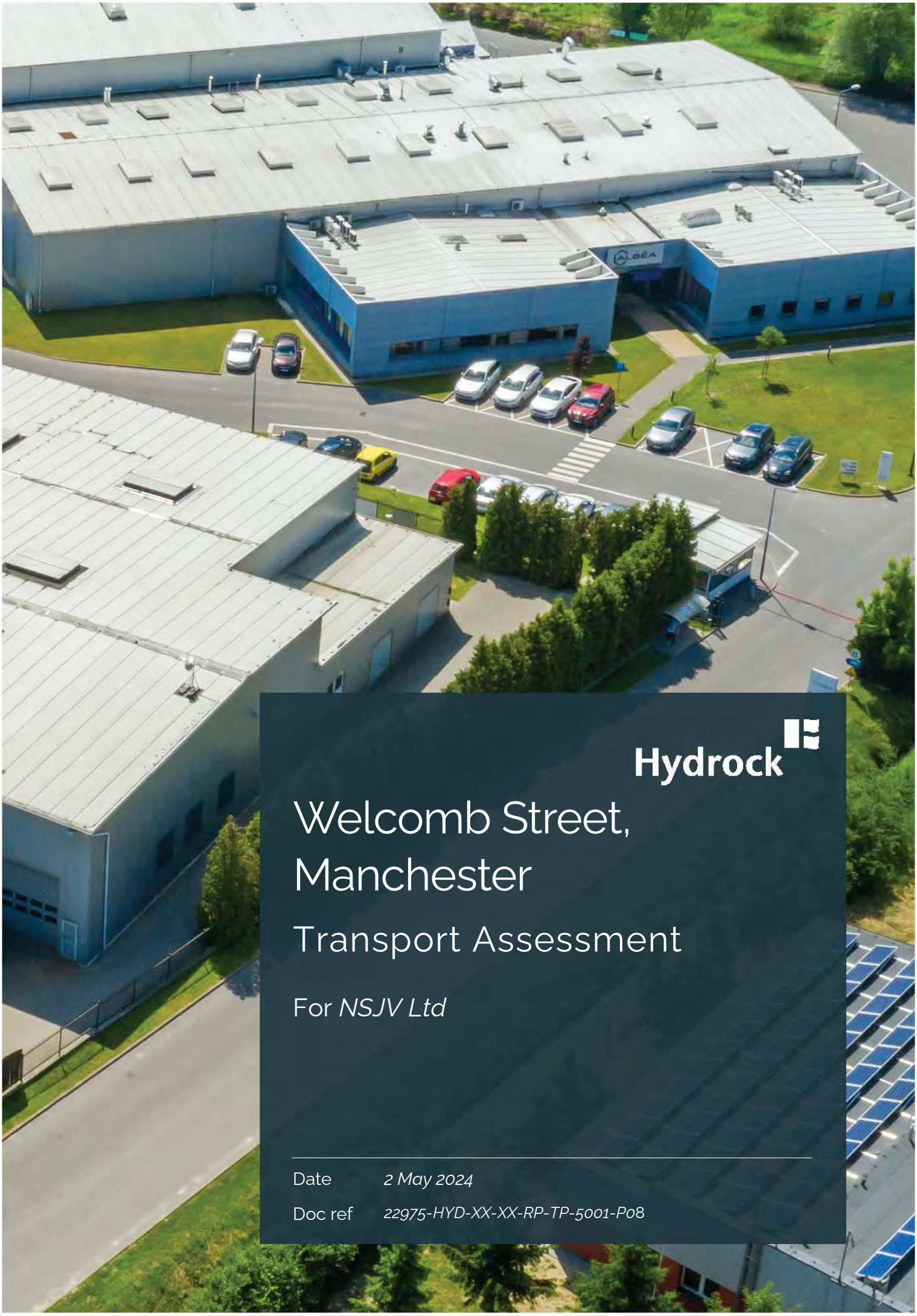

Hydrock

Welcomb Street, Manchester

Transport Assessment

For *NSJV Ltd*

Date	*2 May 2024*
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Issued by	Hydrock Consultants Limited Northern Assurance Buildings 9-21 Princess Street Albert Square Manchester M2 4DN United Kingdom	T +44 (0)161 804 5550 E manchestercentral@hydrock.com hydrock.com
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Prepared by		Syed Rahi BSc (Hons) MSc
Checked by		Tim Ashley BA (Hons) MPlan MCIHT MTPS
Approved by		Sam Denby BA (Hons) MSc CMILT

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1. Introduction

1.1 Overview

1.1.1 Hydrock have been instructed by NSJV Ltd to prepare a Transport Assessment [TA] in support of a planning application for a proposed commercial development comprising a Gross Internal Area [GIA] of circa 6,984sqm across 4 units situated at Welcomb Street in Openshaw, Manchester.

1.1.2 The full development description is as follows;

> "Full application for the erection of four new industrial buildings, with the demolition of existing buildings, to create employment floor space within Use Classes E(g)(ii)(iii), B2 and B8 across the site and ancillary office space, with associated service yards, car parking including electric vehicle charging points, amended site access, refuse storage facilities, substations, boundary treatments, landscaping, and associated works and infrastructure".

1.1.3 The site is currently occupied by several commercial units of varying sizes with access provided off Welcomb Street to these units. The existing access to the site from Welcomb Street will be retained as part of the development proposals however the access road will be redesigned to improve access to the site and reduce areas of conflict at the entrance to the site.

1.1.4 There will be no alterations to the Welcomb Street / Ashton Old Road junction as part of the application.

1.1.5 A detailed description of the development proposals is outlined in **Section 5**.

1.2 Site Location

1.2.1 The site is located within Openshaw Business Park with existing commercial buildings located to the north and east of the site and Manchester College located to the west. Residential dwellings are located to the north of the site off Ashton Old Road. Manchester City Centre lies approximately 5 kilometres to the west of the site.

1.2.2 The site location is illustrated in **Figure 1.1**.

Figure 1.1: Site Location

Source: GoogleMaps©

1.3 Scope of Assessment

1.3.1 Hydrock issued a scoping email to Manchester City Council [MCC] highway officers on 14/06/22 to agree the scope of assessments in principle, and to obtain additional information relating to the site and the surrounding highway network.

1.3.2 Hydrock received a response from MCC on 22/06/22 confirming the following:

- The section of road identified as Welcomb Street is unadopted and known to be used as the Private Access Road to Openshaw Business Park;
- Traffic counts required at Welcomb St/Ashton Old Road and recommended at Bertha St/Ashton Old Road;
- Junction assessment required if additional two-way trips reach 30 vehicle per hour; and,
- Traffic surveys recommended prior to summer school holidays.

1.3.3 Following receipt of the above information, Hydrock commissioned traffic surveys at the Welcomb Street / Ashton Old Road and Bertha Street / Ashton Old Road junctions on the 28th June 2022 prior to the summer school holiday period. The baseline traffic surveys are discussed further in **Section 2** of this report.

1.3.4 Given the above, Hydrock undertook a local highway traffic impact assessment for the proposed development trips upon the surrounding junctions. The assessment is provided in more detail within **Section 7** of this TA. However, in summary the assessments identified that there were no junctions which experienced an increase of 30 two-way trips therefor no junction modelling assessments have been completed as part of this review.

1.3.5 A copy of all the aforementioned scoping discussions is presented in full within **Appendix A.**

1.4 Structure of Report

1.4.1 This TA has been developed in accordance with the now superseded DfT document "Guidance on Transport Assessment" [GoTA] (2007) and gives due regard to the NPPG "Transport Evidence in Plan Making" document. It sets out the transport matters relating to the development site and provides details of the development proposals, including an assessment of the predicted traffic flows, the corresponding impact on the surrounding highway network and matters associated with accessibility and connectivity.

1.4.2 The report seeks to conclude that the proposed development can be accommodated without detriment to the operational capacity or safety of the local highway network and that it can be suitably accessed on foot, by cycle and by local public transport services.

1.4.3 Given there are existing commercial units located within the site this TA will consider the net trip impact of the proposed development on the local highway network.

1.4.4 This report comprises eight sections, including this introduction:

- **Section 2** examines the site location, existing conditions, and accident analysis;
- **Section 3** summarises the national and regional transport policies;
- **Section 4** presents the accessibility of the site;
- **Section 5** discusses the development proposals;
- **Section 6** describes the future baseline traffic conditions on the local highway network and estimates the number of vehicle trips generated by the development;
- **Section 7** presents a review of the trip impact of the proposed development vehicle trips upon the local road network; and
- **Section 8** sets out the summary and conclusions.

2. Existing Conditions

2.1 Site Description

2.1.1 The site is located within Openshaw Business Park with existing commercial buildings located to the north and east of the site and Manchester College located to the west. Residential dwellings are located to the north of the site off Ashton Old Road. Manchester City Centre lies approximately 5 kilometres to the west of the site.

2.1.2 The site is currently occupied by the Manchester School of Building and several commercial units of varying sizes with access provided off Welcomb Street to these units. A number of these units will be demolished as part of the development proposals with some units retained and redeveloped as part of the proposals.

2.2 Highway Network

2.2.1 The main access to the site is provided from Welcomb Street which is a private road as it enters the business park. It currently serves as the main access for Openshaw Business Park. Welcomb Street forms a priority controlled signalised junction with the A635 Ashton Old Road which is an 'A' classified road and provides strategic connections to/from Manchester and Ashton-Under-Lyne. The site location is illustrated in contrast to the surrounding local highway network in **Figure 2.1** below.

Figure 2.1: Local Highway Network

Source: GoogleMaps ©

2.3 Welcomb Street

2.3.1 Welcomb Street is a single carriageway road and is governed by a 20mph speed limit. The road is situated to the north of the site and extends from the A635 Ashton Old Road.

2.3.2 Welcomb Street comprises traffic regulation orders [TROs] in the form of double yellow lines.

2.3.3 Welcomb Street aids pedestrian movements on both side of the carriageway through 1m wide pedestrian footways, regularly spaced street lighting, and dropped kerbs.

2.3.4 **Figure 2.2** below shows Welcomb Street from a northbound direction.

Figure 2.2: Local Highway Network - Welcomb Street

Source: GoogleMaps

2.4 A635 Ashton Old Road

2.4.1 The A580 Ashton Old Road is an 'A' classified road and is governed by a 30mph speed limit. In the vicinity of Welcomb Street there are two lanes of traffic provided in both directions. The road is situated to the north of the site, and links the A6010 in the north west with the A6140 and M60 in the north east. The A580 Ashton Old Road comprises TROs in the form of double yellow lines.

2.4.2 The A635 Ashton Old Road aids pedestrian movements through regularly spaced signalised pedestrian crossing facilities. There are also 2m wide pedestrian footways on both side of the carriageway with regularly spaced street lighting, dropped kerbs, and tactile paving at crossing points.

2.4.3 **Figure 2.3** shows the A635 Ashton Old Road from a westbound direction.

Figure 2.3: Local Highway Network - A635 Ashton Old Road

Source: GoogleMaps©

2.5 Traffic Flow Figures

2.5.1 In order to establish the existing traffic flow demand on the local network within the study area, manual classified turning count traffic flows and queue length surveys were undertaken on Tuesday 28th June 2022 at the following junctions:

- Welcomb Street / Ashton Old Road; and
- Bertha Street / Ashton Old Road.

2.5.2 The full results of the traffic surveys can be found at **Appendix B**. These surveys have been used to assess the effect of the development proposals on the local transport network and is discussed in more detail within **Sections 6** and **Section 7** of this report.

2.5.3 Analysis of the observed traffic flows indicate that the AM peak hour occurs between 08:15 and 09:15, with the PM peak hour occurring between 15:30 and 16:30 within the study area.

2.6 Accident Analysis

2.6.1 The DfT document "Guidance on Transport Assessment" states that:

2.6.2 "Critical locations on the road network with poor accident records should be identified. This is to determine if the proposed development will exacerbate existing problems or, if proposed, whether highway mitigation works or traffic management measures will help to alleviate the problems".

2.6.3 A review of the Personal-Injury Accidents [PIAs] recorded within the study area has been undertaken using the most recently available five-year data (1st January 2017-31st December 2021) available from the DfT.

2.6.4 **Figure 2.4** below illustrates the recorded findings.

Figure 2.4: Study Area Accident Record

Source: Crashmap.co.uk©

2.6.5 **Table 2.1** summarises the accident record and severity over the last 5 years in more detail.

Table 2.1: Study Area Accident Record Summary

Year/Severity	Slight	Serious	Fatal	Total
2018	-	-	-	-
2019	1	-	-	1
2020	1	1	-	2
2021	1	-	-	1
2022	-	-	-	-
Total	3	1	-	4

2.6.6 Examination of the PIA data revealed that during the five-year period a total of four accidents occurred at the Welcomb Street / A635 Ashton Old Road Junction. Of those 4 accidents, 4 resulted in slight injuries.

2.6.7 Whilst all accidents are unfortunate, it is Hydrock's view that given the nature of the road network and subsequently traffic flows, the collisions can be attributed to random fluctuations, with circumstantial factors and weather conditions likely to have been the main causes.

2.6.8 Therefore, Hydrock consider the accident history is not a result of existing layout design issues, and concludes that there are no underlying accident concerns within the study area.

3. Transport Policy Context

3.1 Policy Overview

3.1.1 In line with local and national policy, this section outlines the potential travel demand for all modes with regards to the proposed development, against the existing transport provision within the area.

3.2 National Planning Policy Framework

3.2.1 The NPPF sets out the Government's policies for delivering sustainable development through the planning system. Local authorities are required to take these policies into account when formulating local development plans and when determining planning applications.

3.2.2 The most recent NPPF report was published in December 2023 and sets out the Government's planning policies for England and how these are expected to be applied at a local level. The NPPF is a significant material consideration in plan making and decision taking.

3.2.3 Paragraph 104 seeks to encourage opportunities to promote walking, cycling and public transport use. This is supplemented by paragraph 105 which states that development should be focused in sustainable locations and offer a genuine choice of transport modes.

3.2.4 Development proposals should also give priority to pedestrian and cycle movements and facilitate access to high quality public transport. The needs of people with disabilities and reduced mobility should also be addressed (paragraph 112).

3.2.5 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.

3.2.6 Priority should be given to walking, cycling and public transport movements; conflicts between vehicles and vulnerable road users should be minimised through effective layout design.

3.2.7 Having regard to the above objectives, the proposed site access strategy includes measures to connect the site with the adjacent community and sustainable travel network, including existing public transport services. The TA considers the accessibility of the site by all modes and proposes a layout and access strategy that seeks to maximise the use of sustainable modes.

3.3 Planning Practice Guidance: Travel Plans, Transport Assessments and Statements in Decision-Making

3.3.1 In March 2014, the Department for Communities and Local Government [DCLG] in conjunction with the Department for Transport [DfT], released advice on when transport assessments and transport statements are required and what they should contain, which is intended to assist stakeholders in determining whether an assessment may be required. If an assessment is required, the level and scope of that assessment is then outlined within the document.

3.3.2 The advice reflects current Government policy, promoting a shift from the 'predict and provide' approach to transport planning to one more focused on sustainability. The document focuses on encouraging environmental sustainability, managing the existing network and mitigating the residual impacts of traffic from the development proposals.

3.4 Manual for Streets [MfS]

3.4.1 Manual for Streets (March 2007 and Sept 2010) supersedes Places Streets & Movement and Design Bulletin 32. Manual for Streets should now be used where 85th percentile monitored traffic speeds are less than 37mph.

3.4.2 The Manual deals with first principles in respect of what a street is for. It outlines five principal functions, namely:

- Place;
- Movement;
- Access;
- Parking; and
- Drainage and utilities.

3.4.3 A sense of place encompasses a number of characteristics, namely, local distinctiveness, visual quality and human interaction. Of the five functions, place and movement are the most important in determining the character of streets and should be considered together, as opposed to in isolation.

3.4.4 In new developments, Manual for Streets highlights that locations with a relatively high place function would be those where people are likely to gather and interact with each other, such as the town centre.

3.4.5 In **Section 3** of MfS – the design process highlights that the design of a scheme should follow the user hierarchy shown in **Table 3.1**:

Table 3.1:User Hierarchy (taken from Table 3.2 of MfS, March 2007)

Consider First	Pedestrians
	Cyclists
	Public Transport Users
	Specialist service vehicles (e.g. emergency services, waste etc.)
Consider Last	Other motor vehicles

Source: MfS (2007)

3.5 Other National Policies / Guidelines Reviewed

3.5.1 Various walking distances are quoted in the Chartered Institution of Highways and Transportation's (CIHT's) "Guidelines for Providing for Journeys on Foot". **Table 3.2** (taken from Table 3.2 of the document) sets out the acceptable walking distances in various contexts:

Table 3.2: Acceptable Walking Distances

Criteria	Town Centre (m)	School / Commuters (m)	Elsewhere (m)
Desirable	200	500	400
Acceptable	400	1,000	800
Preferred Maximum	800	2,000	1,200

3.6 Greater Manchester Local Transport Plan

3.6.1 The Greater Manchester Transport Strategy 2040, published in February 2017, sets out TfGM's sustainable mobility plan for the future and forms Greater Manchester's 4th Local Transport Plan (GMLTP4). Building on its own 2040 Vision, the Strategy provides detail on the priority interventions needed to deliver that Vision. The document highlights several key objectives relevant to the application site:

- Reducing the need to travel by car, and the distance travelled.
- Making the best use of existing infrastructure, particularly through increasing the density of development close to public transport nodes.
- Increasing the use of sustainable transport to reduce the negative impacts of car use. The design of new development needs to make it easier for people to use sustainable modes e.g., the availability of safe and direct walk/cycle routes, the provision of secure cycle parking or the availability of EV charging points.
- Establish cycling as a recognised and attractive component of the future integrated transport offer. 'Aim to double and double again' the proportion of trips made by bicycle by 2025, with the aspiration that 10% of all trips should be made by bike.

3.7 Places for Everyone Document [PfE] (Draft 2021)

3.7.1 The Places for Everyone (PfE) plan of nine Greater Manchester local authorities (Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Tameside, Trafford and Wigan) is a long-term plan for jobs, new homes and sustainable growth. It replaces the previous versions of the Transport for Greater Manchester Spatial Framework following Stockport Councils decision to withdraw from this plan.

3.7.2 The nine Councils in Greater Manchester have now submitted the PfE plan to the Secretary of State for Levelling Up, Housing and Communities. Once adopted, the PfE plan will become part of the statutory development plan for each of the nine Greater Manchester authorities, including Trafford. However, the Plan will not cover everything and Trafford will still need to produce a Local Plan which will provide further detail to cover local issues and demonstrate how the framework will be delivered on the ground.

3.7.3 By producing the PfE plan, it is envisaged that the nine district Councils will be able to continue to;

- Progress the strategic policies in the Greater Manchester Spatial Framework, for example net zero carbon development, affordable housing and space and accessibility standards for new housing;
- Maximise the use of sustainable urban/brownfield land and limit the need for Green Belt to accommodate the development needs of the nine Boroughs; and,

- Align with wider Greater Manchester strategies for transport and other infrastructure investment.

3.7.4 The PfE sets out the nine's plan for sustainable growth by setting out how they should develop up to the year 2037; identifies the amount of new development that will come forward for different land uses; identifies the important environmental assets which will be protected and enhanced; allocates sites for employment and housing; supports the delivery of key infrastructure and defines a new Green Belt boundary.

3.7.5 The PfE plan supports the presumption in favour of sustainable development set out within the NPPF which is reflected in the overall strategy of the plan, the proposed scale and location of development and the individual policies and allocations outlined within the strategy. It includes protecting and enhancing key environmental resources, combating and adapting to climate change, reducing carbon emissions, and delivering sustainable patterns of development which minimise the need to travel and reliance on the car.

3.8 Manchester Core Strategy

3.8.1 Manchester's Core Strategy was adopted in July 2012 is the key Development Plan Document in the Local Plan. It sets out the long-term strategic policies for Manchester's future development and forms the framework that planning applications will be assessed against.

3.8.2 Transport forms one of the six spatial objectives within the document. The overriding objective for transport is to 'Improve the physical connectivity of the City, through sustainable and accessible transport networks, to enhance its functioning and competitiveness and provide access to jobs, education, services, retail, leisure and recreation'. The transport related policies are summarised below.

Policy T1 - Sustainable Transport

3.8.3 The policy states the council's aim to deliver a sustainable, high quality, integrated transport system to encourage modal shift away from car travel to public transport, cycling and walking, to support the needs of residents and businesses and to prepare for carbon free modes of transport. The Council will support proposals that:

- "Improve choice by developing alternatives to the car.
- Promote regeneration and economic vitality by relieving traffic congestion and improving access to jobs and services, particularly for those most in need and for those without a car.
- Improve access to transport services and facilities in order to enable disabled people and people with mobility impairments to participate fully in public life.
- Improve pedestrian routes and the pedestrian environment.
- Improve and develop further Manchester's cycle network (for example the Manchester Cycleway and the Trans Pennine Trail).
- Contribute to improvements to the extent and reliability of the public transport network through safe and attractive waiting and interchange facilities, better priority, improved services and information provision.
- Improve and develop appropriate road, rail and water freight transport routes and associated intermodal freight transport facilities in order to assist in the sustainable and efficient movement of goods.
- Facilitate modes of transport that reduce carbon emissions e.g. by incorporating charging points for electric vehicles, subject to their appropriate design and location.

- Would reduce the negative impacts of road traffic, for example, congestion, air pollution and road accident casualties.
- Take account of the needs of road users according to a broad hierarchy consisting of, in order of priority:
  - 1. Pedestrians and disabled people
  - 2. Cyclists, public transport
  - 3. Commercial access
  - 4. General off-peak traffic
  - 5. General peak time traffic"

Policy T2 - Accessible Areas of Opportunity and Need

3.8.4 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. Particular priority will be given to providing all residents with access to strategic employment sites including:
  - Links within East Manchester to employment locations, Central Park and Eastlands in particular.
  - Links within Central Area between residents and employment, the Corridor in particular and east/west connectivity for residents in Central Area to employment areas in Trafford and East Manchester.
- The car parking standards are maximums, and the cycle and disabled car parking standards are minimums. However, the council will take the circumstances of each proposal into account to establish what level of parking is appropriate.
- Includes proportionate Traffic Impact Assessments and Travel Plans for all major applications and for any proposals where there are likely to be access or transport issues."

3.9 Manchester City Council Parking Standards

3.9.1 Manchester parking standards are contained within Appendix B of the Manchester Core Strategy Development Plan Document.

3.9.2 With regards to land use classification B2 / B8, **Table 3.3** suggests the maximum parking provision for cars and minimum provisions for cycles and disabled car parking.

Table 3.3 Manchester City Council Parking Standards

Land Use	Maximum number of car parking spaces		Minimum number of spaces required for: -		
	District Centres	Areas not within the City Centre or District Centre	Accessible Spaces		Cycles (Citywide)
			Up to 200 in total	Over 200 in total	
General Industry	1 space per 60sqm	1 space per 45sqm	Individual bays for each disabled employee plus 2 bays or 5% of total capacity whichever is greater	6 bays plus 2% of total capacity	1 space per 450sqm minimum of 2 spaces
Storage and Distribution	1 space per 100sqm		Individual bays for each disabled employee plus 2 bays or 5% of total capacity whichever is greater	6 bays plus 2% of total capacity	1 space per 850sqm minimum of 2 spaces

3.10 Summary

3.10.1 The above policy review summaries both local and national transport policies relevant to the proposed development site. As such it sets out the context in which the proposed development needs to be compliant.

3.10.2 Access on foot, cycle and public transport is discussed in the following section of this report.

4. Sustainable Accessibility

4.1 Access on Foot

4.1.1 Walking is the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly those under 2km. The guidance on the preferred maximum walking distances to amenities is given in the Chartered Institution of Highways and Transportation [CIHT] document 'Providing for Journeys on Foot' (2000).

4.1.2 In terms of commuting journeys by foot, the desirable distance is 500m, the acceptable distance is 1km and the preferred maximum is 2km. However, the distance that people are prepared to walk depends upon many factors; there are obvious physical factors such as age, health and disabilities, along with factors concerning the quality of the route and the environment.

4.1.3 In relation to shorter trips in particular, the CIHT publication Planning for Walking (section 2.1) states that "across Britain about 80% of journeys shorter than 1 mile are made wholly on foot."

4.1.4 Manual for Streets [MfS] emphasises this advice, stating that "walkable neighbourhoods should have a range of facilities available within 800m." However, this distance is not regarded as the upper limit for walking journeys, and MfS uses the principle that walking offers the greatest potential to replace short car trips, particularly those under 2km in length.

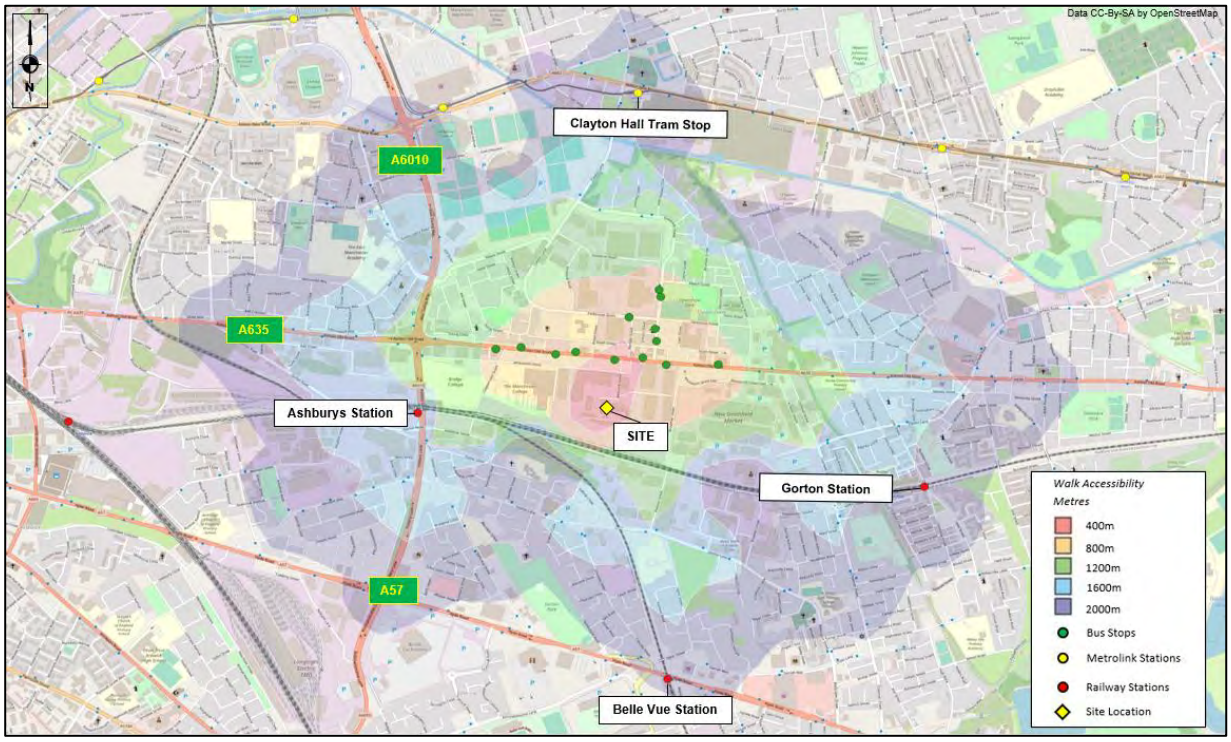
4.1.5 The location of development is within reach of the public transport network, this is particularly important in terms of encouraging travel by this mode and supporting the viability of public transport services.

4.1.6 The local highway network facilitates pedestrian movements through 1m wide pedestrian footways on both sides of the carriageway on Welcomb Street, as well as 2m wide pedestrian footways both sides of the carriageway on the A635 Ashton Old Road.

4.1.7 The A635 Ashton Old Road includes regularly spaced street lighting, dropped kerbs and tactile paving at crossing points. There are also signalised pedestrian crossings on the A635 Ashton Old Road to allow for pedestrians to cross the carriageway safely.

4.1.8 **Figure 4.1** below provides an extract of the indicative 2km walk catchment plan using GIS software - Basemap's Visography (TRACC) program which provides sustainable travel mapping. A copy of the full 2km walking catchment is provided within **Figure 1** of **Appendix C**.

Figure 4.1: 2km Walking Catchment



Source: CC-BY-SA by OpenStreetMap©

4.1.9 As demonstrated in **Figure 4.1**, the site benefits from a number of bus stops located within 800m, with the closest pair located on the A635 Ashton Old Road, approximately 85m and 234m to the north of the site. The proximity of the site to the local bus network provides significant opportunities for pedestrians to access a variety of local destinations.

4.1.10 In addition to the bus stops located on Ashton Old Road there are a number of local services and amenities located within a short distance from the site including a supermarket, primary schools, cafes, restaurants, and shops.

4.1.11 In summary, the site is extremely accessible on foot and within proximity to local amenities, which will reduce the requirement for employees to make short car journeys.

4.2 Access by Bicycle

4.2.1 It is widely recognised that cycling can act as a substitute for short car journeys, particularly those up to 5km in length. This is consistent with the statement in LTN 1/20 Cycle Infrastructure Design (paragraph 2.2.2) that states:

4.2.2 "two out of every three personal trips are less than five miles in length – an achievable distance to cycle for most people, with many shorter journeys also suitable for walking."

4.2.3 A round trip on a waymarked leisure route could easily involve distances of 20 to 30 miles. Experienced cyclists will often be prepared to cycle longer distances for whatever journey purpose.'

4.2.4 There are a number of national, regional and local cycling routes in close proximity to the site. The main national cycle routes are briefly described below:

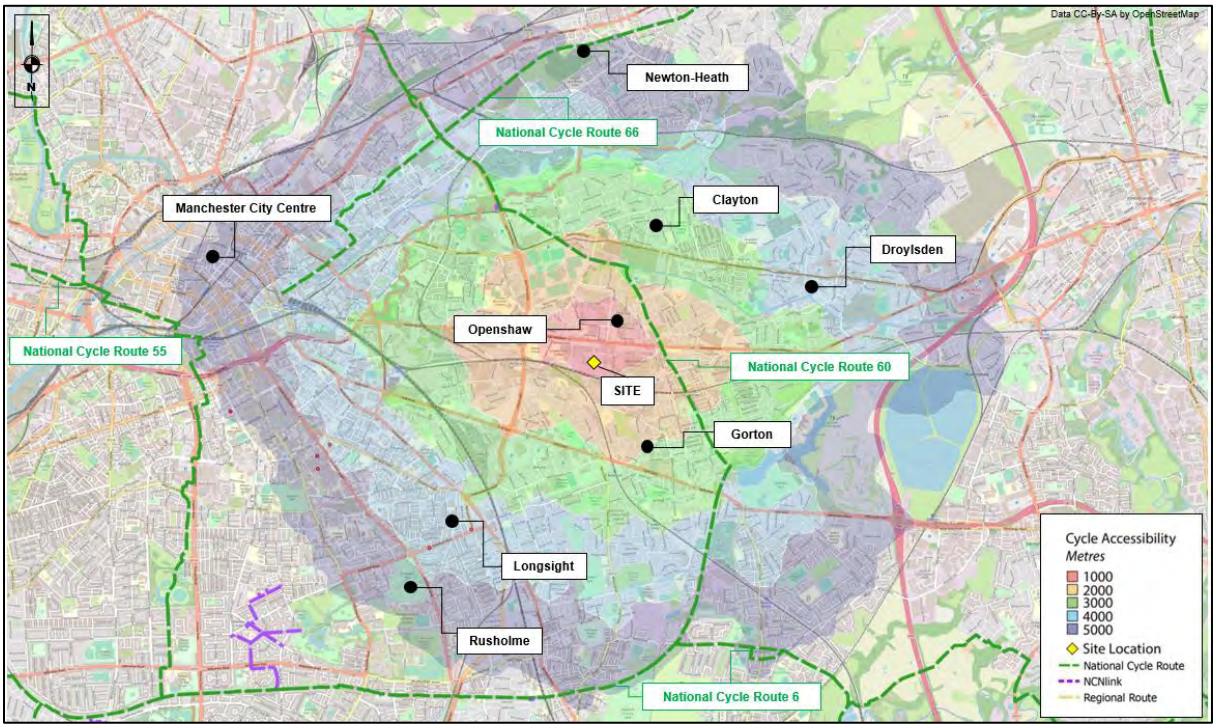
- National Cycle Route 6 is a long-distance route extending from London to the Lake District, alongside historic canals and through some of the UK's most interesting towns and cities.

- National Cycle Route 60 of the National Cycle Network runs between North and East Manchester, with its furthest south stretch forming part of the Fallowfield Loop.
- National Cycle Network Route 66 is a National Route that runs from Kingston upon Hull to Manchester via Beverley, York and Leeds.

4.2.5 In addition, Greater Manchester will benefit from the Bee Network which is a proposed cycling network currently being delivered through the Mayor's Challenge Fund. The vision for the Bee Network is to make Greater Manchester the very first city region in the UK to have a fully joined up cycling and walking network; the most comprehensive in Britain covering 1,000 miles.

4.2.6 **Figure 4.2** below provides an extract of the indicative 5km cycling catchment plan, again using GIS software - Basemap's Visography (TRACC) program, and is equivalent to a typical cycle time of 15-20 minutes. A copy of the full walking catchment is provided within **Figure 2** of **Appendix C**.

Figure 4.2: 5km Cycling Catchment



Source: CC-BY-SA by OpenStreetMap©

4.2.7 A number of local areas including Manchester City Centre, Gorton, Droylsden, Rusholme, and Longsight are accessible via cycle, whilst key public transport infrastructure such as Manchester Piccadilly and Manchester Oxford Road Station are all accessible via cycle.

4.2.8 Additionally, the availability of a national cycling route and the proposed Bee Network expansion, extending to neighbouring boroughs and outside the city's boundaries provides opportunities for travel further afield using linked trips.

4.2.9 Cycling would therefore be a viable mode of transport for residents at the site commuting to work or making leisure trips to/from these locations.

4.2.10 To encourage the uptake of cycling amongst staff, the development will provide covered and secure cycle parking for all staff working at the site. Lockers and showers will also be provided within each unit.

4.3 Access by Bus

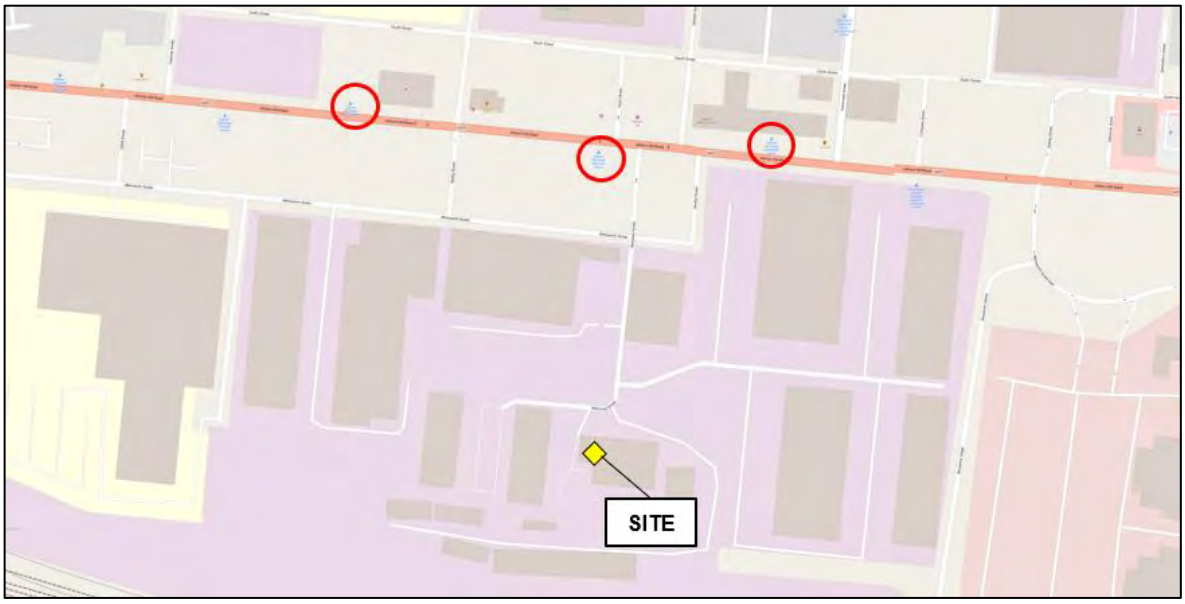
4.3.1 The site benefits from excellent access to the local bus network, with a high number of bus stops located within 800m walking distance.

4.3.2 The closest pair of bus stops is located on the A635 Ashton Old Road, approximately 85m and 234m to the north of the site. These stops serve Bus Service No.119 (Manchester City Centre to Stalybridge), Bus Service No.34 (Broadbent Fold to Manchester City Centre), Bus Service No.710 (Belle Vue to Openshaw via Beswick), and Bus Service No.725 (Belle Vue to Chorlton upon Medlock). These buses are conducive for employees of the site with services serving morning and evening peak hours.

4.3.3 Further bus stops are available along the A635 Ashton Old Road to the east and west.

4.3.4 A map illustrating the location of the bus stops is provided in **Figure 4.3**, whilst the frequency of the service is summarised in **Table 4.1**. For simplicity and to avoid double counting, the frequencies are taken at the nearest available stop for each service. The AM and PM peak for the Weekday are 08:00-09:00 and 17:00- 18:00. On Saturday the peak is 12:00-13:00.

Figure 4.3: Bus Stop Map



Source: OpenStreetMap©

Table 4.1: Bus Timetable Summary

Service Number	Route	Monday - Friday					Saturday			
		First	AM Peak	PM Peak	Last	Av. Freq.	First	Peak	Last	Av. Freq.
219	Manchester City Centre - Stalybridge	05:11	5	5	23:35	12 mins	05:14	5	23:33	12 mins
	Stalybridge - Manchester City Centre	04:43	6	5	23:51	12 mins	05:04	5	23:50	12 mins
221	Broadbent Fold - Manchester City Centre	06:12	-	-	07:28	4 services only	-	-	-	-
	Manchester City Centre - Broadbent Fold	17:15	-	2	18:13	3 services only	-	-	-	-

Source: TFGM

4.3.5 **Table 4.1** demonstrates that the site is accessible by bus for commuters, with the early start and later finish times conducive to employees and visitors.

4.3.6 It is also evident that these services link the site to a number of residential areas. There is the potential for these residential areas to provide a percentage of the development's workforce and, as such, be a strong factor in encouraging bus to travel to and from work.

4.3.7 Based on the above, it is therefore concluded that the site benefits from good access by bus, offering an attractive mode of transport and a viable alternative to single occupancy car journeys.

4.4 Access by Metrolink

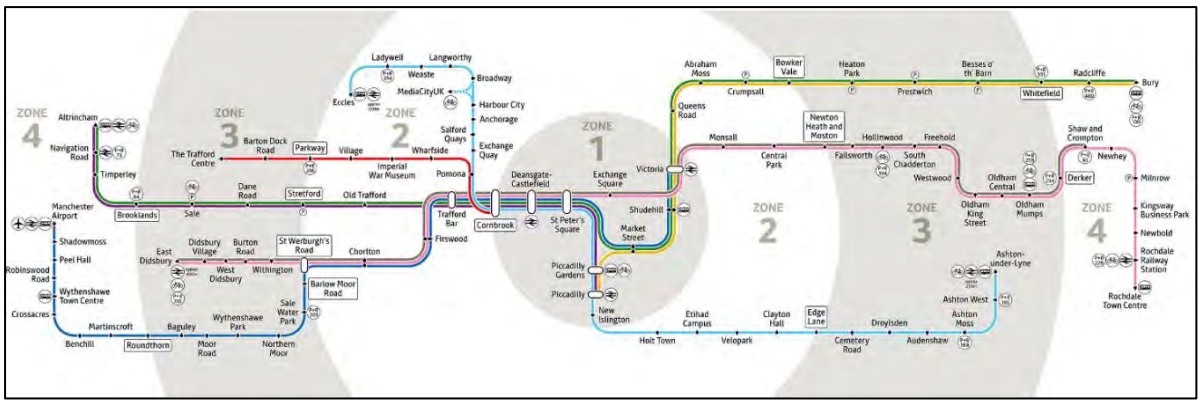
4.4.1 The site benefits from access to the Metrolink network with the nearest tram stop to the site being Clayton Hall, approximately 1.7km away. This equates to a 21-minute walk which is considered an acceptable walking distance for both commuting purposes.

4.4.2 Metrolink offers significant benefits for long distance travel using a sustainable mode of transport. The pedestrian and cycle friendly conditions in the vicinity of the site should further encourage its use and make it a viable alternative.

4.4.3 The Clayton Hall Stop is located within Zone 2 on the Ashton-under-Lyne line (Blue Line), offering frequent services (every 6 minutes during peak times) to Ashton-under-Lyne, Media City UK and Eccles in the east and westbound directions respectively. Further interchange opportunities are available to a wide range of destinations on all lines of the network as well as to other modes of sustainable transport.

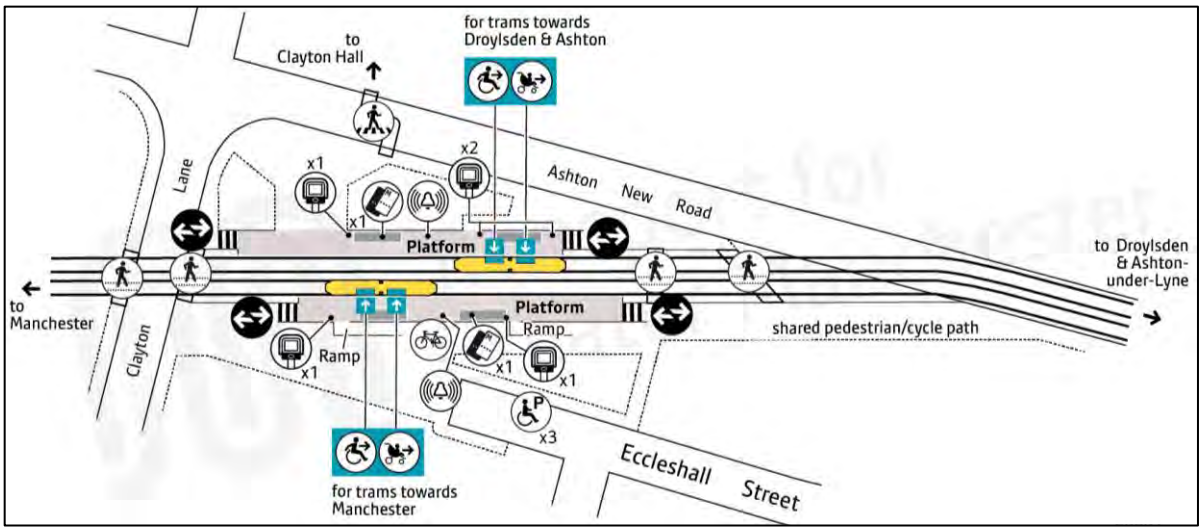
4.4.4 **Figure 4.4** illustrates the Metrolink network map including zoning system while **Figure 4.5** shows a map of the Clayton Hall tram stop and the available facilities, which include shelters and seating, digital timetabling information, ticket machines, customer information and emergency call point, cycle stands and lockers, and ramps which facilitate access and boarding for mobility impaired users.

Figure 4.4: Metrolink Network Map



Source: TFGM

Figure 4.5 Clayton Hall Tram Stop Map



Source: TFGM

4.5 Access by Rail

4.5.1 Ashburys Station is approximately 1km from the site to the south west whilst Gorton Station is 1.5km from the site to the south east and Belle Vue Station is 1.8km from the site to the south. All three stations provide regular services to Marple, Hadfield, and New Mills.

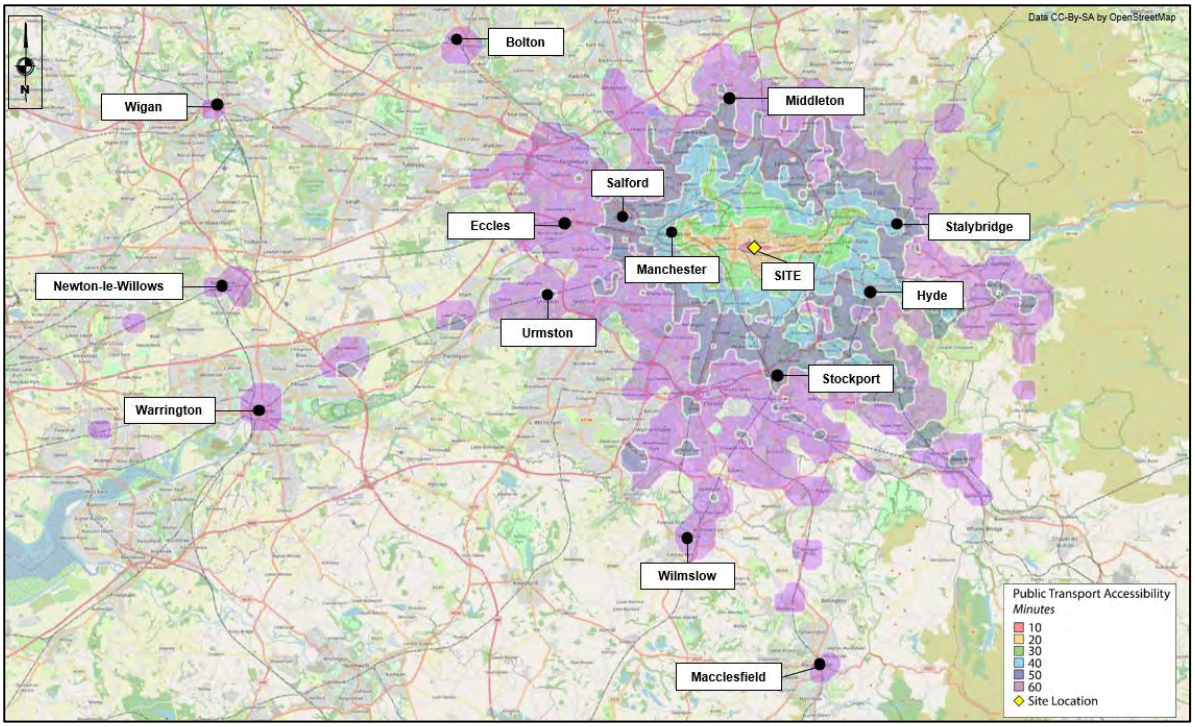
4.5.2 Further afield the development site is within 3.4km and 4.9km of Manchester Piccadilly Station and Manchester Oxford Road Station, offering greater flexibility and interchange opportunities for short and long-distance travel by train.

4.6 Journey Times by Public Transport

4.6.1 A calculation has been undertaken, using GIS software - Basemap's Visography (TRACC) program, to illustrate the distance that can be travelled within 60 minutes by public transport to and from the proposed development site. The time includes the walk to the bus stops or railway station and demonstrates that key areas such as Warrington, Macclesfield, and Stockport to name a few are all within a 60-minute public transport journey.

4.6.2 **Figure 4.6** below provides an extract of the public transport 60-minute catchment area. A copy of the full plan is provided within **Figure 3** of **Appendix C**.

Figure 4.6: 60-minute Public Transport Catchment



Source: CC-BY-SA by OpenStreetMap

4.7 BREEAM Assessment TRA 01 Accessibility Calculator

4.7.1 Further to the above, the BREEAM UK New Construction 2018 Tra 01 Public Transport Accessibility Index Calculator has been used to measure the accessibility of the site by public transport according to the BREEAM criteria.

4.7.2 The aims of this assessment are to recognise where the proximity of good public transport networks has been reviewed, and encourage the implementation of alternative solutions where the proximity to public transport networks is poor; thus, alleviating transport related congestion and pollution.

4.7.3 The assessment has been carried out, with the site yielding an index score of 6.57 and hence achieving 2 credits for this class of development. The results of the calculation are summarised in **Appendix C**.

4.8 Conclusions

4.8.1 In summary, the proposed development site is located in a reasonably accessible location and is well located to make use of the existing public transport links and pedestrian / cycle routes.

5. Development Proposals

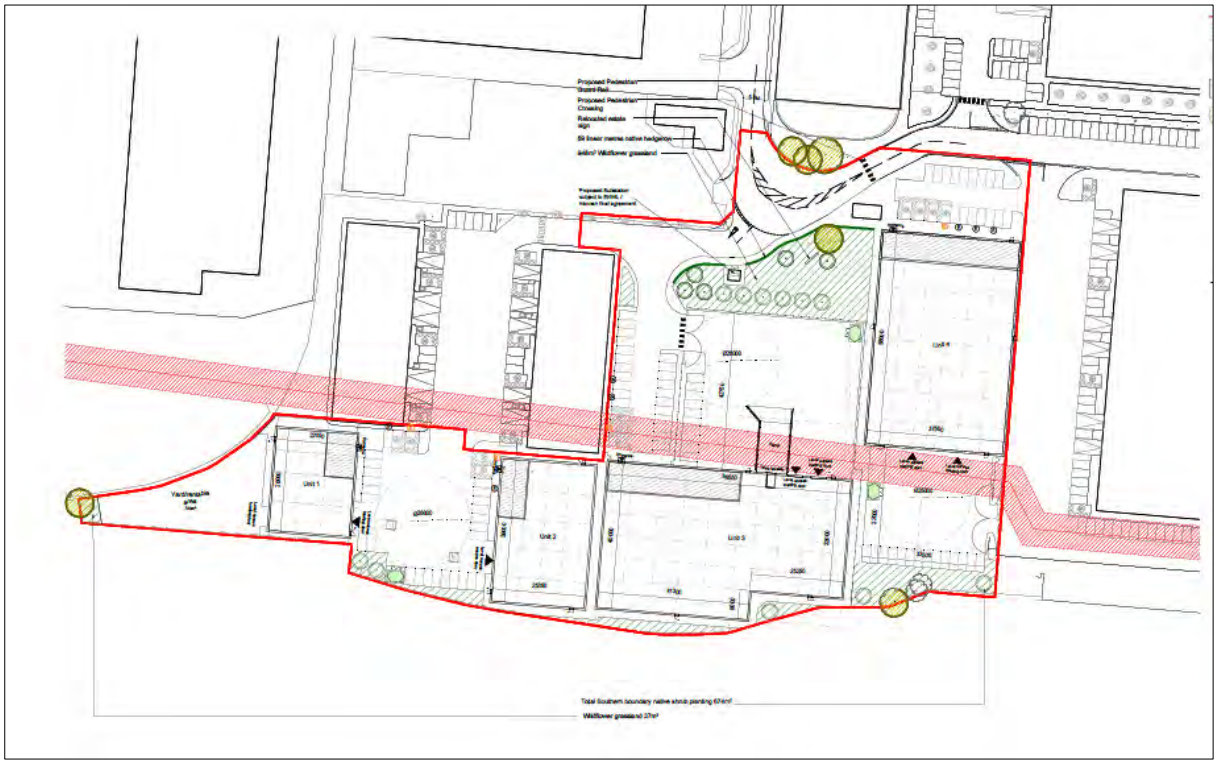
5.1 Introduction

5.1.1 The application relates to the proposed development for B2 / B8 land uses comprising a Gross Internal Area [GIA] of circa 6,984sqm across 4 units, situated off Welcomb Street in Manchester. The full development description is;

> "Full application for the erection of three new industrial buildings, with the extension of one existing building, to create employment floor space within Use Classes E(g)(ii)(iii), B2 and B8 across the site and ancillary office space, with associated service yards, car parking including electric vehicle charging points, amended site access, refuse storage facilities, substations, boundary treatments, landscaping, and associated works and infrastructure".

5.1.2 The proposed site layout is illustrated in **Figure 5.1** below with a copy of the full plan located at **Appendix E**.

Figure 5.1: Proposed Site Layout Plan



Source: AEW Architects

5.1.3 The site is currently occupied by the Manchester School of Building and several commercial units of varying sizes with access provided off Welcomb Street to these units. A number of these units will be demolished as part of the development proposals.

5.2 Schedule of Accommodation

5.2.1 The following schedule of accommodation is proposed at the site:

- **Unit 1** = 713sqm - With 11 parking spaces (2 accessible and 2 EV)
- **Unit 2** = 1,099sqm - With 18 parking spaces (2 accessible and 3 EV)
- **Unit 3** = 2,735 sqm - With 35 parking spaces (3 accessible and 5 EV)
- **Unit 4** = 2,437sqm - With 34 parking spaces (4 accessible and 7 EV)
- **Total proposed = 6,984sqm**

5.3 Proposed Site Access Arrangement

5.3.1 The main site access will be taken from Welcomb Street which provides connections to Ashton Old Road. As part of the Phase 1 development of the site a signal-controlled junction was introduced at the Welcomb Street / Ashton Old Road junction. This access arrangement will be retained as part of the development proposals.

5.3.2 Currently Welcomb Street as it enters the site is unadopted and managed by the owners of the site. The road currently continues south from Ashton Old Road continuing around a sharp bend providing access to Medlock Court on the western side of the site. Separate estate roads are provided from Welcomb Street to the Phase 1 units located on the east of the site and to the Manchester School of Building.

5.3.3 As part of the proposals for the site the following alterations will be made to Welcomb Street to accommodate the development;

- The priority of Welcomb Street will be altered with a give-way junction introduced at the existing sharp bend and the main priority given to vehicles travelling along the existing estate road to the east of the site;
- The two existing accesses to the Manchester School of Building will be altered with the main HGV road removed and the access to the car park repositioned away from the sharp bend on Welcomb Street; and
- Pedestrian infrastructure will be redesigned to accommodate pedestrian connectivity within the site.

5.3.4 The proposed site access arrangements are illustrated in **Appendix E**.

5.3.5 Swept path analysis has been undertaken with a large refuse vehicle and a 16.5m articulated vehicle to demonstrate that the access arrangement and proposed internal layout is suitable and access and egress manoeuvres can be performed safely for access to the site. The swept path analysis drawings are presented in **Appendix F**.

5.3.6 Pedestrian and Cycle Access

5.3.7 Pedestrian and cycle access will be taken from Welcomb Street with footways along this road providing connections to the footways along Ashton Old Road to the north of the site. As part of the re-arrangement of Welcomb Street as it enters the business park and pedestrian guardrail will be introduced on the northern section of this junction to prevent pedestrians crossing the road at its widest point.

5.3.8 A pedestrian crossing will be introduced on the eastern side of this junction to provide safe crossing facilities for pedestrians. The pedestrian crossing will link to a new footway which will continue along the southern boundary of Welcomb Street. This path will provide connections to Medlock Court and the new units to the west of the site.

5.3.9 The proposed site access arrangements are illustrated in **Appendix E**.

5.4 Parking

5.4.1 All parking areas are proposed to be accessed off Welcomb Street. The car parking schedule is as follows:

- Total Car Parking Bays = 98
  - inclusive of 17 EV Bays (at 17% provision); and
  - inclusive of 11 Disabled Bays (at 11% provision).
- Cycle Parking Spaces = 42

5.4.2 As the proposals relate to the development of B2/B8 land uses it is considered that the level of parking provision at the proposed development is policy compliant as it is within the Council's 'Maximum' car parking standards discussed within **Section 3**.

5.4.3 Given the above, it is Hydrock's view that this level of parking provision is suitable for this scale of development, taking into consideration its location, intended use and local factors.

5.5 Waste Servicing

5.5.1 The waste servicing requirements of the development have been considered to ensure that the site can successfully accommodate waste servicing vehicles on the proposed site. As the site has been designed to accommodate a 16.5m articulated vehicle a large 4-axle refuse vehicles will be able to enter the site, collect the waste, manoeuvre within the site, and exit in a forward gear.

6. Trip Generation, Distribution and Assignment

6.1 Introduction

6.1.1 This section of the report considers the trip generation levels associated with the proposed development and the impact it will have on the local highway network. Under the proposed application, the site proposals involve the construction of 4 industrial warehousing units comprising a total internal area of 6,984 sqm for B2 / B8 land use development.

6.1.2 With regards to the proposed vehicular and HGV trips associated with the development, the weekday morning and weekday evening peak hours have been assessed in line with the surveyed peak periods at the Welcomb Street / Ashton Old Road junction as outlined in **Section 2** of this report.

6.1.3 While the development is likely to be a mix of B2/B8 land uses, this assessment focuses on a 100% B8 development. This approach is considered to be robust as B8 land uses generate higher vehicle trip rates than B2 land uses. This approach was outlined within our scoping correspondence with Highways Officers at Manchester City Council who raised no objections to this method of assessment.

6.2 Trip Generation

6.2.1 To determine the vehicular trips associated with the proposed land use, the industry-standard Trip Rate Information Computer System [TRICS] 7.9.1 version has been interrogated. The TRICS database is an industry accepted tool for predicting the likely number of trips from a development by comparing the site with existing developments of a similar size and characteristics within the UK.

6.2.2 In generating trips for the proposed development, the 02-Employment, F-Warehousing (Commercial) land use categories were considered. Sites within Greater London and Ireland have been omitted from this calculation in order to obtain appropriate trip rates.

6.2.3 The results of the TRICS interrogation are shown in **Table 6.1** below, whilst the TRICS outputs are presented in **Appendix G**. In the following table, the trip rates are given per 100sqm.

Table 6.1: B8 Trip Rates

Trip Rates	Weekday AM Peak (08:00-09:00)		Weekday PM Peak (15:00 - 16:00)	
	Arrivals	Departures	Arrivals	Departures
Total Vehicle Trip Rates	0.171	0.165	0.173	0.163
HGV Trip Rates	0.038	0.093	0.079	0.057

6.2.4 To determine the total traffic generation associated with the development, the above trip rates have been applied to the GIA for the proposed which equates to 6,984sqm of B8 land use with the resultant trip generation totalled together, as illustrated in **Table 6.2** below.

Table 6.2: B8 Trip Generation

	Weekday AM Peak (08:00-09:00)		Weekday PM Peak (15:00 - 16:00)	
	Arrivals	Departures	Arrivals	Departures
Total Vehicle Trips	12	12	12	11
HGV	3	6	6	4

**Note: Results subject to rounding*

6.2.5 It can be seen from the above table that the development is expected to generate the following two-way trips:

- 24 trips in the AM peak period this includes 9 HGV movements;
- 23 trips in the PM peak period this includes 10 HGV movements.

6.3 Trip Distribution

6.3.1 The resultant trip generation flows have been distributed onto the local highway network at the Welcomb Street / Ashton Old Road signal-controlled junction based on observed tidal flow distribution methodology of the existing traffic flows within the area, as shown in **Table 6.5** and **Table 6.6** below.

Table 6.3: Proposed %Trip Distribution - AM Peak

Proposed Distribution - AM Peak	
Welcomb Street / A635 Ashton Old Road	Percentage
Ashton Old Road - right into Welcomb Street	38%
Ashton Old Road - left into Welcomb Street	62%
Welcomb Street - right onto Ashton Old Road	49%
Welcomb Street - left onto Ashton Old Road	51%

Table 6.4 Proposed % Trip Distribution - PM Peak

Proposed Outbound Distribution - PM Peak	
Welcomb Street / A635 Ashton Old Road	Percentage
Ashton Old Road - right into Welcomb Street	69%
Ashton Old Road - left into Welcomb Street	31%
Welcomb Street - right onto Ashton Old Road	55%
Welcomb Street - left onto Ashton Old Road	45%

7. Anticipated Highways Impact

7.1 Introduction

7.1.1 This section assesses the impact of the development proposals with regards to increases in traffic along the local highway network.

7.1.2 As outlined within **Section 1** of this report the comments received by Highways Officers at MCC suggested that junction assessments would only be required if additional two-way trips reach 30 vehicle per hour.

7.1.3 As outlined in **Section 6** the proposed development is likely to generate an additional 24 two-way trips in the AM peak period and 23 trips in the PM peak period therefore it is considered that no junction modelling will be required.

7.1.4 Notwithstanding this, a review of the percentage trip impact of the proposals has been considered at the Welcomb Street / Ashton Old Junction using the turning flows recorded in June 2022.

7.2 Proposed Traffic Impact Welcomb Street / Ashton Old Road

7.2.1 Based on the information provided in **Section 6** of this report, Hydrock have undertaken an assessment of the impact of the development proposals on the Welcomb Street / Ashton Old Road junction. This review has considered the increase in trips at this junction using the traffic surveys conducted in June 2022 as outlined in Section 2 of this report.

7.2.2 **Table 7.1** provides a summary of the 2022 surveyed flows on Ashton Old Road and Welcomb Street. **Table 7.2** provides a summary of the predicted increase in trips on both roads as a result of the proposed development.

Table 7.1 Base 2022 Surveyed Flows

Base 2022		
Welcomb Street / A635 Ashton Old Road	**AM Peak**	**PM Peak**
Ashton Old Road (East)	1,430	813
Ashton Old Road (West)	711	1,029
Welcomb Street	85	107

Table 7.2 Base 2022 Surveyed Flows plus Development

Base 2022 plus Development		
Welcomb Street / A635 Ashton Old Road	**AM Peak**	**PM Peak**
Ashton Old Road (East)	1,436 (+0.5%)	816 (+0.4%)
Ashton Old Road (West)	715 (+0.6%)	1,037 (+0.8%)
Welcomb Street	96 (+14.1%)	117 (+10.4%)

7.2.3 **Table 7.2** highlights that there is likely to be a negligible increase in trips along Ashton Old Road as part of the development proposals with a percentage trip increase below 1%. This increase is considered to be within the daily fluctuations for a road of this nature.

7.2.4 **Table 7.2** also highlights that there would be a minor increase in trips along Welcomb Street as part of the development proposals. The higher increase on Welcomb Street can be attributed to the lower baseline flows recorded along this link. It should be noted that although vehicle trips will increase along Welcomb Street, the increase is below the 30 two-way trip thresholds outlined by MCC as requiring further assessment.

7.2.5 In addition to the above, surveys were also conducted at the Bertha Street / Ashton Old junction. A review of these flows suggests that there would be a negligible increase in trips at this junction as part of the development proposals.

7.3 Summary

7.3.1 Based on the above, the number of trips associated with the proposed development is considered negligible and would not have an impact on the local highway network.

7.3.2 Therefore, having regard to all of the above, the proposed development will not have a material impact on the operation of the Welcomb Street / Ashton Old Road junction or the local highway network.

8. Summary and Conclusions

8.1 Summary

8.1.1 Hydrock have been instructed by NSJV Ltd to prepare a TA in support of a planning application for a proposed commercial development comprising a GFA of circa 6,984sqm across 4 units situated at Welcomb Street in Openshaw, Manchester.

8.1.2 The site is currently occupied by several commercial units of varying sizes with access provided off Welcomb Street to these units. The proposals include the development of 9 new units.

8.1.3 The sustainability assessment shows that the site is accessible by non-car modes. The ability to readily access wider destinations by walking, cycling, bus or rail provides a key advantage in providing a real alternative to car travel (e.g., for journeys to work) and as such promotes the aim of reducing car travel.

8.1.4 The assessments indicate that the vehicle impacts associated with the proposed B2 / B8 employment land uses would not lead to a severe impact to either the existing or the future forecast capacity on the local highway network.

8.1.5 Therefore, the traffic impact assessment shows that there is no detrimental traffic impact upon the existing highway network that would be considered severe.

8.1.6 NPPF (December 2023 - paragraph 115) states that:

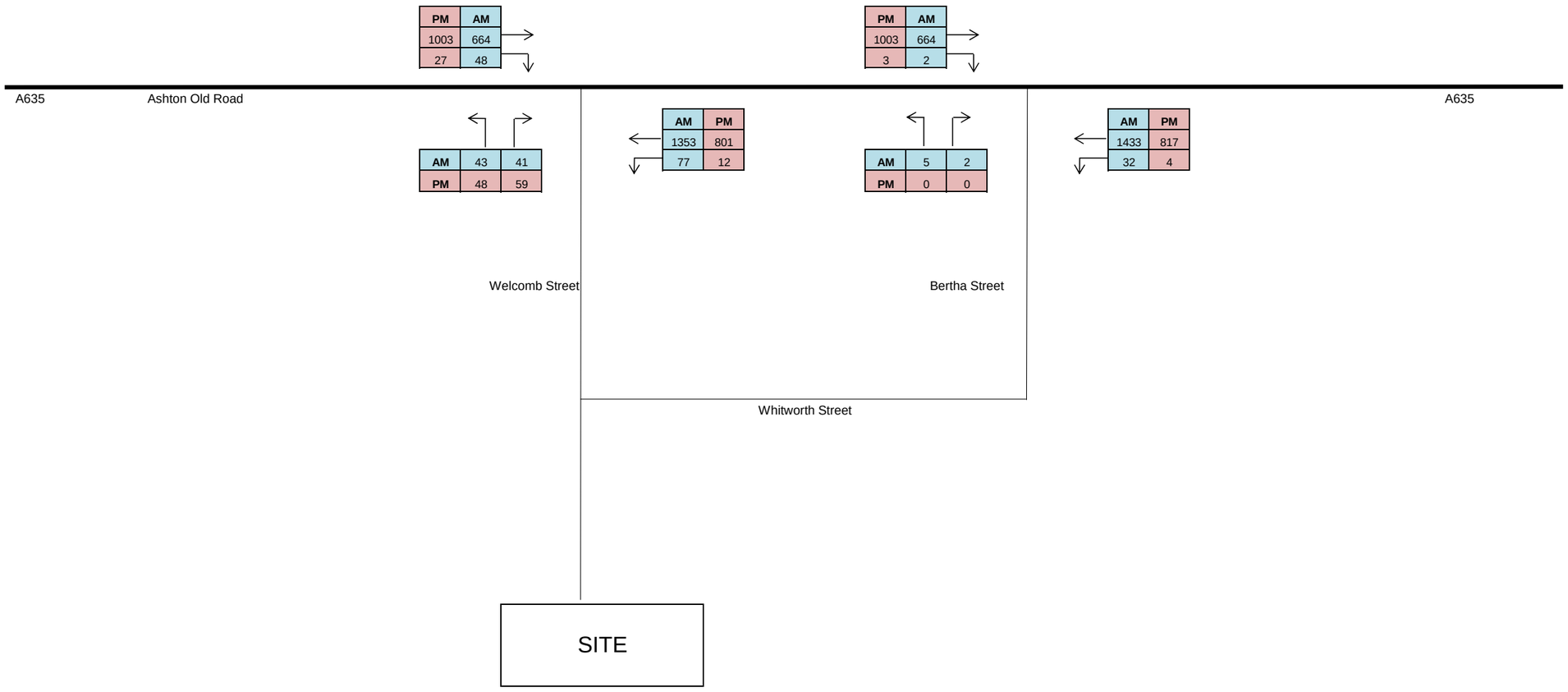
> » "Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe."

8.1.7 The traffic impact assessment shows that the proposed development would not have a “severe” impact on the local highway network.

8.2 Conclusion

8.2.1 Having undertaken a comprehensive analysis of the development site and after reviewing planning policies, it has been demonstrated by this TA that the proposed development accords with highway access design recommendations and sustainable values and hence there is no basis for highway and transportation objections to the proposals.

8.2.2 There are no highways or transport related reasons upon which a refusal of the planning application for the proposals would be justified.

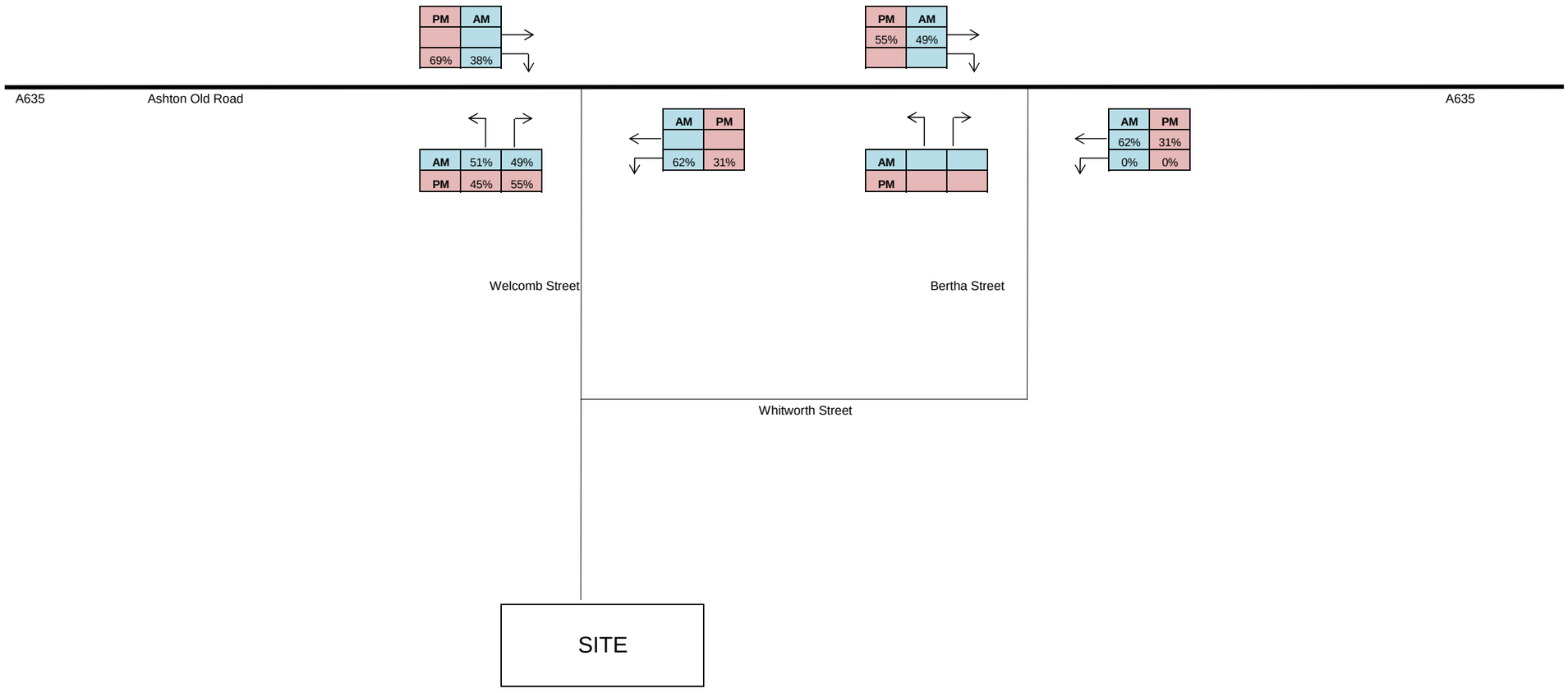


Note: Traffic Surveys undertaken on Tuesday 28th June 2022

Peak Hours

AM	08:15-09:15
PM	15:30-16:30

Hydrock	**Weekday AM & PM Peak Hour - Observed Base 2022 Traffic Flows (PCUs)**	**30 April 2024**
		Job Number - 22975-TMBI
	Proposed Development, Welcomb St. Manchester	**Figure 1**

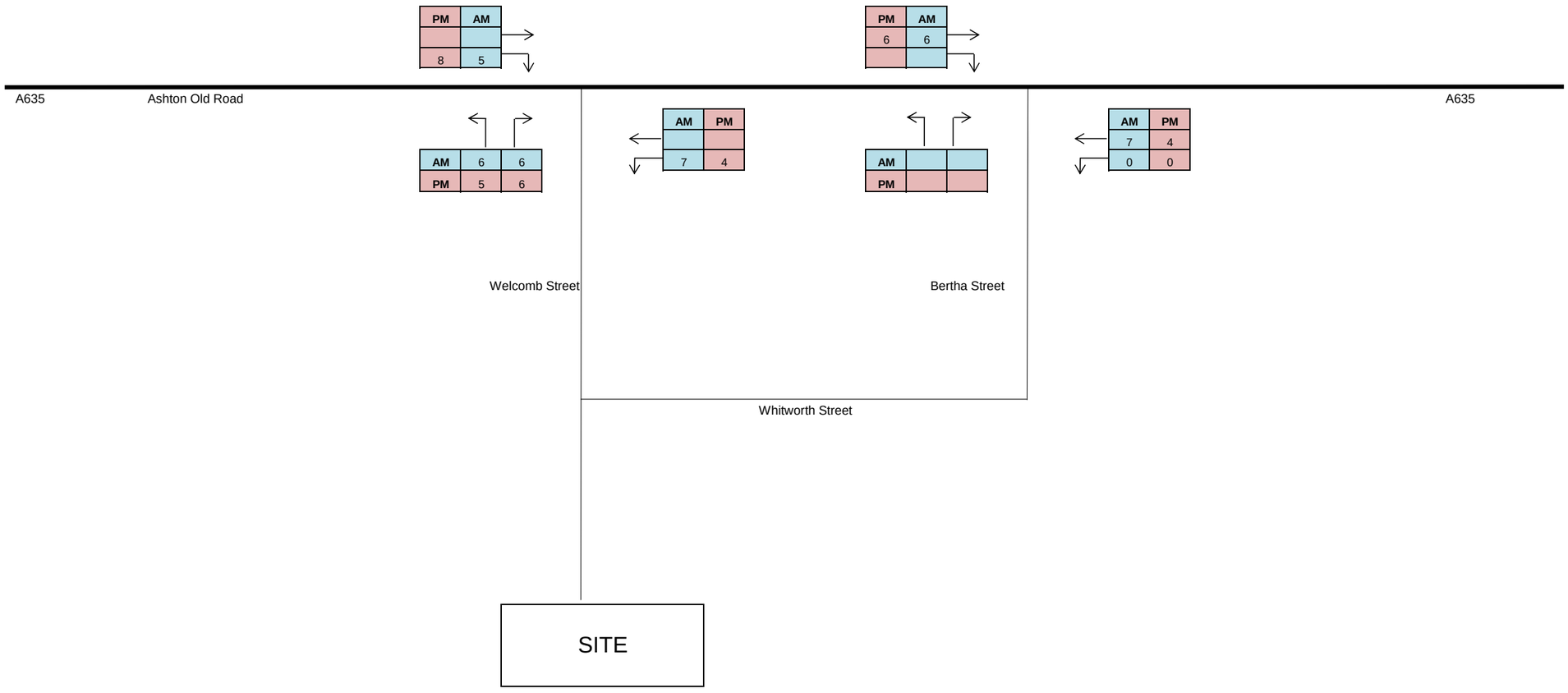


Note: Traffic Surveys undertaken on Tuesday 28th June 2022

Peak Hours

AM	08:15-09:15
PM	15:30-16:30

Hydrock	**Development Trip Distribution**	**30 April 2024**
		Job Number - 22975-TMBI
	Proposed Development, Welcomb St. Manchester	**Figure 2**



Note: Traffic Surveys undertaken on
Tuesday 28th June 2022

	Peak Hours	TRICS Peak Hours
AM	08:15-09:15	08:00 - 09:00
PM	15:30-16:30	15:00 - 16:00

Hydrock

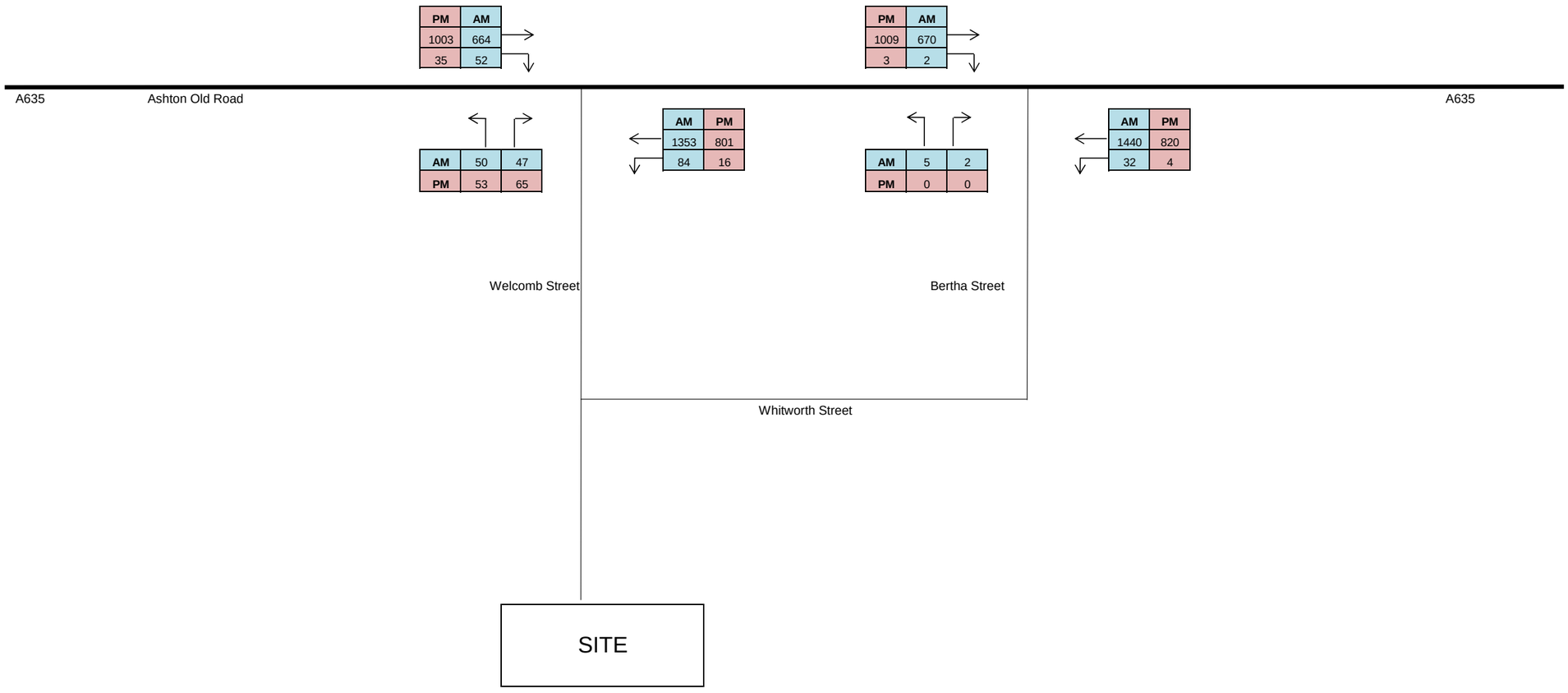
Weekday AM & PM Development Trips

Proposed Development, Welcomb St. Manchester

30 April 2024

Job Number - 22975-TMBI

Figure 3

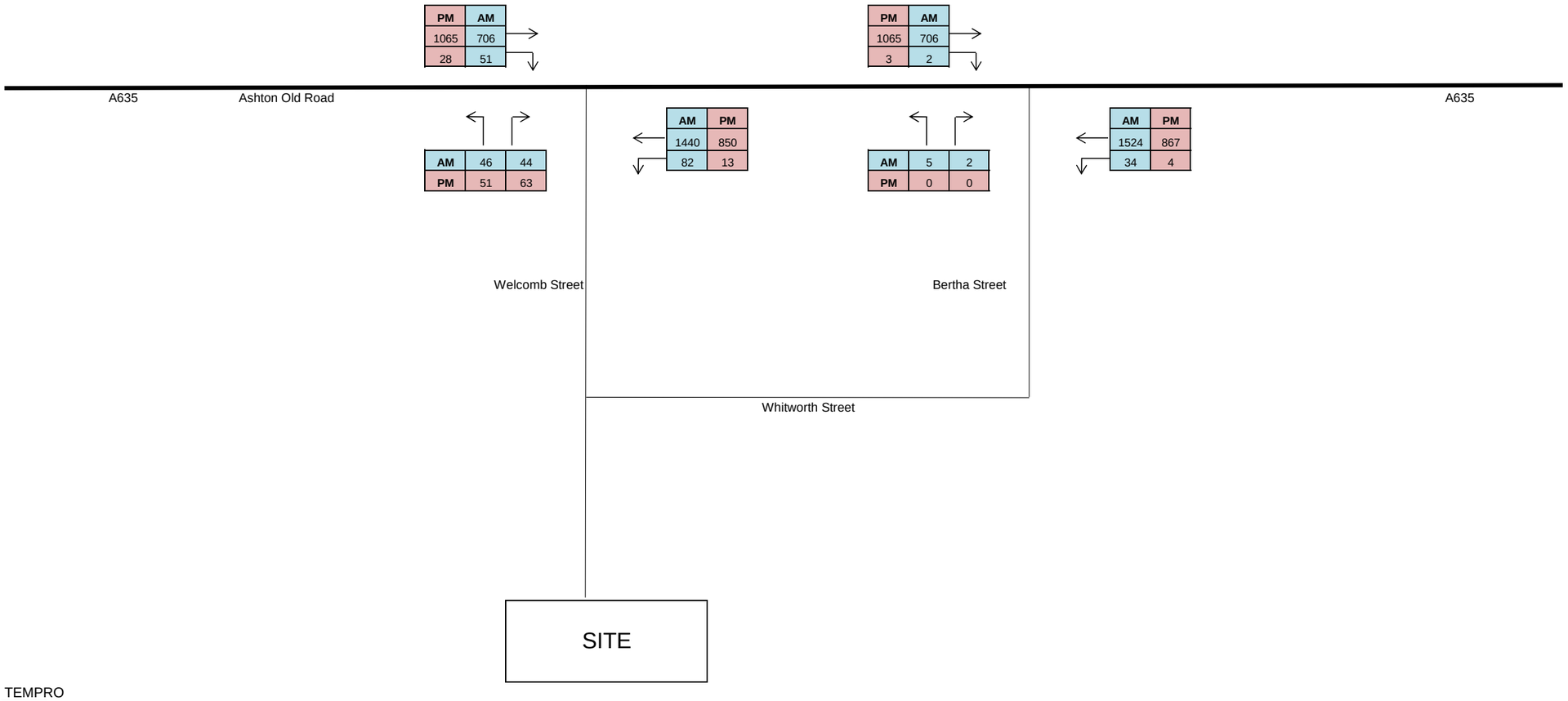


Note: Traffic Surveys undertaken on Tuesday 28th June 2022

Peak Hours

AM	08:15-09:15
PM	15:30-16:30

Hydrock	**Weekday AM & PM Peak Hour - Base 2022 Traffic Flows (PCUs) plus Development**	**30 April 2024**
		Job Number - 22975-TMBI
	Proposed Development, Welcomb St. Manchester	**Figure 4**



Hydrock	**Weekday AM & PM Peak Hour - Future (+5yrs) Base 2027 Traffic Flow (PCUs)**	**30 April 2024**
		Job Number - 22975-TMBI
	Proposed Development, Welcomb St. Manchester	**Figure 5**

Appendices

Appendix A Scoping Discussions

TECHNICAL DESIGN NOTE

Hydrock

Project name	Welcomb Street, Openshaw		
Design note title	Transport Assessment Scope		
Document reference	22975-HYD-XX-XX-RP-TP-3001-P1.01		
Author	Sam Denby BA (Hons) MSc		
Revision	P1.01		
Date	26 May 2022	Approved	✓

1.1 Introduction

1.1.1 Please find below the proposed scope of works with regard to the proposed employment development on land south of A635 Ashton Old Road, Openshaw.

1.1.2 The proposals comprise employment space over a total of:

- B2/B8 planning use;
- GFA 4,847sq.m; and
- 12 units.

1.1.3 This section is looking to confirm the highways scope of assessment and any associated costs with obtaining it.

1.1.4 The site is located to the south of A635 Ashton Old Road, which connects to Manchester City Centre circa 3 miles away.

1.1.5 Please see **Figure 1** below for the site location reference:

Figure 1: Site location

1.2 Assessments

1.2.1 This report is looking to confirm the scope of assessment required to satisfy highways related matters. Based on our current understanding, we anticipate the following documents to be required to support the planning application.

Transport Assessment [TA]

- Comment on the background/ history of the site;
- Provide a full description of the local highway network;
- Consider local and national transport-related policy documentation;
- Consider any committed development within the area – Can the Local Highway Authority confirm any developments you require us to take account of;
- Undertake accident analysis on the local highway network;
- Undertake an assessment of the accessibility of the site by sustainable modes, to include an assessment of the bus, rail, cycling and pedestrian facilities surrounding the site;
- Review applicable car parking standards;
- Provide details of the development proposals and undertake a trip generation analysis. Backed on the previous site use and any extant lawfully permitted and proposed land use(s), we will derive the trip generation associated with the site during the weekday morning/evening peak hours;

- To determine the number of trips generated by the proposed use of the site, a trip generation exercise has been undertaken. The Trip Rate Information Computer System [TRICS] has been used to derive the vehicle trip generation for the proposed development. The proposed trip rates are presented in Table 1 below, with the outputs attached for reference in **Appendix A**.

Table 1 – Proposed Trip Rates

Land Use	Morning Peak 08:00-09:00			Evening Peak 17:00-18:00		
	Arrivals	Departures	Total	Arrivals	Departures	Total
B2 Total Vehicles	0.162	0.042	0.204	0.02	0.161	0.181
B2 HGVs	0.013	0.013	0.026	0.004	0	0.004
B8 Total Vehicles	0.328	0.229	0.557	0.185	0.404	0.589
B8 HGVs	0.051	0.113	0.164	0.055	0.089	0.144

- While the development is likely to be a mix of B2/B8 site it is proposed to base the assessment on 100% B8 land use. This approach was considered to be robust as this generates higher vehicle trip rates than B2 land use.
- The above trip rates have been applied to the circa 4,847 sqm to determine the potential number of vehicle trips within the peak hours. The resultant trip generation is presented in **Table 2**.

Table 2 – Proposed Trip Generation

Land Use	Msq	Morning Peak			Evening Peak		
		Arrivals	Departures	Total	Arrivals	Departures	Total
B8 Total Vehicles	4,847	16	11	27	9	20	29
B8 HGVs	4,847	2	5	8	3	4	7

- Based on the trips set out above to present a robust assessment the planning application will be supported by junction counts at the following junctions:
  - » Welcomb Street / A635 Ashton Old Road
- Should modelling be warranted this would be undertaken in Junctions 9 where appropriate.

Framework Travel Plan [FTP]

- Consider the national and local transport-related policy documentation;

- Undertake an assessment of the accessibility of the site by sustainable modes, to include an assessment of bus, cycling and pedestrian facilities surrounding the site;
- Provide details of the development proposals;
- Identify a range of initiatives for inclusion within the travel plan, to encourage travel by more sustainable modes including car sharing, by public transport, bicycle and on foot, and to reduce the need to travel;
- Provide details of how the travel plan will be managed, outlining the role of the Travel Plan Coordinator and stakeholders;
- Outline the aim, objectives and targets for the travel plan;
- Provide an action plan and marketing strategy to support the implementation of the travel plan at the site; and
- Summarise all of the above within a framework travel plan report.

1.2.2 Based on the above, please could you confirm that the above approach is acceptable?

Sam Denby

From: Sue Wills <sue.wills@manchester.gov.uk>
Sent: 01 November 2022 09:56
To: Hannah Richardson
Subject: Re: LAND AT WELCOMB STREET, OPENSHAW, MANCHESTER

Dear Hannah ,

I have received comments from both Highway Services and Transport for Greater Manchester which are outlined below for your information .

Highway Services have provided the following observations .

The site will comprise of six new industrial units, along with the refurbishment and extension of two existing sites.The indicative layout proposed up to 7,289 sqm of new industrial floorspace with a variety of Use Class including Class E ((g)(ii)(iii), B2 and B8. 43 parking spaces are proposed within the site, of which 51 are disabled.

Regarding the dimension of these parking spaces, these should all accord with Manchester City Council's standard minimum requirement. It is recommended that standard parking bay dimensions be a minimum of 2.4m x 4.8m and disabled parking bay dimensions a minimum of 3.6m x 6.0m. This should also include a 6-metre aisle width to allow vehicles to safely manoeuvre within the car park with formal demarcation of all spaces.
Highways request a minimum of 1 EV charge point per 1,000m2 floor space. Therefore, it is requested that a minimum of 7 parking spaces have an EV charging point. It should also be ensured that the installation of ducting is in place for future EVC installation.
Safe and secure cycle parking should be in place for the use of staff and visitors. It is requested that the applicant review Manchester City Council's Core Strategy Parking Standards. For General Industry (Class B2) a minimum of one space per 200sqm, Storage and Distribution (Class B8) a minimum of one space per 850sqm. Class E would be reviewed on a case by case basis. It is requested that cycle parking for each use is detailed and justification provided.

The proposed site plan suggests that access to each unit will be in place from the existing access road via Welcomb Street. It is recommended that a TRO refreshment is undertaken where necessary to reduce the potential of any inconsiderate parking.
It is understood that car parking and a service yard will be in place for each unit. It is requested that the applicant review MCC Core Strategy Parking Standards, District Centres. It is requested that General Industry (Class B2) provides a minimum of one vehicle parking space per 45sqm and Storage and Distribution (ClassB8) provides one space per 100sqm. Class Use E is reviewed on a case by case basis and therefore it is requested that the justification behind proposed vehicle parking for this use is provided within the Transport Statement/Assessment.
If the access is to be upgraded or any works are proposed to the adopted highway and should the planning application be approved, the applicant will be required to enter into a Section 278/184 agreements for the alterations to the existing highways, and for construction of the proposed vehicular access and dropped kerbs on Welcomb Street and will require a crossing licence/agreement. This will require the agreement with MCC's Highways Applications and Network Resilience teams via Contact Manchester (Tel. 0161 234 5004). This will be funded at the applicant's expense.

It is expected that all modifications / improvements to the public highway are achieved with a maximum carbon footprint of 40%. Materials used during this process must also be a minimum of 40% recycled and fully recyclable. Developers will be expected to demonstrate that these standards can be met prior to planning conditions being discharged. The developer is to agree the above with MCC's Statutory Approvals and Network Resilience Teams post planning approval and prior to construction taking place.

Waste Management details should be provided for the development site within the submitted Transport Statement/Assessment. The information should include the number of collections and location of collection points.
Swept path analysis should be provided of a 11.5m refuse vehicles within the development site. The swept path should demonstrate that the refuse vehicle can enter and exit in forward gear and manoeuvre around the site safely. If the development site proposes private waste collection then it is requested that details of this are provided.
It is requested that servicing is undertaken outside of the network AM and PM peak periods. It is also requested that a Service Management Strategy is in place.
Swept path analysis should be provided for the largest expected service/delivery vehicle within the development boundary. The number of deliveries and location of the delivery points should also be provided
It is requested that a service management strategy is submitted as part of the planning application.
It is recommended that all fencing / railings adjacent to the adopted highway are visually permeable from a distance of 600mm upwards to ensure adequate visual permeability for child pedestrians.
The applicant should be advised that all gated accesses will need to provide inward opening gates to ensure they do not impact on the adopted footway or highway.
For any projects that require a S278 and/or S38 highway agreement a Stage 1 Road Safety Audit (RSA 1) is requested to inform the preliminary design at the pre-planning stage - prior to planning approval being granted. This ensures that any underlying highway safety issues have been identified and mitigation is proposed accordingly. The scope and study area of the RSA1 will be agreed on a site by site basis however, as a minimum, it is expected to include the following:
• 5 years of accident history

• Audit of key pedestrian routes (crossing points, footway widths, condition etc.)

• Audit of key cycling routes (ASLs, cycle lanes etc.)

• Highway layout including, but not limited to (visibility assessments, speed limits, TROs, traffic calming etc.)
A copy of the report (with Designer's Response) is to be made available to the Statutory Approvals Team upon request.

A Construction Management Plan should be provided by the applicant prior to any construction works beginning. The Construction Management Plan should detail the phasing and quantification / classification of vehicular activity associated with planned construction. This should include commentary on types and frequency of vehicular demands together with evidence (including appropriate swept-path assessment) of satisfactory routeing both within the site and on the adjacent highway. The document should also consider ongoing construction works and contractor parking in the locality
It is also requested the applicant provides a dilapidation survey as part of the Construction Management Plan document. The survey should include photographs and commentary on the condition of carriageway / footways on construction vehicle routes surrounding the site.
Should there be any basement excavations proposed adjacent to the highway structural drawings and calculations for the temporary and permanent support works must be submitted for checking (for a fee) to

MCC Bridges/Structures Section. The applicant is advised to contact highways.structures@manchester.gov.uk.
The applicant is advised that any requirements for licensing, hoarding / scaffolding and any associated temporary traffic management arrangements will need discussion and agreement with the council's Highways Applications and Network Resilience teams via Contact Manchester (Tel. 0161 234 5004).

TfGM have provided the following comments .

The following comments are offered as advice on transport issues f and are made in the context of TfGM's role in the planning process, as set out in the footnote below.

TfGM would suggest that eventually a full Transport Assessment (TA) should be provided as part of the application. The TA should contain the information specified within the following sections of this letter.
1. Site Specific Comments

I. If the amount of development between Class B2 and Class B8 use is not established, the trips should be calculated using a worst case scenario i.e. Class B2 use.
II. The operation of the junction should be modelled.
III. The modelling should reflect the actual operation on site – as such the various demand dependent stages should be modelled to reflect the actual appearance – the system logs are available from TfGM UTC.
IV. The modelling should be based on the actual signal timings on site – the information is available from UTC at gmutc@tfgm.com for a fee.
V. If there is there is a predicted increase in congestion at the site then consideration should be made for installing MOVA to improve the capacity of the junction.
VI. Whilst there is an all-red pedestrian stage there are no pedestrian green signals across Welcomb Street – these should be added to help encourage and make safer pedestrian trips.
VII. The existing access road is very narrow and sub-standard – if this could be widened this would improve the access to the site.
VIII. The footways are too narrow and blocked by traffic signal poles – there appears to be sufficient space to widen the footways and the road.
IX. A review of the existing Traffic Regulation Orders should be undertaken surrounding the site, existing TROs should be refreshed and additional TROS implemented where necessary.

2. General Comments

Traffic Impact and Transport Modelling Requirements (to be included within a TA)
I. A description of current baseline traffic conditions in the area.
II. An analysis of injury accidents during a recent five-year period, commenting on whether there are any underlying patterns of injury accidents that might be affected by the development.
III. Traffic surveys and queue surveys (weekdays) - scope to be agreed with the Local Highway Authority (LHA), TfGM UTC and HFAS. TfGM UTC can be contacted in respect of the availability of any traffic counts in the area that could be used for the assessment
IV. A clear estimate of the level of new traffic likely to be associated with the development, based on an inspection of similar (and similarly-located) developments across the UK (excluding London) via the TRICS (or similar) database. The assessment work should be undertaken using a person-trip approach and applying the appropriate modal share percentages from local Census data. Other methodologies to determine trip rates are acceptable but these should be fully explained in the TA.

V. A clearly defined methodology for determining the distribution / assignment of development trips onto the network i.e. understanding of where such new traffic is likely to distribute to/from, based on data sources such a Census Journey-to-Work statistics and/or vehicle turning proportions at nearby junctions.
VI. An assessment of traffic levels and impacts at the specified year of opening of the development, and at a future year at least five years later, with due regard for traffic growth (if any).
VII. An understanding of the likely impacts of the proposed development considered alongside any other nearby committed developments.
VIII. In the relevant TA, clear diagrams should be provided illustrating the following elements, each individually:

- Base Flows
- Committed Development Flows
- Proposed Flows
- Proposed Distribution
- Base plus Committed plus proposed development
- Future plus Committed plus proposed development

IX. TfGM HFAS recommends an increase of about 30vehs/hr at a junction as an appropriate threshold for considering the necessity of a traffic impact assessment; this is in preference to a percentage-increase threshold, which tends to favour development in already heavily-trafficked areas.
X. The scope of the junctions to be assessed by detailed modelling should be agreed with TfGM (UTC) and the LHA in advance and will depend upon the outcome of the trip assessment and distribution exercise. For this reason, TfGM would advise that a trip generation and distribution exercise should be issued before submission of the planning application. Once this is undertaken it will be possible to finalise TfGM requirements in terms of the TA. This will largely depend on the amount of trip generation.
XI. Clear details of proposed vehicular access arrangements including general servicing arrangements. An engineering drawing should be supplied showing the changes to the road network to fully understand the impact of the proposed development.
XII. A swept path analysis should be provided for any vehicular access.
XIII. A review of Traffic Regulation Orders on the surrounding streets in the vicinity of the development.
XIV. An assessment of the likely environmental/traffic impacts of HGVs during the construction process.

3. Site Accessibility by Sustainable Modes

Walking and cycling should form the natural mode choice for shorter trips, and also provide a viable option to facilitate longer trips through providing easy access to public transport. New developments should connect with, and enhance, existing walking and cycling networks in their vicinity, and also provide high quality facilities and networks for walking and cycling within development sites.
The TA should include a comprehensive review of the existing provision in the vicinity of the site for all pedestrians including those with disabilities. In addition to walking distances and pedestrian desire lines, pedestrian environment (including footway condition and widths) and pedestrian safety and security should be considered.
An audit of the footways in the vicinity of the development should be undertaken and improvements identified.
A comprehensive review of the cycling infrastructure in the vicinity of the proposed development should also be undertaken. This should include an assessment of the connectivity of the site with existing cycle routes. The quality and condition of existing infrastructure, cyclist safety and security should also be considered.
The catchment area for cycling, walking and public transport should be captured in maps. The quality of the routes for pedestrians and cyclists should be described and this should include a description of any signing for cycle routes as appropriate.
The TA should provide a review of existing public transport services (including service frequency and location of nearest stations/stops), with a view to supporting improvements to existing public transport

services as required, in particular, assess the quality of the surrounding bus infrastructure i.e. upgrade to shelters etc.
The TA should include a plan clearly showing details of the proposed pedestrian and cycle access points serving the site and linkages into the surrounding area. Connectivity with local public transport networks should be highlighted. The applicant should consider measures to encourage access by sustainable modes. Possible measures include but are not limited to the provision of pedestrian crossings, cycleways, cycle parking, new/improved footway ensuring that there are linkages into existing cycle and pedestrian facilities, as well as upgrades to existing bus stops (where appropriate).
TfGM would suggest that a pedestrian survey is carried out in the vicinity of the site, as per guidance https://www.livingstreets.org.uk/media/1434/street-review-guidance-for-web.pdf and included as part of the TA.
Details of cycle parking facilities for the proposed development (e.g., number of spaces, location and type) should be provided and shown on plan.

4. Mitigation Measures
Impacts of the development should be identified through the above assessment work. The applicant should identify appropriate mitigation to accommodate any increases in traffic generation and increased pedestrian and cyclist movements. Any appropriate mitigation should be identified in conjunction with TfGM UTC and the LHA who will be happy to work with the developer to agree an approach.
The TA should consider the impact of the development on the existing public transport networks in terms of extension of bus services, additional person trips. Mitigation measures should be considered where appropriate.

5. Travel Plan
A Framework Travel Plan for the development should accompany any future planning application.

6. Other
If there are any changes planned for bus infrastructure, for example relocation of existing bus stops or the creation of new bus parking areas, TfGM would request that the developer liaise directly with TfGM's bus infrastructure which can be contacted at Shelters@tfgm.com

7. Suggested Useful Guidance
In relation to walking, the importance of providing and maintaining good quality footways, free from obstruction and wide enough for when they are at their busiest, is critical to encourage and maximise walking levels associated with new developments. Useful guidance on street layouts which encourage walking is provided in Manual for Streets (Department for Transport, 2007). MfS provides guidance on lightly trafficked residential streets, and Manual for Streets 2 (CIHT, 2010) further develops the principles of the first Manual for Streets for application in wider circumstances on busier streets, including town and district centres
In relation to cycling, infrastructure should be designed in accordance with current Greater Manchester Cycling Design Standards, the latest version of which is available from the TfGM website or by emailing cycling@tfgm.com. In particular, connections to/from and within developments should be designed in accordance with the Key Design Criteria of Safety, Coherence, Directness, Attractiveness and Comfort. A general principle is that infrastructure should be designed to be attractive to those who do not currently cycle, in order to drive the increase in cycling's mode share.
The Bee Network will be the largest joined-up system of walking and cycling routes in the UK and has been developed with all 10 Greater Manchester local authorities. More information on this is available on https://www.tfgm.com and TfGM would encourage the applicant to review the map online to determine whether there is an opportunity for this development to connect into the proposed Bee Network.

In view of the above comments, the proposed level of parking provision provided as detailed in the schedule of accommdation in the Design Statement may need to be revisited, as the schedule of accommodation does not identify which use class each of the proposed units would fall within. Furthermore, consideraiton will need to be given to spaces for the parking of vans and lorries , and security measures for the proposed remote parking area.

In addition whilst observations have been made regarding the level of electric vehicle charging points be provided, Part S of the Building regulations will supersede this , if the part S requirements would lead to a higher level of provision. I would , however, also advise that there would be an expection from a planning perspective for cabling to be provided to all parking spaces to enable electric charging points to be provided for all spaces in the future.

In addition , I would advise you that whilst the current site has limited opportunities for biodiversity , the proposed redevelopment of this site should incorporate native tree planting, soft landscaping and measures such as sparrow terraces, and bird and bat boxes etc in order to deliver biodiversity net gain within any future development. It is noted in the Design Statement that trees are to be removed. As such, a minimum of two for one replacement tree planting would be required, together with a tree age and condition survey to accompany any planning application submission to clearly idenify the trees to be removed and those to be retained , together with tree protection measures for those trees to be retained .

I trust the above information will be of assistance to you. If you would find a meeting beneficial when you have had chance to disgest the content of the email above, please let me know and I will send an invite for a face to face meeting through to you. I will however not be available between 3rd and 17th November 2022, so any meeting would need to be diarised for the week after my return.

The above advice is related to the information available to the City Council at this time. This advice may be subject to alteration as a result of consultation or if further information is brought to the attention of the City Council, which materially affects the consideration of this matter.

Kind regards,

Sue Wills
Principal Planner
Development Management North
Planning
Growth and Development Directorate.
Manchester City Council
Floor 6 Town Hall Extension
Albert Square
P.O.BOX 532
M60 2LA
External Tel: 0161 234 4524
Internal extension 34524
Mobile 07788978633
Email: sue.wills@manchester.gov.uk
http://www.manchester.gov.uk

From: Hannah Richardson <Hannah.Richardson@spawforths.co.uk>
Sent: 28 September 2022 13:20

To: Sue Wills <sue.wills@manchester.gov.uk>
Cc: 'Liz Brown' <BrownL@rpsgroup.com>; 'Joe Burnett' <JBurnett@networkspace.co.uk>
Subject: RE: LAND AT WELCOMB STREET, OPENSHAW, MANCHESTER

You don't often get email from hannah.richardson@spawforths.co.uk. Learn why this is important

Hi Sue
Any update on this please ?
Many Thanks
Hannah
Kind regards
HANNAH RICHARDSON
Associate Director: Chartered Town Planner
Phone: 01924 873873 Mobile: 07876 345404

From: Hannah Richardson
Sent: 16 September 2022 10:06
To: Sue Wills <sue.wills@manchester.gov.uk>
Cc: Liz Brown <BrownL@rpsgroup.com>; 'Joe Burnett' <JBurnett@networkspace.co.uk>
Subject: RE: LAND AT WELCOMB STREET, OPENSHAW, MANCHESTER
Thanks Sue, we would be very keen to set up this as soon as possible, when do you think you may receive Highway comments ?
Hannah
Kind regards
HANNAH RICHARDSON
Associate Director: Chartered Town Planner
Phone: 01924 873873 Mobile: 07876 345404

From: Sue Wills <sue.wills@manchester.gov.uk>
Sent: 16 September 2022 08:23
To: Hannah Richardson <Hannah.Richardson@spawforths.co.uk>
Subject: LAND AT WELCOMB STREET, OPENSHAW, MANCHESTER
Dear Hannah Richardson,
I am sorry for the delay in my reply . I can confirm receipt of your enquiry, and would suggest that a meeting be diarised , when I received initial comments from colleagues in Highways Services.
Kind regards,
Sue Wills
Principal Planner
Development Management North
Planning
Growth and Development Directorate.
Manchester City Council
Floor 6 Town Hall Extension
Albert Square
P.O.BOX 532
M60 2LA
External Tel: 0161 234 4524
Internal extension 34524
Mobile 07788978633
Email: sue.wills@manchester.gov.uk
http://www.manchester.gov.uk
From: Hannah Richardson <Hannah.Richardson@spawforths.co.uk>
Sent: 29 July 2022 15:54

To: Planning <Planning@manchester.gov.uk>
Cc: 'Liz Brown' <BrownL@rpsgroup.com>; 'Joe Burnett' <JBurnett@networkspace.co.uk>
Subject: Pre Application Enquiry; LAND AT WELCOMB STREET, OPENSHAW, MANCHESTER
Dear Sir/Madam,
Please see attached Pre Application package to request advice in respect of a proposed development at Welcomb Street, Manchester. Due to the size of the files, please see link below to download from Onedrive:
https://spawforthscouk-my.sharepoint.com/:f:/g/personal/hannah_richardson_spawforths_co_uk/EuVf5Oyufa9AqNwQwOGf2MsBWh4JfayXNUw6k9fi4NNHHg?e=bveIGv
We understand that there is no charge for Pre-Application advice.
I look forward to receiving confirmation of your receipt of this submission, and to arrange a meeting in due course.
Many Thanks
Hannah
Kind regards
HANNAH RICHARDSON
Associate Director: Chartered Town Planner
BSc (Hons), MA, MRTPI

****
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Appendix B Traffic Flow Survey Data

TOTAL TRAFFIC SURVEYS LTD
DATA COLLECTION

Job Title:	Welcomb Street, Openshaw
Job Number:	TTS-1415-June
Client:	Hydrock
Survey Date:	Tuesday 28th June 2022
Survey Period:	0700-1000 & 1500-1900
Survey Type:	Manual Classified Counts
Comments:	There were no incidents likely to affect the outcome of the surveys. Weather - Dry & Fine

TOTAL TRAFFIC SURVEYS LTD
DATA COLLECTION

SITE / LOCATION:	Welcomb Street, Openshaw	**JOB NO:**	TTS-1415	**DWG NO:**	TTS-1415-001	**DRAWN:**	SES
SURVEY DATE:	Tuesday 28th June 2022	**DWG TITLE:**	Location Plan and Observed Movements				
SURVEY TIMES:	0700-1000 & 1500-1900	**JOB TITLE:**	Welcomb Street, Openshaw				

TOTAL TRAFFIC SURVEYS LTD
DATA COLLECTION

Job Title:	**Welcomb Street, Openshaw**
Job Number:	**TTS-1415-Jun**
Survey Date:	**Tuesday 3rd May 2022**
Survey Type:	**Manual Classified Turning Counts**

Site: 1

Location: Welcomb St/A635 Ashton Old Road - 3 arm T/signals

	A - B									A - C									
TIME	PC	MC	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	PC	MC	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
07:00	0	0	16	4	1	1	0	22	24.8	7	5	234	37	11	6	3	303	320.2
07:15	0	0	9	4	1	0	0	14	14.9	9	5	254	55	7	10	1	341	357.6
07:30	0	0	6	4	0	0	0	10	10	7	5	277	51	5	2	4	351	356.7
07:45	0	0	12	6	0	0	0	18	18	6	2	266	43	8	4	4	333	347.8
H/TOT	0	0	43	18	2	1	0	64	67.7	29	17	1031	186	31	22	12	1328	1382.3
08:00	1	0	8	4	1	0	0	14	14.1	6	4	243	32	7	3	5	300	312.3
08:15	0	0	19	4	1	0	0	24	24.9	3	0	273	37	5	5	5	328	347.1
08:30	0	0	11	3	0	1	0	15	16.9	6	1	294	41	17	3	2	364	382.6
08:45	0	0	18	2	2	0	0	22	23.8	5	4	225	45	11	8	3	301	324.2
H/TOT	1	0	56	13	4	1	0	75	79.7	20	9	1035	155	40	19	15	1293	1366.2
09:00	0	0	11	0	0	0	0	11	11	1	0	213	49	6	8	1	278	299.3
09:15	0	0	7	2	0	1	0	10	11.9	1	3	198	39	4	3	4	252	264.7
09:30	0	0	11	2	1	0	0	14	14.9	2	0	196	50	11	5	3	267	289.3
09:45	0	0	9	3	0	0	0	12	12	2	2	179	46	7	5	5	246	266.5
H/TOT	0	0	38	7	1	1	0	47	49.8	6	5	786	184	28	21	13	1043	1119.8
P/TOT	1	0	137	38	7	3	0	186	197.2	55	31	2852	525	99	62	40	3664	3868.3
									77									1353.2

	A - B									A - C									
TIME	PC	MC	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	PC	MC	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
15:00	0	0	5	3	0	0	0	8	8	0	0	155	19	5	4	1	184	197.6
15:15	0	0	1	3	1	0	0	5	5.9	4	0	127	22	2	1	5	161	169
15:30	0	0	1	3	0	0	0	4	4	2	0	169	17	3	5	5	201	219.1
15:45	0	0	0	2	1	0	0	3	3.9	1	1	169	24	5	1	2	203	211
H/TOT	0	0	7	11	2	0	0	20	21.8	7	1	620	82	15	11	13	749	796.7
16:00	0	0	0	0	0	0	0	0	0	0	0	157	18	3	2	3	183	194
16:15	0	0	2	2	0	0	0	4	4	3	3	138	25	2	1	2	174	176.5
16:30	0	0	2	1	0	0	0	3	3	1	3	153	22	2	2	2	185	191
16:45	0	0	3	2	1	1	0	7	9.8	3	1	132	16	4	0	2	158	161.6
H/TOT	0	0	7	5	1	1	0	14	16.8	7	7	580	81	11	5	9	700	723.1
17:00	0	0	1	1	0	0	0	2	2	1	3	152	12	0	0	2	170	170.4
17:15	0	0	0	0	0	0	0	0	0	1	2	174	12	1	0	1	191	191.4
17:30	0	0	2	0	0	1	0	3	4.9	2	2	158	13	1	0	3	179	181.6
17:45	0	0	3	1	0	0	0	4	4	3	1	198	10	1	0	2	215	215.9
H/TOT	0	0	6	2	0	1	0	9	10.9	7	8	682	47	3	0	8	755	759.3
18:00	0	0	2	0	0	0	0	2	2	4	4	168	16	2	0	1	195	192.7
18:15	0	0	1	0	0	0	0	1	1	2	0	140	8	2	0	2	154	157.2
18:30	0	0	0	0	0	0	0	0	0	2	1	159	8	1	1	2	174	177.6
18:45	0	0	0	0	0	0	0	0	0	1	2	142	8	1	0	3	157	160.4
H/TOT	0	0	3	0	0	0	0	3	3	9	7	609	40	6	1	8	680	687.9
P/TOT	0	0	23	18	3	2	0	46	52.5	30	23	2491	250	35	17	38	2884	2967
									12									801

PCU Option WebT: Please select from the list of default PCU values using the drop-down in cell U10

PCU Factors

Car	LGV	OGV1	OGV2	Bus	M/C		P/C
1	1	1.9	2.9	2.5	0.4		0.2

Notes
PCU values taken from Webtag guidance and recent TfL projects
To exclude any vehicle from calculation, enter 0 into the relevant cell (this will remove the link to the selected drop-

Job Title:	**Welcomb Street, Openshaw**
Job Number:	**TTS-1415-Jun**
Survey Date:	**Tuesday 3rd May 2022**
Survey Type:	**Manual Classified Turning Counts**

Site: 1

Location: Welcomb St/A635 Ashton Old Road - 3 arm T/signals

	B - C									B - A								
TIME	PC	MC	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	PC	MC	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
07:00	0	0	2	2	1	0	0	5	5.9	0	0	2	1	1	0	0	4	4.9
07:15	0	0	0	0	2	1	0	3	6.7	0	0	2	2	4	0	0	8	11.6
07:30	0	0	0	6	0	0	0	6	6	0	0	3	3	0	0	0	6	6
07:45	0	0	3	5	0	0	0	8	8	0	0	2	2	1	1	0	6	8.8
H/TOT	0	0	5	13	3	1	0	22	26.6	0	0	9	8	6	1	0	24	31.3
08:00	0	0	5	6	0	0	0	11	11	0	0	3	1	0	0	0	4	4
08:15	0	0	3	3	1	0	0	7	7.9	0	0	1	4	0	0	0	5	5
08:30	0	0	4	4	1	0	0	9	9.9	0	0	1	4	2	1	0	8	11.7
08:45	0	0	3	4	2	0	0	9	10.8	0	0	7	5	2	1	0	15	18.7
H/TOT	0	0	15	17	4	0	0	36	39.6	0	0	12	14	4	2	0	32	39.4
09:00	0	0	5	3	2	1	0	11	14.7	0	0	5	1	0	0	0	6	6
09:15	0	0	5	4	0	0	0	9	9	0	0	6	3	0	1	0	10	11.9
09:30	0	0	2	5	1	0	0	8	8.9	0	0	7	2	1	0	0	10	10.9
09:45	0	0	3	7	0	1	0	11	12.9	0	0	8	7	1	0	0	16	16.9
H/TOT	0	0	15	19	3	2	0	39	45.5	0	0	26	13	2	1	0	42	45.7
P/TOT	0	0	35	49	10	3	0	97	111.7	0	0	47	35	12	4	0	98	116.4
									43									41

	B - C									B - A								
TIME	PC	MC	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	PC	MC	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
15:00	0	0	3	1	1	0	0	5	5.9	1	0	6	4	3	0	0	14	15.9
15:15	0	0	6	5	0	0	0	11	11	0	0	8	5	0	1	0	14	15.9
15:30	0	0	4	3	1	0	0	8	8.9	0	0	8	2	1	0	0	11	11.9
15:45	0	0	9	3	1	0	0	13	13.9	0	0	8	4	1	0	0	13	13.9
H/TOT	0	0	22	12	3	0	0	37	39.7	1	0	30	15	5	1	0	52	57.6
16:00	0	0	9	6	0	0	0	15	15	0	0	11	2	0	0	0	13	13
16:15	0	0	10	0	0	0	0	10	10	0	1	17	3	0	0	0	21	20.4
16:30	0	0	8	3	0	0	1	12	13.5	0	0	21	2	1	0	0	24	24.9
16:45	0	0	8	2	0	0	0	10	10	0	0	13	1	0	0	0	14	14
H/TOT	0	0	35	11	0	0	1	47	48.5	0	1	62	8	1	0	0	72	72.3
17:00	0	0	3	0	1	0	0	4	4.9	0	0	15	3	0	0	0	18	18
17:15	0	0	5	0	0	0	0	5	5	0	0	7	0	0	1	0	8	9.9
17:30	0	0	4	0	1	0	0	5	5.9	1	0	8	0	0	0	0	9	8.2
17:45	0	0	2	0	0	0	0	2	2	0	0	6	2	0	0	0	8	8
H/TOT	0	0	14	0	2	0	0	16	17.8	1	0	36	5	0	1	0	43	44.1
18:00	0	0	2	0	0	0	0	2	2	0	0	7	0	0	0	0	7	7
18:15	0	0	1	2	0	0	0	3	3	0	1	1	0	0	0	0	2	1.4
18:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
18:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	3	2	0	0	0	5	5	0	1	12	0	0	0	0	13	12.4
P/TOT	0	0	74	25	5	0	1	105	111	2	2	140	28	6	2	0	180	186.4
									48									59

down criteria though)

TOTAL TRAFFIC SURVEYS LTD
DATA COLLECTION

Job Title: Welcomb Street, Openshaw
Job Number: TTS-1415-Jun
Survey Date: Tuesday 3rd May 2022
Survey Type: Manual Classified Turning Counts

Site: 1

Location: Welcomb St/A635 Ashton Old Road - 3 arm T/signals

TIME	C - A PC	MC	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	C - B PC	MC	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
07:00	1	1	63	19	1	2	3	90	97.8	0	0	2	2	1	1	0	6	8.8
07:15	2	1	105	16	4	0	3	131	136.9	0	0	10	3	0	0	0	13	13
07:30	1	1	105	17	4	3	1	132	141.4	0	1	7	2	1	1	0	12	14.2
07:45	0	1	89	21	4	3	4	122	136.7	0	0	9	3	0	0	0	12	12
H/TOT	4	4	362	73	13	8	11	475	512.8	0	1	28	10	2	2	0	43	48
08:00	1	0	115	13	6	3	3	141	155.8	0	0	2	3	0	0	0	5	5
08:15	1	1	112	21	4	4	2	145	157.8	0	0	7	1	1	0	0	9	9.9
08:30	2	0	96	21	6	6	4	135	156.2	0	0	5	2	0	2	0	9	12.8
08:45	0	0	100	27	5	3	4	139	155.2	0	0	5	5	1	1	0	12	14.8
H/TOT	4	1	423	82	21	16	13	560	625	0	0	19	11	2	3	0	35	42.5
09:00	0	0	118	22	6	2	2	150	162.2	0	0	6	4	0	0	0	10	10
09:15	0	0	119	19	6	2	3	149	162.7	0	0	4	9	1	1	0	15	17.8
09:30	1	0	114	20	12	3	4	154	175.7	0	0	5	3	2	0	0	10	11.8
09:45	2	1	100	34	8	0	2	147	155	0	0	5	5	2	0	0	12	13.8
H/TOT	3	1	451	95	32	7	11	600	655.6	0	0	20	21	5	1	0	47	53.4
P/TOT	11	6	1236	250	66	31	35	1635	1793.4	0	1	67	42	9	6	0	125	143.9
									631									48

TIME	C - B PC	MC	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	C - B PC	MC	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
15:00	2	0	142	27	2	3	2	178	186.9	0	0	6	6	3	0	0	15	17.7
15:15	0	1	164	30	4	2	4	205	217.8	0	0	2	0	0	0	0	2	2
15:30	3	3	169	36	2	1	4	218	223.5	0	0	5	1	3	0	0	9	11.7
15:45	2	1	197	34	2	2	2	240	246.4	0	0	2	0	1	0	0	3	3.9
H/TOT	7	5	672	127	10	8	12	841	874.6	0	0	15	7	7	0	0	29	35.3
16:00	3	3	179	39	2	3	2	231	237.3	0	0	3	1	1	0	0	5	5.9
16:15	4	2	209	21	5	1	1	243	246.5	0	0	4	1	0	0	0	5	5
16:30	9	4	195	23	1	1	3	236	233.7	0	0	6	1	0	1	0	8	9.9
16:45	7	4	176	23	1	2	1	214	212.2	0	0	3	0	0	0	0	3	3
H/TOT	23	13	759	106	9	7	7	924	929.7	0	0	16	3	1	1	0	21	23.8
17:00	10	4	213	18	1	2	2	250	247.3	0	0	0	0	1	0	0	1	1.9
17:15	5	3	181	17	3	2	2	213	216.7	0	0	1	0	0	0	0	1	1
17:30	3	5	199	9	1	1	2	220	220.4	0	0	0	1	0	0	0	1	1
17:45	4	3	193	8	2	1	2	213	214.7	0	0	0	0	0	0	0	0	0
H/TOT	22	15	786	52	7	6	8	896	899.1	0	0	1	1	1	0	0	3	3.9
18:00	3	1	178	7	4	0	2	195	198.6	0	0	0	0	0	0	0	0	0
18:15	3	1	186	6	0	2	2	200	203.8	0	0	1	1	0	0	0	2	2
18:30	5	3	163	14	0	0	4	189	189.2	0	0	0	1	0	0	0	1	1
18:45	3	0	143	12	1	1	1	161	162.9	0	0	0	0	0	0	0	0	0
H/TOT	14	5	670	39	5	3	9	745	754.5	0	0	1	2	0	0	0	3	3
P/TOT	66	38	2887	324	31	24	36	3406	3457.9	0	0	33	13	9	1	0	56	66
									954									27

TOTAL TRAFFIC SURVEYS LTD
DATA COLLECTION

Job Title:	**Welcomb Street, Openshaw**
Job Number:	**TTS-1415-Jun**
Survey Date:	**Tuesday 3rd May 2022**
Survey Type:	**Manual Classified Turning Counts**

Site: 2

Location: Bertha St/A635 Ashton Old Road - 3 arm T junc

	A - B									A - C									
TIME	PC	MC	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	PC	MC	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
07:00	0	0	3	2	0	1	0	6	7.9	7	5	246	41	13	7	3	322	342.9
07:15	0	0	1	1	0	0	0	2	2	9	5	264	56	7	10	1	352	368.6
07:30	0	0	2	0	0	0	0	2	2	8	5	286	55	6	2	4	366	371.8
07:45	1	0	2	2	0	0	0	5	4.2	5	2	280	49	8	4	4	352	367.6
H/TOT	1	0	8	5	0	1	0	15	16.1	29	17	1076	201	34	23	12	1392	1450.9
08:00	0	0	2	0	1	0	0	3	3.9	8	4	251	37	8	3	5	316	327.6
08:15	0	0	4	1	0	0	0	5	5	3	0	295	42	6	5	5	356	376
08:30	0	1	5	3	0	0	0	9	8.4	6	1	301	42	18	4	2	374	395.4
08:45	1	0	4	0	0	0	0	5	4.2	5	4	246	47	12	8	3	325	349.1
H/TOT	1	1	15	4	1	0	0	22	21.5	22	9	1093	168	44	20	15	1371	1448.1
09:00	0	0	8	6	0	0	0	14	14	1	0	227	48	6	8	1	291	312.3
09:15	0	0	4	1	0	0	0	5	5	1	3	209	41	5	4	4	267	282.5
09:30	0	0	1	0	1	0	0	2	2.9	2	0	207	53	11	5	3	281	303.3
09:45	0	0	5	1	1	0	0	7	7.9	2	2	184	47	6	5	5	251	270.6
H/TOT	0	0	18	8	2	0	0	28	29.8	6	5	827	189	28	22	13	1090	1168.7
P/TOT	2	1	41	17	3	1	0	65	67.4	57	31	2996	558	106	65	40	3853	4067.7
									32									1432.8

	A - B									A - C									
TIME	PC	MC	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	PC	MC	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
15:00	0	0	0	0	0	0	0	0	0	0	0	158	20	5	4	1	188	201.6
15:15	0	0	1	3	0	0	0	4	4	4	0	132	26	3	1	5	171	179.9
15:30	0	0	1	0	0	0	0	1	1	2	0	172	20	3	5	5	207	225.1
15:45	0	0	0	0	0	0	0	0	0	1	1	173	26	6	1	2	210	218.9
H/TOT	0	0	2	3	0	0	0	5	5	7	1	635	92	17	11	13	776	825.5
16:00	0	0	0	1	0	0	0	1	1	0	0	153	19	3	2	3	180	191
16:15	0	0	1	1	0	0	0	2	2	3	3	141	27	2	1	2	179	181.5
16:30	0	0	2	0	0	0	0	2	2	2	3	154	24	2	2	2	189	194.2
16:45	0	0	0	0	0	0	0	0	0	3	1	134	17	5	1	2	163	169.4
H/TOT	0	0	3	2	0	0	0	5	5	8	7	582	87	12	6	9	711	736.1
17:00	0	0	0	1	0	0	0	1	1	1	3	153	13	0	0	2	172	172.4
17:15	1	0	0	0	0	0	0	1	0.2	1	2	176	12	1	0	1	193	193.4
17:30	0	0	1	0	0	0	0	1	1	2	2	162	12	1	1	3	183	187.5
17:45	0	0	1	0	0	0	0	1	1	3	2	201	11	1	0	2	220	220.3
H/TOT	1	0	2	1	0	0	0	4	3.2	7	9	692	48	3	1	8	768	773.6
18:00	0	0	0	0	0	0	0	0	0	3	4	172	16	2	0	1	198	196.5
18:15	0	0	0	0	0	0	0	0	0	2	0	143	9	2	0	2	158	161.2
18:30	0	0	0	1	0	0	0	1	1	2	1	157	7	1	1	2	171	174.6
18:45	0	0	2	1	0	0	0	3	3	1	2	143	8	1	0	3	158	161.4
H/TOT	0	0	2	2	0	0	0	4	4	8	7	615	40	6	1	8	685	693.7
P/TOT	1	0	9	8	0	0	0	18	17.2	30	24	2524	267	38	19	38	2940	3028.9
									4									817

PCU Option WebTa Please select from the list of default PCU values using the drop-down in cell U10

PCU Factors

Car	LGV	OGV1	OGV2	Bus	M/C	P/C
1	1	1.9	2.9	2.5	0.4	0.2

Notes
PCU values taken from Webtag guidance and recent TfL projects
To exclude any vehicle from calculation, enter 0 into the relevant cell (this will remove the link to the selected drop-

TOTAL TRAFFIC SURVEYS LTD
DATA COLLECTION

Job Title:	**Welcomb Street, Openshaw**
Job Number:	**TTS-1415-Jun**
Survey Date:	**Tuesday 3rd May 2022**
Survey Type:	**Manual Classified Turning Counts**

Site: 2

Location: Bertha St/A635 Ashton Old Road - 3 arm T junc

	B - C									B - A								
TIME	PC	MC	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	PC	MC	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
07:30	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	**0**	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
H/TOT	0	0	4	0	0	0	0	4	4	0	0	1	0	0	0	0	1	1
09:00	0	0	0	1	0	0	0	1	1	0	0	0	1	0	0	0	1	1
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	2	0	0	0	2	2	0	0	1	1	0	0	0	2	2
P/TOT	0	0	4	4	0	0	0	8	8	0	0	2	1	0	0	0	3	3
									5									2

	B - C									B - A								
TIME	PC	MC	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	PC	MC	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
15:00	0	0	0	1	0	0	0	1	**1**	0	0	1	0	0	0	0	1	1
15:15	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	1	0	0	0	1	**1**	0	0	1	0	0	0	0	1	1
16:00	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0
16:30	0	0	1	0	0	0	0	1	**1**	0	0	1	0	0	0	0	1	1
16:45	0	0	0	0	0	0	0	0	**0**	0	0	1	0	0	0	0	1	1
H/TOT	0	0	1	0	0	0	0	1	**1**	0	0	2	0	0	0	0	2	2
17:00	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	**0**	**0**	0	0	0	0	0	0	0	**0**	0
18:00	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	**0**	**0**	0	0	0	0	0	0	0	**0**	0
P/TOT	0	0	1	1	0	0	0	2	**2**	0	0	3	0	0	0	0	3	3
									0									0

down criteria though)

TOTAL TRAFFIC SURVEYS LTD
DATA COLLECTION

Job Title:	**Welcomb Street, Openshaw**
Job Number:	**TTS-1415-Jun**
Survey Date:	**Tuesday 3rd May 2022**
Survey Type:	**Manual Classified Turning Counts**

Site: 2

Location: Bertha St/A635 Ashton Old Road - 3 arm T junc

	C - A									C - B									
TIME	PC	MC	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	PC	MC	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
07:00	1	1	62	21	1	1	3	90	95.9	0	0	1	0	1	1	0	3	5.8
07:15	2	1	103	18	8	0	3	135	144.5	0	0	0	0	0	0	0	0	0
07:30	1	1	107	20	4	3	1	137	146.4	0	0	0	0	0	0	0	0	0
07:45	0	1	92	23	5	4	4	129	146.5	0	0	0	0	0	0	0	0	0
H/TOT	4	4	364	82	18	8	11	491	533.3	0	0	1	0	1	1	0	3	5.8
08:00	1	0	118	15	6	3	3	146	160.8	0	0	0	0	0	0	0	0	0
08:15	1	1	112	24	4	4	2	148	160.8	0	0	0	0	0	0	0	0	0
08:30	2	0	94	25	8	7	4	140	164.9	0	0	1	0	0	0	0	1	1
08:45	0	0	107	33	7	4	4	155	174.9	0	0	0	0	0	0	0	0	0
H/TOT	4	1	431	97	25	18	13	589	661.4	0	0	1	0	0	0	0	1	1
09:00	0	0	120	21	6	2	2	151	163.2	0	0	0	1	0	0	0	1	1
09:15	0	0	123	22	6	3	3	157	172.6	0	0	0	0	0	0	0	0	0
09:30	1	0	118	22	13	3	4	161	183.6	0	0	1	0	0	0	0	1	1
09:45	2	1	108	40	8	0	2	161	169	0	0	0	0	0	0	0	0	0
H/TOT	3	1	469	105	33	8	11	630	688.4	0	0	1	1	0	0	0	2	2
P/TOT	11	6	1264	284	76	34	35	1710	1883.1	0	0	3	1	1	1	0	6	8.8
									664									2

	C - A									C - B									
TIME	PC	MC	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	PC	MC	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
15:00	2	0	149	29	5	3	2	190	201.6	0	0	0	0	0	0	0	0	0
15:15	1	1	175	35	4	3	4	223	236.9	0	0	0	1	0	0	0	1	1
15:30	3	3	176	36	3	1	4	226	232.4	0	0	1	1	0	0	0	2	2
15:45	2	1	204	37	3	2	2	251	258.3	0	0	1	0	0	0	0	1	1
H/TOT	8	5	704	137	15	9	12	890	929.2	0	0	2	2	0	0	0	4	4
16:00	3	3	190	40	2	3	2	243	249.3	0	0	0	0	0	0	0	0	0
16:15	4	3	222	24	5	1	1	260	262.9	0	0	0	0	0	0	0	0	0
16:30	8	4	219	25	2	1	3	262	261.4	0	0	0	0	0	0	0	0	0
16:45	8	4	191	23	1	2	1	230	227.4	0	0	0	0	0	0	0	0	0
H/TOT	23	14	822	112	10	7	7	995	1001	0	0	0	0	0	0	0	**0**	0
17:00	10	4	228	21	1	2	2	268	265.3	0	0	0	0	0	0	0	0	0
17:15	6	3	188	17	3	3	2	222	226.8	0	0	0	0	0	0	0	0	0
17:30	4	5	205	8	1	1	2	226	225.6	0	0	0	0	0	0	0	0	0
17:45	5	3	195	9	2	1	2	217	217.9	0	0	0	0	0	0	0	0	0
H/TOT	25	15	816	55	7	7	8	933	935.6	0	0	0	0	0	0	0	**0**	0
18:00	3	1	186	7	4	0	2	203	206.6	0	0	0	0	0	0	0	0	0
18:15	3	2	186	6	0	2	2	201	204.2	0	0	0	0	0	0	0	0	0
18:30	5	3	163	14	0	0	3	188	186.7	0	0	0	0	0	0	0	0	0
18:45	3	0	146	12	1	1	2	165	168.4	0	0	0	0	0	0	0	0	0
H/TOT	14	6	681	39	5	3	9	757	765.9	0	0	0	0	0	0	0	**0**	0
P/TOT	70	40	3023	343	37	26	36	3575	3631.7	0	0	2	2	0	0	0	4	4
									1003									3

Appendix C BREEAM Accessibility Calculation

BREEAM 2018 Tra01/02 Accessibility Index calculator

BREEAM UK delivered by bre

Using the drop down boxes make the relevant selections and press the 'Select' button

Building type: Offices/Industrial

No. nodes required: 2

Select

NODE 1

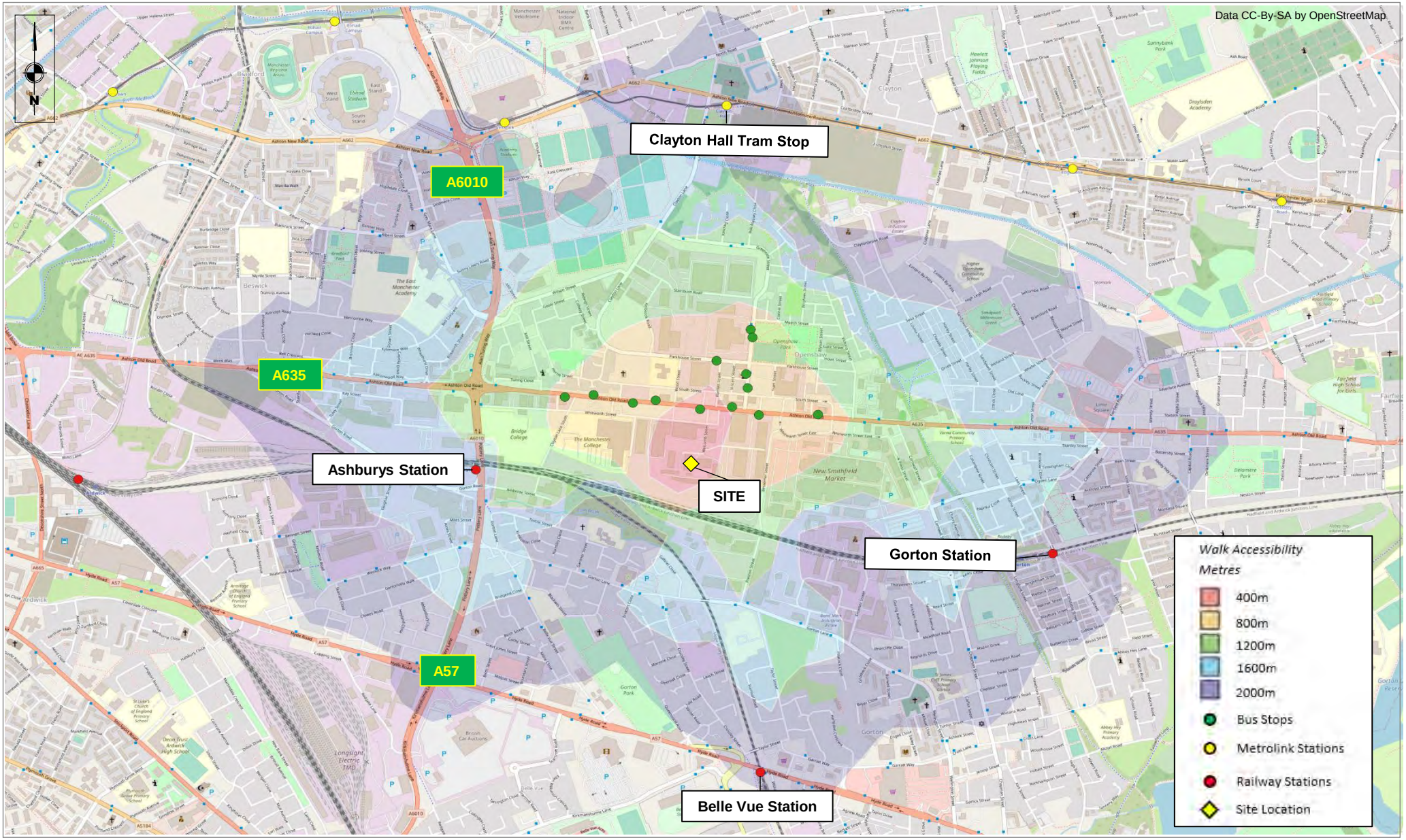
Public transport type	Bus									
Distance to node (m)	83									
	Service 1	Service 2	Service 3	Service 4	Service 5	Service 6	Service 7	Service 8	Service 9	Service 10
Average frequency per hour	5	5								

NODE 2

Public transport type	Rail									
Distance to node (m)	1000									
	Service 1	Service 2	Service 3	Service 4	Service 5	Service 6	Service 7	Service 8	Service 9	Service 10
Average frequency per hour	2	2								

Accessibility Index	6.57

Appendix D Accessibility Figures

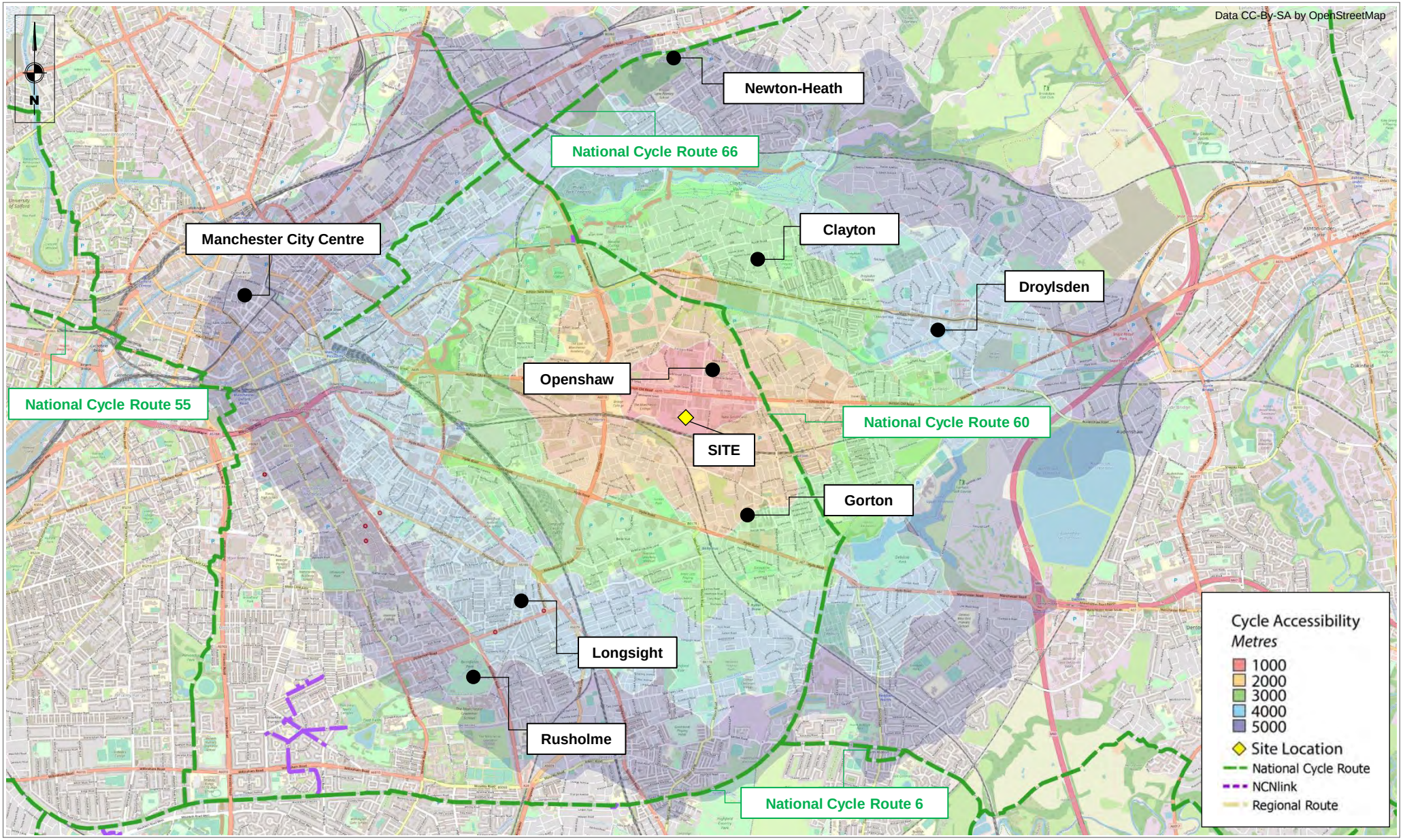


Hydrock

Project Title: 22975 – Welcomb Street, Openshaw	Drawing Title: Accessibility: 2km Walking Catchment	Job Number: 22975	By: SR	Rev	Description	Date	By
		Date: 21.06.2022	Checked: TA	-	-	-	-
		Scale: NTS	Status: -	-	-	-	-
				-	-	-	-
				-	-	-	-

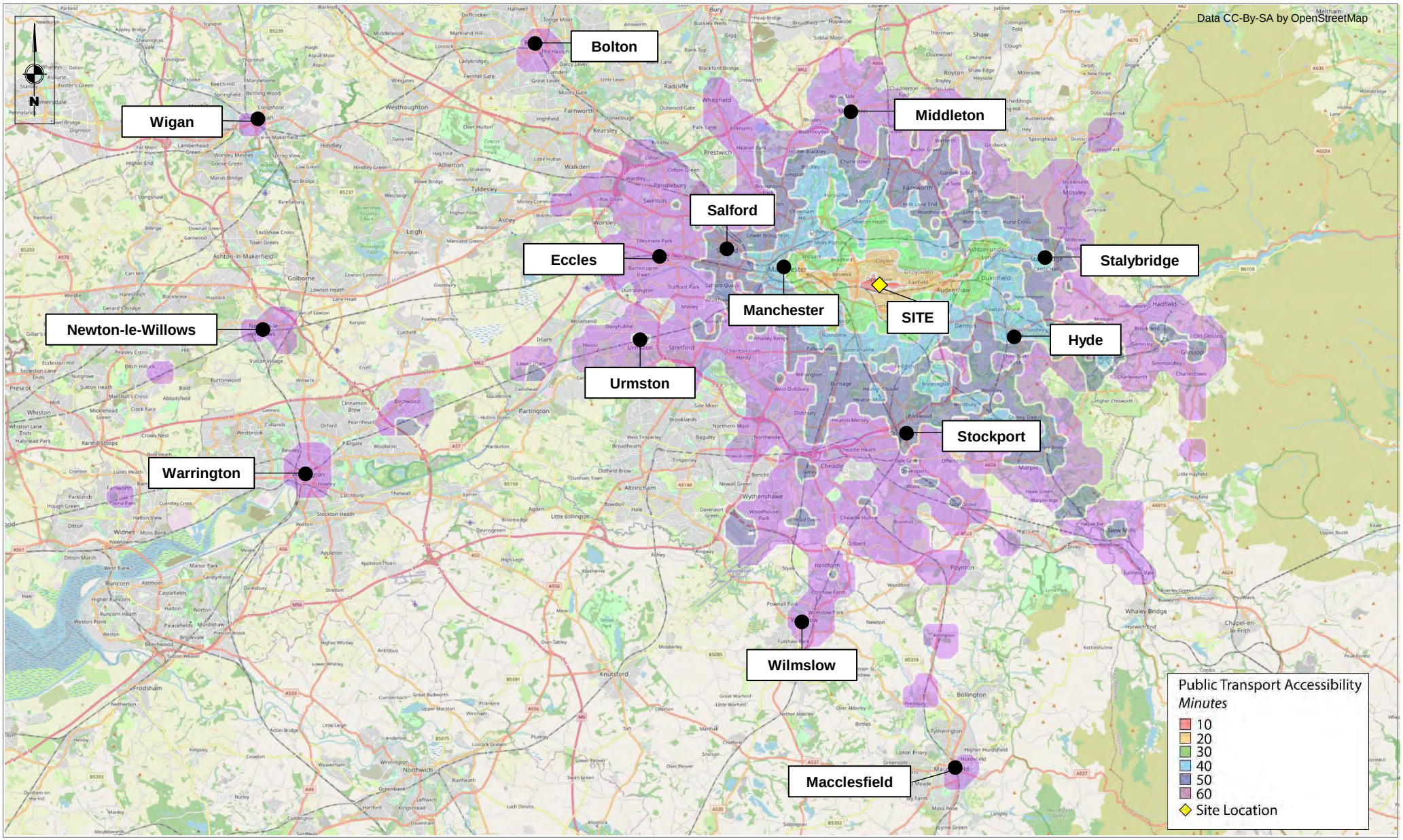
Drawing No.: APPENDIX C

Figure: 1



Hydrock

Project Title: 22975 – Welcomb Street, Openshaw	Drawing Title: Accessibility: 5km Cycling Catchment	Job Number: 22975	By: SR	Rev	Description	Date	By	Drawing No.: APPENDIX C
		Date: 21.06.2022	Checked: TA	-	-	-	-	
		Scale: NTS	Status: -	-	-	-	-	Figure: 2
				-	-	-	-	
				-	-	-	-	



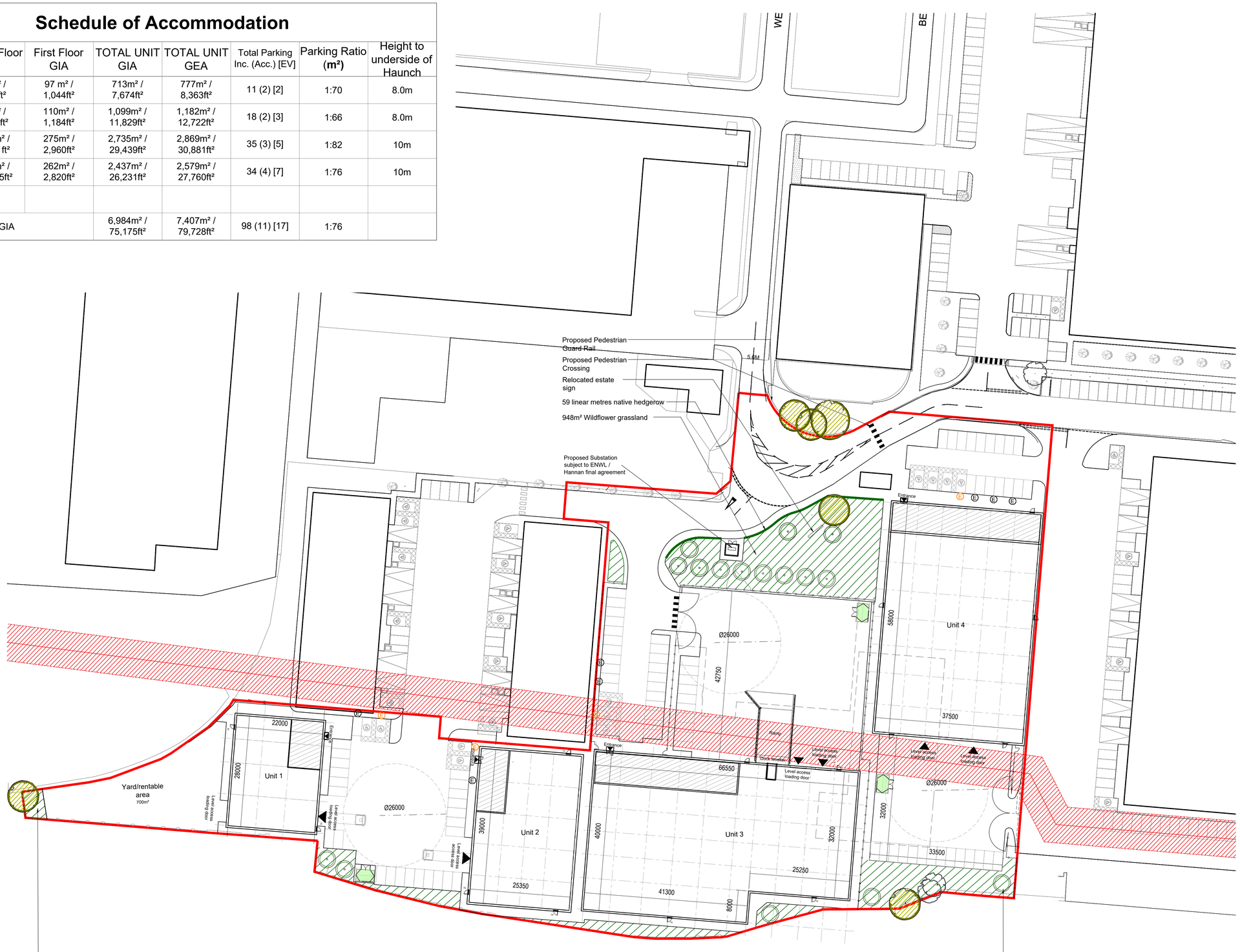
Hydrock

Project Title: 22975 – Welcomb Street, Openshaw	Drawing Title: Accessibility: 60minute Public Transport Catchment	Job Number: 22975	By: SR	Rev	Description	Date	By	Drawing No.: APPENDIX C
		Date: 21.06.2022	Checked: TA	-	-	-	-	
		Scale: NTS	Status: -	-	-	-	-	Figure: 3
				-	-	-	-	
				-	-	-	-	

Appendix E Proposed Site Layout

Schedule of Accommodation

Unit	Ground Floor GIA	First Floor GIA	TOTAL UNIT GIA	TOTAL UNIT GEA	Total Parking Inc. (Acc.) [EV]	Parking Ratio (m²)	Height to underside of Haunch
Unit 1	616m² / 6,630ft²	97 m² / 1,044ft²	713m² / 7,674ft²	777m² / 8,363ft²	11 (2) [2]	1:70	8.0m
Unit 2	989m² / 10,645ft²	110m² / 1,184ft²	1,099m² / 11,829ft²	1,182m² / 12,722ft²	18 (2) [3]	1:66	8.0m
Unit 3	2,460m² / 26,479 ft²	275m² / 2,960ft²	2,735m² / 29,439ft²	2,869m² / 30,881ft²	35 (3) [5]	1:82	10m
Unit 4	2,175m² / 23,411.5ft²	262m² / 2,820ft²	2,437m² / 26,231ft²	2,579m² / 27,760ft²	34 (4) [7]	1:76	10m
TOTAL GIA			6,984m² / 75,175ft²	7,407m² / 79,728ft²	98 (11) [17]	1:76	



NOTES AEWTP026C

- All dimensions and levels are to be checked on site.
- Any discrepancies are to be reported to the architect before any work commences
- This drawing shall not be scaled to ascertain any dimensions. Work to figured dimensions only.
- This drawing shall not be reproduced without express written permission from AEW.
- Title overlay drawings and ownership boundaries are produced using all reasonable endeavors. AEW cannot be responsible for the accuracy or scale discrepancy of base plans supplied to them.
- All works are to be undertaken in accordance with Building Regulations and the latest British Standards.
- All proprietary materials and products are to be used strictly in accordance with the manufacturers recommendations.

CDM 2015

Client notified of duties: **07/04/21**

Principal Designer: **Client**

Unless noted below, all known hazards have been highlighted on the drawing:

N 0 5 10 15 20 25m

Scale 1:500

- Site Boundary 4.45ac / 1.80ha
- Mezzanine Extents
- 30" combined sewer with 30ft easement. Exact alignment TBC by survey
- Footprint of existing Zone A + B
- Landscape Planting to Landscape Architect Specification. Existing trees and shrubs to be retained where possible.
- Existing trees to be retained
- Proposed tree planting

Manchester City Council Maximum parking standards:

B2 = 1:45 sq.m
B8 = 1:100 sq.m

- Proposed Bin store
- Pedestrian gate with panic hardware
- Electrical Vehicle Charging spaces
- Future provision Electrical Vehicle Charging spaces with cable routes

NOTES

HGV circulation subject to tracking analysis

REV	Date	Drawn by: -	Checked by: -
P12	16/04/24	MW	DRS
Planning Issue			

Status: S4 — Purpose of Issue: For Planning

drawing stage: **Stage 3**

client: **Network Space**

project: **Welcomb Street Openshaw**

drawing title: **Proposed Site Plan**

date: Apr 2024 — drawn: MW

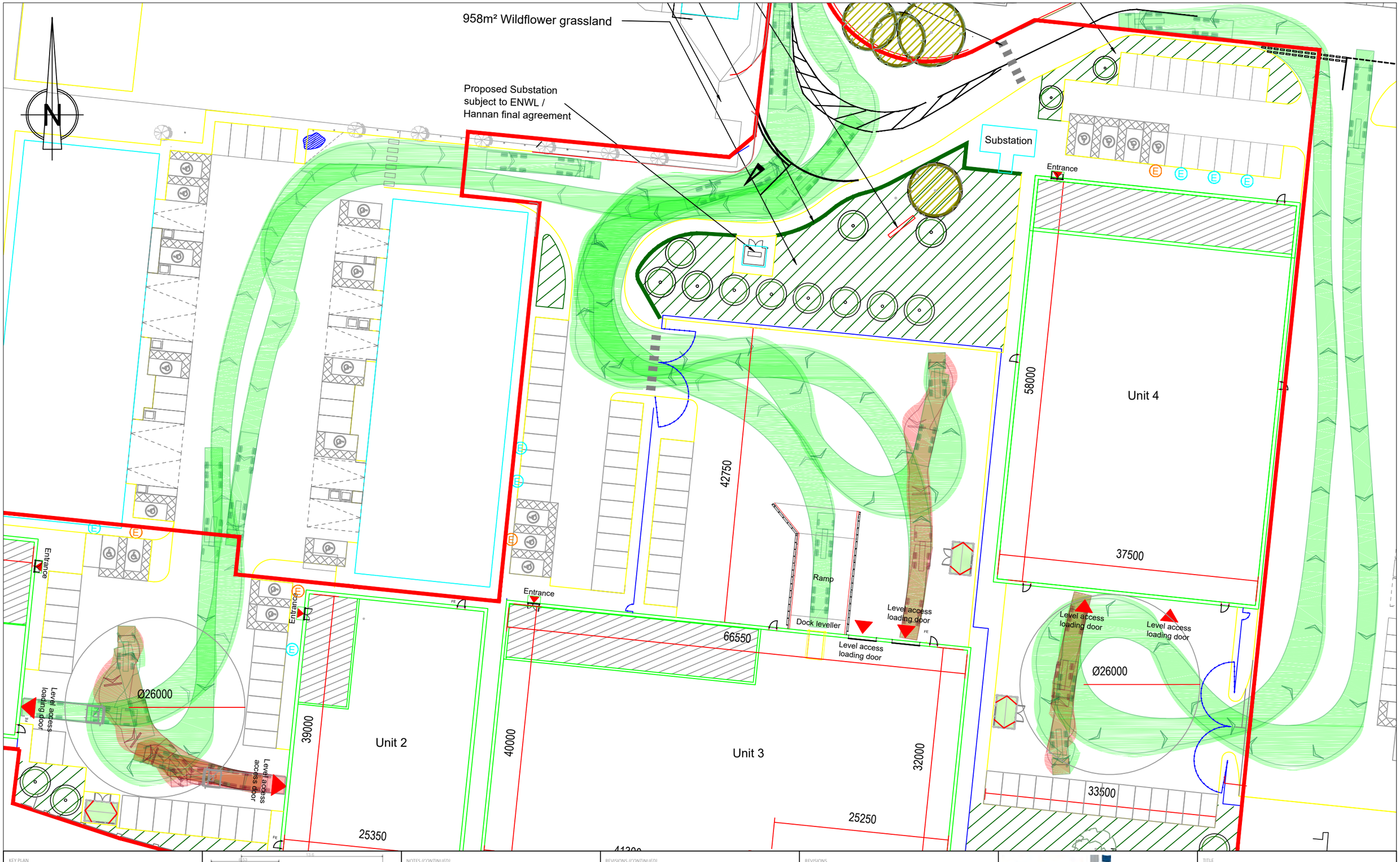
scale@A1: 1:500 — checked: DRS

Rev **P12**

Job No **12481-AEW-XX-XX-DR-A-0503**

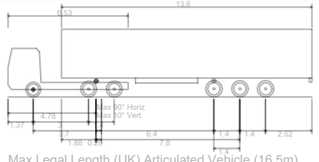
aew architects
0161 214 4370
www.aewarchitects.com

Appendix F Swept Path Analysis



KEY PLAN

- VEHICLE BODY IN FORWARD GEAR
- VEHICLE BODY IN REVERSE GEAR
- VEHICLE CHASSIS IN FORWARD GEAR
- VEHICLE CHASSIS IN REVERSE GEAR



Max Legal Length (UK) Articulated Vehicle (16.5m)	
Overall Length	16.500m
Overall Width	2.550m
Overall Body Height	3.681m
Min Body Ground Clearance	0.411m
Max Track Width	2.500m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	6.530m

NOTES *(CONTINUED)*

1) THIS DRAWING IS FOR DISCUSSION PURPOSES ONLY AND NOT FOR CONSTRUCTION
2) THE CONTENT OF THIS DRAWING WILL REQUIRE FURTHER WORK SUCH AS A ROAD SAFETY AUDIT AND DETAILED DESIGN
3) THIS DRAWING IS BASED ON 3RD PARTY SURVEY INFORMATION

REVISIONS *(CONTINUED)*

P06	FIRST ISSUE					
	HT	30.04.24	SD	30.04.24	SD	30.04.24
P05	FIRST ISSUE					
	HT	22.04.24	SD	22.04.24	SD	22.04.24

REVISIONS

P01.04	FIRST ISSUE					
	CR	02.11.23	SD	02.11.23	SD	02.11.23
P01.03	FIRST ISSUE					
	HT	21.06.23	TA	21.06.23	SD	21.06.23
P01.02	FIRST ISSUE					
	HT	21.06.23	TA	21.06.23	SD	21.06.23
P01.01	FIRST ISSUE					
	HT	23.05.23	TA	23.05.23	SD	23.05.23
REV	REVNOTES	DRAWNBY	DATE-D	CHKBY	DATE-C	APPBY	DATE-A

Hydrock

CLIENT
Network Space

PROJECT
Welcomb Street, Manchester

TITLE
Swept Path Analysis - Maximum Legal HGV (UK) - Proposed Site Layout

HYDROCK PROJECT NO.	SCALE @ A3
TMBI - 22973	1:500

STATUS DESCRIPTION	STATUS
Suitable for Stage Approval	S4

DRAWING NO.	REVISION
22973-HYD-XX-XX-DR-TP-0001	P06

67 linear metres native hedgerow

958m² Wildflower grassland

Proposed Substation subject to ENWL / Hannan final agreement

Substation

Entrance

Unit 4

58000

42750

37500

Ramp

Dock leveller

Level access loading door

Level access loading door

Level access loading door

Level access loading door

Level access loading door

Level access access door

Entrance

Entrance

Entrance

Entrance

Ø26000

Ø26000

66550

39000

40000

32000

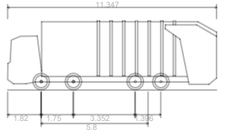
33500

Unit 2

Unit 3

KEY PLAN

- VEHICLE BODY IN FORWARD GEAR
- VEHICLE BODY IN REVERSE GEAR
- VEHICLE CHASSIS IN FORWARD GEAR
- VEHICLE CHASSIS IN REVERSE GEAR



Large Refuse Vehicle (4 axle)	
Overall Length	11.347m
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

NOTES *(CONTINUED)*

1) THIS DRAWING IS FOR DISCUSSION PURPOSES ONLY AND NOT FOR CONSTRUCTION
2) THE CONTENT OF THIS DRAWING WILL REQUIRE FURTHER WORK SUCH AS A ROAD SAFETY AUDIT AND DETAILED DESIGN
3) THIS DRAWING IS BASED ON 3RD PARTY SURVEY INFORMATION

REVISIONS *(CONTINUED)*

P06	FIRST ISSUE					
	HT	30.04.24	SD	30.04.24	SD	30.04.24
P05	FIRST ISSUE					
	HT	22.04.24	SD	22.04.24	SD	22.04.24

REVISIONS

P01.04	FIRST ISSUE					
	CR	02.11.23	SD	02.11.23	SD	02.11.23
P01.03	FIRST ISSUE					
	HT	21.06.23	TA	21.06.23	SD	21.06.23
P01.02	FIRST ISSUE					
	HT	21.06.23	TA	21.06.23	SD	21.06.23
P01.01	FIRST ISSUE					
	HT	23.05.23	TA	23.05.23	SD	23.05.23
REV	REVNOTES					
	DRAWNBY	DATE-D	CHKBY	DATE-C	APPBY	DATE-A

Hydrock

CLIENT: Network Space

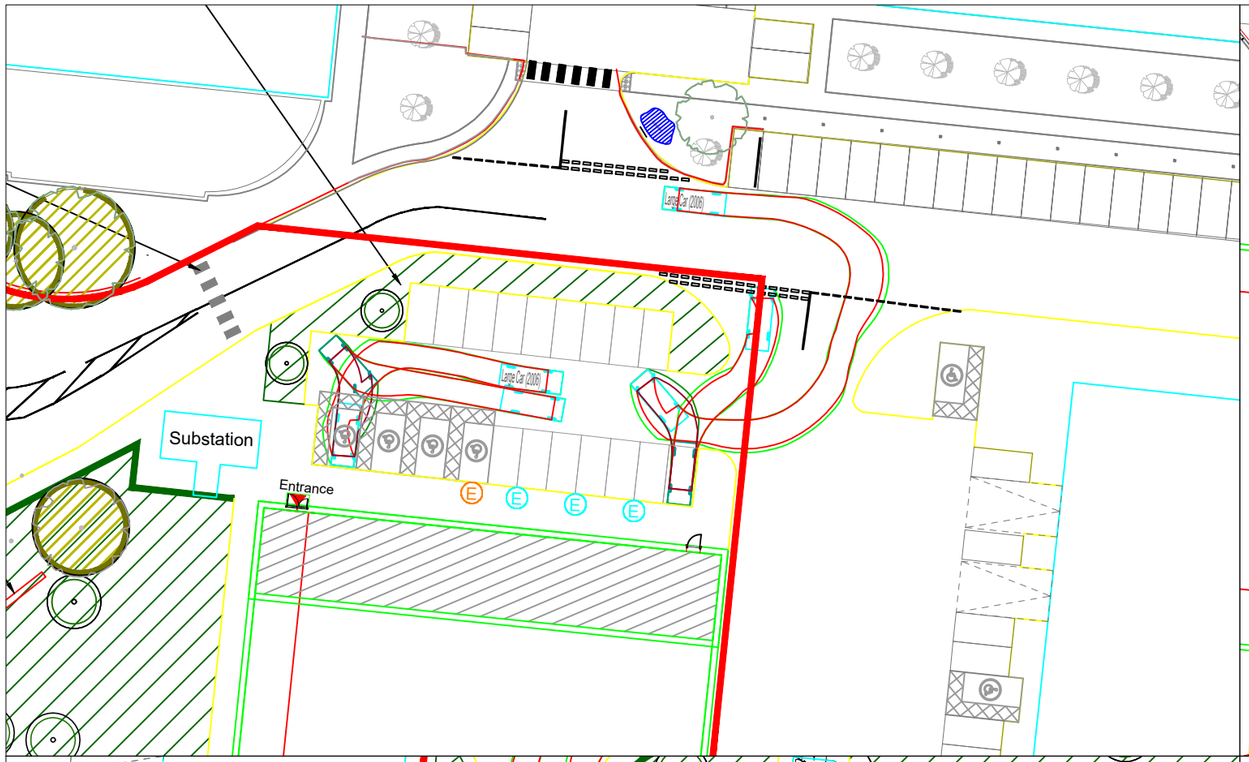
PROJECT: Welcomb Street, Manchester

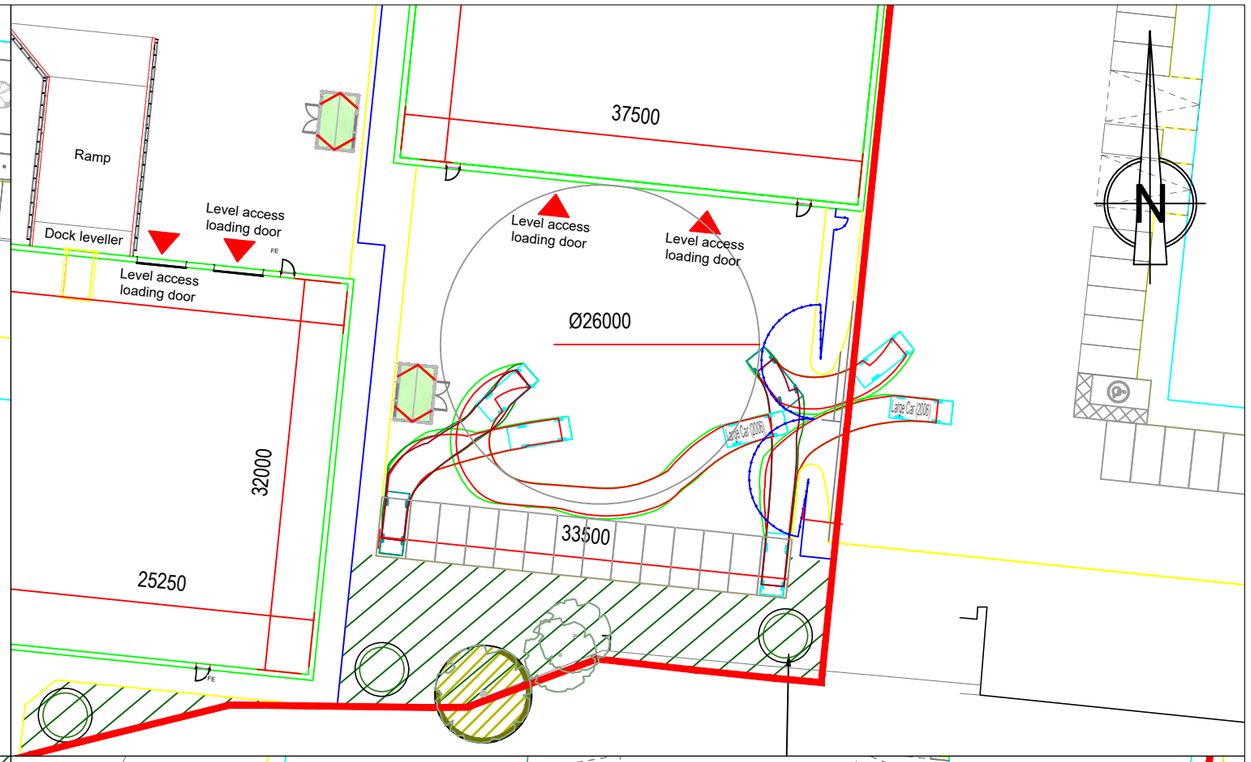
TITLE: Swept Path Analysis - Large Refuse Vehicle - Internal Layout

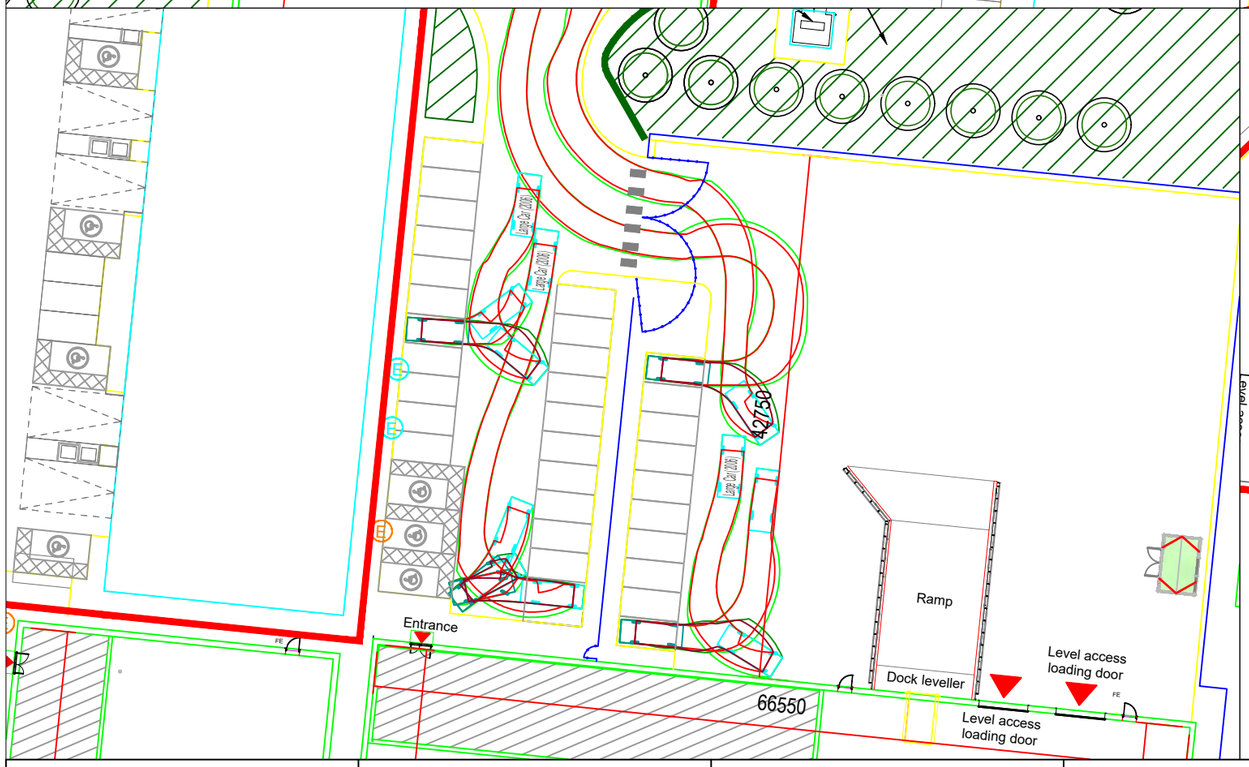
HYDROCK PROJECT NO.	SCALE @ A3
TMBI - 22973	1:500

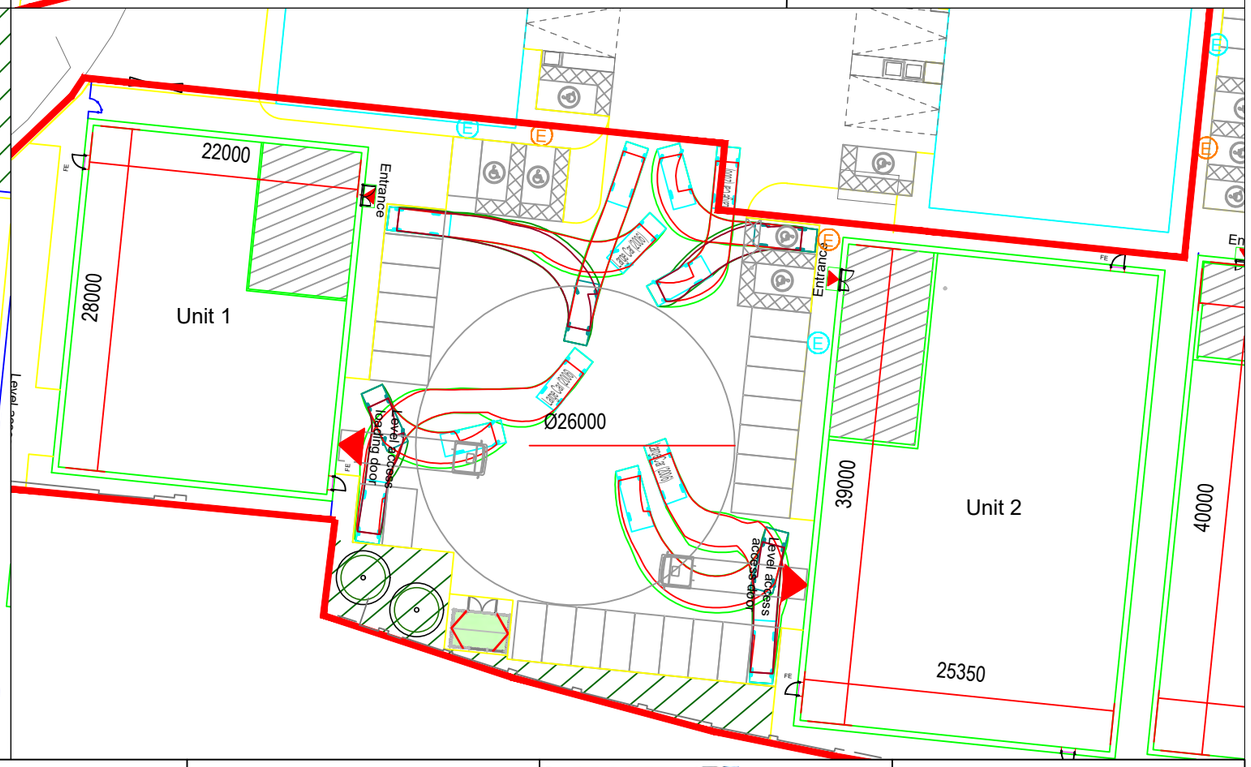
STATUS DESCRIPTION	STATUS
Suitable for Stage Approval	S4

DRAWING NO.	REVISION
22973-HYD-XX-XX-DR-TP-0002	P06









KEY PLAN

- VEHICLE BODY IN FORWARD GEAR
- VEHICLE BODY IN REVERSE GEAR
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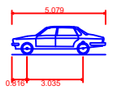
- VEHICLE CHASSIS IN REVERSE GEAR



Large Car (2006)	
Overall Length	5.079m
Overall Width	1.872m
Overall Body Height	1.525m
Min Body Ground Clearance	0.310m
Max Track Width	1.831m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	5.900m

NOTES *(CONTINUED)*

1) THIS DRAWING IS FOR DISCUSSION PURPOSES ONLY AND NOT FOR CONSTRUCTION
2) THE CONTENT OF THIS DRAWING WILL REQUIRE FURTHER WORK SUCH AS A ROAD SAFETY AUDIT AND DETAILED DESIGN
3) THIS DRAWING IS BASED ON 3RD PARTY SURVEY INFORMATION

REVISIONS *(CONTINUED)*

REVISIONS

P02	FIRST ISSUE					
	HT	30.04.24	SD	30.04.24	SD	30.04.24
P01	FIRST ISSUE					
	HT	22.04.24	SD	22.04.24	SD	22.04.24
REV	REVNOTES					
	DRAWNBY	DATE-D	CHKBY	DATE-C	APPBY	DATE-A

Hydrock

CLIENT: Network Space

PROJECT: Welcomb Street, Manchester

TITLE: Swept Path Analysis - Large Car - Internal Layout

HYDROCK PROJECT NO.: TMBI - 22973

SCALE @ A3: 1:500

STATUS DESCRIPTION: For Review and Comment

STATUS: S3

DRAWING NO.: 22973-HYD-XX-XX-DR-TP-0003

REVISION: P02

Appendix G TRICS Outputs

Calculation Reference: AUDIT-540501-220526-0549

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : E - WAREHOUSING (SELF STORAGE)

TOTAL VEHICLES

Selected regions and areas:

03	**SOUTH WEST**		
	WL	WILTSHIRE	1 days
04	**EAST ANGLIA**		
	SF	SUFFOLK	1 days
05	**EAST MIDLANDS**		
	NT	NOTTINGHAMSHIRE	1 days
07	**YORKSHIRE & NORTH LINCOLNSHIRE**		
	NY	NORTH YORKSHIRE	1 days
09	**NORTH**		
	CB	CUMBRIA	1 days
	TW	TYNE & WEAR	1 days

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

Primary Filtering selection:

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

Parameter: Gross floor area
Actual Range: 1350 to 5500 (units: sqm)
Range Selected by User: 1350 to 10000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/14 to 15/10/21

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

Selected survey days:

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

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

Selected survey types:

Manual count	6 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:

Suburban Area (PPS6 Out of Centre)	3
Edge of Town	3

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:

Industrial Zone	4
Development Zone	1
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:

B8	6 days

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

Filter by Site Operations Breakdown:
All Surveys Included

Population within 500m Range:
All Surveys Included

Population within 1 mile:

5,001 to 10,000	1 days
10,001 to 15,000	2 days
15,001 to 20,000	1 days
25,001 to 50,000	2 days

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

Population within 5 miles:

5,001 to 25,000	1 days
75,001 to 100,000	1 days
125,001 to 250,000	2 days
250,001 to 500,000	1 days
500,001 or More	1 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	3 days
1.6 to 2.0	1 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:

No	6 days

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

PTAL Rating:

No PTAL Present	6 days

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

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

LIST OF SITES relevant to selection parameters

1 **CB-02-E-01** **BOX CLEVER SELF STORAGE** **CUMBRIA**
MILLBROOK ROAD
CARLISLE
KINGSTOWN IND. ESTATE
Edge of Town
Industrial Zone
Total Gross floor area: 3100 sqm
Survey date: FRIDAY *15/10/21* *Survey Type: MANUAL*

2 **NT-02-E-02** **BIG YELLOW SELF STORAGE** **NOTTINGHAMSHIRE**
LENTON LANE
NOTTINGHAM

Suburban Area (PPS6 Out of Centre)
Development Zone
Total Gross floor area: 2860 sqm
Survey date: THURSDAY *17/11/16* *Survey Type: MANUAL*

3 **NY-02-E-01** **SELF STORAGE** **NORTH YORKSHIRE**
OAKNEY WOOD ROAD
SELBY

Edge of Town
Industrial Zone
Total Gross floor area: 1350 sqm
Survey date: TUESDAY *21/09/21* *Survey Type: MANUAL*

4 **SF-02-E-01** **SELF STORAGE** **SUFFOLK**
WHITE HOUSE ROAD
IPSWICH

Edge of Town
Industrial Zone
Total Gross floor area: 1530 sqm
Survey date: THURSDAY *24/06/21* *Survey Type: MANUAL*

5 **TW-02-E-01** **1ST STORAGE** **TYNE & WEAR**
STONEYGATE CLOSE
GATESHEAD

Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 5500 sqm
Survey date: MONDAY *13/06/16* *Survey Type: MANUAL*

6 **WL-02-E-01** **BIG YELLOW SELF STORAGE** **WILTSHIRE**
DRAKES WAY
SWINDON

Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Gross floor area: 4925 sqm
Survey date: WEDNESDAY *21/09/16* *Survey Type: MANUAL*

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

TRIP RATE for Land Use 02 - EMPLOYMENT/E - WAREHOUSING (SELF STORAGE)

TOTAL VEHICLES

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 - 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	6	3211	0.057	6	3211	0.031	6	3211	0.088
08:00 - 09:00	6	3211	0.109	6	3211	0.078	6	3211	0.187
09:00 - 10:00	6	3211	0.187	6	3211	0.151	6	3211	0.338
10:00 - 11:00	6	3211	0.171	6	3211	0.176	6	3211	0.347
11:00 - 12:00	6	3211	0.130	6	3211	0.109	6	3211	0.239
12:00 - 13:00	**6**	**3211**	**0.213**	**6**	**3211**	**0.218**	**6**	**3211**	**0.431**
13:00 - 14:00	6	3211	0.140	6	3211	0.119	6	3211	0.259
14:00 - 15:00	6	3211	0.161	6	3211	0.176	6	3211	0.337
15:00 - 16:00	6	3211	0.145	6	3211	0.161	6	3211	0.306
16:00 - 17:00	6	3211	0.114	6	3211	0.119	6	3211	0.233
17:00 - 18:00	6	3211	0.057	6	3211	0.135	6	3211	0.192
18:00 - 19:00	6	3211	0.026	6	3211	0.031	6	3211	0.057
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.510			1.504			3.014

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:	1350 - 5500 (units: sqm)
Survey date date range:	01/01/14 - 15/10/21
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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