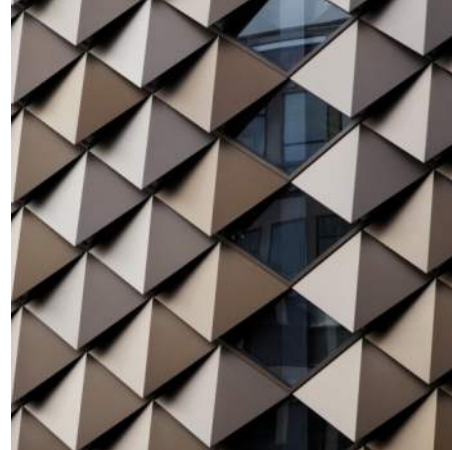
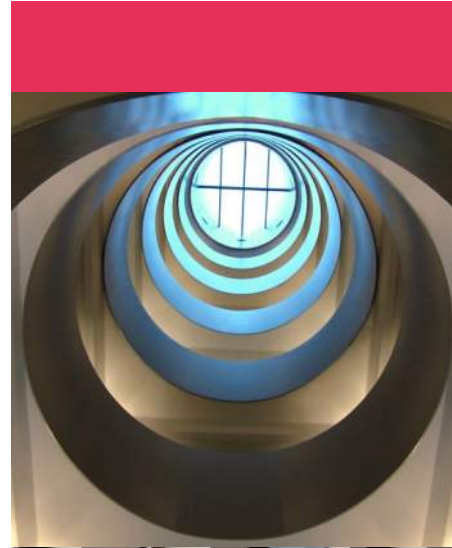


Port Street, Manchester

Transport Statement

Curtins Ref: 79165-CUR-00-XX-RP-TP-001
Revision: V01
Issue Date: 12 November 2021

Client Name: Manchester (Port Street) Ltd



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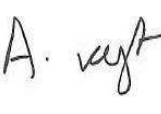


Control Sheet

Rev	Description	Issued by	Checked	Date
V01	1 st Issue	AV	AV	15 October 2021
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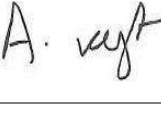
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Appendices

Appendix A – Proposed Layout

Appendix B – TRICS Output

Appendix C – Substation Access Requirements

1.0 Introduction

1.1 Background

- 1.1.1 Curtins has been appointed by Manchester (Port Street) Ltd to provide transport planning advice in relation to a planning application for a new development on land at Port Street, to the east of Manchester City Centre.
- 1.1.2 The proposed development involves the erection of a 33-storey residential tower with 485 units, together with a basement car park, cycle store, ground floor commercial units, landscaping, public realm and associated works.
- 1.1.3 The proposed Site layout is provided in **Appendix A**.

1.2 Purpose of this Report

- 1.2.1 This Transport Statement (TS) has been prepared to accompany the planning application and inform Highway Officers at Manchester City Council (MCC) and Transport for Greater Manchester (TfGM) with regard to the development proposals and their potential impact on the surrounding area from a traffic and transportation perspective.

1.3 Scope of the Report

- 1.3.1 Curtins undertook pre-application discussions with Highways Officers at MCC and TfGM on the 6th September 2021. It was agreed that this TS should include:
 - A description of the transport and highway networks in the vicinity of the Site;
 - A review of the collision record in the immediate vicinity of the Site for a five-year period;
 - A summary of the development proposals, access, parking and servicing arrangements;
 - Information on the proposed access and servicing arrangements;
 - A review of accessibility by all sustainable modes of travel; and
 - An assessment of the traffic generation and vehicular trips generated by the proposals; and
 - A summary of relevant transport planning policy;

1.4 Structure of the Report

- 1.4.1 Following this introduction, **Section 2** of the report provides a description of the existing site 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 highway safety by way of obtaining records of collisions adjacent to the Site over the most recent five-year period available.
- 1.4.3 The development proposals summarised in **Section 3**, including the proposed parking provision and access arrangements.

- 1.4.4 The accessibility of the Site by sustainable modes of travel is assessed in **Section 4**.
- 1.4.5 **Section 5** outlines the traffic forecasting methodology used to establish the likely traffic generation associated with the development proposals.
- 1.4.6 Relevant local and national transport policy is summarised in **Section 6**, and the report is summarised and concluded in **Section 7**.

2.0 Site Location and Highway Layout

2.1 Site Location

2.1.1 The Proposed Development Site ("the Site") is located on the corner of Great Ancoats Street and Port Street and is within the neighbourhood of Ancoats on the northern part of Manchester City Centre.

2.1.2 The Site extends to approximately 0.48 hectares (4845 sqm) and is bound by Great Ancoats Street to the north, Brownsfield Mill and a surface car park to the east, surface car park to the south and Port Street to the west.

2.1.3 **Figure 2.1** below shows the Site in a local context relating to the local highway network:

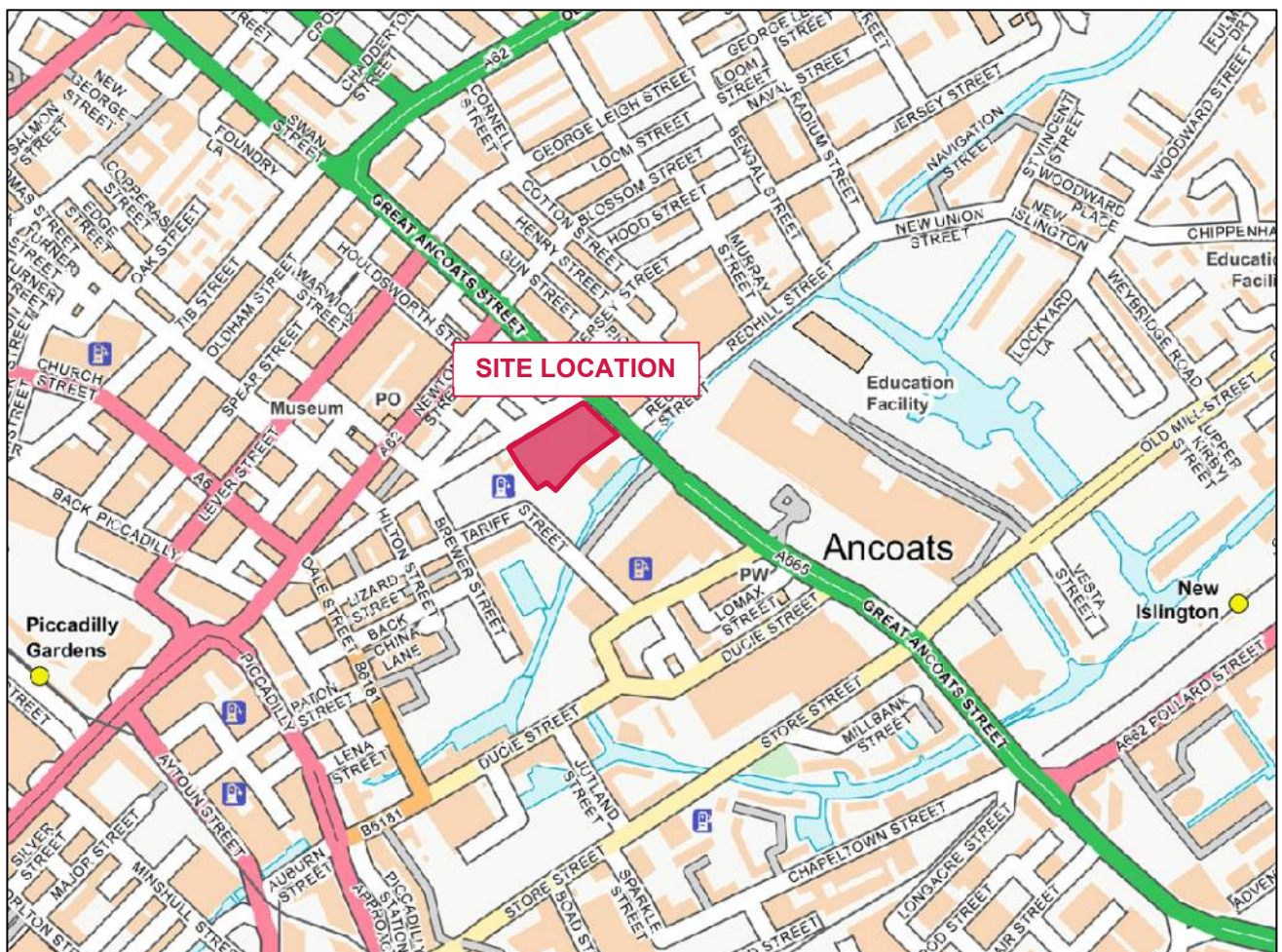


Figure 2.1 – Site Location in Relation to the Regional Highway Network
(Source: OS Maps, 2018)

2.1.4 There are a mixture of uses surrounding the Site. Immediately to the west of the Site there is The Astley, Oxid House and The Wentwood which are mid to high rise apartment buildings with some ground floor commercial frontages as well as a surface level car park. To the north of the Site, across Great Ancoats

Street is the heart of Ancoats, this is a newly regenerated area of Manchester containing a mixture of mid-rise developments including residential and commercial uses. To the east of the Site is Brownsfield Mill, a Grade II* Listed mill building which has been recently refurbished to create new apartments and the Rochdale Canal. To the south of the Site is a number of mid to high-rise developments comprising residential uses, which sit within the centre of the Piccadilly Basin.

- 2.1.5 The Site is located within the Greater Manchester Air Quality Management Area.

2.2 Site Context

- 2.2.1 The Site is located within the Piccadilly Ward and sits on the Piccadilly Basin. This area of Manchester falls within the study area of multiple strategic regeneration frameworks (SRFs) that have been created to develop a vision and strategy that will guide the regeneration of these areas. These include the HS2 Piccadilly SRF (March 2014), Piccadilly Basin SRF (October 2016), Portugal Street East SRF (2017) and Manchester Piccadilly SRF (March 2018).
- 2.2.2 The 2014 HS2 SRF provides high level proposals for the area surrounding Piccadilly Station that has stemmed from the arrival of HS2 into Manchester. This was later refreshed by the 2018 Manchester Piccadilly SRF which builds on the principles established in 2014 but has incorporated a number of changes and refinements to reflect investable changes in the market and overall vision for HS2. The Piccadilly Basin falls within the Manchester Piccadilly SRF and supports the objective to: “reinforce the grain, acknowledging the scale of neighbouring city blocks and reinvigorating connections that existed in the past. The use mix in this area would be governed by demand but a variety of residential development, focused on the canal basins, would be encouraged. Opportunity to invigorate this very under used section of the canal network and improve the pedestrian connection between the Ashton and Rochdale canals.”
- 2.2.3 The Piccadilly Basin SRF relates to a 5.9ha site situated at the north eastern part of Manchester City Centre and is identified within **Figure 2.2** below. The framework envisions Piccadilly Basin as an area that presents the opportunity to create a well-connected neighbourhood community with a mix of office, residential, retail and leisure and has the potential to develop a strong identity due to the presence of the Rochdale Canal and a number of historical assets.

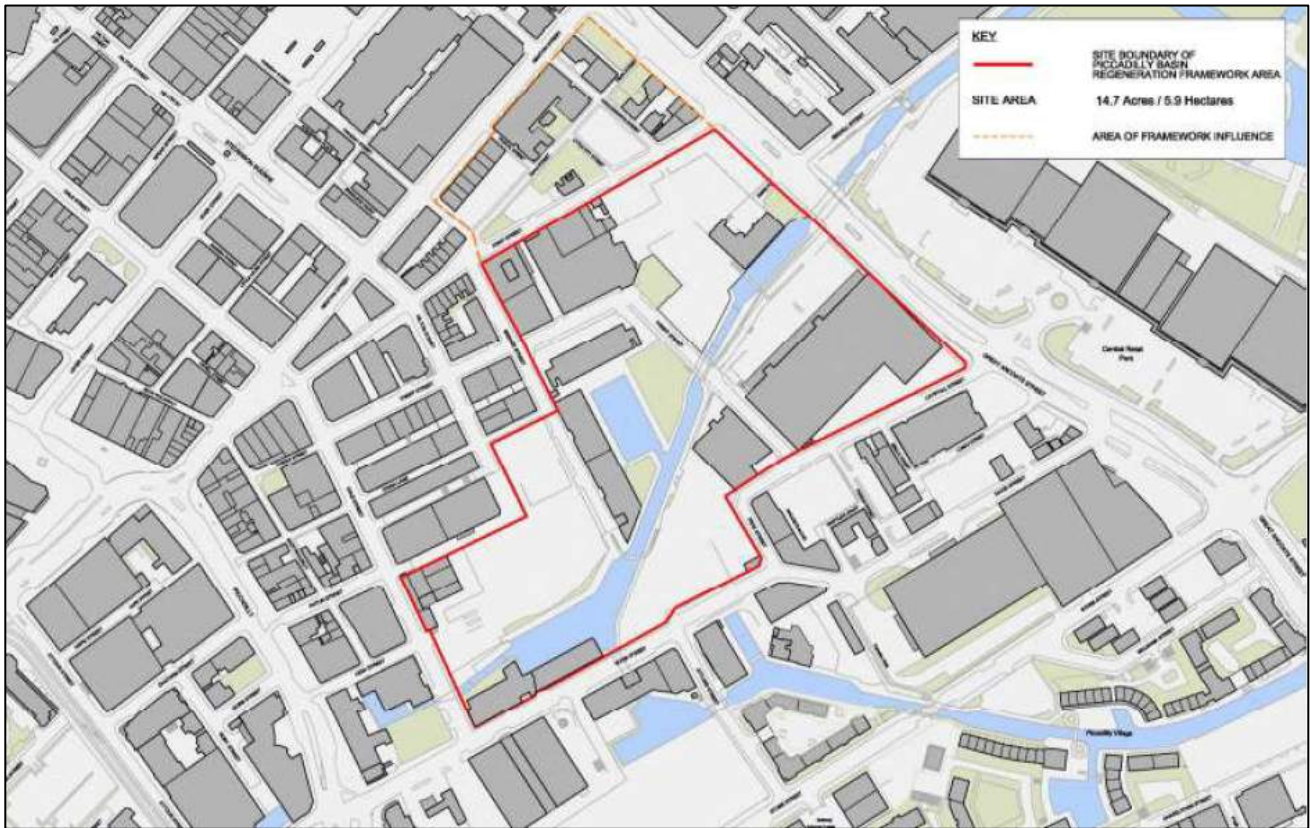


Figure 2.2 – Piccadilly Basin SRF Area
(Source: Deloitte, 2021)

2.2.4 To date, significant progress has been made to deliver the regeneration of the Piccadilly Basin:

- Refurbishment of the Grade II* Listed Jackson's Warehouse and construction of Vantage Quay for residential development, as well as the formation of the Marina which connects these sites;
- Construction of the Urban Exchange Retail Park, adjacent to Great Ancoats Street at the north east of the Site;
- A 232-space multi-storey car park on Tariff Street;
- Investment in public realm including the Canal, in addition to the formation of the Marina;
- Refurbishment of the Grade II* Listed Brownsfield Mill to create high quality residences; and,
- Development of Burlington House, an 11-storey residential building comprising 91 residential apartments.

2.2.5 In 1998, planning permission was granted for a mixed-use development that included residential, retail, licensed retail and studio office uses and provided Piccadilly Basin with a masterplan which was produced by Simpson Haugh (see **Figure 2.3**). The planning permission has now been implemented and therefore remains extant in perpetuity. Later in 2007, another application was submitted for a mixed-use development incorporating 58 residential units, a ground floor restaurant/cafe unit with related

access, servicing, landscaping and associated works at land bounded by Tariff Street, Rochdale Canal and Marina, however this was never implemented.

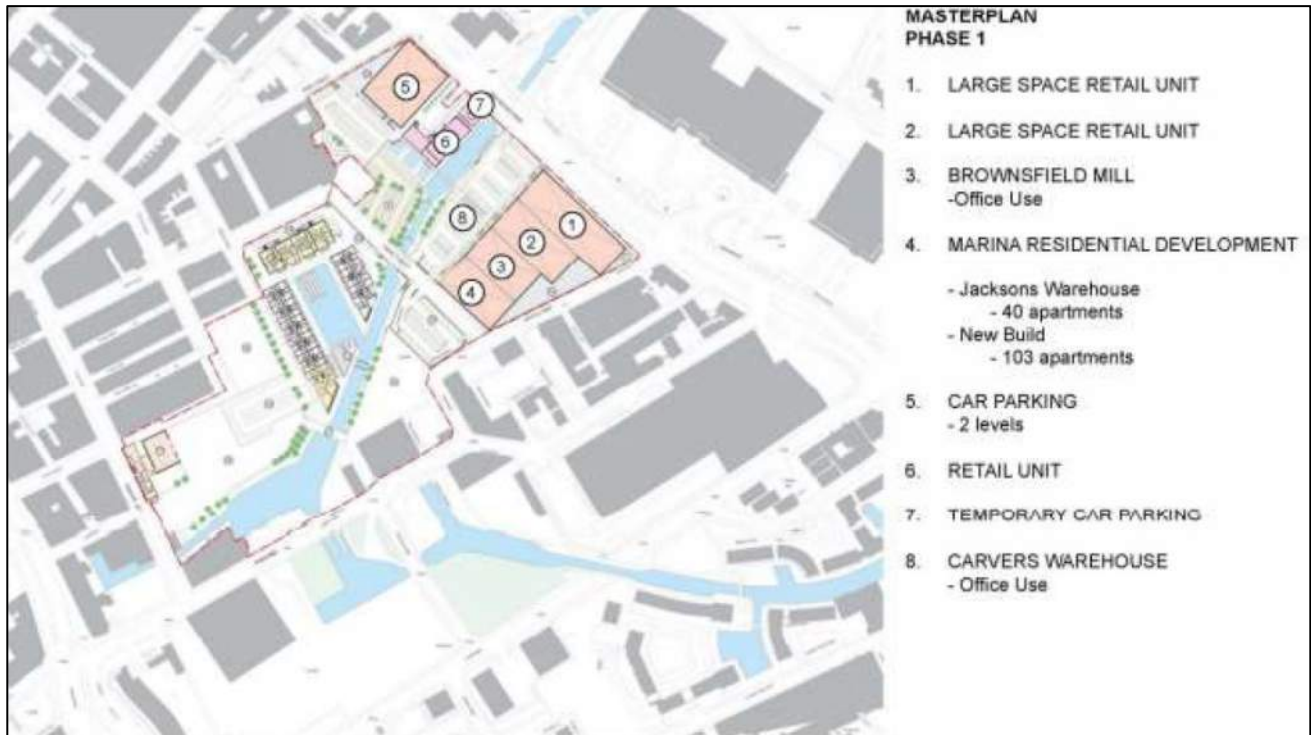


Figure 2.3 – Piccadilly Basin Masterplan, 1998
(Source: Deloitte, 2021)

2.2.6 Within the Piccadilly Basin SRF, a master planning exercise was undertaken by the same architect, Simpson Haugh, in order to create a vision for the area and inform the development principles. This is shown below in **Figure 2.4**. The framework sets out guidelines for the Site in regard to scale, massing and density. According to this, the Site will be residential-led mixed-use up to 32 storeys in height.

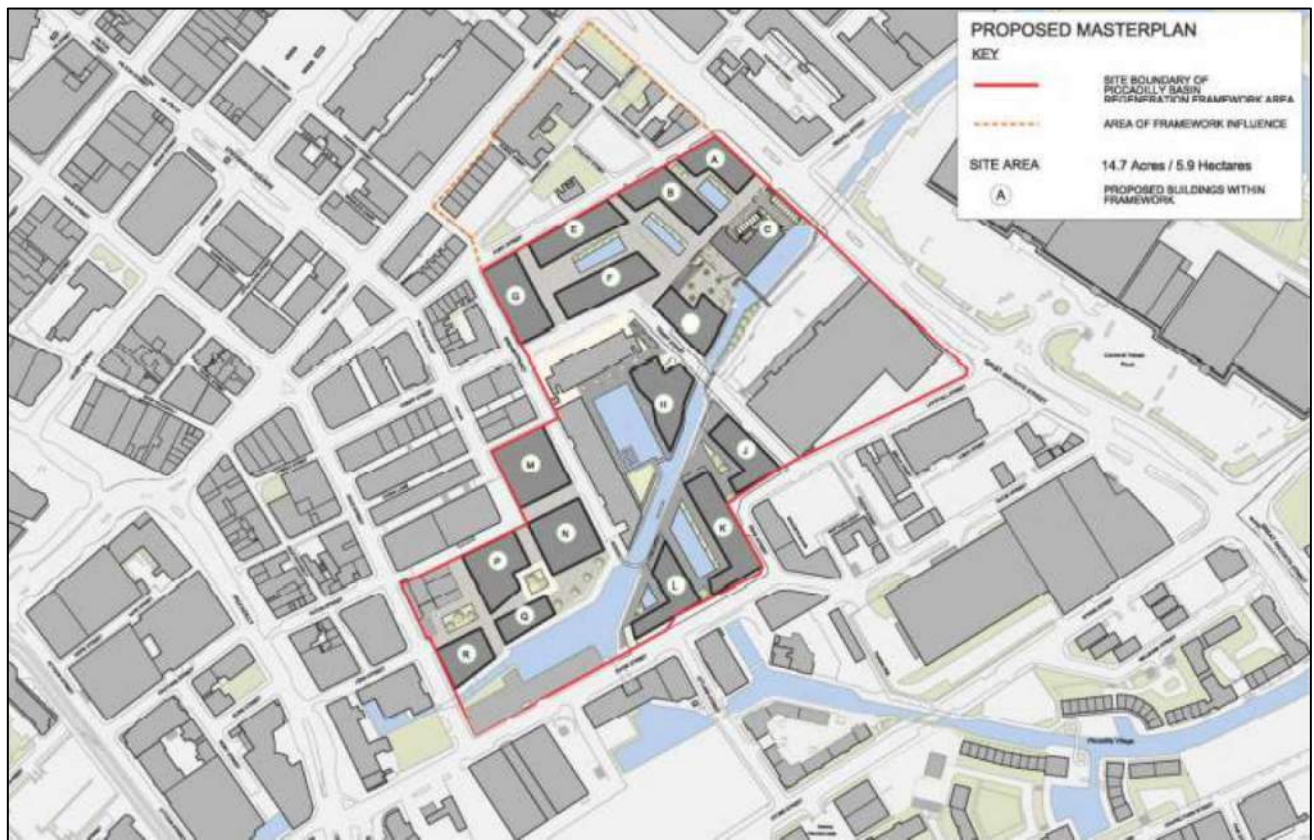


Figure 2.4 – Piccadilly Basin SRF Masterplan, 2016
(Source: Deloitte, 2021)

2.3 Existing Use and Access Arrangements

- 2.3.1 The Site is comprised of a surface level car park of low-quality hardstanding. The car park is operated by CitiPark and has a total capacity of circa 100 spaces.
- 2.3.2 The Site can be accessed by foot or on vehicle by using the car park entrances on Port Street. The access includes segregated access and egress points, with an electronic barrier system in place. In addition to the vehicular access point, several pedestrian entrances to the car park are provided along Port Street, which are in the form of small gaps in the wooden fencing that runs around the perimeter of the Site.

2.4 Surrounding Highway Network

A665 Great Ancoats Street

- 2.4.1 The A665 Great Ancoats Street forms the eastern boundary of the Site. In the vicinity of the Site, it operates primarily as dual carriageway with two lanes in each direction. Great Ancoats Street comprises a speed limit of 30mph and forms part of the north-eastern section of Manchester Ring Road passing through the Northern Quarter, Ancoats, and New Islington.

- 2.4.2 Great Ancoats Street commences at a signalised junction with the A62 Oldham Road to the north of the Site. The road then continues in a south-easterly direction for approximately 1.5km, continuing as the A665 Pin Mill Brow at a priority junction with Palmerston Street. The road then diverges towards Fairfield Street and the A635 Mancunian Way.
- 2.4.3 In the vicinity of the Site, the carriageway measures c. 14m in width. There are well-maintained footways on both sides of the carriageway which, for the most part, are in excess of 3m-wide. Controlled pedestrian crossing facilities with pedestrian call buttons are available along the road, the closest of which is located immediately adjacent to the Site. This crossing is in the form of a Toucan crossing, complete with a refuge island, dropped kerbs and tactile paving.
- 2.4.4 Great Ancoats Street is subject to a series of Traffic Regulation Orders (TROs). These include No-Waiting-At-Any-Time (NWAAT) double yellow parking restrictions, and a yellow box at the junctions with Newton Street and Port Street to keep the junction bellmouth clear.
- 2.4.5 There are several bus stops along Great Ancoats Street. The bus stop hosting southbound services is located directly across the Port Street junction, whereas the bus stop hosting northbound services is located c. 35m to the north of the Site. Both bus stops include shelters, seating, a flag pole, and timetable information. **Section 4** of this report discusses the services available from these stops in greater detail.

Port Street

- 2.4.6 Port Street is a one-way street which runs in a north-easterly direction, forming the northern boundary of the Site. The road commences off Dale Street to the south-west and extends for c. 300m towards a priority junction with the A665 Great Ancoats Street in the north-east. There is also a contra-flow cycle lane which permits cycle access in the opposite direction.
- 2.4.7 At its junction with Great Ancoats Street adjacent to the Site, there are dropped kerbs, tactile paving and a central refuge island. A segregated (southbound) cycle lane is also provided at this location. There are well-maintained footways along both sides of Port Street, which measure in excess of 2m-wide, and street lighting is provided at regular intervals. Where there is no segregated cycle lane, the southern footway on Port Street forms part of dedicated shared foot / cycleway.
- 2.4.8 Port Street is subject to a speed limit of 20mph. It is also subject to TROs in the form of NWAAT double yellow parking restrictions to restrict on-street parking at certain locations. However, on-street parking is permitted on some sections of the road. These comprise pay-and-display bays operated by Manchester City Council (MCC). The Site is located within Zone 2 of the city's Controlled Parking Zone (CPZ), where parking charges apply Monday to Sunday, 8am till 8pm, with no charge for parking on a Bank Holiday.

- 2.4.9 The maximum stay time in this zone is two hours, however charges and time restrictions do not apply to Blue Badge holders. Parking after 8pm and before 8am the next day is free (subject to parking restrictions).

Brewer Street and Tariff Street

- 2.4.10 Further to the west of the Site, Brewer Street comprises a two-way single carriageway. The road commences at a priority junction with Port Street and extends for 180m in a southerly direction, before terminating at a dead-end, where the Vantage Quay Bridge (a footbridge) continues over the Rochdale Canal. The carriageway is c. 6.5m-wide, however the usable width of the road is slightly lesser due to the presence of on-street pay-and-display parking bays.
- 2.4.11 Further to the south of the Site, Tariff Street comprises a two-way single carriageway with an average width of 8m, and extends for c. 350m between its priority junctions with Dale Street to the west and Laystall Street to the south.
- 2.4.12 Both roads are subject to a 20mph speed limit and comprises 2m-wide footways along both sides of the carriageway. Street lighting is present at regular intervals. Similar to Port Street, both roads are subject to NWAT TROs.

2.5 Access for Mobility and Visually Impaired Users

- 2.5.1 The Site benefits from its location near the city centre. 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, such as disabled parking on on-street pay-and-display bays, wide footways surrounding the Site, and dropped kerbs (which often include tactile paving) at most crossings in the vicinity of the Site, helping visually impaired users. Furthermore, there are numerous signal-controlled pedestrian crossings, complete with refuge islands and pedestrian call facilities.

2.6 Highway Safety

- 2.6.1 Personal Injury Accident (PIA) data for the highway network adjacent to the Site has been obtained from the TfGM reported road accidents website for the most recent five years. The details of the search are contained in **Figure 2.5**, and a breakdown of the information is contained in **Table 2.1**:

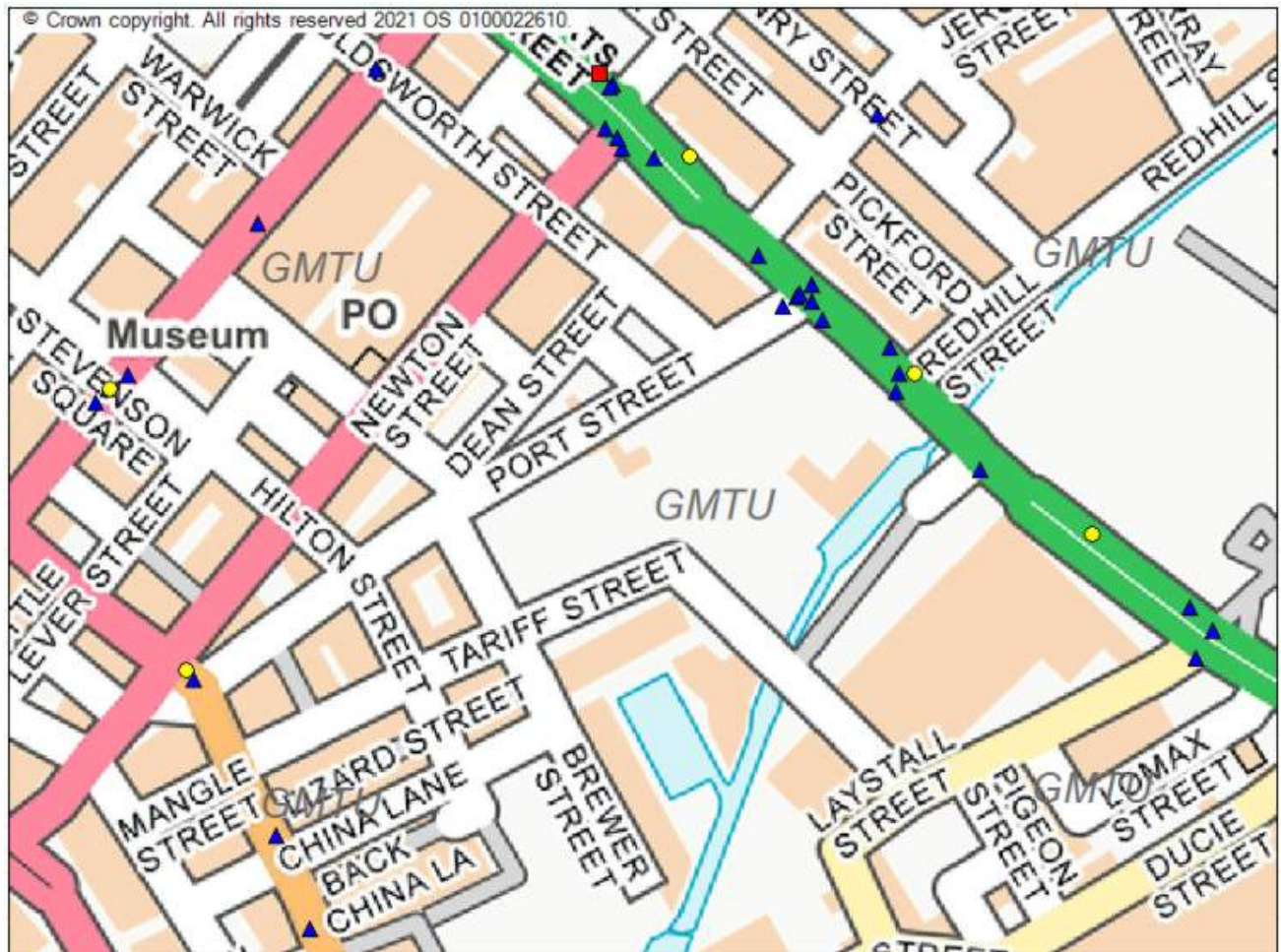


Figure 2.5 – Extents of Search Area
(Source: TfGM, 2021)

Junction/Link	Slight	Serious	Fatal	Totals
Port Street / A665 Great Ancoats Street	6	0	0	6
Port Street / Dale Street	1	1	0	2
A665 Great Ancoats Street / Redhill Street	3	1	0	4
A665 Great Ancoats Street	2	2	0	4
A665 Great Ancoats Street / Laystall Street	3	0	0	3
A665 Great Ancoats Street / Jersey Street	1	0	0	1
A665 Great Ancoats Street / Newton Street / Blossom Street	5	0	1	6
Port Street / China Lane	1	0	0	1
Port Street / Back China Lane	1	0	0	1
Newton Street / Houldsworth Street	1	0	0	1

Junction/Link	Slight	Serious	Fatal	Totals
Newton Street	1	0	0	1
Newton Street / Hilton Street	2	1	0	3
Totals	27	5	1	33

Table 2.1 – Personal Injury Accident Data Summary

- 2.6.2 There has been a total of 33 collisions in the latest five-year period available, comprising 27 'slight', 5 'serious', and 1 'fatal' severity incidents.
- 2.6.3 The 6 'slight' severity incidents at the Port Street / A665 Great Ancoats Street junction are spread across the most recent five-year period. There were 4 incidents in 2017, 1 incident in 2018, and 1 incident in 2019. It is worth noting that Port Street was formerly a two-way street until 2016 when the one-way system was introduced. As part of the Great Ancoats Street improvement scheme, dropped kerbs with tactile paving were introduced at its junction with Port Street in 2019, and a pedestrian refuge island with tactile paving was subsequently added in late 2020.
- 2.6.4 The A665 Great Ancoats Street was also wider with three lanes and a cycle lane northbound, however the footway on the western side of the carriageway was widened whereas the carriageway was narrowed to two lanes in 2020.
- 2.6.5 The 6 incidents at the A665 Great Ancoats Street / Newton Street / Blossom Street junction are evenly spread across the most recent five-year period. There were 1 'slight' severity incident in 2016, 2 'slight' severity incidents in 2017, 2 'slight' severity incidents in 2019, and 1 fatal incident in 2020. The fatal incident occurred in at 03:25 in February 2020, on a Sunday morning when traffic volumes low, in rain conditions during a pedestrian phase at the junction. However, the provisional data does not include vehicle and casualty records.
- 2.6.6 This junction was also included in the Great Ancoats Street improvement scheme, where the pedestrian infrastructure at the junction was simplified in late 2020 to accommodate fewer lanes and direct crossing facilities. Pedestrian footways along both sides of the carriageway have also been widened. Prior to the improvements, crossing points at the central refuge islands on Great Ancoats Street were not in line, for example on the Great Ancoats Street (S) arm, pedestrians crossing the road from the west to the east would have to cross onto the central refuge island, and walk a further 10m south to another crossing point, therefore having to press two sets of pedestrian call buttons. As a result, there were two traffic signals in short succession on the southbound lane (45m apart).
- 2.6.7 Since the improvements have been undertaken, no accidents have been recorded at the above junctions. Although all accidents are regrettable, a review of the data shows that the other collisions are generally dispersed across multiple areas within the study area and across the study years.

- 2.6.8 This review does not highlight any clusters of collisions which would warrant further investigation, and there are no concentrations of vehicle collisions or irregular casualties that would suggest an existing safety issue that would be exacerbated by the proposed development.

3.0 Development Proposals

3.1 Introduction

- 3.1.1 The proposed development involves the erection of a 33-storey residential tower with 485 units, together with a basement car park, cycle store, ground floor commercial units, landscaping, public realm and associated works.
- 3.1.2 The building will comprise a low-level podium and a taller tower. There would be 378 residential units located within the tower, and 107 units located within the podium. There would also be a mixture of 1-, 2-, and 3-bed rooms.
- 3.1.3 The proposed Site layout is provided in **Appendix A**.

3.2 Proposed Access

Vehicular and Cycle Access

- 3.2.1 Vehicular access to the basement car park will be provided via a ramp, located off Port Street. The ramp is 6m wide and will be used by vehicles and cyclists, and is also wide enough to accommodate two-way movements. It is envisaged that the entrance to the basement of the building would be controlled via gates, to prevent unauthorised access into the building. There would be lifts within the basement car park for residents to access the upper levels of the building. **Drawing 79165-CUR-00-XX-DR-TP-05004** shows a large car accessing the proposed basement car park via the ramp.
- 3.2.2 A new 15m x 3m loading bay / drop-off area (to be used as such when there are no service / delivery vehicles utilising the bay) is proposed to the east of the basement car park ramp. **Drawing 79165-CUR-00-XX-DR-TP-05001** shows an 11.2m refuse vehicle utilising the proposed loading bay.
- 3.2.3 The existing westbound cycle lane on the northern boundary of the Site would also be retained and extended to the north-west of the Site (and to the north of the proposed loading bay, with a 0.5m-wide buffer zone between the two), where the cycle lane will continue along the shared footway / cycleway as in the existing arrangement.
- 3.2.4 There would also be 'give way' markings on approach to the ramp to alert cyclists to vehicles turning in and out of the Site and as they join the shared provision to the west of the Site. This arrangement would not result in a material change to the existing carriageway width along Port Lane, nor would the on-street pay-and-display parking bays be affected.
- 3.2.5 This arrangement is shown in **Drawing 79165-CUR-00-XX-DR-TP-75001** to the rear of this report.

Pedestrian Access

- 3.2.6 Pedestrian access into the residential element would be provided from Port Lane, where an entrance hall would be located. The entrance hall would lead towards the concierge and mailbox area, along with the lifts and stairways to access the upper floors of the tower. There would also be a corridor to access the lifts to the units within the low-level podium, and the outdoor amenities.
- 3.2.7 Pedestrian access to the commercial / retail units on the ground floor would be taken directly along the Site frontage onto Port Street and the A665 Great Ancoats Street.

3.3 Parking Provision

- 3.3.1 Appendix B of Manchester City Council (MCC)'s Core Strategy (2012 – 2027) sets out parking standards for the city and its fringe areas. There are no specific requirements for residential developments, however the standards for retail uses are as follows. The Use Classes were last updated in September 2020 (after the Core Strategy was published), as such the list below comprises the old and new use classes for ease of reference:

- **A1: Shops** (updated to Class E(a) and E(b))
 - Food Retail: maximum 1 car parking space per 16sqm, minimum 1 cycle parking space per 140sqm (minimum of 2 spaces);
 - Non-food Retail: maximum 1 car parking space per 22sqm, minimum 1 cycle parking space per 200sqm (minimum of 2 spaces);
- **A3: Restaurants and Cafés** (updated to Class E(b))
 - Restaurant: maximum 1 car parking space per 7sqm of public floor area, minimum 1 cycle parking space per 50sqm (minimum of 2 spaces); and
- **A5: Hot Food Takeaways** (updated to sui generis)
 - Fast Food and Drive through: maximum 1 car parking space per 8.5sqm of gross floor area, minimum 1 cycle parking space per 50sqm (minimum of 2 spaces).

- 3.3.2 For all the above land uses, the minimum number of disabled parking spaces required for car parks with up to 200 bays is 3 bays or 6% of the total capacity, whichever is greater.

- 3.3.3 Recommended residential parking standards are located within the Manchester Residential Quality Guidance (2017) document, shown as follows:

- City centre developments will be required to provide where possible, an appropriate level of car parking within the constraints of site-specific circumstances and other requirements; and
- Reduced on site provision may be justified on the basis of:
 - Secure cycle parking in excess of 50% provision relative to apartment numbers (4 cycle spaces per car park space);

- Identification of sufficient off-site capacity, within 5 minutes' walk of the proposed development, to accommodate designated spaces associated with the development (via a long-term leasehold to be available for the life of the development);
- Demonstrating that provision of full parking provision will unacceptably comprise the development's active frontages and relationship with the street, and evidence that alternative parking solutions cannot be viably accommodated; and
- Provision of robust research and market evidence to demonstrate that lower levels of car parking demand will be appropriate for a particular scheme.

Car Parking

- 3.3.4 Within the basement car park, there would be a total of 47 car parking spaces, 10 of which would be disabled bays. This equates to a c. 10% car parking provision, with 21% of all car parking allocated as disabled bays. Additionally, all of the car parking spaces will be designed for electric vehicle (EV) charging capabilities, with 10 bays (21%) fitted with active provision, with the potential for all spaces to be upgraded in the future. **Drawing 79165-CUR-00-XX-DR-TP-05002** shows a large car utilising the proposed car park.
- 3.3.5 Based on the QS416EW dataset of the 2011 Census, titled 'Car or Van Availability', it can be seen that 65% of households in the Manchester 055 Middle Super Output Area (MSOA) where the Site is located do not own cars or vans. This is followed by 30%, 4%, 0% and 0% of households with 1, 2, 3, and 4 or more cars respectively per household. As such, the average number of cars per household in Manchester 055 can be determined as 0.41.
- 3.3.6 As such, the level and location of provision is considered appropriate to the scale, location and nature of the development, and is in line with the parking requirements outlined in the Manchester Residential Quality Guidance on the basis that the minimum standards may not be applied due to existing car ownership data, high accessibility of the Site, and the introduction of measures and initiatives aimed at encouraging the use of public transport, cycling and walking instead of private car.
- 3.3.7 It is considered limiting the availability of parking would lower the existing level of car ownership further in the case of the proposed development, and, accepting that the proposed development would include higher density residential development such as flats / apartments rather than larger family houses, it is not likely that many prospective residential occupiers would require a car parking space.
- 3.3.8 As prospective residential occupiers come forward to occupy the development, they would be aware of the private vehicle ownership restrictions living in the proposed development would bring and would decide on whether to purchase / rent such a property in consideration of this.

Cycle Parking

- 3.3.9 Within the basement, there would be a bike store with a total of 496 cycle parking spaces. This equates to over 100% cycle parking provision, which has been agreed with MCC during pre-application discussions.
- 3.3.10 This is one of the many initiatives to encourage more residents to travel by sustainable modes (in addition to the initiatives outlined in the accompanying Interim Travel Plan (**Document Reference: 79165-CUR-00-XX-RP-TP-002**)).

3.4 Proposed Servicing Arrangements

- 3.4.1 There are bin stores located at the ground floor of the building. Residents and businesses occupying the retail units would be responsible for removing waste from their dwellings / units to the bin store.
- 3.4.2 On collection days, it is envisaged that management staff at the building would wheel the bins from the bin stores to the proposed loading bay along Port Street, where a refuse vehicle will pull up, and waste operatives will unload the bins. Subsequently, the management staff would wheel the emptied bins back into the bin stores. It is envisaged that waste collections will be undertaken outside of peak hours to minimise disruption to the public highway.
- 3.4.3 More details on the waste collection schedule and number of bins proposed are provided in the Waste Management Strategy prepared by Curtins (**Document Reference: 79165-CUR-00-XX-RP-TP-003_WMS**).

3.5 Substation Access

- 3.5.1 Access to the substation, located to the east of the development and accessed from Great Ancoats Street, was discussed during the pre-application meeting with Highways Officers at MCC and TfGM, as detailed in **Chapter 3.6**. It was agreed that very occasional maintenance access from Great Ancoats Street would be acceptable in principle.
- 3.5.2 To support the exceptionally low frequency of access, FutureServ has prepared a short statement summarising the expected life span of the substation equipment, periodic maintenance requirements and access strategy. In summary, the note states that following construction, vehicular access to the substation is unlikely to happen for 30 years, except if there is a failure of the substation and requires replacing, which would be rare if periodic maintenance is followed. Periodic maintenance would not require vehicular access, with the operative parking elsewhere and walking to the substation. The full note is contained to the rear of this report in **Appendix C**.
- 3.5.3 Notwithstanding this, Great Ancoats Street footway would be resurfaced with York Stone, provided with a new dropped kerb. Any utilities in this section of the footway would need to be assessed as to whether there is enough protection to accommodate a fully laden HGV.

- 3.5.4 **Drawing 79165-CUR-00-XX-DR-TP-05003** to the rear of this report contains the swept path analysis of a 12m Rigid HGV accessing the substation. Banksmen would be required to monitor the reversing manoeuvre along Great Ancoats Street and over the footway.

3.6 Scoping Discussions

- 3.6.1 The above proposals were discussed with Highways Officers and TfGM during the scoping meeting on the 6th September 2021. A summary is provided below:
- Highways initially had some reservations regarding the sub-station location and access requirements from Great Ancoats Street. Notwithstanding, occasional maintenance from Great Ancoats Street would be acceptable in principle subject to:
 - Agreement to provide confirmation that maintenance activity will be rare;
 - Agreement to provide a dropped kerb off Great Ancoats Street to serve the sub-station;
 - Agreement to ensure any utilities in that section of footway are protected enough to accommodate a vehicle; and
 - Agreement to resurface Great Ancoats Street footway in York Stone;
 - Whilst a lay-by for the development was considered essential, removal of the existing cycle lane on Port Street was not favoured. An amended cycle lane should be provided and this should broadly comply with LTN 1/20 and should be segregated from the footway where it can be. **Drawing 79165-CUR-00-XX-DR-TP-75001-P03** presented during the meeting has been considered acceptable in principle by MCC and TfGM;
 - MCC Highways had an expectation that the entire frontage of the Site to be resurfaced in York stone following construction;
 - MCC confirmed that the following were appropriate:
 - 4 accessible bays;
 - 20% electric vehicle (EV) spaces with provision for all to be upgraded in the future; and
 - 100% cycle parking.

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. It is important to ensure that developments are not isolated but are located close to complementary land uses. 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;
- Accessibility by Cycle; and
- Accessibility by Public Transport.

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 Centres (m)	Commuting / School / Sightseeing (m)	Elsewhere/Local Services (m)
Desirable	200	500	400
Acceptable	400	1,000	800
Preferred Maximum	800	2,000	1,200

Table 4.1 – CIHT Suggested Acceptable 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 79165-CUR-00-XX-DR-TP-06001** 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, which are likely to be the most significant categories of trips generated by the proposed residential development.

4.2.3 Within a 500m walking distance of the Site lies Ancoats, New Islington, and the Northern Quarter, which comprise a wide variety of amenities for leisure, retail, food and drink, daily needs such as supermarkets, nightlife, and fitness. The Site is also within a 500m walking distance to the Ancoats

Marina and Cotton Field Wharf, and the Urban Exchange shopping centre, which comprises large stores such as M&S, GO Outdoors, Aldi, and a gym. Additionally, there are bus stops that are accessible along the A665 Great Ancoats Street, for journeys in and out of Manchester City Centre.

- 4.2.4 Further afield but within a 1,000m walking distance of the Site lies additional areas of Manchester City Centre, most notably public transport interchanges such as Manchester Piccadilly, Piccadilly Gardens, Market Street, and Shudehill. These locations allow easy access for future residents of the Site which commute to work to Greater Manchester and beyond.
- 4.2.5 Within a 2,000m walking distance of the Site lies the majority of Manchester City Centre, and additional areas such as Miles Platting to the north-east, Ardwick to the south, and Salford Central to the west. Additional leisure facilities, food and drinks, retail opportunities, employment (i.e. Central Business District), high street banks, health clubs, hotels, and convenience stores are accessible. Manchester Victoria, Manchester Oxford Road, and Salford Central rail stations are also accessible within this catchment.
- 4.2.6 In addition to the above, further education institutions such as Manchester Law School, University of Manchester, and Manchester Metropolitan University are within a 2,000m walking distance of the Site.
- 4.2.7 The surrounding roads have wide footways for pedestrian use, and the carriageways are well-lit by street lighting. To assist pedestrians, there are numerous controlled crossing points with pedestrian refuge islands, dropped kerbs, and tactile paving. There is already a significant amount of pedestrian activity in the area, so high-quality pedestrian facilities are available. As such, the Site is considered highly accessible on foot.

4.3 Accessibility by Cycle

- 4.3.1 In order to assist in assessing the accessibility of the Site by cycle, **Plan 79165-CUR-00-XX-DR-TP-06002** to the rear of the report presents an 8km cycle catchment for the Site. The 8km (5-mile) cycling distance refers to a recommendation by Cycling England in the document *'Integrating Cycling into Development Proposals'* (2009), which states: *"most cycle journeys for non-work purposes and those to rail stations are between 0.5 and 2 miles, but many cyclists are willing to cycle much further (i.e. for work, a distance of 5 miles should be assumed)"*.
- 4.3.2 The 8km catchment area includes the entirety of Manchester City Centre including all major transportation links, shopping centres, bars, restaurants, leisure centres, tourist attractions, and places of worship. The catchment also extends as far as Cheetham Hill and Blackley to the north, Failsworth and Fairfield to the east, Levenshulme and Withington to the south, and Eccles, Trafford Park, and Chorlton to the west.
- 4.3.3 The A665 Great Ancoats Street comprises cycle infrastructure as existing, in the form of shared footway / cycleways. Additionally, low speed limits along streets within the city centre are part of the city's high-

quality cycle infrastructure to improve cyclist safety. Furthermore, to the south-east of the Site lies the Rochdale Canal Towpath which can be accessed from Great Ancoats Street and Tariff Street. The towpath is also known as Regional Route 86 or the Ashton Canal Cycleway, which follows the River Medlock from the eastern edge of the city centre, near Piccadilly, and follows the river through Phillips Park and Clayton Vale

- 4.3.4 A combination of on and off-road local cycle routes form an interconnected network in the vicinity of the Site. The local cycle network in the vicinity of the Site is shown in **Figure 4.1** below:

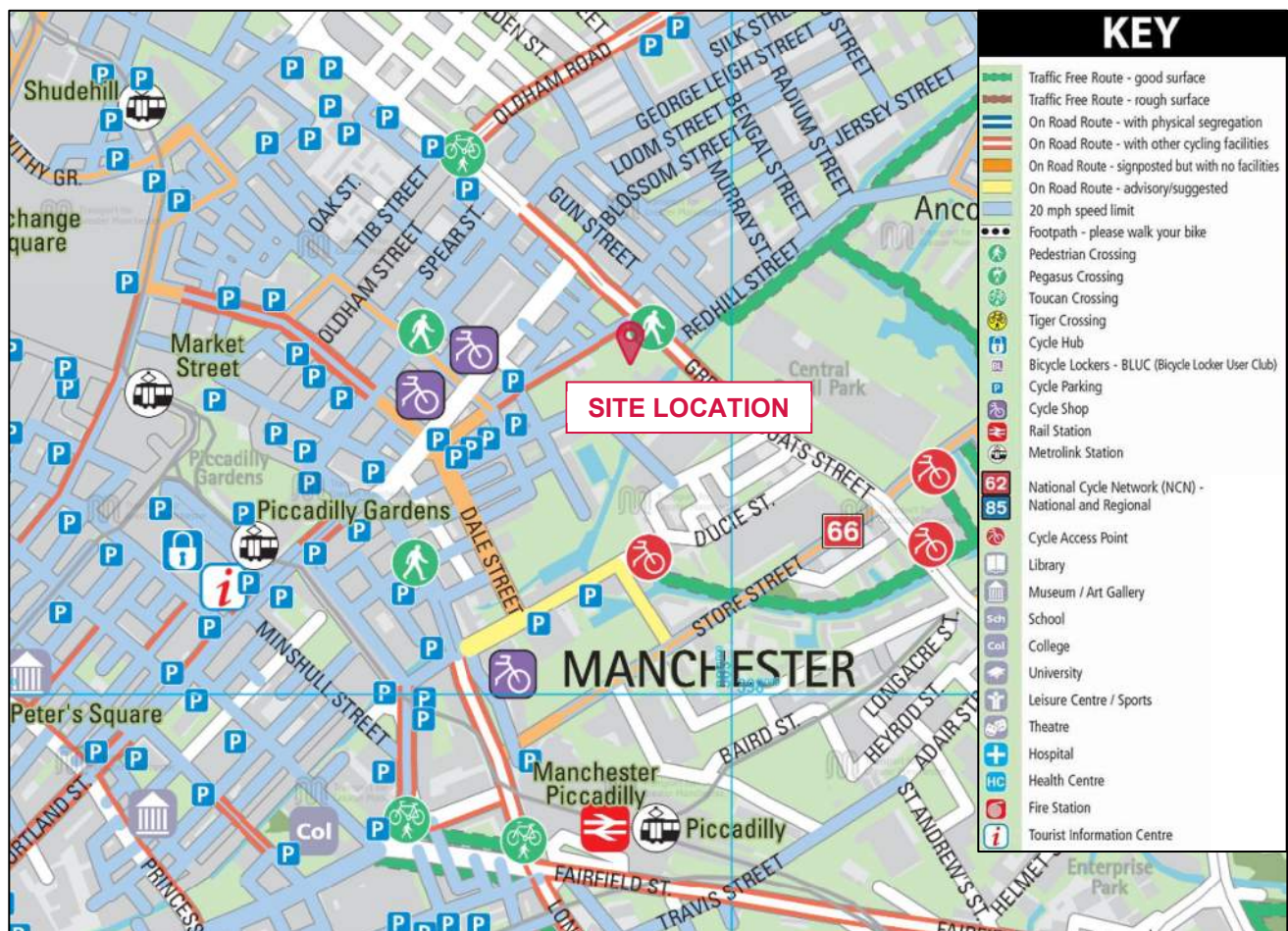


Figure 4.1 – Local Cycle Infrastructure
(Source: TfGM, 2019)

- 4.3.5 Store Street is part of Route 66 on the National Cycle Network (NCN), which, in turn, comprises several stretches of traffic-free cycle paths such as locally along the Rochdale Canal. The route runs from the Old Trafford Football Stadium in Manchester to Spurn Head via Bradford, Leeds, York, Beverley and Kingston upon Hull. More locally, the route connects the Site to the north east of Greater Manchester, including areas such as Failsworth.

- 4.3.6 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. The Site is in close proximity to confirmed Bee Network infrastructure such as the Manchester Northern and Eastern Gateway (connecting the neighbourhoods of Ancoats, New Islington, New Cross, New Town, Redbank and the Green Quarter), allowing future residents to benefit from better connectivity and quality of commute.
- 4.3.7 Based on the above, it is considered that there is a real opportunity for cycling as a sustainable mode of travel to and from the Site.

4.4 Accessibility by Public Transport

- 4.4.1 Developed by Transport for Greater Manchester (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 approach essentially measures the density of public transport in any site within the Greater Manchester region.
- 4.4.2 The accessibility index score has 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 in an area with a GMAL rating of 8 and is considered appropriately situated to take advantage of existing public transport infrastructure within Manchester City Centre.
- 4.4.3 **Plan 79165-CUR-00-XX-DR-TP-06003** to the rear of the report demonstrates those areas accessible via public transport within 20, 40 and 60-minutes journey from the Site. Within a 20-minute journey, residents can travel to Harpurhey to the north, and Ardwick to the south. Manchester Airport, Ashton-under-Lyne, Middleton, Eccles and Old Trafford can be accessed within a 40-minute public transport journey from the Site. Within an hour, residents can travel as far as Huddersfield, Todmorden, Adlington, Rainhill, Widnes, Holmes Chapel, Macclesfield, Chinley, and Glossop
- 4.4.4 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 – Public Transport Network in the Vicinity of the Site

(Source: TfGM, 2019)

Bus Accessibility

- 4.4.5 Guidance from the Chartered Institution of Highways and Transportation (CIHT) document *'Buses in Urban Developments'* (2018) indicates that ideally, a bus stop should be located within the following from a new development based on its location and the number 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 4.2 – CIHT Maximum Suggested Walking Distances to Bus Stops

- 4.4.6 A distance of 400m, which equates to an approximate 5-minute walk, is also commonly cited as a benchmark for access to local bus services.
- 4.4.7 The closest bus stops to the Site are those located along Great Ancoats Street adjacent to the Site. There are also additional bus services located within 400m of the Site, such as those along Level Street and Oldham Street. **Table 4.3** details the services that call at these stops, and their associated frequencies. The frequencies included are for travel in both inbound and outbound directions:

Bus Service	Route	Peak Hourly Frequency		
		Mon – Fri	Sat	Sun/Hols
From Great Ancoats Street:				
216	Piccadilly Gardens – Ashton-under-Lyne – Stalybridge	Every 10 mins	Every 10 mins	Every 15 mins
217	Piccadilly Gardens – Droydsden – Ashton-under-Lyne	Hourly	Hourly	Hourly
230	Piccadilly Gardens – Droydsden – Ashton-under-Lyne	Every 30 mins	Every 30 mins	Hourly
231	Piccadilly Gardens – Droydsden – Hurst – Ashton-under-Lyne	Every 30 mins	Every 30 mins	Hourly
From Lever Street (all of the above, with the addition of):				
74	Piccadilly Gardens – Newton Heath – Failsworth – Woodhouses	5 in the PM	No Service	No Service
76	Piccadilly Gardens – Failsworth – Hollinwood – Oldham Mumps	Every 10 mins	Every 12 mins	Every 30 mins
76A	Piccadilly Gardens – Failsworth – Limeside – Oldham	Hourly	Hourly	No Service
83	Piccadilly Gardens – Failsworth – Oldham – Sholver	Every 10 mins	Every 10 mins	Every 30 mins
84	Piccadilly Gardens – Hollinwood – Oldham – Lees – Uppermill	Every 10 mins	Every 10 mins	Every 20 mins
From Oldham Street (all of the above, with the addition of):				
114	Boarshaw – Middleton – Greengate – Piccadilly Gardens	Every 20 mins	Every 30 mins	Hourly

Bus Service	Route	Peak Hourly Frequency		
		Mon – Fri	Sat	Sun/Hols
181	Piccadilly Gardens – Chadderton – Royton – Wrens Nest	Hourly	Hourly	No Service
182	Piccadilly Gardens – Chadderton – Royton – Wrens Nest	Hourly	Hourly	Hourly
X84	Piccadilly Gardens – Failsworth – Hollinwood – Carrcote	1 in the AM to MCR 1 in the PM to Carrcote	No Service	No Service

Table 4.3 – Summary of Bus Service Frequencies

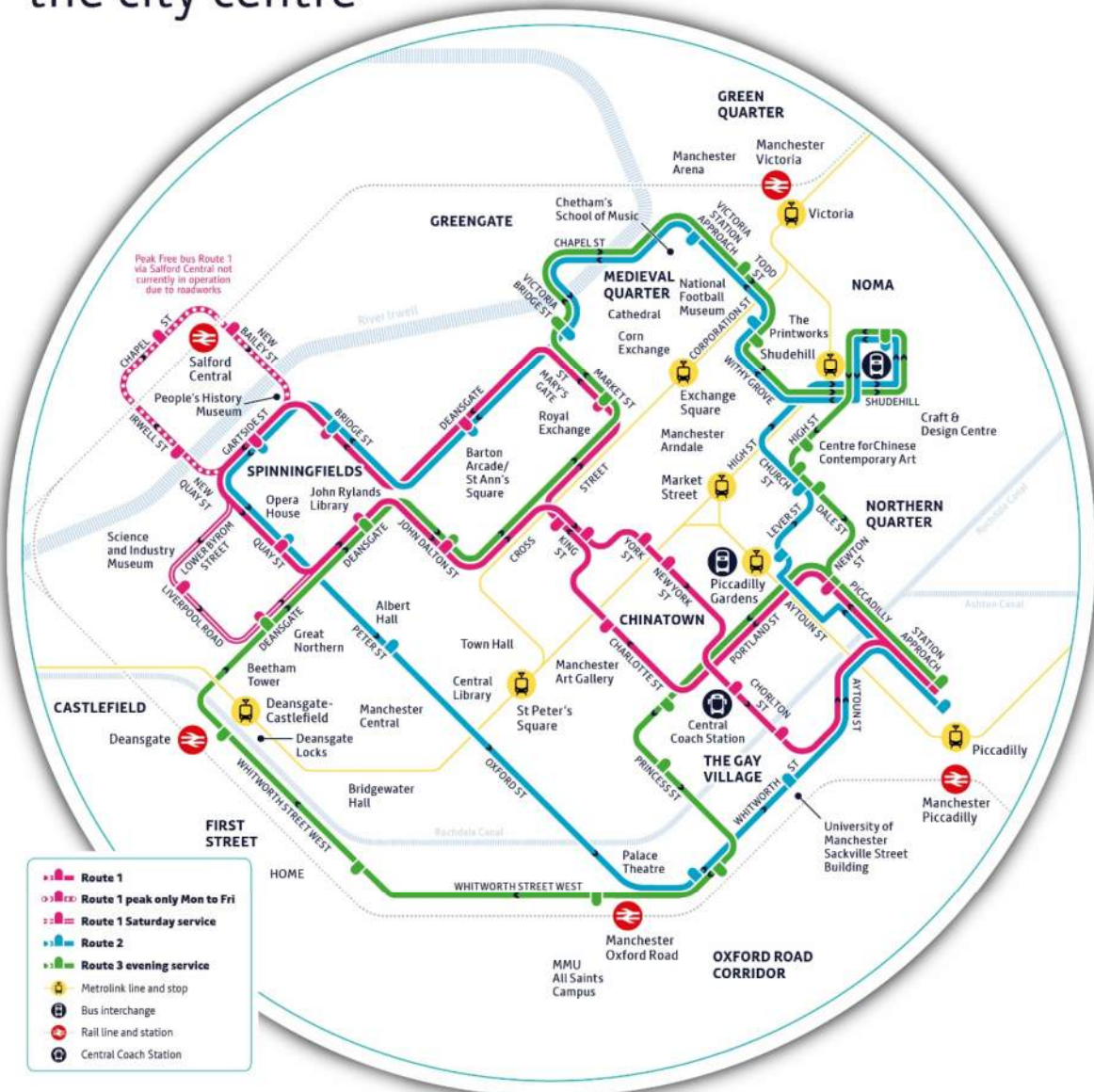
- 4.4.8 Additionally, within a 750m walk from the Site lies Manchester Piccadilly, which serves as a stop for Routes 1, 2, and 3 of the Manchester free bus. The free bus is a service providing direct access to the Deansgate, Oxford Road, Victoria and Salford Central railway stations along with key city 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

Figure 4.3 – Free Bus Route and Timetable
(Source: TfGM, 2021)

4.4.9 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.

4.4.10 Overall, the Site is well served by bus. The Site also benefits from the free bus service.

Rail Accessibility

4.4.11 The closest rail station to the development is Manchester Piccadilly, located c. 750m to the south of the Site. Manchester Piccadilly station is a major transport interchange, being the main rail hub of the northwest of England. It provides regional and national frequent services with trains departing to London every 20 minutes, with an average journey time of 2 hours 10 minutes.

4.4.12 A summary of rail services from the station is summarised in **Table 4.4**. In all cases, rail users should check the respective rail operators' timetables for detailed stops, as trains might not call at every station:

Service	Service Frequency per Hour		
	Peak Weekday	Peak Saturday	Peak Sunday
By Northern Rail:			
Bolton to Manchester and Manchester Airport Calling at: Bolton, Salford Crescent, diverges to: - Salford Central, Manchester Victoria; or - Deansgate, Manchester Oxford Road, Manchester Piccadilly, diverges to: - Stockport; or - Heald Green, Manchester Airport.	2 per hour in each direction	2 per hour in each direction	Hourly in each direction
Manchester to Southport and Kirkby Calling at, but not limited to: Manchester Airport, Manchester Piccadilly, Manchester Oxford Road, Deansgate, Salford Crescent. Extensive route; change at other stations to access additional stops.	Hourly to Manchester 1 in the PM to Southport	Hourly to Manchester 1 in the PM to Southport	No Service
Liverpool to Manchester Piccadilly via Warrington Central Calling at: Liverpool Lime Street, Edge Hill, Mossley Hill, West Allerton, Liverpool South Parkway, Hunt's Cross, Halewood, Hough Green, Widnes, Sankey for Penketh, Warrington West, Warrington Central, Padgate, Birchwood, Glazebrook, Irlam, Flixton, Chassen Road, Urmston, Humphrey Park, Trafford Park, Deansgate, Manchester Oxford Road, Manchester Piccadilly, and Manchester Airport.	2 per hour to Manchester 1 per hour to Liverpool	2 per hour to Manchester 1 per hour to Liverpool	Hourly in each direction

Service	Service Frequency per Hour		
	Peak Weekday	Peak Saturday	Peak Sunday
Manchester to Manchester Airport local stopping services Calling at: Deansgate, Manchester Oxford Road, Manchester Piccadilly, diverges to: - Levenshulme, Heaton Chapel, Stockport, Cheadle Hulme, Handforth; or - Mauldeth Road, Burnage, East Didsbury, Gatley, Heald Green, Manchester Airport, Styal; converges back at: Wilmslow, Alderley Edge, Chelford, Goostrey, Holmes Chapel, Sandbach, Crewe.	2 per hour in each direction	2 per hour in each direction	Hourly in each direction
Blackpool North to Manchester Victoria, Preston to Hazel Grove Calling at, but not limited to: Blackpool North, Layton, Poulton-le-Fylde, Kirkham & Wesham, Preston, Leyland, Buckshaw Parkway, Chorley, Adlington, Blackrod, Horwich Parkway, Lostock, Bolton, Salford Crescent, diverges to: - Salford Central, Manchester Victoria; or - Deansgate, Manchester Oxford Road, Manchester Piccadilly, diverges to: - Heald Green, Manchester Airport; or - Levenshulme, Heaton Chapel, Stockport, Davenport, Woodsmoor, Hazel Grove.	Hourly to Manchester 2 per hour to Blackpool North	Hourly to Manchester 2 per hour to Blackpool North	Hourly in each direction
Carlisle to Preston and Manchester via Cumbrian Coast and Windermere to Manchester Airport Calling at: - Carlisle, Dalston, Wigton, Aspatria, Maryport, Flimby, Workington, Harrington, Parton, Whitehaven, Corkickle, St Bees, Nethertown, Braystones, Sellafield, Seascale, Drigg, Ravenglass, Bootle, Silecroft, Millom, Green Road, Foxfield, Kirkby-in-Furness, Askam, Barrow-in-Furness, Roose, Dalton, Ulverston, Cark, Kents Bank, Grange-over-Sands, Arnside, Silverdale, Carnforth; or - Windermere, Staveley, Burneside, Kendal, Oxenholme Lake District; Lancaster, Preston, Manchester Oxford Road, Manchester Piccadilly, and Manchester Airport.	2 per hour to Manchester Hourly to Lancaster	2 per hour to Manchester Hourly to Lancaster	Hourly in each direction

Service	Service Frequency per Hour		
	Peak Weekday	Peak Saturday	Peak Sunday
Liverpool to Manchester Airport and Warrington Bank Quay via Earlestown (includes Helsby to Ellesmere Port) Calling at: Liverpool Lime Street, Edge Hill, Wavertree Technology Park, Broad Green, Roby, Huyton, Whiston, Rainhill, Lea Green, St Helens Junction, Earlestown, Newton-le-Willows, Patricroft, Eccles, Manchester Oxford Road, Manchester Piccadilly, Manchester Airport. Extensive route; change at other stations to access additional stops.	2 per hour in each direction	2 per hour in each direction	2 per hour in each direction
Manchester to Chester via Altrincham Calling at: Manchester Piccadilly, Stockport, Navigation Road, Altrincham, Hale, Ashley, Mobberley, Knutsford, Plumley, Lostock Gralam, Northwich, Greenbank, Cuddington, Delamere, Mouldsworth, Chester.	Hourly in each direction	Hourly in each direction	Every 2 hours in each direction
Manchester to Crewe via Stockport and via Manchester Airport Calling at: Manchester Oxford Road, Manchester Piccadilly, Mauldeth Road, Burnage, East Didsbury, Gatley, Heald Green, and Manchester Airport. Extensive route; change at other stations to access additional stops.	2 per hour in each direction	2 per hour in each direction	2 per hour in each direction
Manchester to Stoke-on-Trent via Macclesfield Calling at: Manchester Piccadilly, Stockport, Cheadle Hulme, Bramhall, Poynton, Adlington, Prestbury, Macclesfield, Congleton, Kidsgrove, Longport, Stoke-on-Trent.	2 per hour in each direction	2 per hour in each direction	Hourly in each direction
Manchester to Hazel Grove and Buxton Calling at: Manchester Piccadilly, Levenshulme, Heaton Chapel, Stockport, Davenport, Woodsmoor, Hazel Grove, Middlewood, Disley, New Mills Newtown, Furness Vale, Whaley Bridge, Chapel-en-le-Frith, Dove Holes, Buxton.	2 per hour in each direction	2 per hour in each direction	Hourly in each direction

Service	Service Frequency per Hour		
	Peak Weekday	Peak Saturday	Peak Sunday
Manchester to New Mills Central and Rose Hill and to Sheffield (The Hope Valley Line) Calling at: Manchester Piccadilly, Ashburys, diverges to: • Reddish North, Brinnington, Bredbury; or • Gorton, Fairfield, Guide Bridge, Hyde North, Hyde Central, Woodley; converges at: Romiley, Marple OR Rose Hill Marple, New Mills Central, Chinley, Edale, Hope (Derbyshire), Bamford, Hathersage. Grindleford, Dore and Totley, Sheffield.	2 per hour in each direction	2 per hour in each direction	Hourly in each direction
Manchester to Hadfield and Glossop Calling at: Manchester Piccadilly, Ardwick, Ashburys, Gorton, Guide Bridge, Flowery Field, Newton for Hyde, Godley, Hattersley, Broadbottom, Dinting, Glossop, Hadfield.	2 per hour in each direction	2 per hour in each direction	Hourly in each direction
By East Midlands Railway:			
Liverpool to Norwich Calling at: Liverpool Lime Street, Liverpool South Parkway, Widnes, Warrington Central, Manchester Oxford Road, Manchester Piccadilly, Stockport, Chinley, Edale, Hope, Bamford, Hathersage, Grindleford, Dore & Totley, Sheffield, Dronfield, Chesterfield, Alfreton, Ilkeston, Nottingham, Grantham, Peterborough, Ely, Thetford, and Norwich.	Every 2 hours in each direction	Every 2 hours in each direction	Hourly in each direction
By Transport for Wales:			
Llandudno to Manchester Calling at: Llandudno Junction, Colwyn Bay, Abergelle and Pensarn, Rhyl, Prestatyn, Flint, Shotton, Chester, Helsby, Frodsham, Runcorn East, Warrington Bank Quay, Earlestown, Newton-le-Willows, Manchester Oxford Road, Manchester Piccadilly, East Didsbury, and Manchester Airport. Extensive route; change at other stations to access additional stops.	Hourly in each direction	Hourly in each direction	Hourly in each direction
By TransPennine Express:			

Service	Service Frequency per Hour		
	Peak Weekday	Peak Saturday	Peak Sunday
Manchester Airport to Preston, Carlisle, and Glasgow Central / Edinburgh Calling at: Manchester Airport, Manchester Piccadilly, Manchester Oxford Road, Bolton, Preston, Lancaster, Oxenholme, Penrith, Carlisle, Lockerbie, Carstairs, diverges to: • Motherwell and Glasgow Central; or • Haymarket and Edinburgh.	Every 2 hours in each direction	Every 2 hours in each direction	Every 2 hours in each direction
Manchester to Sheffield, Doncaster, Scunthorpe, Grimsby and Cleethorpes Calling at: Manchester Airport, Manchester Piccadilly, Stockport, Dore & Topley, Sheffield, Meadowhall, Doncaster, Scunthorpe, Barnetby, Harbrough, Grimsby Town, Cleethorpes.	Hourly in each direction	Hourly in each direction	Hourly in each direction
Manchester Airport to Leeds, Hull, York, Scarborough, Middlesbrough, Newcastle and Edinburgh Calling at: Manchester Airport, Gatley, Manchester Piccadilly, Manchester Oxford Road, Manchester Victoria, Huddersfield, Dewsbury, Leeds, York, Thirsk, Northallerton, Yarm, Thornaby, Middlesbrough, and Redcar Central.	Hourly in each direction	Hourly in each direction	Hourly in each direction
By CrossCountry:			
Scotland, North East & Manchester to the South West and South Coast Calling at: Manchester Piccadilly, Stockport, Macclesfield, Stoke-on-Trent, Stafford, Wolverhampton, Birmingham New Street, Birmingham International, Coventry, Leamington Spa, Banbury, Oxford, Reading, Basingstoke, Winchester, Southampton Airport Parkway, Southampton Central, Bournemouth.	Hourly from 10:27 – 17:27, then 21:27 (SB) Hourly from 07:29 – 10:23, 15:23 – 16:23, 20:23 – 22:23 (NB)	05:11, 11:27, 12:27, then hourly from 17:27 – 19:27 (SB) 07:30, then hourly from 12:23 – 14:23, 18:23 – 20:23 (NB)	Hourly from 08:27 – 11:27, 16:27 – 18:27, then 22:05 (SB) 10:38, 11:33, 16:26, 17:26, 22:24, 23:23 (NB)
By Avanti West Coast:			
London Euston – Liverpool / Manchester via Stoke-on-Trent / Crewe Calling at: London Euston, Milton Keynes Central, Stoke-on-Trent, Macclesfield, Stockport, Manchester Piccadilly.	2 per hour in each direction	2 per hour in each direction	2 per hour in each direction

Table 4.4 – Summary of Rail Service Frequencies

4.4.13 It is noted that the provision of rail services will change during different seasons in the year and over time in response to current circumstances. The rail times are accurate at the time of writing, whereas up-to-date rail times can be found on the respective train operators' websites:

- Northern Rail: northernrailway.co.uk/travel/timetables;
- East Midlands Railway: www.eastmidlandsrailway.co.uk/timetables;
- Transport for Wales: tfwrail.wales/travel-safer/timetable;
- TransPennine Express: www.tpexpress.co.uk/travel-updates/timetables;
- CrossCountry: <https://www.crosscountrytrains.co.uk/travel-updates-information/train-timetables>;
and
- Avanti West Coast: <https://www.avantiwestcoast.co.uk/travel-information/plan-your-journey/timetables>.

4.4.14 Manchester Piccadilly rail station has step-free access to the platforms and ticket machines via moving walkways and lifts, along with cycle storage spaces outside the station. The station is staffed during regular opening hours and has a concourse / ticket machines from which all tickets must be purchased. The station is sheltered and there are payphones present for passenger use, along with toilets and baby change facilities, shops, left luggage, wi-fi services and ATMs.

4.4.15 Train running information is offered via Customer Information Services (CIS) screens, and there are spaces for bicycles outside the entrances to the station along Fairfield Street, Ducie Street, and the front entrance. There are also parking spaces spin a mixture of long-stay, short-stay, or pick-up / drop-off points for commuters who wish to "Park and Ride".

4.4.16 The trains that serve Manchester Piccadilly run regularly all 7 days of the week. This allows access to a number of different locations across the whole of the UK; and is a viable alternative to private car use.

4.4.17 Journey times have also been reduced and improved following the Ordsall Chord bridge which was completed in 2017 and links Manchester's three main railway stations (Victoria, Oxford Road and Piccadilly) to allow more trains to run across the whole of the north. There are also direct links to Manchester Airport from across the north of England.

4.4.18 The High Speed Rail 2 (HS2) is a high-speed rail network which will allow enhanced connections to London and Birmingham, halving the current travel time, and Europe via the successful HS1. The delivery of a HS2 Station alongside the existing Manchester Piccadilly will have a substantial positive impact on driving forward a wider commercial and regeneration plan for the Oxford Road Corridor.

4.4.19 The Northern Hub is a Network Rail plan to stimulate economic growth in the north of England through better connections between key towns and cities. The Northern Programme is a series of targeted upgrades to the railway in the north of England. It will allow hundreds more trains to run each day and

provide space for millions more passengers a year. The Hub will bring service improvements and economic benefits across the whole north of England which could be hugely beneficial for residents of the Site. These include:

- Over £4bn worth of wider economic benefits to the region and potentially 20,000 to 30,000 jobs;
- The ability to double into the Trafford Park freight terminals;
- Two new fast trains per hour between Manchester Victoria and Liverpool;
- More frequent services between Manchester and Leeds (six per hour);
- Faster passenger services across the TransPennine route – improving journey times of up to 15 minutes between Manchester Victoria to York via Leeds;
- Journey times between Liverpool and Manchester could be reduced by 10-15 minutes;
- New direct services from across the north to Manchester Airport; and
- Faster journey times to Sheffield and the East Midlands, Bradford, Halifax, Hull, Newcastle and the North-East.

4.4.20 It is considered the Site is accessible by rail.

Metrolink (Light Rail) Accessibility

4.4.21 Piccadilly Gardens, Piccadilly, and Shudehill Metrolink stations are located approximately equidistant from the Site (within a 650m – 750m walk from the Site). The following lines call at these stops:

- **Navy Line** – Manchester Airport to Manchester Victoria (Shudehill only);
- **Yellow Line** – Piccadilly to Bury;
- **Green Line** – Altrincham to Bury (Shudehill only);
- **Purple Line** – Altrincham to Piccadilly (Piccadilly Gardens and Piccadilly only); and
- **Blue Line** – Eccles to Ashton-under-Lyne.

4.4.22 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.

4.4.23 The start and end times for specific stations will change during different seasons in the year and 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.

4.4.24 Users can change at St Peter's Square, Manchester Victoria, or Cornbrook stations to access additional services to the Trafford Centre, East Didsbury, and Rochdale, as shown in the Metrolink map in **Figure 4.4**. It is considered the Site is highly accessible by Metrolink (light rail).

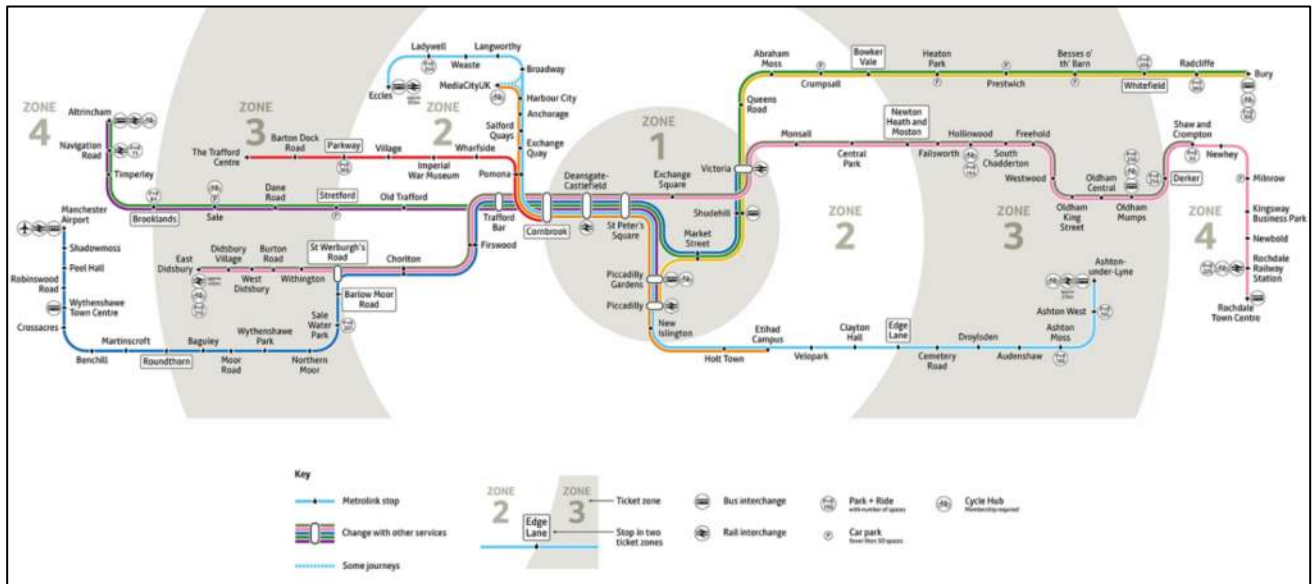


Figure 4.4 – TfGM Metrolink Network Map
(Source: TfGM, 2021)

4.5 Summary

4.5.1 It is clear the Site is well located to benefit from sustainable modes of travel such as walking, cycling and public transport. Additionally, the Site benefits from close proximity to many local amenities and services.

5.0 Traffic Forecasting

5.1 Introduction

- 5.1.1 The following section contains trip generation analysis based on the proposed development during the weekday AM and PM peak hours.
- 5.1.2 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.

5.2 Existing Trip Generation

- 5.2.1 The Site currently comprises a surface level car park operated by CitiPark. It has a total capacity of circa 100 spaces. TRICS does not have a category for car parks on its own, and it is envisaged that existing patrons at the car park are likely to visit the car park for a multitude of reasons, for example to park their cars prior to going to work, or to park their cars prior to undertaking a shopping trip in the city.

5.3 Forecasted Trip Generation

- 5.3.1 The level of trips generated by the development proposals has been derived using peak hour trip rates obtained from surveys of schemes of a similar size and nature to that proposed, from within the 'Residential – Flats Privately Owned' category of the TRICS database.
- 5.3.2 The retail uses would be ancillary to the residential uses and form a minor part of the development traffic. It is considered that the vast majority of trips to these elements will be either linked trips as residents visit shops before / after work, or pass-by trips as other people travel by the Site on an alternative trip. As such, trips generated by these uses have not been calculated.
- 5.3.3 The search criteria used in the TRICS database are presented in **Appendix B**, from which the total trip rates can be calculated. These are summarised in **Table 5.1** below. All trip rates are per 1 dwelling:

Trip Rate Mode	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	0.054	0.177	0.231	38%	0.174	0.098	0.272	43%
Cyclists	0.002	0.011	0.013	2%	0.008	0.004	0.012	2%
Pedestrians	0.021	0.085	0.106	17%	0.075	0.067	0.142	22%
Public Transport	0.011	0.115	0.126	21%	0.075	0.01	0.085	13%

Table 5.1 – Proposed Multi-Modal Trip Rates and Split

5.3.4 From **Table 5.1** above, the total number of trips that could be generated can be found. This is provided in **Table 5.2**:

Trip Rate Mode	Trip Generation AM (08:00 – 09:00)			Trip Generation PM (17:00 – 18:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
Vehicles	26	86	112	84	48	132
Cyclists	1	5	6	4	2	6
Pedestrians	10	41	51	36	32	69
Public Transport	5	56	61	36	5	41

Table 5.2 – Proposed Trip Generation

5.3.5 The number of vehicle trips generated by the proposed development could equate to 112 and 132 two-way movements respectively in the normal AM and PM peak periods (08:00 – 09:00 and 17:00 – 18:00). However, the parking spaces in the building are limited to 47, so usage would be less than this.

Sensitivity Test – TRICS Person Data Combined with Census Data

5.3.6 The TRICS analysis also includes the total person trip rate associated with a development. This is shown in **Table 5.3** below:

Residential	Trip Generation AM (08:00 – 09:00)			Trip Generation PM (17:00 – 18:00)		
	Arrive	Depart	Total	Arrive	Depart	Total
TRICS Person Trip Rates (per 1 dwelling)	0.100	0.512	0.612	0.429	0.211	0.640
Trip Generation (485 dwellings)	49	248	297	208	102	310

Table 5.3 – TRICS Person Trip Rates – Residential

5.3.7 The number of person trips generated by the proposed development could equate to 297 and 310 two-way movements respectively in the normal AM and PM peak periods (08:00 – 09:00 and 17:00 – 18:00).

5.3.8 The 2011 Census dataset 'WU03EW – Location of usual residence and place of work by method of travel to work (MSOA level)' has been consulted to derive the likely modal split of residents at the Site travelling to work. The middle super output area (MSOA) of Manchester 055 where the Site is located has been used as the place of residence.

5.3.9 The mode of travel to work data extracted from the output areas is summarised in **Table 5.4**:

Mode of Travel to Work	Number	Percentage
Work mainly at or from home	0	0%
Underground, metro, light rail or tram	181	4%
Train	496	12%
Bus, minibus, or coach	450	11%

Mode of Travel to Work	Number	Percentage
Taxi	9	0%
Motorcycle, scooter or moped	3	0%
Driving a car or van	751	18%
Passenger in a car or van	59	1%
Bicycle	100	2%
On foot	2,148	51%
Other method of travel to work	8	0%
Total	4,205	100%

Table 5.4 – 2011 Census Method of Travel to Work

5.3.10 **Table 5.4** confirms that the mode share for car drivers is c. 18%. As such, there could be c. 53 and 55 two-way vehicular trips in the AM and PM peak hours respectively, the remainder travelling by sustainable modes of transport. However, as stated earlier, the parking spaces in the building are limited to 47, so usage would be less than this.

5.3.11 It is commonly reported that a proportion of the working population are now working from home, for at least a proportion of their week, as a result of the COVID-19 pandemic. The emergence of trends such as home working, hybrid working, flexible working and peak spreading are potential outcomes that would reduce travel demands during peak hours.

5.3.12 In January 2021, Transport for Greater Manchester (TfGM) published the Greater Manchester Transport Strategy 2040, which is focused around improving the reliability of public transport and local cycling and walking connections so that fewer people would need to drive to work. The following excerpts from the Greater Manchester Transport Strategy 2040 address the change in travel patterns in recent years, along with plans for the future:

“Page 47, under ‘Future role of the car’ – Many younger people no longer see car ownership, or indeed a driving licence, as essential. Growing, ageing and more affluent populations will also choose different ways to travel. The growth of car clubs, the advent of app-enabled taxi despatch companies, and the use of social media to arrange shared transport can provide transport on demand without the costs and responsibilities of car ownership and will help to shift attitudes over time. This provides a great opportunity to develop a more integrated and flexible transport system which responds to the changing needs of Greater Manchester’s residents and businesses; and

Page 62, under ‘Public Transport Integration: Keeping Greater Manchester Moving in 2040’ – Improved public transport will need to play a major role in delivering Greater Manchester’s sustainable growth agenda up to 2040. An attractive, efficient and well-integrated public transport network is an essential element within the city-region’s infrastructure and at the heart of the Our Network vision. Together with active travel, it can provide the significantly enhanced connectivity that our city-region requires for success. It can encourage growing numbers of people out of their cars for more of their journeys

(helping to reduce emissions and congestion), and it can provide access to employment, education and opportunities for the third of households without access to a car. Crucially, however, our approach also opens the way for a future where car ownership is not considered essential, and residents can choose from a range of sustainable and efficient travel options – public transport, ride sharing, car sharing/hire, walking, cycling or taxi.”

- 5.3.13 There is also a sub-strategy to the Greater Manchester Transport Strategy 2040, titled ‘City Centre Transport Strategy to 2040’. The central aim of the strategy is for *“90% of all morning peak trips to the city centre to be made on foot, by cycle or using public transport before 2040, with walking to become the predominant mode of travel within the city centre.”* The following excerpts from the City Centre Transport Strategy 2040 address the change in travel patterns in recent years, along with plans for the future:

“Page 21 – In 2002 cars represented 37% of all journeys into the city centre in the morning peak, with almost 32,000 cars crossing the Manchester-Salford Inner Relief Route. Proposals in the last [City Centre Transport] strategy, including enhanced public transport and cycling provision, resulted in the number of cars entering the city centre falling to less than 23,000, or around 21% of all journeys;

Page 40, under “Ambition 5: Parking in the city centre is smarter and integrated with other modes” – We want to ensure that car parking in the city centre is effectively managed. This means... Providing residents with access to shared vehicles for essential use rather than encouraging car ownership; and

Page 70, under “Management of our city centre car parks” – The change from a carbon and car-based economy to a low carbon one is likely to see a change from a car ownership model to a car sharing model with people viewing mobility rather than ownership as the key.”

- 5.3.14 Residents would continuously be encouraged to travel by sustainable modes of transport, making use of the various modes of public transport, as well as walking and cycling opportunities that are available.

5.4 Net Trip Generation

- 5.4.1 The Site currently comprises a surface level car park operated by CitiPark. It has a total capacity of circa 100 parking bays. In the absence of TRICS data for car park uses and without the quantity of vehicular trips associated with the car park, a first principles approach is used.
- 5.4.2 It is considered that the removal of 100 parking spaces and development of a high-density residential building with 47 parking spaces is likely to result in a net decrease in vehicular trips to and from the Site, for reasons mentioned in **Section 5.3** above regarding the change in attitudes towards travel by private car, whilst considering that patrons who previously used the car park for work or leisure purposes would have to relocate to other parking facilities.
- 5.4.3 It is therefore concluded that the highway network would not experience any adverse traffic impacts resulting from the proposed development.

5.5 Alternative Parking Arrangements

5.5.1 To justify the reduction of car parking spaces, a review of nearby public car parks and associated provision has been undertaken in order to understand parking levels in the surrounding area. There are many publicly available car parks situated within a 600m walking catchment, equating to a walking time of approximately 7 minutes when walking at an average speed of 1.5m/s. Nearby car parking is summarised in **Table 5.5** below.

5.5.2 It is noted that the car park locations and quantity of spaces are subject to change in later years as developments in the City Centre come forward. **Table 5.5** is accurate at the time of writing, whereas up-to-date parking locations and numbers can be found on the following websites:

- Manchester City Council: https://www.manchester.gov.uk/directory/52/car_parking;
- Private car park operators (with directories):
 - NCP: <https://www.ncp.co.uk/parking-solutions/cities/manchester/>;
 - CitiPark: <https://citipark.co.uk/car-parks/manchester>;
 - Q-Park: <https://www.q-park.co.uk/en-gb/cities/manchester/>; and
- Independent online directories: <https://www.parkopedia.com/>.

Car Park	Car Park Location	Approximate Walking Distance from Site	Approximate Number of Spaces	Disabled Bays	Electric Vehicle (EV) Charging Bays
1	CitiPark, 1 Port Street, M1 2EG	20m	50	√*	×
2	SIP Car Parks, 75 Port Street, M1 2EG	50m	21	×	×
3	SIP Car Parks, 77 Port Street, M1 2EQ	100m	20	×	×
4	The Parking Space Ltd, Tariff Street, M1 2EG	100m	110	×	×
5	NCP, Port Street, M1 2EG	125m	3	×	×
6	Port Street Central, 78 Port Street, M1 2EQ	125m	76	×	×
7	SIP Car Parks, 27 Gun Street, M4 5DN	250m	140	√*	×
8	CitiPark, 30 Tariff Street, M1 2FJ	300m	230	√*	√ (2)
9	SIP Car Parks, Pigeon Street and Pigeon Street South, M1 2JZ	350m	25	×	×
10	SIP Car Parks, 77 Ducie Street, M1 2JQ	400m	9	×	×
11	Piccadilly Parking Ltd, 61 Ducie Street, M1 2JQ	450m	42	×	×
12	Manchester Central Car Parking Ltd, 57-59 Ducie Street, M1 2JQ	450m	32	×	×
13	CitiPark, 75 Dale Street, M1 2HG	450m	285	√*	×

Car Park	Car Park Location	Approximate Walking Distance from Site	Approximate Number of Spaces	Disabled Bays	Electric Vehicle (EV) Charging Bays
14	SIP Car Parks, 30 Swan Street, M4 5JQ	450m	11	×	×
15	UKCPS Ltd, 19 Cross Keys Street, M4 5ET	550m	48	×	×
16	Addington Street, M4 5EU	550m	64	×	×
17	Manchester City Council, Northern Quarter, 13 Tib Street, M4 1LX	550m	685	√*	√*
18	Manchester City Council, Piccadilly Gardens, 7 Chatham Street, M1 3AY	600m	712	√*	√*
19	SIP Car Parks, Radium Street, M4 6CG	600m	28	×	×
Total:			2,591	0	2

Table 5.5 – Existing Off-site Car Parking Provision

* Denotes that there is provision, but the quantity is unknown.

- 5.5.3 The above table demonstrates 19 car parks were found within less than 7 minutes' walk of the Site, providing car parking provision for approximately 2,591 vehicles. Of this provision, there are also some disabled parking bays and at least 2 electric vehicle (EV) charging bays. Moreover, there are additional car parking options further afield. It is therefore considered there is adequate opportunity for off-site parking should future visitors / residents / staff at the Site choose to commute by car.
- 5.5.4 It is considered the proposals would have an insignificant effect on the car parking provision across the 600m catchment, and throughout Manchester City Centre. For on-street parking, the Site is located within Zone 2 of Manchester City Centre's Controlled Parking Zone (CPZ), where the pay-and-display parking charges of up to £5.80 for a maximum stay of two hours is 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).
- 5.5.5 There are many opportunities for on-street parking, with bays located along Port Street, Newton Street, Brewer Street, and Tariff Street; all of which are in close proximity to the Site.
- 5.5.6 However, due to the short length of stay for on-street parking bays, it is predicted that these facilities would more likely be used by visitors to the Site instead of staff and residents. 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 reduced mobility could also utilise these on-street spaces.

6.0 Transport Planning Policy

6.1 Introduction

- 6.1.1 It is critical to understand national and local transportation planning policies while formulating scheme suggestions. This section summarises the important policies found in relevant policy and guidance publications.

6.2 National Planning Policy Framework (NPPF) 2021

- 6.2.1 The National Planning Policy Framework (NPPF) summarises the current national transport planning policy and emphasises the critical role that transport policies play in enabling sustainable development.

- 6.2.2 Paragraph 11 states that:

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

- 6.2.3 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.”

- 6.2.4 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.”

- 6.2.5 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.

- 6.2.6 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 Code; 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.”*

6.2.7 The development proposals have shown that safe and suitable access to the Site can be achieved, with improvements already in place along Port Street for pedestrian and cycle amenity. Additionally, it is not anticipated that the proposals would result in any significant impacts on the highway network.

6.2.8 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.”

6.2.9 A TRICS assessment has demonstrated that any vehicular impact would be negligible on the surrounding area in terms of highways, traffic and transportation.

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

- *“give priority first 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;*
- *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;*
- *allow for the efficient delivery of goods, and access by service and emergency vehicles; and*
- *be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.”*

6.2.11 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 distance.

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

6.3 National Planning Practice Guidance (NPPG)

6.3.1 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.”*

6.3.2 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 document should contain. The NPPG has been considered in the production of this TS.

6.3.3 The guidance on Travel Plans reinforces the requirement for a Travel Plan, the scope of the document, and need for monitoring to continue the strategy into the future. The NPPG has been considered in the production of the accompanying Interim Travel Plan (**Document Reference: 79165-CUR-00-XX-RP-TP-002**).

6.4 Manchester Core Strategy (2012 – 2027)

6.4.1 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.

6.4.2 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.

6.4.3 Policy T2 of the Manchester Core Strategy states:

“The Council will actively manage the pattern of development to ensure that new development...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.”

- 6.4.4 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.

6.5 Greater Manchester Transport Strategy 2040

- 6.5.1 In January 2021, TfGM published a 2040 Vision for Transport to develop flexible and customer-focused travel choices, supported by smart information, ticketing and payment systems, across a truly integrated Greater Manchester transport network. The Transport Strategy states an ambition for a well-connected, zero carbon Regional Centre at the heart of the North.

- 6.5.2 Under Policy 3, the Transport Strategy states that TfGM will “maintain a programme of interventions encouraging people to make sustainable journeys, supported through journey planning tools, and information to encourage travel behaviour change and mode shift, 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;*
- *Delivering public health benefits through enabling more active travel;*
- *Improving access to key services and jobs;*
- *Maximising sustainable travel in new developments; and*
- *Becoming more resilient to disruption.”*

- 6.5.3 The above measures and additional initiatives have also been provided in greater detail in the accompanying Interim Travel Plan (**Document Reference: 79165-CUR-00-XX-RP-TP-002**).

- 6.5.4 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.”*

- 6.5.5 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.

6.6 Conclusions

- 6.6.1 In summary, the proposed development is consistent with local and national transport planning principles and advice. The Site is located in an area with a variety of current local facilities and a variety of sustainable transport options.

7.0 Summary and Conclusions

7.1 Summary

- 7.1.1 Curtins has been appointed by Manchester (Port Street) Ltd to provide transport planning advice in relation to a planning application for a new development on land at Port Street, to the east of Manchester City Centre.
- 7.1.2 The proposed development involves the erection of a 33-storey residential tower with 485 units, together with a basement car park, cycle store, ground floor commercial units, landscaping, public realm and associated works.
- 7.1.3 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.
- 7.1.4 Relevant details of the proposed development quanta, site layout, access and parking facilities, and servicing arrangements have been provided.
- 7.1.5 The Site is accessible by sustainable modes of transport. The surrounding area exhibits opportunities for of pedestrian and cycling use, and there are several public transport stops within acceptable walking distance of the Site.
- 7.1.6 The trip generation exercise has demonstrated that any vehicular impact would be negligible on the surrounding area in terms of highways, traffic and transportation. Additionally, it is envisaged that the majority of residents and staff of the Site would not travel by car and would mostly arrive on foot, cycle, or public transport. Sustainable travel initiatives have been proposed to increase the level of walking, cycling and public transport use to and from the Site.
- 7.1.7 A review of relevant local and national transport planning guidance has been undertaken. It is considered that the proposed development is in general accordance with such policies and guidance.

7.2 Conclusions

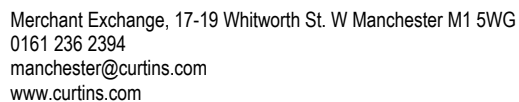
- 7.2.1 It is reasonable to conclude that the proposed development would not have a significant or severe residual impact on the surrounding highway network in accordance with the NPPF.
- 7.2.2 From a traffic and transportation perspective, there are no reasons why the development proposals should not be granted planning approval.

Plans

Plan 79165-CUR-00-XX-DR-TP-06001-P01 – (Accessibility) Indicative Walking Catchment

Plan 79165-CUR-00-XX-DR-TP-06002-P01 – (Accessibility) Indicative Cycle Catchment

Plan 79165-CUR-00-XX-DR-TP-06003-P01 – (Accessibility) Indicative Public Transport Catchment



Project: PORT STREET, MANCHESTER

Status: PRELIMINARY

Drg Title: ACCESSIBILITY
INDICATIVE WALKING CATCHMENT

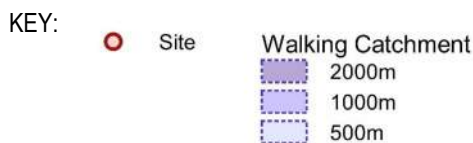
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Designed By: HD Date: 02/09/21

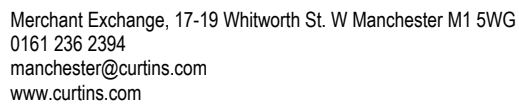
Scale: NTS

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

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Project: PORT STREET, MANCHESTER

Drg Title: ACCESSIBILITY
INDICATIVE CYCLE CATCHMENT

Status: PRELIMINARY

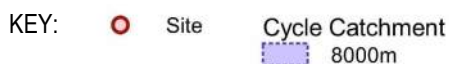
Drawn By: HD Checked By: JA

Designed By: HD Date: 02/09/21

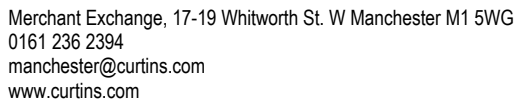
Scale: NTS

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

79165 - CUR - 00 - XX - DR - TP - 06002 - P01



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Project: PORT STREET MANCHESTER

Drg Title: ACCESSIBILITY
INDICATIVE PUBLIC
TRANSPORT CATCHMENT

Status: PRELIMINARY

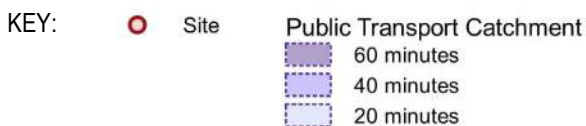
Drawn By: HD Checked By: JA

Designed By: HD Date: 02/09/21

Scale: NTS

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

79165 - CUR - 00 - XX - DR - TP - 06003 - P01



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Drawings

Drawing 79165-CUR-00-XX-DR-TP-75001-P07 – Proposed Access Arrangement

Drawing 79165-CUR-00-XX-DR-TP-05001-P02 – Swept Path Analysis – Refuse Vehicle

Drawing 79165-CUR-00-XX-DR-TP-05002-P04 – Swept Path Analysis – Large Car – Car Park

Drawing 79165-CUR-00-XX-DR-TP-05003-P03 – Swept Path Analysis – Substation

Drawing 79165-CUR-00-XX-DR-TP-05004-P02 – Swept Path Analysis – Large Car – Access



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- BASED ON SIMPSON HAUGH'S LAYOUT: '10376-SHP-Z0-A-G200-PL-00-001'

KEY: — PROPOSED RED LINE
— PROPOSED RAISED KERB
--- PROPOSED FLUSH KERB
--- PROPOSED ROAD MARKINGS

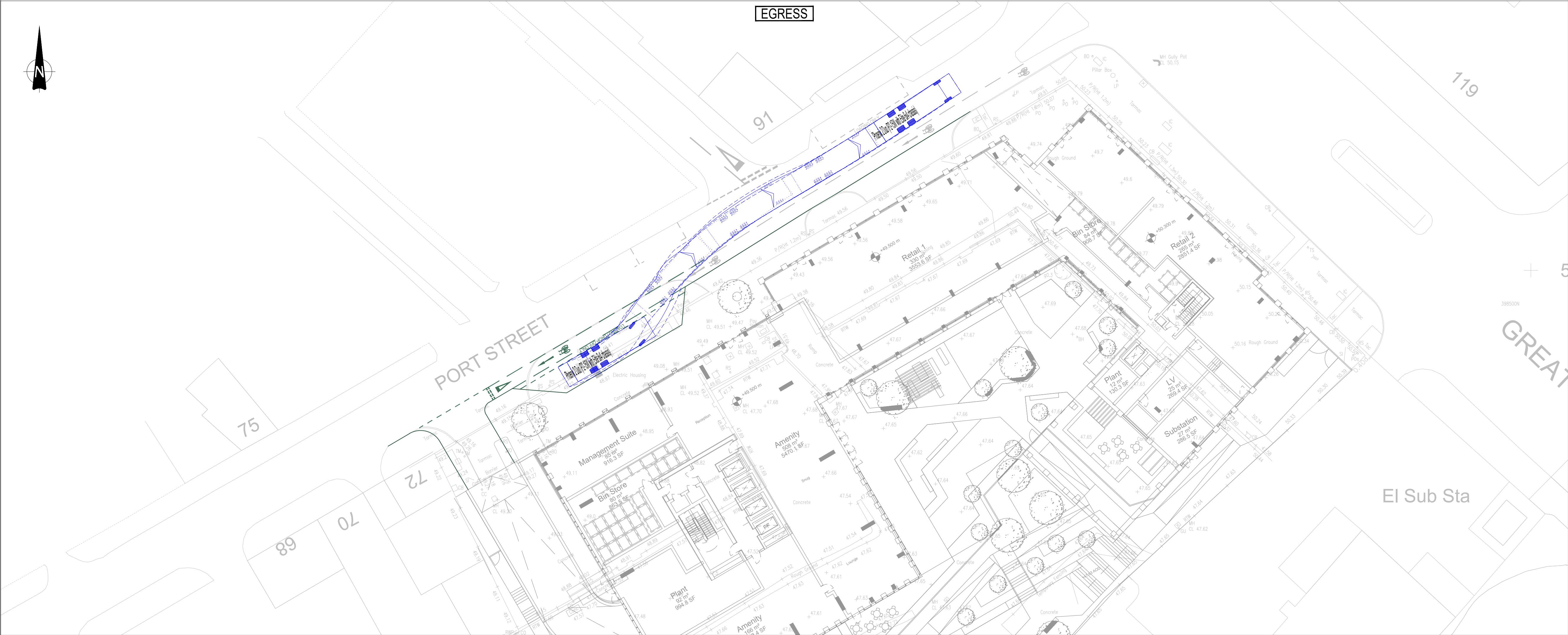
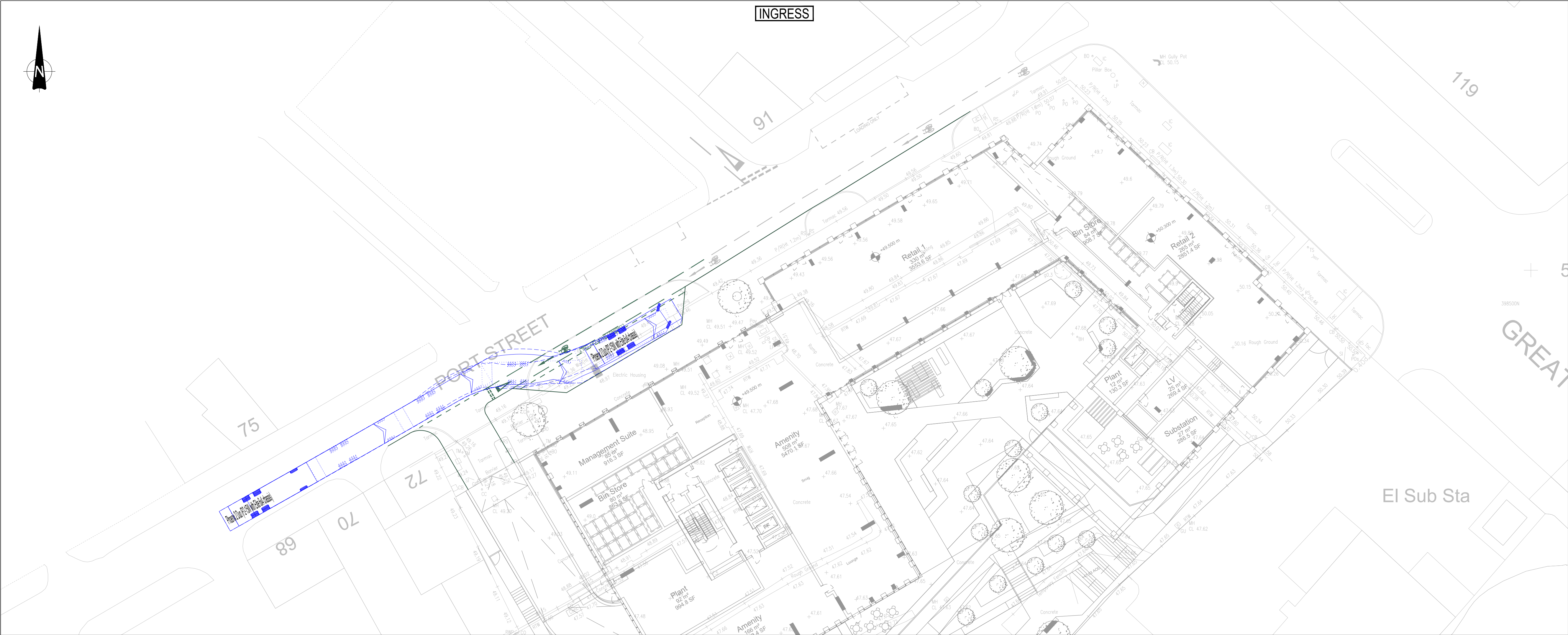
P07	Layout updated	12/11/21	DD	AV
P06	Layout updated	14/10/21	DD	AV
P05	Layout updated	30/09/21	DD	AV
P04	Loading bay relocated	10/09/21	DD	AV
P03	Cycle lane updated. Topo added	06/09/21	DD	AV
P02	Access arrangement updated	03/09/21	DD	AV
Rev:	Description:	Date:	By:	Chkd:



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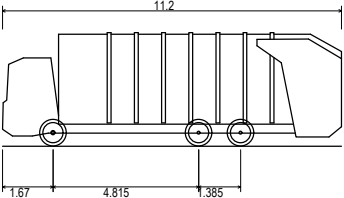
Status:	PRELIMINARY			
Project:	PORT STREET - MANCHESTER			
Orig Title:	PROPOSED ACCESS ARRANGEMENT			
Size:	A1	Date:	18/08/21	Drawn By:
Scale:	1:250			DD
Project No:	79165 - CUR - 00 - XX - DR - TP -	Originator:	Volume:	Level:
		Type:	Role:	Category / Number:
				Rev:
				75001 - P07



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6. BASED ON SIMPSON HAUGHS LAYOUT: '10376-SHP-Z0-A-G200-PL-00-001'

VEHICLE PROFILE:



Phoenix 2 Duo (P2-15W with Elite 6x4 chassis)
Overall Length 11.200m
Overall Width 2.530m
Overall Body Height 3.751m
Min Body Ground Clearance 0.304m
Track Width 2.500m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 9.500m

P02	Layout updated	12/11/21	DD	AV
Rev:	Description:	Date:	By:	Chkd:

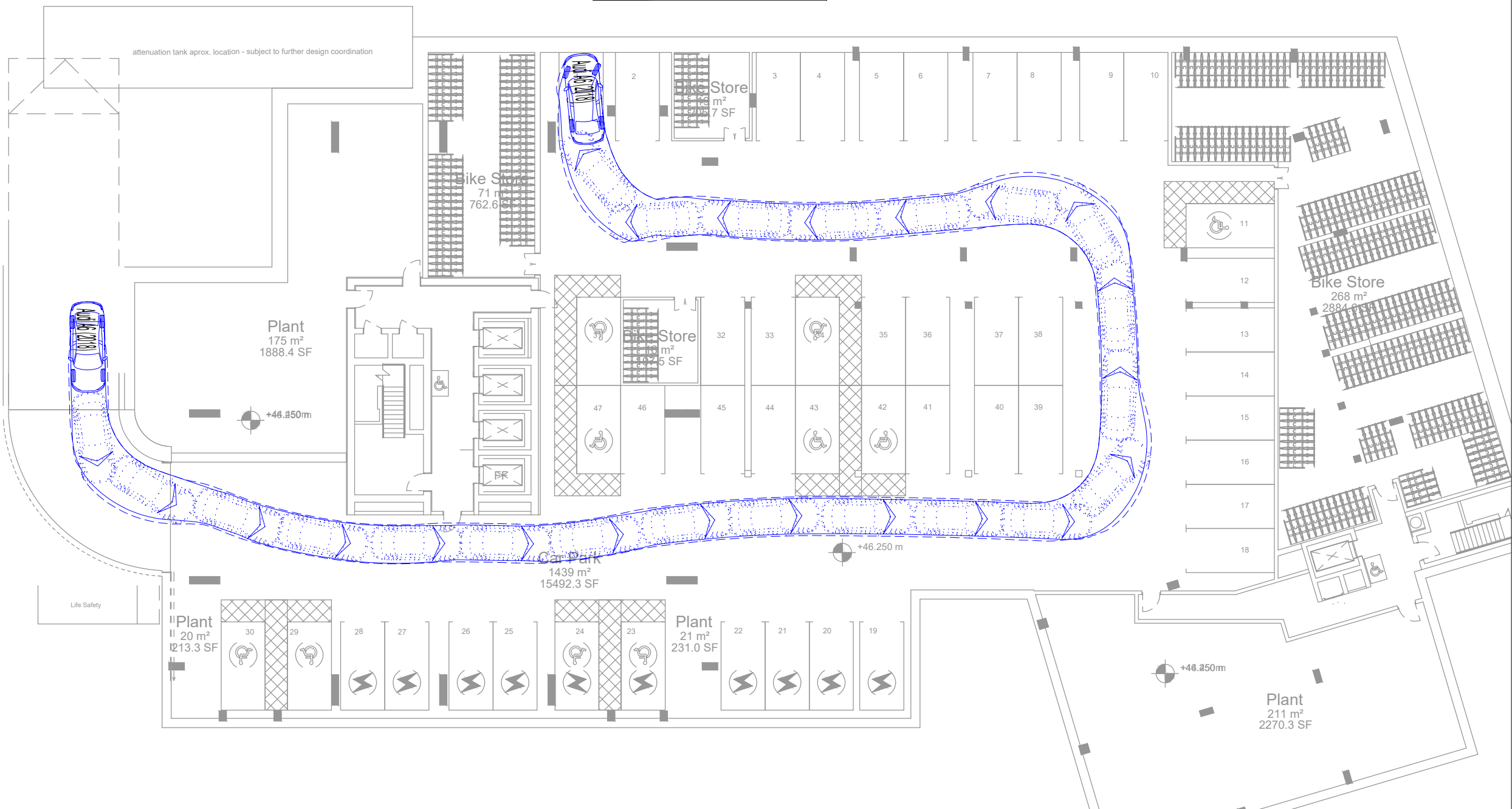


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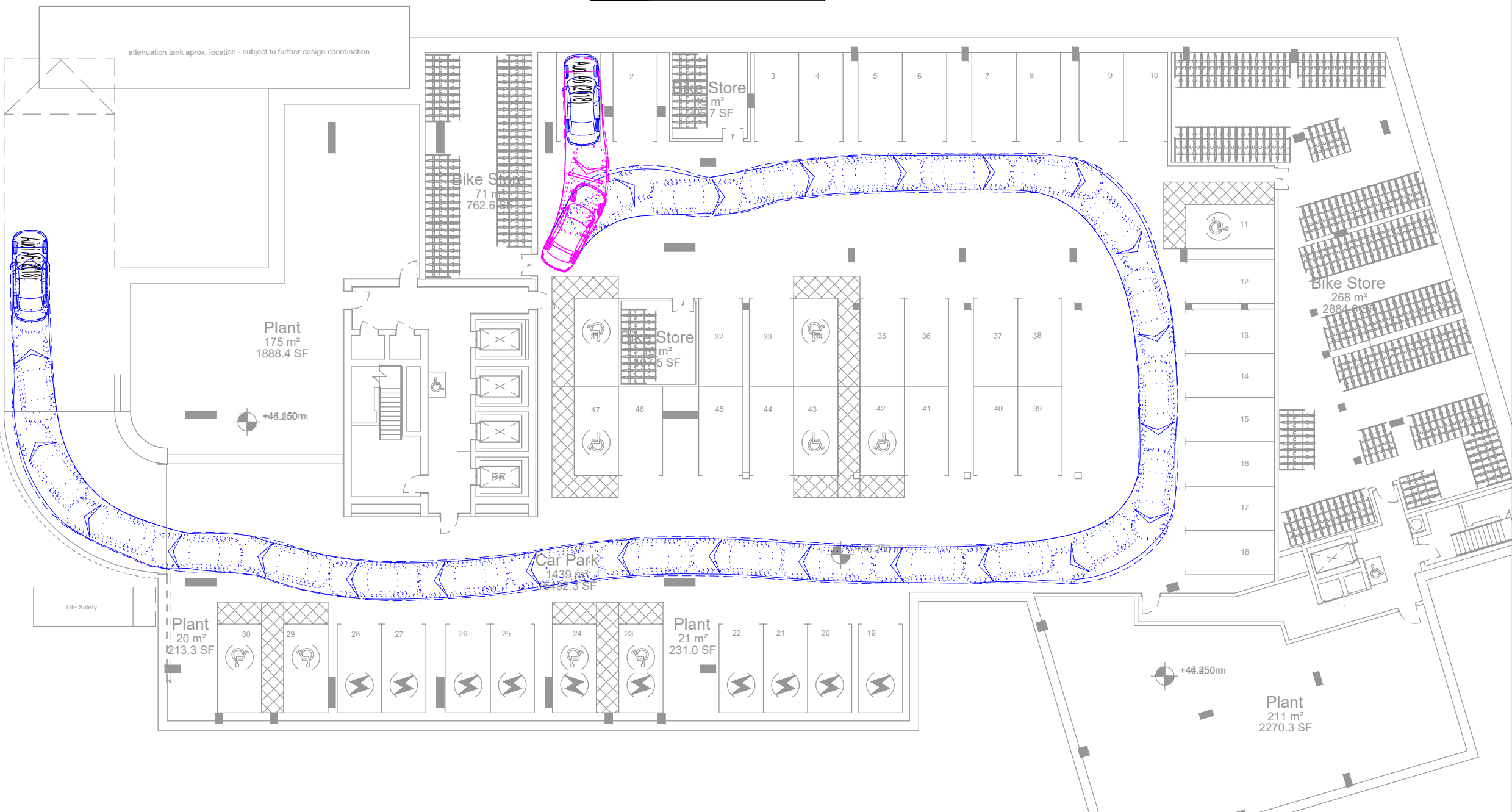
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Status: PRELIMINARY				
Project: PORT STREET - MANCHESTER				
Orig Title: SWEPT PATH ANALYSIS 11.2m REFUSE VEHICLE				
Size: A1	Date: 14/10/21	Drawn By: DD	Designed By: DD	Checked By: AV
Scale: 1:250				
Project No: 79165	Originator: CUR	Volume: 00	Level: XX	Type: DR
Role: TP		Category: 05001	Number: P02	Rev:

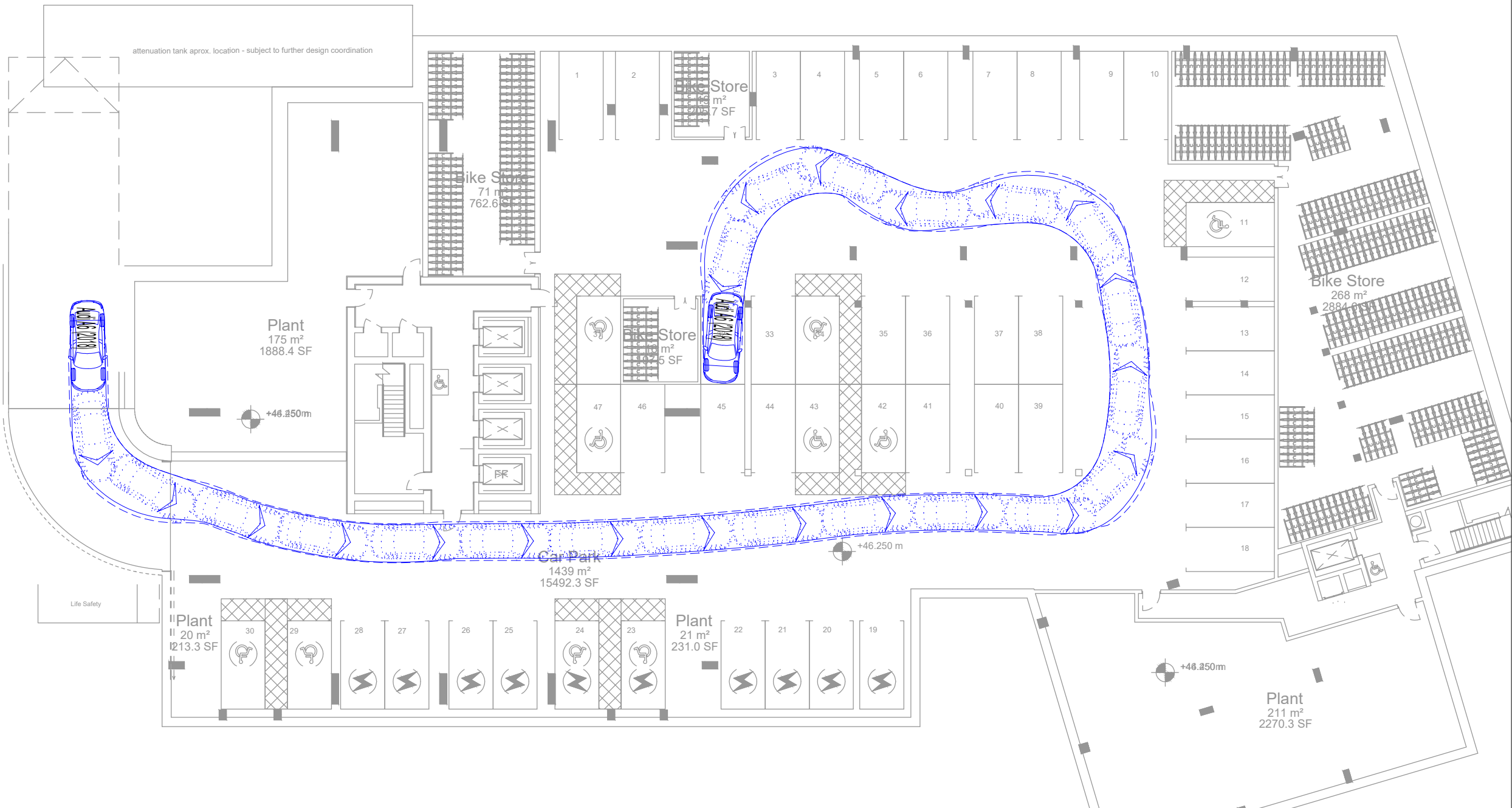
SPACE 1 - INGRESS



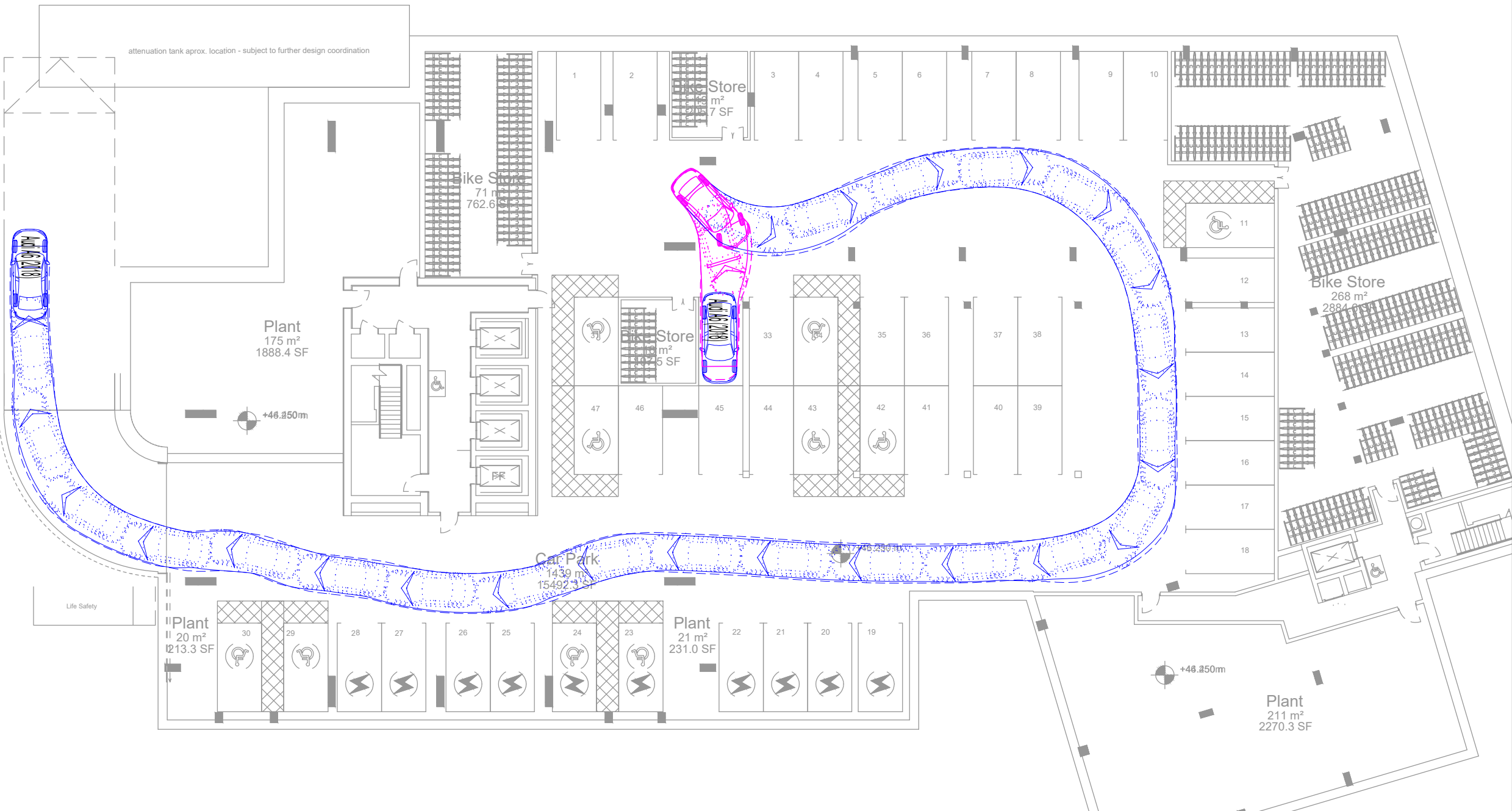
SPACE 1 - EGRESS



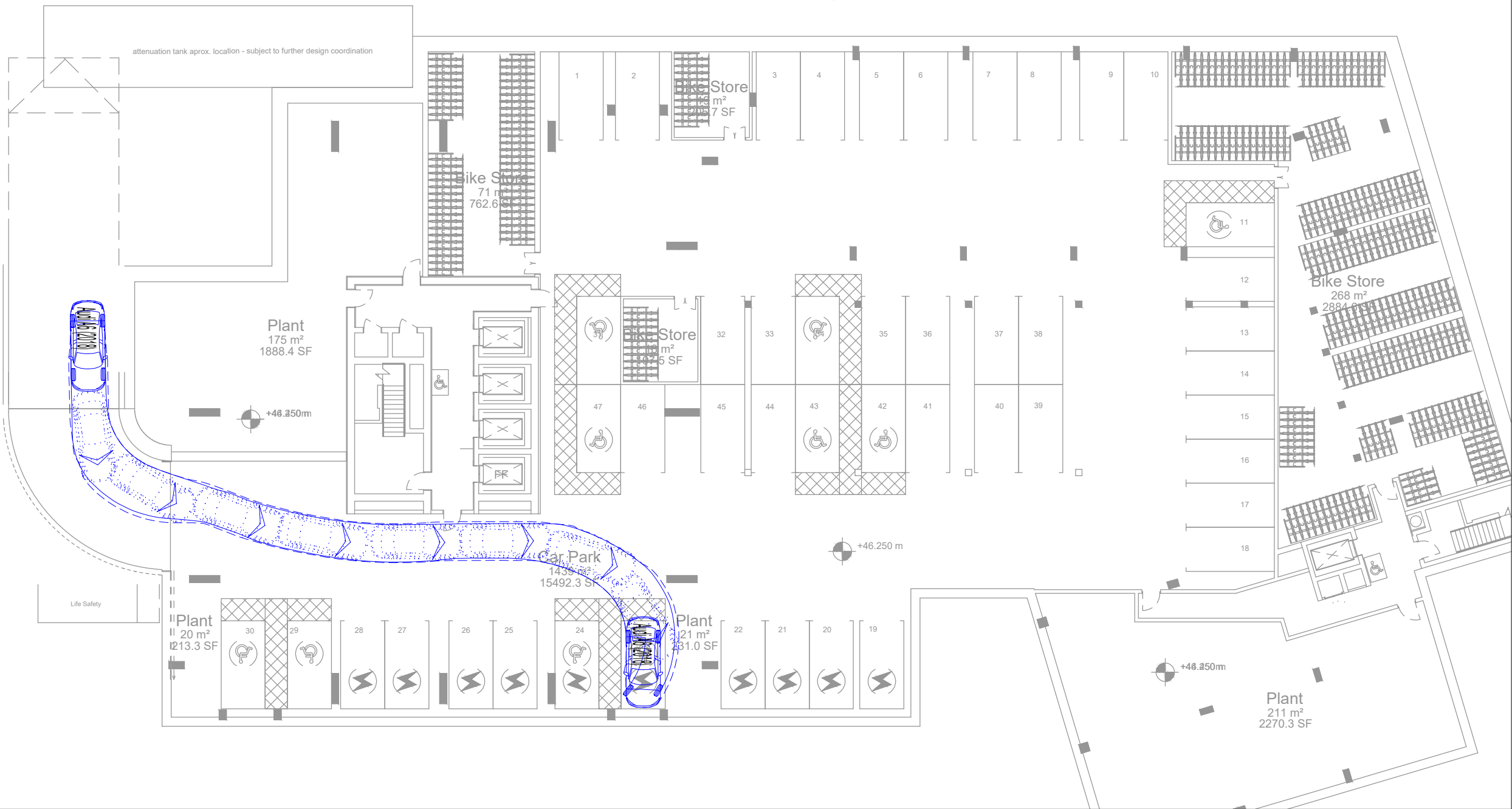
SPACE 31 - INGRESS



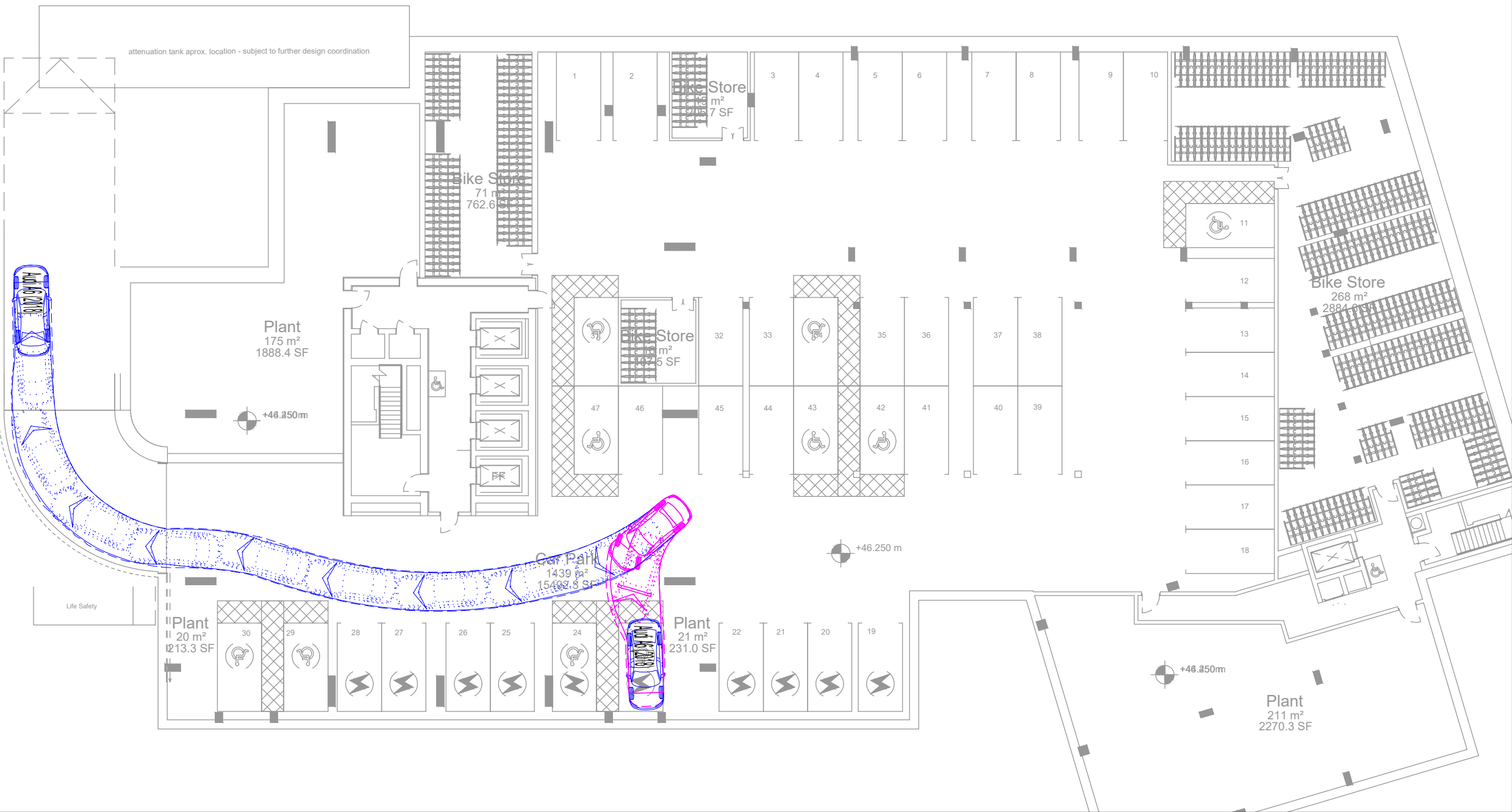
SPACE 31 - EGRESS



SPACE 23 - INGRESS



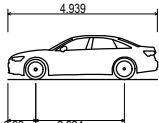
SPACE 23 - EGRESS



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6. BASED ON SIMPSON HAUGHS LAYOUT: '10376-SHP-Z0-A-G200-SK-B1-001'

VEHICLE PROFILE:



Audi A6 (2018)
Overall Length
Overall Body Height
Min Body Ground Clearance
Max Track Width
Lock to lock time
Kerb to Kerb Turning Radius

4.93m
2.14m
1.45m
0.142m
1.875m
4.00s
5.950m

P04	Layout updated	12/11/21	DD	AV
P03	Layout updated	22/10/21	DD	AV
P02	Layout updated	14/10/21	DD	AV
Rev:	Description:	Date:	By:	Chk:



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Status:

PRELIMINARY

Project:

PORT STREET - MANCHESTER

Orig Title:

SWEPT PATH ANALYSIS
LARGE CAR
BASEMENT CAR PARK

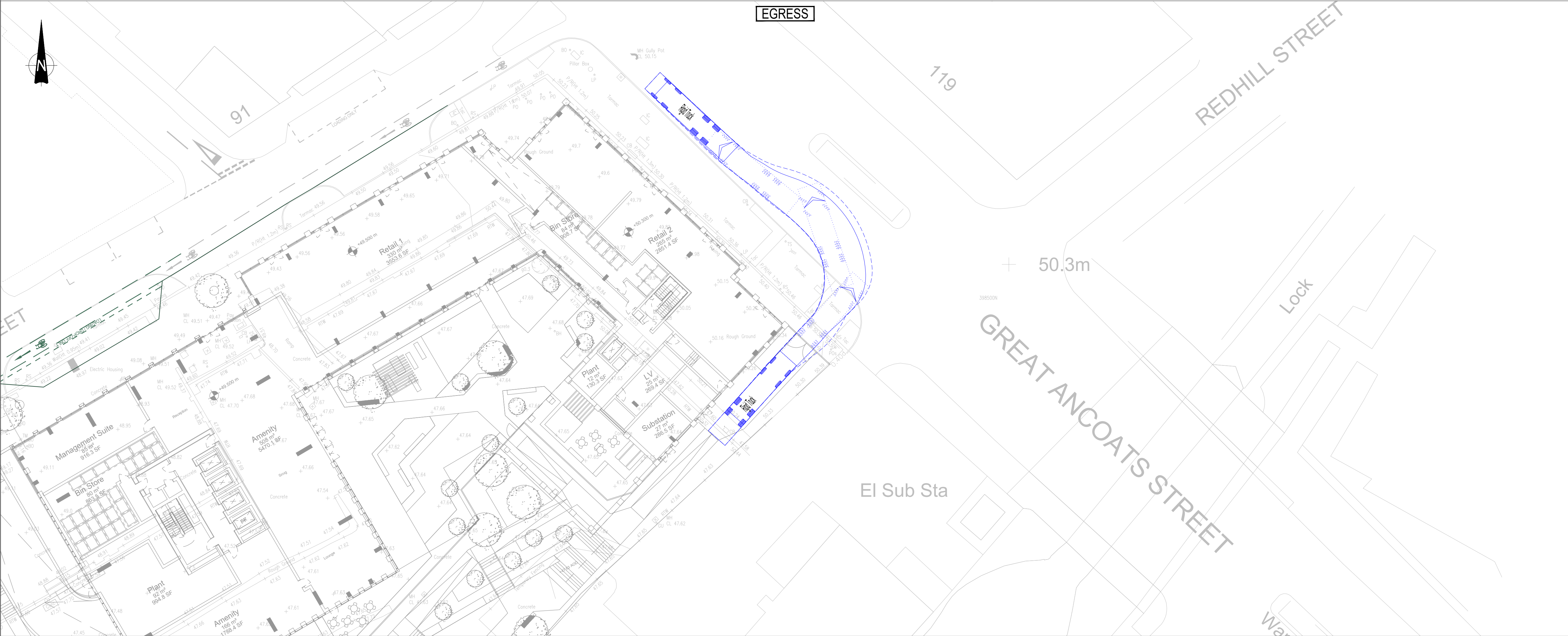
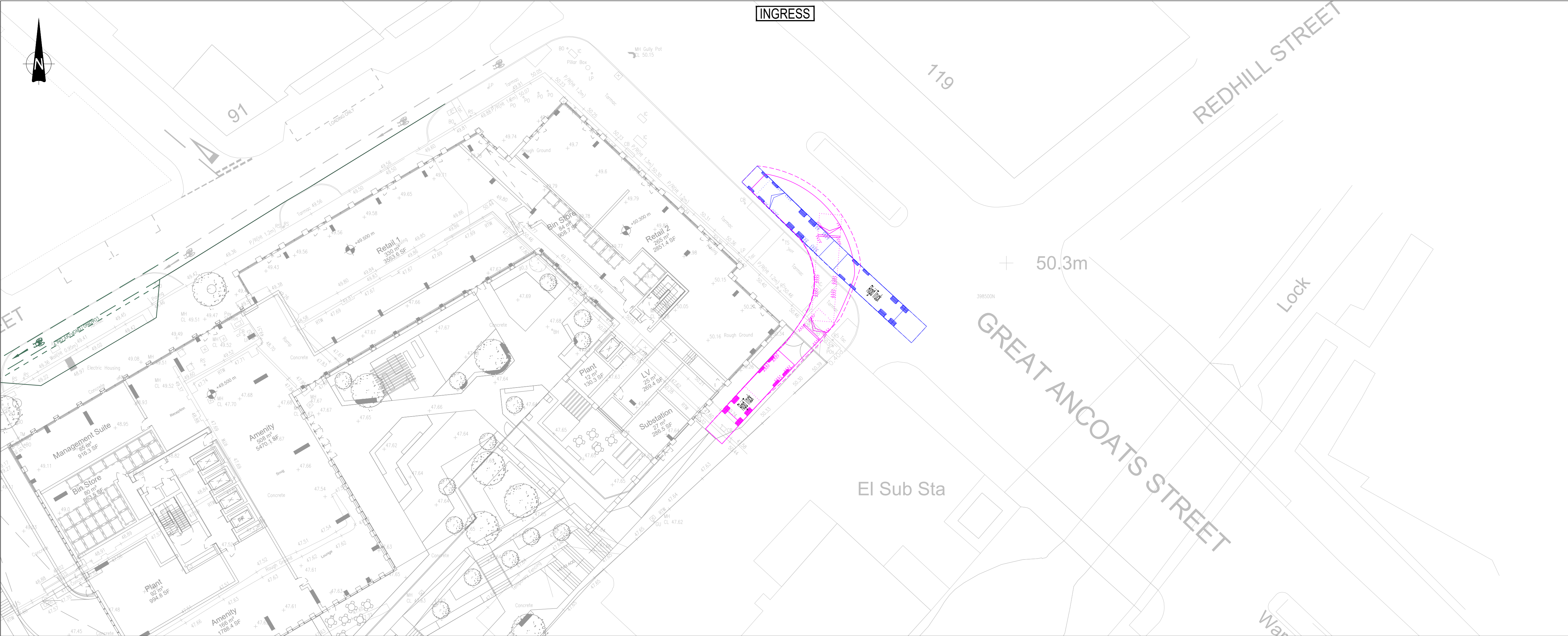
Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	18/08/21	DD	DD	AV

Scale: 1:250

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

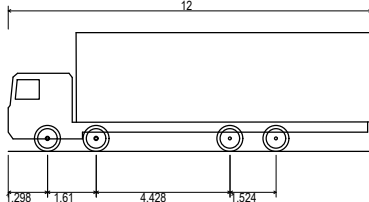
79165 - CUR - 00 - XX - DR - TP - 05002 - P04

\\msd\Projects\072001 - 080000\079165 - Great Access Trail\04-Production\A Models Drawings\TPCAD05



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 6. BASED ON SIMPSON HAUGHS LAYOUT: '10376-SHP-Z0-A-G200-PL-00-001'

VEHICLE PROFILE:



Rigid Truck
Overall Length
Overall Width
Overall Height
Min Body Ground Clearance
Track Width
Lock to lock time
Kerb to Kerb Turning Radius

12.000m
2.500m
2.500m
0.41m
2.47m
6.00m
11.900m

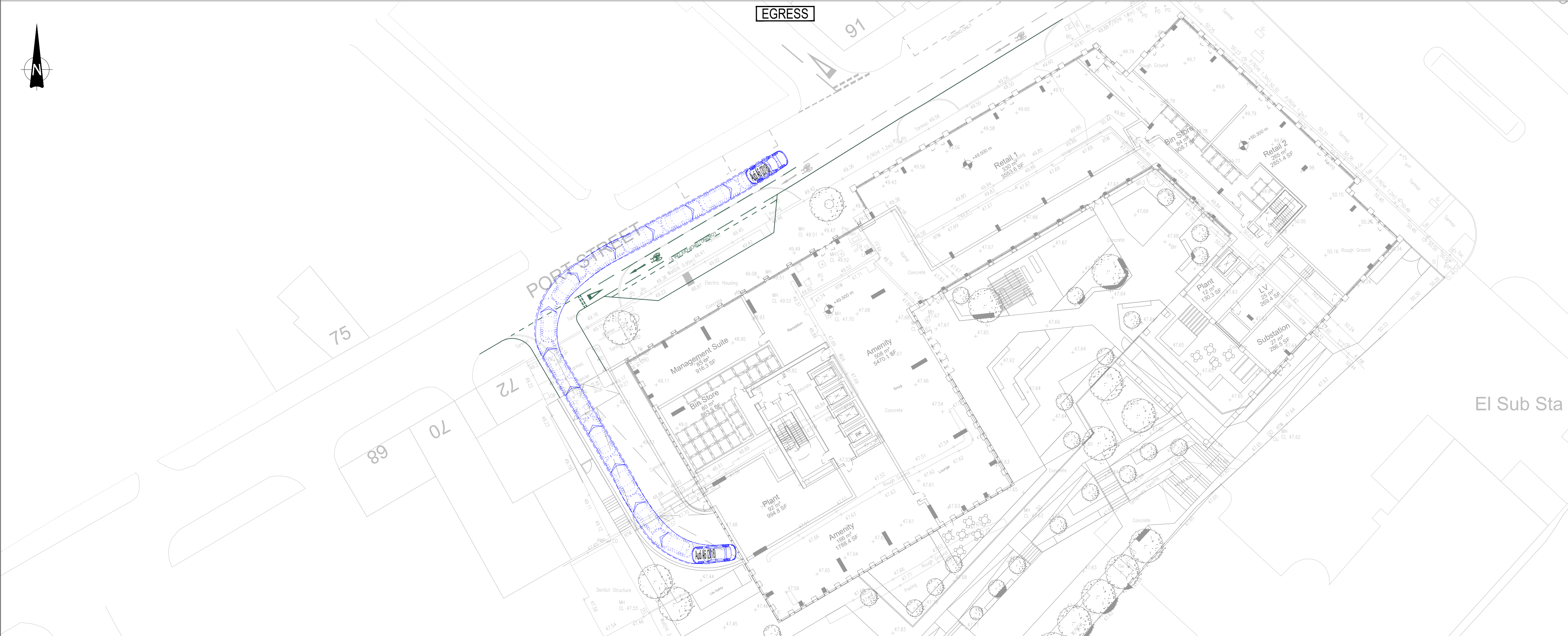
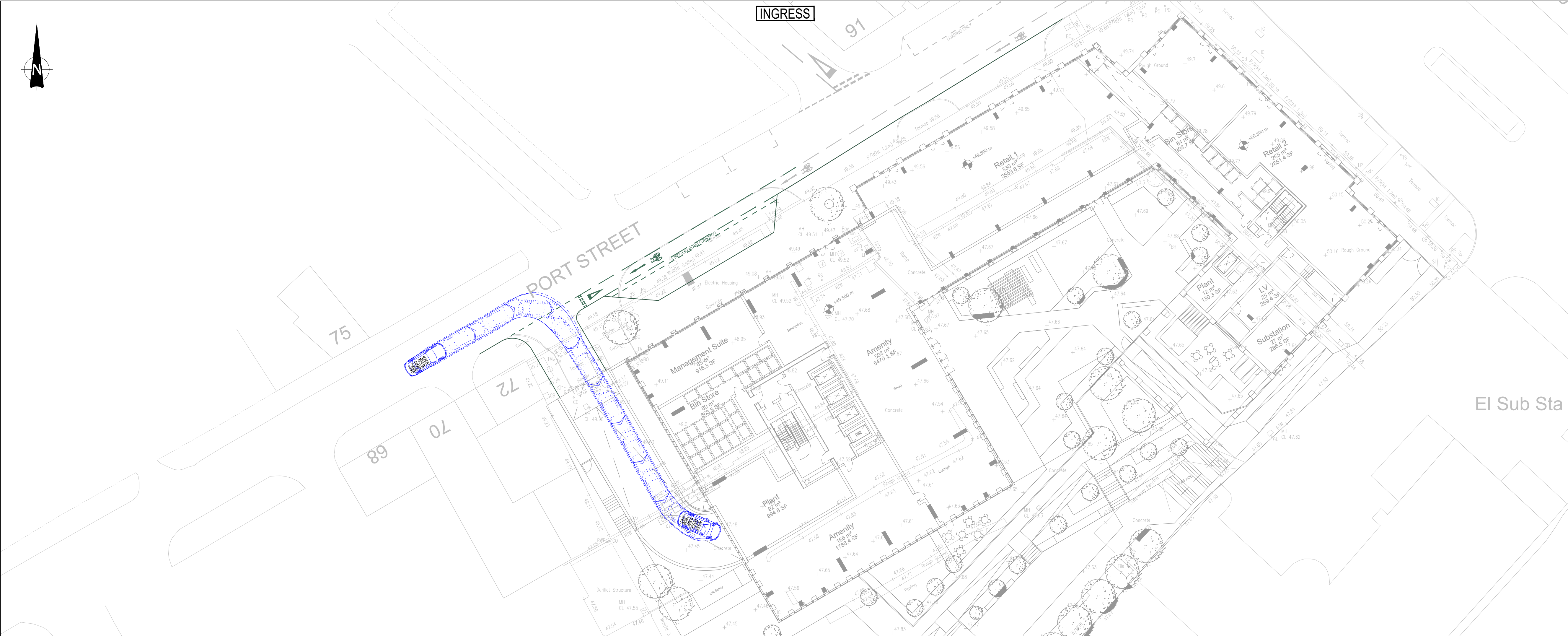
P03	Layout updated	12/11/21	DD	AV
P02	Layout updated	14/10/21	DD	AV
Rev:	Description:	Date:	By:	Chkd:



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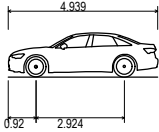
Status:	PRELIMINARY			
Project:	PORT STREET - MANCHESTER			
Orig Title:	SWEPT PATH ANALYSIS 12m RIGID HGV SUBSTATION			
Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	18/08/21	DD	DD	AV
Scale: 1:250				
Project No:	Originator:	Volume:	Level:	Type:
79165 - CUR - 00	- XX	- DR	- TP	- 05003 - P03



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5. THE CONTENT OF THIS DRAWING IS FOR INDICATIVE INFORMATION ONLY AND NOT SUITABLE FOR CONSTRUCTION PURPOSES
6. BASED ON SIMPSON HAUGHS LAYOUT: '10376-SHP-Z0-A-G200-PL-00-001'

VEHICLE PROFILE:



Audi A6 (2018)
Overall Length
Overall Width
Overall Body Height
Min Body Ground Clearance
Max Track Width
Lock to lock time
Kerb to Kerb Turning Radius

4.93m
2.14m
1.45m
0.142m
1.87m
4.00s
5.95m

P02	Layout updated	12/11/21	DD	AV
Rev:	Description:	Date:	By:	Chkd:



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Status: PRELIMINARY

Project: PORT STREET - MANCHESTER

Orig Title: SWEPT PATH ANALYSIS
LARGE CAR
CAR PARK ACCESS

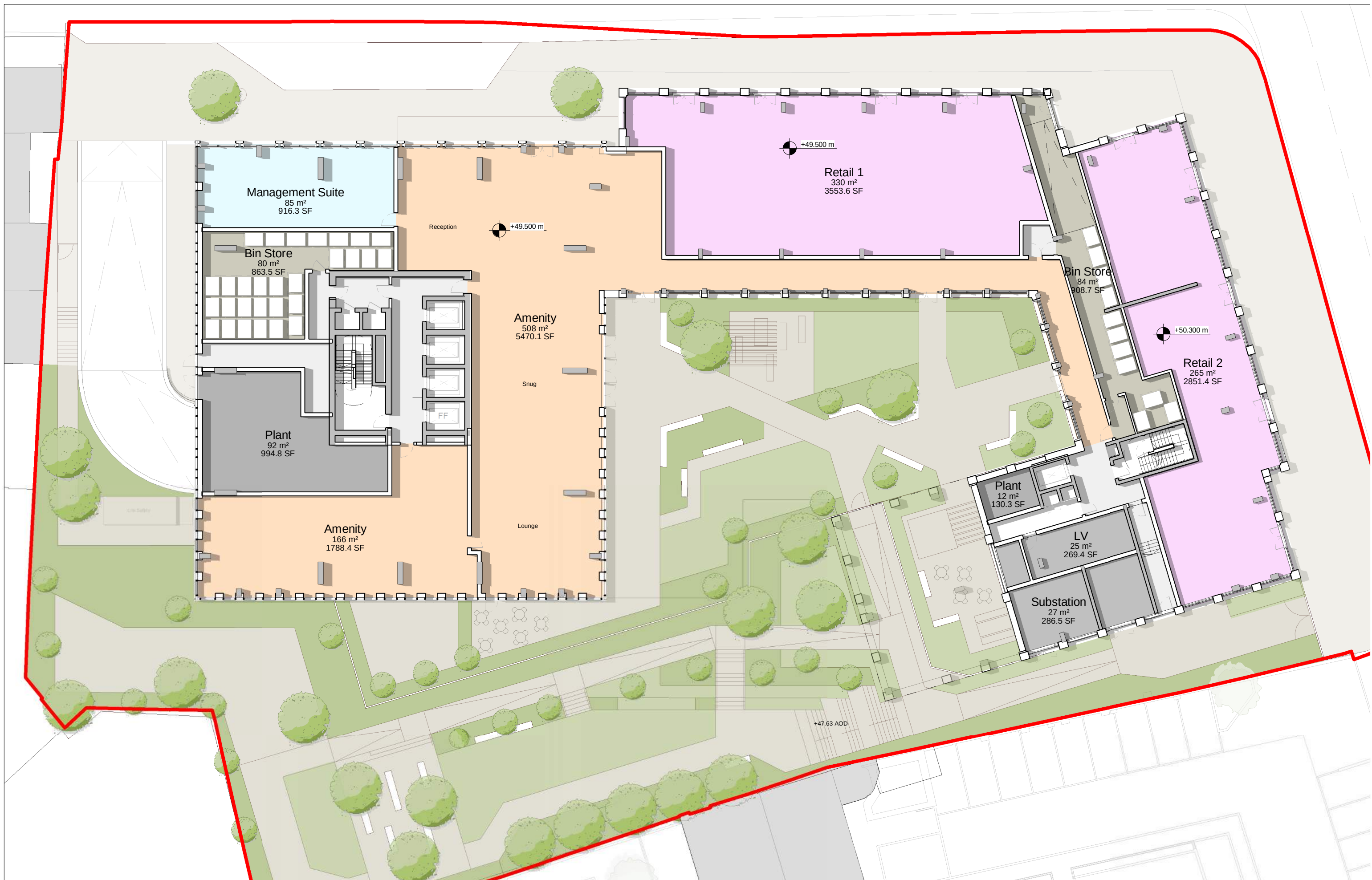
Size:	Date:	Drawn By:	Designed By:	Checked By:			
A1	14/10/21	DD	DD	AV			
Scale: 1:250							
Project No:	Originator:	Volume:	Level:	Type:	Role:	Category / Number:	Rev:
79165 - CUR - 00 - XX - DR - TP - 05004 - P02							

79165 Port Street, Manchester

Transport Statement



Appendix A – Proposed Layout



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Contractor to report any
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DRAWING TO BE READ IN CONJUNCTION WITH SHP SPECIFICATION.
INDICATIVE DETAILS TO ILLUSTRATE VISUAL INTENT ONLY. ALL TO
CONTRACTORS DESIGN.
ALL DETAILS TO BE COORDINATED WITH ADJACENT TRADES AND SE AND
M+E ENGINEER DETAILS.
THE CONTRACTOR IS RESPONSIBLE FOR MEETING THE SPECIFIED
PERFORMANCE CRITERIA.

NORTH

Rev	Date	Description
P01	2021-07-07	FIRST ISSUE
P02	2021-07-28	DESIGN DEVELOPMENT
P03	2021-08-17	DESIGN DEVELOPMENT
P04	2021-08-27	DESIGN DEVELOPMENT
P05	2021-09-09	DESIGN DEVELOPMENT
P06	2021-09-17	DESIGN DEVELOPMENT
P07	2021-09-23	DESIGN DEVELOPMENT
P08	2021-09-29	PORT ST FACADE & RED LINE BOUNDARY UPDATE
P09	2021-10-06	DESIGN DEVELOPMENT
P10	2021-10-07	FROZEN SCHEME
P11	2021-11-09	CHANGES BASED ON WSP, DFC AND CLIENT INPUT

Project Title
**Port Street
Manchester**

Status
FOR INFORMATION

Drawing Title General Arrangement Plan Level 00	
Project No 10376	Scale 1 : 250 @ A3
SHP Drawing Code 10376-SHP-Z0-A-G200-PL-00-001	Revision P11

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M+E ENGINEER DETAILS.
THE CONTRACTOR IS RESPONSIBLE FOR MEETING THE SPECIFIED
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Rev **Date** **Description**

P01	2021-07-07	FIRST ISSUE
P02	2021-07-28	DESIGN DEVELOPMENT
P03	2021-08-17	DESIGN DEVELOPMENT
P04	2021-08-27	DESIGN DEVELOPMENT
P05	2021-09-09	DESIGN DEVELOPMENT
P06	2021-09-17	DESIGN DEVELOPMENT
P07	2021-09-23	DESIGN DEVELOPMENT
P08	2021-09-29	PORT ST FACADE & RED LINE BOUNDARY UPDATE
P09	2021-10-06	DESIGN DEVELOPMENT
P10	2021-10-07	FROZEN SCHEME
P11	2021-11-09	CHANGES BASED ON WSP, DFC AND CLIENT INPUT

NORTH

Project Title
Port Street
Manchester

Status
FOR INFORMATION

Drawing Title
General Arrangement Plan
Level Basement 1

Project No
10376

Scale
1 : 250 @ A3

SHP Drawing Code PROJ - DRG - ZONE - AREA - CLASS - TYPE - LOC - REV
10376-SHP-Z0-A-G200-PL-B1-001

Revision
P11

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Appendix B – TRICS Output

Calculation Reference: AUDIT-148301-210916-0902

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
	EX ESSEX	2 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: 6 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: 01/01/13 to 18/11/19

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:

Tuesday	6 days
Thursday	4 days

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

Selected survey types:

Manual count	10 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	9

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	4
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 10 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	8 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	3 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	8 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	8 days

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

PTAL Rating:

No PTAL Present	10 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	EX-03-C-01	FLATS	ESSEX
	WESTCLIFF PARADE		
	SOUTHEND-ON-SEA		
	WESTCLIFF		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	6	
	Survey date: TUESDAY	22/10/13	Survey Type: MANUAL
6	EX-03-C-02	BLOCK OF FLATS	ESSEX
	WESTCLIFF PARADE		
	SOUTHEND-ON-SEA		
	WESTCLIFF		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	94	
	Survey date: TUESDAY	22/10/13	Survey Type: MANUAL
7	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

LIST OF SITES relevant to selection parameters (Cont.)

8	HF-03-C-03 SHENLEY ROAD BOREHAMWOOD	BLOCK OF FLATS		HERTFORDSHIRE
	Edge of Town Centre Built-Up Zone			
	Total No of Dwellings:	91		
	Survey date: THURSDAY	14/11/19	Survey Type: MANUAL	
9	NF-03-C-01 PAGE STAIR LANE KING'S LYNN	BLOCKS OF FLATS		NORFOLK
	Edge of Town Centre Built-Up Zone			
	Total No of Dwellings:	51		
	Survey date: THURSDAY	11/12/14	Survey Type: MANUAL	
10	SF-03-C-01 STATION HILL BURY ST EDMUNDS	BLOCKS OF FLATS		SUFFOLK
	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.

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

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	10	84	0.045	10	84	0.156	10	84	0.201
08:00 - 09:00	10	84	0.054	10	84	0.177	10	84	0.231
09:00 - 10:00	10	84	0.064	10	84	0.076	10	84	0.140
10:00 - 11:00	10	84	0.073	10	84	0.094	10	84	0.167
11:00 - 12:00	10	84	0.075	10	84	0.087	10	84	0.162
12:00 - 13:00	10	84	0.113	10	84	0.105	10	84	0.218
13:00 - 14:00	10	84	0.092	10	84	0.094	10	84	0.186
14:00 - 15:00	10	84	0.073	10	84	0.077	10	84	0.150
15:00 - 16:00	10	84	0.085	10	84	0.068	10	84	0.153
16:00 - 17:00	10	84	0.133	10	84	0.071	10	84	0.204
17:00 - 18:00	10	84	0.174	10	84	0.098	10	84	0.272
18:00 - 19:00	10	84	0.193	10	84	0.102	10	84	0.295
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.174			1.205			2.379

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

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

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Parameter summary

Trip rate parameter range selected: 6 - 175 (units:)
 Survey date range: 01/01/13 - 18/11/19
 Number of weekdays (Monday-Friday): 10
 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 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	10	84	0.001	10	84	0.008	10	84	0.009
08:00 - 09:00	10	84	0.002	10	84	0.011	10	84	0.013
09:00 - 10:00	10	84	0.001	10	84	0.000	10	84	0.001
10:00 - 11:00	10	84	0.002	10	84	0.004	10	84	0.006
11:00 - 12:00	10	84	0.007	10	84	0.005	10	84	0.012
12:00 - 13:00	10	84	0.001	10	84	0.004	10	84	0.005
13:00 - 14:00	10	84	0.002	10	84	0.001	10	84	0.003
14:00 - 15:00	10	84	0.004	10	84	0.001	10	84	0.005
15:00 - 16:00	10	84	0.005	10	84	0.001	10	84	0.006
16:00 - 17:00	10	84	0.001	10	84	0.001	10	84	0.002
17:00 - 18:00	10	84	0.008	10	84	0.004	10	84	0.012
18:00 - 19:00	10	84	0.004	10	84	0.000	10	84	0.004
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.038			0.040			0.078

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	10	84	0.018	10	84	0.065	10	84	0.083
08:00 - 09:00	10	84	0.021	10	84	0.085	10	84	0.106
09:00 - 10:00	10	84	0.043	10	84	0.050	10	84	0.093
10:00 - 11:00	10	84	0.054	10	84	0.043	10	84	0.097
11:00 - 12:00	10	84	0.033	10	84	0.036	10	84	0.069
12:00 - 13:00	10	84	0.054	10	84	0.046	10	84	0.100
13:00 - 14:00	10	84	0.048	10	84	0.040	10	84	0.088
14:00 - 15:00	10	84	0.046	10	84	0.042	10	84	0.088
15:00 - 16:00	10	84	0.052	10	84	0.051	10	84	0.103
16:00 - 17:00	10	84	0.065	10	84	0.061	10	84	0.126
17:00 - 18:00	10	84	0.075	10	84	0.067	10	84	0.142
18:00 - 19:00	10	84	0.079	10	84	0.063	10	84	0.142
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.588			0.649			1.237

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	10	84	0.001	10	84	0.068	10	84	0.069
08:00 - 09:00	10	84	0.011	10	84	0.115	10	84	0.126
09:00 - 10:00	10	84	0.002	10	84	0.036	10	84	0.038
10:00 - 11:00	10	84	0.011	10	84	0.010	10	84	0.021
11:00 - 12:00	10	84	0.010	10	84	0.008	10	84	0.018
12:00 - 13:00	10	84	0.024	10	84	0.024	10	84	0.048
13:00 - 14:00	10	84	0.014	10	84	0.029	10	84	0.043
14:00 - 15:00	10	84	0.020	10	84	0.012	10	84	0.032
15:00 - 16:00	10	84	0.068	10	84	0.015	10	84	0.083
16:00 - 17:00	10	84	0.048	10	84	0.010	10	84	0.058
17:00 - 18:00	10	84	0.075	10	84	0.010	10	84	0.085
18:00 - 19:00	10	84	0.062	10	84	0.013	10	84	0.075
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.346			0.350			0.696

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

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	10	84	0.074	10	84	0.370	10	84	0.444
08:00 - 09:00	10	84	0.100	10	84	0.512	10	84	0.612
09:00 - 10:00	10	84	0.124	10	84	0.186	10	84	0.310
10:00 - 11:00	10	84	0.160	10	84	0.186	10	84	0.346
11:00 - 12:00	10	84	0.148	10	84	0.167	10	84	0.315
12:00 - 13:00	10	84	0.229	10	84	0.231	10	84	0.460
13:00 - 14:00	10	84	0.198	10	84	0.183	10	84	0.381
14:00 - 15:00	10	84	0.158	10	84	0.157	10	84	0.315
15:00 - 16:00	10	84	0.254	10	84	0.163	10	84	0.417
16:00 - 17:00	10	84	0.325	10	84	0.162	10	84	0.487
17:00 - 18:00	10	84	0.429	10	84	0.211	10	84	0.640
18:00 - 19:00	10	84	0.468	10	84	0.212	10	84	0.680
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.667			2.740			5.407

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.

79165 Port Street, Manchester

Transport Statement



Appendix C – Substation Access Requirements

Project Name: A.L. Port Street, Manchester
Design Phase: Planning
Ref: P7173.17.SUB
Date: 08th September 2021 (Rev. A)

1. Introduction

The proposed Affinity Living residential development at Port Street, Manchester will require a new substation to cater for its electrical supply requirements. To achieve network operator compliance, the substation must be located at ground floor level and in a location to ensure that in the unlikely event of failure the transformers within the substation can be replaced in a timely manner.

This note summarises the expected life span of the substation equipment, periodic maintenance requirements and access strategy.

2. Substation Equipment Lifespan

The main components within the proposed substation will be 2no. MIDEL filled HV/LV distribution transformers, these are large, heavy items equipment which require delivery via a commercial vehicle.

The transformers will initially be delivered to site using a 10-12mtr flat-back truck and unloaded outside of the substation using a HIAB lift, then manoeuvred into the building during construction.

Distribution transformers have an extremely low failure rate due to their robust construction and containing no moving parts. It is anticipated that with correct periodic maintenance, replacement will not be required for a minimum of 30 years. The proposed transformers will be operated and maintained by an approved network operator strictly in accordance with industry guidelines and access only by the substation operator's staff.

Note: In the very unlikely event that the equipment requires early replacement, access must be maintained to the substation to allow the operator to carry out the works.

3. Routine Maintenance

The equipment within the substation will be subject to an annual inspection and preventative maintenance by the network operator to maximise useful life. However, this activity will not require vehicular access to the substation. The maintenance technician use hand tools and small spare components which can be carried by hand. The maintenance operative will therefore arrive in a small van, park at a local public carpark and walk to the building to carry out their inspection.

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