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TRANSPORT STATEMENT

First Street Developments Ltd

Plot 10a, First Street

January 2023

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Report control

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1 INTRODUCTION

1.1 This Transport Statement (TS) has been prepared by Vectos on behalf of First Street Developments Ltd in support of a planning application for a proposed office-based development on Plot 10a of the First Street Masterplan Area.

1.2 This TS provides an assessment of the development proposals in terms of highways and transport and forms supplementary information to assist in the determination of a planning application.

1.3 This development is also supported by a Framework Travel Plan (FTP) and a Waste and Servicing Strategy Report prepared by Vectos.

Development Site

1.4 The location of the development site is shown in a local context of the existing layout within Manchester City Centre in **Dwg 105-MP_00_1200 B,** while the context with the emerging masterplan is shown in **Dwg 105-MP_00_2200 B.**

1.5 Plot 10a overall covers roughly 0.36 hectares and it is bound by River Street to the north and east, Hulme Street to the south, and the development Plot 9a to the west and Plot 10b to the east. There are no permanent structures on the site, and no trees on or adjacent to the site.

1.6 The development of First Street South is being constructed by Downing. This is a development in four buildings of over 2200 bedrooms along with large amenity space 17,000 sq ft of commercial leisure, restaurant and retail space.

1.7 More widely the area is characterised by a mix of uses including office and leisure uses to the north, residential to the east and west and student residential to the south.

Proposed Development

1.8 Plot 10a comprises a 13-storey office building, delivering just over 20,000sqm floorspace, together with new public realm completing the missing link of First Street in the space adjacent to office development of Plot 9a.

1.9 The forthcoming development of Plot 10b lies to the east of Plot 10a and is intended as a Purpose-Built Student Accommodation building, together with new public realm along Wilmott Street. It would also include a Food Hall food and beverage facility for the public at the ground floor level. Plot 10a has been designed in collaboration with Plot 10b to ensure a cohesive and coordinated street-scape is achieved.

1.10 Plot 10b will be delivered independently of Plot 10a and once developed they would share the space between the buildings where the main servicing activity would take place running between River Street and Hulme Street and designed to a high standard. We consider the servicing strategy in the interim period prior to completion as well as on completion of Plot 10b. Both the interim and final service routes have been fully tracked and can accommodate the necessary service and waste vehicles.

1.11 The landscaping aims to provide a continuity to the existing First Street works implemented to the north of the site. The adjacent Plot 9a delivers the majority of the public realm extension with Plot 10a completing the pedestrianised footpath connecting First Street to Hulme Street to the south.

1.12 The River Street frontage of Plot 10a will consist of a high quality yorkstone street surfacing, continuing the materials palette used throughout James Grigor Square.

1.13 A 'pocket park' is proposed between the Plot 10a and the forthcoming development of Plot 10b which consists of seating for the public and planting.

1.14 The development proposals for Plot 10a can be summarised as follows:

- A 13-storey commercial office building (Use Class E) with winter gardens and roof terraces. The quantum of development includes:
  - c.20,175 sqm of commercial space (Use Class E);
  - 11th floor terrace and 12th floor terraces;
  - 204 double stacked cycle parking spaces with showers and changing facilities;
  - There is no car parking provided. The nearby First Street Q-Park multi-storey car park has 700 standard spaces, 26 disabled spaces & 6 EV charging spaces. In addition to this, there are 6 on-street parking bays where disabled drivers can park without payment or limit, located on the northern side of River Street between Medlock Street and James Grigor Square; and
  - Landscaping and public realm works.

1.15 The proposed ground floor plan for the site is presented in **Dwg 105-MP_02_2200 H,** and in more detail in **Dwg 105-B1_02_2200 B.**

Report Structure

1.16 Following this introductory chapter, the remainder of this TS is structured as follows:

— **Section 2: Policy Context** – outlines the national and local policy relevant to the proposed development;
— **Section 3: Baseline Conditions** – discusses the existing site and the local highway network. reviews accident data in the vicinity of the site;
— **Section 4**: **Accessibility by Sustainable Modes of Travel** – describes the accessibility of the site by all modes of sustainable transport;
— **Section 5: Proposed Development** – sets out the development proposals, access strategy, trips forecasts and servicing strategy for Plot 10a during the interim phase and upon development of the full scheme for Plot 10b; and
— **Section 6: Summary and Conclusions** – summarises the findings of the TS and provides the report conclusions.

2 POLICY CONTEXT

Overview

2.1 This section of the report provides an outline of national and local policy applicable to the development site. It is important that the TS is in accordance with such guidance and that the principles of development are consistent with national and local policies.

National Planning Policy Framework (2021)

2.2 The current National Planning Policy Framework (NPPF) was published in July 2021 and sets out the government's planning policies for England and how these are expected to be applied. This revised Framework replaces the previous NPPF published in March 2012 and revised in July 2018 and February 2019. At the heart of the Framework is a presumption in favour of sustainable development.

2.3 As part of promoting sustainable transport, paragraph 110 of the revised NPPF states that in assessing applications for development, it should be ensured that:

- appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location.
- safe and suitable access to the site can be achieved for all users;
- 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
- 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.

2.4 Paragraph 111 goes on to state 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'.

Local Planning Policy

2.5 Relevant transport planning policy and guidance at the local level is contained within the Manchester Core Strategy document, the Guide to Development in Manchester SPD and Planning Guidance and the Greater Manchester Transport Strategy. The First Street Strategic Development Framework document has also been considered.

Manchester Core Strategy

2.6 The Core Strategy forms the key document in Manchester's Local Development Framework and was adopted in 2012. It sets out a number of strategic policies that will guide the development of the city. Policy SP1 sets out the spatial principles that will guide development to 2027. One of these principles is as follows:

- 'New development will maximise the potential of the City's transport infrastructure, in particular promoting walking, cycling and the use of public transport.'

2.7 In addition, the policy goes on to state that developments in all parts of the city should '*improve access to jobs, services and education and open space by being located to reduce the need to travel and provide good access to sustainable transport provision'*.

2.8 This is reinforced through policy DM 1 of the Core Strategy, which concerns development management. This states that all developments should have regard to specific issues including the access to new development by sustainable transport modes and vehicular access and car parking.

2.9 Policy T1 of the Core Strategy concerns sustainable transport. It states that the Council will support proposals that:

- *'Improve choice by developing alternatives to the private car.*
- *Take account of the needs of road users according to a broad hierarchy consisting of, in order of priority:*

i) Pedestrians and disabled people,
ii) Cyclists, public transport,
iii) Commercial access,
iv) General off-peak traffic,
v) General peak time traffic.'

2.10 The development proposals are in line with these policy objectives, ensuring that the site will be accessible to all users by a range of different transport modes.

2.11 Policy T2 states that the Council will actively manage the pattern of development to ensure that new development:

- *'Is located to ensure good access to the City's main economic drivers, including the Regional Centre, the Oxford Road Universities and Hospitals and the Airport and to ensure good national and international connections*
- *Is easily accessible by walking, cycling and public transport; connecting residents to jobs, centres, health, leisure, open space and educational opportunities.'*

2.12 With regards to parking standards, the Core Strategy states that the *'maximum standards for car parking do not apply to the City Centre as each development in the City Centre will be considered on a case-by-case basis.'*

Guide to Development in Manchester SPD & Planning Guidance

2.13 This document brings together the development principles that will apply to new developments in Manchester. Paragraph 2.22 of the document states that:

'In order to reduce reliance on the car, residents and workers should be within easy walking distance of facilities such as clinics, corner shops, newsagents and public transport.'

2.14 The proposed development is well aligned with this goal, being located close to a range of different facilities. The guidance goes on to describe the need for Travel Plans in new developments, stating:

'A Travel Plan is a package of measures and actions aimed at reducing the need to travel by car by providing alternative choices and encouraging walking, cycling, and public transport use. At the planning stage consideration should be given to the proximity of the development to existing travel facilities and services, site layout, suitable density, cycling, pedestrian facilities and potential for parking restraint.'

2.15 Such an exercise has been completed for this development and informs part of this report along with the accompanying Travel Plan.

Greater Manchester Transport Strategy 2040

2.16 Transport for Greater Manchester (TfGM) has developed a 2040 Transport Strategy that sets out ambitions for a radical new approach to planning Manchester's transport system in support of long-term needs and aspirations.

2.17 The vision is for Greater Manchester to have 'World class connections that support long-term, sustainable economic growth and access to opportunity for all'. The Transport Vision aims are as follows:

- Supporting Sustainable Economic growth
- Protecting Our Environment
- Improving Quality of Life for All
- Developing an Innovative City Region

2.18 The 2040 Vision is supported by policies and proposals for improving the transport network in the medium term up to 2025 structured around spatial themes. A common theme is the need to tackle congestion on Manchester's transport networks and minimise the negative impacts of traffic on communities.

2.19 The development proposals aspire to conform to the vision and goals as set out within the 2040 Vision Document by ensuring that the site is accessible by a variety of sustainable transport modes in order to deliver a quality development that enhances the environment.

City Centre Transport Strategy

2.20 A report was presented to the MCC Executive in October 2019 that set out proposals for a revised City Centre Transport Strategy (CCTS), aligned to the Greater Manchester Transport Strategy 2040.

2.21 The new strategy is considered necessary to take account of the predicted growth of the city centre, changes in the policy context since the previous strategy in 2010, and the outcomes of the City Centre Transport Strategy Conversation that took place in 2018.

2.22 It will set out ambitious targets for the city centre in the wider context of the GMSF, emerging Local Plan, Climate Change Policy and Clean Air proposals, including the ambition to be a zero-carbon city by 2038 at the latest. The focus is upon significant shifts to sustainable transport modes, which will require enhancements to the walking and cycling networks, providing additional Metrolink capacity in the city centre and increasing electric vehicle charging points. Additionally, the ambition is for a shift in car parking spaces over time from the centre to the periphery.

First Street Strategic Regeneration Framework (SRF)

2.23 A Development Framework for First Street was first endorsed by Manchester City Council's Executive Committee in 2005. This was updated in 2007 and 2010 to broadly focus on a commercially led neighbourhood.

2.24 The 2012 and 2015 Frameworks identified three distinct development areas of First Street, incorporating four of the character zones: First Street North, First Street Central, First Street South, and the Creative Ribbon.

2.25 The site falls within the 'First Street Central' character zone, a new office destination targeted at a range of commercial occupiers, particularly those seeking the benefits of a central and highly accessible city centre location.

2.26 An update to the First Street Strategic Development Framework (SDF) was approved by Manchester's Executive on 14 November 2018. The focus of the 2018 Framework was to update the development principles for the First Street Central area of the masterplan, particularly Plots 9 and 10, which were subject to further viability and design analysis. This analysis indicates that greater scale and density of office accommodation can be delivered on these plots, to ensure that First Street can meet the level of demand in the area and maximise its contribution to the City's economic growth.

2.27 An Addendum to the 2018 First Street SDF was adopted in July 2020. Whilst the Addendum provides more focus on the western plots of First Street, it also reiterates the economic context of the regeneration area, as well as the demand for office space in the city. In addition, the Addendum provides an added emphasis on climate change and sustainability. To this effect, all developments within the SRF area must positively contribute toward the City's net zero carbon by 2028.



Figure 2.1: First Street Central Development within wider First Street Masterplan

3 BASELINE CONDITIONS

Overview

3.1 This section of the report provides information on the baseline conditions in the vicinity of the site, providing a detailed overview of the existing site. It describes the local highway network in detail, existing car parking facilities and accident data in the vicinity of the site.

3.2 An audit of the local transport/highway infrastructure in the area was conducted to establish the baseline conditions for the street environment has been undertaken with a particular focus on the provision for pedestrians, cyclists and public transport users. The summary of this walkover audit is given in **Appendix A** and some of the key features are considered further below. It is noted that the First Street Plot 9a will deliver a new pedestrian crossing of Medlock Street and footway paving improvements on the east side of Medlock Street as described later.

Existing Site

3.3 The site currently consists of an area of hard standing that has previously been used as a surface car park and more recently as Homeground, which was a temporary food, beverage and events space.

3.4 The wider area is characterised by a mix of uses including office and leisure uses to the north, residential to the east and west and student residential to the south.

Local Highway Network

A5103 Medlock Street

3.5 The A5103 Medlock Street, located to the west of the proposed site, is a key strategic route into Manchester City Centre from the south of Manchester. The A5103 Medlock Street connects with the A57 Mancunian Way gyratory, which forms part of the Manchester and Salford Inner Relief Route (MSIRR). This route connects the north and south of the city and providing strategic access to the City Centre.

3.6 In the vicinity of the site, Medlock Street is circa 12m in width and the southbound lane flares on approach to the roundabout provide two lanes. Northbound, there is a right turn ghost island arrangement which provides a dedicated right turn lane into River Street. Medlock Street is subject to a 30mph speed limit, and there are footways, mandatory cycle lanes and street lighting provided on both sides of the carriageway. **Photo Plate 1** shows a view of Medlock Street looking north towards the City Centre.



Photo Plate 1: Medlock Street looking North towards the City Centre

3.7 A new pedestrian crossing has been proposed on Medlock Street approximately 40m north of River Street. This crossing is to be signalised and staggered, comprising a 3.5m x 12m pedestrian refuge in the middle of the road. The general arrangement of the proposed pedestrian crossing is shown in **Dwg VD20344-VEC-HGN-XX-DR-CH-100 C** and is being delivered as part of Plot 9a.

A5103 / A57 (M) Mancunian Way Junction

3.8 The A5103 Medlock Street forms a gyratory passing underneath the A57(M) Mancunian Way to the south of the site. Travelling east from this gyratory, access can be gained to the A57(M) eastbound and Cambridge Street. Travelling west, access can be gained to the A57(M) westbound, and to the south the A5103 continues, becoming Princess Road and providing connections to the M60 and M56.

3.9 This junction was recently improved with the introduction of traffic signals and layout changes to increase separation of traffic streams, and also provide new dedicated off-road cycle infrastructure at the junction. The scheme layout is shown in **Dwg 7378-MJ-00-00-DR-D-1799**.

River Street

3.10 River Street forms the northern boundary of the site and links to Medlock Street via an all-movement priority junction. River Street is circa 6m in width and is subject to a 30mph speed limit. It is a private road, and the on-street parking is managed by a private parking enforcement company. Traffic calming is provided in the form of speed table arrangements at two locations in the vicinity of James Grigor Square. **Photo Plate 2** shows a view of River Street looking west past James Grigor Square.



Photo Plate 2: River Street looking West past James Grigor Square

3.11 River Street is street lit with footways along both sides of the carriageway. It provides access to the First Street Q-Park multi-storey car park via Anne Horniman Street. There is loading bay provision along the northern side of River Street along with 3x disabled parking spaces.

3.12 The traffic flows on River Street were surveyed pre-pandemic and are considered robust. These are shown **Figure 3.1** overleaf.

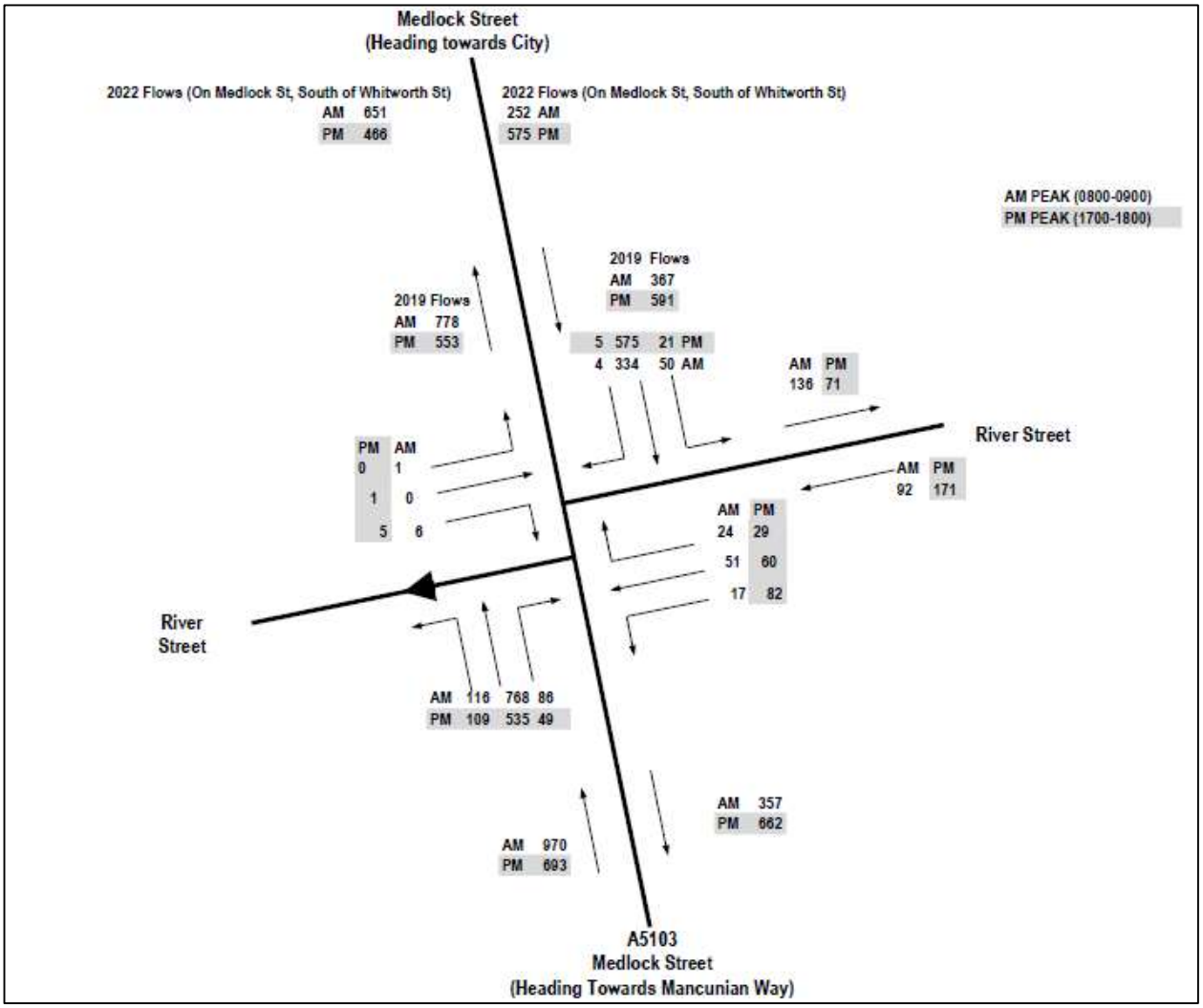


Figure 3.1: River Street Traffic Flows

3.13 It can be seen in **Figure 3.1** that the two-way flows equate to 228 vehicle flows in the AM peak and 242 in the PM peak. While this is busy in the peak hours, equating to a vehicle every 15 seconds, there are plenty of crossing opportunities for pedestrians. Outside of the peak hours the flows are much lower.

3.14 Medlock Street experiences queuing in the AM Peak building up from the Whitworth Street signals back to River Street. In the PM peak, the occurrence of queuing has largely been removed by the works to the Medlock Street roundabout with Mancunian Way. Those queues tended to block the exiting traffic from River Street, but these have largely gone away.

Hulme Street

3.15 Vehicular access to the site will be taken from Hulme Street, which is circa 6m in width and a lower priority distributor link. This road provides connections to Cambridge Street and Oxford Road to the east. Footways and street lighting are provided along Hulme Street and there are some on-street parking bays along the northern side of the road, with double yellow line waiting restrictions along the southern side.

3.16 The on-street parking bays lie within the City Centre parking zone 4, which applies Monday to Sunday, 8am till 8pm, with no charge for parking on a Bank Holiday. The bays permit parking for up to 10 hours or all weekend.

3.17 Hulme Street west of the junction with Wilmott Street is currently closed to the public due to the ongoing construction works in the area.

Existing Car Parking Provision

3.18 There are numerous public car parks within a short walk of the site, notably the First Street Q-Park multi-storey car park with 700 spaces and the NCP Hulme Street car park with 114 spaces both within 200m of the site.

3.19 There are 28 disabled parking spaces provided in the First Street Q-Park multi-storey car park. In addition to this, there are 3 on-street parking bays where disabled drivers can park without payment or limit on the northern side of River Street between Medlock Street and James Grigor Square.

3.20 **Dwg VN222361-G104** shows the location of the site in relation to public car parks within 800m of the site illustrating that there are 3,484 public car parking spaces within a short walk of the site.

Accident Data Record

3.21 The online version of the TfGM accident database has been interrogated to understand the level of accidents in the immediate vicinity of the proposed development occurring over the most recent five-year period for which data is available. **Figure 3.2** shows the accident plot for the area surrounding the site, with the site itself indicated by the red star.

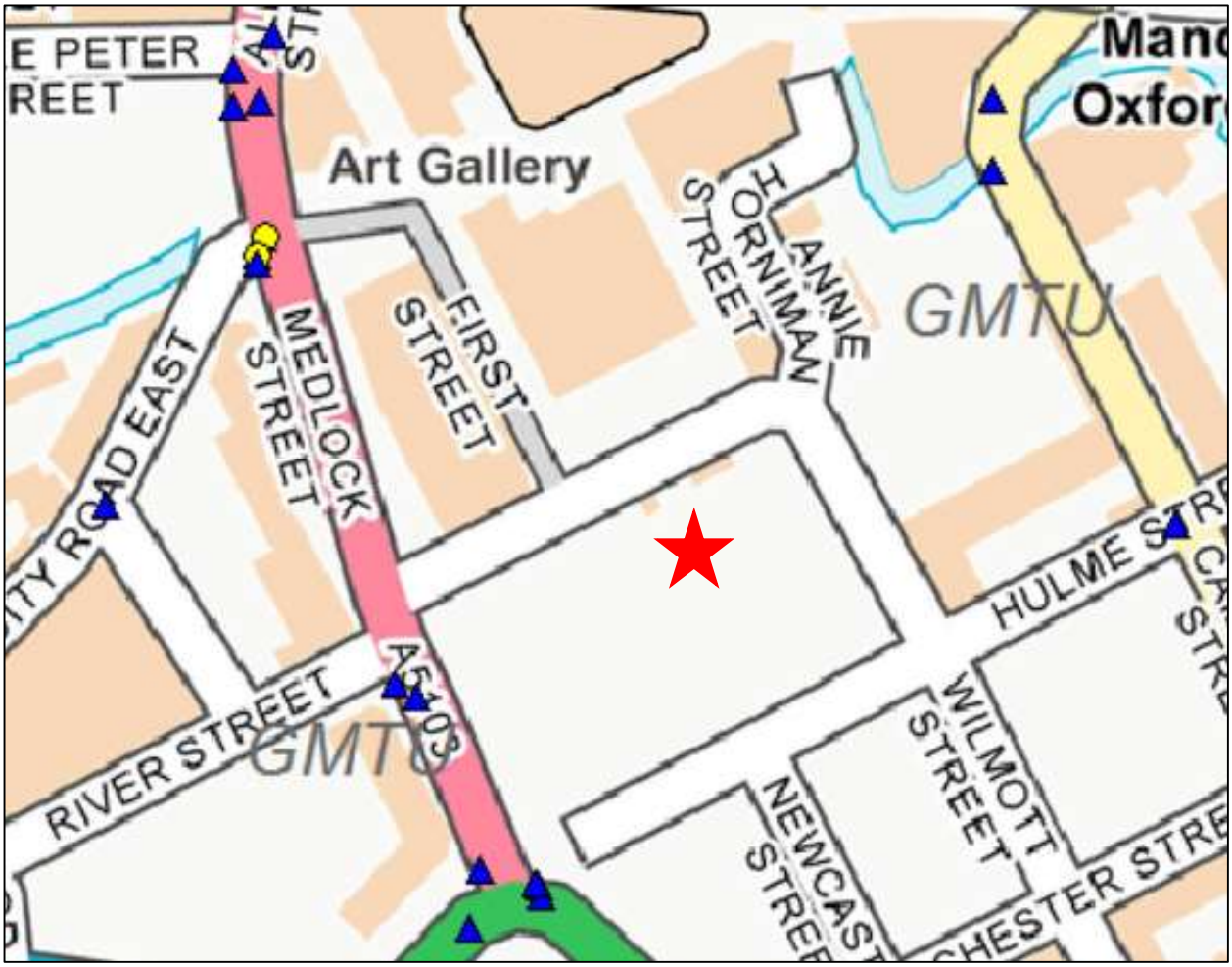


Figure 3.2. 5 Year Accident Plot Data (extract from TfGM Interactive Map) (http://www.gmtu.gov.uk/gmaccidents/#)

3.22 It can be seen from **Figure 3.2** that there have been no accidents on River Street, Wilmott Street or Hulme Street in the vicinity of the site, whilst there have been two slight accidents on the section of Medlock Street which runs along the site's western boundary. Additionally, there have been two serious accidents and two slight accidents at the junction between Medlock Street/City Road East to the north of the site.

3.23 Overall, given the moderately high volumes of vehicles and pedestrians in the area, it is considered that the number and severity of accidents is relatively low and that there are no material prevailing road safety issues in the vicinity of the site that would indicate a persistent road safety issue.

4 ACCESSIBILITY BY SUSTAINABLE MODES OF TRAVEL

Overview

4.1 This section of the report provides a review of the site's accessibility by sustainable modes of travel, namely walking, cycling, bus, Metrolink and rail.

4.2 The site is aiming to achieve a high BREEAM score, and therefore, this section of the report considers various criteria contained within BREEAM Tra 01 (Public Transport Accessibility). In order to achieve these BREEAM credits, consideration has been given to the requirements for all users to be able to access the site accounting for varying levels and types of disability.

4.3 The reference guidance for considering access by disabled users is based on the MCC document Design for Access 2 which complies with the requirements of the Disability Discrimination Act.

Walking

4.4 The Institution of Highways and Transportation (IHT) document *'Guidelines for Providing for Journeys on Foot'* (2000) suggest that a desirable walking distance for commuting purposes is 800 metres with the preferred maximum distance being 2 kilometres. Walking can also be promoted as part of a multi-modal journey, particularly with public transport.

4.5 The more recent CIHT document *'Planning for Walking'* (2015) affirms this by stating that 80% of journeys shorter than a mile (approximately 1.6 km) are made wholly on foot and therefore represent a key mode to access the site either on its own or as part of a multi-modal journey.

4.6 In line with this guidance, **Dwg VN222361-G102** represents an 800m and 2km walk catchment from the site. This plan shows that there are two bus stops, two National Rail and one Metrolink stop located within an 800m walk from the site. In addition to this, the entirety of Manchester City Centre is within the 2km walk catchment. The 2km catchment also includes the residential suburbs of Castlefield, St Georges, Hulme, Brunswick and parts of Salford. The University of Manchester Campus and the Manchester Royal Infirmary sites on Oxford Road to the east of the site are also within a 2km walk.

4.7 The existing pedestrian facilities in the vicinity of the site are of a good standard and are suitable for all pedestrians including disabled users. Footways are provided in the vicinity of the site with both formal and informal crossing facilities providing connectivity to the adjacent residential areas and Manchester City Centre. First Street is a high quality, traffic free pedestrian and cyclist route from Whitworth Street to the City Centre incorporating sears, trees and landscaping to create an attractive space for people to enjoy and pass along.

4.8 There are footways provided along both sides of Medlock Street which can be used to access local transport including bus, train and tram. There is a pedestrian refuge provided across Medlock Street approximately 200m north of the site. There is a signalised pedestrian crossing provided at the Medlock Street/Whitworth Street West junction.

4.9 To the south of the site, pedestrian access across the A57(M) has been significantly improved with at-grade footway crossings under Mancunian Way. These footways provide connections to the residential area of Hulme and can be used to access the University of Manchester and the Oxford Road Corridor.

4.10 To support disabled users, the existing public realm around the site includes wide footways and step free access where appropriate. There is an uncontrolled pedestrian crossing with dropped kerbs and tactile paving approximately 50m east of the site entrance across River Street.

4.11 Overall, it is considered that the pedestrian network in the area surrounding the site facilitates connectivity with a number of key services and therefore ensures walking can be actively promoted as a sustainable mode.

Cycling

4.12 Cycling is an effective mode for short trips up to three to five miles (5-8km) and a catchment of 5km represents a journey time of 20 minutes using a leisurely cycle speed pf 10mph (16kph). To demonstrate that cycling can be promoted for a range of users of varying ability, a 5km catchment is presented in **Dwg VN222361-G103.**

4.13 The 5km catchment encompasses the whole of Manchester City Centre and surrounding areas including Old Trafford, Salford, Cheetham Hill, Broughton, Ancoats, New Islington, Miles Platting, Ardwick, Longsight, Moss Side, Whalley Range and parts of Chorlton-cum-Hardy.

4.14 **Dwg VN222361-G103** also highlights the cycling infrastructure available within that catchment. This plan shows that there are extensive cycling routes provided in close proximity to the site this includes on-road and off-road routes, signed routes and canal towpath routes.

4.15 An extract of TfGM's cycle map is provided in **Figure 4.1** for the area in the vicinity of the site, with the site itself indicated by the red star.

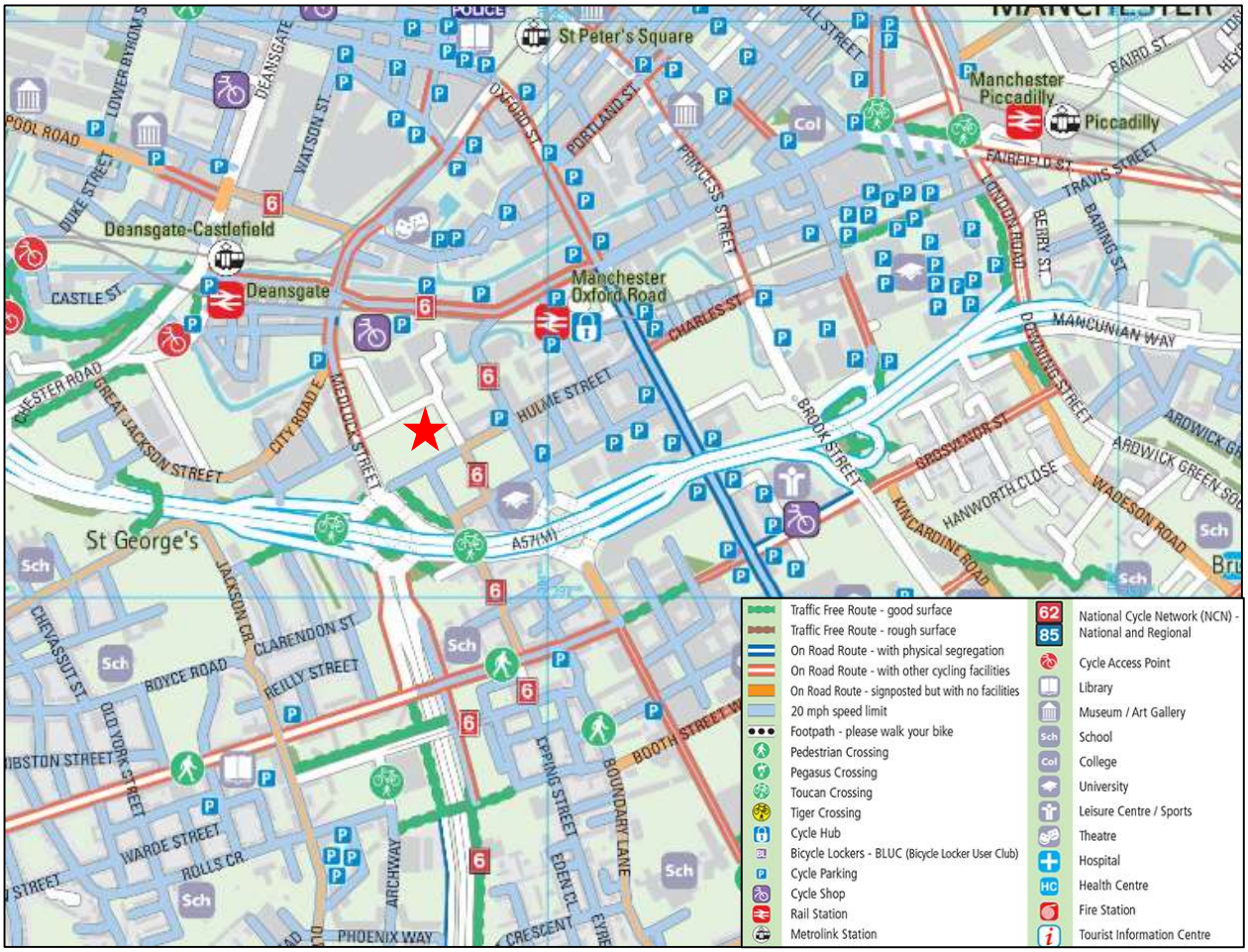


Figure 4.1: TfGM Cycle Map

4.16 **Figure 4.1** shows that Hulme Street forms part of National Cycle Network Route 6 (NCN 6). This is a long-distance cycle route linking London to the Lake District. There is also a 20mph speed limit on Hulme Street, Cambridge Street, Wilmott Street and Chester Street to support cyclist trip movements.

4.17 The site will be provided with cycle parking facilities that will further encourage travel via this mode:

— A total of 204 double stacked cycle parking spaces will be provided on the ground floor, as well as showers and changing facilities.

4.18 Overall, the site already benefits from excellent cycle infrastructure and with the developing Bee Network, the connectivity will increase ensuring can be actively promoted as a sustainable mode.

Public Transport – Bus

4.19 The IHT document 'Guidelines for Planning for Public Transport in Developments' (1999) suggests that the maximum walking distance to the nearest bus stop should not exceed 400 metres.

4.20 The closest bus stops are located on Medlock Street within 200 metres of the site. The southbound stop provides a flag post bus stop sign while the northbound stop provides a bus shelter with seating and timetable information. The existing footways along First Street and Medlock Street can be used to access both bus stops.

4.21 There is one high frequency bus route which serves the stops on Medlock Street. This bus service can be used to access residential areas of Hulme, Stretford, Davyhulme and Flixton to the south west of the conurbation site and can also be used to access Piccadilly Gardens.

4.22 The bus service frequency for this stop is presented in **Table 4.1**.

Table 4.1: Bus Services within 400 metres

Service No.	Route	Approximate Frequency (services per hour)					
		Mon-Fri				Sat	Sun
		AM Peak	Midday	PM Peak	Evening		
256	Piccadilly Gardens - Flixton via Hulme, Trafford Bar, Stretford, Davyhulme	6	6	6	2	6	2

4.23 There are other bus services which serve bus stops just over a 400m walk from the site on Whitworth Street West including:

- Free Bus 2, the free city centre shuttle bus, every 10 minutes;
- 255 service to Partington, every 30 minutes;
- X50 to Trafford Centre, every 20 minutes; and
- X58 to Flixton once a day commuter service.

4.24 All buses in Greater Manchester designed to carry over 22 passengers on local and scheduled routes comply with the government's Public Service Vehicles Accessibility Regulations (PSVAR). These standards include:

- Bus drivers being able to provide disabled passengers with certain types of assistance such as deploying boarding ramps and lifts when required to assist wheelchair users to board or alight the vehicle; and
- Free off-peak local bus travel for eligible disabled users at any time on a Saturday, Sunday or bank holiday and from 9:30am to 11pm on any other day.

4.25 In addition to the above, the majority of buses in Greater Manchester have low floors to further assist wheelchair users and audio-visual 'next stop' announcements to assist visually or hearing impaired passengers.

4.26 Overall, it is considered that the bus facilities surrounding the site provide a regular service which is available within an acceptable distance and at key travel times which will be suitable for a variety of trip purposes.

Public Transport – Metrolink

4.27 The nearest Metrolink stop is Deansgate-Castlefield which is just over 400 metres walk from the site. This station is a major interchange station with services operating to Manchester Piccadilly, Manchester Victoria, Manchester Airport, East Didsbury, Eccles, Altrincham, Bury, Rochdale Town Centre and Ashton-under-Lyne.

4.28 In 2020, the new Trafford Park Metrolink Line was launched which links Deansgate-Castlefield with Trafford Park and the Trafford Centre.

4.29 All services operate on a 12-minute frequency Monday to Sunday with combined frequency of 6 minutes Monday to Saturday during the day. All lines operate between 06:00 and 00:00, the Airport line operates from 03:00 from Deansgate Castlefield.

4.30 Deansgate-Castlefield can be accessed using the existing pedestrian network surrounding the site. All Metrolink stops provide shelters, seating and real-time journey information. All Metrolink trams and stations also provide disabled access in the form of step-free access, tactile paving and dropped kerbs.

4.31 The combined Greater Manchester Metrolink and Rail Network Map is provided in **Figure 4.2** overleaf.

4.32 All Metrolink trams and stops comprise step free access to assist wheelchair users, and benefit from the appropriate signage and emergency call points.

4.33 Overall, it is considered that the tram facilities offered from Deansgate-Castlefield provide a regular service which is available within an acceptable distance and at key travel times which will be suitable for a variety of trip purposes.

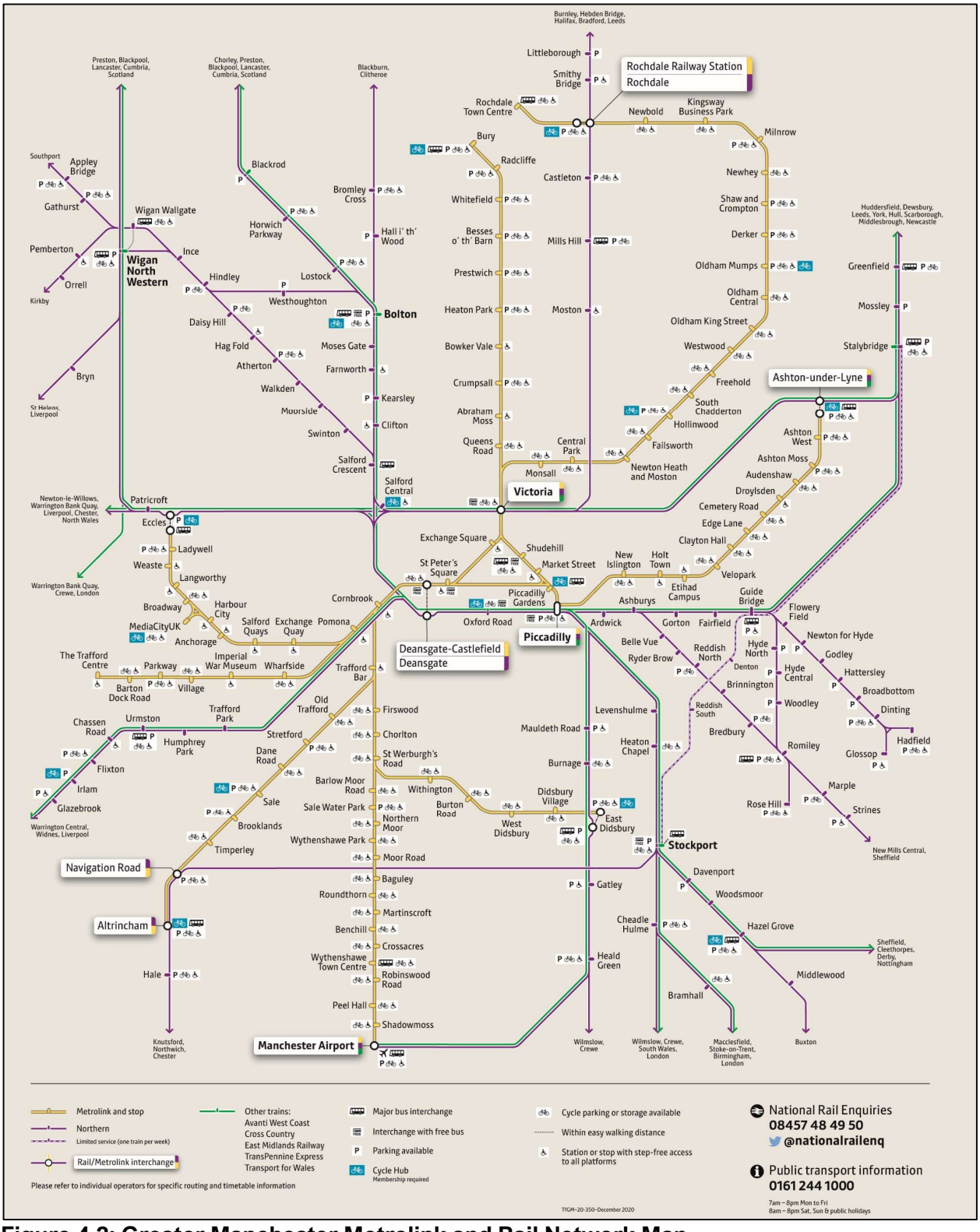


Figure 4.2: Greater Manchester Metrolink and Rail Network Map

Public Transport – Rail

4.34 Deansgate Railway Station is the located approximately 500 metres north of the site. This station provides an interchange between train and tram services with a pedestrian only bridge connecting the tram and train platforms.

4.35 Services from Deansgate are operated by Northern trains with services operating to Manchester Piccadilly, Manchester Oxford Road, Alderley Edge, Blackpool North, Warrington Central, Barrow-in-Furness, Blackpool North and Preston. Services operate Monday to Sunday.

4.36 To support disabled passengers, Deansgate has staff help available as well as lifts on each platform to provide step free access and ramps for train access.

4.37 Manchester Oxford Road and Piccadilly Railway Stations are also accessible within a 20-minute walk of the site, and these provide extensive regional and national rail connections. **Figure 4.3** below shows the location of the nearby transport networks including the rail stations in relation to the site, with the site itself indicated by the red star.

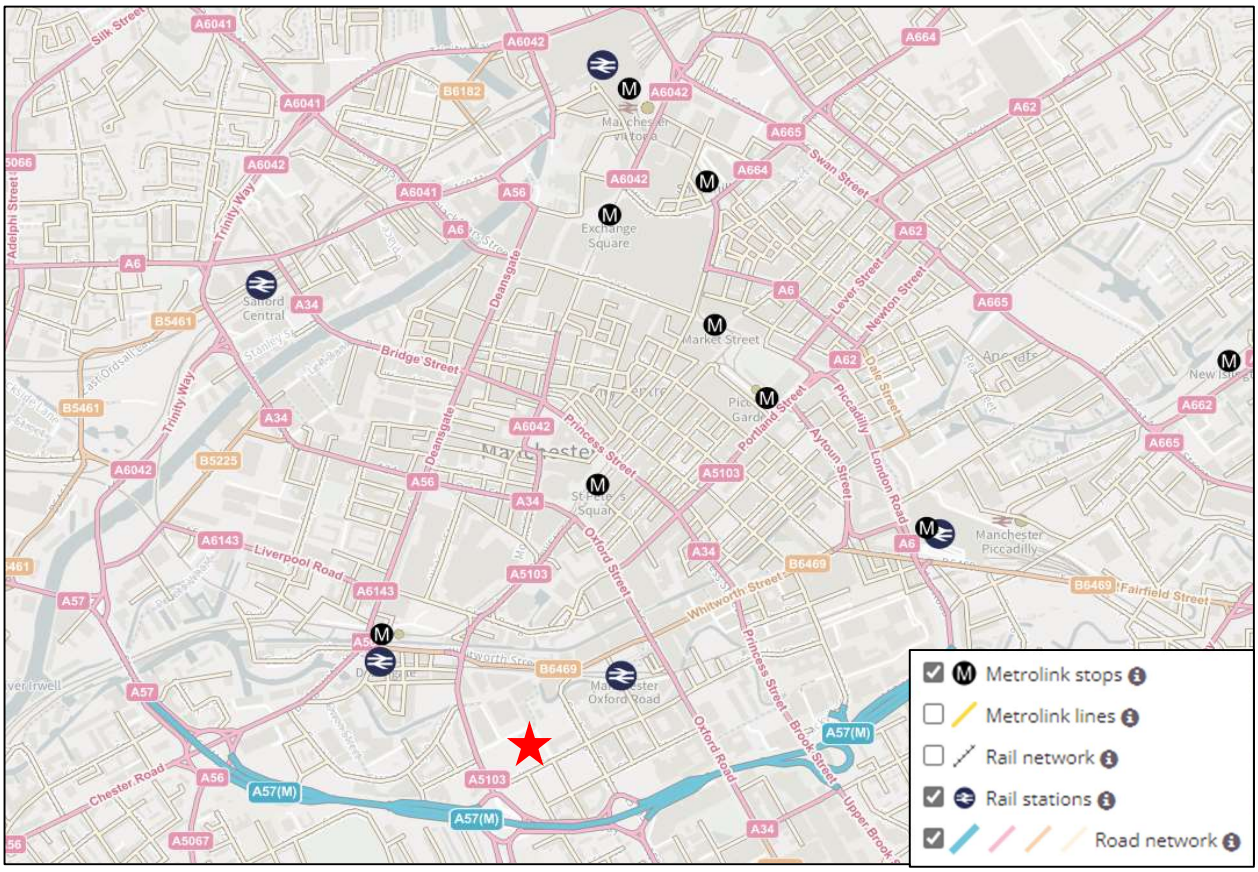


Figure 4.3: Nearby Transport Networks to the Site

4.38 Overall, it is considered that the rail facilities offered from Deansgate provide a regular service which is available within an acceptable distance and at key travel times which will be suitable for a variety of trip purposes.

Greater Manchester Accessibility Level (GMAL)

4.39 Greater Manchester Accessibility Level (GMAL) is a detailed and accurate measure of the accessibility of a site to both the conventional public transport network (bus, Metrolink and rail) and Greater Manchester's Local Link (flexible transport service). The GMAL takes into account walk access time and service availability.

4.40 The method is a way of measuring the density of public transport provision at any location within the Greater Manchester region. The levels range from 1 which represents the least accessible sites to 8 which represents the most accessible sites.

4.41 **Figure 4.4** provides an extract of the GMAL Map for the area in the vicinity of the site, with the site itself indicated by the red star.



Figure 4.4: GMAL Map

4.42 **Figure 4.4** highlights that the site has a GMAL of 8 indicating that it is in a highly accessible area, and amongst the most accessible locations in Greater Manchester with excellent connections to local and regional public transport services. As a result, it would be easy to access the site without needing a car and therefore, the site represents great potential for a car-free scheme.

4.43 Disabled users are able to access the site by taxi and Manchester boasts a highly developed taxi service with all Hackney Carriages and many private hire companies offering access for wheelchair users with ramps and equipment for wheelchair users along with assistance features for the visually impaired and hard of hearing. The routes from kerb to the building entrances will be design for access by disabled users.

5 PROPOSED DEVELOPMENT

Overview

5.1 In summary, the development proposals comprise:

- A 13-storey commercial office building (Use Class E) with winter gardens and roof terraces. The quantum of development includes:
  - c.20,175 sqm of commercial space (Use Class E);
  - 11th floor terrace and 12th floor terraces;
  - 204 double stacked cycle parking spaces with showers and changing facilities;
  - There is no car parking provided. The nearby First Street Q-Park multi-storey car park has 700 standard spaces, 26 disabled spaces & 6 EV charging spaces. In addition to this, there are 6 on-street parking bays where disabled drivers can park without payment or limit, located on the northern side of River Street between Medlock Street and James Grigor Square; and
  - Landscaping and public realm works.

Access and Parking

5.2 The main pedestrian entrances into the office development are from the corner facing north-west onto First Street. Access for cyclists will be from the southern façade and servicing access will be from the east.

5.3 Improved areas of public realm will be provided around the building to create a pleasant environment for pedestrians.

5.4 The proposed development will be car-free and therefore, there will be no car parking spaces provided on site.

5.5 The site will benefit from cycle parking facilities that will further encourage travel via this mode. A total of 204 double stacked cycle parking spaces will be provided on the ground floor, as well as showers and changing facilities.

Servicing and Deliveries

5.6 Servicing takes place from the eastern side of the building along a corridor between Plot 10a and the forthcoming development of Plot 10b. This route will be designed to a high quality and will be accessible by the general public although we note that the main routes for pedestrians lie to the west on First Street and to the east on Wilmott Street.

5.7 Service vehicle access is from Hulme Street. In this area, the highway will be defined by low kerbs over which the vehicles can overrun. Plot 10a benefits from a Servicing Bay on the eastern elevation where bins and delivery goods can be stored, and this acts as the primary location for service activity for the building. In addition, to the north of this there is a room where Amazon ‘Bring Me Lockers’ are housed which acts as a self-service delivery location for online purchases.

5.8 As described in **Section 1**, the service corridor lies between the two buildings of Plot 10a and Plot 10b which could progress on different timescales. We therefore describe how Plot 10a could be serviced in the interim phase and how it would be serviced once Plot 10b is competed.

5.9 In the interim phase, the servicing corridor will be reduced to allow for the site boundary/ hoarding line for construction of Plot 10b. Given the reduced width and presence of service vehicles, pedestrians would be encouraged to use the adjacent route. During this period, the Amazon Vans accessing the Bring Me Lockers would reverse along the corridor from Hulme Street. The vehicle tracking of this manoeuvre is shown in **Dwg VN222361-TR100**. Larger vehicles accessing the Servicing Bay such as large refuse vehicles would also reverse in from Hulme Street. These larger vehicles will not be able to reverse into the Service Bay so will pull up to the doors and the tracking for this manoeuvre is shown in **Dwg VN222361-TR101**.

5.10 It can be seen that in this interim phase some of the infrastructure works at the southern end of the Service Corridor will be temporary including the Bollards, the Tree and the Access Kerb works. These would be completed upon the finalisation of Plot 10b.

5.11 The final phase of development has been described in **Dwg 105-B1_02_2200 B.** Here the space between the buildings is c. 12m although in parts this width may be reduced with the presence of a ramp for the rear access into Plot 10b.

5.12 Based on the latest plans for Plot 10b we have re-tracked the Amazon Van and Large Refuse vehicle accessing the Bring Me Locker location and Service Bay and these are shown in **Dwg VN222361-TR103** and **Dwg VN222361-TR104.** It can be seen that it is possible for the Amazon Vans to make a 3-point turn within that space and for the Large Refuse Vehicle to reverse into the Service Bay.

5.13 As part of these works the Service Yard Corridor would be finished off with implementation of the drop bollards accessing the service corridor, the trees on the southern part of the corridor and the final kerb detail for access onto Hulme Street. There is the potential that Plot 10b could be completed prior to Plot 10a but in that situation it would be Plot 10a that completes the public realm.

5.14 On completion this corridor would be open to the public to access although we note that the main routes for pedestrians are to the west on the extension of First Street between Plot 9a and 10a and to the east on Wilmott Street.

5.15 Finally, a substation will also be located to the north-east of the site which will also be accessed from the service yard area. It is anticipated that vehicles will only need to access the substation rarely by a c.10m flatbed lorry with a Hiab crane. To do so it would reverse in all the way from Hulme Street under control from a banksman.

Office Trip Forecasts

5.16 The total person trip forecasts for Plot 10a have been derived via reference to the TRICS (7.8.3) trip rate database using either in Town Centres Edge of Town Centre office development sites. The full TRICS output files are contained in **Appendix B**. The trip rates and trip generation based on the proposed 20,175 sqm floor area of the office development are presented in **Table 5.1.**

Table 5.1: Office Total Person Trip Forecasts

	Trip Rate (per 100 sqm)		Trip Generation	
	Arrivals	Departures	Arrivals	Departures
AM Peak (08:00-09:00)	1.930	0.178	389	36
PM Peak (17:00-18:00)	0.155	1.834	31	370

**Numbers are rounded to the nearest whole integer*

5.17 It can be seen from **Table 5.1** that during the peak hours around 400 persons could be expected to be accessing the office development.

5.18 In order to derive estimates for the transport modes by which these trips are undertaken, reference has been made to TfGM's Transport Statistics 2019 report for access to and from the 'Key Centre' (Manchester City Centre).

5.19 This provides the non-car modal share for trips to and from the centre in the peak hours specific to Manchester. The modal splits provided in the TfGM report are as below:

Walk	Cycle	Bus	Rail	Metrolink	Car	Total
13%	2%	21%	26%	17%	21%	100%

5.20 Applying the modal splits above to the calculated person trips (**Table 5.1**) provides the estimated numbers of trips by mode specific to the site as set out in **Table 5.2**. These are provided for the AM peak hour (08:00-09:00), the PM peak hour (17:00-18:00).

Table 5.2: Multi-Modal Office Trip Forecasts

	Walk		Cycle		Bus		Rail		Metrolink		Car	
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep
AM Peak	51	5	8	1	82	8	101	9	66	6	82	8
PM Peak	4	48	1	7	7	78	8	96	5	63	7	78

**Numbers are rounded to the nearest whole integer*

5.21 It can be seen from **Table 5.2** that the peak hour car trips generated by the development will be relatively modest with around 90 two-way trips in the morning peak hour and 85 two-way trips in the evening peak hour. The majority of car trips generated by the development will be expected to park in nearby public car parks, the closest of which have been identified in **Section 3** of this report. A few of these movements would taxi trips and we forecast around 5 taxi trips in the AM peak hour and around 23 over the course of the day.

5.22 Overall, the car trips generated by the development represent around two to three vehicle movements per minute during the busiest hours of the day, and the trips will be dispersed across a number of City Centre car parks. The effect of these trips upon the operation of the surrounding highway network will therefore be negligible.

5.23 Trips by public transport will make up the majority of the travel modes to and from the development. It is expected that the excellent cycle facilities at the development will help to attract a higher proportion of cyclists to the development than suggested by the 2019 TfGM statistics described above.

Servicing Vehicle Trips

5.24 The typical deliveries for the development will be as follows:

- Office supplies, post/courier, consumables, occasional IT supplies and office furniture.

Delivery Forecasts and Timings of Deliveries

5.25 A forecast of service and delivery vehicle trips has been undertaken for the proposed office development, again using TRICS forecasting the LGV and OGV (vehicles greater than 7.5t) vehicles. The service vehicle trip rates are also contained in **Appendix B.**

5.26 In summary the office use will generate around 4 HGV deliveries and around 34 LGV trips. In the mid-morning peak hour, the busiest level of activity would be around 4 vehicles in an hour.

5.27 As the proposed development will be located within the First Street Regeneration Area, deliveries are likely to be made as part of a combined service route so each building would be serviced in turn. While the daily forecast is for 38 servicing and delivery trips per day, it is expected that many of these trips (e.g. Post, Office Supplies, Waste Collection) would be coordinated with other buildings on First Street which would significantly reduce the number of new trips to the area.

5.28 Typically, most deliveries are small consignments and evidence from other sites show that 40% of all deliveries take less than 5 minutes. Larger deliveries tend to take longer and for this site we expect that a large delivery consignment would take no more than 20 minutes to serve the site.

5.29 The service area will be managed so that as the nature of the regular deliveries are confirmed, the vehicle arrivals of the larger deliveries are timed so that they do not conflict.

Combined Highway Operation with Plot 10b

5.30 Given the shared use of the Service Corridor, a high-level assessment of activity with Plot 10a and Plot 10b service traffic has been considered. We expect around 4 Large Rigid Lorries to access Plot 10b over the course of a day and around 30-40 vans, with most of the activity associated with the Food Hall operation. We do also expect a significant number of online courier deliveries to be made by bicycle largely associated with the Food Hall operation and this may equate to around 50-70 trips per day.

5.31 Overall, we expect that the servicing area will see regular activity across the day with most deliveries being made in the morning. Some of the regular arrivals by some of the large vehicles are expected to be timed to avoid clashes although there is scope for several vehicles to serve the buildings at the same time. Most deliveries are completed within 5-10 minutes and a few up to 20 minutes. While this service corridor will be busy, we expect that it can operate efficiently and without blocking access for delivery drivers nor causing an adverse impact on pedestrian safety.

Service Vehicle Impact Measures

5.32 Measures will be taken regarding pedestrian safety/amenity and servicing will be made with a minimum amount of noise and no use of the horn at any time.

5.33 As such, vehicles will manoeuvre on-site with as little noise as possible, and drivers will ensure they:

- Engage gears quietly;
- Keep engine revs to a minimum;
- Apply brakes gently;
- Close driver's door quietly; and
- Engine off when not in use.

6 SUMMARY AND CONCLUSION

Summary

6.1 This Transport Statement (TS) has been prepared by Vectos on behalf of First Street Developments Ltd to support of a planning application for a proposed office-based development on Plot 10a of the First Street Masterplan Area.

6.2 The proposals are for a development of a highly sustainable office building with high quality public realm.

6.3 The site benefits from excellent levels of accessibility by sustainable transport modes being located within a short walk of Manchester City Centre, the main university campuses and public transport interchanges. The development will be car free and will have high levels of cycle parking, showers and changing facilities.

6.4 Plot 10a comprises a 13-storey office building, delivering just over 20,000sq m floorspace, together with new public realm to complete the missing link of First Street extending between Plot 9a and Plot 10a connecting First Street to Hulme Street to the south. The landscaping works will match the high quality of the works implemented on the rest of the estate to the north of the site. The adjacent Plot 9a delivers the majority of the public realm extension with Plot 10a completing the pedestrianised footpath

6.5 River Street is a private road and the frontage of the Plot 10a site will be improved to benefit from high quality yorkstone street surfacing, continuing the materials palette used throughout James Grigor Square.

6.6 Adjacent to Plot 10a lies the forthcoming development of Plot 10b which will share the servicing corridor that lies between the two buildings. Plot 10b would provide Purpose Built Student Accommodation and a Food Hall available to the public. This development may progress at a different timescale to Plot 10a, therefore, we have considered the implications of this development both in the interim phase as the 10b site is hoarded off and upon final completion of both buildings.

6.7 Service access is to be made from Hulme Street along the servicing corridor that lies between Plot 10a and Plot 10b. Plot 10a benefits from an internal servicing bay providing a safe space to accommodate the main service activity. In addition, the site has Amazon ‘Bring Me Lockers’ and we show how these can be accessed by Amazon vans allowing then to turn within the service corridor so that they arrive and depart the site in a forward gear. The swept path assessment demonstrates that there is sufficient space for delivery and service vehicles to access the service area safely.

6.8 In the Interim Phase prior to completion of Plot 10b, we have considered the effect of a reduced width on servicing activity. In summary, during this period the larger service vehicles to the Service Bay and the Amazon vans accessing the Bring Me Lockers will need to reverse in from Hulme Street. Given this reduced width, we propose that the service corridor is not open to the public and pedestrians are directed via First Street to the West or Wilmott Street to the East.

Conclusion

6.9 This proposal does not adversely affect the operation of the highway or transport network and meets the criteria set out in national and local policy for sustainable development. It is therefore considered that the scheme is acceptable in highways and transportation terms.

Drawings



Notes:

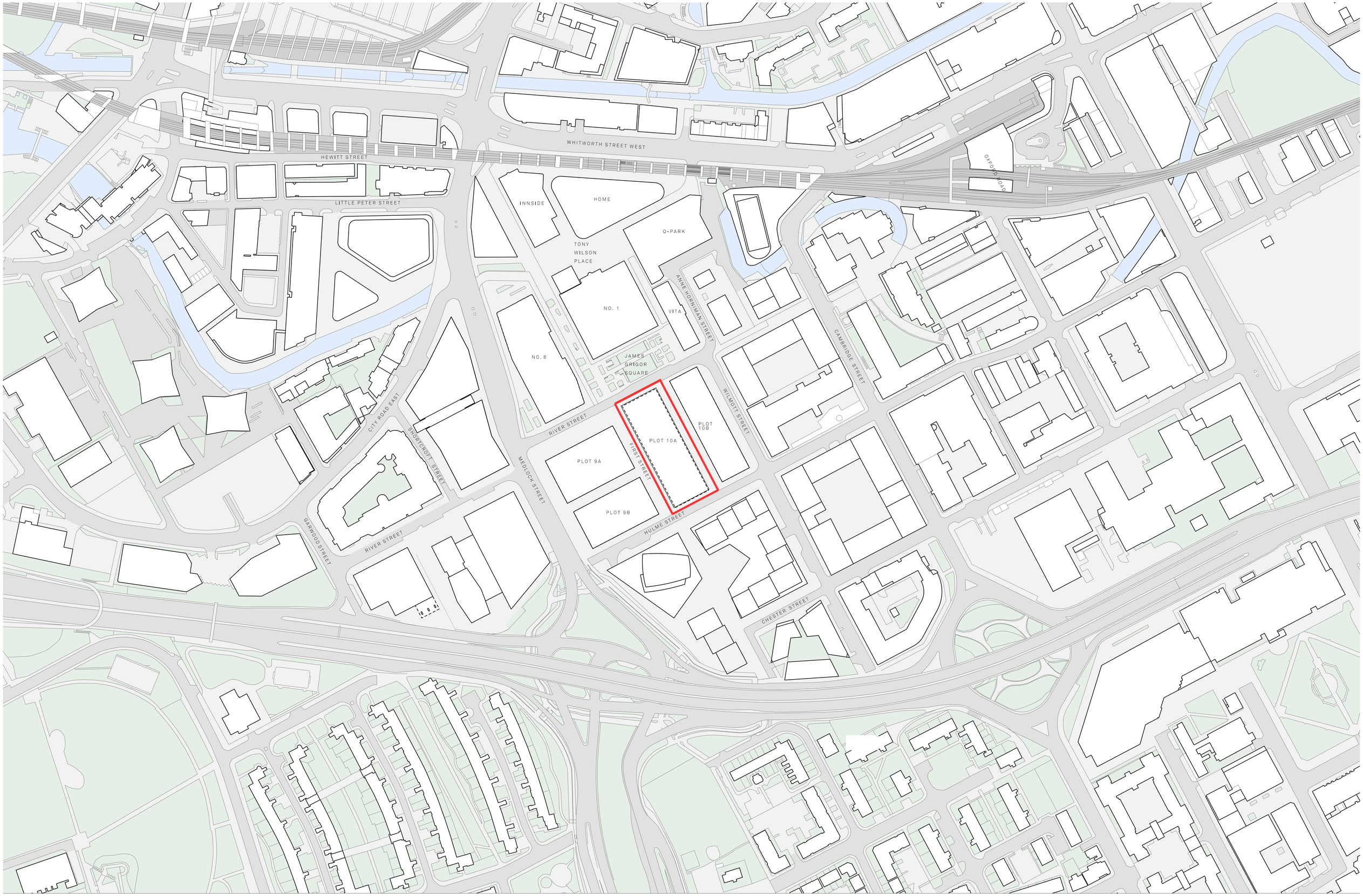
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Details: 13.01.23 Issued for Planning					

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Notes:

Planning Application Boundary

Project Name: Plot 10a First Street		Title: Proposed Masterplan		Scale: 1:1250 @ A1		
Drawn: MH	Checked: JC	Status: Information	Project: 105	Drawing No: MP_00_2200		Rev: B
Details: 13.01.23 Issued for Planning						

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JAMES
GRIGOR
SQUARE

NO. 8

RIVER STREET

PLOT 9A

FIRST STREET

PLOT 10B

MEDLOCK STREET

PLOT 9B

HULME STREET

Notes:

Planning Application Boundary

Project Name: Plot 10a First Street		Title: Proposed Site Plan			Scale: 1:250 @ A1	
Drawn: IB	Checked: JC	Status: Information		Project: 105	Drawing No: MP_02_2200	Rev: H
Details: 13.01.23 Issued for Planning						

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Notes:

Planning Application Boundary

Project Name: Plot 10a First Street		Title: Proposed GA Plan Ground Floor			Scale: 1:125 @ A1 1:250 @ A3	
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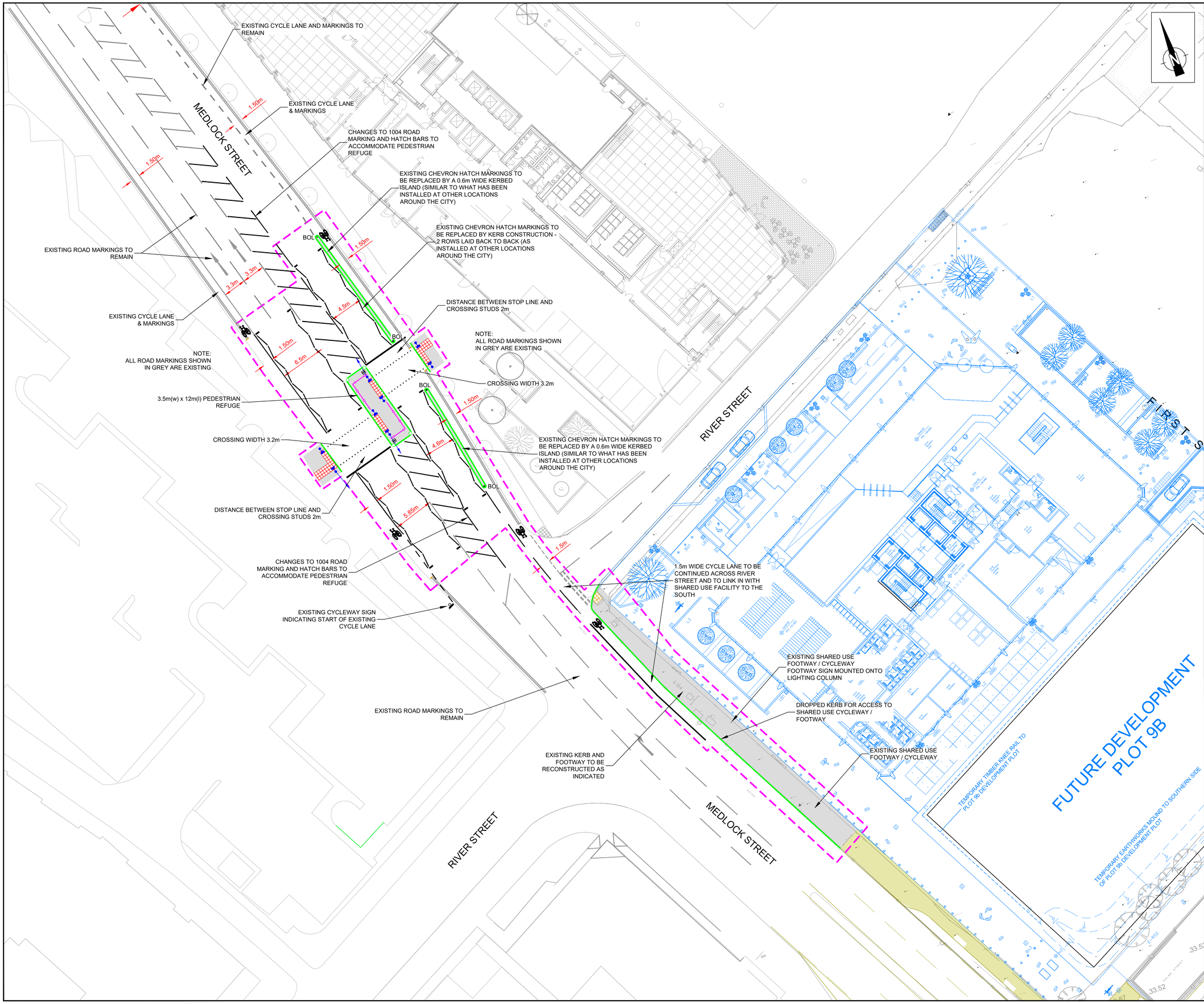
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11. THIS DRAWING IS SUBJECT TO DETAILED DESIGN AND HA TECHNICAL APPROVALS

KEY

- PROPOSED FOOTWAY CONSTRUCTION AT PEDESTRIAN CROSSING AND ALSO DEVELOPMENT SITE FRONTAGE
- PROPOSED NEW TACTILE PAVING AT UNCONTROLLED PEDESTRIAN CROSSING (COLOUR: BUFF).
- PROPOSED NEW TACTILE PAVING AT SIGNAL CONTROLLED PEDESTRIAN CROSSING (COLOUR: RED).
- PROPOSED NEW KERB CONSTRUCTION
- PROPOSED PEDESTRIAN GUARDRAIL ON REFUGE ISLAND
- PROPOSED LOCATION OF TRAFFIC SIGNAL
- PROPOSED LOCATION OF TRAFFIC PEDESTRIAN PUSH BUTTON

NOTE: SIGNALS INFORMATION IS SHOWN FOR INDICATIVE PURPOSES ONLY AND IS TO BE DESIGNED IN DETAIL BY TFGM

- REFLECTORISED TRAFFIC BOLLARD
- EXTENT OF HIGHWAY WORKS

0 2.5 5 10 15
1:250 SCALE (m)

AWAITING TECHNICAL APPROVAL

This drawing has NOT been technically approved by Local Authority and/or Water Authority.
All works subject to change through technical review process with relevant approving authorities.

Rev	Details	Drawn	Checked	Auth	Date
C	CHANGES IN RESPONSE TO MCC COMMENTS	IW	SR	SR	21.07.22
B	DESIGN RE-DRAWN ON TOPO SURVEY	IW	SR	SR	29.06.22
A	EXISTING ROAD MARKINGS UPDATED	IW	SR	SR	29.04.22

Drawing Status: PRELIMINARY ISSUE
Suitability: S4

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e: manchester@vectos.co.uk
CfA Centre for Assessment ISO 9001 17373345

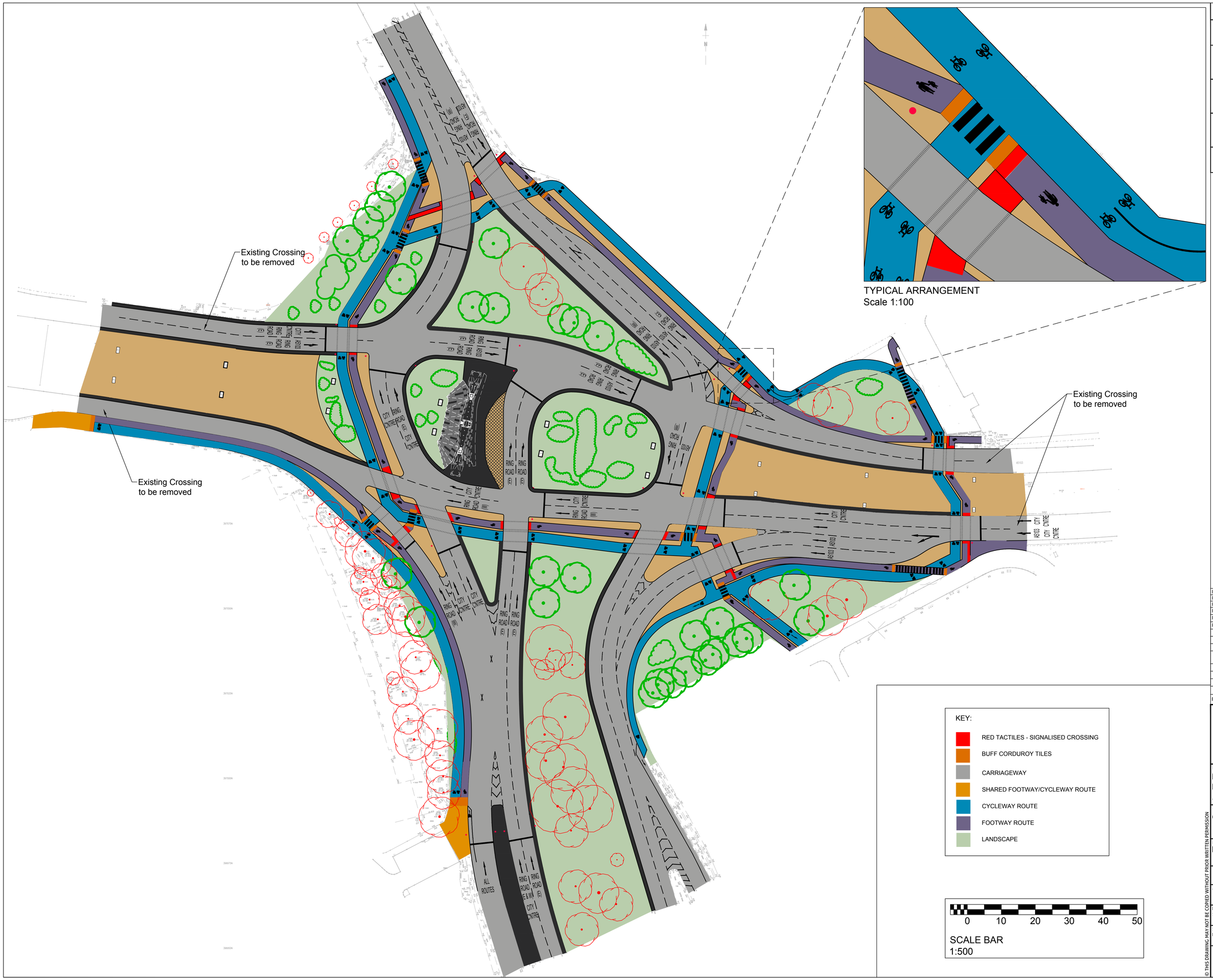
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Project Title: FIRST STREET, PLOT 9

Drawing Title: GENERAL ARRANGEMENT
PROPOSED PEDESTRIAN CROSSING
MEDLOCK STREET

Scale	Designed	Drawn	Checked	Authorised
1:250	JF	IW	SR	SR
Original Size	**Date**	**Date**	**Date**	**Date**
A1	20/04/22	20/04/22	20/04/22	20/04/22

Drawing Number: PIN/Proj. Ref. No. | Originator | Volume | Location | Type | Role | Number
VD20344 - VEC-HGN- XX -DR-CH- 100
Project Ref. No.: VD20344
Revision: C



TYPICAL ARRANGEMENT
Scale 1:100

KEY:

- RED TACTILES - SIGNALISED CROSSING
- BUFF CORDUROY TILES
- CARRIAGEWAY
- SHARED FOOTWAY/CYCLEWAY ROUTE
- CYCLEWAY ROUTE
- FOOTWAY ROUTE
- LANDSCAPE

0 10 20 30 40 50

SCALE BAR
1:500

DESIGNER RISK INFORMATION

IN ADDITION TO THE HAZARDS/RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING:

CONSTRUCTION:

MAINTENANCE/CLEANING:

DECOMMISSIONING/DEMOLITION:

IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT CONTRACTOR WORKING, WHERE APPROPRIATE, TO AN APPROVED METHOD STATEMENT.

Rev	Date	Amendment		
P15	24.09.19	Amended Cycle/Pedestrian Routes	nt	TD
P14	18.09.19	Amended Cycle/Pedestrian Routes	TD	TD
P13	13.09.19	Amended Cycle/Pedestrian Route Medlock Street	TD	TD
P12	10.09.19	Left Turn Amended Princess Road	TD	TD
P11	04.09.19	Footway/Cycleway amended.	nt	TD
P10	29.08.19	Footway/Cycleway further separated.	nt	TD
P9	20.08.19	Client requested amendements.	nt	TD
P8	19.08.19	Client requested amendements.	nt	TD
P7	13.08.19	REDESIGN.	nt	TD
P6	31.07.19	Service Zone amended. Pedestrian/Cycle route across junction amended. Hatching added back.	nt	TD
P5	30.07.19	Additional details added.	nt	TD
P4	23.07.19	Additional planting shown.	nt	RE
P3	22.07.19	Additional notes added.	nt	RE
P2	19.07.19	AMENDED to suit client comments	nt	TD

mjm Consulting Engineers Ltd
Southgate House, 38 Southgate, Wakefield WF1 1TL
T: 01924 811 000 mjmc.co.uk

Project:
NPIF
PRINCESS ROAD/MANCUNIAN WAY
JUNCTION IMPROVEMENTS

Client:
COLAS

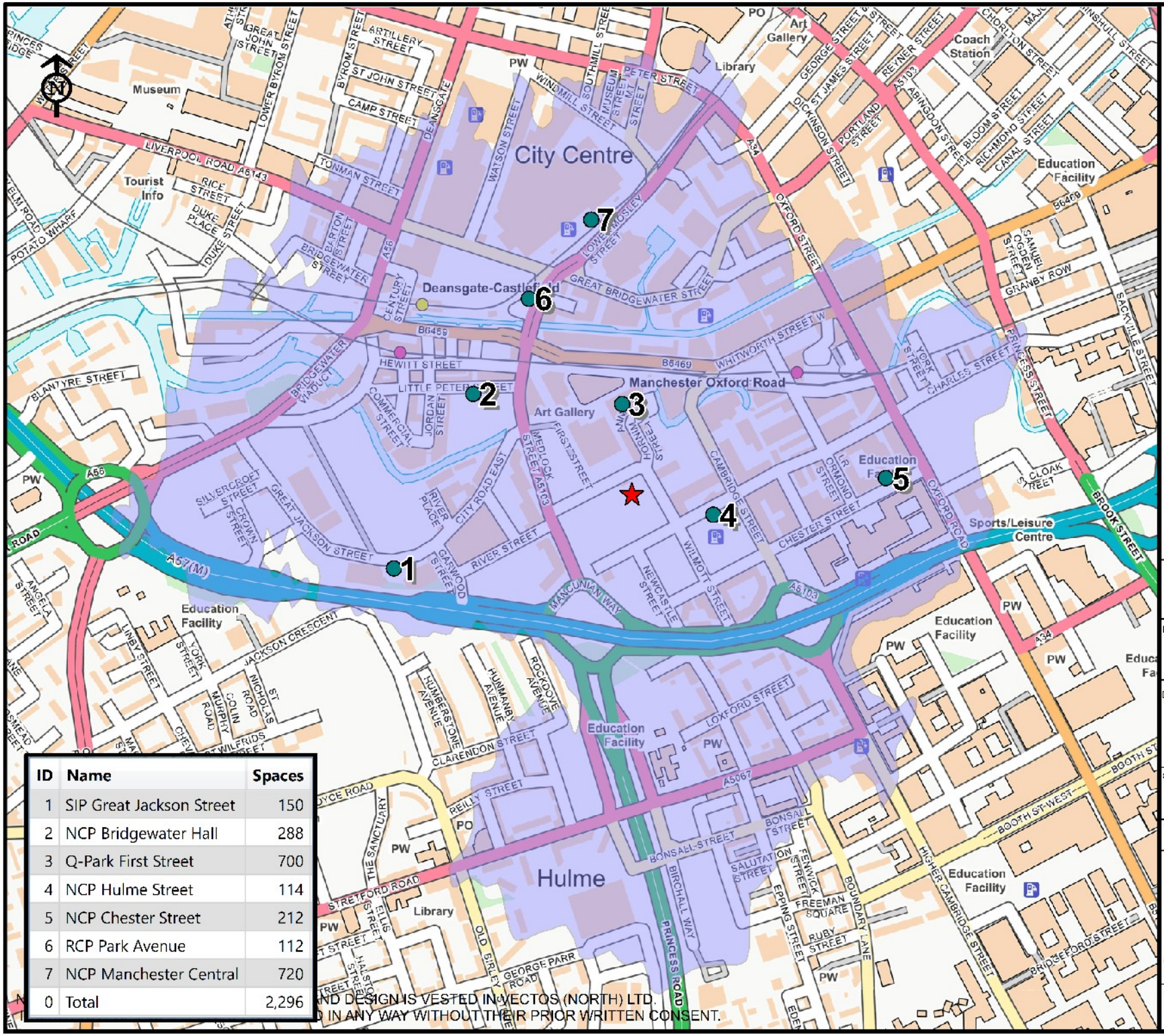
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INDICATIVE GENERAL ARRANGEMENT

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Revision Status: P15	Suitability Status: S2	Date: July 2019

Suitability Description: ISSUED FOR INFORMATION

Drawing Reference:
Project - Originator - Zone - Level - File Type - Discipline - Number
7378-MJ-00-00-DR-D-1799

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ID	Name	Spaces
1	SIP Great Jackson Street	150
2	NCP Bridgewater Hall	288
3	Q-Park First Street	700
4	NCP Hulme Street	114
5	NCP Chester Street	212
6	RCP Park Avenue	112
7	NCP Manchester Central	720
0	Total	2,296

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Legend

- Site Location
- Car Park
- 800m Walk Catchment

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CLIENT: First Street Developments Ltd

PROJECT TITLE: Plot 10a, First Street

DRAWING TITLE: Public Car Park within 800m Catchment

SCALE: N.T.S

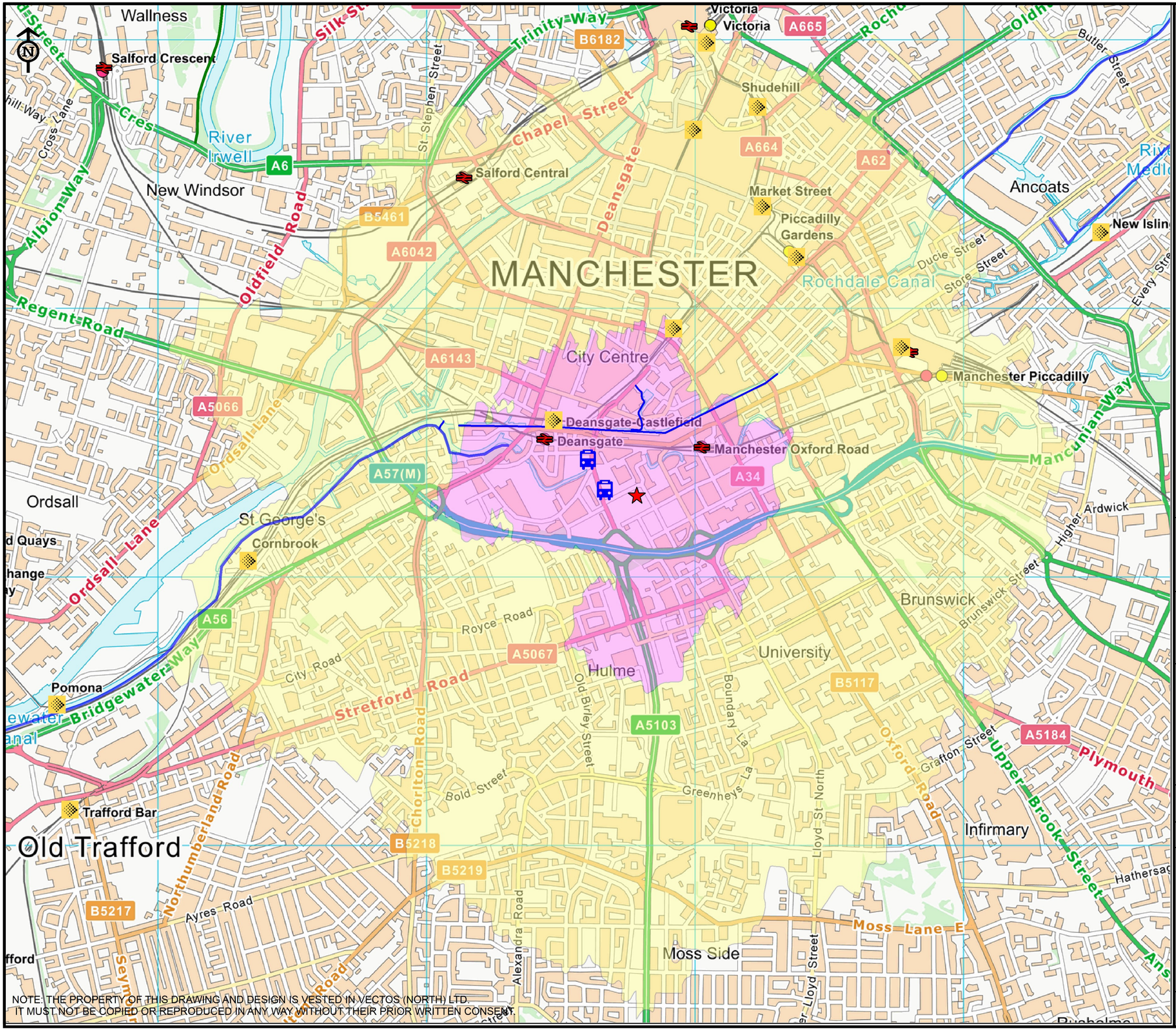
DRAWN:	CHECKED:	DATE:
CJ	GD	Aug 2022

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Oxford Place, 61 Oxford Street, Manchester M1 6EQ
t:0161 228 1008 e:manchester@vectos.co.uk

DRAWING NO: VN222361-G104

REVISION:



Legend

- Site Location
- Bus Stop
- Metrolink
- National Rail
- Canal Tow Path

Pedestrian Walking Catchment

- 0 - 800m
- 800m - 2km

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CLIENT:

First Street Developments Ltd

PROJECT TITLE:

Plot 10a, First Street

DRAWING TITLE:

Pedestrian Walking Catchment

SCALE: N.T.S

DRAWN:	CHECKED:	DATE:
CJ	GD	Aug 2022

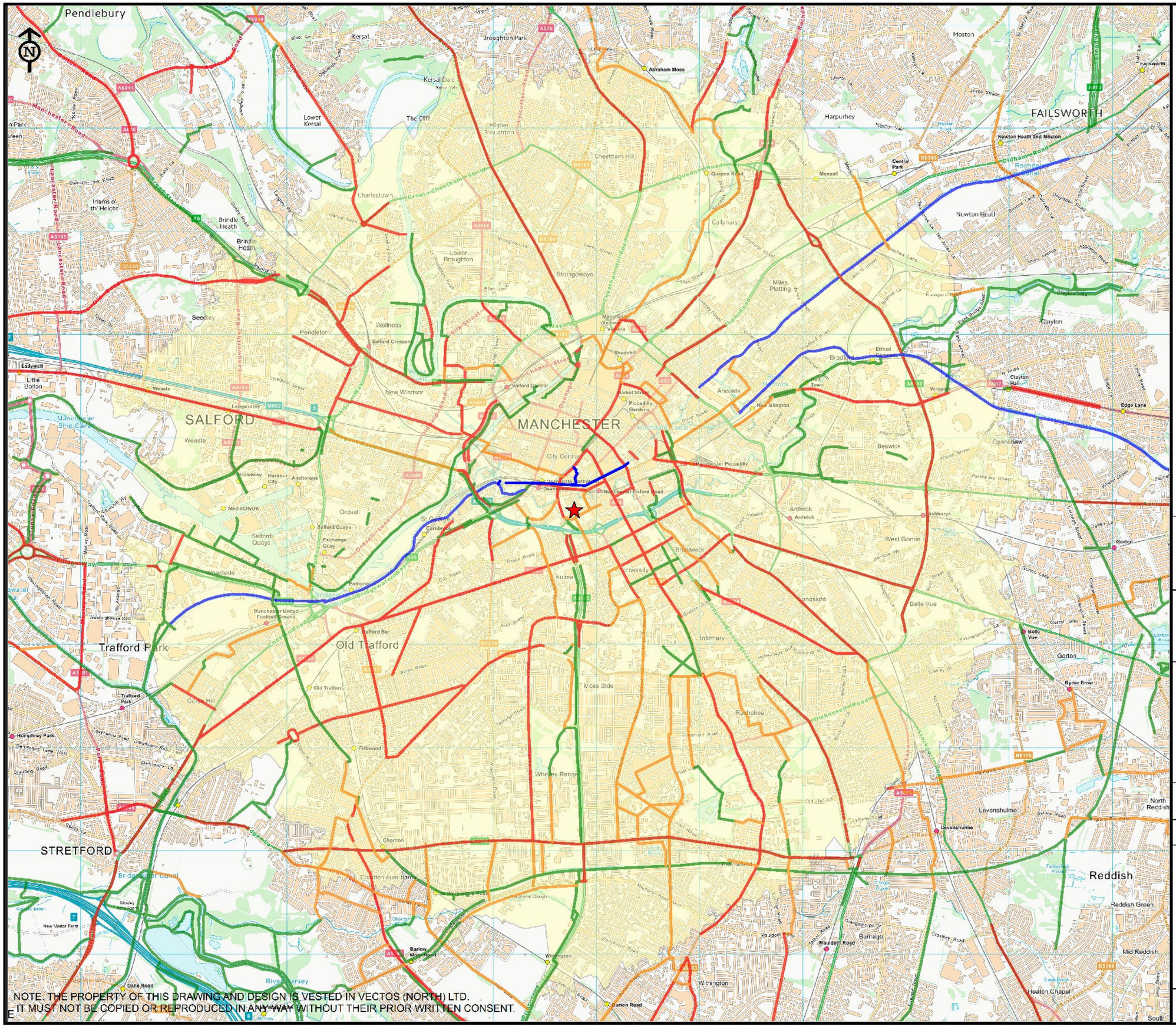
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t:0161 228 1008 e:manchester@vectos.co.uk

DRAWING NO: VN222361-G102

REVISION:

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Legend

Site Location

Cycle Routes

- Signed Routes
- On Road with Cycle Lanes
- Off Road
- Canal Tow Path

Cycling Catchment

- 0 - 5km

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CLIENT:

First Street Developments Ltd

PROJECT TITLE:

Plot 10a, First Street

DRAWING TITLE:

Cycling Catchment

SCALE: N.T.S

DRAWN:	CHECKED:	DATE:
CJ	GD	Aug 2022

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Oxford Place, 61 Oxford Street, Manchester M1 6EQ
t:0161 228 1008 e:manchester@vectos.co.uk

DRAWING NO: VN222361-G103

REVISION:

Reverse Manoeuvre through Internal Infrastructure

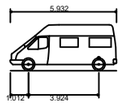


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REV.	DETAILS	DRAWN	CHECKED	DATE
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Notes:

1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.



Mercedes Sprinter	
Overall Length	5.932m
Overall Width	2.020m
Overall Body Height	2.567m
Min Body Ground Clearance	0.339m
Track Width	1.996m
Lock to lock time	4.00s
Wall to Wall Turning Radius	7.600m

Plot 10a, First Street (Interim Phase)

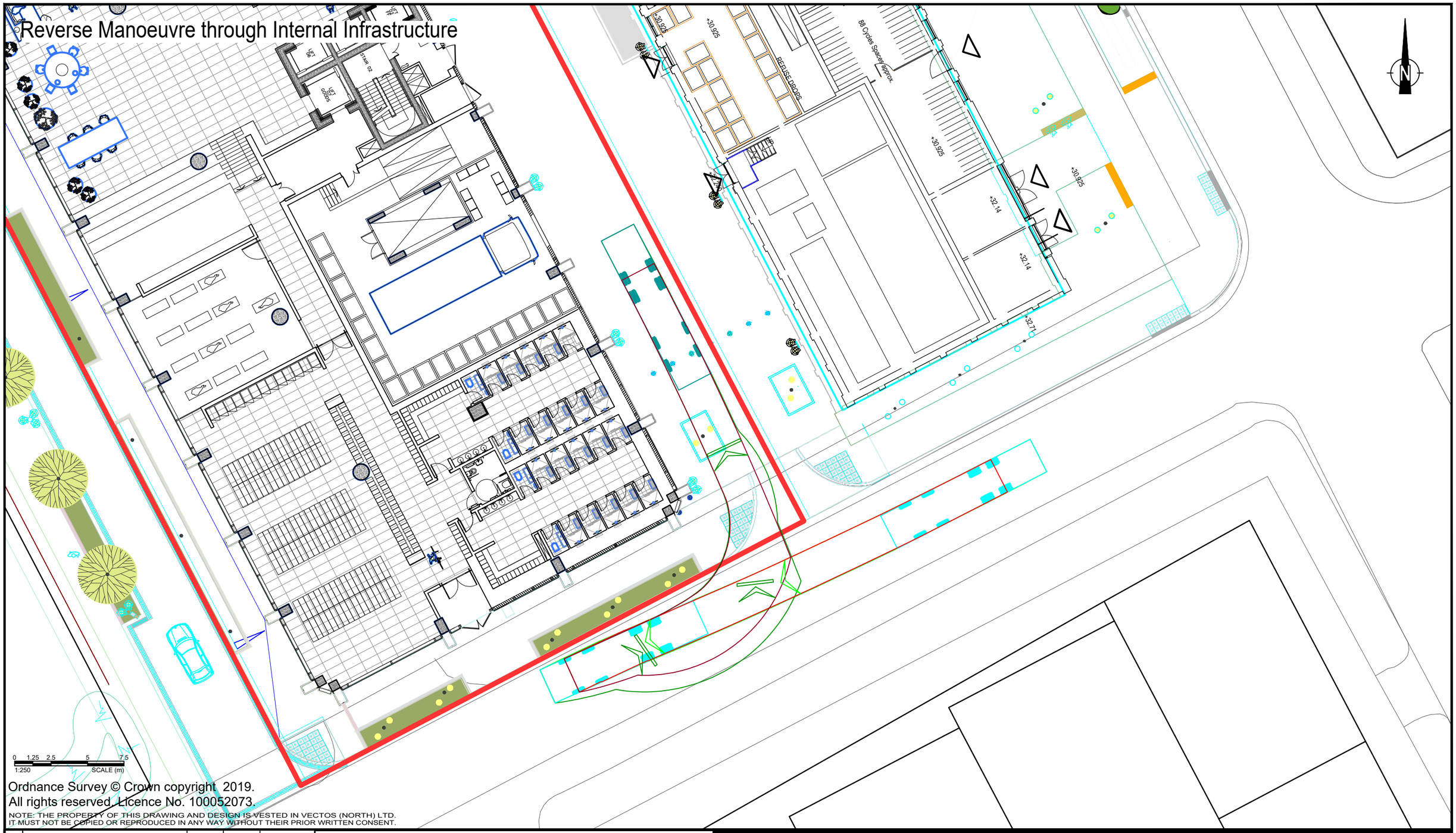
First Street Developments

Swept Path Analysis - Amazon Van

vectos.
4th Floor Oxford Place, 61 Oxford Street, Manchester, M1 6EQ
0161 228 1008 e: manchester@vectos.co.uk

DRAWN:	CHECKED:	DATE:	SCALES:	DRAWING NUMBER:	REVISION:
CG	GD	12.01.23	1:500 at A3	VN222361-TR100	·

Reverse Manoeuvre through Internal Infrastructure



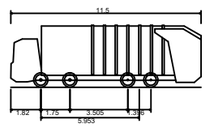
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REV.	DETAILS	DRAWN	CHECKED	DATE
.	.	.	.	.

Notes:

1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.



11.5m Large Refuse Vehicle (4 axle)	
Overall Length	11.500m
Overall Width	2.500m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	6.00s
Wall to Wall Turning Radius	11.330m

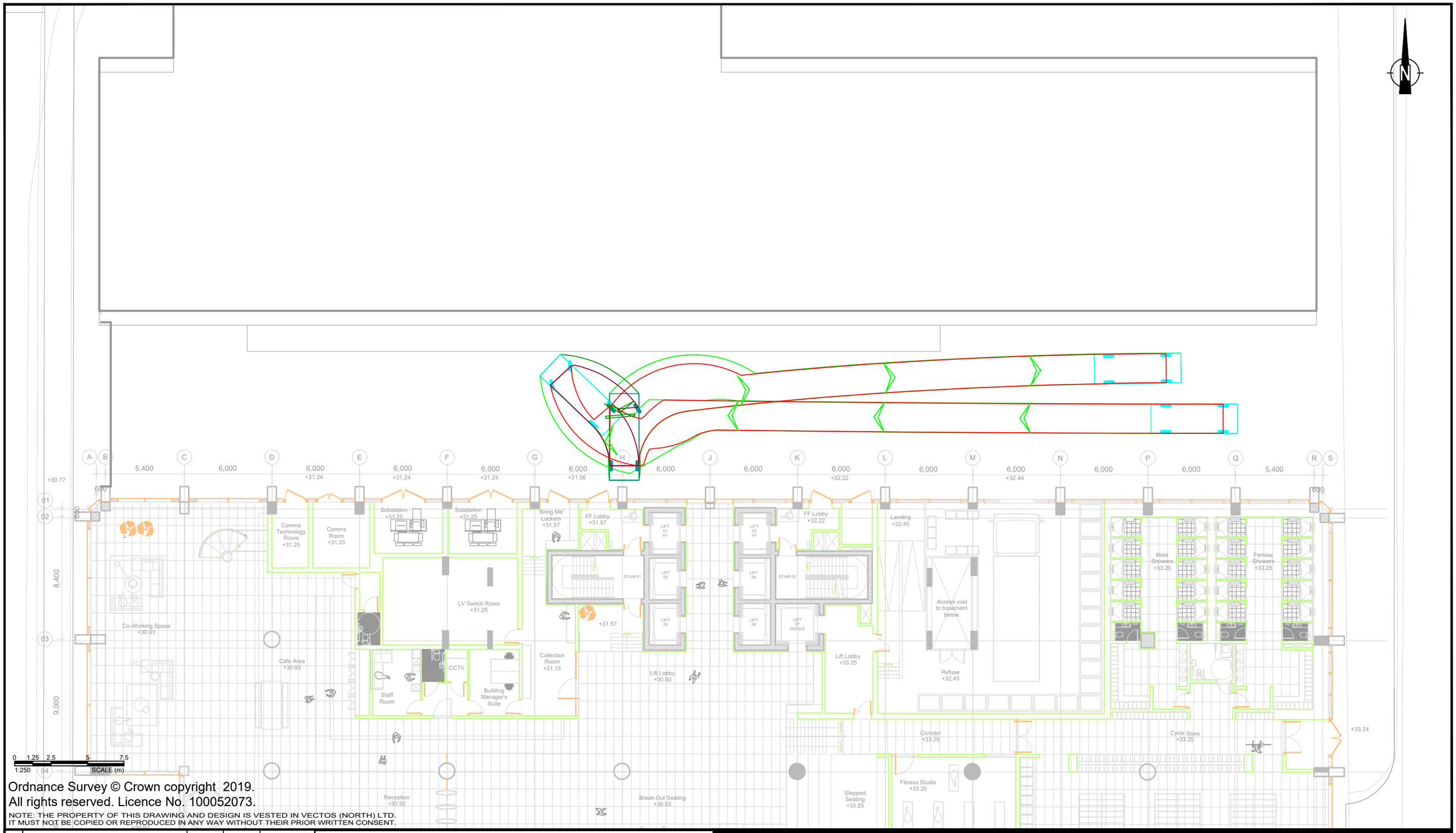
Plot 10a, First Street (Interim Phase)

First Street Developments

Swept Path Analysis - Refuse Vehicle

vectos.
4th Floor Oxford Place, 61 Oxford Street, Manchester, M1 6EQ
0161 228 1008 e: manchester@vectos.co.uk

DRAWN:	CHECKED:	DATE:	SCALES:	DRAWING NUMBER:	REVISION:
CG	GD	12.01.23	1:250 at A3	VN222361-TR101	·

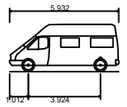


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REV.	DETAILS	DRAWN	CHECKED	DATE
.	.	.	.	.

Notes:

1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.



Mercedes Sprinter	
Overall Length	5.932m
Overall Width	2.020m
Overall Body Height	2.567m
Min Body Ground Clearance	0.339m
Track Width	1.996m
Lock to lock time	4.00s
Wall to Wall Turning Radius	7.600m

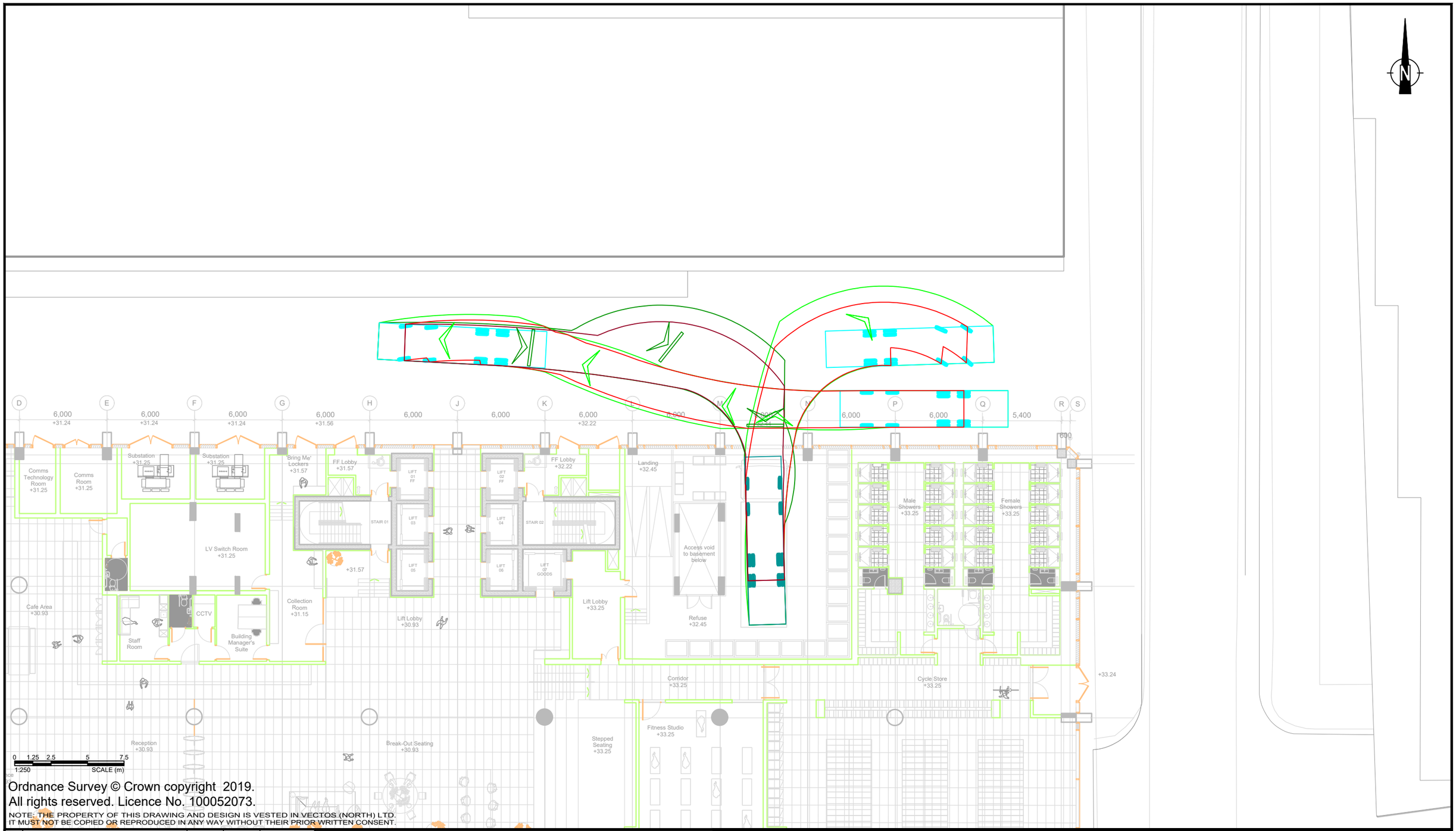
Plot 10, First Street

Swept Path Analysis - Amazon Van

First Street Developments Ltd

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0161 228 1008 e: manchester@vectos.co.uk

DRAWN:	CHECKED:	DATE:	SCALES:	DRAWING NUMBER:	REVISION:
CG	GD	10.01.23	1:250 at A3	VN222361-TR103	·



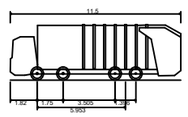
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REV.	DETAILS	DRAWN	CHECKED	DATE
.	.	.	.	.

Notes:

1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.



11.5m Large Refuse Vehicle (4 axle)	
Overall Length	11.500m
Overall Width	2.500m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	6.00s
Wall to Wall Turning Radius	11.330m

Plot 10, First Street

Swept Path Analysis - Refuse Vehicle

First Street Developments Ltd

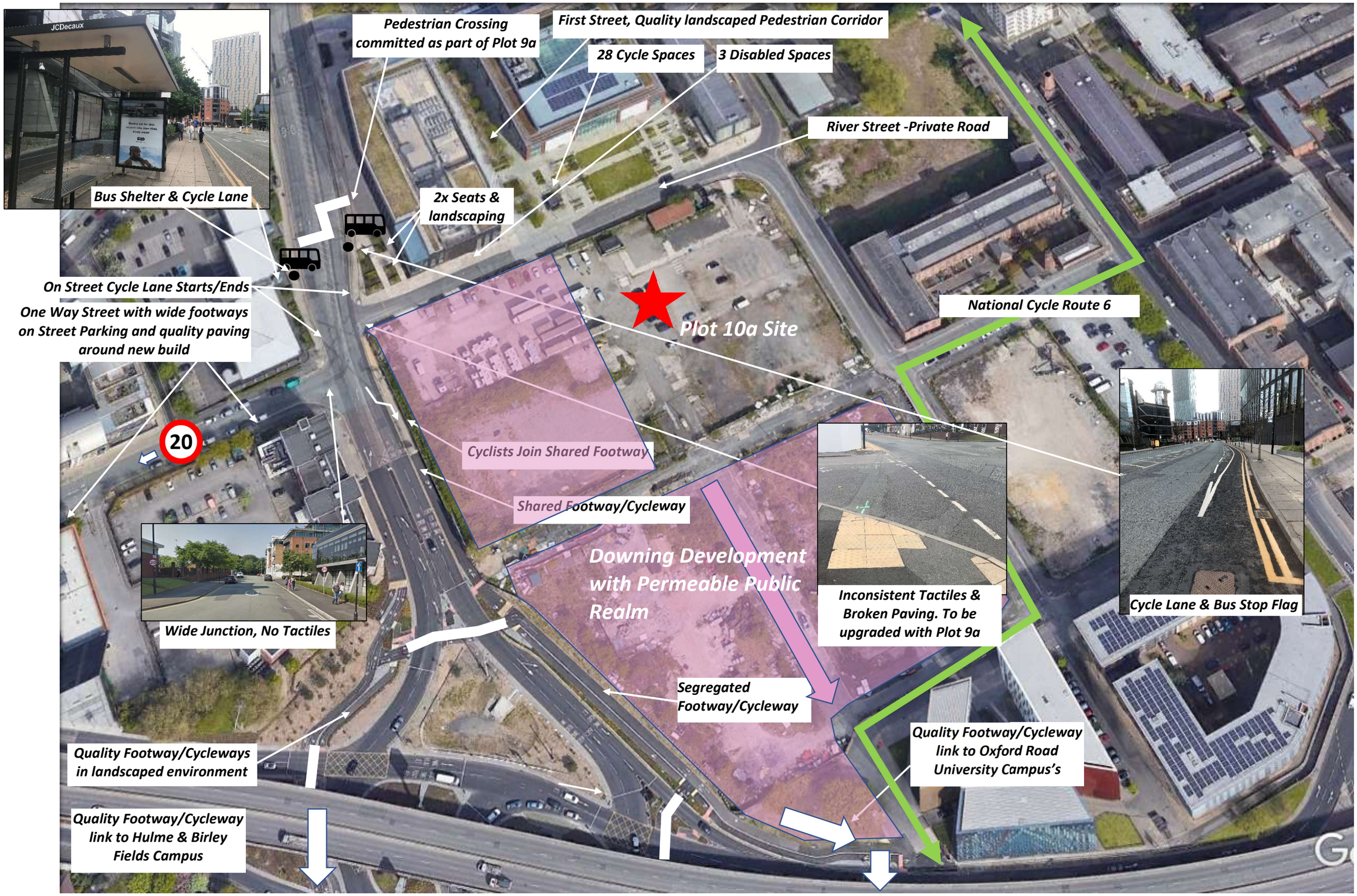
vectos.
4th Floor Oxford Place, 61 Oxford Street, Manchester, M1 6EQ
0161 228 1008 e: manchester@vectos.co.uk

DRAWN:	CHECKED:	DATE:	SCALES:	DRAWING NUMBER:	REVISION:
CG	GD	10.01.23	1:250 at A3	VN222631-TR104	·

Appendix A

Audit of Local Transport Infrastructure

Audit of Highway Infrastructure



Appendix B

TRICS Output Files

Calculation Reference: AUDIT-715001-220831-0801

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : A - OFFICE
MULTI-MODAL TOTAL PEOPLE

Selected regions and areas:

02	SOUTH EAST		
	SO	SLOUGH	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
08	NORTH WEST		
	GM	GREATER MANCHESTER	1 days
09	NORTH		
	TW	TYNE & WEAR	1 days
11	SCOTLAND		
	EB	CITY OF EDINBURGH	1 days

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

Primary Filtering selection:

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

Parameter: Gross floor area
Actual Range: 1800 to 8793 (units: sqm)
Range Selected by User: 178 to 60000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/14 to 21/10/21

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

Selected survey days:

Monday	2 days
Tuesday	1 days
Wednesday	1 days
Thursday	1 days

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

Selected survey types:

Manual count	5 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 undertaking using machines.

Selected Locations:

Town Centre	5

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

Selected Location Sub Categories:

Built-Up Zone	4
High Street	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.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 3.79

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	5	4229	0.184	5	4229	0.043	5	4229	0.227
07:30 - 08:00	5	4229	0.284	5	4229	0.061	5	4229	0.345
08:00 - 08:30	5	4229	0.634	5	4229	0.014	5	4229	0.648
08:30 - 09:00	5	4229	0.960	5	4229	0.047	5	4229	1.007
09:00 - 09:30	5	4229	0.771	5	4229	0.118	5	4229	0.889
09:30 - 10:00	5	4229	0.653	5	4229	0.114	5	4229	0.767
10:00 - 10:30	5	4229	0.714	5	4229	0.430	5	4229	1.144
10:30 - 11:00	5	4229	0.747	5	4229	0.435	5	4229	1.182
11:00 - 11:30	5	4229	0.530	5	4229	0.681	5	4229	1.211
11:30 - 12:00	5	4229	0.634	5	4229	0.572	5	4229	1.206
12:00 - 12:30	5	4229	0.719	5	4229	1.017	5	4229	1.736
12:30 - 13:00	5	4229	0.785	5	4229	0.955	5	4229	1.740
13:00 - 13:30	5	4229	0.880	5	4229	0.965	5	4229	1.845
13:30 - 14:00	5	4229	0.993	5	4229	0.639	5	4229	1.632
14:00 - 14:30	5	4229	0.738	5	4229	0.492	5	4229	1.230
14:30 - 15:00	5	4229	0.492	5	4229	0.549	5	4229	1.041
15:00 - 15:30	5	4229	0.378	5	4229	0.525	5	4229	0.903
15:30 - 16:00	5	4229	0.378	5	4229	0.478	5	4229	0.856
16:00 - 16:30	5	4229	0.289	5	4229	0.790	5	4229	1.079
16:30 - 17:00	5	4229	0.255	5	4229	0.657	5	4229	0.912
17:00 - 17:30	5	4229	0.095	5	4229	0.970	5	4229	1.065
17:30 - 18:00	5	4229	0.071	5	4229	0.624	5	4229	0.695
18:00 - 18:30	5	4229	0.009	5	4229	0.601	5	4229	0.610
18:30 - 19:00	5	4229	0.014	5	4229	0.279	5	4229	0.293
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			12.207			12.056			24.263

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	5	4229	0.000	5	4229	0.000	5	4229	0.000
07:30 - 08:00	5	4229	0.000	5	4229	0.000	5	4229	0.000
08:00 - 08:30	5	4229	0.000	5	4229	0.000	5	4229	0.000
08:30 - 09:00	5	4229	0.005	5	4229	0.005	5	4229	0.010
09:00 - 09:30	5	4229	0.000	5	4229	0.000	5	4229	0.000
09:30 - 10:00	5	4229	0.000	5	4229	0.000	5	4229	0.000
10:00 - 10:30	5	4229	0.000	5	4229	0.000	5	4229	0.000
10:30 - 11:00	5	4229	0.000	5	4229	0.000	5	4229	0.000
11:00 - 11:30	5	4229	0.000	5	4229	0.000	5	4229	0.000
11:30 - 12:00	5	4229	0.000	5	4229	0.000	5	4229	0.000
12:00 - 12:30	5	4229	0.000	5	4229	0.000	5	4229	0.000
12:30 - 13:00	5	4229	0.000	5	4229	0.000	5	4229	0.000
13:00 - 13:30	5	4229	0.000	5	4229	0.000	5	4229	0.000
13:30 - 14:00	5	4229	0.000	5	4229	0.000	5	4229	0.000
14:00 - 14:30	5	4229	0.000	5	4229	0.000	5	4229	0.000
14:30 - 15:00	5	4229	0.000	5	4229	0.000	5	4229	0.000
15:00 - 15:30	5	4229	0.000	5	4229	0.000	5	4229	0.000
15:30 - 16:00	5	4229	0.000	5	4229	0.000	5	4229	0.000
16:00 - 16:30	5	4229	0.000	5	4229	0.000	5	4229	0.000
16:30 - 17:00	5	4229	0.000	5	4229	0.000	5	4229	0.000
17:00 - 17:30	5	4229	0.000	5	4229	0.000	5	4229	0.000
17:30 - 18:00	5	4229	0.000	5	4229	0.000	5	4229	0.000
18:00 - 18:30	5	4229	0.000	5	4229	0.000	5	4229	0.000
18:30 - 19:00	5	4229	0.000	5	4229	0.000	5	4229	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.005			0.005			0.010

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

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TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL LGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	5	4229	0.005	5	4229	0.014	5	4229	0.019
07:30 - 08:00	5	4229	0.009	5	4229	0.000	5	4229	0.009
08:00 - 08:30	5	4229	0.005	5	4229	0.005	5	4229	0.010
08:30 - 09:00	5	4229	0.000	5	4229	0.000	5	4229	0.000
09:00 - 09:30	5	4229	0.005	5	4229	0.005	5	4229	0.010
09:30 - 10:00	5	4229	0.005	5	4229	0.005	5	4229	0.010
10:00 - 10:30	5	4229	0.000	5	4229	0.000	5	4229	0.000
10:30 - 11:00	5	4229	0.019	5	4229	0.019	5	4229	0.038
11:00 - 11:30	5	4229	0.009	5	4229	0.009	5	4229	0.018
11:30 - 12:00	5	4229	0.009	5	4229	0.005	5	4229	0.014
12:00 - 12:30	5	4229	0.009	5	4229	0.009	5	4229	0.018
12:30 - 13:00	5	4229	0.033	5	4229	0.033	5	4229	0.066
13:00 - 13:30	5	4229	0.000	5	4229	0.005	5	4229	0.005
13:30 - 14:00	5	4229	0.014	5	4229	0.005	5	4229	0.019
14:00 - 14:30	5	4229	0.005	5	4229	0.005	5	4229	0.010
14:30 - 15:00	5	4229	0.005	5	4229	0.005	5	4229	0.010
15:00 - 15:30	5	4229	0.014	5	4229	0.014	5	4229	0.028
15:30 - 16:00	5	4229	0.019	5	4229	0.014	5	4229	0.033
16:00 - 16:30	5	4229	0.005	5	4229	0.009	5	4229	0.014
16:30 - 17:00	5	4229	0.009	5	4229	0.009	5	4229	0.018
17:00 - 17:30	5	4229	0.005	5	4229	0.009	5	4229	0.014
17:30 - 18:00	5	4229	0.000	5	4229	0.000	5	4229	0.000
18:00 - 18:30	5	4229	0.000	5	4229	0.000	5	4229	0.000
18:30 - 19:00	5	4229	0.000	5	4229	0.000	5	4229	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.184			0.179			0.363

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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