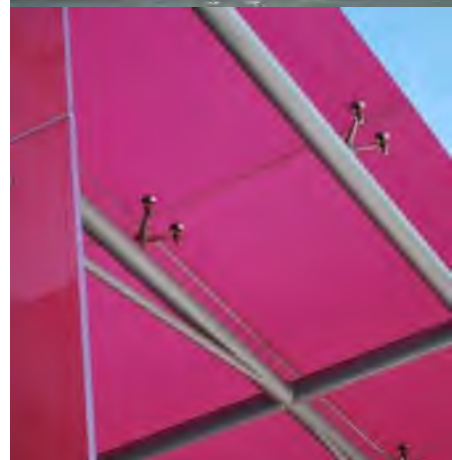
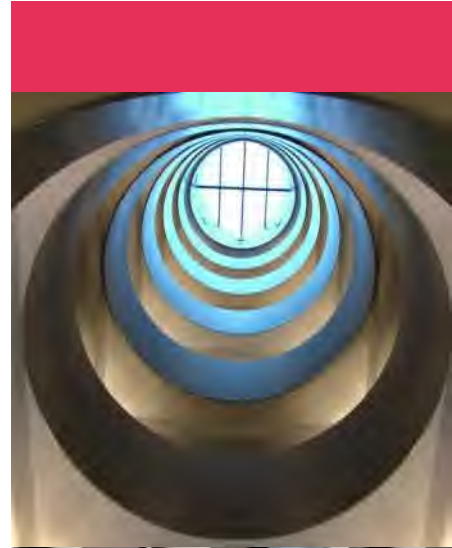


Albert Bridge House, Manchester

Transport Statement

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Appendices

- Appendix A – Proposed Site Layout**
- Appendix B – TRICS Output**

1.0 Introduction

1.1 Background

- 1.1.1 Curtins has been appointed by Oval Real Estate to provide traffic and transport advice in relation to a planning application for a proposed mixed-use development at Albert Bridge House, off St Mary's Parsonage and Bridge Street in Manchester City Centre.
- 1.1.2 The general scope of works comprises full demolition of the existing Albert Bridge House office building and replacement with a new residential building, office building, and new areas of public realm.
- 1.1.3 There will be 24 car parking spaces in a new basement accessed off Bridge Street which represents an 82% reduction from the c. 137 car parking spaces located within the Site's two existing surface-level car parks.
- 1.1.4 The loss of existing car parking spaces will result in a net reduction in the number of vehicle movements accessing the site daily, therefore representing a net benefit in traffic terms.
- 1.1.5 The proposed site layout is provided in **Appendix A** to the rear of the report.

1.2 Purpose of the Report

- 1.2.1 This Transport Statement (TS) has been prepared to inform Highway Officers at Manchester City Council (MCC) as the Local Highway Authority (LHA), and Transport for Greater Manchester (TfGM), of the development proposals and their potential impact on the surrounding area from a traffic and transportation perspective.
- 1.2.2 The TS is supported by a range of appendices, with swept path assessments showing the proposed servicing arrangements. Additionally, the TS is supported by a Framework Travel Plan (Document Reference: **80823-CUR-XX-XX-T-TP-00002**) with measures and initiatives to encourage active and sustainable travel.

1.3 Scope of the Report

- 1.3.1 The scope of this report is consistent with the guidance and recommendations set out in Local and National planning policy.
- 1.3.2 In addition, Curtins held a pre-application meeting with MCC Highways on 4th April 2022 and a follow-up meeting with a wider team from MCC Highways and Transport for Greater Manchester (TfGM) on 11th April 2022. A final meeting was held with MCC Highways Officers on the 16th August 2022.

1.3.3 These meetings considered the development proposals, access strategy, car parking, and possible interventions to the highway network, with the following matters raised:

- MCC agreed that a Transport Statement would be sufficient to support the development;
- TfGM agreed that traffic counts and junction modelling would not be necessary;
- MCC Highways acknowledged that five interventions to the highway network would likely be required and the following were agreed in principle:
 - A new access and ramp down to a basement car park from Bridge Street;
 - A new loading bay on Bridge Street for refuse and servicing of the residential plot;
 - A new shared surface access into an area of public realm from Bridge Street to provide fire and maintenance access only;
 - A new shared surface access to a sub-station for the commercial building; and
 - A new loading bay on St Mary's Parsonage to accommodate refuse and servicing of the commercial block.
- The introduction of a car free development was thoroughly explored, but is not possible for a number of reasons, including market advice, a desire to provide car club spaces and a desire for accessible parking. MCC subsequently confirmed that the 24 parking spaces proposed or a similar level of provision were acceptable.
- Extensive public realm works are proposed to make the site more permeable and connected and this is welcomed by MCC Highways and TfGM.
- Opportunities for narrowing the Bridge Street carriageway adjacent to the development were discussed and have been thoroughly considered, but these are not necessary to make the development acceptable and are beyond the scope of the project.

1.3.4 It was also agreed that the TS should contain the following:

- A description of the transport and highway network in the vicinity of the site;
- A review of highway safety within the vicinity of the site for the most recent five years;
- A summary of the development proposals, proposed parking arrangements, and justification for the provision;
- Drawings showing the proposed access and servicing strategy with swept path analysis;
- An audit of accessibility by all modes of travel including walking, cycling, and public transport;
- Details of future vehicular trips and commentary on any highway impacts; and
- A review of the relevant local and national transport planning policy.

1.4 Structure of the Report

1.4.1 Following this introduction, **Section 2** of the report provides a comprehensive description of the existing site and its location. This includes the local highway network and facilities for pedestrians, cyclists, and public transport users.

- 1.4.2 **Section 2** also reviews the local area in terms of highways safety by way of obtaining records of accidents adjacent to the site over the most recent five-year period available.
- 1.4.3 **Section 3** gives an overview of the development proposals including details on proposed access, parking provision, and a servicing and refuse strategy.
- 1.4.4 **Section 4** considers the site's accessibility by sustainable modes of transport, including walking, cycling, and public transport.
- 1.4.5 **Section 5** assesses the development for compliance against the Building Research Establishment Environmental Assessment Method (BREEAM) UK New Construction 2018 criteria.
- 1.4.6 **Section 6** outlines the traffic forecasting methodology used to establish the likely traffic generation associated with the development proposals, and the highway impact.
- 1.4.7 **Section 7** summarises key national and local transport planning policy, and **Section 8** provides a report summary and conclusion.

2.0 Existing Situation

2.1 Site Location

- 2.1.1 The site is located within the St Mary's Parsonage Strategic Regeneration Framework (SRF) area within Manchester City Centre and is adjacent to the Parsonage Gardens Conservation Area. **Figure 2.1** illustrates the location of the SRF area in relation to the local highway network and site:



Figure 2.1 – Site Location in relation to the St Mary's Parsonage SRF area
(Source: Sheppard Robson, 2020)

- 2.1.2 The site is located in Zone 2 of the SRF area and is bound by the River Irwell to the west and north, Alberton House (which is being redeveloped by Bruntwood (MCC planning ref: 134287/FO/2022)) and the access to Trinity Bridge to the north, St Mary's Parsonage to the east, and Bridge Street to the south.
- 2.1.3 **Plan 80823-CUR-00-XX-DR-TP-06001** to the rear of the report illustrates the location of the site in relation to the regional highway network, while **Figure 2.2** below and **Plan 80823-CUR-00-XX-DR-TP-06002** to the rear of the report show the site in a local context relating to the local highway network:

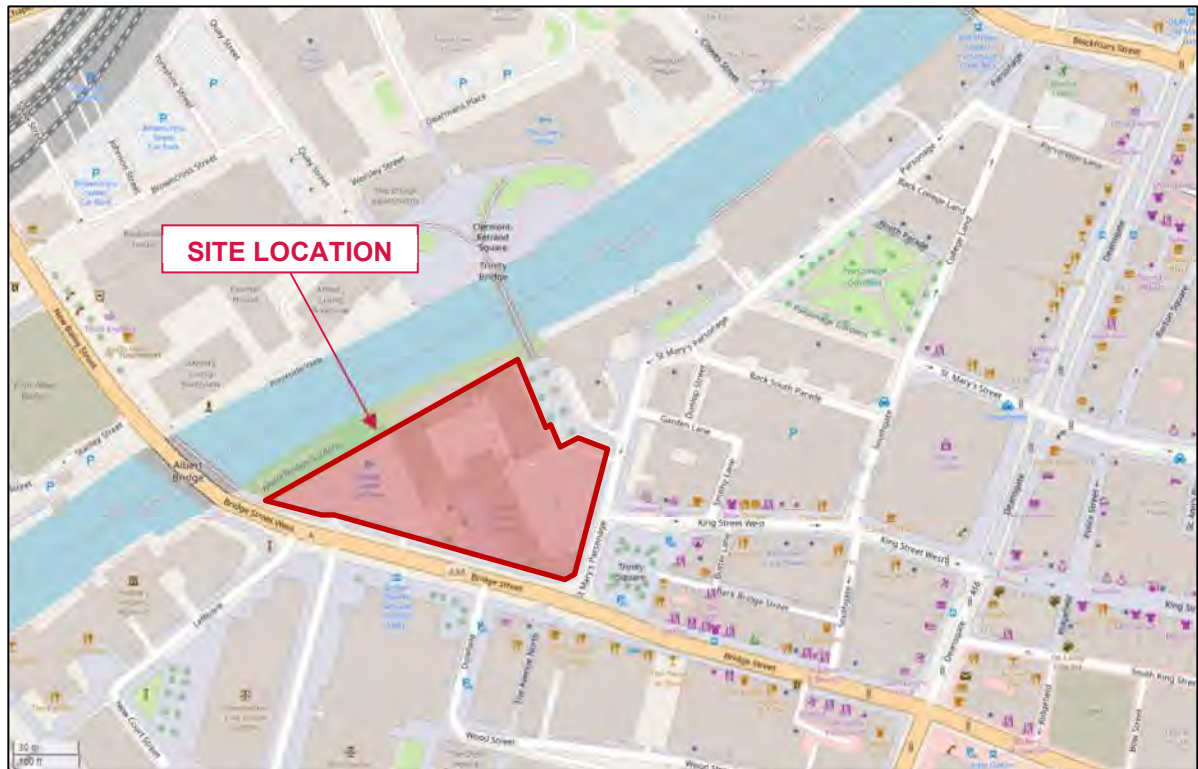


Figure 2.2 – Site Location in Relation to the Local Highway Network
(Source: OpenStreetMap, 2022)

2.2 Existing Use and Access

- 2.2.1 The Site is currently occupied by Albert Bridge House and two car parks. The current building includes three parts, a 17-storey building, flanked by a 5 and 2-storey building. Albert Bridge House is currently occupied by HMRC.
- 2.2.2 There are circa 137 spaces across the two car parks located within the Site. The MCC-operated car park off Bridge Street contains circa 65 spaces while the private car park off St Mary's Parsonage contains circa 72 spaces, including circa 7 accessible spaces.
- 2.2.3 Curtins undertook a site visit on the 28th April 2022. At this time, it was observed that the Bridge Street car park was at capacity with circa 67 parked vehicles, and that 45 vehicles were parked in the private St Mary's Parsonage car park. Overall, this equates to an occupancy level of 82% – 112 vehicles. Site visits later in the year have revealed similar levels of parking.
- 2.2.4 The vehicular access to the private St Mary's Parsonage car park is barrier-controlled with a yellow box junction.
- 2.2.5 The MCC Bridge Street car park has separate ingress and egress junctions. There is a right-turn pocket along the westbound lane of Bridge Street providing access into the car park. The egress is signalised and is located opposite Gartside Street, slightly to the west of the signalised junction.

- 2.2.6 The main pedestrian entrance to the office buildings is located off Bridge Street, although there is also a pedestrian entrance off St Mary's Parsonage.

2.3 Surrounding Highway Network

St Mary's Parsonage

- 2.3.1 St Mary's Parsonage stretches in a northerly and then easterly direction for circa 350m from a three-arm signalised yellow box junction with Bridge Street to a pedestrianised area at the junction with Blackfriars Street.
- 2.3.2 The road is c. 6.5-7m wide and has footways of c. 2-3m wide along both sides, albeit the width does vary and decrease at certain pinch points. Along the eastern side of the road are Trinity Square (to be reconfigured and rebranded as Motor Square as part of the SRF) and Parsonage Gardens.
- 2.3.3 There are dropped kerbs, tactile paving, and push-button operated traffic lights on all arms of the junction with Bridge Street, along with central refuge islands on the eastern and western arms. There are dropped kerbs in most places along the road and tactile paving on some.
- 2.3.4 There are Traffic Regulation Orders (TROs) in the form of double yellow lines (no waiting at any time) on both sides of the road between the junctions with Bridge Street and Back South Parade / Dunlop Street to prevent on-street parking – with the exception of two Car Club bays and some pay-and-display parking bays. The double yellow lines continue along the entirety of the north-western side of the road and recommence on the south-eastern side north of the junction with Parsonage Lane.
- 2.3.5 St Mary's Parsonage is also located within Zone 1 of Manchester City Centre's Controlled Parking Zone (CPZ), where there are on-street pay-and-display parking bays owned and operated by Manchester City Council (MCC). Parking charges in Zone 1 apply Monday to Sunday, from 08:00 – 22:00, with no charge for parking on a Bank Holiday. The maximum stay time in this zone is two hours, however these charges and time restrictions do not apply to Blue Badge holders.
- 2.3.6 As part of the proposed permanent scheme to partially pedestrianise the A56 Deansgate corridor, the northern end of St Mary's Parsonage near Blackfriars Street has been blocked with Rhino blocks to prevent traffic from Deansgate diverting along the road. These are shown in **Figure 2.3** below (from 25th October 2021):



Figure 2.3 – Closure of St Mary's Parsonage at its Junction with Blackfriars Street

- 2.3.7 The road has a speed limit of 20mph and is well-lit by street lighting at regular intervals.
- 2.3.8 Curtins on site observations in October 2021 and again in August 2022 show vehicular movements to be limited to local access and servicing vehicles, with a low number of total vehicular movements observed.

Trinity Bridge and Access

- 2.3.9 The footpath that leads to Trinity Bridge starts at St Marys Parsonage and extends between Alberton House and Albert Bridge House as shown on **Figure 2.4** below. This path is initially c. 3m wide before widening significantly to a more attractive c. 15m wide area of public realm with trees.



Figure 2.4 – View of Path to Trinity Bridge from St Mary's Parsonage

- 2.3.10 The c. 5m wide bridge is a pedestrian link between Manchester and Salford. At the northern end of the bridge, the area opens to a large area of public realm – Clermont Ferrand Square.

A34 Bridge Street

- 2.3.11 Bridge Street is a section of the A34 which continues from John Dalton Street at a signalised yellow box junction with the A56 Deansgate and continues west for 370m, and subsequently continuing as New Bailey Street on the Salford / northern side of the River Irwell.
- 2.3.12 As part of the Deansgate proposals detailed below, access to Salford across the River Irwell has been limited to buses only, with eastbound traffic into Manchester unaffected.
- 2.3.13 The road has a speed limit of 20mph and is well-lit by street lighting at regular intervals. There are also footways over 2m-wide along both sides of the carriageway.
- 2.3.14 In addition to the crossings at the junction with St Mary's Parsonage, there is a further signalised pedestrian crossing over Bridge Street between the existing car park's ingress and egress.
- 2.3.15 Both pedestrian crossings on Bridge Street are staggered across a central refuge island with separate push-button controlled traffic signals.
- 2.3.16 Bridge Street has footways of circa 3.1-3.8m wide along both sides.
- 2.3.17 Double yellow lines are also in place on both sides of Bridge Street.

A56 Deansgate

- 2.3.18 The A56 Deansgate is a major route connecting Manchester City Centre to the north and the A56 Chester Road and the A57(M) Mancunian Way to the south. It commences to the south at the signalised junction with Whitworth Street West as a continuation of A56 Chester Road. Deansgate extends for approximately 1.2km towards the north, where it becomes Victoria Street at a signalised junction with Victoria Bridge Street.
- 2.3.19 Deansgate is approximately 14 metres wide with footways provided along both sides of the carriageway. Loading bays, disabled parking, taxi ranks and some on-street parking reduce the available width of the carriageway. The road is subject to a speed limit of 20mph.
- 2.3.20 In May 2020, during the COVID-19 pandemic, a section of Deansgate between King Street West and Blackfriars Street was pedestrianised / closed to car traffic, under emergency legislation brought in by the Government to allow people more room to social distance. 'Surface guard' barriers were installed to block access to vehicles whilst providing space for bicycles to pass, and tree planters were also placed in the middle of the carriageway.

- 2.3.21 During the closure period, road closure signs appear on both ends of the pedestrianised zone to inform vehicles about the restriction; however, vehicles accessing local premises were still able to access the closed sections to load and unload during certain times (06:00 – 08:00 on Mondays to Saturdays). Emergency services would also have full access if necessary.
- 2.3.22 In December 2020, Manchester City Council installed new ‘Rhino’ barriers to allow buses and taxis to travel one-way down the road (southbound, with the northbound carriageway still closed). Pedestrians still have extra room to walk along the carriageway, and the tree planters remain. This remains the arrangement along this section of Deansgate at the time of writing.
- 2.3.23 MCC then held a public consultation, ending in January 2021, on the permanent pedestrianisation of the remainder of the A56 Deansgate up until its junction with the A34 Quay Street / Peter Street (and additional changes to surrounding roads). In these proposals, the remainder of Deansgate could be made one-way in a southbound direction, with a contraflow cycle provision in place northbound.
- 2.3.24 MCC has now implemented many of the changes with the final design (published in June 2022) illustrated in **Figure 2.5**. Since the initial design, the proposed one-way restriction on Gartside Street has been removed and the traffic-free Deansgate between Blackfriars Street and King Street changed to a bus gate. Adjacent to Albert Bridge House, there will be a westbound bus gate along Bridge Street and a change of priorities at the King Street West/ St Mary’s Parsonage junction.

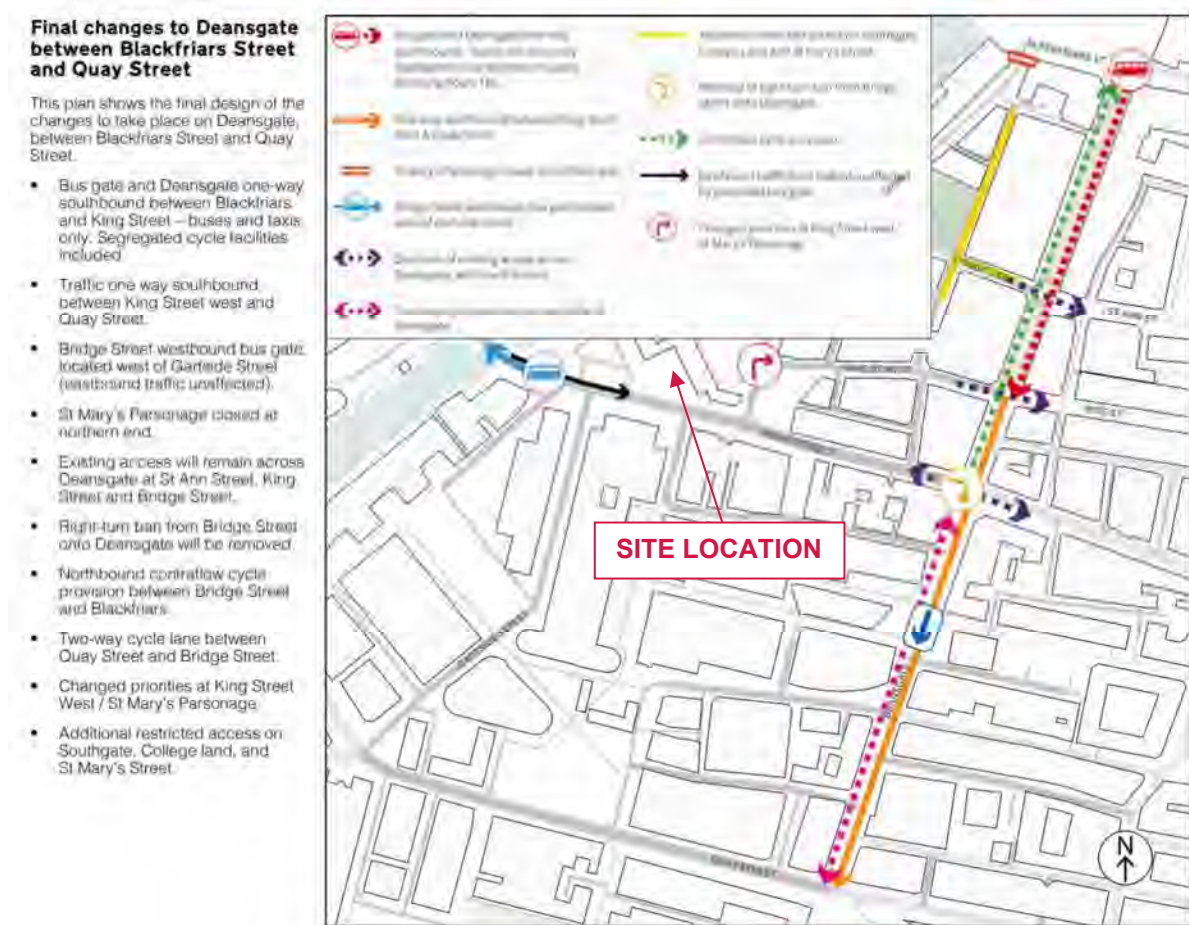


Figure 2.5 – Map of Changes to Deansgate and Surrounding Roads

(Source: Manchester City Council, 2022)

2.4 Access for Mobility and Visually Impaired Users

- 2.4.1 The site benefits from its city centre location and the existing infrastructure afforded by its strategic position. There are a number of existing features which ensure safe, convenient, and aided access for those site users who are disabled and / or visually impaired. Blue badge holders can also park free of charge without any time limits at any pay and display bay.
- 2.4.2 There are dropped kerbs and tactile paving on some crossings in the vicinity of the site. There are pedestrian refuge islands at the St Mary's Parsonage / Bridge Street junction and near the Bridge Street car park access.

2.5 Highway Safety

- 2.5.1 Personal Injury Accident (PIA) data for the highway network adjacent to the site has been obtained from the TfGM reported road accidents database for the most recent five years (2016 – 2020 inclusive). The details of the search are contained in **Figure 2.6**, and a breakdown of the information is contained in **Table 2.1**:



Figure 2.6 – Area Assessed for Personal Injury Accident Data (5 years)
(Source: TfGM, 2021)

Junction/Link	Slight	Serious	Fatal	Totals
Chapel Street	1	0	0	1
Chapel Street / Victoria Bridge Street	1	0	0	1
Chapel Street / Blackfriars Road / Blackfriars Street	2	0	0	2
Chapel Street / Dearmans Place	1	1	0	2
Chapel Street / New Bailey Street / Bloom Street	6	1	0	7
Blackfriars Road / Grave Lane	1	0	0	1
Blackfriars Road / Viaduct Street	2	0	0	2
Trinity Way / William Street / Lamb Lane	2	2	0	4
Trinity Way / Unnamed Access to Deva Centre Business Park	2	1	0	3
Bridge Street / Left Bank	2	0	0	2
Bridge Street / Gartside Street	2	0	0	2
Bridge Street	1	2	0	3
Bridge Street / Back Bridge Street	1	0	0	1

Junction/Link	Slight	Serious	Fatal	Totals
Bridge Street / Deansgate / John Dalton Street	5	1	0	6
John Dalton Street / Bow Street	1	0	0	1
John Dalton Street / St James's Square	1	0	0	1
Gartside Street	1	0	0	1
Quay Street / Lower Byrom Street	1	1	0	2
Quay Street / Byrom Street	3	0	0	3
King Street West	1	0	0	1
Deansgate / Atkinson Street	1	0	0	1
Deansgate / Hardman Street	2	0	0	2
Deansgate / Queen Street	1	0	0	1
Deansgate / S King Street	1	0	0	1
Deansgate / King Street	1	0	0	1
Deansgate	1	1	0	2
Deansgate / St Marys Gate	1	0	0	1
Deansgate / Victoria Bridge Street / Cateaton Street	3	0	0	3
Blackfriars Street	0	1	0	1
St Mary's Parsonage / Blackfriars Street	2	0	0	2
St Mary's Parsonage / College Land	1	0	0	1
Albert Square / Southmill Street	0	1	0	1
Albert Square	1	0	0	1
Lloyd Street	1	0	0	1
King Street / Brown Street	0	1	0	1
Cross Street / King Street	1	1	0	2
Booth Street	1	0	0	1
Total	55	14	0	69

Table 2.1 – Personal Injury Accident Data Summary

2.5.2 There has been a total of 69 collisions in the latest five-year period available, 55 of which were 'slight' severity incidents, and 14 of which were 'serious' severity incidents. No fatal accidents have been recorded in the study area and period.

2.5.3 The 7 incidents at the Chapel Street / New Bailey Street / Bloom Street junction are spread among the most recent five-year period. There was one 'slight' severity incident in each of 2017, 2019 and 2020, three 'slight' severity incidents in 2018, and one 'serious' severity incident in 2020. Considering these

findings and the temporal nature of the study, it can be concluded that the accidents are not related to the features of the highway at this junction.

- 2.5.4 The three slight severity incidents at northern end of St Mary's Parsonage took place in 2018 and 2019, before this section was blocked to vehicular traffic and the junction with Blackfriars Street cut off. The Deansgate traffic change proposals are also considered likely to reduce the risk of future accidents occurring along Deansgate, Bridge Street, and Gartside Street.
- 2.5.5 No significant correlations have been identified to suggest that highway condition, layout or design were significant contributory factors in any of the collisions. It is not considered that there is an existing safety issue that is likely to be exacerbated by the proposed development.
- 2.5.6 The above conclusion was also reached with regard to the Alberton House application and MCC Highways have not raised any objection with regard to highway safety for that scheme.

3.0 Development Proposals

3.1 Overview of Proposals

- 3.1.1 The general scope of works for Albert Bridge House comprise full demolition of the existing Albert Bridge House office building and replacement by a residential building, office building, and extensive new public realm works.
- 3.1.2 There will be two buildings on the Site: a 367-dwelling residential building on the western part and a 50,850sqm GEA (IPMS1) (43,457 sqm GIA (IPMS2) commercial office block on the eastern section.
- 3.1.3 On the publicly accessible ground and first floors of the commercial office building, there will be two retail units, a food and beverage unit, a restaurant, and – on the ground floor only – a cyclist café. There will also be a retail unit on the ground floor of the residential building. These provide BREEAM-compliant ‘appropriate food outlet[s]’.
- 3.1.4 As well as these amenities, much of the Site area will be occupied by large areas of public realm which will increase the permeability of the Site and unlock new attractive, traffic-free routes for pedestrians and cyclists (especially along the River Irwell between Trinity Bridge and Bridge Street), greatly widen the existing footways along Bridge Street and St Mary’s Parsonage, and open up the poor existing access to Trinity Bridge from St Mary’s Parsonage. This will provide BREEAM-compliant ‘access to an outdoor open space (public or private, suitably sized and accessible to building users)’.
- 3.1.1 A shared basement that serves both buildings will be provided and this will contain car parking, cycle storage, lockers, showers, and plant areas.
- 3.1.2 The proposed site layout is provided in **Appendix A** to the rear of the report.

3.2 Proposed Access

Vehicular Access

- 3.2.1 Access to the proposed basement will be via Bridge Street and the ramp to the basement will be slightly west of the staggered Bridge Street pedestrian crossing and opposite the junction with Left Bank.
- 3.2.2 There will be a waiting area on the access road, off Bridge Street for vehicles entering the basement if there is an exiting vehicle. The access ramp would also be signalised.
- 3.2.3 This arrangement is shown on Drawing Number **Drawing 80823-CUR-00-XX-D-TP-75001** and swept path analysis for a car is included at the rear of the report.

Pedestrian and Cycle Access

- 3.2.4 There would be pedestrian and cycle access throughout the site, although the south-facing residential lobby would be accessed from Bridge Street, whilst the commercial lobby would be near equidistant from Bridge Street and St Mary's Parsonage.
- 3.2.5 Step-free access would be provided to all cycle parking with cycle lifts provided on the northern boundary of the residential building and the cycle lobby of the commercial building provided near the area of existing public realm south of Trinity Bridge.

3.3 Proposed Parking

- 3.3.1 The proposed car and cycle parking for the development is cognisant of the Manchester City Council (MCC) Parking Standards, provided in Appendix B of the Manchester Core Strategy, adopted in 2012.

Car Parking

- 3.3.2 During scoping discussions, MCC and TfGM originally requested consideration of a car free development. This has been explored, but it is not feasible based on market advice, a desire to provide car club spaces and a desire for accessible parking. Notwithstanding, the level of car parking proposed has been reduced from the originally proposed 36 spaces to 24, in recognition of the sites excellent accessibility and a desire to minimise vehicular impacts.
- 3.3.3 It is proposed that the development would provide 24 car parking spaces in a shared basement, as follows:
- **Residential** – 8 spaces, comprising:
 - 4 accessible spaces
 - 3 standard Car Club spaces; and
 - 1 space for deliveries.
 - **Office** – 16 spaces, comprising:
 - 8 accessible spaces;
 - 6 standard Car Club spaces; and
 - 2 spaces for deliveries.
- 3.3.4 Swept path analysis of these spaces has been undertaken and this is shown in swept path analysis at the rear of this report.

Nearby Parking Facilities

- 3.3.5 In addition to the on-site car parking, a review of nearby public car parks and associated provision has been undertaken in order to understand parking levels in the surrounding area. This demonstrates that

there are a number of publicly available car parks situated within a 550m walking catchment, equating to a walking time of approximately 6 minutes when walking at an average speed of 1.4m/s. Nearby car parking is summarised in **Table 3.1**:

Car Park	Car Park Location	Approximate Walking Distance from Site	Approximate Number of Spaces	Disabled Bays	Electric Vehicle (EV) Charging Bays
1	Deansgate, MCC, M3 2EQ	300m	331	✓*	0
2	Browncross Street, Euro, M3 5AX	330m	118	0	0
3	New Bailey, NCP, M3 5EN	350m	620	✓ (33)	✓*
4	Travelodge, APCOA, M3 5AL	410m	32	✓*	0
5	Market Street, M&S, M1 1WT	470m	155	✓*	0
Total:			1321	33	✓*

Table 3.1 – Existing Off-site Car Parking Provision

*There is provision, but the quantity of spaces is unknown.

- 3.3.6 The above table demonstrates 6 car parks were found within a 6-min walk of the site, providing car parking provision for approximately 1,321 vehicles, including at least 33 spaces for disabled badge holders and some electric vehicle (EV) charging facilities. It is therefore considered there is adequate opportunity for off-site parking should future employees chose to commute by car.

Existing On-Street Parking

- 3.3.7 The site is located within Manchester City Centre and therefore opportunities for on-street parking are limited. However, the site is located within Zone 1 of Manchester City Centre's Controlled Parking Zone (CPZ) where the pay-and-display parking charges are up to £6.00 for a maximum stay of two hours, applicable on Mondays to Sundays between 08:00 and 20:00. Parking between 20:00 and 08:00 would then be free (subject to parking restrictions). On-street parking within the St Mary's Parsonage area of Zone 1 includes:

- St Mary's Parsonage – c. 23 bays, including 2 Car Club bays;
- Southgate – c. 5 bays
- King Street West – c. 12 bays, including 2 disabled bays; and
- Dunlop Street – 2 disabled bays.

- 3.3.8 As stated earlier, there are also no parking restrictions for blue badge holders, where drivers displaying a blue badge can use parking bays across Manchester City Centre for free and for an unlimited time, therefore those with limited mobility could also utilise the on-street spaces listed above.

Cycle Parking

3.3.9 Cycle parking standards relevant to the land use of the proposed development are reproduced in **Table 3.2** below.

Land Use	MCC Cycles (Citywide Minimum)	Proposed Development
Stand Alone Offices	1 space per 200sqm; minimum of 2 spaces	43,457 sqm GIA - 213 spaces required 50,850sqm GIA – 254 spaces required
Non-Food Retail	1 space per 200sqm; minimum of 2 spaces	---
Restaurants and Cafes	1 space per 50sqm; minimum of 2 spaces	2,340sqm GEA (incl. restaurant, cyclist café and F&B (in office and residential buildings)); so, 47 spaces required

Table 3.2 – MCC Cycle Parking Standards

3.3.10 Secure, sheltered cycle parking for 367 and 344 spaces will be provided for the residential and commercial elements, respectively. This provision is in excess of MCC's cycle parking standards even when considering the spaces required for the retail, restaurant and café uses.

3.3.11 This is one of the many initiatives to encourage more people to travel by sustainable modes (in addition to other measures outlined in the accompanying Framework Travel Plan (Document Reference: **80823-CUR-XX-XX-T-TP-00002**)).

3.3.12 Cycle parking also needs to be determined against Building Research Establishment Environmental Assessment Method (BREEAM) requirements, which is based on occupancy numbers. The cycle parking provision of 344 spaces is in excess of the BBREEAM requirements which are as follows:

- **Offices:** Over 400 users (3,450 proposed), therefore 158 spaces minimum using the BREEAM sliding scale of compliance:
 - 1 – 200 users @ 1 space per 10 users = 20 spaces;
 - 201 – 300 users @ 1 space per 15 users = 7 spaces;
 - 301 – 400 users @ 1 space per 20 users = 5 spaces; and
 - 401+ users @ 1 space per 25 users = 126 spaces.
- **Small Retail:** 7 units @ 4 spaces total per unit = 28 spaces.

3.3.13 There are also areas dedicated to cycle facilities, such as rooms which could provide drying spaces, changing areas, and showers.

3.4 Proposed Servicing Arrangements

3.4.1 As set out in the introduction it is envisaged that there would be five potential interventions to the highway network to enable efficient servicing and refuse collection at the site. This consists of:

- A new access and ramp down to a basement car park from Bridge Street;

- A new loading bay on Bridge Street for refuse and servicing of the residential plot;
- A new shared surface access into an area of public realm from Bridge Street to provide fire and maintenance access only;
- A new shared surface access to a sub-station for the commercial building; and
- A new loading bay on St Mary's Parsonage to accommodate refuse and servicing of the commercial block.

3.4.2 The basement will contain 3 bays that can be used for deliveries. These are standard car parking spaces that will only accommodate cars and small vehicles.

3.4.3 The new loading bay on Bridge Street will predominantly be used for refuse collection, servicing and potentially drop-off and pick-up activities associated with the residential building. The existing footway will be diverted behind the bay and a 3m footway will be offered for adoption or rights will be granted. The existing traffic signals will need to be amended to remove this arm from the junction.

3.4.4 A new shared surface access from Bridge Street into the public realm area will be provided to accommodate fire access and substation repair and replacement. Access is rarely envisaged and the area will be bollard controlled to ensure no other vehicles can gain access to these areas. The pedestrian crossing and central island on Bridge Street would be slightly amended to accommodate this but there would be no other significant changes to the adopted highway.

3.4.5 A small, shared surface access will be provided in front of the commercial building for substation repair and replacement. This is envisaged every 10+ years so will rarely be used.

3.4.6 Finally, a new loading bay is proposed on St Mary's Parsonage to accommodate refuse and servicing of the commercial block. A 2m footway will be provided behind the bay and this would be offered as adopted highway or rights will be granted.

3.4.7 The proposals are shown in **Drawing 80823-CUR-00-XX-DR-TP-75001** and Swept Path Analysis of all of the above movements is included in **Drawing 80823-CUR-00-XX-DR-TP-05001 to 05005**.

Refuse

3.4.8 With regard to waste collection, a management company will be appointed to transfer waste from the office and residential uses to the bin stores, whereas staff at the amenity / retail units would transfer waste from within their units to the bin store after closing time at the end of each day. The management company / staff on-site would be responsible for moving the bins from the bin stores to the collection points on collection day.

3.4.9 The waste operators will collect the bins and load them into the refuse vehicle. Once the bins have been emptied, containers would be wheeled immediately back to the bin stores by the management team. As a result, the bins will not be present with the public realm for any significant length of time.

- 3.4.10 More details on the waste collection and number of bins proposed are provided in a Waste Management Strategy prepared by Curtins (Document Reference: **80823-CUR-XX-XX-T-TP-00003**).

4.0 Accessibility by Sustainable Modes of Travel

4.1 Introduction

- 4.1.1 A key element of national and local policy is to ensure that new developments are located in areas where alternative modes of travel are available. This supports the aims of integrating planning and transport, providing more sustainable transport choices, and reducing overall travel and car use.
- 4.1.2 The accessibility of the proposed development is considered in this context for the following modes of travel:
- Pedestrian Accessibility;
 - Cycle Accessibility; and
 - Public Transport Accessibility.

4.2 Pedestrian Accessibility

- 4.2.1 Research has indicated that acceptable walking distances depend on a number of factors, including the quality of the development, the type of amenity offered, the surrounding area, and other local facilities. The Chartered Institution of Highways and Transportation (CIHT) document entitled '*Providing for Journeys on Foot*' suggests walking distances which are relevant to this planning application. These are reproduced in **Table 4.1**:

CIHT Category	Town Centers (m)	Commuting / School / Sightseeing (m)	Elsewhere (m)
Desirable	200	500	400
Acceptable	400	1,000	800
Preferred Maximum	800	2,000	1,200

Table 4.1 – CIHT Recommended Walking Distances

- 4.2.2 To assist in summarising the accessibility of the site by foot, an indicative pedestrian catchment plan has been produced. **Plan 80823-CUR-00-XX-D-TP-06003** to the rear of the report shows distances of 500m, 1,000m and 2,000m which are termed 'Desirable', 'Acceptable' and the 'Preferred Maximum' by the CIHT for commuting trips; these are a good approximation for the majority of trips associated with this office development.
- 4.2.3 Guidance from the Building Research Establishment Environmental Assessment Method (BREEAM) UK New Construction 2018 consultation states that Transport Assessments and Travel Plans should include reporting on the number and type of amenities within 500m of the site (based on current Tra 02 criteria) to obtain credits. The number and type of existing accessible amenities within 500m of the site can be summarised in **Table 4.2** below:

No.	Amenity	BREEAM Criteria / Type	Proximity to Site (m)
1	Spinningfields (comprising shops, restaurants, bars, a gym, open space)	Appropriate food outlet Access to an outdoor open space Access to a recreation or leisure facility for fitness or sports	150
2	Parsonage Gardens (comprising shops, restaurants, open space, and gym)	Appropriate food outlet Access to an outdoor open space Access to a recreation or leisure facility for fitness or sports	200
3	A56 Deansgate (comprising restaurants, supermarkets, bars, hotels)	Appropriate food outlet Access to cash	250
4	St Ann's Square (comprising shops, banks, restaurants, bars, theatre, open space)	Appropriate food outlet Access to cash Access to an outdoor open space	400

Table 4.2 – Number and Type of Existing Accessible Amenities within 500m of the Site

- 4.2.4 The pedestrian catchment plan confirms that the site is well located in relation to local services and facilities within Manchester. In addition to those in **Table 4.2** above, bus stops along the A56 Deansgate, Bridge Street / John Dalton Street, and Chapel Street are all within a 500m walk of the site.
- 4.2.5 Between 500m and 1000m from the site lies Salford Central rail station, the Metrolink, Market Street, Piccadilly Gardens, Chinatown, the Printworks, and Arndale Centre. The Printworks contains leisure outlets, restaurants / bars, the Vue cinema and a Co-Op establishment, whereas the Arndale centre is one of the largest city-centre shopping malls in Europe and houses over 200 shops as well as several food and drink establishments.
- 4.2.6 Within the wider 1,000m – 2,000m catchments, there are a number of city centre residential properties in all directions. Additional leisure, food, retail, employment, high street banks, health clubs, and convenience stores are accessible at Spinningfields, Noma, New Bailey, Market Street, Oxford Road, Castlefield, and Gay Village. These areas comprise many convenience stores, retail outlets, places of worship, high street banks, artisan cafes, bars, restaurants, public houses, along with a vibrant nightlife.
- 4.2.7 The vast majority of Manchester and Salford City Centres and the major public transport interchanges (Salford Central, Manchester Victoria, Manchester Piccadilly, Manchester Oxford Road, Deansgate, Oxford Road corridor) are within a 2,000m (c. 25-minute) walk of the site.
- 4.2.8 The development proposals (detailed in **Section 3**) also include plans to improve pedestrian amenity and public realm in the vicinity of the site, which would be beneficial to pedestrians and would encourage more staff and visitors to travel on foot.
- 4.2.9 The site is considered highly accessible by foot.

4.3 Cycle Accessibility

- 4.3.1 Cycling is a cheap, efficient, and healthy way to travel. Cycling also provides a predictable arrival time which depending on location, can be quicker than driving or using public transport, and is subject to fewer delays.
- 4.3.2 The average person in England cycled 16 times for a total distance of 54 miles in 2019, according to the Department for Transport's walking and cycling statistics. This equates to an average of 3.38 miles / 5.43km per trip, which is rounded to a 5.5km catchment. Furthermore, Sustrans' Walking and Cycling Index 2021 reveals that the average distance of a cycling trip in the past year in Greater Manchester was 6.9km.
- 4.3.3 8km (5-miles) is considered to be the maximum acceptable cycling distance for most people, based on the 2019 National Travel Survey statistics which demonstrate that 82% of cycling trips were under 5 miles (8km). The National Model Design Code – Part 2 (DLUHC, 2021) also references this distance, expressing *“the aim that walking and cycling should be the first choice for short local journeys, particularly those of 5 miles or less.”*
- 4.3.4 In order to assist in assessing the accessibility of the site by cycle, **Plan 80823-CUR-00-XX-D-TP-06004** to the rear of the report presents 5.5km and 8km cycle catchments for the site, along with the National Cycle Network (NCN) Routes available within these ranges.
- 4.3.5 The 5.5km catchment encompasses Manchester and Salford City Centres including all key transport links, shopping centres, bars, restaurants, leisure centres, tourist attractions and places of worship. The catchment also extends as far as Crumpsall to the north, Droylsden to the east, Chorlton-cum-hardy to the south, and Littler Bolton to the west. The 8km catchment extends further north to Heaton Park, east to Fairfield, south to Didsbury, and west to Particroft.
- 4.3.6 Cyclists can access Routes 6, 66, and 55 of the NCN from Manchester and Salford City Centres, in addition to Route 60 within the 5.5km cycle catchment.
- 4.3.7 Route 6 runs from Watford in London to Windermere in the Lake District (more locally, Route 6 connects Manchester City Centre to Chorlton); Route 60 connects North and East Manchester, partly following the Fallowfield Loopline; Route 66 begins in Manchester, extending to Spurn Head, via Bradford, Leeds, York and Kingston upon Hull; and Route 55 is still under construction, but the accessible stretch runs on-road to Eccles and traffic-free to Tyldesley.

- 4.3.8 Low 20mph speed limits along the surrounding roads, along with existing cycle infrastructure allows easy cycle access to Albert Bridge House. The local cycle network in the vicinity of the site is shown in **Figure 4.1** below:

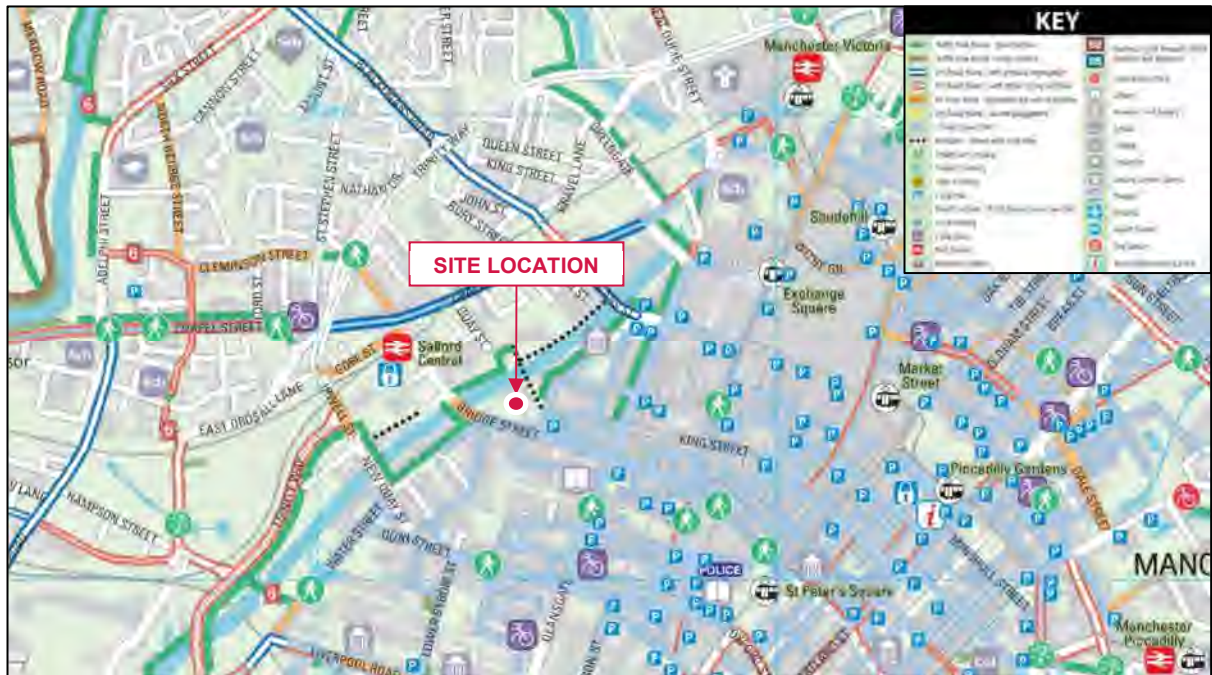


Figure 4.1 – Local Cycle Network

(Source: TfGM, 2022)

Note: On-site observations confirmed that the traffic-free route along St Mary's Parsonage does not exist.

- 4.3.9 The local cycle network shown above is also a part of Greater Manchester's cycling and walking infrastructure proposal, named the "Bee Network". The Bee Network comprises signed routes that mark the most direct and pleasant way to navigate an area on foot or by bike. There are no proposed Bee Network improvements in the St Marys Parsonage area. Notwithstanding, the site is in close proximity to the Beeways network and future improvements (i.e. the New Bailey connection to Salford Central station and the City Centre Triangle), allowing cyclists to benefit from the public realm improvements for better safety and quality of commute.
- 4.3.10 Furthermore, the development will provide internal, secure cycle parking spaces to encourage cycling.
- 4.3.11 In summary, it is considered that cycling is a highly realistic mode of travel to and from the site.

4.4 Public Transport Accessibility

- 4.4.1 The site is well situated to take advantage of existing public transport infrastructure within Manchester City Centre and to other areas of Greater Manchester.
- 4.4.2 **Plan 80823-CUR-00-XX-D-TP-06005** to the rear of the report demonstrates those areas accessible via public transport within 20, 40 and 60-minutes journey to the Site. Within a 20-minute journey, future staff and residents at the site can travel from Manchester and Salford City Centres to the site. Staff and

residents from Trafford, Levenshulme, Eccles, Cheetham Hill, Moston, Bolton, Rochdale, Stalybridge, Ashton-under-Lyne, and East Didsbury can access the site within a 40-minute public transport journey from the Site. Within an hour, areas as far as Leyland, Todmorden, Broadbottom, Marple, Macclesfield, Wilmslow, Manchester Airport, Altrincham, Hough Green, Newton-Le-Willows, and Wigan can be accessible to / from the site.

- 4.4.3 Developed by TfGM, Greater Manchester Accessibility Levels (GMAL) are a measure of the accessibility of a point to both the conventional public transport network (i.e. bus, Metrolink and rail) and Greater Manchester's Local Link (flexible transport service), considering walk access time, service availability, and average waiting time. The method is essentially a way of measuring the density of the public transport provision at any location within the Greater Manchester region.
- 4.4.4 The accessibility index score is categorised into eight levels (1 to 8), where level 8 represents a high level of accessibility (described as 'excellent') and level 1 a low level of accessibility (described as 'very poor'). The site is located in an area with an 'excellent' GMAL rating of 8 and is considered appropriately situated to take advantage of existing public transport infrastructure within Manchester and Salford City Centres.
- 4.4.5 The National Model Design Code – Part 2 (DLUHC, 2021) states: *"Generally, people are prepared to walk further to a railway station or tram stop (10 minutes) [800m walking distance] than to a bus stop (5 minutes) [400m walking distance]."* These distances are also cited in the CIHT document *'Planning for Walking'* (2015). This equates to a walking speed of 80m per minute (1.34m/s) – equivalent to the average walking speed of 79m per minute (1.31m/s) in 2019 that can be calculated from the National Travel Survey statistics (Table NTS0303).
- 4.4.6 Accessibility by bus, rail and Metrolink are considered further below, with a local public transport network map included in **Figure 4.2** below:



Figure 4.2 – Manchester City Centre Public Transport Network
(Source: TfGM, 2019)

Bus Accessibility

- 4.4.7 Further CIHT guidance – from ‘*Buses in Urban Developments*’ (2018) – indicates that a bus stop should be located within the following walking distances from a new development based on its location and the number and frequency of services:

Situation	Maximum Walking Distance (m)
Core bus corridors with two or more high-frequency services	500
Single high-frequency routes (every 12 minutes or better)	400
Less frequent routes	300
Town/city centres	250

Table 4.3 – CIHT Maximum Suggested Walking Distances to Bus Stops

4.4.8 The nearest bus stops to the site are located along Bridge Street. This core bus corridor is within the recommended 250m distance for city centres. **Table 4.4** details the services that call at these stops, and their associated frequencies:

Bus Service	Route	Peak Hourly Frequency		
		Mon – Fri	Sat	Sun/Hols
8	Shudehill – Salford – Pendlebury – Farnworth – Bolton	12 mins	12 mins	20 mins
34	Piccadilly Gardens – Salford – Leigh – Golborne – Bryn	30 mins	30 mins	Hourly
34A	Piccadilly Gardens – Salford – Pendleton – Eccles – Worsley	30 mins	30 mins	Hourly
36	Piccadilly Gardens – Salford – Peel – Great Lever – Bolton	12 mins	12 mins	30 mins
37	Piccadilly Gardens – Salford – Walkden – Farnworth – Bolton	12 mins	12 mins	30 mins
38	Piccadilly Gardens – Salford – Swinton – Logistics North	10 mins	10 mins	30 mins
50	MediaCityUK – Pendleton – Salford – Burnage – East Didsbury	10 mins	10 mins	15 mins
V1	Manchester Royal Infirmary – Salford – Tyldesley – Leigh	10 mins	30 mins	30 mins
V2	Manchester Royal Infirmary – Salford – Tyldesley – Atherton	30 mins	30 mins	30 mins
V4	Manchester Royal Infirmary – Salford – Deans – Ellenbrook	4 in the AM 5 in the PM	N/A	N/A
X39	Farnworth – Peel – Swinton – Salford – Piccadilly Gardens	2 in the AM	N/A	N/A

Table 4.4 – Summary of Bus Service Frequencies in the vicinity of the Site

4.4.9 Furthermore, within 100m of the mid-point of the site, Route 1 of the Free Bus stops on Bridge Street; and within 400m of the proposed development entrance, Routes 2 and 3 of the Free Bus stop on Deansgate. The free bus is a service providing direct access across key city centre locations. The free bus routes and frequencies are detailed in **Figure 4.3** below:

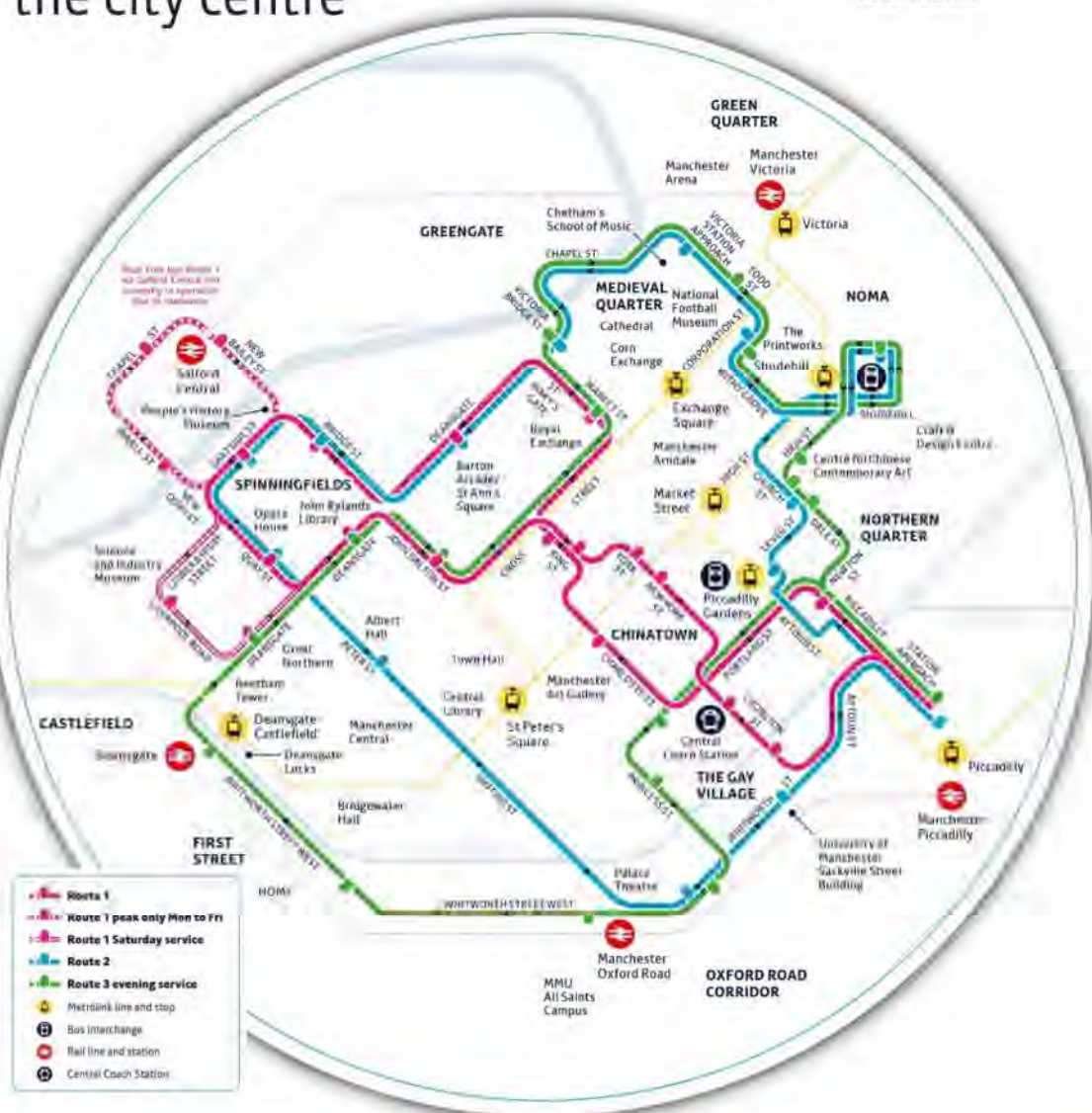
free bus routes around the city centre



Salford City Council



MAYOR OF
GREATER
MANCHESTER



1	Monday – Friday Every 10 minutes: 7am – 7:15pm Peak route only: 7am – 9am and 4pm – 7:15pm Saturday Every 10 minutes: 8:20am – 7:15pm Sunday and public holidays Every 12 minutes: 11am – 6pm
----------	--

2	Monday – Friday Every 10 minutes: 6:30am – 7:10pm Every 20 minutes: 7:10pm – 11:30pm Saturday Every 10 minutes: 8:30am – 7:30pm Every 15 minutes: 7:30pm – 11:30pm Sunday and public holidays Every 12 minutes: 10am – 7pm
----------	--

3	Monday – Friday Every 20 minutes: 7:30pm – 11:30pm Saturday Every 15 minutes: 7:30pm – 11:30pm
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Figure 4.3 – Free Bus Route and Timetable
(Source: TfGM, 2021)

4.4.10 These stops provide frequent access to city centre facilities, as well as all major public transport interchanges in Manchester and Salford City Centres every day of the week.

4.4.11 It is noted that the provision of bus services will change during different seasons in the year and over time in response to current circumstances. The bus times are accurate at the time of writing, whereas up-to-date bus times can be found on TfGM's website: tfgm.com/public-transport/bus.

4.4.12 It is considered that the site is accessible by bus.

Rail Accessibility

4.4.13 The Chartered Institution of Highways and Transportation (CIHT) document, '*Planning for Public Transport in Developments*' notes that those travelling to a site by rail will typically be prepared to walk further to the site than those travelling by bus, with a preferred distance of 800m.

4.4.14 The Salford Central rail station is located at a c. 300m walk from the site. This lies within the CIHT recommended distance. There are accessible ticket machines and step-free access across the whole station but there are no ramps for train access. There is a ticket office, but no cycle storage. Northern Rail offers space for up to two bikes on all trains for no extra charge, however these are allocated on a first-come, first-serve basis.

4.4.15 A summary of rail services from Salford Central rail station is outlined in **Table 4.5**:

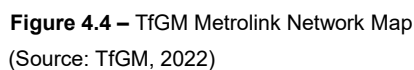
Service	Service Frequency		
	Peak Weekday	Peak Saturday	Peak Sunday
Manchester Victoria to Clitheroe Calling at: Manchester Victoria, Salford Central, Salford Crescent, Bolton, Hall I' Th' Wood, Bromley Cross, Entwistle, Darwen, Blackburn, Ramsgreave & Wilpshire, Langho, Whalley, Clitheroe.	Hourly	Hourly	Hourly
Manchester to Southport and Kirkby Calling at: Rochdale or Stalybridge and Ashton-under-Lyne, converging at Manchester Victoria, continuing to Salford Central, Salford Crescent. Change at Salford Crescent for services to Wigan North Western, Kirkby and Southport.	2-4 per hour	2-4 per hour	No services
Blackpool North to Manchester Victoria/Manchester Airport, Preston to Hazel Grove Calling at: Preston, Leyland, Buckshaw Parkway, Chorley, Adlington, Blackrod, Horwich Parkway, Lostock, Bolton, Salford Crescent, Salford Central, Manchester Victoria.	Every 2 hours each way	Every 2 hours each way	No services

Table 4.5 – Summary of Rail Services calling at Salford Central

- 4.4.16 The trains that service Salford Central rail station regularly run 7 days a week to a number of different locations and residential areas within the North West; this provides frequent access for staff of the site and is a viable alternative to private car use.
- 4.4.17 Deansgate, Oxford Road, Victoria and Piccadilly train stations are located within a walking distance of 1,000m to 2,000m from the site. These provide additional local and national rail services.
- 4.4.18 It is noted that the provision of rail services will change over time in response to current circumstances. The rail frequencies are accurate at the time of writing, whereas up-to-date rail times can be found on Northern Rail's website: <https://www.northernrailway.co.uk/stations/SFD>.

Metrolink (Light Rail) Accessibility

- 4.4.19 The nearest Metrolink stations, Exchange Square and St Peters Square, are located within a c. 700m walk of the Site. There is step-free access to all platforms at all Metrolink stations.
- 4.4.20 The following services call at these stations:
- **Blue Line:** Eccles to Ashton-under-Lyne (St Peters Square only);
 - **Brown and Pink Line:** East Didsbury to Shaw and Crompton / Rochdale;
 - **Navy Line:** Victoria to Manchester Airport; and
 - **Purple and Green Line:** Piccadilly / Bury to Altrincham.
- 4.4.21 All lines run at a frequency of every 12 minutes between 06:00 – 00:00 on Mondays to Saturdays, and 07:00 – 00:00 on Sundays. Some lines only operate during peak hours, for example:
- **Green Line** (Altrincham to Bury) – 07:00 – 20:00 on Mondays to Fridays and 09:00 – 18:30 on Saturdays. Outside these hours, use the Purple (Altrincham to Piccadilly) and Yellow (Piccadilly to Bury) Lines; and
 - **Brown Line** (Shaw and Crompton to East Didsbury) – 07:00 – 20:00 on Mondays to Fridays and 09:00 – 18:30 on Saturdays. Outside these hours, use the Pink (Rochdale Town Centre to East Didsbury) Line.
- 4.4.22 The start and end times for specific stations will change over time in response to current circumstances. The Metrolink frequencies are accurate at the time of writing, whereas up-to-date times can be found on the Metrolink website at: tfgm.com/public-transport/tram/tram-times.
- 4.4.23 Users can change at Piccadilly Gardens, Victoria, and Cornbrook to access the entire Metrolink network, including accessing additional services to Bury and the Trafford Centre, as shown in the Metrolink map in **Figure 4.4**.



BREEAM Public Transport Accessibility Index (AI)

4.4.26 The methodology for calculating the AI uses Transport for London's Public Transport Accessibility Level (PTAL) method, itself based on a methodology developed in 1992 by the London Borough of Hammersmith and Fulham. The GMAL methodology is also derived from the PTAL approach but modified to consider flexible transport service provision (Local Link) and to reflect local service provision levels (different accessibility levels) within Greater Manchester.

4.4.28 Furthermore, for this project specifically, BRE has confirmed to Sustainability Consultants at Hoare Lea that the GMAL value can be used as a direct substitute for the AI.

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4.4.30 The site is located in an area with a GMAL rating of 8 as mentioned earlier, with a further GMAL index score of 59.9. This is understood to be the AI of the site.

4.4.31 It can be observed that the site's AI of 59.9 suggests that the site has an excellent level of public transport accessibility in relation to BREEAM. Notwithstanding, as illustrated in **Table 5.1**, a range of measures are being implemented to encourage sustainable travel.

4.5 Summary

4.5.1 It is considered the site is highly accessible by sustainable modes of transport, which are also usable by those with limited mobility and are wheelchair accessible. The surrounding area exhibits excellent levels of pedestrian and cycling infrastructure, and there are a number of public transport opportunities within acceptable walking distance of the site.

5.0 Building Research Establishment Environmental Assessment Method (BREEAM) Compliance

5.1.1 The development would be assessed against BREEAM UK New Construction 2018 standards and would seek to demonstrate compliance by obtaining a suitable number of credits. The assessment categories pertaining to traffic and transport, the relevant sections of this report where compliance has been assessed, and the credits they obtain, are summarised in **Table 5.1** below:

BREEAM Category	Description	Signposts	No. of Credits
Tra 01	<u>Transport Assessment and Travel Plan:</u>		2
	1. No later than Concept Design stage, undertake a site-specific transport assessment (or develop a travel statement) and draft travel plan, which can demonstrably be used to influence the site layout and built form.	This document	
	2. The site-specific travel assessment (or statement) shall cover as a minimum:		
	If relevant, travel patterns and attitudes of existing building or site users towards cycling, walking and public transport, to identify relevant constraints and opportunities;	N/A	
	Predicted travel patterns and transport impact of future building or site users;	Section 6 of TS	
	Current local environment for pedestrians and cyclists, accounting for any age-related requirements of occupants and visitors;	Section 2 of TS	
	Reporting of the number and type of existing accessible amenities within 500m of the site;	Section 4 of TS	
	Disabled access accounting for varying levels and types of disability, including visual impairment;	Section 2 of TS	
Tra 02	Calculation of the existing public transport Accessibility Index (AI); and	Section 4 of TS	
	Current facilities for cyclists.	Section 2 of TS	
	3. Following a transport assessment (in accordance with the requirements set out in criteria 2), develop a site-specific travel plan that provides a long-term management strategy which encourages more sustainable travel. The travel plan includes measures to increase or improve more sustainable modes of transport and movement of people and goods during the building's operation.	Framework Travel Plan (FTP) (Document Reference: 80823-CUR-XX-XX-T-TP-00002)	
	4. If the occupier is known, involve them in the development of the travel plan.	TBC	
	5. Demonstrate that the travel plan will be implemented and supported by the building's management in operation.	Section 9 of FTP	
Tra 02	<u>Sustainable Transport Measures:</u>		
	1. Prerequisite: Achieve criteria 3–5 in the Tra 01 Transport Assessment and Travel Plan credit.	This document	

BREEAM Category	Description	Signposts	No. of Credits
	2. Identify the sustainable transport measures as per Table 7.4 in BREEAM guidance. - The existing AI calculated in Tra 01 ≥ 8; - Demonstrate an increase over the existing Accessibility Index through negotiation with local bus, train, or tram companies to increase the frequency of the local service provision for the development; OR - Demonstrate an increase over the existing Accessibility Index. This could be through provision of a diverted bus route, a new or enhanced bus stop, or other similar solutions; OR - Provide a dedicated service, such as a bus route or service.	Section 4 of TS Not achieved, not required considering existing site's excellent accessibility	<i>Points:</i> 1 0
	- Provide a public transport information system in a publicly accessible area, to allow building users access to up-to-date information on the available public transport and transport infrastructure. This may include signposting to public transport, cycling, walking infrastructure or local amenities; - Provide electric recharging stations of a minimum of 3kW for at least 10% of the total car parking capacity for the development; - Set up a car sharing group or facility to facilitate and encourage building users to car share; AND - Raise awareness of the sharing scheme with marketing and communication materials; AND - Provide priority spaces for car sharers for at least 5% of the total car parking capacity for the development; AND - Locate priority parking spaces nearest the development entrance used by the sharing scheme participants. - During preparation of the brief, the design team consults with the local authority (LA) on the state of the local cycling network and public accessible pedestrian routes, to focus on whichever the LA deems most relevant to the project, and how to improve it; AND - Agree and implement one proposition chosen with the local authority. The proposition supported by the development is additional to existing local plans and has a significant impact on the local cycling network or on pedestrian routes open to the public. - Install compliant cycle storage spaces to meet the minimum levels set out in Table 7.5 (1 space per 10 staff and 1 space per 10 visitors, a minimum of one compliant space is required); - The above has been achieved; provide at least two compliant cyclists' facilities for the building users (showers, changing facilities, lockers, drying spaces);	Section 7 of FTP Section 3 of TS Not achieved, development is located close to existing car club spaces Not achieved, development is located centrally Section 3 of TS Section 3 of TS	1 1 0 0 1 1

BREEAM Category	Description	Signposts	No. of Credits
	Existing amenities: At least three existing accessible amenities are present;	Section 4 of TS	1
	Enhanced amenities: - Ensure a minimum of one new accessible amenity, in accordance with Table 7.6 on page 191, for the relevant Building Group, is provided; OR - Ensure more than one new accessible amenity, in accordance with Table 7.6 on page 191, for the relevant Building Group, is provided. - Implement one site-specific improvement measure, not covered by the options already listed in this issue, in line with the recommendations of the travel plan. Submit this for review by BRE.	Section 3 of TS (appropriate foot outlet and outdoor open space) Section 7 of FTP, pending BRE review (see para 1.4.3)	3
	3. Award credits according to the existing Accessible Index (AI) of the project, and the total number of points achieved for the options implemented, see Table 7.3 of BREEAM guidance.	Site AI: 59.9 Points achieved under criteria 2: 9	10
Total Transport Credits Obtained			12

Table 5.1 – BREEAM Credits Targeted

5.1.2 Other relevant considerations in a BREEAM-compliant report include the following, with the compliance of the proposed development to these considerations outlined next to the criteria:

- **Lighting, landscaping and shelter to create pleasant pedestrian and public transport waiting areas** – Pleasant pedestrian environments will be delivered within the site as part of proposed development, public transport waiting areas will not be delivered within the site due to existing infrastructure that is already available in the vicinity of Bridge Street;
- **Restrictions or charging for car parking** – Car parking will be limited and not publicly accessible;
- **Pedestrian and cyclist friendly (for all types of user regardless of the level of mobility or visual impairment) with the provision of cycle lanes, safe crossing points, direct routes, appropriate tactile surfaces, good lighting and signposting to other amenities, public transport nodes and adjoining off-site pedestrian and cycle routes** – Direct routes, appropriate surfaces, lighting and signposting will be delivered within the site as part of proposed development. Safe crossing points and cycle lanes out of the site will not be delivered due to the presence of existing infrastructure that is already available in the vicinity of Bridge Street;
- **Provision of suitable taxi drop-off or waiting areas** – Drop off/ loading bay provided along St Mary's Parsonage; and
- **Ensure rural buildings have appropriate access to transport to serve the local community adequately (where procured to do so, e.g. community centre)** – Not applicable as development is located within the city centre.

5.1.3 A key part of the Framework Travel Plan (FTP) will be monitoring, whereby travel surveys will be distributed to staff and residents at the development in order to understand travel habits. Recipients will

be encouraged to participate, and the surveys would extract key information such as place of residence/ work, usual mode of travel and reason for modal choice, attractiveness of and barriers to active and sustainable modes of travel, and any incentives that could encourage recipients to travel more sustainably. The findings will provide information on reasons for travel patterns and attitudes of site users to identify relevant constraints and opportunities.

- 5.1.4 The FTP includes Travel Information Welcome Packs as an initiative to encourage sustainable travel, which would be a site-specific improvement measure in line with the aims, objectives, and recommendations of the Travel Plan. This measure is submitted for review by BRE.

6.0 Traffic Forecasting and Highway Impact

6.1 Introduction

- 6.1.1 The following section contains trip generation analysis based on the proposed development during the weekday AM and PM peak hours.
- 6.1.2 In order to undertake the assessment, the TRICS database has been used. TRICS is the industry recognised tool for calculating the anticipated future trip demand of a proposed development. The database contains multi-modal surveys of varying land uses in multiple destinations across the UK, including office land uses.
- 6.1.3 Whilst TRICS is the industry recognised tool for calculating the anticipated future trip demand of a proposed development, it must be noted that many of the office sites are in no way comparable to modern offices located in highly sustainable areas of Manchester City Centre – as discussed further later.

6.2 Existing Trip Generation

Office

- 6.2.1 The Site is currently occupied by Albert Bridge House and two car parks. Albert Bridge House is currently occupied by HMRC. The existing operational car parks within the Site have capacity for circa 137 vehicles.
- 6.2.2 The existing Albert Bridge House buildings have an approximate combined GEA of c.19,432sqm.
- 6.2.3 The full search criteria used in the TRICS database are included in **Appendix B**, applying the following:
- Land Use: 02/A – Office;
 - Regions: England, excluding Greater London;
 - Location Type: Town Centre; and
 - Number of Survey Included: 4
- 6.2.4 The level of trips generated by the existing uses of the site have been estimated using multi-modal peak hour trip rates. **Table 6.1** below summarises this. Note that due to the exclusion of some modes (i.e. taxis and other modes of travel), the modal split does not add to 100%. All trip rates are per 100m² GFA/GIA..

TRICS	Average TRICS Trip Rates AM (08:00 – 09:00)				Average TRICS Trip Rates PM (17:00 – 18:00)			
	Arrive	Depart	Total	Modal Split (%)	Arrive	Depart	Total	Modal Split (%)
Vehicles	0.459	0.047	0.506	35	0.047	0.38	0.427	24
Cyclists	0.221	0	0.221	15	0	0.182	0.182	10
Pedestrians	0.324	0.008	0.332	23	0.04	0.554	0.594	34
Public Transport	0.364	0	0.364	25	0	0.49	0.49	28
Total People	1.408	0.024	1.432	100	0.079	1.684	1.763	100

Table 6.1 – Existing Multi-Modal Trip Rates and Split

- 6.2.5 From **Table 6.1** above, the total number of trips that could be generated by the current uses can be found. This is provided in **Table 6.2**:

Mode of Travel	Trip Generation AM (08:00 – 09:00)			Trip Generation PM (17:00 – 18:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
Vehicles	84	9	93	9	70	78
Cyclists	41	0	41	0	33	33
Pedestrians	59	1	61	7	102	109
Public Transport	67	0	67	0	90	90

Table 6.2 – Existing Trip Generation

- 6.2.6 TRICS vehicular trip rates estimate that the number of vehicle trips generated by the existing offices could equate to 93 and 78 two-way movements respectively in the normal AM and PM peak periods (08:00 – 09:00 and 17:00 – 18:00).

Public Car Park

- 6.2.7 As mentioned earlier, the MCC-operated car park off Bridge Street contains circa 65 spaces and was observed to be at capacity at the time of Curtins' site visit at around 11:00 on 28th April 2022. A couple of vehicles departed during the short visit and were promptly replaced by others.
- 6.2.8 Parking tickets can be purchased for stays of 1 hour, 2 hours or a maximum of 4 hours.
- 6.2.9 For assessment purposes, it has been assumed that all vehicles arrive in the AM peak period and then depart in the PM peak hour, as shown below:

Mode of Travel	Trip Generation AM (08:00 – 09:00)			Trip Generation PM (17:00 – 18:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
Vehicles	65	0	65	0	65	65

Table 6.3 – Existing Car Park Trip Generation

Total Existing

6.2.10 The following **Table 6.4** indicates the existing trip generation of both the offices and public car park.

Mode of Travel	Trip Generation AM (08:00 – 09:00)			Trip Generation PM (17:00 – 18:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
Vehicles	149	9	158	9	135	144
Cyclists	41	0	41	0	33	33
Pedestrians	59	1	61	7	102	109
Public Transport	67	0	67	0	90	90

Table 6.4 – Total Existing Trip Generation

6.2.11 TRICS vehicular trip rates estimate that the number of vehicle trips generated by the existing uses of the site could equate to 158 and 144 two-way movements respectively in the normal AM and PM peak periods (08:00 – 09:00 and 17:00 – 18:00).

6.3 Forecasted Trip Generation

Office

- 6.3.1 The commercial building has a GEA of 50,850 Sqm and a GIA of 43,457sqm. The GIA figure is equivalent to GFA and has been used for the below calculations.
- 6.3.2 The total people trip rates for an office are provided in **Table 6.1** above.
- 6.3.3 The modal split has been obtained through analysis of the 2011 Census dataset 'WU03EW – Location of usual residence and place of work by method of travel to work (MSOA level)'. The middle super output area (MSOA) of Manchester 054 has been used as the place of work, whereas the assumptions used for the places of residence include all ten Greater Manchester Local Authorities (Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Stockport, Tameside, Trafford, and Wigan).
- 6.3.4 The Census data is referred to with discretion due to its datedness, however it remains the most comprehensive dataset available at the time of writing. It is worth noting that there have been significant changes in car use trends in recent years. For example, the National Travel Survey (NTS) 2019 indicated that the total distance travelled per person per year has fallen by c. 4% between 2011 and 2019. Distance by all motorised private transport has fallen by c. 7% since 2011, and as a car driver by c. 6% since 2011. Miles travelled by surface rail have also increased by over 25% since 2011.
- 6.3.5 Furthermore, the development has very low levels of parking, and the typical demographic of staff are expected to favour travel by public transport, walking, cycling, or flexible working / working from home on certain days of the week. Therefore, the mode share has been adjusted to account for the low car parking provision/home working, with a redistribution across other modes, summarised in **Table 6.5**:

Mode of Travel to Work	Total	Percentage Mode Share	Adjusted Mode Share
Work mainly at or from home	0	0%	3%
Underground, metro, light rail or tram	2,867	7%	12%
Train	4,807	12%	17%
Bus, minibus, or coach	12,237	29%	34%
Taxi	147	0%	0%
Motorcycle, scooter or moped	178	0%	0%
Driving a car or van	12,948	31%	5%
Passenger in a car or van	1,664	4%	4%
Bicycle	1,146	3%	6%
On foot	5,694	14%	19%
Other method of travel to work	77	0%	0%
Total	<u>41,765</u>	<u>100%</u>	<u>100%</u>

Table 6.5 – Method of Travel to Work – Site as Place of Work

6.3.6 This has been summarised below for consistency with the TRICS modes:

Mode of Travel to Work	2011 Census Mode Share	Adjusted Mode Share
Work mainly at or from home	0%	3%
Total Vehicles (incl. cars, taxis, motorcycles)	36%	10%
Cyclists	3%	6%
Pedestrians	14%	19%
Public Transport	48%	63%
Total People	100%	100%

Table 6.6 – Summarised Method of Travel to Work – Site as Place of Work

6.3.7 The forecasted trip generation for the offices is provided in **Table 6.7** below, when the above adjusted mode share is applied to the total people person trip rates from **Table 6.1**:

	Trip Generation AM (08:00 – 09:00)			Trip Generation PM (17:00 – 18:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
Total People	599	10	<u>609</u>	34	716	<u>750</u>
Work mainly at or from home	18	0	18	1	21	22
Total Vehicles (incl. cars, taxis, motorcycles)	58	1	<u>59</u>	3	70	<u>73</u>
Cyclists	34	1	35	2	41	43
Pedestrians	112	2	114	6	133	140

	Trip Generation AM (08:00 – 09:00)			Trip Generation PM (17:00 – 18:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
Public Transport	375	6	382	21	449	470

Table 6.7 – Forecasted Trip Generation – Offices

- 6.3.8 **Table 6.7** demonstrates that there could be 59 and 73 two-way vehicle movements generated by the offices of the proposed development in the AM and PM peak, respectively.
- 6.3.9 Notwithstanding, it must be noted that there are limited parking spaces proposed at the development, as such it is not likely that future staff would choose to drive to the site. Staff who choose to commute by car are likely to park at other car parks in the vicinity of the site as discussed in **Section 3.3** above.

Residential

- 6.3.10 The full search criteria used in the TRICS database are included in **Appendix B**, applying the following:
- Land Use: 02/A – Flats Privately Owned;
 - Regions: England, excluding Greater London;
 - Location Type: Town Centre and Edge of Town Centre; and
 - Reason for Survey Deselection: Covid-19 restrictions (2 surveys)
 - Number of Surveys Included: 8
- 6.3.11 Furthermore, only one suitable survey in the TRICS database was of a ‘Town Centre’ site, like this development, so it was necessary to include ‘Edge of Town Centre’ sites.
- 6.3.12 The total people trip rates per dwelling are provided in **Table 6.8** below:

per dwelling	Average TRICS Trip Rates AM (08:00 – 09:00)			Average TRICS Trip Rates PM (17:00 – 18:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
Total People	0.099	0.555	0.654	0.459	0.224	0.683

Table 6.8 – Residential Person Trip Rates

- 6.3.13 The modal split has been obtained through analysis of the 2011 Census dataset ‘WU03EW – Location of usual residence and place of work by method of travel to work (MSOA level)’. The middle super output area (MSOA) of Manchester 054 has been used as the place of residence, whereas the assumptions used for the places of work include all ten Greater Manchester Local Authorities (Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Stockport, Tameside, Trafford, and Wigan).
- 6.3.14 Notwithstanding, the development again has low levels of parking, and the typical demographic of residents are expected to favour spending most of their time in the city centre and travelling by public transport, walking, cycling, or flexible working / working from home on certain days of the week.

Therefore, the car driver mode share has been set to the level of car parking provision (2.2%) with the change redistributed across working from home, Metrolink, bus, and cycling, summarised in **Table 6.9**:

Mode of Travel to Work	Total	Percentage Mode Share	Adjusted Mode Share
Work mainly at or from home	0	0%	3%
Underground, metro, light rail or tram	156	5%	10%
Train	144	5%	5%
Bus, minibus, or coach	459	15%	18%
Taxi	10	0%	0%
Motorcycle, scooter or moped	6	0%	0%
Driving a car or van	482	16%	2%
Passenger in a car or van	37	1%	1%
Bicycle	85	3%	6%
On foot	1,605	54%	54%
Other method of travel to work	11	0%	0%
Total	2,995	100%	100%

Table 6.9 – Method of Travel to Work – Site as Place of Residence

6.3.15 This has been summarised below for consistency with the TRICS modes:

Mode of Travel to Work	2011 Census Mode Share	Adjusted Mode Share
Work mainly at or from home	0%	3%
Total Vehicles (incl. cars, taxis, motorcycles)	18%	4%
Cyclists	3%	6%
Pedestrians	54%	54%
Public Transport	25%	33%
Total People	100%	100%

Table 6.10 – Summarised Method of Travel to Work – Site as Place of Residence

6.3.16 The forecasted trip generation for the 367 dwellings is provided in **Table 6.11** below, when the above adjusted mode share is applied to the total people person trip rates from **Table 6.8**:

Net Impact	Trip Generation AM (08:00 – 09:00)			Trip Generation PM (17:00 – 18:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
Total People	36	204	<u>240</u>	168	82	<u>251</u>
Work mainly at or from home	1	6	7	5	2	8
Total Vehicles (incl. cars, taxis, motorcycles)	1	8	<u>9</u>	7	3	<u>10</u>

Net Impact	Trip Generation AM (08:00 – 09:00)			Trip Generation PM (17:00 – 18:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
Cyclists	2	12	14	10	5	15
Pedestrians	19	109	129	90	44	134
Public Transport	12	68	80	56	27	83

Table 6.11 – Forecasted Trip Generation – Residential

6.3.17 **Table 6.11** demonstrates that there could be 9 and 10 two-way vehicle movements generated by the residential element of the proposed development in the AM and PM peak, respectively.

Total Proposed

6.3.18 **Table 6.12** indicates the trip generation of both the office and residential elements of the proposed development.

Mode of Travel	Trip Generation AM (08:00 – 09:00)			Trip Generation PM (17:00 – 18:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
Vehicles	60	9	69	10	73	83

Table 6.12 – Total Forecasted Trip Generation

6.3.19 TRICS vehicular trip rates estimate that the number of vehicle trips generated by the proposed uses of the site could equate to 69 and 83 two-way movements respectively in the normal AM and PM peak periods (08:00 – 09:00 and 17:00 – 18:00).

6.4 Limitations of TRICS and 2011 Census Data

6.4.1 As mentioned previously, the data from TRICS should be treated with caution when in reference to large, dense, and modern developments in highly accessible locations of Manchester city centre with low car parking provision. The five office surveys used have an average GFA of 4,136sqm with 1.39 car parking spaces per 100sqm, as against the circa 43,457 GIA of the office element of this development which has 0.03 car parking spaces per 100sqm. Similarly, the eight residential surveys used have an average of 93 dwellings with 1.03 car parking spaces per dwellings, as against the 367 dwellings provided by this development which has 0.02 car parking spaces per dwelling.

6.5 Net Site Impact

6.5.1 **Table 6.13** indicates the net impact of the proposed site.

	Trip Generation AM (08:00 – 09:00)			Trip Generation PM (17:00 – 18:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
Existing Trip Generation (Office and Public Car Park)						
Vehicles	149	9	158	9	135	144

	Trip Generation AM (08:00 – 09:00)			Trip Generation PM (17:00 – 18:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
Proposed Development (Offices and Residential)						
Vehicles	60	9	<u>69</u>	10	73	<u>83</u>
Net Site Impact						
Vehicles	-89	0	<u>-89</u>	1	-62	<u>-60</u>

Table 6.13 – Net Multi-Modal Site Impact

- 6.5.2 The proposed development could result in a decrease of 89 and 60 two-way vehicular trips in the AM and PM peaks, respectively.

6.6 Highway Impact Summary

- 6.6.1 On the above basis, Curtins do not believe that capacity assessments would be required, and that the highway network would not experience any adverse traffic impact resulting from the proposed development. This view was shared by TfGM in the pre-application meeting on 11th April 2022 who stated that traffic and junction modelling would not be necessary

7.0 Transport Planning Policy

7.1 Introduction

- 7.1.1 The following section sets out key local and national transport planning policies, and how the proposals relate to them.

7.2 National Planning Policy Framework (2021)

- 7.2.1 NPPF sets out the current national transport planning policy and outlines the important role that transport policies have to play in facilitating sustainable development.

- 7.2.2 Paragraph 11 states that:

“Plans and decisions should apply a presumption in favour of sustainable development.”

- 7.2.3 For decision taking this means granting permission unless:

“...any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies.”

- 7.2.4 Section 9 of the NPPF is entitled *Promoting Sustainable Transport* and outlines the important role that transport policies have to play in facilitating sustainable development. The section states that:

“The planning system should actively manage patterns of growth ...Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes.”

- 7.2.5 The document emphasises the need for developments to offer a choice of sustainable modes of transport to *“reduce congestion and emissions, and improve air quality and public health”* and provide *“safe and suitable access”* for all users.

- 7.2.6 Paragraph 110 of the NPPF states that in assessing sites that may be allocated for development in plans, or specific applications in development, it should be ensured that:

- a) *“appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;*
- b) *safe and suitable access to the site can be achieved for all users;*
- c) *the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code⁴⁶; and*

- d) *any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.*"

7.2.7 The development proposals have shown that safe and suitable access to the site can be achieved, and it is not anticipated that the proposals would result in any significant impacts on the highway network.

7.2.8 Paragraph 111 of the NPPF states that:

"Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe"

7.2.9 Trip generation forecasts using TRICS data and 2011 Census Journey to Work data have demonstrated that there is a decrease in vehicular trip generation for the proposed uses of the site compared to the existing development. This is because the development is car limited in nature, and the typical demographic of staff and residents are expected to favour travel by public transport, walking, cycling, or flexible working / working from home on certain days of the week. As such, any vehicular impact would be negligible on the surrounding area in terms of highways, traffic, and transportation.

7.2.10 Paragraph 112 of the NPPF states that applications for development should:

- *"give priority to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;*
- *address the needs of people with disabilities and reduced mobility in relation to all modes of transport; and*
- *create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards."*

7.2.11 The proposed development is situated in an accessible location. There is good walking and cycling infrastructure adjacent to the site, and public transport is accessible within an acceptable walking and cycling distance.

7.2.12 The proposed development accords with the general principles of the NPPF.

7.3 National Planning Practice Guidance (NPPG)

7.3.1 In addition to the NPPF, a National Planning Practice Guidance (NPPG) document has also been developed by the Ministry of Housing, Communities & Local Government in 2012, with a revised version in 2018. It brings together planning practice guidance for England and sits alongside the NPPF. Within

this document there is a specific section that clarifies the over-arching principles on Travel Plans, Transport Assessments and Transport Statements. The guidance states that:

“Travel Plans, Transport Assessments and Statements can positively contribute to:

- *Encouraging sustainable travel;*
- *Lessening traffic generation and its detrimental impacts;*
- *Reducing carbon emissions and climate impacts;*
- *Creating accessible, connected, inclusive communities;*
- *Improving health outcomes and quality of life;*
- *Improving road safety; and*
- *Reducing the need for new development to increase existing road capacity or provide new roads.”*

7.3.2 The guidance on Transport Assessments and Statements re-iterates the circumstances in which either document would usually be required. It is clear that a development of the size and nature of this development requires a Transport Statement. It also clarifies the process for establishing a scope for what the documents should contain. The NPPG has been considered in the production of this TS and the accompanying Framework Travel Plan (Document Reference: **80823-CUR-XX-XX-T-TP-00002**).

7.3.3 As outlined above, this TS demonstrates that the site is accessible by active and sustainable modes of travel, and that safe and suitable access can be gained to the development. The development proposals therefore apply the principles set out in the NPPG and will seek to create a sustainable development and make a positive contribution to the local area.

7.4 Manchester Core Strategy (2012 – 2027)

7.4.1 The Manchester Core Strategy promotes similar principles to the NPPF. It contains three specific “Transport” policies, comprising:

- Policy T1 – Sustainable Transport;
- Policy T2 – Accessible Areas of Opportunity and Need; and
- Policy T3 – Strategic Integration.

7.4.2 Policy T1 focuses on sustainable transport and access for all. The accessibility of the site would encourage users of the proposed development to travel by sustainable modes.

7.4.3 Policy T2 of the Manchester Core Strategy states:

“The Council will actively manage the pattern of development to ensure that ... Within the City Centre, provides a level of car parking which reflects the highly accessible nature of the location, as well as the realistic requirements of the users of the development.”

7.4.4 It is considered the lack of proposed parking provision is reflective of the highly accessible nature of the development. The development would benefit from sustainable transport links across the city centre. The Council notes that it *“will take the circumstances of each proposal into account to establish what level of parking is appropriate.”*

7.4.5 Policy T3 is in relation to strategic integration of developments with the sustainable transport network. The proposed development would not prejudice the implementation of any of the strategic integration projects.

7.5 Greater Manchester Transport Strategy 2040

7.5.1 In 2021 TfGM updated the 2040 Vision for Transport to deliver a transport system which enables residents, businesses and visitors in Greater Manchester to travel to a wide range of different destinations and opportunities, and where sustainable transport can be a viable and attractive alternative to the car.

7.5.2 Under Policy 3, the Transport Strategy states that TfGM will “maintain a programme of interventions designed to encourage people to make sustainable journeys. We will support this through journey planning tools and information to encourage travel behaviour change and mode shift, and in order to make the most efficient use of available capacity (particularly during peak periods).” Such interventions comprise:

- *“Reducing the carbon and environmental cost of journeys;*
- *New ways of working which make the best use of the transport network;*
- *Maximising the benefit of new, integrated transport infrastructure and services;*
- *Delivering public health benefits through enabling more active travel;*
- *Supporting town and city centre economic vitality and sustainability;*
- *Improving access to key services and jobs;*
- *Maximising sustainable travel in new developments; and*
- *Becoming more resilient to disruption.”*

7.5.3 The above measures and additional initiatives have also been provided in greater detail in the accompanying Framework Travel Plan (**Document Reference 80823-CUR-XX-XX-T-TP-00002**).

7.5.4 Under Policy 4, TfGM will also “work with developers to ensure that new developments are accessible by sustainable modes, and to reduce transport emissions and impacts on the highway network.” This will be in accordance with the principles of:

- *“Reducing the need to travel;*
- *Reducing the need to travel by car, and the distance travelled;*
- *Maximising accessibility by sustainable modes;*

- *Making the best use of existing infrastructure, particularly through increasing the density of development close to public transport nodes;*
- *Maximising opportunities to provide additional public transport; and*
- *Designing to encourage active travel.”*

7.5.5 It is considered that the development proposals will not adversely impact the transport network, and instead would support the Transport Strategy by enhancing opportunities for sustainable travel by integrating into existing infrastructure.

7.6 St Mary’s Parsonage Strategic Regeneration Framework (SRF)

7.6.1 The proposed development forms a part of the evolving developments which are within the St Mary’s Parsonage Strategic Regeneration Framework (SRF). On 12 February 2020, the Executive endorsed, in principle, the draft SRF and requested that the Strategic Director for Growth and Development undertake a public consultation in relation to it. The public consultation was undertaken between March 2020 to May 2020, and the findings were presented to Committee for endorsement in July 2020. It is now fully endorsed.

7.6.2 The SRF seeks to create a range of new employment and enterprise opportunities, supported by a unique retail and leisure offer and hotel accommodation, to enhance the area’s attractiveness to residents, tourists, shoppers, and visitors.

7.6.3 The SRF area is bound by three prominent routes within the City Centre as shown in **Figure 2.1** earlier: Blackfriars Street and Bridge Street which provide important vehicular routes east-west, connecting Manchester City Centre and Salford; and Deansgate, a principal thoroughfare connecting the northern and southern areas of the City Centre. The key themes identified in the SRF relating to the proposed development are as follows:

- *“To establish Parsonage Gardens as a clearly definable and cohesive part of the City Centre, ... commercially-led mixed use neighbourhood, anchored by high quality public space at its heart and a range of leisure and retail facilities to create a vibrant destination that compliments the wider City Centre;*
- *To fully embrace Manchester’s zero carbon ambitions and builds on the strength of the existing residential and business communities, to deliver jobs and opportunities for all, a place for enterprise as well as innovation and an important driver of inclusive socioeconomic productivity for Manchester;*
- *To build upon its existing asset base, and its positive adjacencies to other parts of the City Centre, to successfully host an eco-system of best in class employment – from global businesses to start ups - and other high quality uses including residential, hotel, retail and leisure;*

- *To be fully integrated and connected into the wider city centre and will draw activity and support the further expansion of the City Centre's quality activity into the area. This will make the most of its positive adjacencies to... Spinningfields, the Primary Retail Area, the Central Business District, and support the growth and enhanced productivity of the City. The aim is to ensure that the full economic potential of the area is realised; and*
- *To have an important focus on maintaining and enhancing the quality of the environment for existing residential and business communities, rebalancing the vehicular access, servicing and operational management arrangements in the area, and a review of car parking provision to ensure that the essential requirements of the City Centre from a functional point of view are properly assessed against value add opportunities that rationalisation would deliver within the area."*

7.6.4 The site would be located within the St Mary's Parsonage area. The neighbourhood benefits from a key interface with Manchester City Centre and towards Salford Central across the River Irwell, and key public transport nodes which could integrate with an enhanced pedestrian and cycling network to achieve high levels of permeability within the city centre and adjacent neighbourhoods.

7.6.5 Specific to Albert Bridge House, the SRF states that:

"At ground level, it would be necessary to undertake substantial remodelling and regrading of surrounding land to address the severance and separation experienced between the existing building and St Mary's Parsonage, which would also require major investment."

"Considering the extensive river frontage that abuts the western edge of the site and the adjacency of the pedestrian footbridge to the north, any future proposals will be expected to explore the feasibility of delivering enhanced connections to what is one of the City's key elements of blue infrastructure. This exercise should include consideration of collaborating with adjacent landowners to explore the potential to create opportunities to create interspersed access to the River through punctured access points. Notwithstanding this aspiration, it is noted that the feasibility and viability of creating stronger connections to the river may be challenging for any future development to progress."

By bringing forward a mixture of uses, including potential for ancillary ground floor retail or leisure uses, the scheme will create conditions for pedestrian activity throughout the day and into the evening, which will not only benefit the vitality of Bridge Street and St Mary's Parsonage, but will also enhance safety and security.

The way in which the development positively contributes to street level environment must be considered holistically in the context of it being bound by Bridge Street and St Mary's Parsonage. It will be particularly important for the future design to deliver active frontages and position key building entrances in locations that animate key routes and areas of public realm. It is also recognised that any high density scheme will have substantial back of house servicing arrangements, which must therefore be designed to minimise operational and visual impacts so far as is practical, including the avoidance of street level

parking. Ultimately, these are detailed design matters that need to be resolved via a robust options appraisal and presented as part of any future planning application.

- 7.6.6 The limited ground level footprint of the proposed buildings opens up the site for pedestrians, allowing nearly unrestricted access across the entire site with far more high-quality public realm than suggested in the SRF and excellent views of the River Irwell from the site and the surrounding area.
- 7.6.7 The SRF also notes that the existing highway would be rebalanced where necessary for a reduction in car parking and reliance on private vehicles in favour of sustainable forms of transport.
- 7.6.8 The proposed development would have very limited car parking, which would act as a deterrent to future residents and staff who might consider driving. The typical demographic of building users is expected to favour travel by public transport, walking, cycling, or flexible working / working from home on certain days of the week, and this would be further encouraged by a series of measures included the accompanying Framework Travel Plan (Document Reference: **80823-CUR-XX-XX-T-TP-00002**).

7.7 Conclusions

- 7.7.1 It is considered that the proposed development is in line with national and local transport policies and guidance. The site is located within an area which has a range of existing local facilities and plenty of sustainable travel choices.

8.0 Summary and Conclusions

8.1 Summary

- 8.1.1 Curtins has been appointed by Oval Real Estate to provide transport and highways advice in relation to a planning application for a proposed office development at Albert Bridge House, off St Mary's Parsonage and Bridge Street in Manchester City Centre.
- 8.1.2 The general scope of works for Albert Bridge House comprises full demolition of the existing office buildings and basement. The existing building is replaced by construction of a new residential building, office building, and publicly accessible ground floors. There will be significant improvements to the public realm within the site to enhance permeability.
- 8.1.3 A review of baseline conditions and highway safety in the vicinity of the site has been undertaken. It is not considered that there is an existing highway safety issue that is likely to be exacerbated by the proposed development.
- 8.1.4 Relevant details of the proposed site layout, access, parking facilities, and servicing arrangements have been provided.
- 8.1.5 The site is accessible by sustainable modes of transport. The surrounding area exhibits good levels of pedestrian and cycling infrastructure, and there are several public transport opportunities within acceptable walking distance of the site.
- 8.1.6 Trip generation forecasts using TRICS data and 2011 Census Journey to Work data have demonstrated that there is a decrease in vehicular trip generation for the proposed uses of the site compared to the existing development. This is because the development is car limited in nature, and the typical demographic of staff and residents are expected to favour travel by public transport, walking, cycling, or flexible working / working from home on certain days of the week. As such, any vehicular impact would be negligible on the surrounding area in terms of highways, traffic, and transportation.
- 8.1.7 Additionally, measures are proposed in the accompanying Framework Travel Plan to increase the level of walking, cycling and public transport use to and from the site, and to reduce reliance on the private car.
- 8.1.8 A review of relevant local and national transport planning guidance has been undertaken. It is considered that the proposed development conforms with such policy.

8.2 Conclusions

- 8.2.1 From a traffic and transportation perspective there are no reasons why the development proposals should not be granted planning approval.

Plans



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Project:
ALBERT BRIDGE HOUSE - MANCHESTER

Status:
PRELIMINARY

Drg Title:
SITE LOCATION
REGIONAL VIEW

Drawn By: JM Checked By: AF

Designed By: JM Date: 20/04/22

Scale: NTS

Project No: Originator: Volume: Level: Type: Role: Category / Number: Rev:

80823 - CUR - 00 - XX - D - TP - 06001 - P01



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Project:
ALBERT BRIDGE HOUSE - MANCHESTER

Status:
PRELIMINARY

Drg Title:
SITE LOCATION
LOCAL VIEW

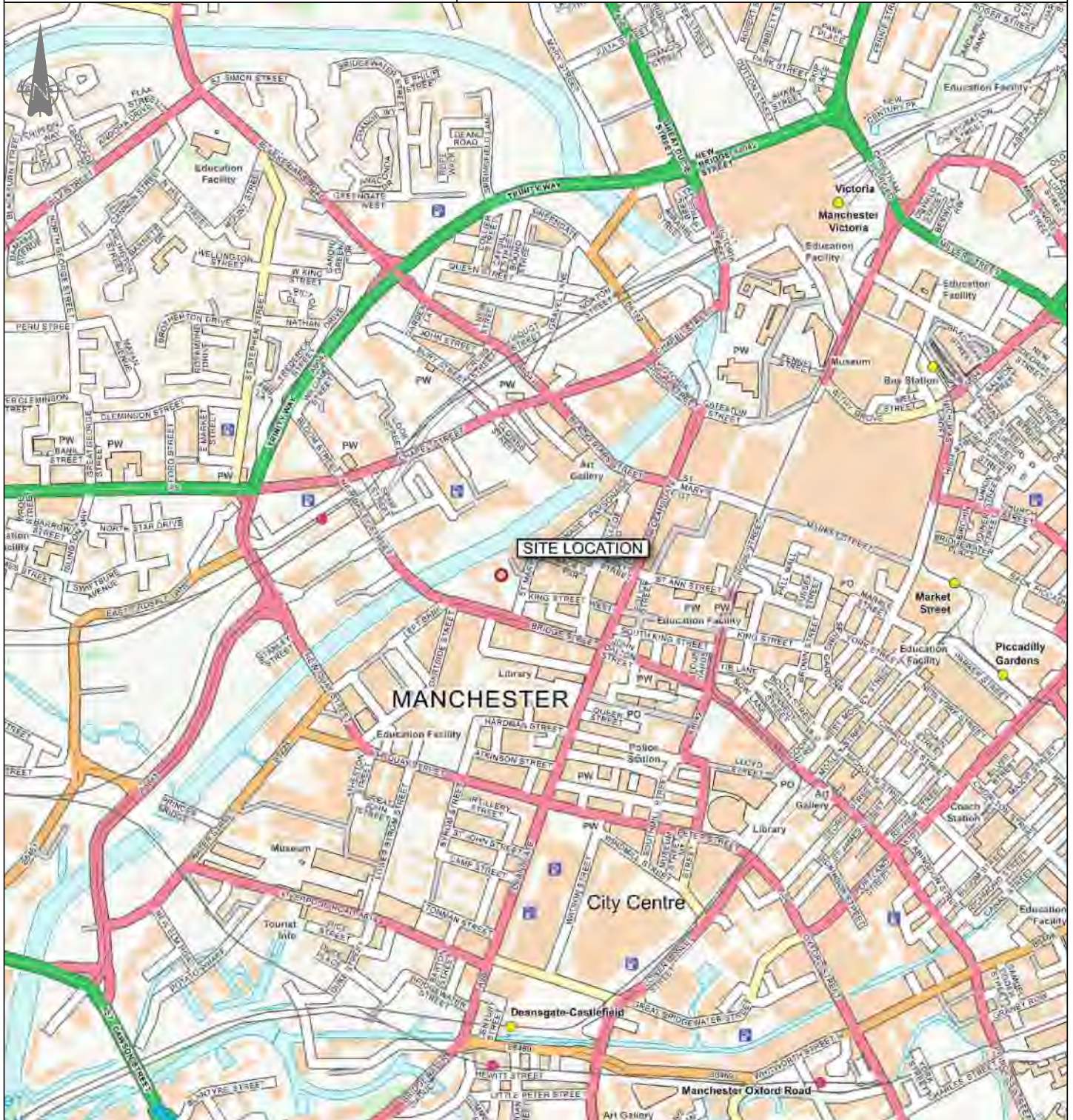
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Designed By: JM Date: 20/04/22

Scale: NTS

Project No: Originator: Volume: Level: Type: Role: Category / Number: Rev:

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Project:
ALBERT BRIDGE HOUSE - MANCHESTER

Status:
PRELIMINARY

Drg Title:
ACCESSIBILITY
INDICATIVE WALKING CATCHMENT

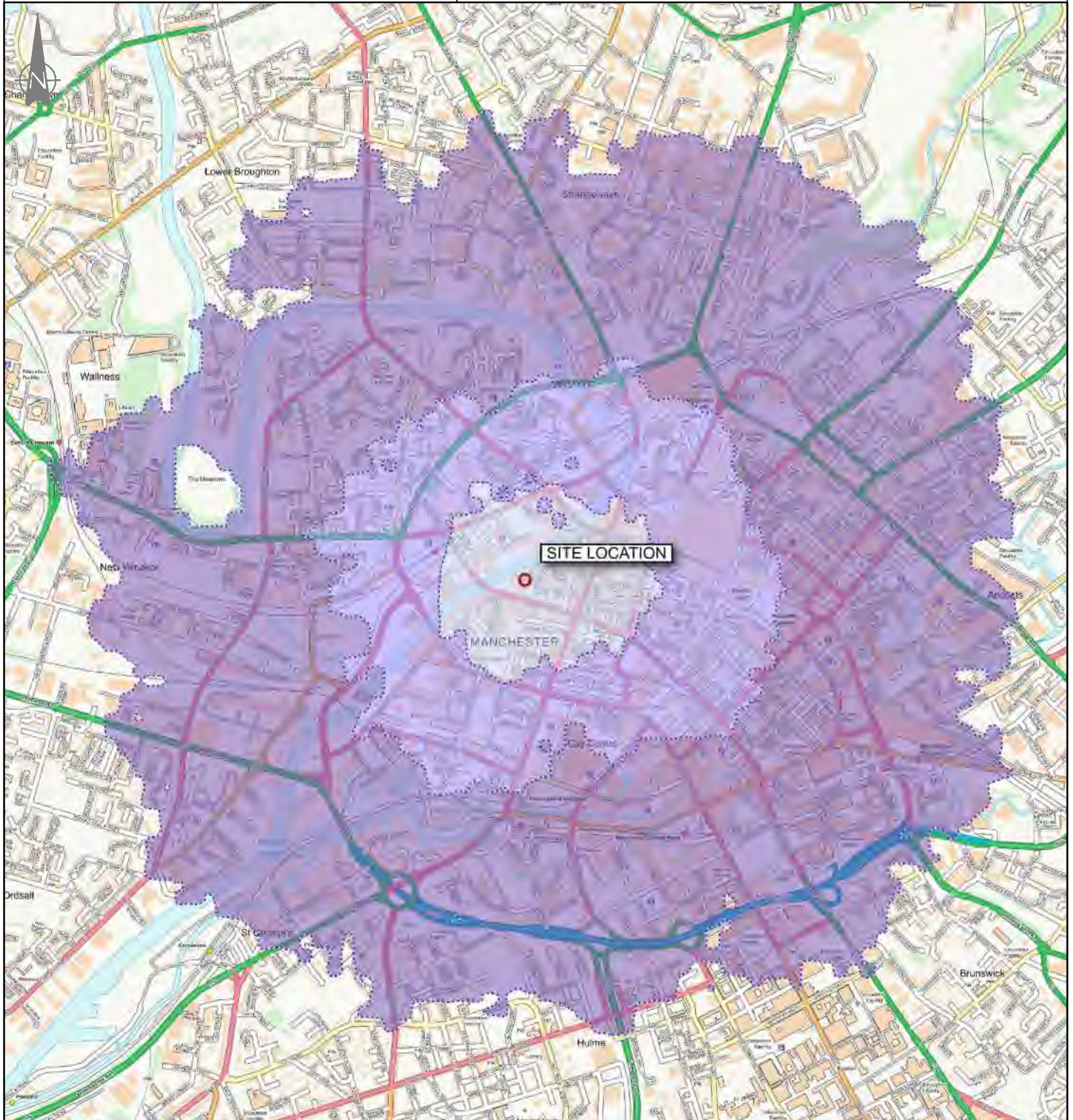
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Designed By: JM Date: 20/04/22

Scale: NTS

Project No: Originator: Volume: Level: Type: Role: Category / Number: Rev:

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KEY: Site

Walking Catchment:

- 500m
- 1000m
- 2000m

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Project:
ALBERT BRIDGE HOUSE - MANCHESTER

Drg Title:
ACCESSIBILITY
INDICATIVE CYCLE CATCHMENT

Status:
PRELIMINARY

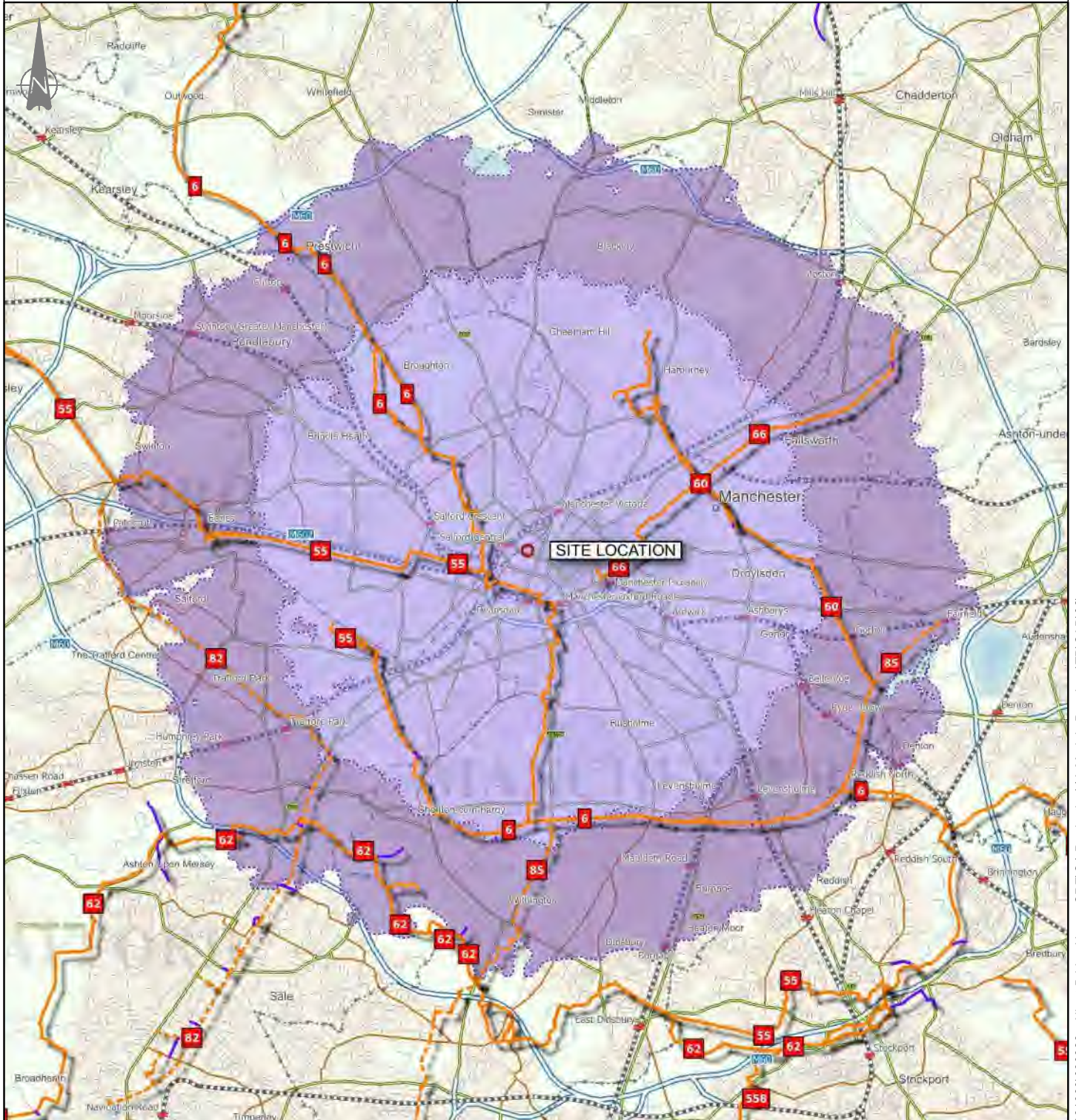
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Designed By: JM Date: 20/04/22

Scale: NTS

Project No: Originator: Volume: Level: Type: Role: Category / Number: Rev:

80823 - CUR - 00 - XX - D - TP - 06004 - P01



KEY:

Site

Cycle Catchment:

5500m

8000m

National Cycle Network:

Route on National Cycle Network

Route on Regional Cycle Network

Route not on Cycle Network

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Project:
ALBERT BRIDGE HOUSE - MANCHESTER

Status:
PRELIMINARY

Drg Title:
ACCESSIBILITY
INDICATIVE PUBLIC TRANSPORT CATCHMENT
INBOUND AM PEAK

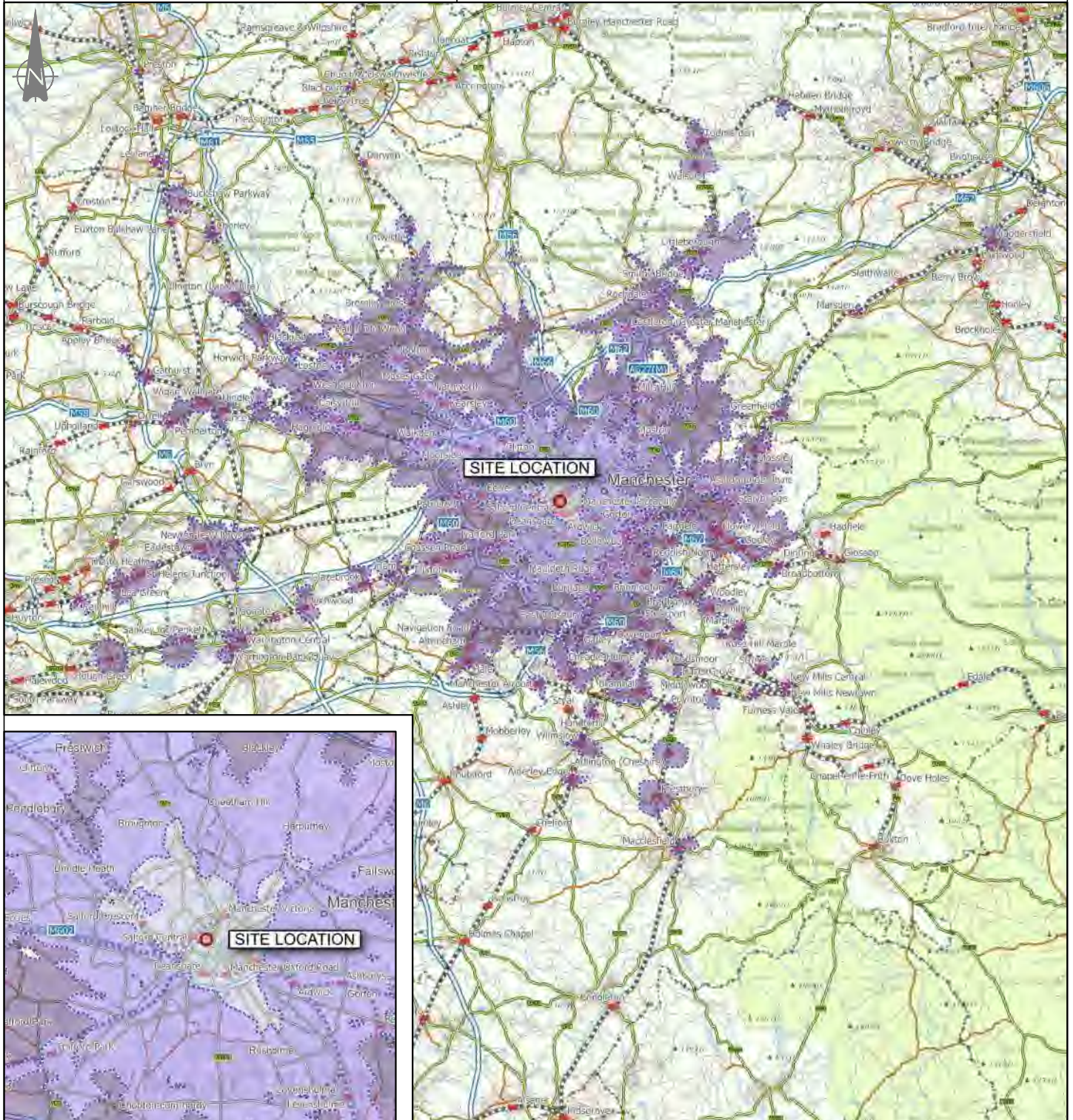
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Designed By: JM Date: 20/04/22

Scale: NTS

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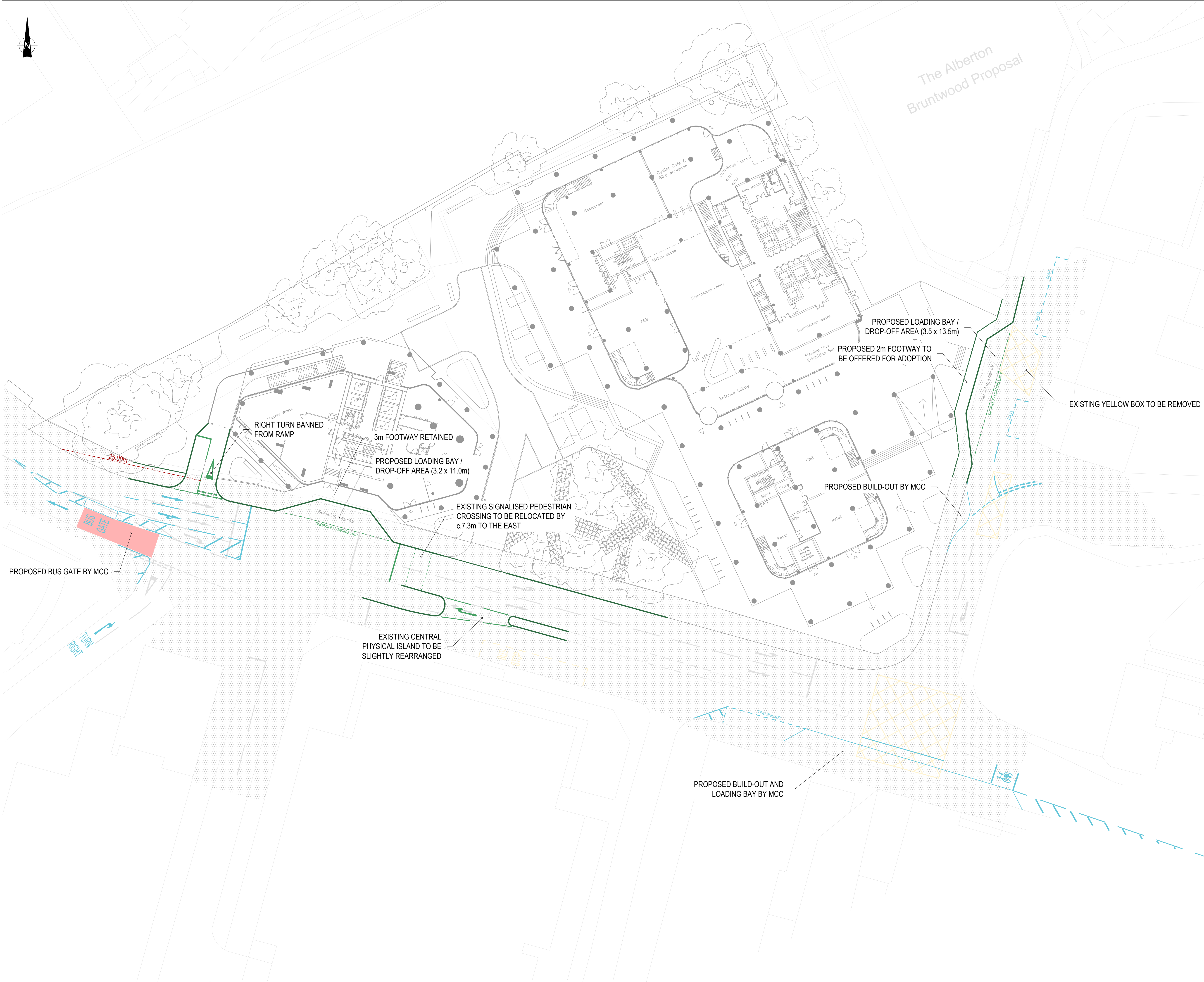
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KEY: Site Public Transport Catchment:
 20 minutes
 40 minutes
 60 minutes

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Drawings



GENERAL NOTES:	
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- KEY: MCC HIGHWAYS PLANNED IMPROVEMENTS
 PROPOSED RAISED KERB
 PROPOSED FLUSH KERB / BACK OF FOOTWAY
 PROPOSED ROAD MARKINGS
 VISIBILITY SPLAYS (20mph - MIS)

KEY: MCC HIGHWAYS PLANNED IMPROVEMENTS
 PROPOSED RAISED KERB
 PROPOSED FLUSH KERB / BACK OF FOOTWAY
 PROPOSED ROAD MARKINGS
 VISIBILITY SPLAYS (20mph - MIS)

 **Curtins**

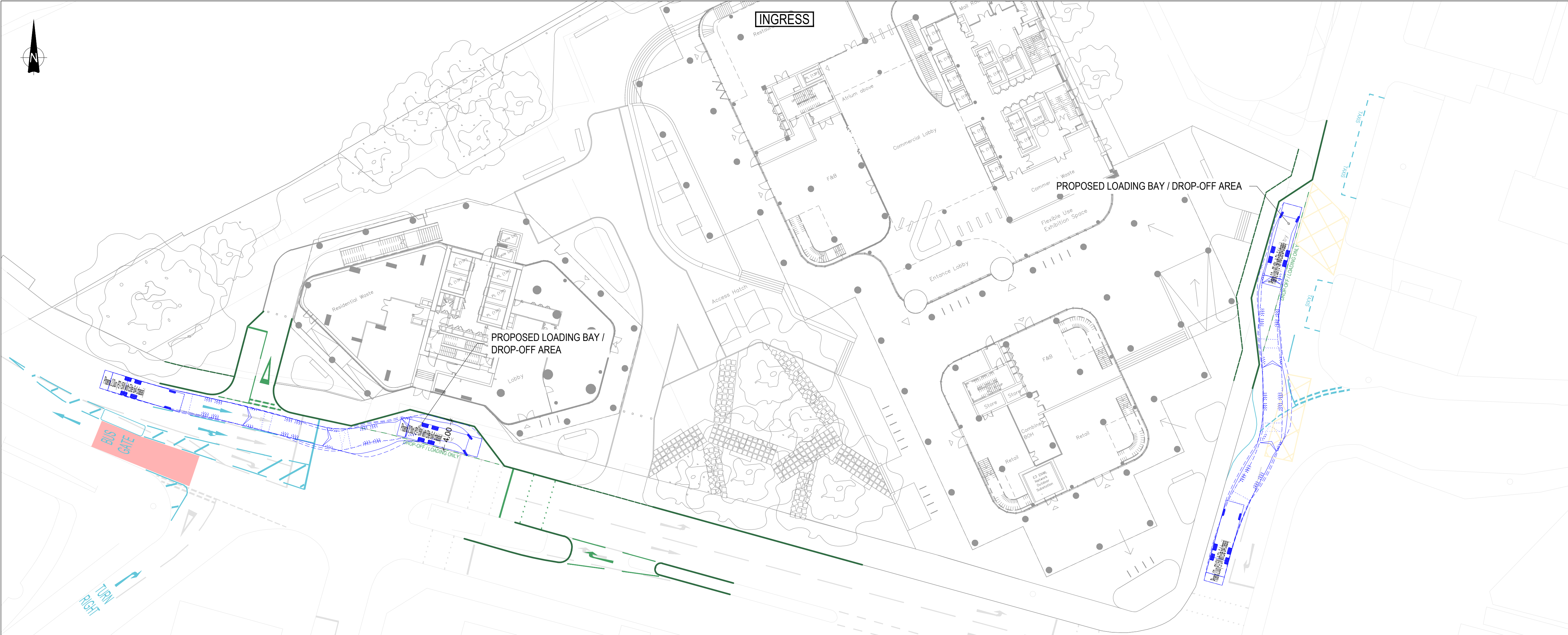
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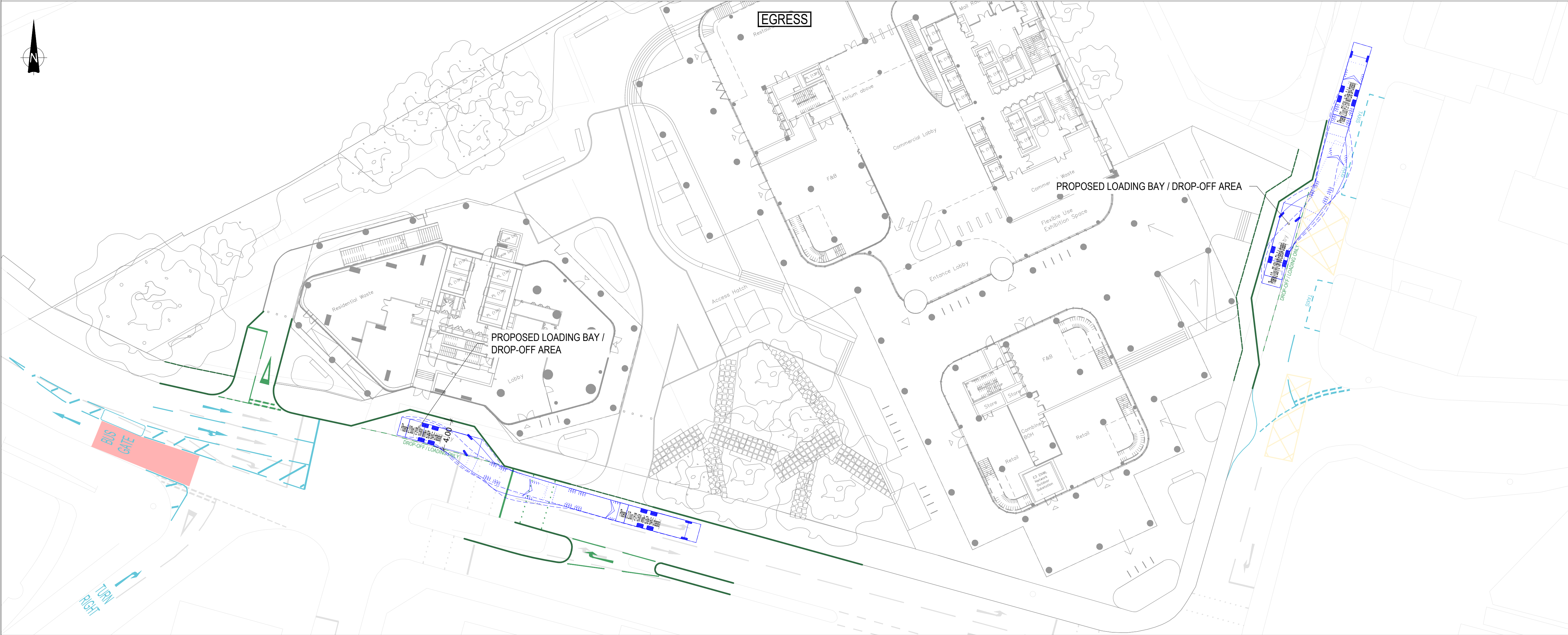
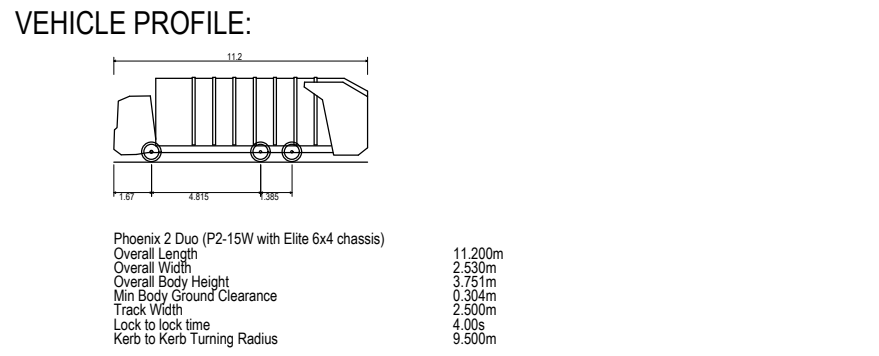
Project: ALBERT BRIDGE HOUSE - MANCHESTER

PROPOSED ACCESS ARRANGEMENT

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Scale: 1:300							
Project No:	Originator:	Volume:	Level:	Type:	Role:	Category / Number:	Rev:
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- KEY:**
- PROPOSED RAISED KERB
 - PROPOSED FLUSH KERB / BACK OF FOOTWAY
 - PROPOSED ROAD MARKINGS



P04	Layout updated	01/12/22	DD	AV
P03	Layout updated	28/07/22	DD	AV
P02	Layout updated	23/03/22	DD	AV
Rev:	Description:	Date:	By:	Chkd:

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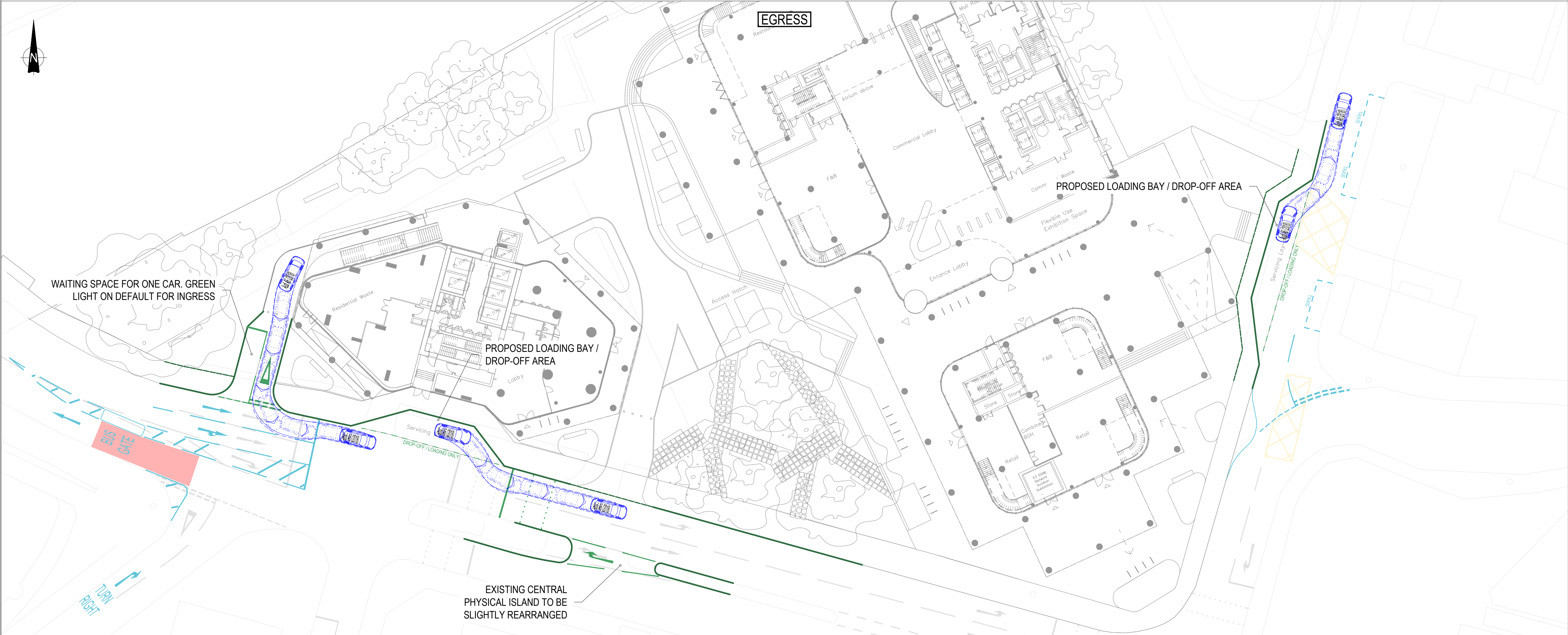
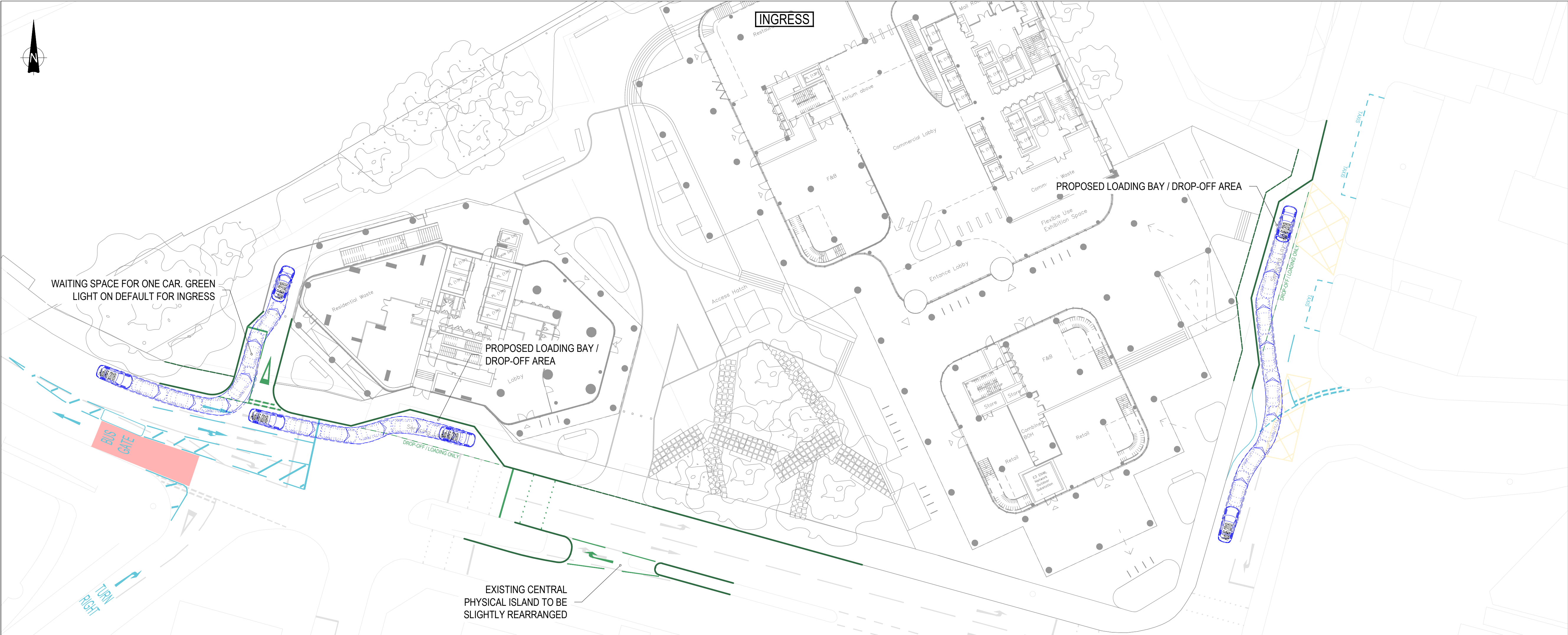
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Status: **PRELIMINARY**

Project: **ALBERT BRIDGE HOUSE - MANCHESTER**

Orig Title: **SWEPT PATH ANALYSIS
11.2m REFUSE VEHICLE**

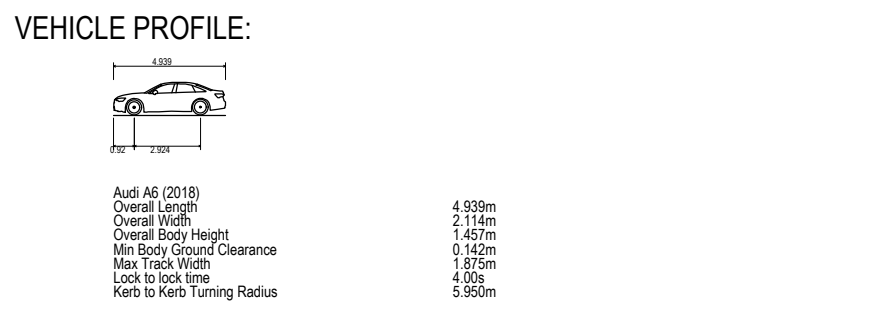
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Project No:	Originator:	Volume:	Level:	Type:	Role:	Category / Number:	Rev:
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KEY:

- PROPOSED RAISED KERB
- PROPOSED FLUSH KERB / BACK OF FOOTWAY
- PROPOSED ROAD MARKINGS



P03	Layout updated	01/12/22	DD	AV
P02	Layout updated	23/03/22	DD	AV
Rev:	Description:	Date:	By:	Chkd:

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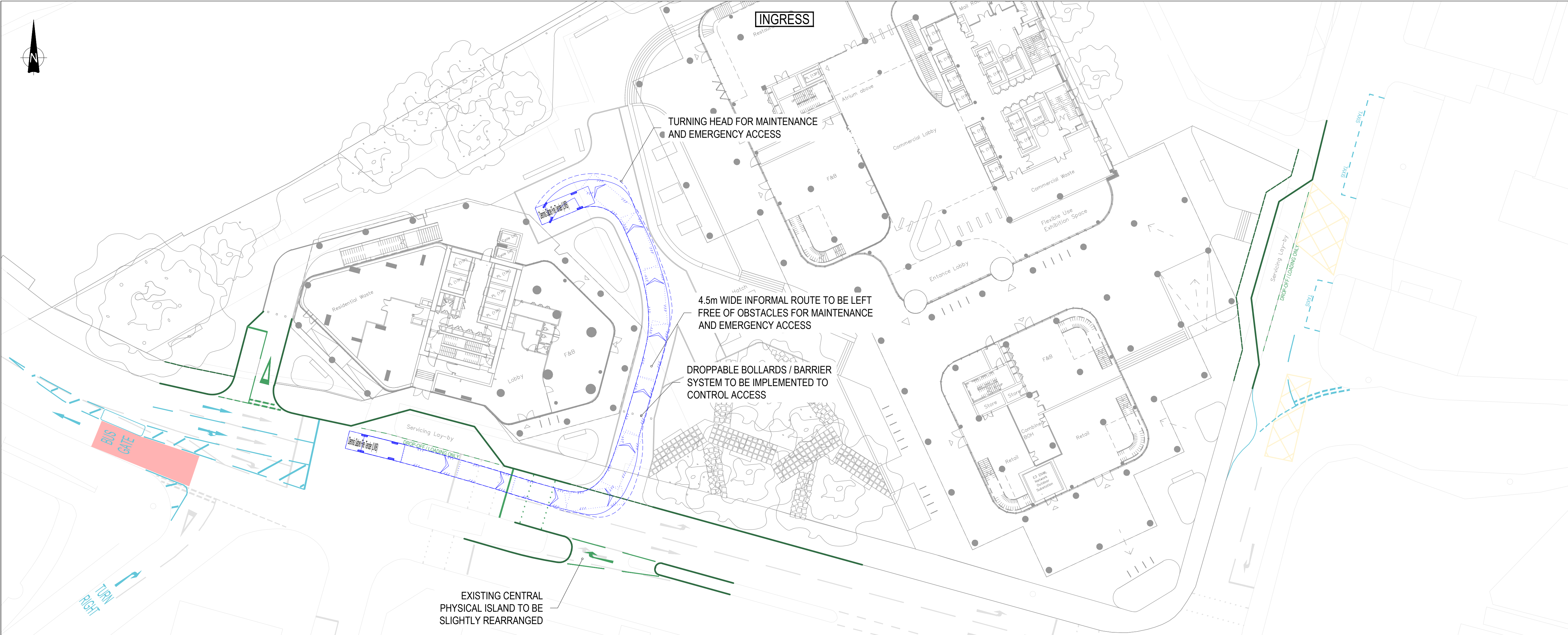
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Status: **PRELIMINARY**

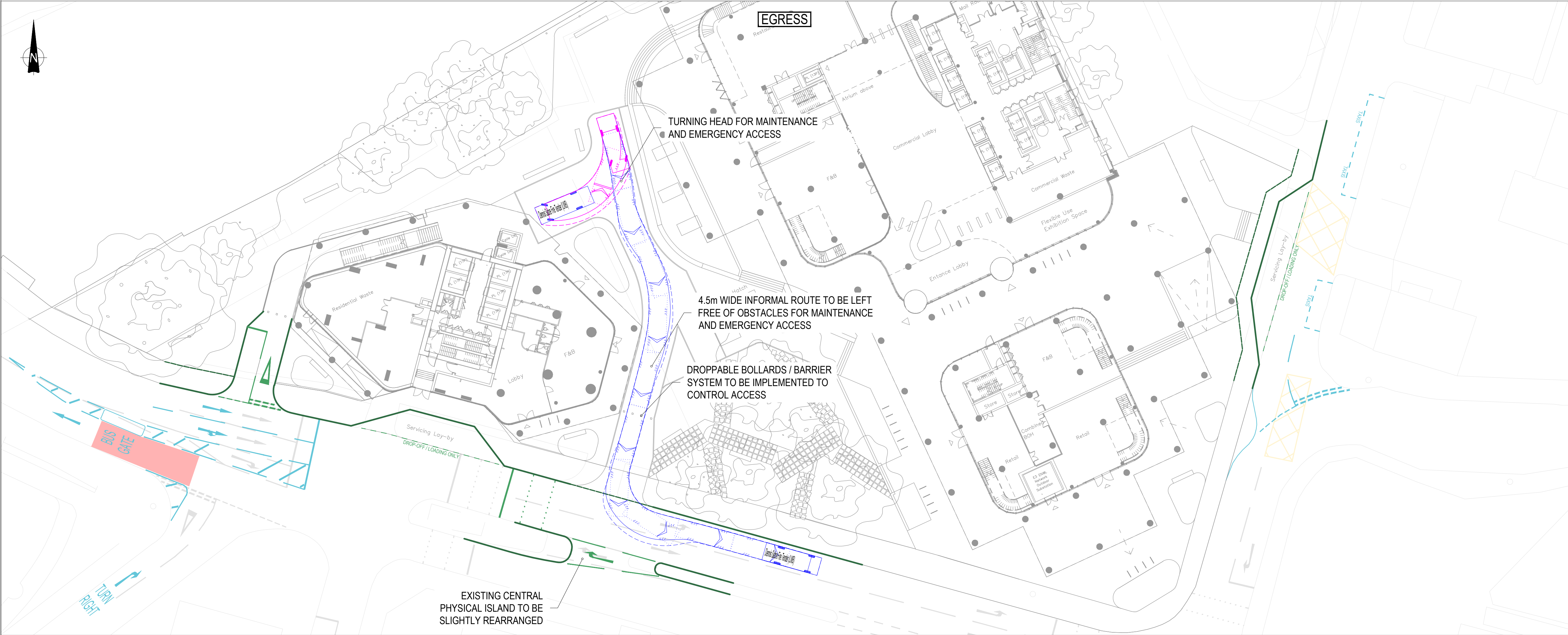
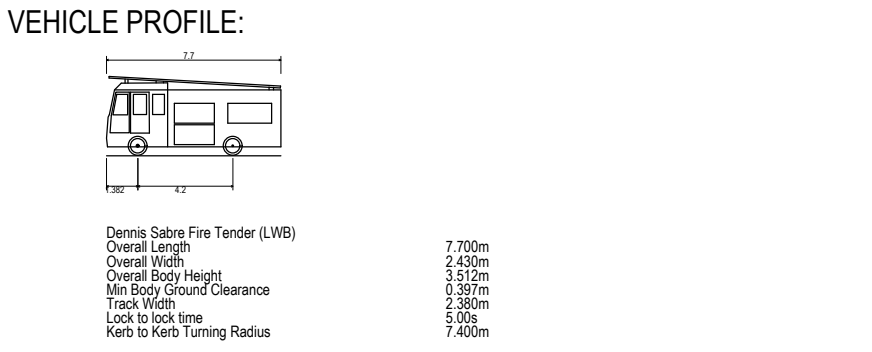
Project: **ALBERT BRIDGE HOUSE - MANCHESTER**

Orig Title: **SWEPT PATH ANALYSIS
LARGE CAR
GROUND FLOOR**

Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	22/02/22	DD	DD	AV
Scale:	1:300			
Project No:	Originator:	Volume:	Level:	Type:
80823	- CUR	- XX	- 00	- D - TP -
05002	- P03			



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 - MCC HIGHWAYS PLANNED IMPROVEMENTS BASED ON DRAWING REF.: '0412-SEW-ZZ-ZZ-SK-A-SK0068'
- KEY:**
- PROPOSED RAISED KERB
 - PROPOSED FLUSH KERB / BACK OF FOOTWAY
 - PROPOSED ROAD MARKINGS



P03	Layout updated	01/12/22	DD	AV
P02	Layout updated	23/03/22	DD	AV
Rev:	Description:	Date:	By:	Chkd:

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Project: ALBERT BRIDGE HOUSE - MANCHESTER

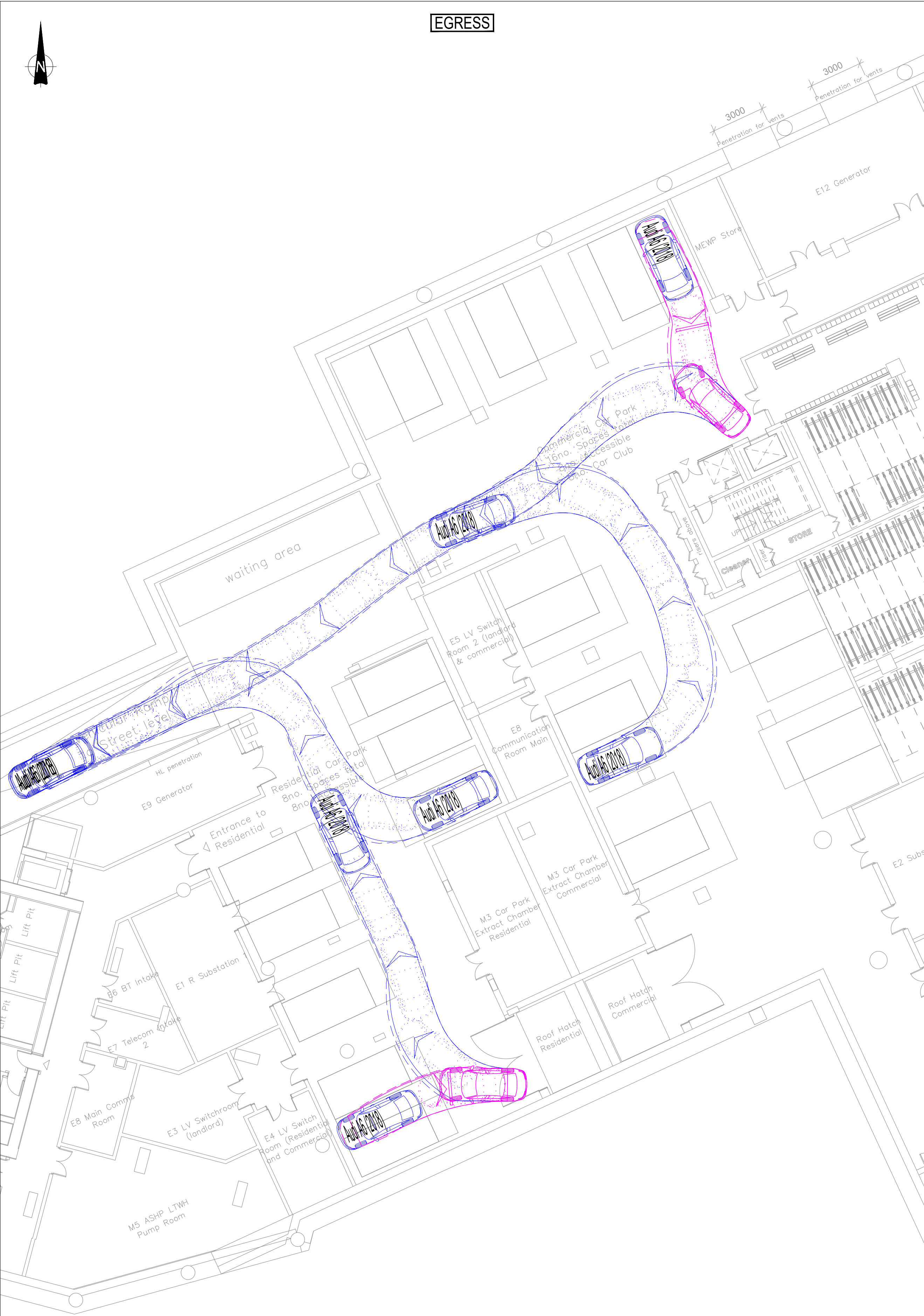
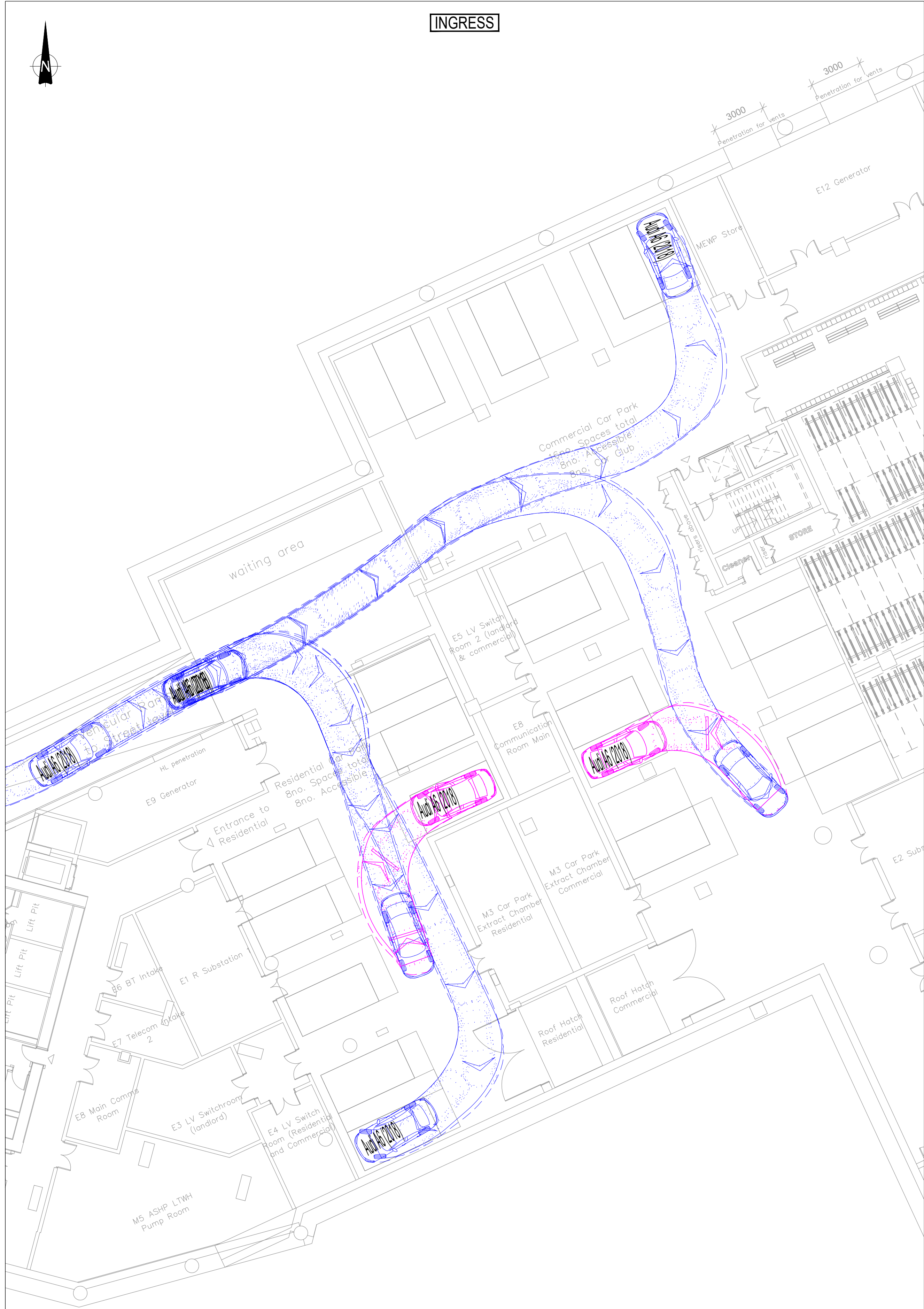
Orig Title: SWEPT PATH ANALYSIS
7.7m FIRE TENDER

Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	22/02/22	DD	DD	AV

Scale: 1:300

Project No:	Originator:	Volume:	Level:	Type:	Role:	Category / Number:	Rev:
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VEHICLE PROFILE:

Audi A6 (2016)	4.500m
Overall Length	4.500m
Overall Width	2.114m
Overall Body Height	1.425m
Min Body Ground Clearance	1.143m
Max Track Width	1.875m
Lock to lock time	4.000m
Kerb to Kerb Turning Radius	8.500m

P04	Layout updated	01/12/22	DD	AV
P03	Layout updated	15/08/22	DD	AV
P02	Layout updated	27/06/22	DD	AV
Rev:	Description:	Date:	By:	Chkd:

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Project: ALBERT BRIDGE HOUSE - MANCHESTER

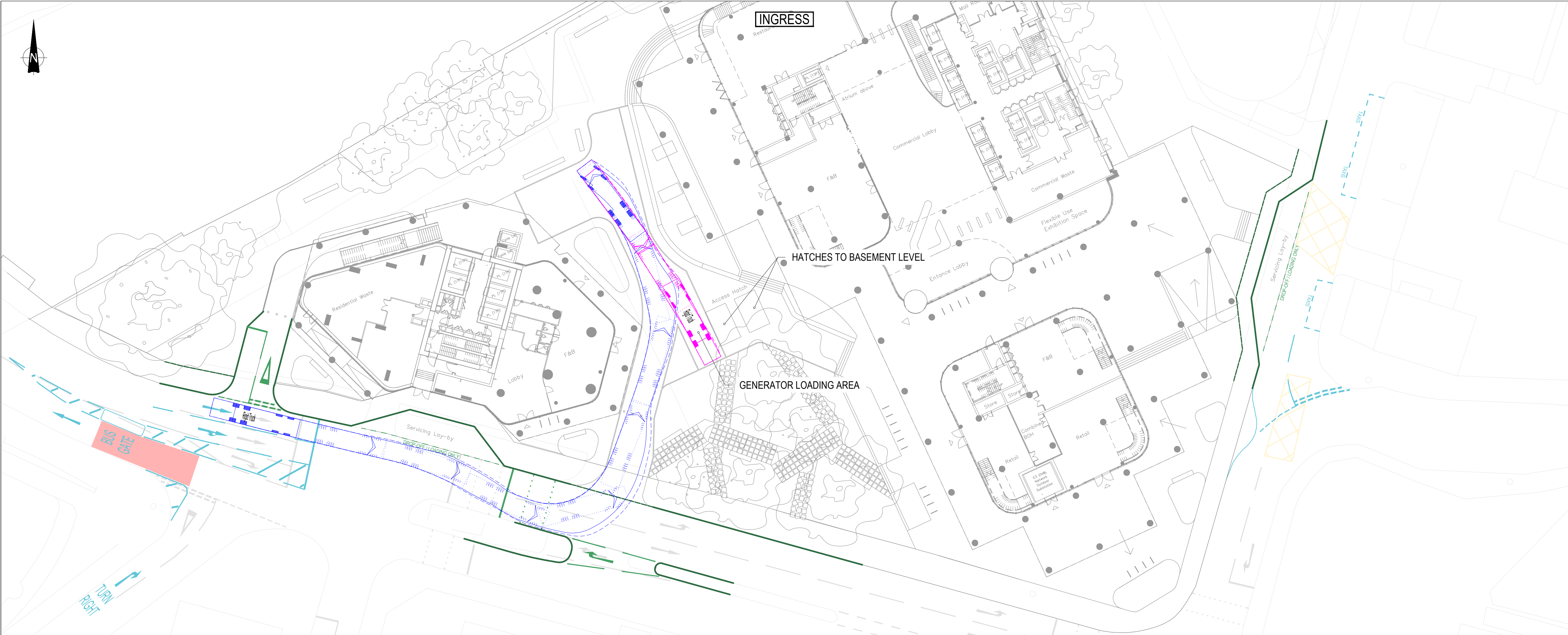
Orig Title: SWEPT PATH ANALYSIS
LARGE CAR
BASEMENT CAR PARK

Size:	Date:	Drawn By:	Designed By:	Checked By:
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Scale: 1:150

Project No:	Originator:	Volume:	Level:	Type:	Role:	Category / Number:	Rev:
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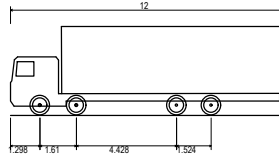


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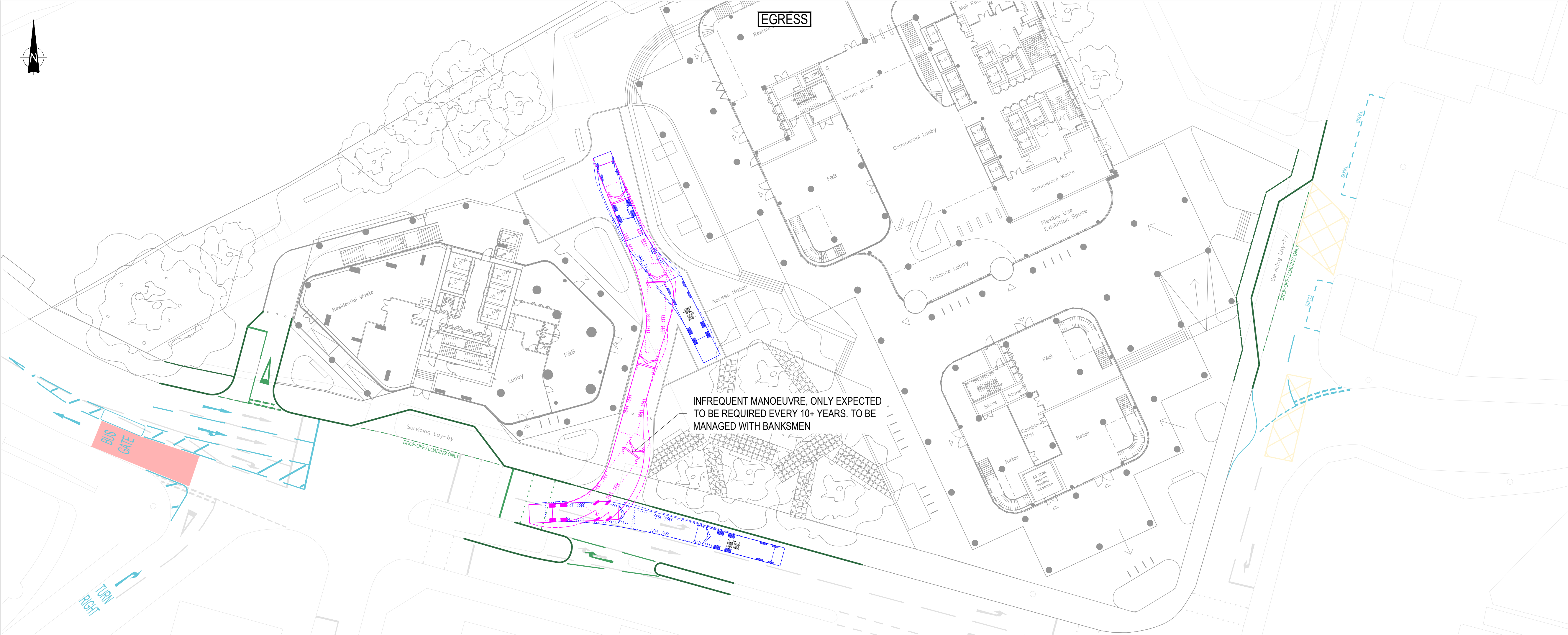
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- KEY:
- PROPOSED RAISED KERB
 - PROPOSED FLUSH KERB / BACK OF FOOTWAY
 - PROPOSED ROAD MARKINGS

VEHICLE PROFILE:



Rigid Truck
Overall Length 12.000m
Overall Width 2.550m
Overall Body Height 3.550m
Min Body Ground Clearance 0.410m
Track Width 2.410m
Lock to Lock Spine 6.000m
Kerb to Kerb Turning Radius 11.900m



EGRESS

INFREQUENT MANOEUVRE, ONLY EXPECTED TO BE REQUIRED EVERY 10+ YEARS. TO BE MANAGED WITH BANKSMEN

P02	Layout updated	01/12/22	DD	AV
Rev:	Description:	Date:	By:	Chkd:



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Status: PRELIMINARY

Project: ALBERT BRIDGE HOUSE - MANCHESTER

Orig Title: SWEPT PATH ANALYSIS
12m RIGID HGV

Size:	Date:	Drawn By:	Designed By:	Checked By:			
A1	28/07/22	DD	DD	AV			
Scale: 1:300							
Project No:	Originator:	Volume:	Level:	Type:	Role:	Category / Number:	Rev:
80823 - CUR - XX - 00 - D - TP- 05005 - P02							

Appendix A – Proposed Site Layout



General Notes

No implied licence exists. This drawing should not be used to calculate areas for the purposes of valuation.
Do not scale this drawing for construction purposes. All dimensions to be checked on site by the contractor and such dimensions to be their responsibility.
All work must comply with relevant British Standards and Building Regulations requirements. Drawing errors and omissions to be reported to the architect.

Notes

Site Boundaries

Application Site Red Line Boundary

Use Classes

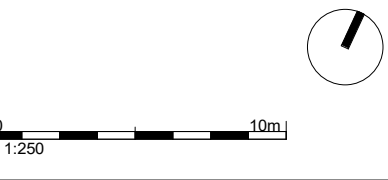
- E (a, b, c) Retail/ Restaurant/ Cafe
- E (g) Office
- C3 Residential
- Suis Generis

Residential Units

- 1B2P
- 2B3P
- 2B4P
- 3B4P
- 3B6P

Refer to Landscape GA drawings for hard landscape:
0412-SEW-ZZ-ZR-DR-L-PL0100

For soft landscape:
0412-SEW-ZZ-ZZ-DR-L-PL0101



Key Plan



PLANNING

Project No. 0412

Project Name

Albert Bridge House

Drawing Title

GA Plan - Level 00

Client Oval Real Estate

Scale 1 : 250

Date 29/11/22

Drawn by DB

Checked by SEW

Rev	Date	Reason	Chk
0	29/11/22	Issue for Planning	SEW

Drawing Number	Rev
0412-SEW-ZZ-00-DR-A-PL1000	0

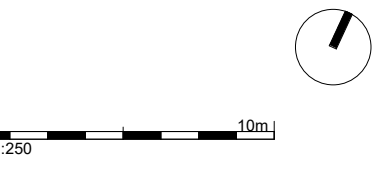
no implied licence exists. This drawing should not be used to calculate areas for the purposes of valuation.

Do not scale this drawing for construction purposes. All dimensions to be checked on site by the contractor and such dimensions to be their responsibility.

All work must comply with relevant British Standards and Building Regulations requirements. Drawing errors and omissions to be reported to the architect.

ey

-  Application Site Red Line Boundary
-  Building footprint above
-  Residential Plant
-  Office Plant
-  Sewer
- TPO Root Protection Zone



A diagram showing two polygons, A and B, with a red line representing a boundary or path around them. Polygon A is a small, irregular shape on the left. Polygon B is a larger, more complex shape on the right. A red line starts at the top left, goes around the left side of A, then around the bottom and right side of B, and finally goes back to the top left, enclosing both polygons.



Brewhouse Yard
London, EC1V 4JQ
regretwest.com
(0) 20 7549 1730

Project No. 0412

Project No. 0412

Project Name

Robert Bridge House

Drawing Title

tailed Application

Plan - Sitewide Basements

ent Oval Re

ale 1 : 250

te 29/11/22

awn by EB

	29/11/22	Issue for Planning	SEW
ev	Date	Reason	Chk

Drawing Number	Rev
112-SEW-ZZ-B2-DR-A-PL0999	0

Appendix B – TRICS Output

Calculation Reference: AUDIT-148301-220824-0817

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST	
	BD BEDFORDSHIRE	3 days
	HC HAMPSHIRE	1 days
	HF HERTFORDSHIRE	1 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
	SF SUFFOLK	1 days
09	NORTH	
	CB CUMBRIA	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: 24 to 175 (units:)
 Range Selected by User: 6 to 184 (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: 01/01/14 to 15/10/21

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:

Tuesday	4 days
Thursday	4 days

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

Selected survey types:

Manual count	8 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	1
Edge of Town Centre	7

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:

Residential Zone	2
Built-Up Zone	5
No Sub Category	1

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.

Secondary Filtering selection:

Use Class:

C3 8 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

10,001 to 15,000	1 days
15,001 to 20,000	1 days
25,001 to 50,000	6 days

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

Population within 5 miles:

50,001 to 75,000	4 days
75,001 to 100,000	1 days
125,001 to 250,000	1 days
250,001 to 500,000	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	6 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	2 days
No	6 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	8 days
-----------------	--------

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

LIST OF SITES relevant to selection parameters

1	BD-03-C-01	BLOCKS OF FLATS	BEDFORDSHIRE
	WING ROAD		
	LEIGHTON BUZZARD		
	LINSLADE		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	175	
	Survey date: TUESDAY	15/05/18	Survey Type: MANUAL
2	BD-03-C-02	BLOCKS OF FLATS	BEDFORDSHIRE
	STANBRIDGE ROAD		
	LEIGHTON BUZZARD		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	62	
	Survey date: TUESDAY	15/05/18	Survey Type: MANUAL
3	BD-03-C-03	BLOCKS OF FLATS	BEDFORDSHIRE
	COURT DRIVE		
	DUNSTABLE		
	Edge of Town Centre		
	No Sub Category		
	Total No of Dwellings:	146	
	Survey date: TUESDAY	15/05/18	Survey Type: MANUAL
4	CB-03-C-01	BLOCK OF FLATS	CUMBRIA
	KING STREET		
	CARLISLE		
	Town Centre		
	Built-Up Zone		
	Total No of Dwellings:	40	
	Survey date: THURSDAY	12/06/14	Survey Type: MANUAL
5	HC-03-C-01	BLOCKS OF FLATS	HAMPSHIRE
	CROSS STREET		
	PORTSMOUTH		
	Edge of Town Centre		
	Built-Up Zone		
	Total No of Dwellings:	90	
	Survey date: TUESDAY	05/06/18	Survey Type: MANUAL
6	HF-03-C-03	BLOCK OF FLATS	HERTFORDSHIRE
	SHENLEY ROAD		
	BOREHAMWOOD		
	Edge of Town Centre		
	Built-Up Zone		
	Total No of Dwellings:	91	
	Survey date: THURSDAY	14/11/19	Survey Type: MANUAL
7	NF-03-C-01	BLOCKS OF FLATS	NORFOLK
	PAGE STAIR LANE		
	KING'S LYNN		
	Edge of Town Centre		
	Built-Up Zone		
	Total No of Dwellings:	51	
	Survey date: THURSDAY	11/12/14	Survey Type: MANUAL
8	SF-03-C-01	BLOCKS OF FLATS	SUFFOLK
	STATION HILL		
	BURY ST EDMUNDS		
	Edge of Town Centre		
	Built-Up Zone		
	Total No of Dwellings:	85	
	Survey date: THURSDAY	18/12/14	Survey Type: MANUAL

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.

MANUALLY DESELECTED SURVEYS

Site Ref	Survey Date	Reason for Deselection
MS-03-C-04	12/04/21	Covid-19 restrictions
SF-03-C-05	23/06/21	Covid-19 restrictions

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period
 Total People to Total Vehicles ratio (all time periods and directions): 2.40

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									
07:00 - 08:00	8	93	0.046	8	93	0.174	8	93	0.220
08:00 - 09:00	8	93	0.049	8	93	0.188	8	93	0.237
09:00 - 10:00	8	93	0.059	8	93	0.068	8	93	0.127
10:00 - 11:00	8	93	0.061	8	93	0.077	8	93	0.138
11:00 - 12:00	8	93	0.066	8	93	0.080	8	93	0.146
12:00 - 13:00	8	93	0.099	8	93	0.096	8	93	0.195
13:00 - 14:00	8	93	0.073	8	93	0.077	8	93	0.150
14:00 - 15:00	8	93	0.061	8	93	0.064	8	93	0.125
15:00 - 16:00	8	93	0.084	8	93	0.059	8	93	0.143
16:00 - 17:00	8	93	0.130	8	93	0.066	8	93	0.196
17:00 - 18:00	8	93	0.184	8	93	0.100	8	93	0.284
18:00 - 19:00	8	93	0.208	8	93	0.114	8	93	0.322
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.120			1.163			2.283

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:	24 - 175 (units:)
Survey date range:	01/01/14 - 15/10/21
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	2
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 shown. 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

MULTI-MODAL 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									
07:00 - 08:00	8	93	0.003	8	93	0.004	8	93	0.007
08:00 - 09:00	8	93	0.004	8	93	0.004	8	93	0.008
09:00 - 10:00	8	93	0.001	8	93	0.003	8	93	0.004
10:00 - 11:00	8	93	0.001	8	93	0.001	8	93	0.002
11:00 - 12:00	8	93	0.004	8	93	0.004	8	93	0.008
12:00 - 13:00	8	93	0.008	8	93	0.008	8	93	0.016
13:00 - 14:00	8	93	0.000	8	93	0.000	8	93	0.000
14:00 - 15:00	8	93	0.000	8	93	0.000	8	93	0.000
15:00 - 16:00	8	93	0.001	8	93	0.001	8	93	0.002
16:00 - 17:00	8	93	0.005	8	93	0.004	8	93	0.009
17:00 - 18:00	8	93	0.004	8	93	0.003	8	93	0.007
18:00 - 19:00	8	93	0.003	8	93	0.003	8	93	0.006
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.034			0.035			0.069

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

MULTI-MODAL 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									
07:00 - 08:00	8	93	0.004	8	93	0.004	8	93	0.008
08:00 - 09:00	8	93	0.000	8	93	0.000	8	93	0.000
09:00 - 10:00	8	93	0.001	8	93	0.001	8	93	0.002
10:00 - 11:00	8	93	0.000	8	93	0.000	8	93	0.000
11:00 - 12:00	8	93	0.001	8	93	0.000	8	93	0.001
12:00 - 13:00	8	93	0.001	8	93	0.003	8	93	0.004
13:00 - 14:00	8	93	0.001	8	93	0.001	8	93	0.002
14:00 - 15:00	8	93	0.000	8	93	0.000	8	93	0.000
15:00 - 16:00	8	93	0.000	8	93	0.000	8	93	0.000
16:00 - 17:00	8	93	0.000	8	93	0.000	8	93	0.000
17:00 - 18:00	8	93	0.000	8	93	0.000	8	93	0.000
18:00 - 19:00	8	93	0.000	8	93	0.000	8	93	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.008			0.009			0.017

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

MULTI-MODAL 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									
07:00 - 08:00	8	93	0.001	8	93	0.008	8	93	0.009
08:00 - 09:00	8	93	0.003	8	93	0.012	8	93	0.015
09:00 - 10:00	8	93	0.001	8	93	0.000	8	93	0.001
10:00 - 11:00	8	93	0.003	8	93	0.001	8	93	0.004
11:00 - 12:00	8	93	0.005	8	93	0.005	8	93	0.010
12:00 - 13:00	8	93	0.000	8	93	0.001	8	93	0.001
13:00 - 14:00	8	93	0.003	8	93	0.001	8	93	0.004
14:00 - 15:00	8	93	0.004	8	93	0.001	8	93	0.005
15:00 - 16:00	8	93	0.005	8	93	0.001	8	93	0.006
16:00 - 17:00	8	93	0.001	8	93	0.001	8	93	0.002
17:00 - 18:00	8	93	0.008	8	93	0.004	8	93	0.012
18:00 - 19:00	8	93	0.003	8	93	0.000	8	93	0.003
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.037			0.035			0.072

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

MULTI-MODAL VEHICLE OCCUPANTS

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									
07:00 - 08:00	8	93	0.055	8	93	0.255	8	93	0.310
08:00 - 09:00	8	93	0.059	8	93	0.324	8	93	0.383
09:00 - 10:00	8	93	0.073	8	93	0.086	8	93	0.159
10:00 - 11:00	8	93	0.077	8	93	0.108	8	93	0.185
11:00 - 12:00	8	93	0.089	8	93	0.108	8	93	0.197
12:00 - 13:00	8	93	0.134	8	93	0.149	8	93	0.283
13:00 - 14:00	8	93	0.111	8	93	0.093	8	93	0.204
14:00 - 15:00	8	93	0.072	8	93	0.089	8	93	0.161
15:00 - 16:00	8	93	0.128	8	93	0.084	8	93	0.212
16:00 - 17:00	8	93	0.208	8	93	0.084	8	93	0.292
17:00 - 18:00	8	93	0.285	8	93	0.135	8	93	0.420
18:00 - 19:00	8	93	0.350	8	93	0.151	8	93	0.501
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.641			1.666			3.307

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

MULTI-MODAL PEDESTRIANS

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									
07:00 - 08:00	8	93	0.018	8	93	0.069	8	93	0.087
08:00 - 09:00	8	93	0.024	8	93	0.088	8	93	0.112
09:00 - 10:00	8	93	0.042	8	93	0.053	8	93	0.095
10:00 - 11:00	8	93	0.059	8	93	0.043	8	93	0.102
11:00 - 12:00	8	93	0.031	8	93	0.038	8	93	0.069
12:00 - 13:00	8	93	0.057	8	93	0.047	8	93	0.104
13:00 - 14:00	8	93	0.050	8	93	0.043	8	93	0.093
14:00 - 15:00	8	93	0.046	8	93	0.046	8	93	0.092
15:00 - 16:00	8	93	0.059	8	93	0.055	8	93	0.114
16:00 - 17:00	8	93	0.073	8	93	0.066	8	93	0.139
17:00 - 18:00	8	93	0.082	8	93	0.074	8	93	0.156
18:00 - 19:00	8	93	0.082	8	93	0.064	8	93	0.146
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.623			0.686			1.309

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

MULTI-MODAL BUS/TRAM PASSENGERS

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									
07:00 - 08:00	8	93	0.001	8	93	0.047	8	93	0.048
08:00 - 09:00	8	93	0.011	8	93	0.104	8	93	0.115
09:00 - 10:00	8	93	0.003	8	93	0.030	8	93	0.033
10:00 - 11:00	8	93	0.007	8	93	0.007	8	93	0.014
11:00 - 12:00	8	93	0.011	8	93	0.007	8	93	0.018
12:00 - 13:00	8	93	0.018	8	93	0.019	8	93	0.037
13:00 - 14:00	8	93	0.012	8	93	0.028	8	93	0.040
14:00 - 15:00	8	93	0.022	8	93	0.012	8	93	0.034
15:00 - 16:00	8	93	0.069	8	93	0.018	8	93	0.087
16:00 - 17:00	8	93	0.031	8	93	0.011	8	93	0.042
17:00 - 18:00	8	93	0.058	8	93	0.011	8	93	0.069
18:00 - 19:00	8	93	0.053	8	93	0.012	8	93	0.065
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.296			0.306			0.602

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

MULTI-MODAL TOTAL RAIL PASSENGERS

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									
07:00 - 08:00	8	93	0.000	8	93	0.028	8	93	0.028
08:00 - 09:00	8	93	0.001	8	93	0.027	8	93	0.028
09:00 - 10:00	8	93	0.000	8	93	0.011	8	93	0.011
10:00 - 11:00	8	93	0.007	8	93	0.004	8	93	0.011
11:00 - 12:00	8	93	0.003	8	93	0.001	8	93	0.004
12:00 - 13:00	8	93	0.005	8	93	0.004	8	93	0.009
13:00 - 14:00	8	93	0.003	8	93	0.004	8	93	0.007
14:00 - 15:00	8	93	0.004	8	93	0.001	8	93	0.005
15:00 - 16:00	8	93	0.007	8	93	0.000	8	93	0.007
16:00 - 17:00	8	93	0.023	8	93	0.000	8	93	0.023
17:00 - 18:00	8	93	0.026	8	93	0.000	8	93	0.026
18:00 - 19:00	8	93	0.012	8	93	0.003	8	93	0.015
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.091			0.083			0.174

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

MULTI-MODAL PUBLIC TRANSPORT USERS

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									
07:00 - 08:00	8	93	0.001	8	93	0.076	8	93	0.077
08:00 - 09:00	8	93	0.012	8	93	0.131	8	93	0.143
09:00 - 10:00	8	93	0.003	8	93	0.041	8	93	0.044
10:00 - 11:00	8	93	0.012	8	93	0.011	8	93	0.023
11:00 - 12:00	8	93	0.011	8	93	0.008	8	93	0.019
12:00 - 13:00	8	93	0.023	8	93	0.023	8	93	0.046
13:00 - 14:00	8	93	0.016	8	93	0.032	8	93	0.048
14:00 - 15:00	8	93	0.023	8	93	0.014	8	93	0.037
15:00 - 16:00	8	93	0.077	8	93	0.018	8	93	0.095
16:00 - 17:00	8	93	0.054	8	93	0.011	8	93	0.065
17:00 - 18:00	8	93	0.084	8	93	0.011	8	93	0.095
18:00 - 19:00	8	93	0.068	8	93	0.015	8	93	0.083
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.384			0.391			0.775

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

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 2.40

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									
07:00 - 08:00	8	93	0.076	8	93	0.408	8	93	0.484
08:00 - 09:00	8	93	0.099	8	93	0.555	8	93	0.654
09:00 - 10:00	8	93	0.119	8	93	0.180	8	93	0.299
10:00 - 11:00	8	93	0.151	8	93	0.164	8	93	0.315
11:00 - 12:00	8	93	0.136	8	93	0.159	8	93	0.295
12:00 - 13:00	8	93	0.214	8	93	0.220	8	93	0.434
13:00 - 14:00	8	93	0.180	8	93	0.170	8	93	0.350
14:00 - 15:00	8	93	0.145	8	93	0.150	8	93	0.295
15:00 - 16:00	8	93	0.270	8	93	0.158	8	93	0.428
16:00 - 17:00	8	93	0.336	8	93	0.162	8	93	0.498
17:00 - 18:00	8	93	0.459	8	93	0.224	8	93	0.683
18:00 - 19:00	8	93	0.503	8	93	0.230	8	93	0.733
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.688			2.780			5.468

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

MULTI-MODAL 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									
07:00 - 08:00	8	93	0.032	8	93	0.153	8	93	0.185
08:00 - 09:00	8	93	0.039	8	93	0.174	8	93	0.213
09:00 - 10:00	8	93	0.047	8	93	0.055	8	93	0.102
10:00 - 11:00	8	93	0.049	8	93	0.061	8	93	0.110
11:00 - 12:00	8	93	0.043	8	93	0.059	8	93	0.102
12:00 - 13:00	8	93	0.073	8	93	0.068	8	93	0.141
13:00 - 14:00	8	93	0.059	8	93	0.062	8	93	0.121
14:00 - 15:00	8	93	0.051	8	93	0.055	8	93	0.106
15:00 - 16:00	8	93	0.066	8	93	0.047	8	93	0.113
16:00 - 17:00	8	93	0.107	8	93	0.043	8	93	0.150
17:00 - 18:00	8	93	0.164	8	93	0.092	8	93	0.256
18:00 - 19:00	8	93	0.199	8	93	0.104	8	93	0.303
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.929			0.973			1.902

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

MULTI-MODAL 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									
07:00 - 08:00	8	93	0.005	8	93	0.014	8	93	0.019
08:00 - 09:00	8	93	0.005	8	93	0.009	8	93	0.014
09:00 - 10:00	8	93	0.009	8	93	0.008	8	93	0.017
10:00 - 11:00	8	93	0.011	8	93	0.015	8	93	0.026
11:00 - 12:00	8	93	0.018	8	93	0.016	8	93	0.034
12:00 - 13:00	8	93	0.016	8	93	0.016	8	93	0.032
13:00 - 14:00	8	93	0.011	8	93	0.012	8	93	0.023
14:00 - 15:00	8	93	0.009	8	93	0.008	8	93	0.017
15:00 - 16:00	8	93	0.016	8	93	0.011	8	93	0.027
16:00 - 17:00	8	93	0.018	8	93	0.019	8	93	0.037
17:00 - 18:00	8	93	0.014	8	93	0.004	8	93	0.018
18:00 - 19:00	8	93	0.005	8	93	0.005	8	93	0.010
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.137			0.137			0.274

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

MULTI-MODAL 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									
07:00 - 08:00	8	93	0.001	8	93	0.000	8	93	0.001
08:00 - 09:00	8	93	0.000	8	93	0.000	8	93	0.000
09:00 - 10:00	8	93	0.000	8	93	0.000	8	93	0.000
10:00 - 11:00	8	93	0.000	8	93	0.000	8	93	0.000
11:00 - 12:00	8	93	0.000	8	93	0.000	8	93	0.000
12:00 - 13:00	8	93	0.000	8	93	0.001	8	93	0.001
13:00 - 14:00	8	93	0.001	8	93	0.001	8	93	0.002
14:00 - 15:00	8	93	0.000	8	93	0.000	8	93	0.000
15:00 - 16:00	8	93	0.000	8	93	0.000	8	93	0.000
16:00 - 17:00	8	93	0.000	8	93	0.000	8	93	0.000
17:00 - 18:00	8	93	0.003	8	93	0.001	8	93	0.004
18:00 - 19:00	8	93	0.001	8	93	0.001	8	93	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.006			0.004			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.

Calculation Reference: AUDIT-148301-211027-1052

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT

Category : A - OFFICE

MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

03	SOUTH WEST	
	BR BRISTOL CITY	1 days
06	WEST MIDLANDS	
	WK WARWICKSHIRE	1 days
08	NORTH WEST	
	GM GREATER MANCHESTER	1 days
09	NORTH	
	TW TYNE & WEAR	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: Gross floor area
 Actual Range: 960 to 5736 (units: sqm)
 Range Selected by User: 178 to 70291 (units: sqm)

Parking Spaces Range: Selected: 0 to 100 Actual: 5 to 2923

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/13 to 13/11/19

*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	2 days
Thursday	1 days
Friday	1 days

*This data displays the number of selected surveys by day of the week.*Selected survey types:

Manual count	4 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	4
-------------	---

*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:

Built-Up Zone	4
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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.

Secondary Filtering selection:

Use Class:

Not Known 4 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Filter by Site Operations Breakdown:

All Surveys Included

Population within 500m Range:

All Surveys Included

Population within 1 mile:

5,001 to 10,000 1 days

15,001 to 20,000 1 days

25,001 to 50,000 2 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 2 days

500,001 or More 2 days

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

Car ownership within 5 miles:

0.6 to 1.0 4 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 1 days

No 3 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 4 days

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

LIST OF SITES relevant to selection parameters

1	BR-02-A-02	PLANNING & ENGINEERING	BRISTOL CITY
	ST THOMAS STREET		
	BRISTOL		
	Town Centre		
	Built-Up Zone		
	Total Gross floor area:	5736 sqm	
	Survey date: FRIDAY	29/11/13	Survey Type: MANUAL
2	GM-02-A-08	REGUS	GREATER MANCHESTER
	FOUNTAIN STREET		
	MANCHESTER		
	Town Centre		
	Built-Up Zone		
	Total Gross floor area:	3960 sqm	
	Survey date: MONDAY	26/09/16	Survey Type: MANUAL
3	TW-02-A-07	OFFICES	TYNE & WEAR
	MULGRAVE TERRACE		
	GATESHEAD		
	Town Centre		
	Built-Up Zone		
	Total Gross floor area:	2090 sqm	
	Survey date: MONDAY	13/06/16	Survey Type: MANUAL
4	WK-02-A-01	OFFICES	WARWICKSHIRE
	WARWICK ROAD		
	COVENTRY		
	Town Centre		
	Built-Up Zone		
	Total Gross floor area:	960 sqm	
	Survey date: THURSDAY	17/10/13	Survey Type: MANUAL

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 02 - EMPLOYMENT/A - OFFICE

MULTI-MODAL TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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									
07:00 - 08:00	4	3162	0.142	4	3162	0.000	4	3162	0.142
08:00 - 09:00	4	3162	0.459	4	3162	0.047	4	3162	0.506
09:00 - 10:00	4	3162	0.411	4	3162	0.063	4	3162	0.474
10:00 - 11:00	4	3162	0.142	4	3162	0.040	4	3162	0.182
11:00 - 12:00	4	3162	0.071	4	3162	0.119	4	3162	0.190
12:00 - 13:00	4	3162	0.174	4	3162	0.174	4	3162	0.348
13:00 - 14:00	4	3162	0.142	4	3162	0.103	4	3162	0.245
14:00 - 15:00	4	3162	0.095	4	3162	0.119	4	3162	0.214
15:00 - 16:00	4	3162	0.111	4	3162	0.095	4	3162	0.206
16:00 - 17:00	4	3162	0.103	4	3162	0.316	4	3162	0.419
17:00 - 18:00	4	3162	0.047	4	3162	0.380	4	3162	0.427
18:00 - 19:00	4	3162	0.024	4	3162	0.300	4	3162	0.324
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.921			1.756			3.677

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:	960 - 5736 (units: sqm)
Survey date range:	01/01/13 - 13/11/19
Number of weekdays (Monday-Friday):	4
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 shown. 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 02 - EMPLOYMENT/A - OFFICE

MULTI-MODAL TAXIS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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									
07:00 - 08:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
08:00 - 09:00	4	3162	0.016	4	3162	0.016	4	3162	0.032
09:00 - 10:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
10:00 - 11:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
11:00 - 12:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
12:00 - 13:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
13:00 - 14:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
14:00 - 15:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
15:00 - 16:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
16:00 - 17:00	4	3162	0.008	4	3162	0.008	4	3162	0.016
17:00 - 18:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
18:00 - 19:00	4	3162	0.008	4	3162	0.008	4	3162	0.016
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.032			0.032			0.064

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 02 - EMPLOYMENT/A - OFFICE

MULTI-MODAL OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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									
07:00 - 08:00	4	3162	0.008	4	3162	0.000	4	3162	0.008
08:00 - 09:00	4	3162	0.000	4	3162	0.008	4	3162	0.008
09:00 - 10:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
10:00 - 11:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
11:00 - 12:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
12:00 - 13:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
13:00 - 14:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
14:00 - 15:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
15:00 - 16:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
16:00 - 17:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
17:00 - 18:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
18:00 - 19:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.008			0.008			0.016

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 02 - EMPLOYMENT/A - OFFICE

MULTI-MODAL CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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									
07:00 - 08:00	4	3162	0.040	4	3162	0.000	4	3162	0.040
08:00 - 09:00	4	3162	0.221	4	3162	0.000	4	3162	0.221
09:00 - 10:00	4	3162	0.087	4	3162	0.000	4	3162	0.087
10:00 - 11:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
11:00 - 12:00	4	3162	0.000	4	3162	0.016	4	3162	0.016
12:00 - 13:00	4	3162	0.008	4	3162	0.000	4	3162	0.008
13:00 - 14:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
14:00 - 15:00	4	3162	0.000	4	3162	0.008	4	3162	0.008
15:00 - 16:00	4	3162	0.000	4	3162	0.016	4	3162	0.016
16:00 - 17:00	4	3162	0.000	4	3162	0.032	4	3162	0.032
17:00 - 18:00	4	3162	0.000	4	3162	0.182	4	3162	0.182
18:00 - 19:00	4	3162	0.000	4	3162	0.103	4	3162	0.103
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.356			0.357			0.713

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 02 - EMPLOYMENT/A - OFFICE

MULTI-MODAL VEHICLE OCCUPANTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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									
07:00 - 08:00	4	3162	0.158	4	3162	0.000	4	3162	0.158
08:00 - 09:00	4	3162	0.498	4	3162	0.016	4	3162	0.514
09:00 - 10:00	4	3162	0.459	4	3162	0.055	4	3162	0.514
10:00 - 11:00	4	3162	0.158	4	3162	0.040	4	3162	0.198
11:00 - 12:00	4	3162	0.079	4	3162	0.127	4	3162	0.206
12:00 - 13:00	4	3162	0.174	4	3162	0.190	4	3162	0.364
13:00 - 14:00	4	3162	0.166	4	3162	0.127	4	3162	0.293
14:00 - 15:00	4	3162	0.111	4	3162	0.119	4	3162	0.230
15:00 - 16:00	4	3162	0.119	4	3162	0.127	4	3162	0.246
16:00 - 17:00	4	3162	0.103	4	3162	0.356	4	3162	0.459
17:00 - 18:00	4	3162	0.040	4	3162	0.459	4	3162	0.499
18:00 - 19:00	4	3162	0.008	4	3162	0.348	4	3162	0.356
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.073			1.964			4.037

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 02 - EMPLOYMENT/A - OFFICE

MULTI-MODAL PEDESTRIANS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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									
07:00 - 08:00	4	3162	0.063	4	3162	0.024	4	3162	0.087
08:00 - 09:00	4	3162	0.324	4	3162	0.008	4	3162	0.332
09:00 - 10:00	4	3162	0.427	4	3162	0.221	4	3162	0.648
10:00 - 11:00	4	3162	0.474	4	3162	0.364	4	3162	0.838
11:00 - 12:00	4	3162	0.324	4	3162	0.419	4	3162	0.743
12:00 - 13:00	4	3162	0.577	4	3162	0.973	4	3162	1.550
13:00 - 14:00	4	3162	1.083	4	3162	0.467	4	3162	1.550
14:00 - 15:00	4	3162	0.364	4	3162	0.300	4	3162	0.664
15:00 - 16:00	4	3162	0.182	4	3162	0.087	4	3162	0.269
16:00 - 17:00	4	3162	0.095	4	3162	0.190	4	3162	0.285
17:00 - 18:00	4	3162	0.040	4	3162	0.554	4	3162	0.594
18:00 - 19:00	4	3162	0.008	4	3162	0.198	4	3162	0.206
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.961			3.805			7.766

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 02 - EMPLOYMENT/A - OFFICE
 MULTI-MODAL BUS/TRAM PASSENGERS
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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									
07:00 - 08:00	4	3162	0.032	4	3162	0.000	4	3162	0.032
08:00 - 09:00	4	3162	0.150	4	3162	0.000	4	3162	0.150
09:00 - 10:00	4	3162	0.229	4	3162	0.000	4	3162	0.229
10:00 - 11:00	4	3162	0.040	4	3162	0.000	4	3162	0.040
11:00 - 12:00	4	3162	0.032	4	3162	0.024	4	3162	0.056
12:00 - 13:00	4	3162	0.032	4	3162	0.079	4	3162	0.111
13:00 - 14:00	4	3162	0.000	4	3162	0.024	4	3162	0.024
14:00 - 15:00	4	3162	0.000	4	3162	0.024	4	3162	0.024
15:00 - 16:00	4	3162	0.024	4	3162	0.032	4	3162	0.056
16:00 - 17:00	4	3162	0.000	4	3162	0.095	4	3162	0.095
17:00 - 18:00	4	3162	0.000	4	3162	0.182	4	3162	0.182
18:00 - 19:00	4	3162	0.000	4	3162	0.103	4	3162	0.103
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.539			0.563			1.102

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 02 - EMPLOYMENT/A - OFFICE
 MULTI-MODAL TOTAL RAIL PASSENGERS
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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									
07:00 - 08:00	4	3162	0.016	4	3162	0.000	4	3162	0.016
08:00 - 09:00	4	3162	0.214	4	3162	0.000	4	3162	0.214
09:00 - 10:00	4	3162	0.229	4	3162	0.000	4	3162	0.229
10:00 - 11:00	4	3162	0.032	4	3162	0.000	4	3162	0.032
11:00 - 12:00	4	3162	0.032	4	3162	0.000	4	3162	0.032
12:00 - 13:00	4	3162	0.016	4	3162	0.024	4	3162	0.040
13:00 - 14:00	4	3162	0.008	4	3162	0.032	4	3162	0.040
14:00 - 15:00	4	3162	0.024	4	3162	0.024	4	3162	0.048
15:00 - 16:00	4	3162	0.008	4	3162	0.024	4	3162	0.032
16:00 - 17:00	4	3162	0.016	4	3162	0.079	4	3162	0.095
17:00 - 18:00	4	3162	0.000	4	3162	0.308	4	3162	0.308
18:00 - 19:00	4	3162	0.000	4	3162	0.134	4	3162	0.134
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.595			0.625			1.220

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 02 - EMPLOYMENT/A - OFFICE
 MULTI-MODAL PUBLIC TRANSPORT USERS
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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									
07:00 - 08:00	4	3162	0.047	4	3162	0.000	4	3162	0.047
08:00 - 09:00	4	3162	0.364	4	3162	0.000	4	3162	0.364
09:00 - 10:00	4	3162	0.459	4	3162	0.000	4	3162	0.459
10:00 - 11:00	4	3162	0.071	4	3162	0.000	4	3162	0.071
11:00 - 12:00	4	3162	0.063	4	3162	0.024	4	3162	0.087
12:00 - 13:00	4	3162	0.047	4	3162	0.103	4	3162	0.150
13:00 - 14:00	4	3162	0.008	4	3162	0.055	4	3162	0.063
14:00 - 15:00	4	3162	0.024	4	3162	0.047	4	3162	0.071
15:00 - 16:00	4	3162	0.032	4	3162	0.055	4	3162	0.087
16:00 - 17:00	4	3162	0.016	4	3162	0.174	4	3162	0.190
17:00 - 18:00	4	3162	0.000	4	3162	0.490	4	3162	0.490
18:00 - 19:00	4	3162	0.000	4	3162	0.237	4	3162	0.237
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.131			1.185			2.316

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 02 - EMPLOYMENT/A - OFFICE

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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									
07:00 - 08:00	4	3162	0.308	4	3162	0.024	4	3162	0.332
08:00 - 09:00	4	3162	1.408	4	3162	0.024	4	3162	1.432
09:00 - 10:00	4	3162	1.431	4	3162	0.277	4	3162	1.708
10:00 - 11:00	4	3162	0.704	4	3162	0.403	4	3162	1.107
11:00 - 12:00	4	3162	0.467	4	3162	0.585	4	3162	1.052
12:00 - 13:00	4	3162	0.807	4	3162	1.265	4	3162	2.072
13:00 - 14:00	4	3162	1.257	4	3162	0.648	4	3162	1.905
14:00 - 15:00	4	3162	0.498	4	3162	0.474	4	3162	0.972
15:00 - 16:00	4	3162	0.332	4	3162	0.285	4	3162	0.617
16:00 - 17:00	4	3162	0.214	4	3162	0.751	4	3162	0.965
17:00 - 18:00	4	3162	0.079	4	3162	1.684	4	3162	1.763
18:00 - 19:00	4	3162	0.016	4	3162	0.886	4	3162	0.902
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			7.521			7.306			14.827

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 02 - EMPLOYMENT/A - OFFICE

MULTI-MODAL CARS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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									
07:00 - 08:00	4	3162	0.127	4	3162	0.000	4	3162	0.127
08:00 - 09:00	4	3162	0.419	4	3162	0.016	4	3162	0.435
09:00 - 10:00	4	3162	0.403	4	3162	0.063	4	3162	0.466
10:00 - 11:00	4	3162	0.134	4	3162	0.032	4	3162	0.166
11:00 - 12:00	4	3162	0.063	4	3162	0.119	4	3162	0.182
12:00 - 13:00	4	3162	0.134	4	3162	0.134	4	3162	0.268
13:00 - 14:00	4	3162	0.142	4	3162	0.095	4	3162	0.237
14:00 - 15:00	4	3162	0.087	4	3162	0.111	4	3162	0.198
15:00 - 16:00	4	3162	0.103	4	3162	0.087	4	3162	0.190
16:00 - 17:00	4	3162	0.079	4	3162	0.285	4	3162	0.364
17:00 - 18:00	4	3162	0.040	4	3162	0.348	4	3162	0.388
18:00 - 19:00	4	3162	0.016	4	3162	0.293	4	3162	0.309
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.747			1.583			3.330

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 02 - EMPLOYMENT/A - OFFICE

MULTI-MODAL LGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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									
07:00 - 08:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
08:00 - 09:00	4	3162	0.008	4	3162	0.008	4	3162	0.016
09:00 - 10:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
10:00 - 11:00	4	3162	0.008	4	3162	0.008	4	3162	0.016
11:00 - 12:00	4	3162	0.008	4	3162	0.000	4	3162	0.008
12:00 - 13:00	4	3162	0.040	4	3162	0.040	4	3162	0.080
13:00 - 14:00	4	3162	0.000	4	3162	0.008	4	3162	0.008
14:00 - 15:00	4	3162	0.008	4	3162	0.008	4	3162	0.016
15:00 - 16:00	4	3162	0.008	4	3162	0.008	4	3162	0.016
16:00 - 17:00	4	3162	0.016	4	3162	0.016	4	3162	0.032
17:00 - 18:00	4	3162	0.008	4	3162	0.008	4	3162	0.016
18:00 - 19:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.104			0.104			0.208

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 02 - EMPLOYMENT/A - OFFICE

MULTI-MODAL MOTOR CYCLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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									
07:00 - 08:00	4	3162	0.008	4	3162	0.000	4	3162	0.008
08:00 - 09:00	4	3162	0.016	4	3162	0.000	4	3162	0.016
09:00 - 10:00	4	3162	0.008	4	3162	0.000	4	3162	0.008
10:00 - 11:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
11:00 - 12:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
12:00 - 13:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
13:00 - 14:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
14:00 - 15:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
15:00 - 16:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
16:00 - 17:00	4	3162	0.000	4	3162	0.008	4	3162	0.008
17:00 - 18:00	4	3162	0.000	4	3162	0.024	4	3162	0.024
18:00 - 19:00	4	3162	0.000	4	3162	0.000	4	3162	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.032				0.032	0.064	

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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