

CS CONSULTING
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DUBLIN

Traffic and Transport Statement
Proposed Residential Development
Glover Court, York Street, Dublin 2

Client: Dublin City Council

Job No. D117

July 2025



TRAFFIC AND TRANSPORT STATEMENT
PROPOSED RESIDENTIAL DEVELOPMENT
GLOVER COURT, YORK STREET, DUBLIN 2

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Appendix A: TRICS Data

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1.0 INTRODUCTION

Cronin & Sutton Consulting Engineers (CS Consulting) have been commissioned by Dublin City Council (DCC) to prepare a Traffic and Transport Statement for a proposed residential development at Glover Court, York Street, Dublin 2.

In preparing this report, CS Consulting has made reference to the following:

- Dublin City Development Plan 2022-2028
- Sustainable Urban Housing: Design Standards for New Apartments (Guidelines for Planning Authorities) July 2023
- Trip Rate Information Computer System (TRICS)
- Design Manual for Urban Roads and Streets (2019)
- Greater Dublin Area Cycle Network Plan
- TII traffic and Transport Guidelines (PE – PDV – 02045)

The Traffic and Transport Statement is to be read in conjunction with the engineering drawings and documents submitted by CS Consulting and with the various additional information submitted by the other members of the design team, which forms part of the Planning Submission

2.0 SITE LOCATION AND PROPOSED DEVELOPMENT

2.1 Site Location

The site of the proposed development is located at Glover court, York Street, Dublin 2, in the operational area of Dublin City Council. The area enclosed by the planning application boundary is approximately 0.3ha.

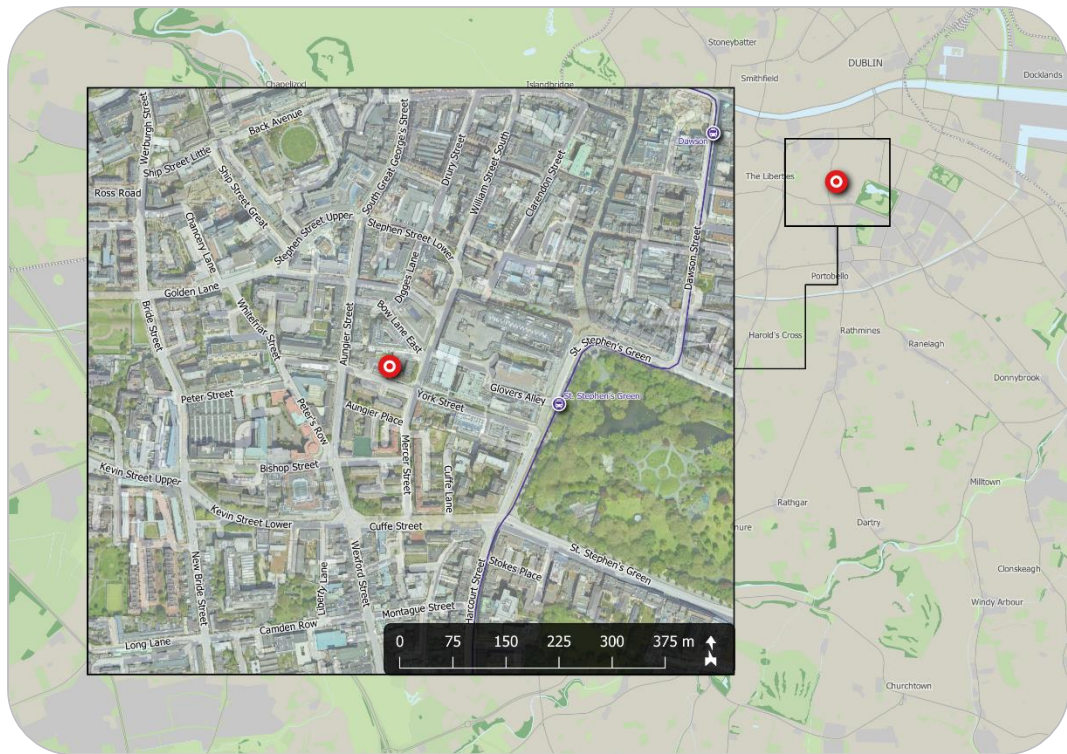


Figure 1 – Location of proposed development site
(map data & imagery: EPA, OSM Contributors, Google)

The location of the proposed development site is shown in **Figure 1** above; the indicative extents of the development site, as well as relevant elements of the surrounding road network, are shown in more detail in **Figure 2**.

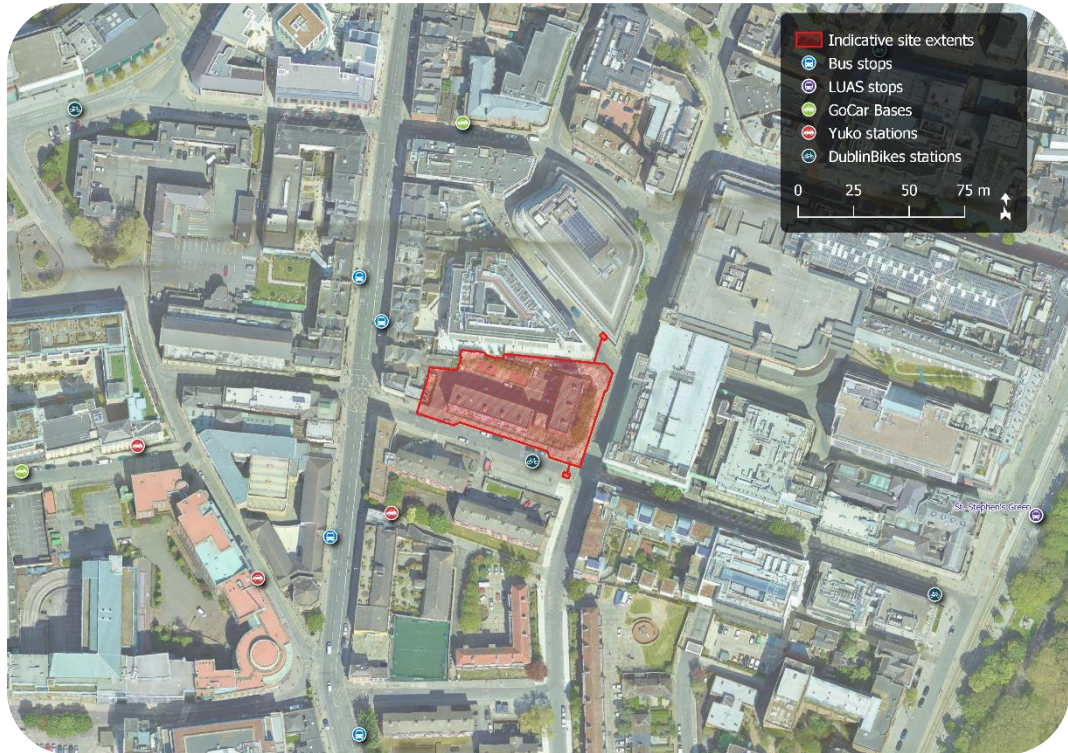


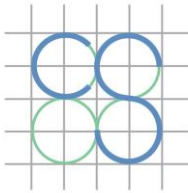
Figure 2 – Elements of surrounding street network

(map data & imagery: NTA, Dublin Bus, GoCar, Yuko, DublinBikes, OSM Contributors, Google)

The development site falls immediately south of Marlin Hotel, and is bound to the east by Mercer Street Lower, to the south by York Street, and to the west by existing commercial buildings.

2.2 Existing Land Use

The subject site currently comprises of existing residential units which shall be refurbished under this planning application. The site currently generates minimal vehicular, cyclist, and pedestrian traffic. The site is currently accessed from York Street.



2.3 Description of Proposed Development

The project comprises of the retrofit and amalgamation of the existing blocks, with the addition of new bays, additional floors, new vertical cores, new access decks and balconies. The proposal is to provide 53 residential units comprising of 15 no. 1 bed apartments, 30 no. 2 bed apartments, 8 no. 3 bed apartments. The York Street block will be extended at both ends and by one additional upper floor. The upper floor on the York Street block will be held back on the new build section of the western boundary to create a stepping down in height in respect of the protected structure context to Aungier Street which includes the Swan Bar. The Mercer Street block will be extended on the corner with York Street and by two additional upper floors. The amalgamated building will comprise of a 5 and 6 storey block to York Street and a 7-storey block to Mercer Street. New stairs and lift cores are to be accommodated within the grid of the existing frame, one in each block. A new external façade is introduced throughout the building with access provided by a new access deck to the internal courtyard and balconies to the street facing facades.

3.0 RECEIVING ENVIRONMENT

3.1 Existing Public Transport Services

The development site benefits from proximity to good quality public transport services, as shown in **Figure 3**. The development site is situated within a 5-minute walk of high frequency bus stops on Aungier Street and Stephen's Green Luas Stop. The site is also within a 15-minute walk of the Tara Street Railway Station.

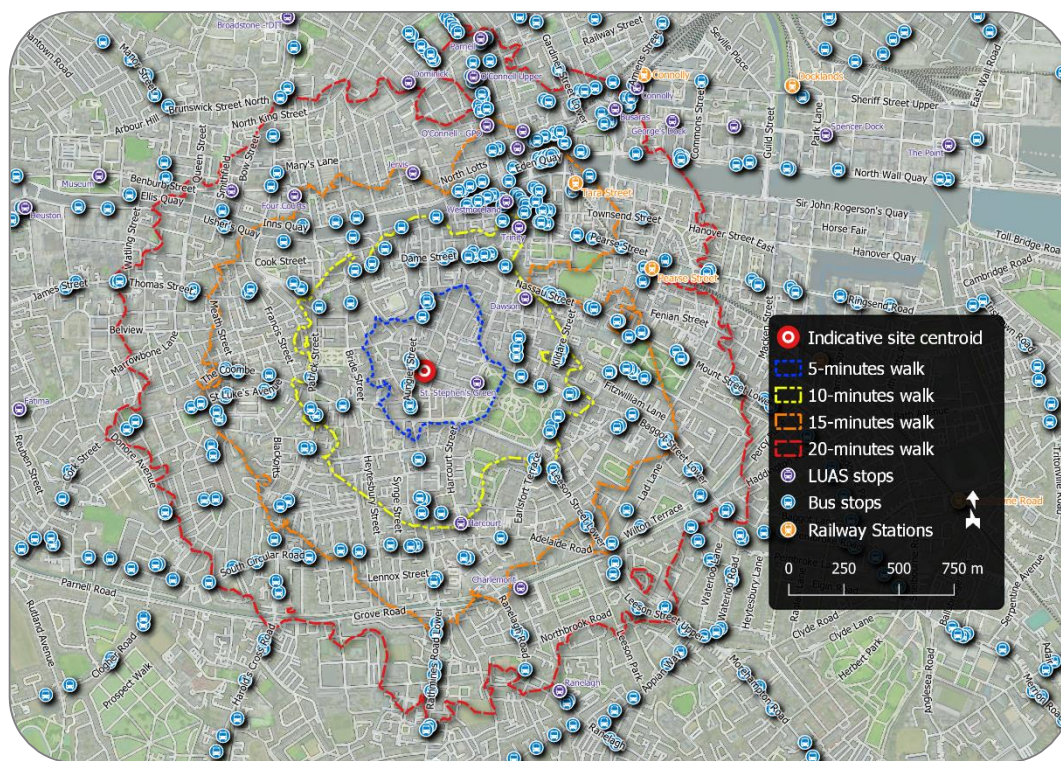
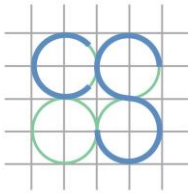


Figure 3 – Walking times and public transport facilities
(map data & imagery: OSM Contributors, Google, NTA, OSI)

3.1.1 Light Rail Services

The Luas light rail network consists of two principal lines, which connect to one another at Abbey Street/Marlborough Street/O'Connell Street in Dublin City Centre.

- LUAS Red Line (E-W) Dublin Docklands to Tallaght/Saggart



- LUAS Green Line (N-S) Broombridge to Bride's Glen

Table 1 – Luas Green Line Light Rail Services

Direction	Destinations	Peak Interval
Northbound	Broombridge	3-4 min
Southbound	Bride's Glen	3-4 min

The subject development site is located within a 5-minute walk of the St. Stephen's Green stop on the Luas Green Line. Light rail services operating to and from this stop connect it directly to Broombridge in the north (via Dublin city centre) and to Bride's Glen in the south; interchange with the Luas Red Line is possible at Abbey Street. Trams serve the Stephen's Green stop at intervals of approximately 3-4 minutes at peak times.

3.1.2 Bus Services

Bus stops located within a 5-minute walk of the development site are served by 16no. Dublin Bus routes, which connect it to Dublin city centre and to Dublin's northern, western and southern suburbs. Of these, a total of 7no. bus routes (9, 14, 15, 15B, 16, 122, 140) operate with peak frequency of 10 mins or less. Details of these bus routes are given in **Table 2**.

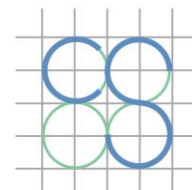


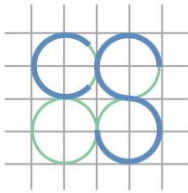
Table 2 – Bus Services within 5-minute Walk of Site

Route No.	Operator	Destinations	Weekday Services ¹	Peak Interval
9	Dublin Bus	Charlestown/ Limekiln Ave.	77	10 mins
14	Dublin Bus	Beaumont (Ardlea Rd.)/ Dundrum Luas Station	88	5 mins
15	Dublin Bus	Clongriffin/ Ballycullen Rd.	140	5 mins
15A	Dublin Bus	Merrion Square/ Limekiln Ave.	49	15 mins
15B	Dublin Bus	Merrion Square/ Stocking Ave	68	10 mins
15D	Dublin Bus	Merrion Sq./ Whitechurch	2	n/a
16	Dublin Bus	Dublin Airport/ Ballinteer (Kingston)	88	10 mins
16D	Dublin Bus	Dublin Airport/ Ballinteer not via Beaumont Village	8	n/a
65	Dublin Bus	Poolbeg St./ Blessington	16	20 mins
65B	Dublin Bus	Poolbeg Street/ Citywest	20	60 mins
68A	Dublin Bus	Hawkins Street/ Newcastle	21	30 mins
83	Dublin Bus	Harristown/ Kimmage	75	15 mins
83A	Dublin Bus	Stannaway Ave/ Harristown Bus Garage	39	30 mins
122	Dublin Bus	Ashington/ Drimnagh Rd.	60	10 mins
140	Dublin Bus	Palmerston Park/ Ballymun (Ikea)	67	10 mins

3.1.3 Rail Services

Tara Street railway station is located within 15-minutes walk of the development site. Tara Street railway station is one of the three principal city-centre stations on the Dundalk-Dublin-Wexford railway line and is also connected to the northern and southern Kildare rail lines (the latter via the Phoenix Park tunnel). Frequent Dublin Area Rapid Transit (DART) trains serve this station, running between Howth/Malahide in the north and Bray/Greystones in the south.

¹ Average number of services per day in each direction, Monday-Friday



Commuter rail services operating to and from this station directly serve towns as far as Dundalk in the north, Wexford in the south, and Newbridge and Maynooth in the west. **Table 3** gives a summary of rail services to and from Tara Street station. All rail services to/from the north also serve Connolly Station, where a number of additional rail services are accessible – these include intercity services to and from Belfast and Sligo.

Table 3 – Direct Rail Services to/from Tara Street Station

Service Type	Origins / Destinations	Daily Services (Mon-Fri average, each direction)
DART	Howth / Malahide	95
	Bray / Greystones	95
Commuter Rail	Balbriggan / Drogheda / Dundalk	18
	Gorey / Wexford / Rosslare	5
	Hazelhatch-Celbridge / Newbridge	25
	Maynooth	15

3.2 External Shared Transport

The area surrounding the subject site is well served by commercial car-share services and by the DublinBikes, Bleeper Bikes bicycle sharing schemes.

- 4no. DublinBikes stations are located within a 5-minute walk of the subject site. A further 11no. DublinBikes stations are located within a 10-minute walk.
- 4no. bases for the GoCar commercial car-sharing service are located within a 5-minute walk of the development site. A further 5no. GoCar bases are located within a 10-minute walk.
- 3no. bases for the Yukō commercial car-sharing service are located within a 5-minute walk of the development site. A further 4no. GoCar bases are located within a 10-minute walk.

The development site is also situated within the geofenced operating zones for the Bleeper Bikes commercial bicycle sharing schemes. Within these

areas, these shared bicycles may be collected from or returned to any public bicycle parking stand.

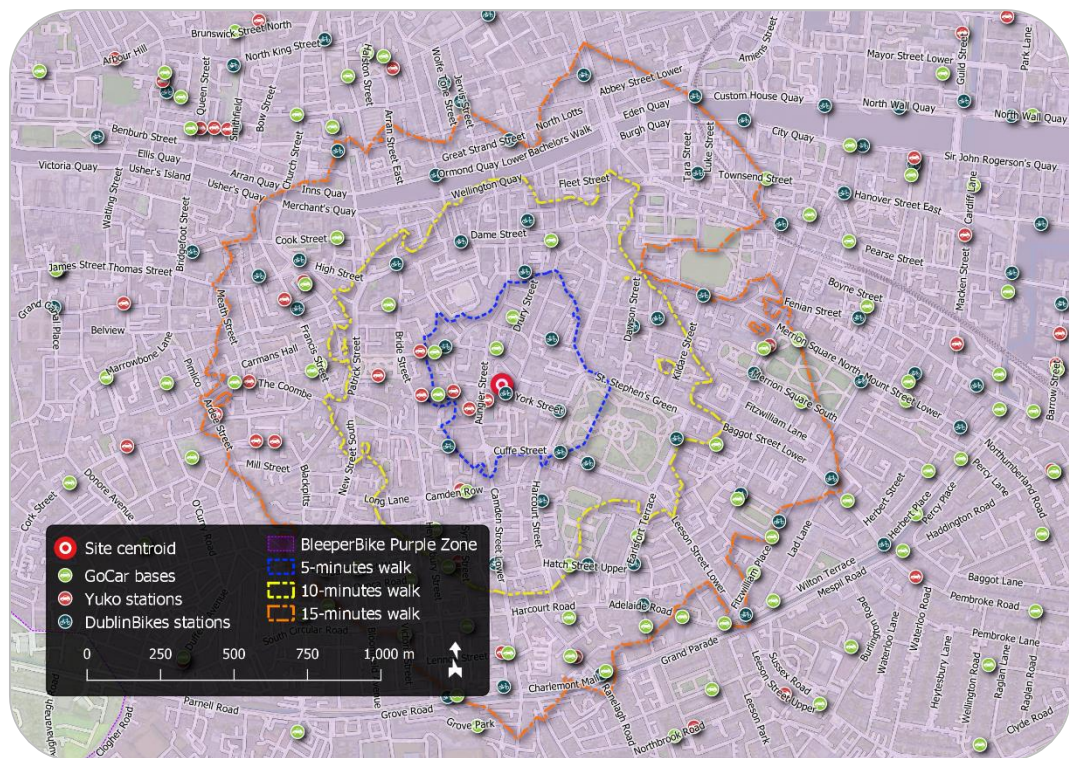


Figure 4 – Walking times and shared transport services
(map data & imagery: EPA, DCC, GoCar, Yuko, OSM Contributors, Google)

Note:

The above car sharing locations represent the most up to date information available on the publicly-accessible GoCar and Yukō bases at the time of preparing this report. These base locations are subject to periodic alteration by the scheme operators, in response to usage demand and to traffic management considerations.

3.3 Proposed Local Infrastructure Improvements

3.3.1 NTA Cycle Network

As part of the *Cycle Network Plan for the Greater Dublin Area*, administered by the National Transport Authority, it is proposed that a primary cycle route be implemented along Anguier Street and a secondary cycle route be implemented along Mercer Street Upper in the vicinity of the subject development site. It is proposed that the secondary lane along Mercer Street Upper would further connect to primary orbital cycle route along Grafton Street which will further provide access to the city centre. No further information is available at present regarding the delivery timeframe or detailed design of these proposed cycle network improvements. Refer to **Figure 5**.

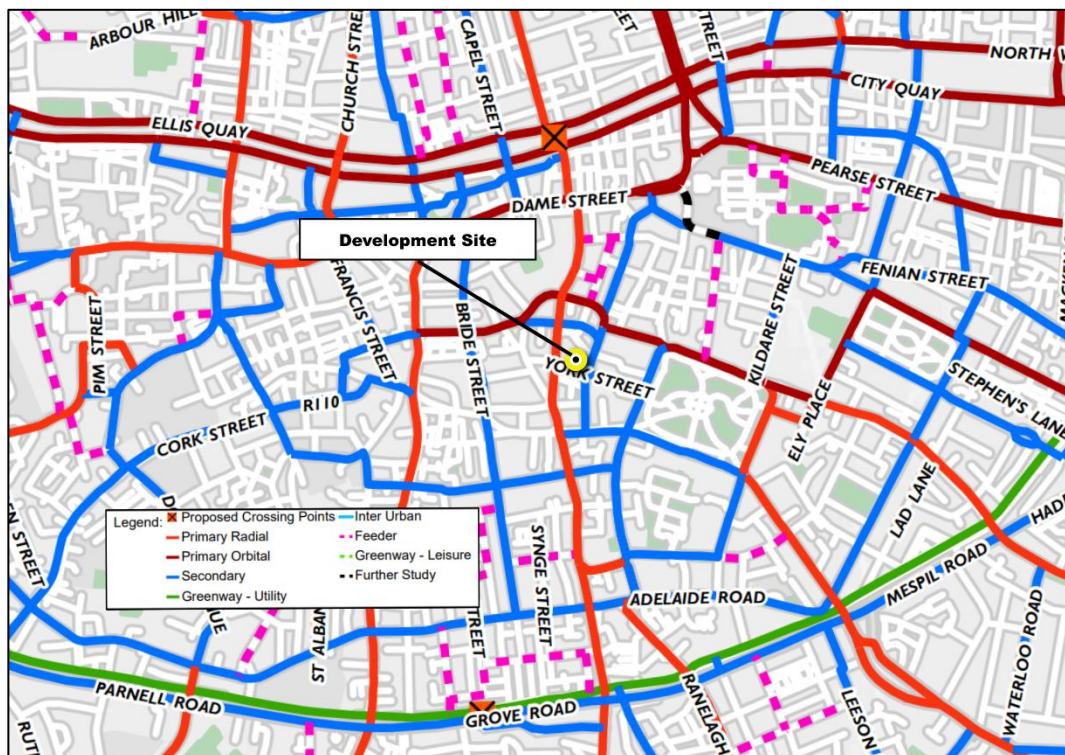


Figure 5 – Proposed Cycle Network – Dublin City Centre
(map data & imagery: OSI, OSM Contributors, Google)

3.3.2 BusConnects

The NTA BusConnects Core Bus Corridor Project includes the implementation of Core Bus Corridor no. 12 (Rathfarnham to City Centre) along Aungier Street, to the west of the development site. Three rounds of Public Consultation have been conducted in respect of this Core Bus Corridor Project, and this has been presented for planning application to An Bord Pleanála along with several of the other Core Bus Corridor routes. Please refer to **Figure 6** below.

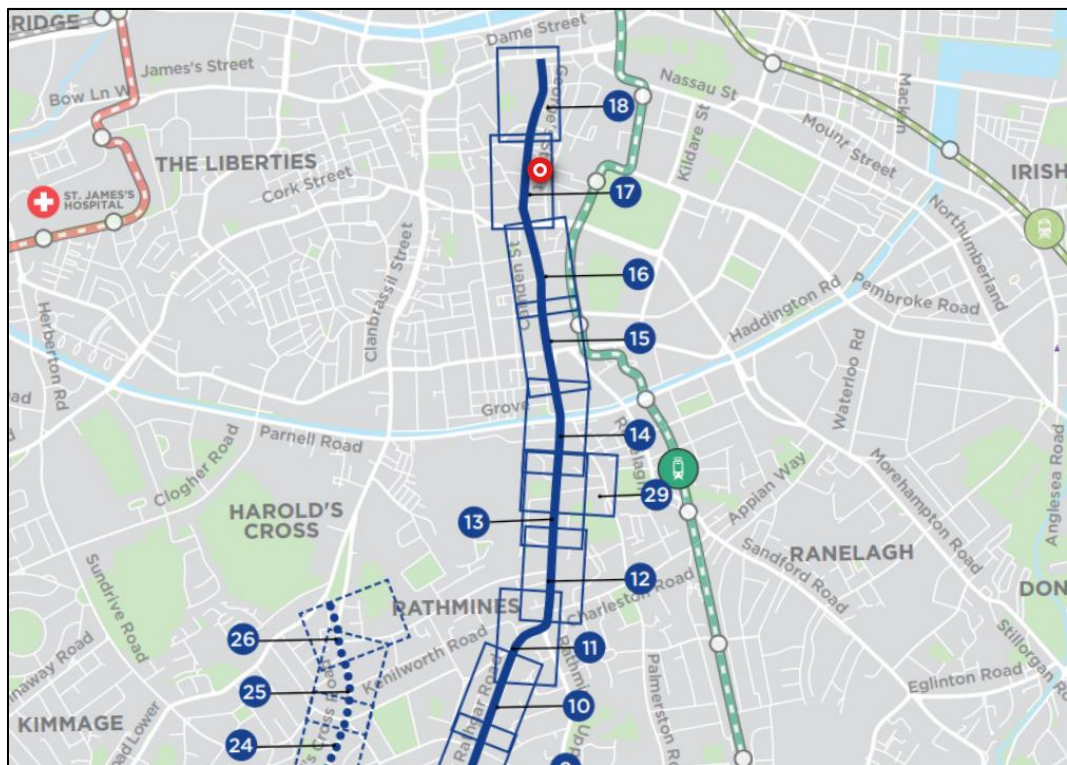


Figure 6 –BusConnects Core Bus Corridor 12 index map
(source: BusConnects)

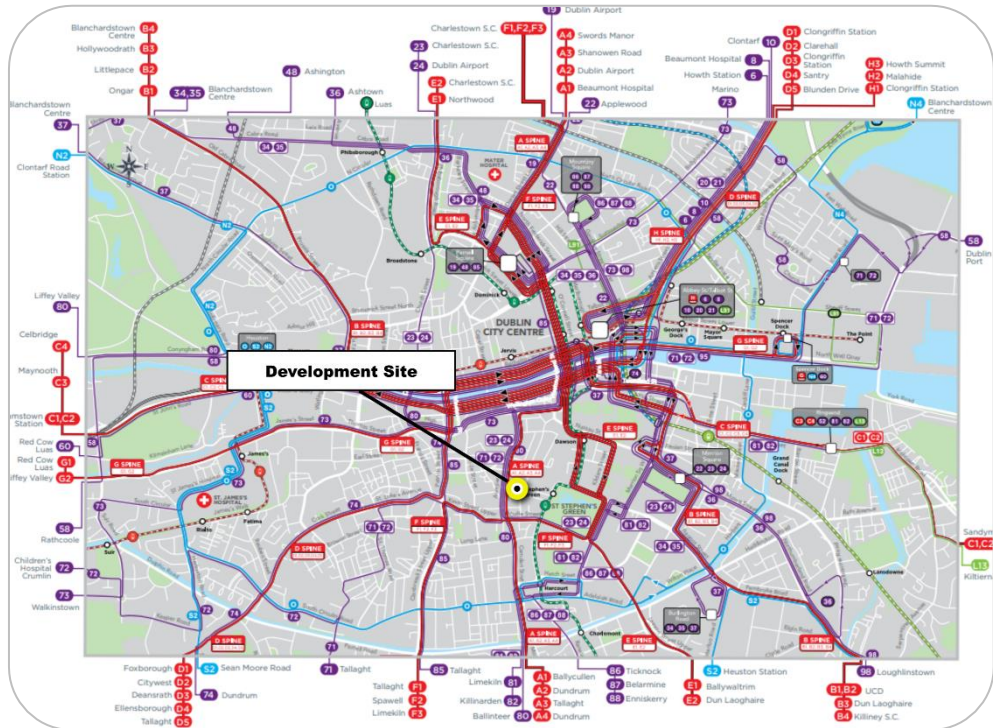


Figure 7 – Dublin Area Revised Bus Network city centre area map
(background imagery source: NTA)

The Core Bus Corridor Project is accompanied within the BusConnects framework by the Dublin Area Revised Bus Network initiative, which seeks to improve the overall convenience and efficiency of the city's bus routes. This includes the implementation of high-frequency spine routes through the city centre, all of which are to serve stops in proximity to the development site. These spine routes consolidate branching radial routes and harmonise their timetabling. To date, the H-Spine, C-Spine, and G-Spine routes have been introduced, with A-Spine, B-Spine, D-Spine, E-Spine, and F-Spine routes to follow.

3.3.3 MetroLink

MetroLink is a high capacity, high-frequency heavy rail line running from Swords to Charlemont, linking Dublin Airport, Irish Rail, DART,

Dublin Bus and Luas services and thereby creating a fully integrated public transport network in the Greater Dublin Area.

As well as linking major transport hubs, MetroLink will connect key destinations including Ballymun, the Mater Hospital, the Rotunda Hospital, Dublin City University and Trinity College Dublin. Much of the 19-kilometre route will run underground.

As per the reports MetroLink will carry up to 50 million passengers annually, cutting journey times from Swords to the city centre to 25 minutes.

A MetroLink station (Tara Street) is to be constructed underground, which shall be within 15-minutes walk of the development site (see **Figure 8**), providing an interchange with Tara Street railway station.

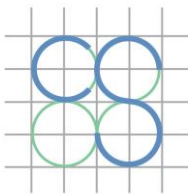


Figure 8 – Metrolink Route Map
(map data & imagery: Metrolink, Google)

3.3.4 DART+ Programme

The DART+ Programme consists of a series of proposals that aim to modernise and improve the existing rail services in the Greater Dublin Area (GDA). It will provide a sustainable, electrified, reliable and more frequent rail service, improving capacity on rail corridors serving Dublin. The current DART network is 50km long, extending from Malahide/ Howth to Greystones. The DART+ programme will increase the length of the DART network to 150km of railway corridor

through the electrification and upgrade of existing lines transforming commuter train travel in the Greater Dublin Area (GDA). The DART+ Programme also includes the purchase of new train fleet.

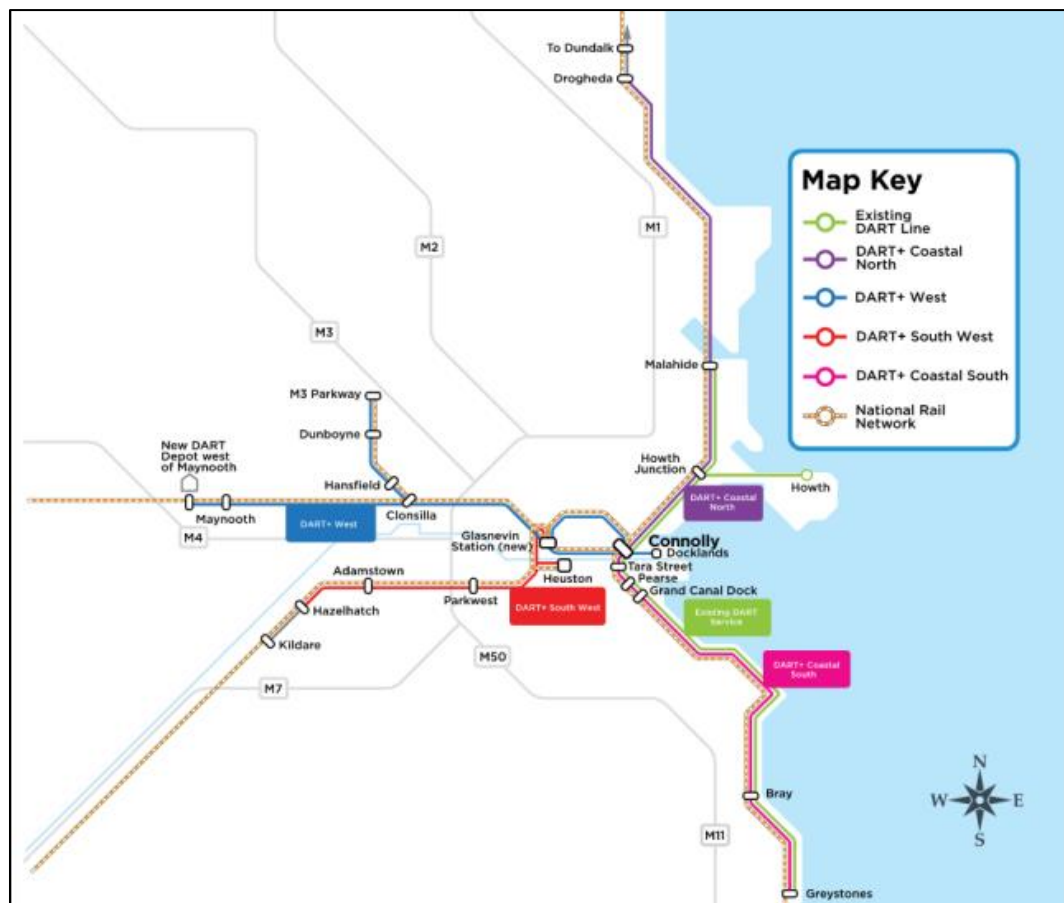
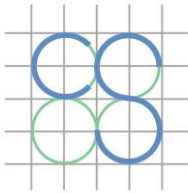


Figure 9 – DART+ Programme map
(map data & imagery: DART+, Google)

As set out in the map, the DART+ Programme will deliver frequent, modern, electrified services between Dublin City Centre (Tara Street, Connolly and Spencer Dock) to:

- Maynooth and M3 Parkway;
- Hazelhatch and Celbridge;
- Drogheda; and
- Greystones



Given the connectivity of the site to the rail wider network via the Tara Street railway station located within 15-minutes' walk of the subject site, all parts of the DART+ programme will be of benefit to the proposed development site.

3.3.5 Local Authority Development Plan

DCC Development Plan 2022-2028 indicates a possible DART Underground rail line to the north of the development site along/ in the close proximity to King Street South as shown in **Figure 10** below.

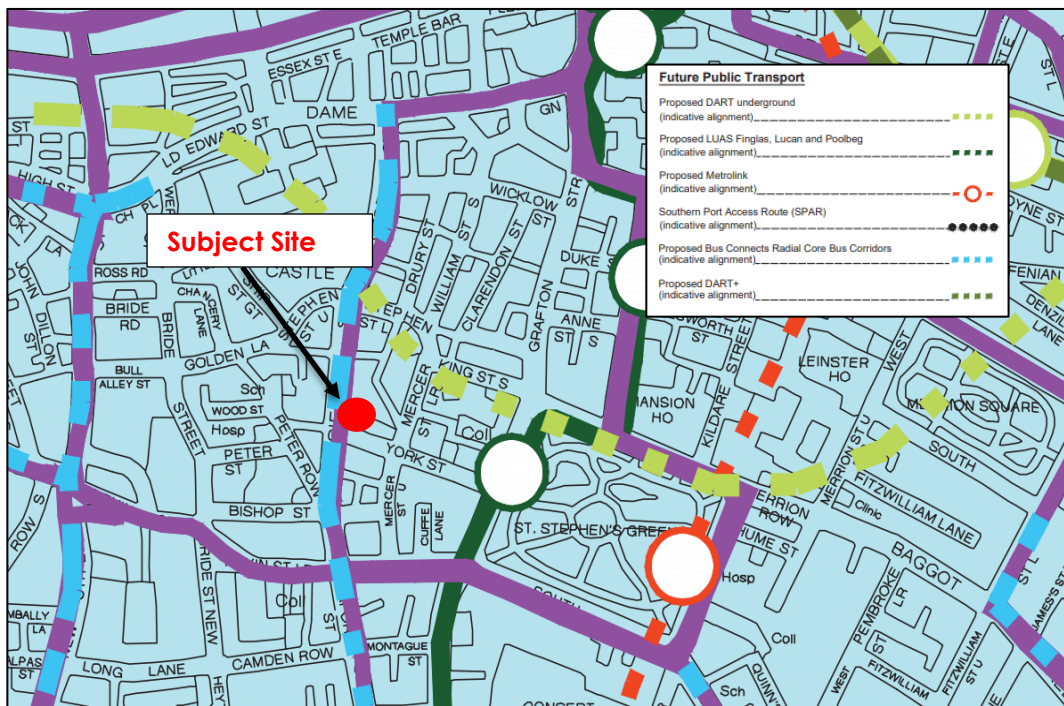


Figure 10 – Extract of Map J from DCC Development Plan 2022-2028
(map data and imagery: DCC, QGIS)

4.0 TRAFFIC GENERATION

4.1 Subject Development Trip Generation

Trip generation factors from the TRICS database have been used to predict the trip generation to and from the proposed development, for both the AM and PM peak hour periods, as well as for a full day. The TRICS survey database is maintained by a consortium of English County Councils but covers the entirety of Great Britain and Ireland. Full details of the TRICS information used in the assessments are provided in **Appendix A**.

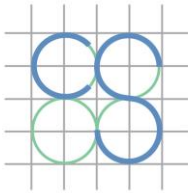
The subject development comprises 53no. apartments. For the residential element of the development, the TRICS sub-categories, '03 Residential / C – Flats Privately Owned' have been employed. This sub-category is described in the TRICS land use category definitions as follows:

Flats Privately Owned

"Housing developments where at least 75% of households are privately owned. Of the total number of units, 75% must also be flats (sum of flats in blocks and "split" houses), with no more than 25% of the total units being "non-split" houses. Includes properties that are privately owned and then privately rented. Note that "Help to Buy" dwellings or any other where residents have equity in a property are considered to be privately owned. Trip rates are calculated by Site Area, Dwellings, Housing Density, or Total Bedrooms."

The TRICS trip rates for the proposed development have been selected from the above category, restricted insofar as possible to similar suburban locations, and further refined with reference to 2022 CSO census data on the basis of:

- the population within 1 mile of the development site (approx. 58,900);
- the population within 5 miles of the development site (approx. 533,650);



- the aggregate mean car ownership rate within 5 miles of the development site (1 or less cars per household) (0.63).

The mean TRICS arrival and departure trip rates for similar developments indicate that the morning peak combined trip generation (AM Peak) occurs between 08:00 and 09:00, while the evening peak combined trip generation (PM Peak) occurs between 17:00 and 18:00.

Table 4 – TRICS Subject Development Trip Generation Rates

	Arrivals per hour per dwelling	Departures per hour per dwelling
AM Peak	0.028	0.093
PM Peak	0.108	0.062

Trip numbers in this instance have been calculated as a function of the TRICS trip rates given in **Table 4** and the total number of dwellings (53no. apartments) within the proposed development. The following trip generation figures are calculated.

Table 5 – Subject Development Trip Generation from TRICS

	Arrivals	Departures	Total Trips
AM Peak	1	5	6
PM Peak	6	3	9

The TII Traffic and Transport Assessment Guidelines (PE-PDV-02045) advise that Transport Assessments should generally be applied where traffic to and from a development is predicted to exceed 10% of the existing background traffic on the adjoining road (or 5% at sensitive locations). The subject development shall result in minimal volumes of vehicular traffic. As such, it is not expected to result in an increase of more than 10% in total traffic flows at any adjoining roads, in either peak hour period due to the minimal level of vehicular traffic forecasted. As such, further assessment is not required.

5.0 PARKING

5.1 Overall Car Parking Provision

The development shall include a total of 9no. car parking spaces (including 1no. disabled parking space) located at surface level along the northern boundary of the development site.

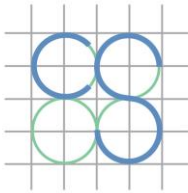
Table 6 – Overall Car Parking Provision

Land Use (Zone 1)	Car Parking Maximum	Quantum	Maximum Provision	Proposed Provision
Car Parking Standards				
Apartments	0.5 space per unit	53 units	27 spaces	9 spaces
TOTAL			27 spaces	9 spaces

The car parking provision of the proposed development has been assessed with respect to the Dublin City Development Plan 2022–2028, which defines the standard maximum car parking provision for new developments by land use type. **Table 6** shows the car parking standards applicable to the proposed development and illustrates that the proposed car parking provision equates to a ratio of 0.17no. spaces per apartment.

In addition, the policy document *Sustainable Urban Housing: Design Standards for New Apartments (Guidelines for Planning Authorities)*, published by the Department of Housing, Planning and Local Government in July 2023, gives the following guidance on the provision of residential car parking:

“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 [as] 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 proposed development's car parking provision ratio of 0.17no. spaces per apartment is considered appropriate to the context of the development, in particular given its proximity to high quality and high frequency public transport services into and through Dublin City. A reduced car parking provision shall also serve to promote and maintain a lower rate of private car use among apartment residents, supporting planning objectives of encouraging a shift to more sustainable modes of transport.

As detailed in the sub-section 3.1, the development site is situated within a 5-minute walk of high-frequency bus services through Dublin city centre and within 15-minutes walk of Tara Street Railway Station. The development site is also situated within the 'purple zone' for the Bleeper Bikes commercial bicycle sharing service, and 4no. existing GoCar bases, 3no. existing Yuko stations, and 4no. DublinBikes stations are also located within 5-minute walk from the site.

The proposed development is also located within 5-minutes walk of Stephen's Green Green Line LUAS stop. The LUAS light rail operate at these stops at a peak frequency of 3-4 minutes.

The proposed development is therefore considered as an appropriate candidate for a limited residential car parking provision, in accordance with the standards and guidelines set out by Dublin City Council and by the Department of Housing, Planning and Local Government.

5.2 Disabled-Accessible Car Parking

The *Dublin City Development Plan 2022-2028* sets out the minimum requirement for the provision of disabled-accessible parking in new developments, as a proportion of the total development car parking provision. **Table 7** applies this requirement to the proposed development.

Table 7 – Accessible Car Parking Provision

Proposed Car Parking Provision	Minimum Required Proportion	Accessible Spaces Required	Accessible Spaces Proposed
Development Total			
9 spaces	5%	1	1

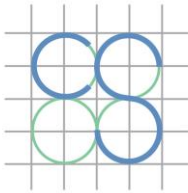
The development's overall provision of disabled-accessible car parking facilities thereby satisfies the requirements of the *Dublin City Development Plan 2022-2028*.

5.3 Electric Vehicle Charging Provision

Table 8 – Electric Vehicle Parking Provision

Proposed Car Parking Provision	Standard Required Proportion	Electric Charging Spaces Required	Electric Charging Spaces Proposed
Development Total			
9 spaces	50%	5	5

Facilities for the charging of battery electric vehicles (BEVs) shall be provided at 5no. parking spaces, representing 50% of the development's



internal car parking provision. All remaining internal car parking spaces within the development shall be 'future-proofed' by the inclusion of ducting and/or cabling to permit the rapid future installation of BEV charging points, as defined in the ESB ecars specification document no. 18017 (*Public Charge Points*, last reviewed February 2012).

5.4 Car Parking Management Plan

9no. car parking spaces within the development shall be controlled by the development's Management Company. Parking spaces shall not be assigned to individual apartment units; instead shall be leased to residents on the basis of availability and need, in part by means of a permit/lottery system, in order to optimise the use of parking spaces. The Management Company shall be responsible and shall implement suitable measures to prevent unauthorized use of car parking spaces.

5.4.1 Eligibility

- A resident is defined as an owner or a tenant, who's primary residence is within the development site.
- Disabled car space shall be leased to disabled residents, upon presentation of a valid disabled parking permit, as issued by the Disable Drivers Association on behalf of Department of Transport.

5.4.2 Strategy

- Car spaces can be leased to residents by the Management Company. The duration of leases shall be for a minimum of 1 month and a maximum of 12 months, after which the lease can be renewed at the discretion of the Management Company and their agents, and subject to availability and demand, and strictly in accordance with the rules of the Car Park Management Strategy in force at that time.

- Upon completion of the construction phase of the development, and as the occupation commences, the available car spaces will be leased to residents on a first come, first served basis.
- A resident cannot park multiple vehicles in their designated parking space.
- A resident is not permitted to allow any other vehicles (whether owned by residents or not) to use their parking space.
- Disabled car space shall be leased to disabled residents, upon presentation of a valid disabled parking permit, as issued by the Disable Drivers Association on behalf of Department of Transport.
- All vehicles must be properly parked within their designated bay. Consistent failure to do so, may result in the suspension or termination of the parking lease, at the discretion of the Car Park Manager and/or the Management Company.
- Major repairs or servicing of vehicles is prohibited within the car park spaces or grounds of the development site.
- Drivers parking vehicles within the development property shall do so at their own risk. No responsibility or liability will be accepted by the Management Company, its employees or its agents for damage to or loss of any vehicle, or its contents whilst parked on the property.
- Regular on-the beat surveys shall be employed to ensure that opportunistic parking by external parties cannot occur. The parking provision is therefore considered appropriate and will not affect the performance of the surrounding road network.

5.5 Bicycle Parking Provision

The bicycle parking provision of the proposed development has been assessed with respect to the policy document *Sustainable Urban Housing: Design Standards for New Apartments (Guidelines for Planning Authorities)*, published by the Department of Housing, Planning and Local Government in July 2023 and *Dublin City Council Development Plan 2022-2028*, which defines the minimum standard bicycle parking provision for new developments by land use type. It should be noted the *Dublin City Development Plan 2022-2028* also specifies the same standards for bicycle parking as *Design Standards for New Apartments (Guidelines for Planning Authorities)*. **Table 9** shows the standards applicable to the proposed development.

Table 9 – Bicycle Parking Provision – Apartment Guidelines and Dublin City Development Plan 2022-2028

Land Use (Zone 1)	Cycle Parking Minimum	Quantum	Minimum Provision	Proposed Provision
Residential Cycle parking Standards				
Apartments	Long-stay	1 space per bedroom	99 bedrooms	99 spaces
	Short-stay	1 space per 2 units	53 units	27 spaces
Sub-total			126 spaces	113 spaces

The proposed development shall include a total of 113no. bicycle spaces for the residential units of the development. A total of 99no. long-stay cycle spaces shall be located within a safe and secure bicycle storage areas to the west of the proposed car parking area.

In addition, 14no. short-term cycle spaces in the form of 6no. Sheffield stands and 2no. Cargo Bike stands shall be provided along the north-

eastern boundary of the development to facilitate visitors of the proposed development.

It is worth noting that there are large number of existing public cycle stands in the close proximity of the development site. Therefore, the number of short stay bicycle parking spaces within the proposed development have been reduced from 27no. spaces to 14no. spaces. It is also worth noting that the proposed 14no. short stay bicycle parking spaces have been agreed with DCC Transportation department.

Refer to **Figure 11** and **Figure 12** for cycle ingree and egress routes.

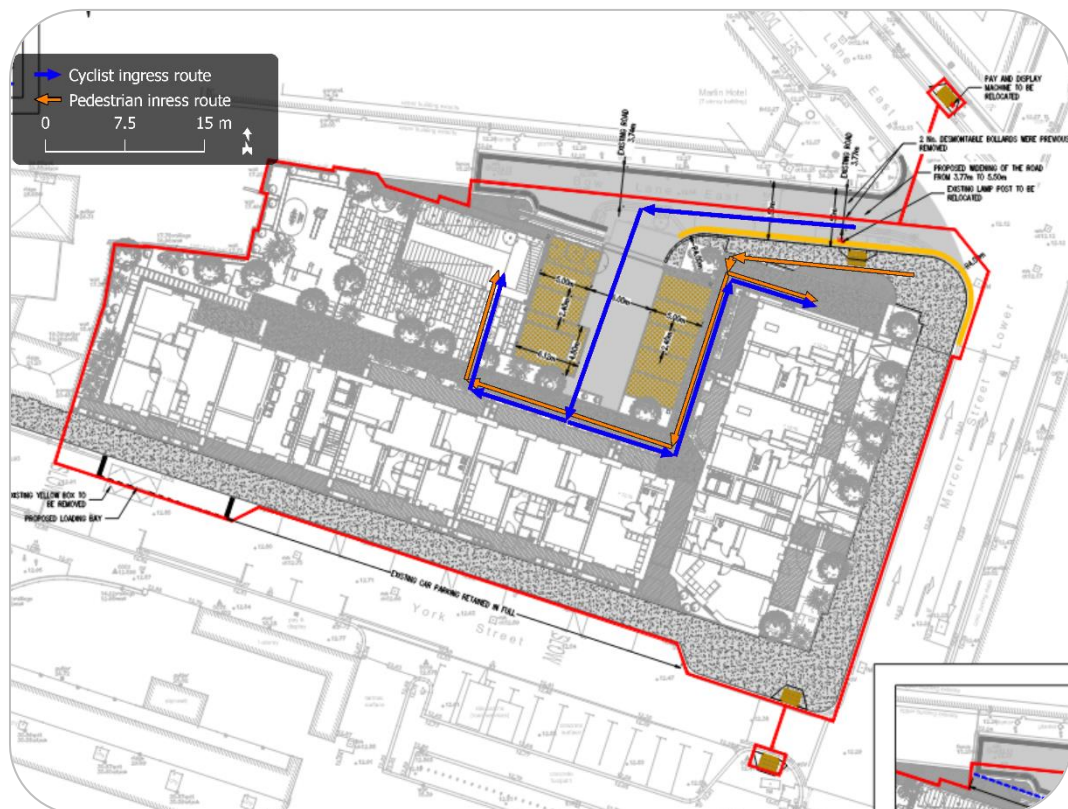


Figure 11 – Pedestrian and cyclist ingress route

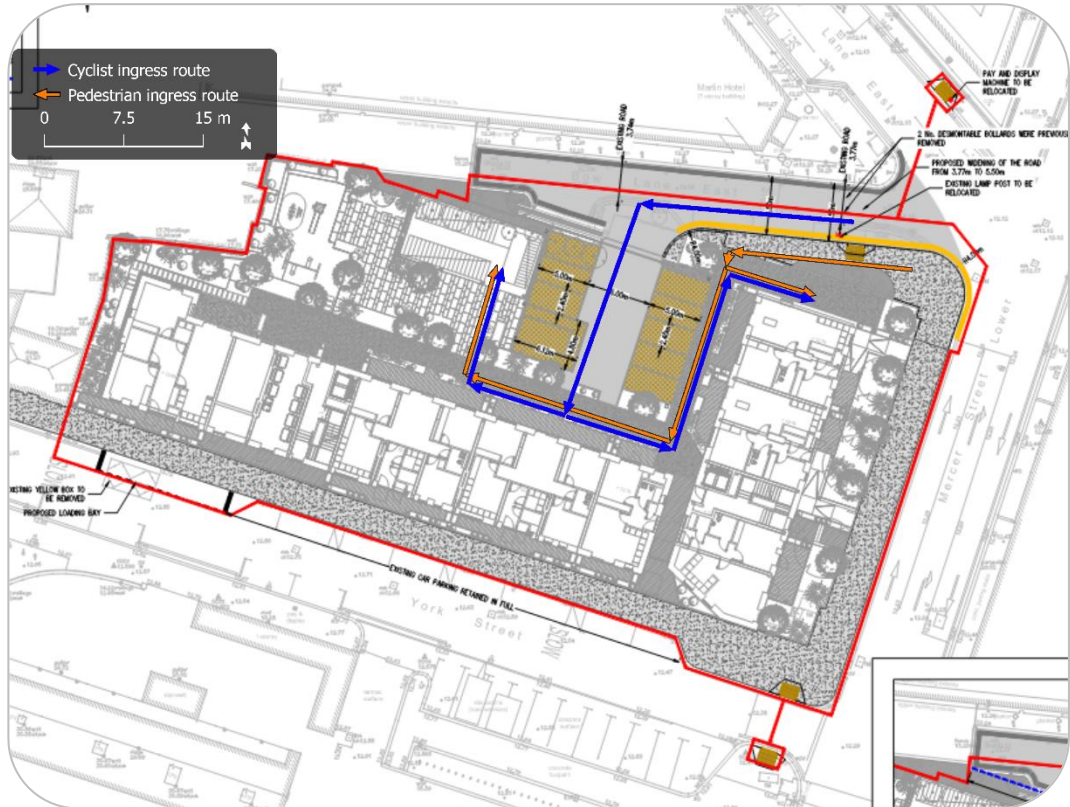


Figure 12 – Pedestrian and cyclist egress route

5.6 Motorcycle Parking Requirements

Table 10 – Motorcycle Parking Provision

Proposed Car Parking Provision	Standard Required Proportion	Motorcycle Spaces Required	Motorcycle Spaces Proposed
Development Total			
9	5%	1	0

The Dublin City Development Plan 2022–2028 sets out the standard requirement for the provision of motorcycle parking in new developments, as a proportion of the total development car parking provision. **Table 10** applies this requirement to the proposed development. However, it is worth noting that due to the site's proximity to Dublin City Centre it is not proposed to provide any motorcycle parking spaces within the proposed development.

6.0 ACCESS, LAYOUT, PEDESTRIANS & CYCLISTS, SERVICING

6.1 Development Access and Internal Layout

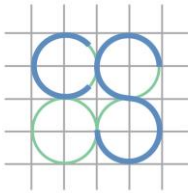
It is proposed to provide a new 3-arm priority junction at the northern boundary of the development site. The minor arm of the proposed priority junction shall serve the car parking spaces of the subject development.

In addition, It is also proposed to upgrade the existing Bow Lane East from 3.77m to 5.50m in width and to decommission 2 No demountable bollards currently present at the entrance to Bow Lane East. It is also proposed to provide an uncontrolled pedestrian crossing along this upgraded road. Tactile paving and dropped kerb shall also be provided at the uncontrolled pedestrian crossing at the Bow Lane East and Mercer Street Lower junction. Refer to CS Consulting drawing no. **D117-CSC-ZZ-XX-DR-C-0004**. Unobstructed sightlines of 23m can be achieved on east direction along the upgraded Bow Lane East as measured from a set-back of 2.4m from the minor road of the proposed priority junction in accordance with the *Design Manual for Urban Roads and Streets*.

The internal road network of the development comprises a single access road providing access to all the car parking spaces.

The internal road network provides access to a total of 9no. car parking spaces. The car parking spaces shall be placed perpendicular to the road, with a minimum clearance width of 6m. Refer to CS Consulting Drawing no. **D117-CSC-ZZ-XX-DR-C-0004**.

The final upgrade works for the footpath along Bow Lane East and the upgrade work for the Bow Lane East itself shall be subject to agreement with the Planning Authority and to be provided on their behalf as a condition of grant of planning permission. In previous discussions with DCC Roads Department it was agreed that a condition requiring details to be



submitted to and agreed in writing with the planning authority prior to commencement of construction of the these road upgrade and footpath upgrade works, was considered the most appropriate solution.

6.2 Pedestrians & Cyclists

Pedestrian and cyclist access to the development shall be accommodated via the main access on the upgraded Bow Lane East, at the northern boundary of the development site.

It is proposed to upgrade Bow Lane East and York Street pedestrian crossings by providing buff coloured tactile pavement at these locations. Refer to CS Consulting drawing no. **D117-CSC-ZZ-XX-DR-C-0004**.

In relation to cycle parking 99 no. long stay bicycle spaces shall be provided within a safe and secure storage area. The bicycle storage area shall be located to the west of the car parking area. In addition, 14no. short-term cycle spaces in the form of 6no. Sheffield stands and 2no. Cargo Bike stands shall be provided to accommodate visitors of the north-eastern boundary of the development.

6.3 Bicycle Infrastructure

Northbound cycle lane is present along Aungier Street in the close vicinity of the development site. There are no other cycle lanes currently present in the immediate vicinity of the development site.

As shown in **Figure 13** the development site is within a 5-minute bicycle journey of the heart of Dublin city centre, and within a 10-minute bicycle journey of high-intensity employment centres in the Dublin Docklands.

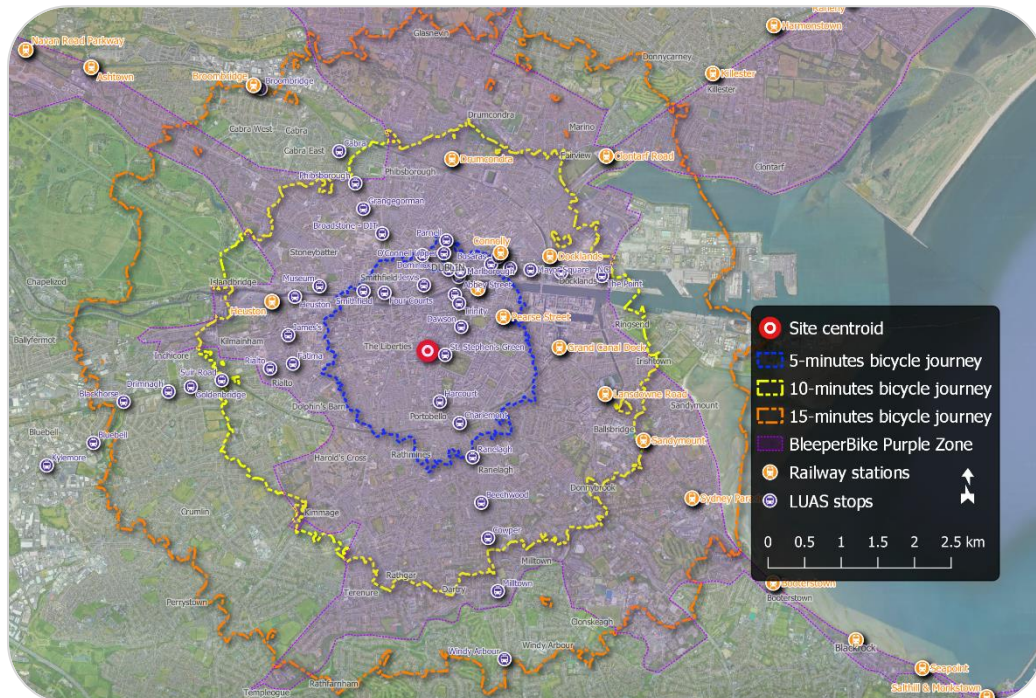
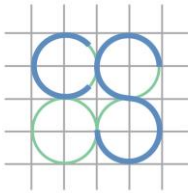


Figure 13 – Bicycle facilities and cycling times
(map data & imagery: OSI, OSM Contributors, Irish Rail, Bleperbike)

6.4 Development Servicing and Waste Collection

The collection of waste generated by the proposed development shall be conducted kerbside along York Street, in the same manner as existing premises on this street. Refuse bins shall be collected by the waste contractors from the development's bin storage area along the southern boundary of the development and promptly returned to the storage area after collection. Management company shall be responsible to stage the bins at the bin storage area on the collection days. A just-in time approach shall be adopted in relation to waste storage and collection.

All incoming and outgoing servicing operations (including deliveries) of the development shall be conducted at the proposed loading bay along York Street to the south of the subject development, to avoid obstruction of vehicular or pedestrian traffic on the external road network. It is worth noting that the proposed loading bay on York Street will be implemented



in the location of existing vehicular entrance that is being decommissioned and will not have any negative impact on the existing car parking provision on York Street.

Upon completion of the development, a Management Company shall be constituted, with the remit to provide and maintain common areas and communal facilities within the development, including all waste collection and segregation facilities. The Management Company shall prepare an Operational Waste Control Strategy for the development, which shall detail specific operational arrangements for these.

6.5 Swept Path Analysis

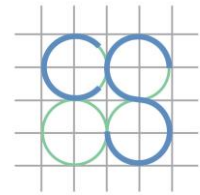
Swept path analyses have been carried out for fire tender accessing and egressing the development. Additional swept path of private cars maneuvering within the subject development's internal road network was also carried out. These analyses, provided on drawing **D117-CSC-ZZ-XX-DR-C-0005** within this planning application, indicate that the design of the development can accommodate these vehicle movements where required.

7.0 SUMMARY & CONCLUSIONS

The main observations and conclusions of this study are as follows:

- The subject development shall result in 6no. vehicular traffic arriving and departing in AM peak hour period and 9no. vehicular traffic arriving and departing in PM peak hour period. Therefore, it is not expected to result in an increase of more than 10% in total traffic flows at any adjoining roads, in either peak hour period due to the minimal level of vehicular traffic forecasted. As such, further assessment is not required.
- The proposed provision of car, and bicycle parking within the development (including disabled-accessible car parking spaces) complies with Local Authority development plan standards and Sustainable Urban Housing: Design Standards for New Apartments (Guidelines for Planning Authorities) document due to the development's location and access to high frequency bus services.
- Unobstructed sightlines of 23m can be achieved on east direction along upgraded Bow Lane East as measured from a set-back of 2.4m from the minor road of the proposed priority junction.
- Swept path analyses have been conducted for cars manoeuvring within the proposed development. These indicate that the design of the development access and its internal layout can accommodate these vehicle movements where required.

In summary, the assessment indicates that the proposed development can be supported by the existing road infrastructure, that the parking provision for the proposed development confirms to Local Authority standards, and that the development access design and internal layout are fit for purpose and comply with the *Design Manual for Urban Roads and Streets*.



CS CONSULTING
GROUP

Appendix A

TRICS Data

Calculation Reference: AUDIT-656801-240411-0415

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : C - FLATS PRIVATELY OWNED
TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON	
	BE BEXLEY	1 days
	BM BROMLEY	1 days
	HM HAMMERSMITH AND FULHAM	1 days
	HO HOUNSLOW	1 days
	IS ISLINGTON	1 days
	WF WALTHAM FOREST	4 days
02	SOUTH EAST	
	HF HERTFORDSHIRE	1 days
	PO PORTSMOUTH	1 days
06	WEST MIDLANDS	
	WM WEST MIDLANDS	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: No of Dwellings
Actual Range: 6 to 194 (units:)
Range Selected by User: 6 to 493 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 13/09/23

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	1 days
Tuesday	6 days
Wednesday	2 days
Thursday	1 days
Friday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	12 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Town Centre	2
Edge of Town Centre	10

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Development Zone	1
Residential Zone	6
Built-Up Zone	5

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	19 days - Selected
Servicing vehicles Excluded	7 days - Selected

Secondary Filtering selection:

Use Class:

C3 12 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS@.

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

25,001 to 50,000	9 days
50,001 to 100,000	3 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

250,001 to 500,000	3 days
500,001 or More	9 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.5 or Less	2 days
0.6 to 1.0	10 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	4 days
No	8 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	3 days
2 Poor	1 days
3 Moderate	1 days
4 Good	3 days
5 Very Good	1 days
6a Excellent	2 days
6b (High) Excellent	1 days

This data displays the number of selected surveys with PTAL Ratings.

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions
-----------------------	-----	--

LIST OF SITES relevant to selection parameters

1	BE-03-C-01 CROOK LOG BEXLEYHEATH	BLOCKS OF FLATS		BEXLEY
	Edge of Town Centre Residential Zone Total No of Dwellings:		79	
	<i>Survey date: WEDNESDAY</i>		<i>19/09/18</i>	<i>Survey Type: MANUAL</i>
2	BM-03-C-01 RINGER'S ROAD BROMLEY	BLOCKS OF FLATS		BROMLEY
	Town Centre Built-Up Zone Total No of Dwellings:		160	
	<i>Survey date: MONDAY</i>		<i>12/11/18</i>	<i>Survey Type: MANUAL</i>
3	HF-03-C-03 SHENLEY ROAD BOREHAMWOOD	BLOCK OF FLATS		HERTFORDSHIRE
	Edge of Town Centre Built-Up Zone Total No of Dwellings:		91	
	<i>Survey date: THURSDAY</i>		<i>14/11/19</i>	<i>Survey Type: MANUAL</i>
4	HM-03-C-02 GLENTHORNE ROAD HAMMERSMITH	BLOCKS OF FLATS		HAMMERSMITH AND FULHAM
	Town Centre Built-Up Zone Total No of Dwellings:		194	
	<i>Survey date: TUESDAY</i>		<i>30/04/19</i>	<i>Survey Type: MANUAL</i>
5	HO-03-C-03 COMMERCE ROAD BRENTFORD	BLOCKS OF FLATS		HOUNSLOW
	Edge of Town Centre Development Zone Total No of Dwellings:		150	
	<i>Survey date: FRIDAY</i>		<i>18/11/16</i>	<i>Survey Type: MANUAL</i>
6	IS-03-C-05 LEVER STREET FINSBURY	BLOCK OF FLATS		ISLINGTON
	Edge of Town Centre Built-Up Zone Total No of Dwellings:		15	
	<i>Survey date: WEDNESDAY</i>		<i>29/06/16</i>	<i>Survey Type: MANUAL</i>
7	PO-03-C-01 CROSS STREET PORTSMOUTH	BLOCKS OF FLATS		PORTSMOUTH
	Edge of Town Centre Built-Up Zone Total No of Dwellings:		90	
	<i>Survey date: TUESDAY</i>		<i>05/06/18</i>	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

8	WF-03-C-01 ERSKINE ROAD WALTHAMSTOW	BLOCKS OF FLATS		WALTHAM FOREST
	Edge of Town Centre Residential Zone Total No of Dwellings:		97	
	Survey date: <i>TUESDAY</i>		<i>05/11/19</i>	Survey Type: <i>MANUAL</i>
9	WF-03-C-02 GROSVENOR ROAD WANSTEAD	BLOCKS OF FLATS		WALTHAM FOREST
	Edge of Town Centre Residential Zone Total No of Dwellings:		28	
	Survey date: <i>TUESDAY</i>		<i>25/05/21</i>	Survey Type: <i>MANUAL</i>
10	WF-03-C-04 GROSVENOR ROAD WANSTEAD	BLOCKS OF FLATS		WALTHAM FOREST
	Edge of Town Centre Residential Zone Total No of Dwellings:		42	
	Survey date: <i>TUESDAY</i>		<i>25/05/21</i>	Survey Type: <i>MANUAL</i>
11	WF-03-C-05 NEW WANSTEAD WANSTEAD	BLOCK OF FLATS		WALTHAM FOREST
	Edge of Town Centre Residential Zone Total No of Dwellings:		6	
	Survey date: <i>TUESDAY</i>		<i>25/05/21</i>	Survey Type: <i>MANUAL</i>
12	WM-03-C-04 GILLQUART WAY COVENTRY PARKSIDE	BLOCKS OF FLATS		WEST MIDLANDS
	Edge of Town Centre Residential Zone Total No of Dwellings:		55	
	Survey date: <i>FRIDAY</i>		<i>11/11/16</i>	Survey Type: <i>MANUAL</i>

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	42	0.000	1	42	0.000	1	42	0.000
07:00 - 08:00	12	84	0.033	12	84	0.091	12	84	0.124
08:00 - 09:00	12	84	0.028	12	84	0.093	12	84	0.121
09:00 - 10:00	12	84	0.042	12	84	0.052	12	84	0.094
10:00 - 11:00	12	84	0.054	12	84	0.049	12	84	0.103
11:00 - 12:00	12	84	0.048	12	84	0.067	12	84	0.115
12:00 - 13:00	12	84	0.053	12	84	0.067	12	84	0.120
13:00 - 14:00	12	84	0.049	12	84	0.061	12	84	0.110
14:00 - 15:00	12	84	0.027	12	84	0.032	12	84	0.059
15:00 - 16:00	12	84	0.068	12	84	0.050	12	84	0.118
16:00 - 17:00	12	84	0.077	12	84	0.050	12	84	0.127
17:00 - 18:00	12	84	0.108	12	84	0.062	12	84	0.170
18:00 - 19:00	12	84	0.096	12	84	0.060	12	84	0.156
19:00 - 20:00	9	86	0.062	9	86	0.048	9	86	0.110
20:00 - 21:00	9	86	0.032	9	86	0.027	9	86	0.059
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.777			0.809			1.586

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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Parameter summary

Trip rate parameter range selected: 6 - 194 (units:)
Survey date date range: 01/01/16 - 13/09/23
Number of weekdays (Monday-Friday): 12
Number of Saturdays: 0
Number of Sundays: 0
Surveys automatically removed from selection: 0
Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

TAXIS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	42	0.000	1	42	0.000	1	42	0.000
07:00 - 08:00	12	84	0.005	12	84	0.005	12	84	0.010
08:00 - 09:00	12	84	0.001	12	84	0.001	12	84	0.002
09:00 - 10:00	12	84	0.003	12	84	0.004	12	84	0.007
10:00 - 11:00	12	84	0.002	12	84	0.002	12	84	0.004
11:00 - 12:00	12	84	0.004	12	84	0.004	12	84	0.008
12:00 - 13:00	12	84	0.004	12	84	0.004	12	84	0.008
13:00 - 14:00	12	84	0.001	12	84	0.001	12	84	0.002
14:00 - 15:00	12	84	0.000	12	84	0.000	12	84	0.000
15:00 - 16:00	12	84	0.003	12	84	0.002	12	84	0.005
16:00 - 17:00	12	84	0.006	12	84	0.007	12	84	0.013
17:00 - 18:00	12	84	0.004	12	84	0.003	12	84	0.007
18:00 - 19:00	12	84	0.007	12	84	0.007	12	84	0.014
19:00 - 20:00	9	86	0.005	9	86	0.006	9	86	0.011
20:00 - 21:00	9	86	0.001	9	86	0.000	9	86	0.001
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.046			0.046			0.092

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
OGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	42	0.000	1	42	0.000	1	42	0.000
07:00 - 08:00	12	84	0.004	12	84	0.004	12	84	0.008
08:00 - 09:00	12	84	0.001	12	84	0.001	12	84	0.002
09:00 - 10:00	12	84	0.006	12	84	0.005	12	84	0.011
10:00 - 11:00	12	84	0.001	12	84	0.000	12	84	0.001
11:00 - 12:00	12	84	0.004	12	84	0.004	12	84	0.008
12:00 - 13:00	12	84	0.000	12	84	0.000	12	84	0.000
13:00 - 14:00	12	84	0.003	12	84	0.004	12	84	0.007
14:00 - 15:00	12	84	0.002	12	84	0.002	12	84	0.004
15:00 - 16:00	12	84	0.000	12	84	0.001	12	84	0.001
16:00 - 17:00	12	84	0.000	12	84	0.000	12	84	0.000
17:00 - 18:00	12	84	0.000	12	84	0.000	12	84	0.000
18:00 - 19:00	12	84	0.000	12	84	0.000	12	84	0.000
19:00 - 20:00	9	86	0.000	9	86	0.000	9	86	0.000
20:00 - 21:00	9	86	0.000	9	86	0.000	9	86	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.021			0.021			0.042

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
PSVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	42	0.000	1	42	0.000	1	42	0.000
07:00 - 08:00	12	84	0.000	12	84	0.000	12	84	0.000
08:00 - 09:00	12	84	0.000	12	84	0.001	12	84	0.001
09:00 - 10:00	12	84	0.000	12	84	0.001	12	84	0.001
10:00 - 11:00	12	84	0.000	12	84	0.000	12	84	0.000
11:00 - 12:00	12	84	0.000	12	84	0.002	12	84	0.002
12:00 - 13:00	12	84	0.000	12	84	0.003	12	84	0.003
13:00 - 14:00	12	84	0.000	12	84	0.001	12	84	0.001
14:00 - 15:00	12	84	0.000	12	84	0.000	12	84	0.000
15:00 - 16:00	12	84	0.000	12	84	0.001	12	84	0.001
16:00 - 17:00	12	84	0.000	12	84	0.001	12	84	0.001
17:00 - 18:00	12	84	0.000	12	84	0.000	12	84	0.000
18:00 - 19:00	12	84	0.000	12	84	0.000	12	84	0.000
19:00 - 20:00	9	86	0.000	9	86	0.000	9	86	0.000
20:00 - 21:00	9	86	0.000	9	86	0.000	9	86	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.010			0.010

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	42	0.000	1	42	0.000	1	42	0.000
07:00 - 08:00	12	84	0.004	12	84	0.008	12	84	0.012
08:00 - 09:00	12	84	0.001	12	84	0.009	12	84	0.010
09:00 - 10:00	12	84	0.000	12	84	0.001	12	84	0.001
10:00 - 11:00	12	84	0.002	12	84	0.006	12	84	0.008
11:00 - 12:00	12	84	0.002	12	84	0.001	12	84	0.003
12:00 - 13:00	12	84	0.000	12	84	0.000	12	84	0.000
13:00 - 14:00	12	84	0.003	12	84	0.000	12	84	0.003
14:00 - 15:00	12	84	0.005	12	84	0.003	12	84	0.008
15:00 - 16:00	12	84	0.000	12	84	0.000	12	84	0.000
16:00 - 17:00	12	84	0.003	12	84	0.000	12	84	0.003
17:00 - 18:00	12	84	0.004	12	84	0.004	12	84	0.008
18:00 - 19:00	12	84	0.003	12	84	0.002	12	84	0.005
19:00 - 20:00	9	86	0.010	9	86	0.000	9	86	0.010
20:00 - 21:00	9	86	0.004	9	86	0.001	9	86	0.005
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.041			0.035			0.076

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
CARS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	42	0.000	1	42	0.000	1	42	0.000
07:00 - 08:00	12	84	0.018	12	84	0.074	12	84	0.092
08:00 - 09:00	12	84	0.016	12	84	0.079	12	84	0.095
09:00 - 10:00	12	84	0.024	12	84	0.035	12	84	0.059
10:00 - 11:00	12	84	0.034	12	84	0.034	12	84	0.068
11:00 - 12:00	12	84	0.026	12	84	0.042	12	84	0.068
12:00 - 13:00	12	84	0.030	12	84	0.040	12	84	0.070
13:00 - 14:00	12	84	0.028	12	84	0.035	12	84	0.063
14:00 - 15:00	12	84	0.020	12	84	0.023	12	84	0.043
15:00 - 16:00	12	84	0.051	12	84	0.033	12	84	0.084
16:00 - 17:00	12	84	0.059	12	84	0.028	12	84	0.087
17:00 - 18:00	12	84	0.092	12	84	0.052	12	84	0.144
18:00 - 19:00	12	84	0.080	12	84	0.046	12	84	0.126
19:00 - 20:00	9	86	0.049	9	86	0.034	9	86	0.083
20:00 - 21:00	9	86	0.029	9	86	0.026	9	86	0.055
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.556			0.581			1.137

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
 LGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	42	0.000	1	42	0.000	1	42	0.000
07:00 - 08:00	12	84	0.005	12	84	0.006	12	84	0.011
08:00 - 09:00	12	84	0.009	12	84	0.008	12	84	0.017
09:00 - 10:00	12	84	0.009	12	84	0.007	12	84	0.016
10:00 - 11:00	12	84	0.014	12	84	0.012	12	84	0.026
11:00 - 12:00	12	84	0.013	12	84	0.014	12	84	0.027
12:00 - 13:00	12	84	0.019	12	84	0.019	12	84	0.038
13:00 - 14:00	12	84	0.016	12	84	0.018	12	84	0.034
14:00 - 15:00	12	84	0.004	12	84	0.006	12	84	0.010
15:00 - 16:00	12	84	0.012	12	84	0.012	12	84	0.024
16:00 - 17:00	12	84	0.012	12	84	0.013	12	84	0.025
17:00 - 18:00	12	84	0.009	12	84	0.006	12	84	0.015
18:00 - 19:00	12	84	0.004	12	84	0.003	12	84	0.007
19:00 - 20:00	9	86	0.004	9	86	0.005	9	86	0.009
20:00 - 21:00	9	86	0.000	9	86	0.000	9	86	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.130			0.129			0.259

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MOTOR CYCLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	42	0.000	1	42	0.000	1	42	0.000
07:00 - 08:00	12	84	0.001	12	84	0.002	12	84	0.003
08:00 - 09:00	12	84	0.001	12	84	0.003	12	84	0.004
09:00 - 10:00	12	84	0.000	12	84	0.000	12	84	0.000
10:00 - 11:00	12	84	0.003	12	84	0.001	12	84	0.004
11:00 - 12:00	12	84	0.001	12	84	0.001	12	84	0.002
12:00 - 13:00	12	84	0.000	12	84	0.001	12	84	0.001
13:00 - 14:00	12	84	0.001	12	84	0.002	12	84	0.003
14:00 - 15:00	12	84	0.001	12	84	0.001	12	84	0.002
15:00 - 16:00	12	84	0.002	12	84	0.001	12	84	0.003
16:00 - 17:00	12	84	0.001	12	84	0.001	12	84	0.002
17:00 - 18:00	12	84	0.003	12	84	0.001	12	84	0.004
18:00 - 19:00	12	84	0.005	12	84	0.004	12	84	0.009
19:00 - 20:00	9	86	0.004	9	86	0.003	9	86	0.007
20:00 - 21:00	9	86	0.003	9	86	0.001	9	86	0.004
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.026			0.022			0.048

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*