022-2028)	Apartments (543)	1 cycle space per bedroom	905	906
	Visitor Spaces	1 cycle space per 2 apartments	272	138 minus the creche (16 cycle spaces) and the café (3 cycle spaces)
Sustainable Urban Housing : Design Standards for New Apartments guidelines (December 2020)	Bedrooms (905)	1 Cycle Space Per Bedroom	905	906
	Visitor Spaces	1 Cycle Space per 2 apartments	272	138 minus the creche (21 cycle spaces) and the café (3 cycle spaces)
DCC Development Plan (2022-2028) – . Creche	Staff	1 Cycle Space per 5 staff	7	8
	Students	1 Cycle Space per 5 Students	14	8
DCC Development Plan (2022-2028) – Community Space (i.e. Cafe)	Staff	1 per 5 staff	2	2
	Customers	1 per 10 seats	1	1

The proposed development proposes to provide 906 no. cycle spaces. There are also an additional 138 no. bicycle spaces at surface level for visitors to the scheme.

While the proposed development does provide for the quantum of cycle spaces to serve the residents of the scheme as per the minimum requirement provided for in the guidelines for 1 cycle storage space per bedroom for the 1-bed and 2-bed units, 1 space per studio unit, which equates to 905 no. spaces, it is slightly below the standard for visitor parking which is 1 visitor space per 2 units, which equates to a visitor requirement of 272 no. spaces.

However, as provided for in the guidelines, "*any deviation from these standards shall be at the discretion of the planning authority and shall be justified with respect to factors such as location, quality of facilities proposed, flexibility for future enhancement/enlargement, etc.".* As noted above, and as set out in the TTA report prepared by AECOM, given the sites highly accessible location which is proximate to a range of high quality public transport services, a large number of the visitors to the site are likely to arrive by public transport or on foot.

Bicycle stores will be clearly visible and located in convenient locations to encourage sustainable modes of transport: beside residential entrances; along active street frontages; from the communal courtyard in DCC6; or from podium car parking in DCC5. All residential bicycle parking is located within the building footprint.

Further details on the cycle parking provision are set out in the Transport & Traffic Assessment submitted with the application.

The proposed 'creche' space as part of the community/ art space within the proposed development, is planned to accommodate 80 no. children and accommodate 34 no. staff. This figure is based on the number of children divided by the national guidance on children adult ratios for creche facilities.

The cycle parking areas are located in convenient locations, around the different blocks, that are easily accessible from street level being located adjacent to building entrances. In addition, 5% of the total number of cycle parking spaces are for the larger bikes, such as cargo bicycles, or other non-standard bicycles .Included in this 5% it is proposed to provide 2 no. cargo bike stands at the entrance to the creche. Excluded from the 119 no. visitor cycle parking spaces located around the proposed development site is a proposed 16 no. bike parking spaces consisting of 14 bike spaces via two tier (Josta-type) stands as well as a Sheffield stand for non-standard bikes totalling 16 no. spaces. These are dedicated entirely for use of staff and students of the creche.

Similarly, regarding the café it is proposed to provide 3 number of bicycle parking spaces dedicated to the use of staff and customers of the café. At the time of writing this MMP AECOM do not know the number of covers or the style of business that the proposed café on the proposed development site is to contain or present as. The cycle parking guidance is recommended as per the DCC development plan in terms seat covers and number of staff. Through having knowledge of the proposed café GFA of 168 sqm AECOM have assumed that 10 seats would be applicable to this space with 2 members of staff. It is considered very unlikely that the proposed café will be generating trips outside the development itself given its small scale.

These dedicated bike parking spaces will be included in the final number of 138 no. visitor bike parking spaces proposed within the development site. The total number of visitor spaces for the site will total 119 number of spaces The bicycle parking is distributed pro rata amongst the various blocks as set out below and summarised in Table 5.2

- DCC1 - Total spaces = 200
- DCC3 - Total spaces = 376
- DCC5 - Total spaces = 238
- DCC6 - Total spaces = 92

Table 5.2 Cycle Parking Provision

Bike Parking Provision		
Residential	906	Spaces in secure bicycle stores
Visitor	119	Spaces distributed through the site
Creche	16	Spaces distributed near to the Creche
Cafe	3	Spaces distributed near the Cafe
Cargo	5%	Of the residential Bike parking
Total	1,044	Cycle parking spaces

Visitor spaces, in the form of Sheffield Stands, are distributed around the site for each block and these provide space for a total 138 bicycles, or 0.2 spaces per dwelling. Within the 138 cycle parking spaces they will be identified separately as residential visitor cycle parking spaces, creche drop off / staff cycle parking spaces and café cycle spaces as standards and guidelines require.

AECOM have assessed the relevant land uses regarding cycle parking provisions required. In regards to the 952 sqm of community, artist workspace, arts and cultural space, including a creche the cycle parking provision has been calculated with the worst case scenario in mind to ensure that the proposed development would meet the cycle parking requirement. Therefore, for the purposes of robust analysis and ensuring adequate cycle parking provision the entirety of the 952sqm stated in the development description and above is for the purposes of assessment being titled as the land use of a creche.

With consideration of the above, the proposed cycle parking provision is sufficient to accommodate predicted demand.

The proposed cycle parking provision has been designed to encourage cycling as a key mode of travel to and from the site. The cycle parking spaces for residents will comprise of predominantly 2 tier (Josta) stands with some non standard stands.

Visitor cycle parking spaces are incorporated as part of the external landscaping across the site in the form of 'Sheffield style' cycle parking stands. Resident's cycle parking is located at grade within building footprints and secured with fob access for residents only. The cycle parking is located adjusted to communal lift/stair cores. Figure 5.2 illustrates the locations of cycle storage units within the proposed development.

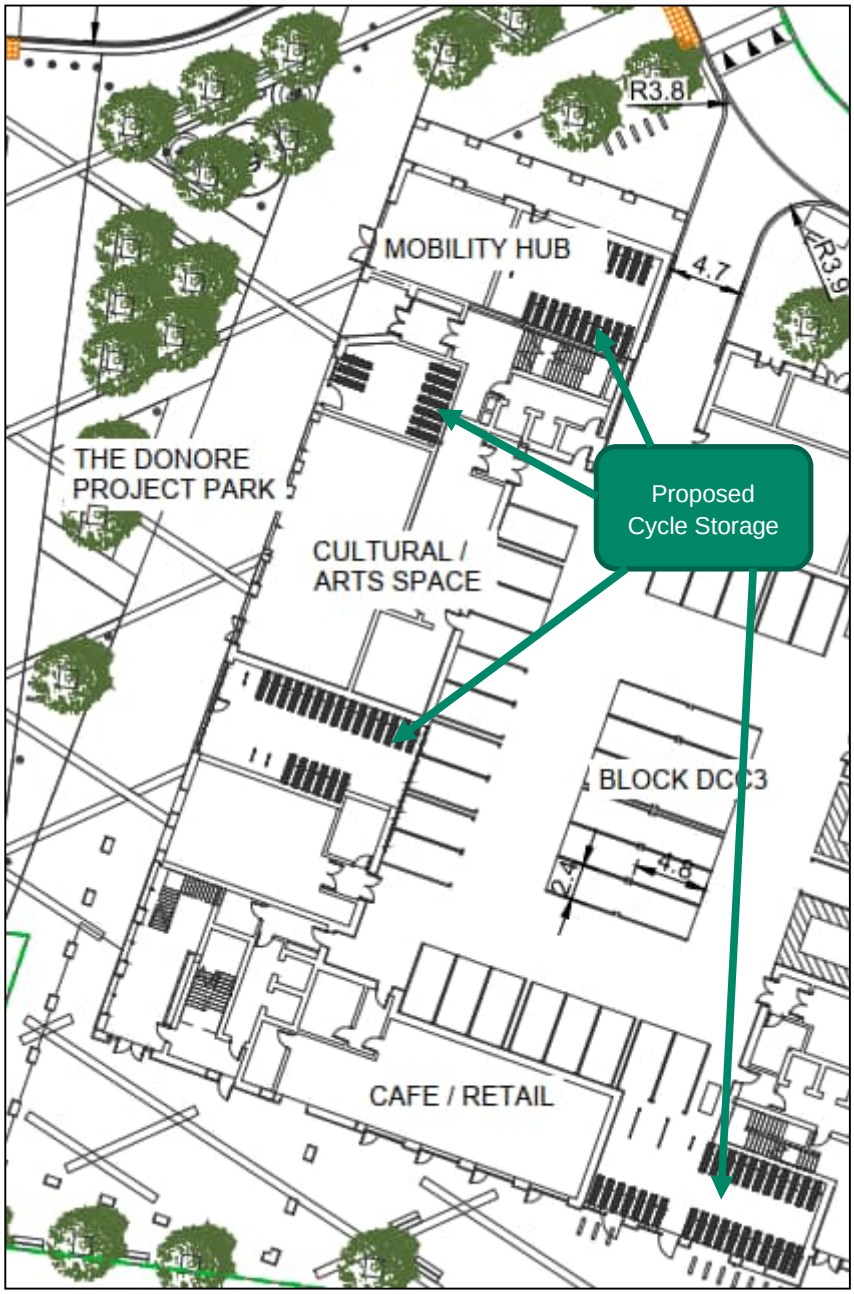

Figure 5.2 Proposed Cycle Storage within General Arrangement (AECOM Drawing No. AECOM drawing no. STG-AEC-S1b-00-00-DR-C-0000001)

5.4 Car Parking Provision

The subject site is proposed to be a low car development. The public transport network nearby is considered to be well established and operating within capacity and this will enable a low car development to thrive on the proposed development site. The purpose of the low car development is to encourage, through traffic management, the use of public transport and active modes of travel by the proposed residents and users of the proposed development site. The reliance on private car use is discouraged through the reduced level of car parking spaces provided within the proposed development. The proposed development provides secure bike parking which will encourage residents to use this mode of transport more frequently. The suggested Mobility Hub will provide residents with live times of local public transport so that they can plan their journey accordingly. Due to the location of the site a low car development will be viable, and it is well situated between various public transport routes.

A total of 79 no. car parking spaces are proposed to be provided. This will comprise of 79 no. podium car parking spaces at grade inclusive of 6 no mobility impaired spaces. 10% of standard spaces will be EV fitted. With up to 30 no. spaces being reserved for resident only car sharing. Podium refers to the car parking being enclosed within the building footprint.

- A further 15 no. on-street spaces are proposed consisting of:
- 1 no. short stay bay (between DCC5 & DCC6)
- 1 no. accessible bay (between DCC5 & DCC6)
- 1 no. crèche set-down/ loading bay (between DCC5 & DCC6)
- 1 no. set-down / loading bay (northern side of DCC5)
- 1 no. set-down/loading bay (northern side of DCC 3
- 10 no. short stay spaces (north west of DCC 1)

Table 5.3 details the proposed car parking allocation.

Table 5.3 – Proposed Car Parking Allocation

Allocation	Proposed Parking (Podium)	Proposed Parking (At Surface)	Proposed Parking (overall)
Apartments	73	0	73
Visitor	0	11*	1
Accessible	6	1	7
Crèche Set down	0	1	1
Set down/ loading bay	0	2	2
Total	**79**	**15**	**94**

**Short Stay Surface Parking*

Inclusive of the total number of car parking spaces allocated to the apartments(79 no. spaces), comprises of the following:

Mobility Impaired Spaces: 6 no. mobility impaired parking spaces (6 no. resident spaces in basement and 1 no. visitor space at ground level) are proposed in compliance with the Dublin City Council (DCC) Development Plan requirements, which recommends at least 5% of the total number.

Four motorcycle spaces are proposed in compliance with the Dublin City Council Development Plan requirements, which recommends at least 4% of the total spaces should be designated for motorcycles. Figure 5.3 illustrates proposed car parking within the site.

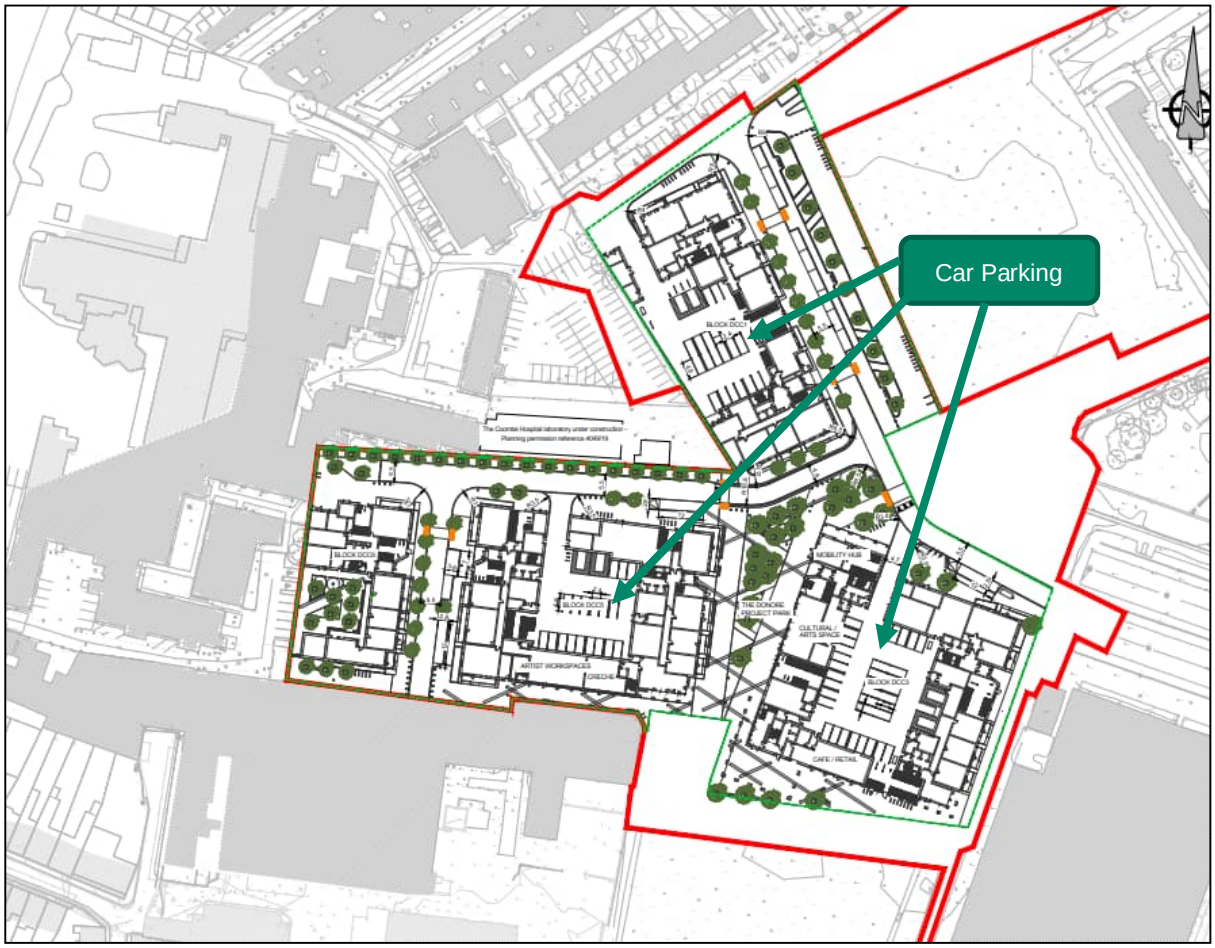

Figure 5.3 Proposed General Arrangement Indicating Car Parking (AECOM drawing no. STG-AEC-S1b-00-00-DR-C-0000001)

5.5 Car Club

Car club/ car share spaces have been provided in addition to existing nearby locations with up to 30 car club/ car share spaces within the development.

5.5.1 Electric Vehicle Charging Infrastructure

In regard to EV parking 50% of the car parking spaces that are provided should be EV compliant in accordance with the European Union requirement of all spaces to be future proofed for EV capability (S.I No. 393/2021 – European Union (Energy Performance of Buildings) Regulations 2021. 50% of standard spaces within the proposed development will be EV fitted and therefore the EV parking within the proposed development is compliant to the Dublin City Development Plan 2022-2028.

6. MMP Objectives, Targets and Measures

6.1 Introduction

In addition, the site location helps negate the need for a car by having an excellent location relative to a range of facilities that are within convenient walking and cycling distances. The site also has good accessibility to public transport.

The initiatives set out below are predominately for residents of the site; however, there is also reference made to the staff associated with the crèche and café.

6.2 Objectives

The objectives of the MMP are as follows:

- To discourage private car as a means of travel to and from the development;
- To increase and facilitate the number of people choosing to walk, cycle or travel by public transport to the development;
- To work with DCC, the National Transport Authority and public transport providers to support and encourage resident and staff up take;
- To develop an integrated and unified public transport, private vehicle, business fleet management and suppliers of commercial services to the development; and
- To liaise and co-operate with adjacent developments in relation to a coordinated approach to Mobility Management between the various employment areas.

To achieve the above objectives, measures have been proposed for the specific modes of transport. These are based on existing infrastructure and public transport systems. These objectives are preliminary and will be further developed in the light of ongoing monitoring as the proposed development is occupied and information becomes available on future travel behaviour of residents and staff.

It is recommended that an Action Plan Coordinator is appointed from within the development, as someone who will take ownership of implementing the measures. Table 6.1 to Table 6.6 presents a list of recommended measures and actions.

6.3 Measures

6.3.1 Walking

Table 6.1 Walking Measures

Walking		
Initiatives	Responsibility / Ownership	Timescale
Provision of details on how to access the site on foot. Details would include safe walking routes and location of the nearest bus stops/rail station. Promote walking events / lunchtime walks for residents Where appropriate organise annual Team Walking Events for residents e.g. Pedometer Challenge Provide umbrella for employees of the apartment block on wet days	The Action Plan Co-ordinator	To be established prior to operation

6.3.2 Cycling

Table 6.2 Cycling Measures

Cycling		
Initiatives	Responsibility / Ownership	Timescale
Launch Cycle to Work scheme for Staff of development If demand is met establish a Staff/Resident Bicycle User Group If residents request convert cargo bike space/s to cargo bike share space/s Encourage establishment of a cycling club / society Provision for tool stations with cyclist equipment i.e. pump, allen keys, lights, puncture repairs Display maps of local cycle network on notice boards If demand is met participate in National Cycle Week Survey and monitor cycle parking occupancy where capacity issues arise Secure parking within basement with fob/key entry Review cycle parking usage / utilisation. Installation of additional cycle parking as required	The Action Plan Co-ordinator	To be established prior to operation

6.3.3 Public Transport

Table 6.3 Public Transport Measures

Public Transport		
Initiatives	Responsibility / Ownership	Timescale
Provision of public transport maps and timetables in prominent locations on site. Information should be kept up to date. This information could also be available online. Provision of information to residents on savings that can be made by using Leap Card and details on where Leap Cards can be purchased. Re-advertise and promote the Tax saver monthly and annual commuter tickets for public transport to staff of the development. Explore the opportunity to include a one month trial ticket for public transport and timetable information. Display a local area map with public transport stops / route numbers marked. Publicise real time passenger information apps and websites where relevant. If applicable discuss with public transport operators fare structures and ticketing options.	The Action Plan Co-ordinator	To be established prior to operation

Publicise door-to-door multi modal journey planner website If applicable the section plan coordinator will liaise with public transport operators regarding service frequencies to the residential development.		

6.3.4 Car Sharing

Table 6.4 Car Sharing Measures

Car Sharing		
Initiatives	Responsibility / Ownership	Timescale
Encouragement of residents, employees and visitors of the development where possible to use other modes of travel other than private car. Where it is necessary for car use to travel to and from work, residents and staff could be made aware of other people who are either within close proximity of their homes (for staff) or on their route into work (for residents). Hold a coffee morning / launch event for car share/car club. Explore the process of offering a guaranteed ride home in emergencies	The Action Plan Co-ordinator	To be established prior to operation

6.3.5 Construction Phase

Table 6.5 Construction Phase Measures

Construction Phase		
Initiatives	Responsibility / Ownership	Timescale
Provide a Construction Traffic Management Plan to provide detailed mitigation of construction traffic associated with the proposed development.	The Contractor / DCC Roads & Traffic Department	To be established prior to operation

6.3.6 Other Measures

Table 6.6 Other Measures

Other Measures		
Initiatives	Responsibility / Ownership	Timescale
Residents to be informed of the health and fitness benefits of cycling and walking through posters and notice boards. Explore the provision of travel information to employee induction packs. If demand is met hold a launch event of the travel plan. Develop a marketing and communication plan. Distribute travel maps, leaflets and timetables, ensuring consistent accessible formats, health information for walking routes, signposting to website / apps. Explore the production of providing quarterly 'How to Travel' newsletter via email to residents. Example parking policies to ensure access to parking for those most in need, and for those who could use alternative modes.	The Action Plan Co-ordinator	To be established prior to operation

7. Monitoring

To ensure the success of a MMP, the identification of an appropriate management structure is critical to its effective implementation. The Action Plan Co-ordinator will therefore be responsible for managing and overseeing the implementation of the MMP. Periodic monitoring will assess whether the stated targets for a reduction in travel are met. This will play an important role in reviewing and re-setting resident targets by ensuring that on-going observation takes place. It is recommended that annual reviews are undertaken to review travel patterns, and whether the measures are supporting modal shift from private car to more sustainable modes

8. Summary

This Mobility Management Plan (MMP) has been prepared by AECOM in support of a planning application for a proposed development on a site located at Donore Project, Dt Teres's Gardens, Dublin 8. This MMP forms a part of the planning application documentation prepared for the development.

Based upon the information and analysis presented within this MMP, the assessment demonstrates how prospective residents and visitors of the proposed development can be encouraged to use sustainable means of transport to and from the subject site. The MMP details the current modal choice for residents of the surrounding area and has established that these splits are achievable in relation to the proposed development given proximity of the development to local facilities and the existing sustainable transport network in proximity to the site.

The applicant for the proposed development is committed to the implementation and ongoing monitoring of a MMP and will allocate resources to ensure success. This will include appointing an Action Plan Co-ordinator, undertaking travel surveys and implementing measures to reduce single occupancy car dependency.

The plan presents a series of measures to promote sustainable travel amongst future site users, and to reduce the reliance on private vehicular modes. Given the site is highly accessible via walking, cycling and public transport, and a series of sustainable transport measures are proposed in the MMP, the development is well placed to promote sustainable travel from the onset.

The proposed development is situated within an ideal location to benefit from existing sustainable travel facilities. Cork Street and South Circular Road enjoy high levels of cycling on both the west and eastbound lanes during the weekday peak hour periods, providing an attractive and viable mode of transport to Dublin City Centre, as opposed to private car. High frequency with spare capacity bus services are available from Cork Street and South Circular Road, which connect the site to numerous local destinations including Dublin City Centre. The scheme is supported by this MMP to support the proposed development.

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