ARUP

Tiznow Property Company Limited (Comer Group Ireland)

City Park Development at The Former Tedcastles Site

Outline Mobility Management Plan

Reference: 267365-ARUP-XX-XX-RP-YT-0012

P02 | 25 March 2022

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 267365-00

Ove Arup & Partners Ireland Limited One Albert Quay Cork T12 X8N6 Ireland arup.com

ARUP

| Project title | City Park Development at | |
|----------------|----------------------------------|--|
| | The Former Tedcastles Site | |
| Document title | Outline Mobility Management Plan | |
| Job number | 267365-00 | |
| Document ref | 267365-ARUP-XX-XX-RP-YT-0012 | |
| File reference | 4-04-02 | |
| | | |

| Revision | Date | Filename | 267365-ARUP-XX-XX-RP-YT-0012 | | |
|----------|---------------|-------------|---|--|-------------|
| P01 | 11 March 2022 | Description | S2 – Suitable for Information – Draft Planning Issue | | |
| | | | Prepared by | Checked by | Approved by |
| | | Name | James Glenn- Craigie | Clifford Killeen | John Hynes |
| | | Signature | Jester brijv | QL:JL & Kilke | n Jehn Myre |
| P02 | 25 March 2022 | Filename | 267365-ARUP- | 267365-ARUP-XX-XX-RP-YT-0012 | |
| | | Description | S2 – Suitable fo | S2 – Suitable for Information – Planning Issue | |
| | | | Prepared by | Checked by | Approved by |
| | | Name | James Glenn- Craigie | Clifford Killeen | John Hynes |
| | | Signature | Jesble-brijv | Ql.fl & Klke |) John Myre |
| | | Filename | | | |
| | | Description | | | |
| | | | Prepared by | Checked by | Approved by |
| | | Name | | | |
| | | | | | |

Contents

| 1. | Introduction | 1 |
|-----|--|----|
| 1.1 | Context | 1 |
| 1.2 | Proposed Development | 1 |
| 2. | Site Assessment | 2 |
| 2.1 | Location | 2 |
| 2.2 | Local Road Network | 2 |
| 2.3 | Pedestrian Accessibility | 3 |
| 2.4 | Cycle Accessibility | 4 |
| 2.5 | Public Transport Accessibility | 7 |
| 2.6 | Site Access Arrangements | 10 |
| 2.7 | Strategic Transport Proposals | 11 |
| 3. | Objectives and Targets | 17 |
| 3.1 | Objectives | 17 |
| 3.2 | Mode Split | 17 |
| 4. | Oversight of the Mobility Management Plan Framework | 20 |
| 4.1 | Introduction | 20 |
| 4.2 | MMP Management | 20 |
| 4.3 | Travel Surveys | 21 |
| 5. | Mobility Management Plan Measures | 22 |
| 5.1 | Information Provision | 22 |
| 5.2 | Reduced car parking provision on site | 22 |
| 6. | Monitoring and Review | 23 |
| | | |

Tables

| Table 1: | Existing Mode Share in Site Locality | 18 |
|----------|--------------------------------------|----|
| Table 2: | Proposed Mode Share Target for 2030 | 18 |

Figures

| Figure 1: Si | ite Location – Cork City Centre Context | 2 |
|--------------|---|---|
| Figure 2: W | Valking Catchment of proposed development site | 4 |
| Figure 3: C | Cycling Catchment of proposed development site | 5 |
| Figure 4: C | Cycle Network Proposals for Cork City Centre | 5 |
| Figure 5: C | Cycle Network Proposals for site environs | 6 |
| Figure 6: C | Cycle Network Proposals for Site Environs | 6 |
| Figure 7: E | Existing Public Bike Hire station locations in site vicinity | 7 |
| Figure 8: C | Cork City Bus Service Termini and routes/stops in site vicinity | 7 |
| Figure 9: E | Existing bus stops and bus routes in site vicinity | 8 |
| Figure 10: A | AM Peak (08:30) Public Transport Catchment of proposed development site | 8 |
| Figure 11: 1 | PM Peak Public (18:00) Transport Catchment of proposed development site | 9 |

| Figure 12: Public Transport Destination Accessibility from The Site [Base map source: | |
|---|----|
| BusConnects.ie] | 10 |
| Figure 13: Development Site Access Strategy | 11 |
| Figure 14: CMATS Bus Network Proposals in site vicinity | 12 |
| Figure 15: Proposed LRT East-West Corridor | 13 |
| Figure 16: Proposed Light Rail Transit Corridor through South Docklands and along site boundary | 13 |
| Figure 17: Proposed Suburban Rail Improvements | 14 |
| Figure 18: Proposed Streetscape Improvements on Albert Quay East under the Docklands to City | |
| Centre Road Network Improvement Scheme | 16 |
| Figure 19: Electoral Division Zones in Cork City | 17 |

1. Introduction

1.1 Context

Arup have been commissioned by Tiznow Property Company Limited (Comer Group Ireland) to prepare an Outline Mobility Management Plan (MMP) for a proposed strategic housing development at The Former Tedcastles Site, in the South Docks area of Cork City.

This report presents an assessment of the site accessibility, presents the objectives of the Outline MMP, sets mode split targets for the proposed development and sets out initiatives proposed to help meet these targets.

1.2 Proposed Development

The proposed development will consist of the demolition of the existing structures on site and the construction of a strategic housing development of 823 no. apartments, resident amenity and ancillary commercial areas including childcare facilities. The development will comprise 6 no. buildings ranging in height from 1 no. to 35 no. storeys over lower ground floor level. The proposed development also comprises hard and soft landscaping, pedestrian bridges, car parking, bicycle stores and shelters, bin stores, ESB substations, plant rooms and all ancillary site development works. Vehicular access to the proposed development will be provided via Centre Park Road.

The development will deliver a new neighbourhood which will be conveniently located in proximity to Cork City Centre and to the south-eastern suburbs. The site lies on the strategic transport corridor intended to facilitate a rapid transit system as identified in the Cork Metropolitan Area Transport Strategy.

The site will have controlled internal vehicle accesses to a total of 268 residential car parking below podium level via the internal site access road, which will be accessed via Centre Park Road. In addition, 1,718 bicycle parking spaces and a further 412 visitor cycle parking spaces are proposed.

City Park Development at

2. Site Assessment

2.1 Location

The development site is located in the eastern suburb of Cork City, approximately 2km east of the city centre, within the South Docklands, at The Former Tedcastles Site. The site is bounded to the north by Marina Walk, to the south by Centre Park Road and to the west by industrial lands. The site is also located quite close to Páirc Uí Chaoimh Stadium and Marina Park. The location of the site in the context of Cork City Centre can be seen in Figure 1.

The development site is approximately 4.86 hectares in area and is currently not in use although there are remnants of a number of industrial-type buildings still present on site.

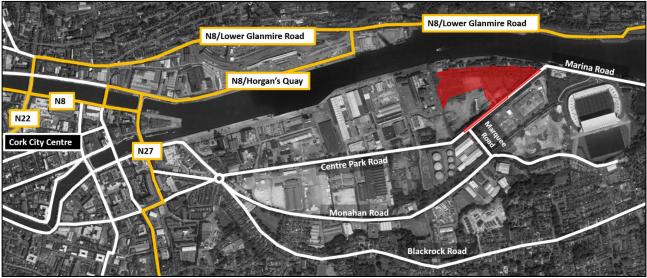


Figure 1: Site Location – Cork City Centre Context

2.2 Local Road Network

The roads located in the proximity of the development are described below and can be seen in Figure 1. The local area surrounding the site at present can largely be described as industrial in use, with a number of dormant sites towards the eastern end of the South Docklands. Centre Park Road and Monahan Road are connecting routes to Cork City Centre to the west, and to the Blackrock and Ballintemple suburban areas to the east/south-east. These routes are standard two-lane carriageways for the most part (with some localised flaring in certain locations). Marquee Road is a connecting road that links Centre Park Road and Monahan Road.

2.2.1 Centre Park Road

Centre Park Road is a 1.5km long, two-lane wide road which runs from the Victoria Road Roundabout to the West, to the Marina Road to the East. The road will be used to gain access to the development site. There are pedestrian facilities on both sides of the road and there are segregated cycle facilities (outbound) in place on the route. The 212 city bus service (Kent Station to Mahon Point) has an outbound stop on Centre Park Road approximately 250m west of the site.

Centre Park Road also acts as a link to the city centre from Blackrock Village via The Marina. Currently, there are no significantly active entrances on the section of Centre Park Road to the north-east of the junction with Marquee Road, and as such this section of Centre Park Road experiences very light traffic flows. Furthermore, Cork City Council have implemented through traffic restrictions along the Marina to the north-east as of the end of 2021, which effectively prohibits any non-essential through traffic along Centre Park Road east of its junction with Marquee Road.

2.2.2 Monahan Road

Monahan Road is a 2km long, two-lane wide road, which runs from the Victoria Road to the west to the Blackrock Road to the east. The northern side of the road has a footpath running the length of the road. There is on street parking on some sections of the southern side of the road, with intermittent footpath provision. There are segregated cycling facilities (inbound) in place on the route.

The 212 city bus service (Kent Station to Mahon Point) has inbound and outbound stops on Monahan Road approximately 200m south-east of the site.

The road experiences low-to-moderate traffic flow during the AM and PM peak periods as there are several employment areas situated along the road and the route also facilitates onward traffic flow to Centre Park Road. Monahan Road also acts as a link to the city centre from Blackrock Village and Ballintemple via Maryville/Blackrock Road.

2.2.3 Marquee Road

Marquee Road is a 135m long, two-lane wide road which links Centre Park Road with Monahan Road. There are no bus stops on the route, but the route has footpaths on both sides as well as segregated cycling infrastructure on the eastern side, connecting Centre Park Road to Monahan Road.

As with the other roads in the locality, Marquee Road experiences low-to-moderate traffic flow during the AM and PM peak periods as there are several employment areas situated in the vicinity and the route also facilitates onward traffic between Centre Park Road and Monahan Road, as well as traffic routing from Maryville/Blackrock Road to Centre Park Road to and from the city centre.

2.2.4 The Marina

The Marina is a narrow, two-lane road which runs along the southern bank of the River Lee, connecting Blackrock Village with Centre Park Road. The Marina has been designated by Cork City Council (as of late 2020) as a pedestrian and cyclist-only area, with restrictions in place preventing vehicular use of the route and limiting vehicle access to local access only.

Local access to the Shandon Boat Club, the Lee Rowing Club and Páirc Uí Chaoimh is retained, but no vehicular access is permitted to the east of the vehicle entrance to Páirc Uí Chaoimh (the road is now closed at this location). Further east, access via Blackrock Village is permitted for vehicles up to the junction with Church Avenue; west of this junction, no vehicle access is permitted.

Outbound traffic on Centre Park Road is also permitted to access the Marina for local access to the Lee Rowing Club, and to the Marina Park car park, and for access to Páirc Uí Chaoimh stadium. Otherwise, the Marina now carries no traffic flows of note.

2.3 Pedestrian Accessibility

All of the routes discussed in Section 2.2 have footpaths of varying quality. A program of footpath improvement works has been carried out in recent years in the site vicinity which has seen the replacement and upgrade of a significant portion of the existing footpaths along Centre Park Road in particular. Monahan Road has a continuous footpath along the northern side of the route, and intermittent footpath provision on the southern side. The pedestrian network in the site vicinity is extremely popular as a leisure walking and running route due to the onward connection to the southern bank of the River Lee (along The Marina). Marquee Road has footpaths provided on both sides of the road, of varying quality.

Figure 2 below shows the walking catchment of the development site (in 5-minute bands). It can be seen that Páirc Uí Chaoimh is within the 10-minute catchment. Marina Commercial Park, the South Docks Area and the Blackrock Road are all within the 15-minute catchment. Douglas Street is reachable within 30-minutes and Victoria Road is just outside the 20-minute walking catchment.

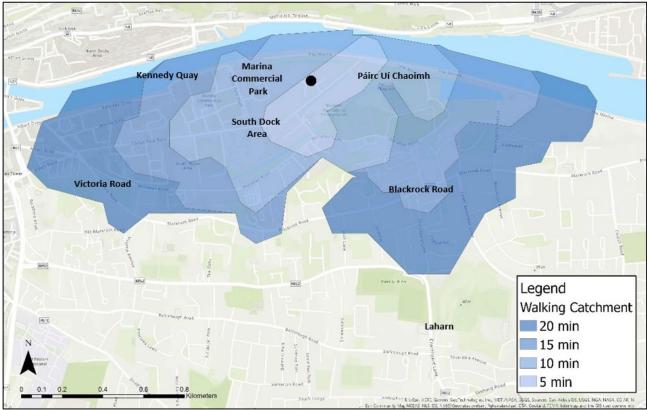


Figure 2: Walking Catchment of proposed development site

As set out in the Cork Metropolitan Area Transport Strategy (CMATS) a key aim is to improve walking infrastructure across the city to ensure the pedestrian environment is significantly enhanced, more attractive and safer.

2.4 Cycle Accessibility

As outlined above, there are a number of dedicated cycle infrastructure improvement schemes which have recently been implemented by Cork City Council in the site vicinity. Segregated cycle infrastructure is now in place on Centre Park Road (outbound), Monahan Road (inbound), Marquee Road (connecting Centre Park Road and Monahan Road), and segregated cycle infrastructure is also now in place between Centre Park Road (at the Victoria Road Roundabout) and Grand Parade, providing high-quality connections directly between the city centre core and the site. To the east, The Marina is also now a pedestrian and cyclist-only area, and approximately 1km from the site, the Passage Greenway line is accessible directly from the Marina.

The greenway is an extremely popular facility used for leisure and commuting, providing access via ramped connections to the Mahon Point area (via a ramped connection at St. Michael's Drive) and to Skehard Road (via a ramped connection in the vicinity of the Skehard Road/Mahon Link Road junction), and ultimately linking onwards to Cork City Centre.

The Passage Greenway is currently being upgraded by Cork City Council to allow for a wider facility, additional CCTV and public lighting, and new ramped connections from the adjacent road and street network. This is under construction at present and is expected to be complete and opened in mid-2022.

Figure 3 below shows the cycling catchment for the site. It can be seen that the catchment encompasses most of Cork City. The city centre and Blackrock are within a 20-minute cycle from the site. University College Cork, Black Ash, Blackpool, Douglas and Ballyvolane are all within the 30-minute catchment. Munster Technological University (MTU), Whites Cross and Cork Airport are within the 40-minute catchment area.

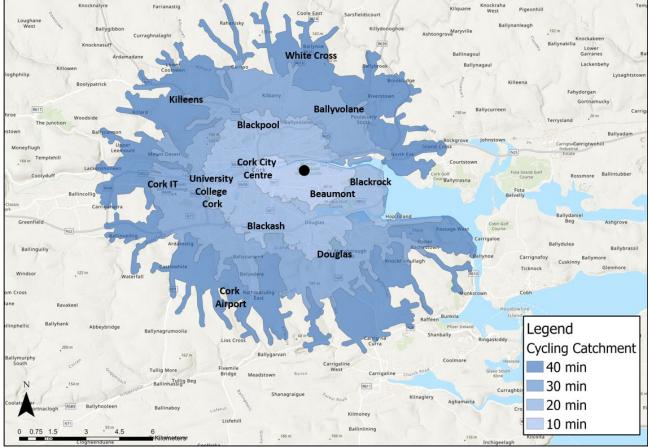


Figure 3: Cycling Catchment of proposed development site

Under the Cork Metropolitan Area Cycle Network Plan, a network of cycling facilities has been identified and are due to be implemented; Figure 4 and Figure 5 below show the cycle proposed cycling facilities for Cork City Centre and for the road network surrounding the site, respectively.

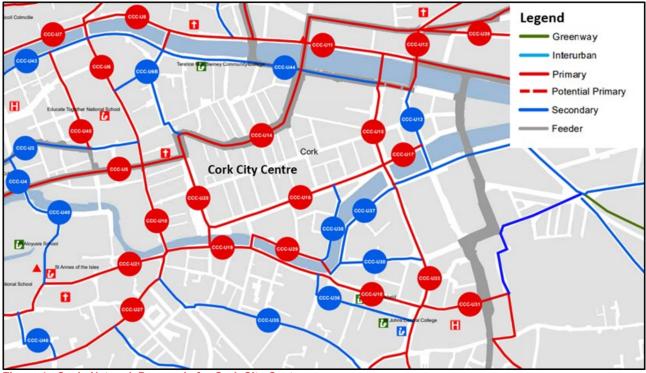


Figure 4: Cycle Network Proposals for Cork City Centre

Tiznow Property Company Limited (Comer Group Ireland) 267365-ARUP-XX-XX-RP-YT-0012 | P02 | 25 March 2022 | Ove Arup & Partners Ireland Limited

City Park Development at The Former Tedcastles Site

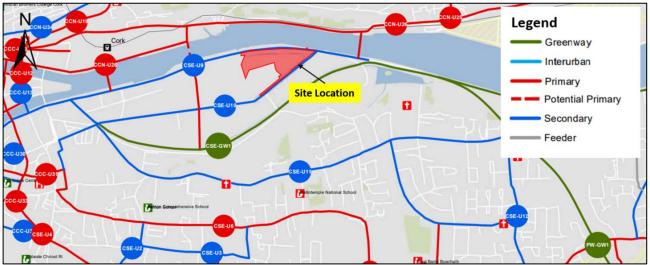


Figure 5: Cycle Network Proposals for site environs

In addition to the above, the Cork Metropolitan Area Transport Strategy (CMATS) outlines cycle proposals in the site environs. Figure 6 below illustrates the proposed cycle network as indicated in CMATS. The CMATS proposals are assumed in this regard to supersede the Cork Metropolitan Area Cycle Network Plan as the purpose of the strategy is to amalgamate all relevant proposals into a single framework for implementation. It is seen in Figure 6 below that CMATS proposes to amend the cycle network as proposed in the Cork Metropolitan Area Cycle Network Plan to extend the greenway on the Marina further west towards the city centre.



Figure 6: Cycle Network Proposals for Site Environs

Cork City is also served by a public bike hire scheme which covers a large portion of the city centre and extends from University College Cork in the west to Kent station in the east, as shown below in Figure 7. The nearest public bike share scheme docking stations to the site are on Lapp's Quay and Anglesea Street, approximately 1.9km walking distance from the site. It is an ongoing objective of Cork City Council and the National Transport Authority to seek to expand the coverage of the network where feasible. An additional 11 stations have been announced for the scheme, of which 6 are constructed and operational with the remainder expected to be implemented and operational in mid-2022. These additional stations will include a proposed station at Victoria Road, which will be approximately 1.4km from the site.

City Park Development at The Former Tedcastles Site



Figure 7: Existing Public Bike Hire station locations in site vicinity

2.5 Public Transport Accessibility

Cork City Centre has a large number of public transport services including city bus services, regional and commuter bus services and commuter/suburban rail. These are described in more detail below.

2.5.1 Cork City Bus Network

Cork City is served by 30 city bus services. Of these, 27 services travel to or through the City Centre. There are 3 main bus-stop/termini areas in the city centre; namely South Mall, St. Patricks Street and Merchants Quay/Parnell Place Station (see Figure 8 below). The Marina Commercial Park stop is located within 250m walking distance to the west of the site and is served by the 212 service, thereby connecting the development site directly with Cork City Centre to the west and Mahon Point to the east. To the south-east, the existing stop on Monahan Road is approximately 200m walking distance from the site.



Figure 8: Cork City Bus Service Termini and routes/stops in site vicinity

The Bus Éireann 202/202A service (which runs from Mahon Point to Knocknaheeny at 10-minute frequencies) also has its' primary route corridor on Blackrock Road, approximately 800m walking distance south-east from the site.



Figure 9: Existing bus stops and bus routes in site vicinity

Figure 10 and **Figure** 11 below show the 15, 30, 45 and 60-minute public transport catchments for the site during the AM peak (departing at 08:30) and the PM peak (arriving at 18:00).

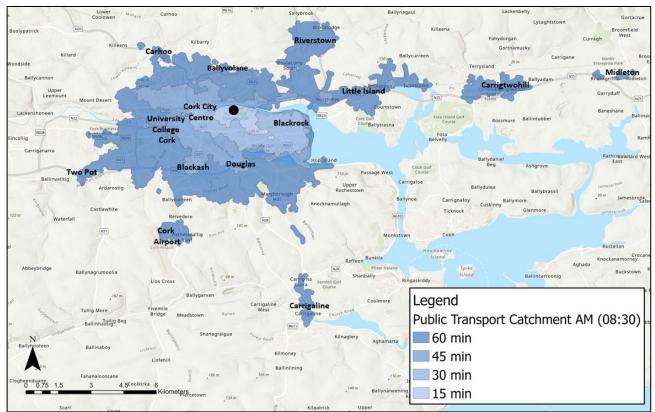


Figure 10: AM Peak (08:30) Public Transport Catchment of proposed development site

Tiznow Property Company Limited (Comer Group Ireland) 267365-ARUP-XX-XX-RP-YT-0012 | P02 | 25 March 2022 | Ove Arup & Partners Ireland Limited City Park Development at The Former Tedcastles Site During the AM Peak Cork City Centre can be reached from the site within 30 minutes, with the western edge of the city centre area within a 45-minute catchment. The 45-minute catchment encompasses Blackrock/Mahon Point and University College Cork. Outside of this, the majority of the Cork City area is within the 60-minute catchment, as well as Riverstown to the north, and the Black Ash and Douglas to the south. Cork Airport lies just inside the 60-catchment area.

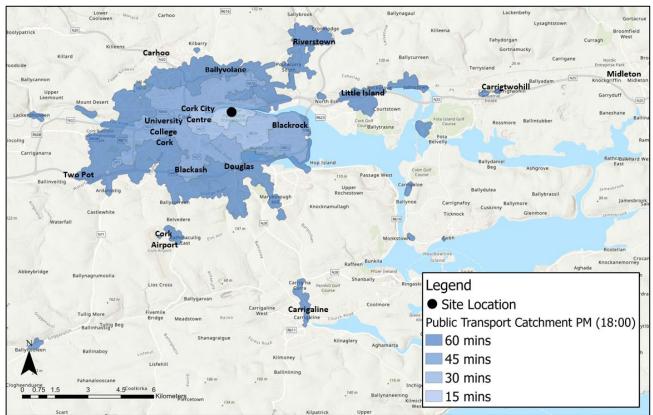


Figure 11: PM Peak Public (18:00) Transport Catchment of proposed development site

During the PM Peak the site can be reached from Cork City Centre within 30 minutes. Blackrock and University College Cork can be reached by public transport within 45-minutes. Ballyandreen, Riverstown and Carhoo to the north are within 60-minutes by public transport from the site. Cork Airport, Douglas and the Black Ash to the south are also within 60-minutes from the site.

2.5.2 BusConnects Cork – Draft City Bus Network

In November 2021, the National Transport Authority announced details of a new metropolitan area bus network for Cork. This new network is currently at draft stage and a consultation process is underway, following which the final proposed new city bus network will be published.

The draft network design maps indicate that a proposed service (Route 9) is intended to link Jacobs Island, at 20-minute weekday frequencies and will pass the site on Marquee Road along its route. Additionally, the proposed Route 11 will link Mahon Point to Farranree at 30-minute frequencies and will route along the Blackrock Road. The online map of the draft network indicates that this proposed new network would place an estimated 1,000 additional jobs within a 30-minute travel time, and an additional 7,000 jobs within a 60-minute travel time.

Figure 12 below illustrates the catchment of the proposed new city bus network in relation to the development site.

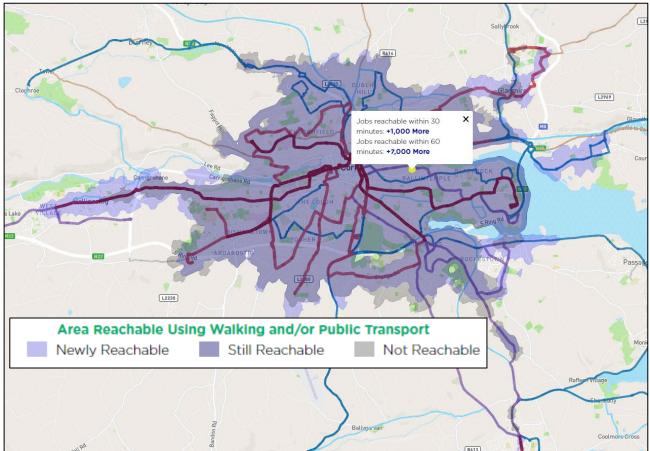


Figure 12: Public Transport Destination Accessibility from The Site [Base map source: BusConnects.ie]

2.5.3 Regional / Commuter Bus Services

A significant number of Bus Éireann Regional and Commuter services terminate or stop at Parnell Place bus station in the city centre, approximately 2.0km from the site.

2.5.4 Commuter/Suburban Rail Services

Kent Station is the principal train station serving Cork City. Services to and from Cobh, Mallow, Midleton and Dublin arrive and depart from Kent Station. The station is approximately 1.2km due north-west of the site but is approximately 2.5km by road.

The commuter services to and from Cobh run every 30 mins during the AM and PM peak periods (i.e., 07:00-09:00 and 16:00-19:00). There are 4 services from Mallow which arrive in Kent Station during the AM peak period and 6 services which depart from Cork to Mallow during the PM peak period. Services to and from Midleton run every 30 mins during the AM and PM peak periods.

Intercity services from Cork- Dublin typically run every hour during the day – a number of these are direct services and others have scheduled stops along the route.

2.6 Site Access Arrangements

The proposed development will have a single vehicle access point directly from Centre Park Road. This will lead vehicles to an internal roadway (Street A), from which there will be controlled vehicle accesses to the car parking proposed at sub-podium level.

Pedestrian and cyclist access and permeability through the site is provided throughout. The site is bounded by Centre Park Road and the Shandon Boat Club access road to the south and north, respectively, and by the year of opening (estimated to be 2015) it is envisaged that the Monahan Road to the south will be extended (by Cork City Council) – this project has planning consent and construction is expected to commence in mid-2022 (with an estimated 12-month construction duration). The site is bounded to the west by existing industrial lands.

The development site access strategy is shown in Figure 13.

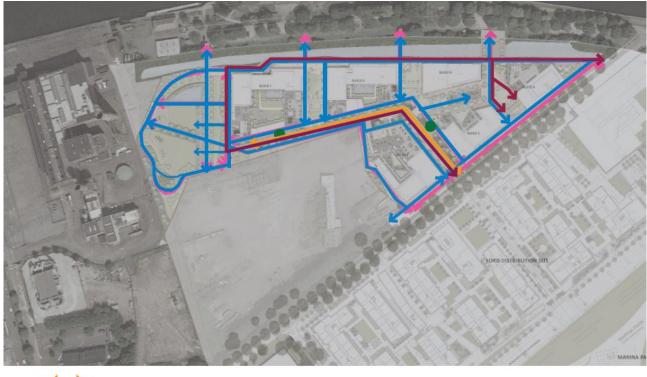




Figure 13: Development Site Access Strategy

2.7 Strategic Transport Proposals

The Cork South Docklands is envisaged to be a major regeneration hub for the city and will result in a substantial population and employment increase within the study area (including within the proposed development site). This will in turn require a commensurate improvement in both transport infrastructure and transport services.

Local and strategic transport proposals for the transport network in the site vicinity include upgrades to the local road network and additional road infrastructure in the site vicinity (including some additional river crossings), and at a strategic level the site lies along a proposed rapid transit corridor linking Mahon to Ballincollig via Cork City Centre. Therefore, regardless of the implementation of the proposed development, the local road network will see a significant increase in traffic flow arising from the redevelopment of the South Docklands and the implementation of new major transport infrastructure projects.

2.7.1 Cork Metropolitan Area Transport Strategy (CMATS)

CMATS has been developed by the National Transport Authority in collaboration with Transport Infrastructure Ireland, Cork City Council and Cork County Council. CMATS represents a co-ordinated landuse and transport strategy for the Cork Metropolitan Area to cover the period to 2040. The strategy builds upon previous similar strategies, including the Cork City Centre Movement Strategy (CCMS), the Cork Area Strategic Plan (CASP) and the Cork Metropolitan Area Cycle Network Plan.

CMATS is intended to provide a coherent transport planning policy framework and implementation plan for the measures contained therein.

CMATS aspires to support the future development of the Cork Metropolitan Area and specifically the South Docklands area as a key development zone within Cork City; to this end, high-frequency bus services are proposed across the entire Cork Metropolitan Area, with most services intended to have frequencies of 15 minutes or less. It is also understood that to serve the South Docklands in the short term, high-frequency bus services are deemed critical. The proposed bus network identified in CMATS is to be delivered in the coming years by the NTA and Cork City Council via the 'BusConnects Cork' funding programme.



Figure 14: CMATS Bus Network Proposals in site vicinity

A significant portion of the proposed network above will be provided with bus priority measures – these are being developed by the National Transport Authority under the BusConnects Cork programme at present and are expected to be released for an initial public consultation in mid-2022.

In addition, a Bus Rapid Transit (BRT) system is initially envisaged to serve the South Docklands area as part of a proposed rapid transit corridor to link Ballincollig to Mahon via Cork City Centre; ultimately, it is expected that this corridor will be upgraded to Light Rail Transit (LRT). A route feasibility study is underway at present to determine the preferred route corridor for a future LRT system.

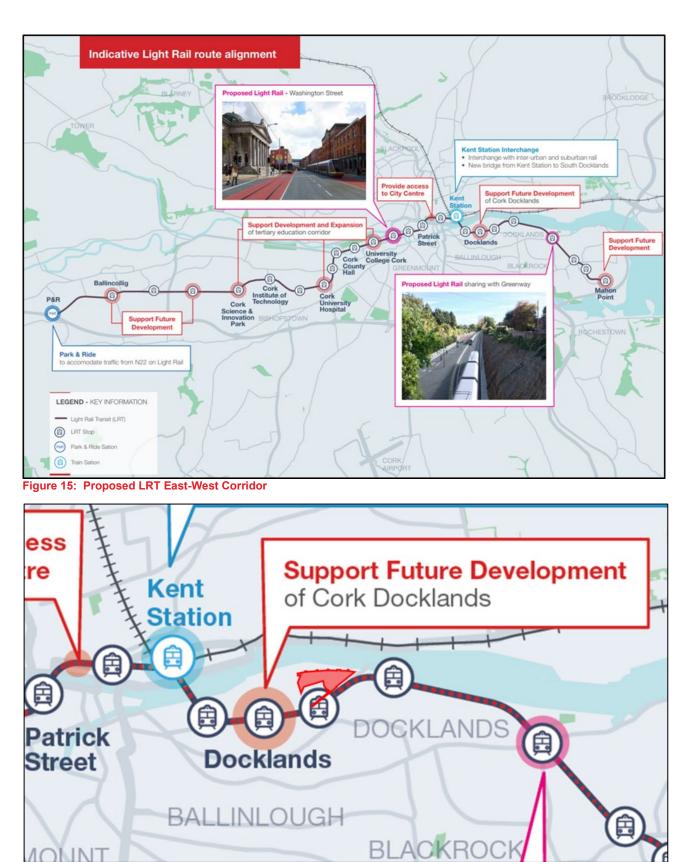


Figure 16: Proposed Light Rail Transit Corridor through South Docklands and along site boundary

This transit corridor is proposed to route from Mahon to Ballincollig (via Cork City Centre) and to pass directly along the site boundary on Centre Park Road.

Improved throughput at Kent Station is also proposed as part of the CMATS, in order to enable direct train services from Mallow to Midleton/Cobh without requiring passengers to interchange between services at Kent Station. In addition, CMATS proposes the implementation of eight new train stations along the route to create a better suburban network.

Tiznow Property Company Limited (Comer Group Ireland) 267365-ARUP-XX-XX-RP-YT-0012 | P02 | 25 March 2022 | Ove Arup & Partners Ireland Limited City Park Development at The Former Tedcastles Site



Figure 17: Proposed Suburban Rail Improvements

As outlined above, since publication of CMATS a proposed LRT Route Feasibility Study has been tendered and awarded to a design consultant, and the BusConnects Infrastructure Cork project has also been awarded to consultants to develop the relevant infrastructure proposals for bus services on a number of corridors across the city and suburbs. Further details on these two transformational projects are expected in mid-2022.

2.7.2 South Docklands Area-Based Transport Assessment (ABTA)

CMATS is supported at a local level by an 'Area-Based Transport Assessment' (ABTA) for the South Docklands, developed by Cork City Council (due to be finalised and published in 2022). The CMATS and ABTA assessments in turn will then inform the (ongoing) development of a new Local Area Plan for the South Docklands. It is noted that the outputs from the ABTA study have been incorporated into a specific section of the Draft Cork City Development Plan (2022-2028) that outlines the strategic objectives for the South Docklands area.

The ABTA for the South Docklands is fully aligned with the proposals outlined in CMATS (including the proposed public transport services and transport infrastructure proposals) and is based on a 2040 horizon year to include full achievement of the population and employment growth for Cork envisaged in the National Planning Framework as well as full build-out of the South Docklands (including the proposed development site). The CMATS and ABTA have therefore determined the necessary transport infrastructure required to support this population and employment growth in the period to 2040.

The CMATS and ABTA also both support the implementation of a comprehensive cycle network across the metropolitan area, and specifically within the South Docklands dedicated cycle infrastructure is proposed on all roads that pass the site.

To complement the above transport proposals, the proposed development will adopt a robust approach to demand management, to include a reduced parking provision at the site and the promotion of walking, cycling and public transport. As a result, the expected trip generation for the scheme will be reduced, and the resultant impacts on the local road network will be reduced.

The scheme will have one distinct vehicle access point on Centre Park Road. This will also rationalise the distribution of traffic onto the local road network.

Crucially, the site is extremely well-placed to avail of the transformational sustainable transport proposals envisaged for the South Docklands and the wider city area and indeed to support the viability of these services.

The proposed rapid transit corridor is seen in Figure 16 above to cross the River Lee using a new proposed public transport-only bridge (the Mill Road Bridge) and route directly to Kent Rail Station, providing interchange opportunity with suburban and inter-city rail services, and with city bus services that serve Kent Station. The LRT corridor continues eastwards to Mahon Point, and westwards to Ballincollig via the city centre, with proposed stops at key destination and interchange locations, including:

- Mahon Point;
- St. Patrick's Street;
- University College Cork;
- Cork County Hall;
- Cork University Hospital;
- Cork Institute of Technology;
- Cork Science & Innovation Park; and
- Ballincollig.

The LRT system is intended to ultimately operate at 5-minute frequencies. The site location along the proposed LRT system alignment on Centre Park Road ensures the proposed development is ideally placed to support the rapid transit corridor and to avail of the benefit of a flagship public transport system.

2.7.3 Cork Docklands to City Centre Road Improvement Scheme

The Docklands to City Centre Road Network Improvement Scheme has been identified by Cork City Council as an important project to support development in the South Docks of Cork City.

Funding has been secured by Cork City Council from the Local Infrastructure and Housing Activation Fund (LIHAF) to implement measures aimed at unlocking sustainable transport access between the South Docks and the city centre which will facilitate the beginning of the Docklands area realising its stated potential. The road improvement works will form part of Cork City Council's long-term infrastructure proposals for both the North and South Docks which will interconnect all zones within the Docklands area as development parcels are advanced.

The main project aims of the Docklands to City Centre Road Network Improvement scheme are:

- To provide key transport infrastructure that will act as the catalyst for the early development of the adjoining lands within the Docklands area;
- To provide a network for the optimum movement of all modes of transportation between the Docklands and the City Centre; and
- To provide a high-quality public realm consistent with the overall ambition for the Docklands area as a vibrant, innovative, mixed use, sustainable, socially inclusive, new urban quarter.

The scheme extends from the Albert Road/Albert Quay/Éamon de Valera Bridge junction eastwards along Victoria Road and incorporates the junctions at Centre Park Road, Monahan Road and Blackrock Road. The main changes proposed to the network under the scheme are as follows:

- Replacement of the existing Victoria Road Roundabout with a signalised junction;
- Introduction of a northbound contraflow bus lane on Victoria Road North from the new signalised junction to Albert Quay, continuing west along Albert Quay through the Albert Quay/Albert Street Junction and terminating at the Eglinton Street/Albert Quay and Clontarf Bridge Junction; City Park Development at

- Introduction of a two-way Cycle Track on Albert Quay East;
- Introduction of a two-way Cycle Track on Victoria Road North which will continue down Centre Park Road and Monahan Road (for future connectivity);
- Improvement to the Monahan Road/Victoria Road Junction;
- Re-alignment of the Old Blackrock Road/Victoria Road Junction;
- Public Realm Improvements to Albert Quay East this quay will act as the 'gateway' to the South Docks from the city centre; and
- Public Realm Improvements to Victoria Road, Albert Road, and Marina Terrace.

The implementation of these measures is to ensure connectivity for sustainable modes of transport between the South Docks and the city centre into the future. A planning application is expected to be submitted for this scheme in mid-2022.



Figure 18: Proposed Streetscape Improvements on Albert Quay East under the Docklands to City Centre Road Network Improvement Scheme

3. Objectives and Targets

3.1 Objectives

The primary objectives of this travel plan are to:

- Reduce car dependency and demand;
- Promote the use of sustainable travel modes;
- Create awareness of alternative modes of transport available;
- Reduce the environmental effects associated with increased car use such as congestion, parking impacts, longer journey times and increased pollution; and
- Set, and work towards, achievable modal split targets based on strategies to improve alternative modes of transport.

3.2 Mode Split

3.2.1 Existing Mode Split

Until such point that the development is built and occupied, it is impossible to know the exact travel characteristics of the proposed development. However, in the interest of setting indicative mode split targets, an initial mode split has been estimated based on commuting data from the 2016 Census small areas surrounding the site.

The Central Statistics Office (CSO) Small Area Population (SAP) statistics were reviewed for the local area. A total of 5 relevant zones were identified and reviewed (Knockrea B – which contains the site itself, and Mahon A, Mahon C, Knockrea A, and Ballinlough C). The SAP information for these zones is based on Census 2016 data, and provides data on existing travel habits from the site, including mode share, departure times and distances to work, etc.

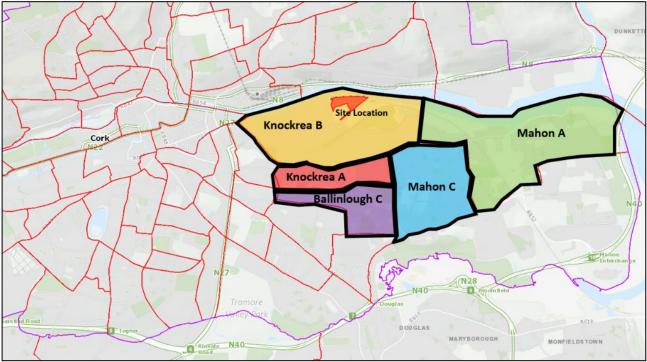


Figure 19: Electoral Division Zones in Cork City

City Park Development at The Former Tedcastles Site

Table 1: Existing Mode Share in Site Locality

| Mode of Travel | Modal Split |
|-------------------------------------|-------------|
| On foot - Total | 14% |
| Bicycle - Total | 4% |
| Bus, minibus or coach - Total | 8% |
| Train, DART or LUAS - Total | 0% |
| Motorcycle or scooter - Total | 0% |
| Car driver - Total | 46% |
| Car passenger - Total | 20% |
| Van - Total | 3% |
| Other (incl. lorry) - Total | 0% |
| Work mainly at or from home - Total | 2% |
| Not stated - Total | 3% |
| Total | 100% |

3.2.2 Mode Split Target

It is seen above in Table 1 that an existing mode share of 49% exists for car drivers and van drivers for these zones. This is to be expected given the proximity to both the city centre and to the Mahon employment area, and the presence of a high-frequency bus service serving these areas (the Bus Éireann 202 route) and the connection to the Passage Greenway line for cycling.

These mode share splits are also from Census 2016 and would not account for more recent improvements to public transport and cycling facilities (for example the Skehard Road improvement schemes, the Passage Greenway widening and lighting scheme, the current closure of the Marina to traffic and the new cycle infrastructure on Centre Park Road and Monahan Road).

In light of the improvements made since 2016 and the envisaged introduction of a high-frequency bus service to serve the South Docklands in the short term, a reduced mode share from the 49% noted above can be justified.

However, for robustness and to ensure a conservative assessment, it has been agreed with Cork City Council that the prevailing mode share of 49% for vehicle trips should be assumed for the site by the Opening Year scenario (2025), and that a mode share of 40% for vehicle trips can be assumed for the Opening Year +5 scenario (assumed to be 2030).

This is in recognition of the pending implementation of further walking, cycling and public transport service improvements within the South Docklands as the CMATS and ABTA strategies are applied and implemented across the Cork Metropolitan Area.

Based on the existing mode splits of the area surrounding the site, the following targets have been set for the period from 2025-2030, following the opening of the development. The achievement of this mode share is to be achieved incrementally over the period 2025-2030.

Table 2: Proposed Mode Share Target for 2030

| Mode of Travel | Modal Split |
|-------------------------------|-------------|
| On foot - Total | 15% |
| Bicycle - Total | 8% |
| Bus, minibus or coach - Total | 12% |
| Train, DART or LUAS - Total | 0% |
| Motorcycle or scooter - Total | 0% |
| Car driver - Total | 37% |

Tiznow Property Company Limited (Comer Group Ireland) 267365-ARUP-XX-XX-RP-YT-0012 | P02 | 25 March 2022 | Ove Arup & Partners Ireland Limited

| Car passenger - Total | 20% |
|-------------------------------------|------|
| Van - Total | 3% |
| Other (incl. lorry) - Total | 0% |
| Work mainly at or from home - Total | 2% |
| Not stated - Total | 3% |
| Total | 100% |

It is therefore proposed that a travel survey of residents will be carried out within 12 months of occupation of the first phase of the development (expected to be completed by 2025) in order to ascertain the actual travel characteristics of the proposed development.

This initial survey would be to determine the prevailing mode share at the site post-opening. It is proposed that this survey of residents would then be repeated on an annual basis to monitor the changes in travel behaviour at the site.

4. Oversight of the Mobility Management Plan Framework

A Mobility Management co-ordinator will be appointed at the development and will likely be from the Property Management Company. The Mobility Management co-ordinator will be appointed to oversee the development and implementation of the MMP and will have the chief role of promoting and monitoring the MMP going forward.

In advance of the Property Management Company being appointed, a contact from Tiznow Property Company Limited (Comer Group Ireland) will perform the role of Interim Mobility Management Co-ordinator.

4.1 Introduction

A key objective of the development will be to promote sustainable access by all modes of transport. To achieve this goal, a full Mobility Management Plan (MMP) should be created for the proposed development setting out measures to achieve.

The proposed development should have a MMP prepared as and when the occupiers are in place. This MMP would be based upon the collection of travel data from residents through a Travel Survey. At this stage (preplanning), and for this reason, it is not possible to prepare a full MMP, but it is important to set out the aims and potential contents of such plans.

The primary objective of the MMP should be to contribute to sustainable transport by optimising the existing transportation infrastructure, reducing car dependency, and creating awareness of alternative modes of transport.

The MMP should emphasise and promote sustainable travel options through the development of planning and operational stages for the benefit of all end users and thereby to achieve the modal split targets for the building and support a limited provision of car parking.

4.2 MMP Management

4.2.1 MMP Coordinators

It is recommended that an MMP Coordinator is nominated to oversee the development and implementation of the MMP.

Amongst the key roles of the MMP Coordinator will be:

- To ensure co-ordination with the occupiers so that they are aware of and supportive of the targets set in the MMP;
- To develop and support a culture of sustainable travel into and within the site;
- To raise awareness of sustainable transport issues among residents;
- To act as a single point of contact for all queries relating to the MMP and transport issues in the area and to centrally coordinate the MMP initiatives;
- To coordinate the development and implementation of the MMP;
- To liaise with the National Transport Authority programme and channel learning and resources from the national Smarter Travel Workplace programme to the area;
- To liaise with external bodies and local public transport operators on transport issues in the area;
- To promote smarter travel events in the area in conjunction with the Steering Group; and

City Park Development at

• To coordinate the monitoring and reporting of the MMP progress towards achieving targets, setting clear dates for actions to ensure that the MMP targets and objectives are realised.

4.2.2 Communication and Marketing

An on-going communication strategy will ensure that the initiatives being implemented are promoted to residents. Events and initiatives will be promoted through a range of possible marketing means, such as:

- Posters in breakout/common/amenity areas;
- Circulation of emails to notify residents of specific events;
- Provision of an 'Induction Manual' containing information on all travel options available to residents;
- Organising and participating in in wellness programmes (i.e., group walks, sponsored cycles, Pilate/yoga classes, etc.) to create a culture of wellbeing;
- Organisation of an intranet (if feasible) which would contain a section on travel to work which will be maintained and updated with relevant initiatives; and
- Quarterly newsletters will notify staff of any transport related changes coming up (additional bus routes/stops, new cycle parking locations etc.) and promote upcoming events. It will also report on events held in the previous quarter.

4.3 Travel Surveys

Within 12 months of occupation of the first phase of proposed development a travel survey should be undertaken to determine a baseline transport modal split. This will allow baseline travel patterns to be established and targets to be set and will also be a forum for staff to comment on any issues relating to their commute. Following this, subsequent travel surveys would be carried out at significant implementation stages (e.g., the construction of a subsequent phase), and post completion and full occupation ongoing regular surveys would be carried out at appropriate intervals.

City Park Development at

5. Mobility Management Plan Measures

5.1 Information Provision

Informing people of travel options is a crucial tool in encouraging the use of alternative travel modes to the car. Information will be primarily provided to residents via the management company in order to provide insight into alternative travel measures to that of the car. Transport information provided may include the following:

- Details on existing bus routes and timetables in the site vicinity;
- Information regarding bicycle parking areas, nearby cycle routes;
- Information and promotion of local and national green travel initiatives; and
- Details of car sharing arrangements and car clubs, etc.

5.2 Reduced car parking provision on site

A total of 268 residential parking spaces are proposed across the proposed development, which represents 79% of the suggested maximum standards as per the ABTA guidance, and 28% of the maximum requirement as per the City Development Plan.

6. Monitoring and Review

Monitoring is crucial to the successful implementation of any MMP. An annual review will be carried out on the MMP targets and action plan to assess progress.

Travel pattern data will be obtained by undertaking a survey of existing travel patterns. A fundamental part of mobility management is the monitoring of the plan and measurement of changes in order to determine progress, identify problem areas and initiate corrective measures to ensure targets are achieved. This monitoring programme will be carried out on an on-going basis.

The basic procedure would typically consist of:

- Reviewing the implementation of the different MMP measures;
- Regularly carrying out a travel survey;
- Controlling the achievement of the different targets;
- Proposing corrective measures if needed; and
- Informing Cork City Council about the implementation and progress on the MMP.