

Proposed Commercial Development
35, Wilson Road, Huyton

December 2025

FRAMEWORK TRAVEL PLAN & TRANSPORT NOTE

REPORT

DOCUMENT:	Framework Travel Plan & Transport Note
PROJECT:	Proposed Commercial Development, 35, Wilson Road, Huyton
CLIENT:	Linden Hill Capital Assets ALX Limited
JOB NUMBER:	5054
FILE ORIGIN:	Z:\projects\5054 Wilson Road, Huyton\Docs\Reports\5054TP.2.docx

DOCUMENT CHECKING:

Primary Author:	MR	Initialled:	TR
Contributor	LG	Initialled:	TR
Review By:	TR	Initialled:	TR

Issue	Date	Status	Checked for Issue
1	18-12-25	Final	TR
2			
3			
4			

CONTENTS

1	INTRODUCTION	1
1.1	Introduction.....	1
1.2	Structure of the Travel Plan	2
1.3	The Proposed Development.....	3
1.4	BREEAM Compliance	6
1.5	The Travel Plan	9
1.6	Employee Travel Pack	9
2	TRAVEL PLANNING POLICY AND GUIDANCE.....	10
2.1	Travel Planning Policy	10
2.2	Travel Planning Guidance	10
3	TRAVEL PLAN AIMS & OBJECTIVES.....	13
3.1	Introduction.....	13
3.2	The Travel Plan	13
4	MANAGEMENT MEASURES	14
4.1	Introduction.....	14
4.2	Management Measures	14
5	TRAVEL PLAN TARGETS.....	19
5.1	Introduction.....	19
5.2	Action Plan.....	21
6	CONCLUSIONS	22

PLANS

Plan 1 Proposed Site Layout

APPENDICES

Appendix 1 Transport Assessment
Appendix 2 BREEAM Compliance Criteria
Appendix 3 BREEAM Accessibility Index (AI)

1 INTRODUCTION

1.1 Introduction

- 1.1.1** Eddisons has been instructed by Linden Hill Capital Assets ALX Limited to advise on the traffic and transport issues relating to a Reserved Matters (RM) application for a commercial development at 35, Wilson Road, Huyton.
- 1.1.2** More specifically, the RM application follows an Outline planning approval (App ref no. 22/0028/OUT) and a series of S73 varied permissions (App ref no. 24/00132/FUL, 24/00427/FUL, 25/00205/FUL) for the demolition of existing buildings and outline application for the erection of a logistics warehouse (Use class B8) with approval sought for access, with appearance, layout, landscaping and scale reserved for future approval. The outline application secured access and an employment development of up to 19,510 square metres.
- 1.1.3** This Framework Travel Plan and Transport Note will set out the principal strategies that will be put in place once the development is operational to encourage sustainable travel to the development.
- 1.1.4** The Department for Transport has issued two separate guides on the preparation of travel plans which are of relevance to this development, these documents are as follows.
- Making Residential Travel Plans Work - Published in September 2005.
 - Good Practice Guidelines: Delivering Travel Plans through the Planning Process - Published in April 2009.
- 1.1.5** The Applicant is committed to delivering a sustainable development in line with local and national policies and aspirations.
- 1.1.6** Indeed, this Travel Plan has been prepared to fully comply with Building Research Establishment Environmental Assessment Method (BREEAM) requirements for which Two credits (Transport Assessment and Travel Plan) are available.

- 1.1.7 The BREEAM requirements are contained within **Appendix 1**.
- 1.1.8 The 1st credit available refers to a requirement that *‘No later than Concept Design stage, undertake a site-specific transport assessment (or develop a travel statement) and draft travel plan, which can demonstrably be used to influence the site layout and built form’*.
- 1.1.9 It can be confirmed that a comprehensive Transport Assessment (TA) was prepared to accompany the outline application and demonstrated that the development will not have a material impact on the surrounding road network. Therefore, the one credit available can be achieved.
- 1.1.10 The 2nd credit available relates to a site-specific travel assessment (or statement) and lists the bare minimum it should cover. These are dealt with in the appropriate section of this Travel Plan.

1.2 Structure of the Travel Plan

- 1.2.1 Following this introduction, Section 2 details Travel Plan Policy and guidance and presents the ‘Travel Plan Pyramid’.
- 1.2.2 Section 3 provides a brief background on the aims and objectives of the Travel Plan.
- 1.2.3 The accessibility of the site by non-car modes, including walking, cycling and public transport was covered in detail in the submitted TA and so has not been repeated within this document. The TA is contained within **Appendix 2**.
- 1.2.4 Section 4 sets out a series of management measures that will be implemented as part of the Travel Plan.
- 1.2.5 Section 5 discusses targets for reducing trips by the private car while Section 7 details the monitoring of the Travel Plan.
- 1.2.6 Section 6 draws together the findings and conclusions.

1.3 The Proposed Development

- 1.3.1** The RM application relates to the construction of a 19,602 square metre storage and distribution centre, with ancillary office floorspace.
- 1.3.2** The proposed site layout is shown in **Plan 1**.
- 1.3.3** The proposals will provide a total of 190no. car parking spaces, including 11no. accessible bays and 20no. Electric Vehicle Charging Points (EVCP's). In addition, a total of 8no. motorcycle spaces will be provided with 32no. cycle spaces.
- 1.3.4** In regards to car and cycle parking provision, consideration has been given to the Council's current standards which are contained within Appendix A (pdf page 39) of Knowsley Borough Council's Ensuring A Choice of Travel Supplementary Planning Document.
- 1.3.5** In regard to B8 development, the document states car parking spaces of '1 space per 100 sq.m.' and cycle spaces of '*1 space per 850 sq.m. (minimum of 2 spaces)*' as set out in the extract in **Figure 1.1** below.

Class	Broad Land Use	Specific Land Use	Town Centre (Maximum)	District and Local Centre (Maximum)	Other Areas (Maximum)	Disabled Parking		Bicycles (Minimum)	Motorcycles (Minimum)	Coaches Parking (Minimum)	Coaches Drop Off (Minimum)	Comments
						Up to 200 bays (Minimum)	Over 200 bays (Minimum)					
			All areas are Gross Floor Area unless otherwise stated					All areas are Gross Floor Area unless otherwise stated				
B2	General Industry	General Industry	1 space per 60 sq.m.	1 space per 48 sq.m.	1 space per 45 sq.m.	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 450 sq.m. (minimum of 2 spaces)	1 space per 1000 sq.m. (minimum of 2 spaces)	-	-	Includes general industry in residential areas.
B8	Storage and distribution	Storage and distribution	1 space per 100 sq.m.	1 space per 100 sq.m.	1 space per 100 sq.m.	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 850 sq.m. (minimum of 2 spaces)	1 space per 2000 sq.m. (minimum of 2 spaces)	-	-	

Parking Standards A

Figure 1.1 Extract from KBC's Ensuring A Choice of Travel SPD

1.3.6 If the above ratio of 1 space per 100 sqm for car parking is applied to the proposed floor spaces, the following provision would be required as set out below in **Table 1.1**, along with the shortfall.

Land Use	GFA	Min. Spaces
B8	19,244	192
Office (ancillary)	1,250	13
B8+Office	20,494	205
Proposed spaces	-	190
Shortfall/Over	-	-15

Table 1.1 Car Parking Standards

1.3.7 The above Table indicates that the proposed provision of 190no. spaces is slightly below the required 205no, spaces i.e. by 15no. spaces.

1.3.8 Notwithstanding the above, it should be noted that paragraph 4.5 of the SPD standards states that *‘For general car parking, the standards define upper limits for new developments. These maximum standards for car parking vary according to the location of a site’*.

1.3.9 As has been demonstrated in the previously submitted TA, the site is well located to generate trips by non-car modes, thus reducing the demand for car parking.

1.3.10 This is evident with regards to the latest Census data for Method of Travel to Work, which is summarised in **Table 1.2** below.

Mode	MSOA
Car (Driver)	55%
Car (Passenger)	9%
Public Transport	15%
Bicycle	1%
Walk	19%
Motorbike	1%
Other	0%
Total	100%

Table 1.2 Census Data Modal Split

1.3.11 The data for existing residents in the area shows only 54% travel by car as the driver/sole occupier, so again, if trends continue as above, demand for car parking will be further reduced. The above data is detailed further in Section 5 and the existing modal split will be used against which to set targets.

1.3.12 It is therefore considered that the proposed parking provision is acceptable and appropriate to serve this scale and type of development.

1.3.13 If the above ratio of 1 space per 850 sqm for cycle parking is applied to the proposed floor spaces, the following provision would be required as set out below, along with the shortfall.

Land Use	GFA	Min. Spaces
B8	19,244	23
Office (ancillary)	1,250	1
B8+Office	20,494	24
Proposed spaces	-	32
Shortfall/Over	-	+8

Table 1.3 Cycle Parking Standards

1.3.14 As can be seen above, the development will provide ample cycle parking, even 8no. spaces over and above the requirement.

1.3.15 This shows commitment to the objectives of the Travel Plan and will give employees a real choice about how they travel to and from the site.

1.4 Servicing and Emergency Vehicles

1.4.1 The internal access roads have been designed to accommodate waste and delivery vehicles, so that they can enter the site, turn around and exit in a forward gear.

1.4.2 This will ensure there is no detrimental impact to the public highway and confirm that the site can be serviced without giving rise to any road safety issues.

1.4.3 To demonstrate this, a swept path analysis has been undertaken for an FTA (16.5m articulated vehicle), as shown in **Plan 2**.

1.4.4 In addition to the above, a swept path analysis for a standard fire appliance has been undertaken, as shown in **Plan 3**.

1.5 BREEAM Compliance

1.5.1 BREEAM requires that access for disabled is considered and should account for *‘varying levels and types of disability, including visual impairment’*.

- 1.5.2** As already mentioned above, accessible parking bays will be provided on site and the area caters well of pedestrians, benefiting from good standard footways, with many segregated from the carriageway by grass verges, thus creating a more *attractive* walking environment. For those with mobility issues or visual impairment, dropped kerbs and tactile paving are provided at numerous junctions in the vicinity.
- 1.5.3** This was confirmed in the submitted TA which stated that:
- 'In terms of pedestrian infrastructure, footways within proximity of the site are approximately 2m wide which according to MfS (Manual for Streets) are of an adequate width for accessible travel. There is also a zebra crossing located to the north of the site, along Wilson Road to aid safe crossing of the carriageway. Dropped kerbs and tactile paving are also present on the surrounding pedestrian footways to aid safe crossing. Lighting is also present within the vicinity of the site.'*
- 1.5.4** It is therefore considered that the existing pedestrian infrastructure will facilitate safe walking trips for employees, and visitors, including those with disability or mobility issues.
- 1.5.5** BREEAM also requires that consideration be given to '*current facilities for cyclists*' and cycling provision in the area. Secure cycle parking will be provided on site.
- 1.5.6** Whilst there are no dedicated cycle routes or facilities close to the site, the site does benefit from being situated approximately 650m south of part of National Cycle Route (NCR) 56, which provides an off-road route towards Whiston and Prescott.
- 1.5.7** In light of the above, there is potential for employees to travel by cycle to and from the site. As already mentioned, to facilitate this sustainable mode of travel, secure cycle parking for up to 32no. cycles will be provided on site.
- 1.5.8** In line with the BREEAM requirements consideration has been given to the calculation of the existing public transport Accessibility Index (AI) for the site.
- 1.5.9** To comply with the above requirement, the AI has been completed and is contained with **Appendix 3**.

- 1.5.10 The nearest bus stops to the site are located approximately 210 metres to the north, which equates to around a 3-minute walk. There is a bus stop on either side of the carriageway, of which both have a flag and post with some timetable information. The bus stops are served by various routes, with destinations including Prescot Bus Station and Huyton Bus Station.
- 1.5.11 Based on the BREEAM assessment, the Accessibility Index for the site is 3.16.
- 1.5.12 BREEAM requires consideration to lighting, landscaping and shelter to create pleasant pedestrian and public transport waiting areas. It can be confirmed that employees will wait within the reception area on the ground floor of the building.
- 1.5.13 Similarly, in regards to providing suitable taxi drop-off or waiting areas, it can be confirmed that all taxi vehicles can gain close access to the building and the waiting area will be provided in reception on the ground floor. These requirements will form part the tenant management policy.
- 1.5.14 It is therefore concluded that the proposed development site is accessible by bus and taxi, which is also considered to be a sustainable mode, as it is a vehicle already on the road network.
- 1.5.15 In regard to sustainable travel, BREEAM requires that the site operators *'Demonstrate that the travel plan will be implemented and supported by the building's management in operation'*.
- 1.5.16 Whilst the end/user is not yet known, the applicant is committed to developing the site in a sustainable manner. Given the site has been demonstrated to benefit from good non-car accessibility, it should be expected that the proposals will provide ample opportunities for travel by modes other than the private car.
- 1.5.17 All obligations within the Travel Plan will be conveyed to the site operator/occupier, once this is known.
- 1.5.18 BREEAM requires *'pedestrian and cyclist friendly (for all types of user regardless of the level of mobility or visual impairment) with the provision of cycle lanes, safe crossing points, direct routes, appropriate tactile surfaces, good lighting and*

signposting to other amenities, public transport nodes and adjoining off-site pedestrian and cycle routes’.

1.5.19 As has been demonstrated above, provision for pedestrians and cyclists in the area is good, with street lighting and surfaces in good condition. Secure cycle parking for staff will be provided on site.

1.6 The Travel Plan

1.6.1 The aim of the Travel Plan is as follows:

- To encourage staff and visitors to use alternatives to the private car.
- To increase the awareness of the advantages and potential for travel by more environmentally friendly modes, and
- To introduce a package of management measures that will facilitate travel by modes of transport other than the private car.

1.7 Employee Travel Pack

1.7.1 The principal measure will consist of an Employee Travel Pack containing relevant material to promote non-car modes of travel and the provision of certain physical measures. This will be discussed further in Section 4.

2 TRAVEL PLANNING POLICY AND GUIDANCE

2.1 Travel Planning Policy

- 2.1.1** The need to manage transport in new developments is included within national and local policy. The need to reduce car dependency, increase travel choices and encourage sustainable distribution is supported by the National Planning Policy Framework (NPPF) which states at para. 118 that *‘All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a vision-led transport statement or transport assessment so that the likely impacts of the proposal can be assessed and monitored’*.

2.2 Travel Planning Guidance

- 2.2.1** The preparation and adoption of a Travel Plan is an important element of managing the demand for travel to all modern developments.
- 2.2.2** The document, entitled ‘Good Practice Guidelines: Delivering Travel Plans through the Planning Process’ sets out an overview of the process and delivery of Travel Plans and states that *“A Travel Plan is a long-term management strategy for an occupier or site that seeks to deliver sustainable transport objectives through positive action and is articulated in a document that is regularly reviewed.”*
- 2.2.3** Whilst this is not a residential development, the DfT document entitled “Making Residential Travel Plans Work” states that Travel Planning is one of a range of measures known as smarter choices which have been found to be effective on reducing traffic and improving accessibility in residential areas” and goes on to say, *“Travel Planning is one of a range of measures known as smarter choices which have been found to be effective on reducing traffic and improving accessibility in residential areas”*.

2.2.4 The DfT's 'Making Residential Travel Plans Work' also introduces the concept of a 'Travel Plan Pyramid'. This helps demonstrate how successful plans are built on the firm foundations of a good location and site design. The pyramid is presented in **Figure 2.1** below.



Figure 2.1 – The Travel Plan Pyramid

2.2.5 The hierarchy of 5 tiers of measures and criteria are well illustrated in pyramid form since the concept presented within that “good practice” is that each higher layer builds upon the more important foundations of the criteria and initiatives below it.

2.2.6 The most important layer of the pyramid is considered to be the base, this shows the key to making Travel Plans work is the actual location of the development and its proximity to local facilities and services essential to everyday life.

2.2.7 The second layer of the pyramid refers to how the layout of the site can assist in reducing the need to travel, which in this instance is again linked to the existing level of provision to facilitate sustainable travel.

- 2.2.8** As indicated in level 3 of the pyramid, the Travel Plan co-ordinator will be free to develop further measures to maximise the sustainability of the site.
- 2.2.9** The fourth layer of the pyramid looks at how parking management and public transport can influence travel choice, while the top layer of the pyramid relates to how the Travel Plan will be marketed and how the measures within are to be promoted.

3 TRAVEL PLAN AIMS & OBJECTIVES

3.1 Introduction

3.1.1 The main objectives of this Travel Plan are to improve and raise awareness of sustainable travel choices and impacts of travel, reduce car journeys, especially single occupancy journeys; encourage the use of more sustainable modes of travel; improve access, road safety and personal security and to reduce travel-related CO₂ emissions associated with staff and visitor travel.

3.1.2 This Travel Plan has been produced with reference to the policies and strategies contained within national and local Travel Planning Guidance to encourage sustainable travel to and from the development site.

3.2 The Travel Plan

3.2.1 The Travel Plan is a long-term strategy for reducing the dependence of employees and visitors on travel by private car.

3.2.2 The aims of the Travel Plan are as follows:

- To encourage employees and visitors to use alternatives to the private car,
- To increase the awareness of the advantages and potential for travel by more environmentally friendly modes, and
- To introduce a package of management measures that will facilitate travel by modes of transport other than the private car.

3.2.3 A Travel Plan is effectively a combination of information, proposals and incentives designed to use most effectively the different means of travel available to employees and visitors.

3.2.4 In addition, the management of employee travel represents an important element in pursuing the overall aims of the latest national guidance included within the DfT's Best Practice Guide.

4 MANAGEMENT MEASURES

4.1 Introduction

4.1.1 The following Travel Plan measures are proposed:

- i) Travel Plan Co-ordinator
- ii) Employee Travel Pack
- iii) Travel Awareness and Information
- iv) Travel Information Display Areas
- v) Promotion of Car Share Scheme
- vi) Encouraging Walking/Cycling and Use of /Public Transport
- vii) Cycle Users Group
- viii) Employee Travel Survey
- ix) Electric Vehicle Charging Facilities
- x) Preferential Parking for Car Sharers
- xi) Car Parking Restrictions and Charging

4.2 Management Measures

Travel Plan Co-ordinator

4.2.1 A Travel Plan Co-ordinator (TPC) is to be appointed by the developer at least one month before the new premises comes into operation.

4.2.2 The TPC will be responsible for all aspects of the Travel Plan. Their primary functions will be as follows;

- Liaison with the local planning and highways authorities;
- Provision of an Employee Travel Pack containing information for employees;
- Promotion of the sustainable transport options available to employees, including public transport, cycle, walking and car sharing schemes; and
- Maintenance of all necessary systems, data and paperwork.

Employee Travel Survey

- 4.2.3 In order to establish the travel modes of employee's (on occupation) an Employee Travel Survey will be undertaken.
- 4.2.4 The employee travel survey will be provided to all the staff as part of their 'Travel Pack'.
- 4.2.5 This information will be used to determine which modes of travel will need to be promoted and encouraged the most.

Employee Travel Pack

- 4.2.6 It is an important principle in employment developments that where appropriate the implementation of travel plan type measures can establish a pattern of travel behaviour favouring sustainable modes from the inception of the development.
- 4.2.7 The proposed development is very well placed for encouraging access on foot or by cycle to a wide range of facilities. Similarly, the existence of local bus services will encourage choice of public transport as a primary means of travel for the development.
- 4.2.8 An Employee Travel Pack, including the initial Employee Travel Survey, will be prepared and distributed.
- 4.2.9 The contents of the travel pack include information relating to walking and cycling routes in the area and links to the provision of up to date bus and rail timetable information.

- 4.2.10 The adoption of such travel packs is recognised as being an important element in ensuring that access by non-car modes is promoted. The packs will continue to be distributed to staff.

Travel Awareness and Information

- 4.2.11 Staff will be made aware of the existence of the Travel Plan.
- 4.2.12 As mentioned previously, Employee Travel Packs will be issued to staff when commencing work at the development.
- 4.2.13 To comply with the requirements of BREEAM, up-to -date bus and train timetables will be on display in a central area (reception) for staff. It will be regularly checked and updated when necessary.

Promotion of Car Share Scheme

- 4.2.14 The Travel Plan Co-ordinator will promote the use of car sharing scheme and employees will be encouraged to register on the Liftshare website - <https://liftshare.com/uk>.
- 4.2.15 This allows users to register their details, where they are travelling to in the area and if they are offering a lift or require a lift to their destination.
- 4.2.16 Travel Plan Co-ordinator will also investigate the viability of establishing a Car Sharing Club for the proposed development, however, it is likely that the promotion of the above schemes will be more beneficial.

Encouraging Walking/Cycling and Use of Public Transport

- 4.2.17 Employee's will be provided with information and advice concerning safe pedestrian and cycle routes via the Employee Travel Pack.
- 4.2.18 It is also worth noting that all staff will be provided with information and advice concerning safe pedestrian and cycle routes to the site through cycle and walking schemes, as part of the Travel Plan initiatives.

4.2.19 Additional travel information is provided on the following websites:

Free Journey Planner:

<https://www.traveline.info/>

Walking Routes and Initiatives: <http://www.livingstreets.org.uk/walk-with-us>
& <http://www.walk4life.info/>

Online Cycle Route Planner:

<http://www.sustrans.org.uk/ncn/map>

Bus Timetables, Leaflets and Maps:

<http://www.traveline.info/>

Rail Travel Information:

www.thetrainline.com/

www.nationalrail.co.uk/

4.2.20 To comply with the BREEAM requirements, the TPC will seek to negotiate with local bus, train or tram companies to increase local service provision for the development, where appropriate.

Cycle User Group

4.2.21 The Travel Plan coordinator will consider setting up a 'Cyclist Forum' for regular cyclists at the site. This will be an effective way to monitor cyclist provision and facilities and could extend to organising group rides in the area and rides along recognised routes to promote cycling to others.

4.2.22 It can be confirmed that provision of dedicated and convenient cycle storage will be provided on site to encourage and facilitate cycling as a mode of travel.

Electric Vehicle Charging Facilities

- 4.2.23 In regard to the provision electric recharging stations, a total of 20no. Electric Vehicle Charging Points (EVCP's) are proposed.

Preferential Parking for Car Sharers

- 4.2.24 It can be confirmed that these spaces will be provided close to the main visitor entrance; however, this will be developed by the tenant of the building.

Car Parking Restrictions and Charging

- 4.2.25 Another part of BREEAM requires consideration to the need for parking restrictions or charging.
- 4.2.26 It can be confirmed that there will be no charge for parking on site.
- 4.2.27 The proposed staff car park provides a safe and efficient means of access. The service yard (for large vehicles/lorry use) and car park access points will be gated for security and safety requirements.

5 TRAVEL PLAN TARGETS

5.1 Introduction

- 5.1.1 This section of the Travel Plan deals with the post development scenario i.e. once the development is complete, occupied and the Travel Plan has been implemented and relates to targets against which the success of the Plan in achieving its objectives will be measured.
- 5.1.2 The targets are designed to be quantifiable, be relevant to both measures and objectives identified in the plan and to include timescale.
- 5.1.3 The BREEAM criteria states that *'If relevant, travel patterns and attitudes of existing building or site users towards cycling, walking and public transport, to identify relevant constraints and opportunities'*.
- 5.1.4 Clearly, no existing travel mode data is available. However, to establish existing travel modes, reference has been made to Census 'Method of Travel to Work' percentages for the Middle Super Output Area (MSOA) for E02001341 Knowsley 015, where the site is located. This data has been used to set the initial modal targets.
- 5.1.5 More accurate information to establish the baseline targets, will be obtained from an Employees Travel Survey which will be undertaken within 3 months of the development being occupied.
- 5.1.6 A summary of the modal split results and the proposed targets are provided in the **Table 5.1** below:

Mode	MSOA	Target
Car (Driver)	55%	50%
Car (Passenger)	9%	8%
Public Transport	15%	18%
Bicycle	1%	3%
Walk	19%	21%
Motorbike	1%	0%
Other	0%	0%
Total	100%	100%

Table 5.1 Modal Split and Interim Targets

5.1.7 As can be seen that the largest travel mode is that of Car Driver, however, there is currently an encouraging level of travel by public transport and walk due to the accessible location of the site.

5.1.8 In summary, based on the data obtained from the Census data initial minimum targets for the developments model split have been proposed as follows;

- Car Driver - Reduction of 5% to 50%.
- Public Transport - Increase of 15% to 18%.
- Bicycle - Increase of 1% to 3%.
- Walking - Increase of 2% to 21%.

5.1.9 The initial targets may need to be amended following receipt of the actual data and suitable targets for reducing the need to travel by private car will be set against the baseline targets and agreed with the Council.

5.1.10 In regard to the consideration of '*Predicted travel patterns and transport impact of future building or site users*', the Census data detailed above provides a good indication of likely future travel patterns at the site.

- 5.1.11** The submitted TA demonstrated that the traffic associated with the proposals can be accommodated onto the surrounding road network and will not give rise to any highway or road safety issues.

5.2 Action Plan

- 5.2.1** **Table 5.2** below provides an Action Plan and timescales to assist the Travel Plan Coordinator (TPC) to implement the obligations of the Travel Plan.

Action	Target Date	Indicator/Measured by	Responsibility
Appointment of TPC	TPC appointed one month prior to first occupation of site	Appointment of TPC by target date	Occupier
Production of Employees Travel Pack	Upon Opening	Employee travel survey	Occupier/TPC
Undertake initial travel surveys	Within 3 months of opening	receipt of written agreements of targets	TPC
Agree Travel Plan Targets	1 month after initial travel survey undertaken	Employees travel surveys conducted in years 1, 3 and 5	TPC
Achieve target car driver travel to work mode split	5 years after initial travel survey	Employee travel surveys conducted annually	TPC

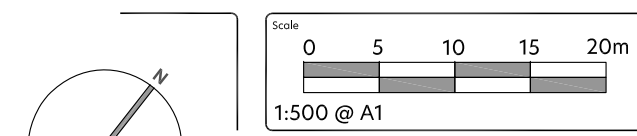
Table 5.2 – Travel Plan Action Plan and Timescales

- 5.2.2** The table above sets out the key tasks that will need to be undertaken by the Travel Plan Coordinator as part of the Travel Plan including guidance as to timescales for the tasks to be undertaken.

6 CONCLUSIONS

- 6.1.1** This Travel Plan has detailed the proposals associated with the development site to promote sustainable modes of travel and reduce the dependency of the private car.
- 6.1.2** It is considered that this Travel Plan complies with the requirements of BREEAM and will have a positive benefit to the development and its employees.
- 6.1.3** The information contained within the Travel Plan and details of sustainable modes of transport in relation to BREEAM demonstrate the site will be highly accessible to employees and visitors to the development.
- 6.1.4** The aim of the Travel Plan is:
- To encourage employees to use sustainable modes of transport to access the site,
 - Reduce the reliance on single car occupancy journeys, and
 - Generally reduce traffic related pollution and noise.
- 6.1.5** A wide range of measures and actions will be used to encourage car sharing, public transport use, cycling and walking.
- 6.1.6** The Travel Plan Co-ordinator will ensure the Travel Plan is implemented and is operating effectively.
- 6.1.7** A detailed Employee Travel Survey will be undertaken to establish travel modes of staff and following this, specific targets will be set and agreed with the Travel Plan team at the Council.
- 6.1.8** The site has been demonstrated (in the submitted TA) to benefit from excellent non-car accessibility and it should, therefore, be expected that the adoption of a Travel Plan would be particularly effective.
- 6.1.9** It can therefore be concluded that the proposals, through the implementation of the Travel Plan, will provide a highly sustainable development.

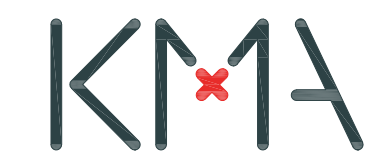
PLANS



Notes
Figured dimensions are to be used in all cases. Dimensions should not be scaled from drawing unless for planning purposes. Land Registry and ownership boundaries are produced by Studio KIMA using all of its available resources. Studio KIMA cannot be held responsible for scale discrepancies in plans supplied by others. Any discrepancies in dimensions should be clarified with the Architect on the address below prior to commencement of the works. No deviation from this drawing will be permitted without the prior written consent of the Architect. This drawing is to be read in conjunction with all the relevant Mechanical and Electrical Drawings. This drawing is to be read in conjunction with the relevant Structural Engineer's drawings, structural calculations and recommendations. This drawing is to be read in conjunction with the relevant Fire Safety Strategy drawings. Please note that the use of any quantification data is done at the owner's own risk. This drawing is the copyright of Studio KIMA and is to be returned to the Architect on completion of the works. The drawing should not be reproduced without the written permission of Studio KIMA.

Rev	Date	Revision Description	Drawn	Checked
P5	11.12.25	General Amendment	RH	AT
P4	09.12.25	General Amendment	RH	AT
P3	08.12.25	General Amendment	RH	AT
P2	03.12.25	General Amendment	RH	AT
P1	01.12.25	Initial Issue	RH	AT

DRAFT



Project Name
**Huyton
Wilson Road**

Drawing Title
Proposed
Site Plan / Roof Plan

Drawing Number
HWR-KMA-XX-XX-DR-A-7004

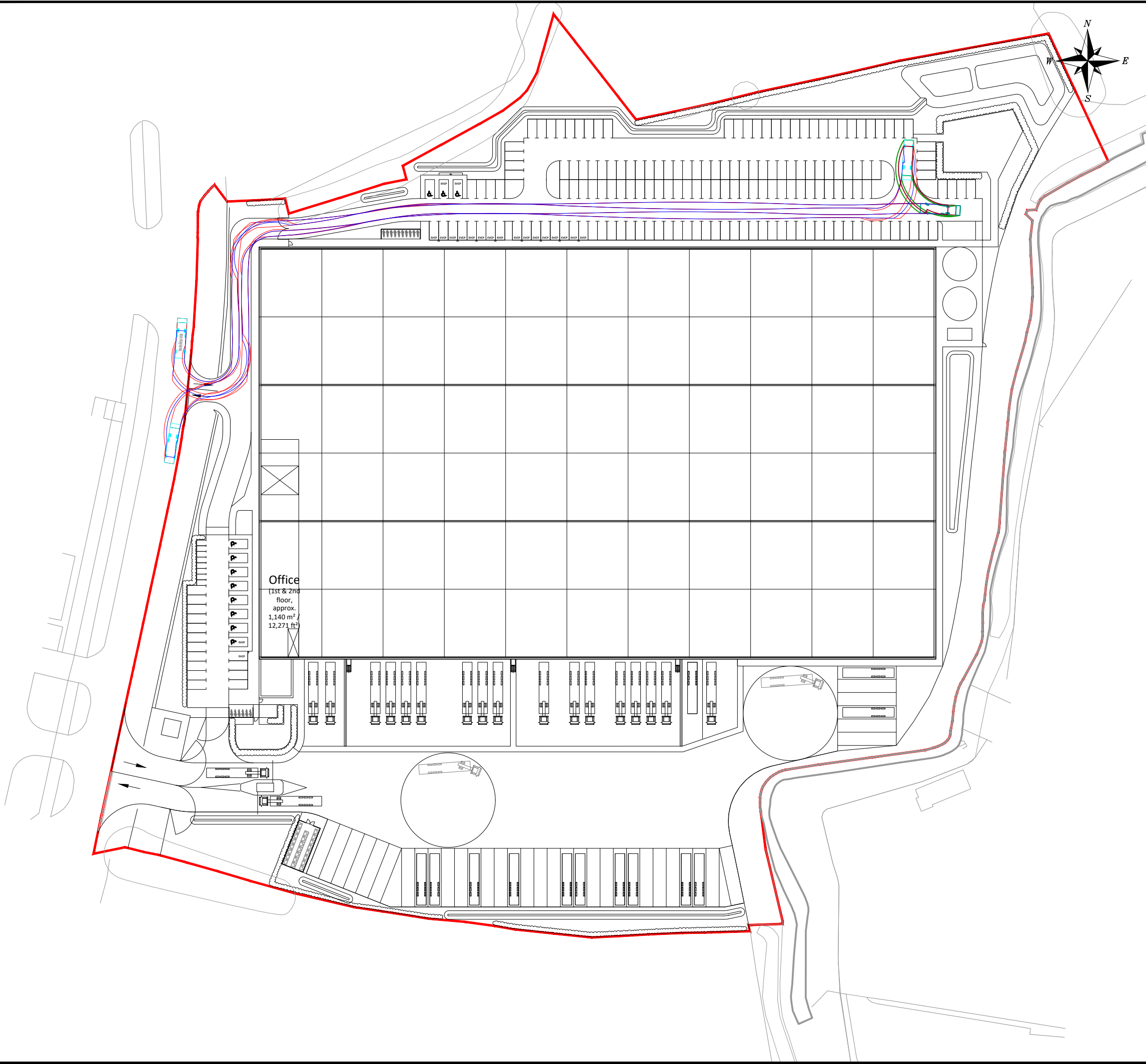
Project Number
T1306

Status
A3
Planning

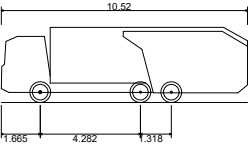
Revision
P5

Drawn by RH	Authorised by AT	Date 01.12.25
-----------------------	----------------------------	-------------------------

Studio KMA
Clarence Arcade | Stamford Street | Ashton-under-Lyne | OL6 7P
T: 01457 873163
E: info@studiokma.co.uk www.studiokma.co.uk



NOTES



Knowsley Refuse Vehicle	10.520m
Overall Length	2.530m
Overall Width	3.211m
Overall Body Height	0.416m
Min Body Ground Clearance	2.530m
Track Width	4.00s
Lock to lock time	10.250m
Kerb to Kerb Turning Radius	

REV	DETAILS	DRAWN	CHECKED	DATE
-----	---------	-------	---------	------

CLIENT:	STUDIO KMA
---------	------------

PROJECT:	WILSON ROAD, HUYTON
----------	------------------------

DRAWING TITLE:	SWEPT PATH ANALYSIS
----------------	---------------------

SCALES:

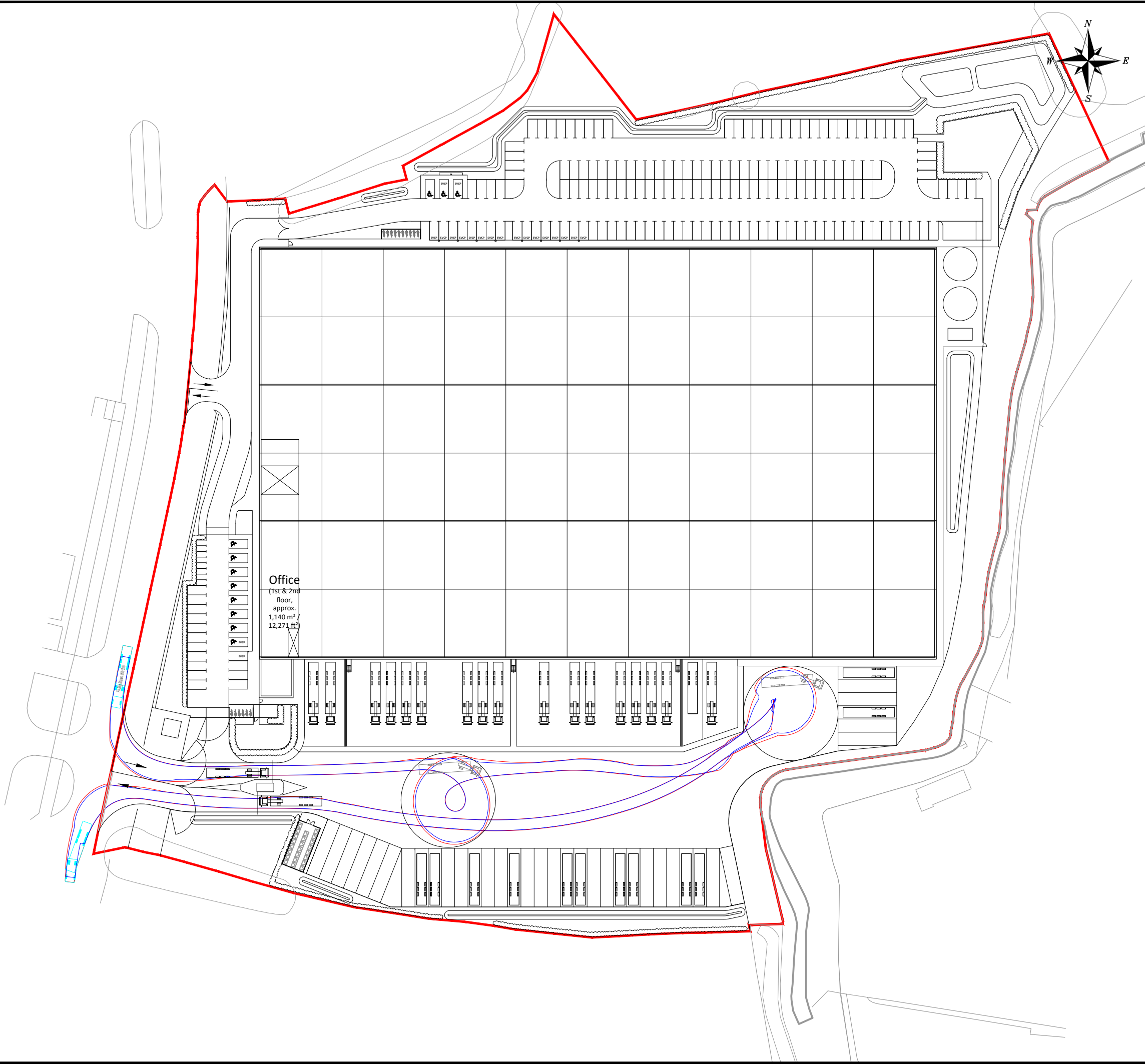
1:1000 @ A3

DRAWN:	LB	CHECKED:	MR	DATE:	DEC 25
--------	----	----------	----	-------	--------

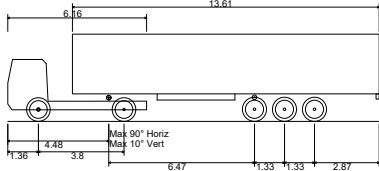
Eddisons 340 Deansgate Manchester M3 4LY Email: info@crofts.co.uk Tel: 0161 837 7380 Web: www.eddisons.com/services/transport-planning
--

DRAWING NUMBER:	5054-SP03	REVISION:	-
-----------------	-----------	-----------	---





NOTES



FTA Design Articulated Vehicle (1998)

Overall Length	16.480m
Overall Width	2.550m
Overall Body Height	3.870m
Min Body Ground Clearance	0.515m
Max Track Width	2.470m
Lock to Lock Time	3.00s
Kerb to Kerb Turning Radius	6.550m

REV	DETAILS	DRAWN	CHECKED	DATE
-	-	-	-	-

CLIENT:

STUDIO KMA

PROJECT:

**WILSON ROAD,
HUYTON**

DRAWING TITLE:

SWEPT PATH ANALYSIS

SCALES:

1:1000 @ A3

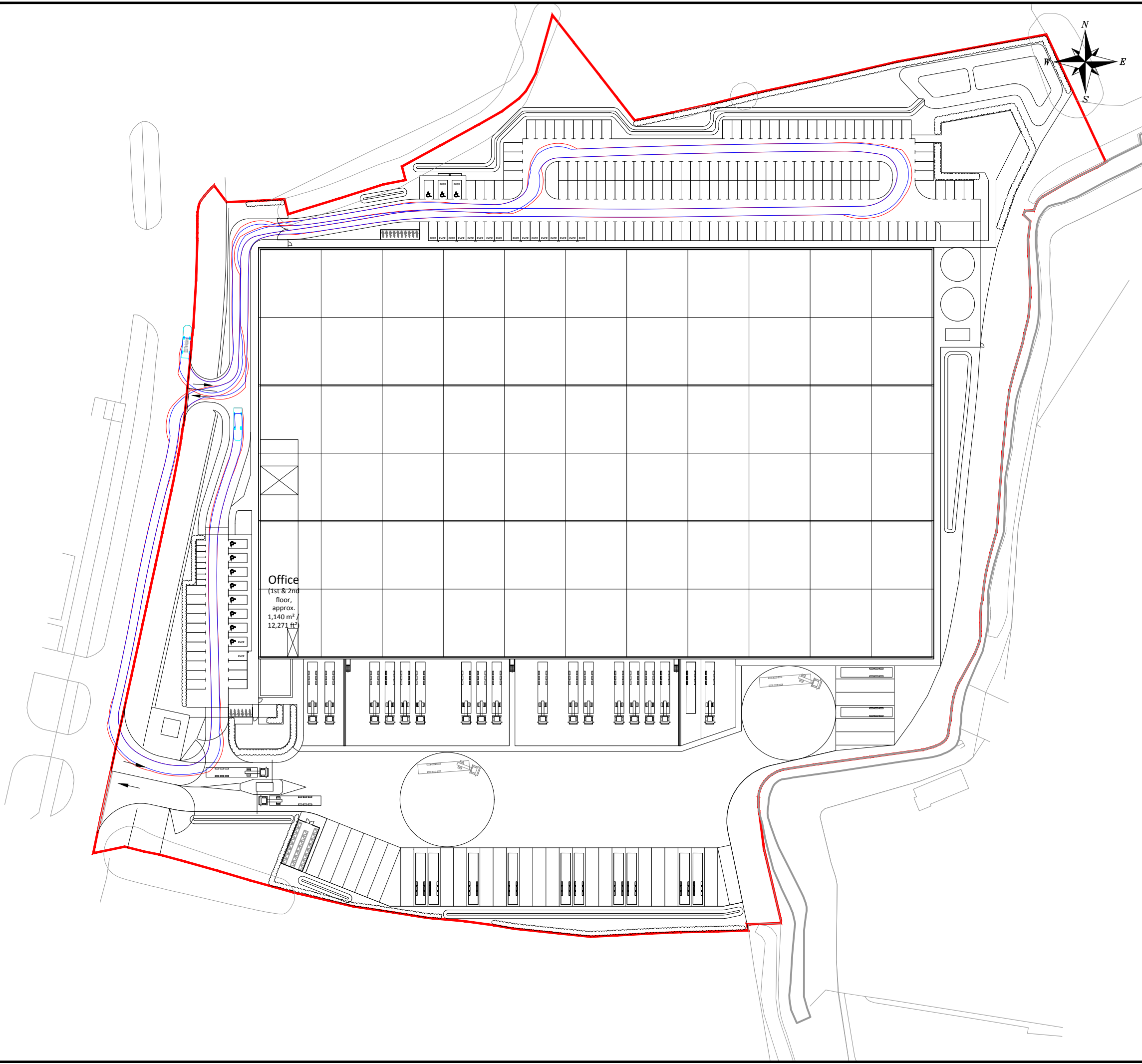
DRAWN:	LB	CHECKED:	MR	DATE:	DEC 25
--------	----	----------	----	-------	--------

Eddisons
340 Deansgate
Manchester
M3 4LY

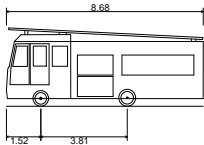
Email: info@crofts.co.uk
Tel: 0161 837 7380
Web: www.eddisons.com/services/transport-planning

DRAWING NUMBER:	5054-SP02	REVISION:	A
-----------------	-----------	-----------	---

Eddisons



NOTES



DB32 Fire Appliance
Overall Length 8.680m
Overall Width 2.180m
Overall Body Height 3.452m
Min Body Ground Clearance 0.337m
Max Track Width 2.121m
Lock to lock time 6.00s
Kerb to Kerb Turning Radius 7.910m

REV	DETAILS	DRAWN	CHECKED	DATE
-	-	-	-	-

CLIENT:
STUDIO KMA

PROJECT:
**WILSON ROAD,
HUYTON**

DRAWING TITLE:
SWEPT PATH ANALYSIS

SCALES:
1:1000 @ A3

DRAWN:	LB	CHECKED:	MR	DATE:	OCT 25
--------	----	----------	----	-------	--------

Eddisons
340 Deansgate
Manchester
M3 4LY
Email: info@crofts.co.uk
Tel: 0161 837 7380
Web: www.eddisons.com/services/transport-planning

DRAWING NUMBER: 5054-SP01	REVISION: B
-------------------------------------	-----------------------



APPENDICES

APPENDIX 1

Transport Assessment

Transport Assessment

35 Wilson Road, Huyton

29 April 2022

Prepared for

LINDEN HILL - CAPITAL ASSETS - ALX LIMITED



Prepared for:

LINDEN HILL - CAPITAL ASSETS - ALX LIMITED

Prepared by:

Markides Associates
2nd Floor, The Bridge
73 – 81 Southwark Bridge Road
London SE1 0NQ
United Kingdom

T: +44 (0)20 7442 2225

E: info@markidesassociates.co.ukW: markidesassociates.co.uk

Project Number: 22036

Doc Number: TA01

Rev	Issue Purpose	Author	Checked	Reviewed	Approved	Date
A	Draft	ESG	DJT	ESG	DJT	19/04/2022
B	Final	ESG	DJT	ESG	DJT	29/04/2022

Copyright 2022 Markides Associates Ltd. The concepts and information contained in this document are the property of Markides Associates. Use or copying of this document in whole or in part without the written permission of Markides Associates constitutes an infringement of copyright.

Limitation: This report has been prepared on behalf of, and for the exclusive use of the client of Markides Associates, and is subject to, and issued in accordance with, the provisions of the contract between the client and Markides Associates. Markides Associates accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this report by any third party.

Contents

1. INTRODUCTION	4
2. POLICY CONSIDERATION	6
3. EXISTING CONDITIONS.....	10
4. DEVELOPMENT PROPOSALS	16
5. TRIP GENERATION AND DISTRIBUTION.....	18
6. SUMMARY AND CONCLUSION.....	24

Tables

Table 2.1	Car and Cycle Parking Standards.....	9
Table 3.1	Local Facilities.....	11
Table 3.2	Bus Services.....	13
Table 3.3	Rail Services.....	14
Table 3.4	Method of Travel to Work Census Information - Workplace.....	15
Table 5.1	Existing Trip Rates – per 100sqm	18
Table 5.2	Existing Trip Generation – 9,863sqm	19
Table 5.3	Trip Generation – B8 Commercial Warehouse (19,116sqm)	19
Table 5.4	Net Impact.....	20
Table 5.5	Trip Distribution	20
Table 5.6	Distributed Trips Per Link – 19,116sqm B8 Floorspace.....	22
Table 5.7	Proposed Site Access T-Junction	23

Figures

Figure 1.1	Site Location Plan
Figure 3.1	Site Context Plan
Figure 3.2	Pedestrian and Cycle Infrastructure Plan
Figure 3.3	Public Transport Plan
Figure 5.1	Trip Distribution

Drawings

22036-MA-XX-XX-DR-C-0120 – Vehicle Swept Path (Large Car)
22036-MA-XX-XX-DR-C-0122 – Arctic and Rigid Swept Path Analysis

Appendices

Appendix A – Proposed Cycle Extension
Appendix B - Ground Floor Layout

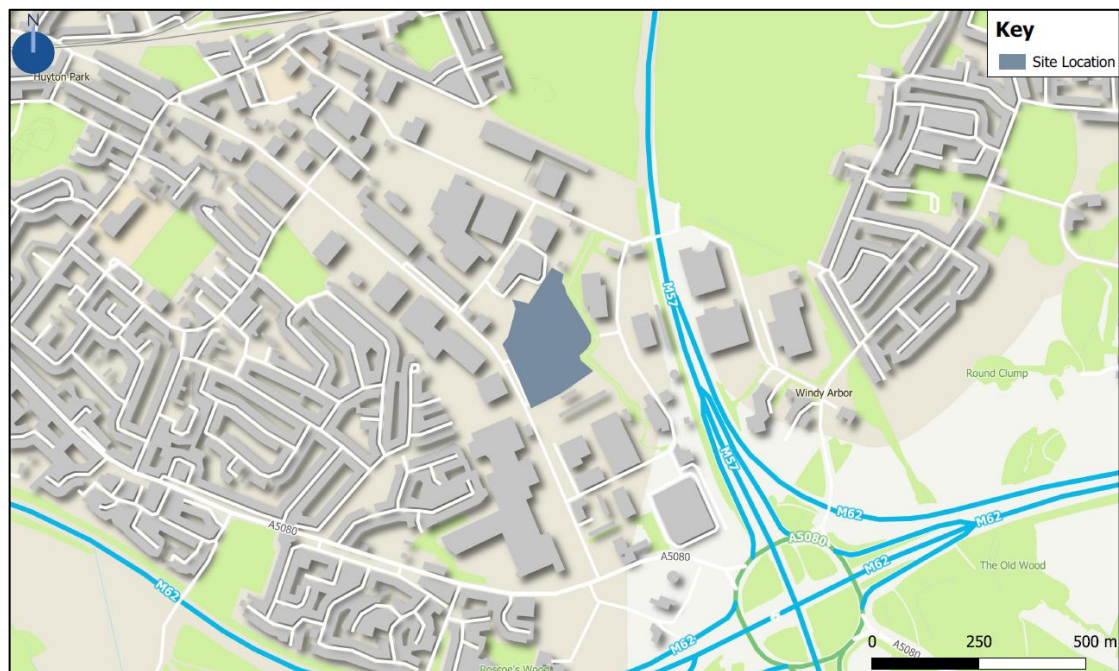
Appendix C – WSP Report
Appendix D - B8 TRICs Output
Appendix E – Model Output

1. Introduction

1.1 Preamble

- 1.1.1 Markides Associates (MA) have been instructed to prepare this Transport Statement (TS) by LINDEN HILL - CAPITAL ASSETS - ALX LIMITED in support of an application for the development of a commercial (Use Class B8) unit located at Land at John Mason International Site, Wilson Road, Huyton Business Park, L36 6AE ('the site').
- 1.1.2 The existing site occupies some 9,863sqm of B8 floorspace. The development proposals comprise the provision of 19,116sqm of B8 floor area which will also be accompanied by 190 car parking spaces, 45 trailer spaces and 32 cycle parking spaces.
- 1.1.3 The site falls within the planning and highway authority area of Knowsley Metropolitan Borough Council (KMBC). A site location plan has been included as an extract as **Figure 1.1** and at the end of the report at scale.

Figure 1.1 Site Location Plan



- 1.1.4 As shown in **Figure 1.1**, the site fronts onto Wilson Road and is bound to the north, south and east by other B8 commercial units. The site also lies within close proximity to both the M57 and the M62.

1.2 Report Structure

1.2.1 This report is structured as follows:

- **Section 2 – Policy Guidance** examines the relevant national, regional, and local planning policy with regards to the site.
- **Section 3 – Baseline Conditions** details the site and its location, and the surrounding areas in highways and transport terms, including analysis of the site's accessibility by walking, cycling and public transport.
- **Section 4 – Proposed Development** outlines the application proposals, site access, cycle provision and servicing arrangements.
- **Section 5 – Traffic Impact Assessment** examines the multi-modal trip generation, footfall to the site and the impact in transport and highways terms.
- **Section 6** – summarises and concludes this report.

2. Policy Consideration

2.1 Preamble

- 2.1.1 This section outlines the relevant national, regional, and local planning policy in relation to the site.

2.2 National Policy

The National Planning Policy Framework (2021)

- 2.2.1 The NPPF as of July 2021 sets out Government planning policy, provides a framework within which local planning policies should be produced, and is a material consideration in planning decisions.
- 2.2.2 With regards to transport, the NPPF states that:

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

Paragraph 112 continues those applications for development should:

- Give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second- so far as possible – to facilitate access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;
- Address the needs of people with disabilities and reduced mobility in relation to all modes of transport;
- Create places that are safe, secure, and attractive – which minimise the scope for conflicts between pedestrians, cyclists, and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;
- Allow for the efficient delivery of goods, and access by service and emergency vehicles; and
- Be designed to enable charging of plug-in and ultra-low emission vehicles in safe, accessible, and convenient locations.

- 2.2.3 Paragraph 113 states that:

“All developments that will generate significant amounts of movement should be required to provide a travel plan and should be supported by a transport statement or transport assessment.”

2.3 Regional Policy

Liverpool Local Plan (2013-2033)

- 2.3.1 The Liverpool Local Plan provides a long-term spatial vision, strategic priorities, and policies for future development in the City over the next 15-20 years specifically with regard to the number of new homes, employment provision, shops, facilities, transport, and other infrastructure.
- 2.3.2 In terms of sustainable transport, 'Policy TP2: Transport Assessments' states the following:
- Development proposals that generate significant amounts of movement should be supported by a Transport Statement/Transport Assessment.
 - In order to ensure that free and safe movement is not comprised consideration will be given to the effect on safety, congestion and the environment when dealing with development proposals that involve:
 - New or altered access to the transport network; or
 - Improvement work to the transport network; or
 - Creation of new transport infrastructure; or
 - The generation of additional trips on the transport network.
 - Development proposals will only be permitted where:
 - Accesses, junctions, and new road layouts would be safe and operate efficiently;
 - The development would not, individually, or cumulatively with other projects, have a severe impact on the functioning of the network;
 - The proposals would not be detrimental to the safety of all users of the transport network and in particular pedestrians and cyclists;
 - The proposal makes provision for walking, cycling and the use of public transport;
 - The proposal would not generate regular movement of heavy goods vehicles (HGVs) on unsuitable roads, or on roads without easy access to Liverpool City Region's Freight Route Network; and
 - Vehicle and cycle parking, turning, and servicing appropriate to the scale and nature of the development is provided.

2.4 Local Policy

Knowsley Local Plan Core Strategy (2016)

- 2.4.1 The Knowsley Local Plan comprises of several documents. The core strategy part of the local plan sets the strategic framework for growth and development of Knowsley up to 2028 and beyond.
- 2.4.2 Strategic Objective 6 'Sustainable Transport' of the core strategy states the following:

“To ensure new development in Knowsley encourages a reduction in the overall need to travel, and prioritises sustainable transport such as walking, cycling and public transport. This will help to ensure accessibility and linkage between housing areas and employment locations, shopping, leisure, culture, health care, education, community and sporting facilities, green spaces, and other services.”

- 2.4.3 Policy CS7 also explores ways in which the existing highway network can be used to aid sustainable development as well as outlining the overall transport strategy. Policy CS7 has been summarised below.

Overall Transport Strategy

Planning powers and other interventions will be used to support a sustainable and integrated transport system that will:

- Support the economy by facilitating efficient movement of people and goods within the borough and linking to Liverpool City Centre, the Port of Liverpool, Liverpool John Lennon Airport, and other destinations in the surrounding area;
- Help meet the development needs of the borough through to 2028;
- Ensure people can get to where they need to by a choice of walking, cycling and public transport;
- Enhance road safety;
- Seek to reduce carbon emissions; and
- Improve the health and wellbeing of local people.

Location, Design and Management of New Development

New development will be required to be:

- Located and designed to prioritise accessibility and sustainable modes of travel through a choice of walking, cycling, public transport, and incorporate access for private vehicles. Where deficiencies are identified, developer contributions will be required to improve the accessibility of the location;
- Located and designed to ensure that larger scale proposals (attracting a lot of visitors, customers and/or employees) are located in the most accessible locations;
- Where subject to a planning application, accompanied (except in the case of smaller scale proposals) by Transport Assessments and/or Travel Plans;
- In compliance with adopted cycle, car, disabled and service vehicle parking standards for different types and scales of new development;
- Inclusive of measures that will mitigate carbon emissions and improve air quality where appropriate; and
- Consistent with safeguarding arrangements that secure the operational integrity and safety of Liverpool John Lennon Airport.

Strategic Transport Schemes and Programmes

The Council will work with national, regional, and sub-regional partners to deliver schemes which support Local Transport Plan priorities including:

- Further transport infrastructure that is necessary to support the future expansion of Liverpool John Lennon Airport consistent with its Surface Access Strategy and national aviation policy;
- Improvements to the rail network including electrification of existing lines; enhancements to stations and passenger interchange facilities; provision of Park and Ride facilities; and expansion and/or improvement of the Knowsley Rail Freight Terminal;
- Enhanced provision for buses, including improved bus stations, bus stops and laybys, and the enhancement of the principal bus routes through Quality Bus Partnerships and Quality Bus Contracts;
- Maintenance of transport hubs such as bus termini and train stations to give improved safety;
- Enhanced provision of walking and cycling routes as part of the Green Infrastructure network (see Policy CS8: Green Infrastructure); and
- The roll out of infrastructure for low carbon emission vehicles.

Ensuring a Choice of Travel Supplementary Planning Document

- 2.4.4 This SPD provides the car and cycle parking standards for the area of Knowsley. The car and cycle parking standards for B8 use classes have been summarised in **Table 2.1**.

Table 2.1 Car and Cycle Parking Standards

	Town Centre (Maximum)	District and Local Centre (Maximum)	Other Areas (Maximum)	Disabled Parking (Minimum)		Cycle (Minimum)
				Up to 200 bays	Over 200 bays	
B8 Use Class	1 space per 100 sqm			Individual bays for each disabled employee plus 2 bays of 5 of total capacity whichever is greater	6 bays plus 2% of total capacity	1 space per 850 sqm (Minimum of 2 spaces)

3. Existing Conditions

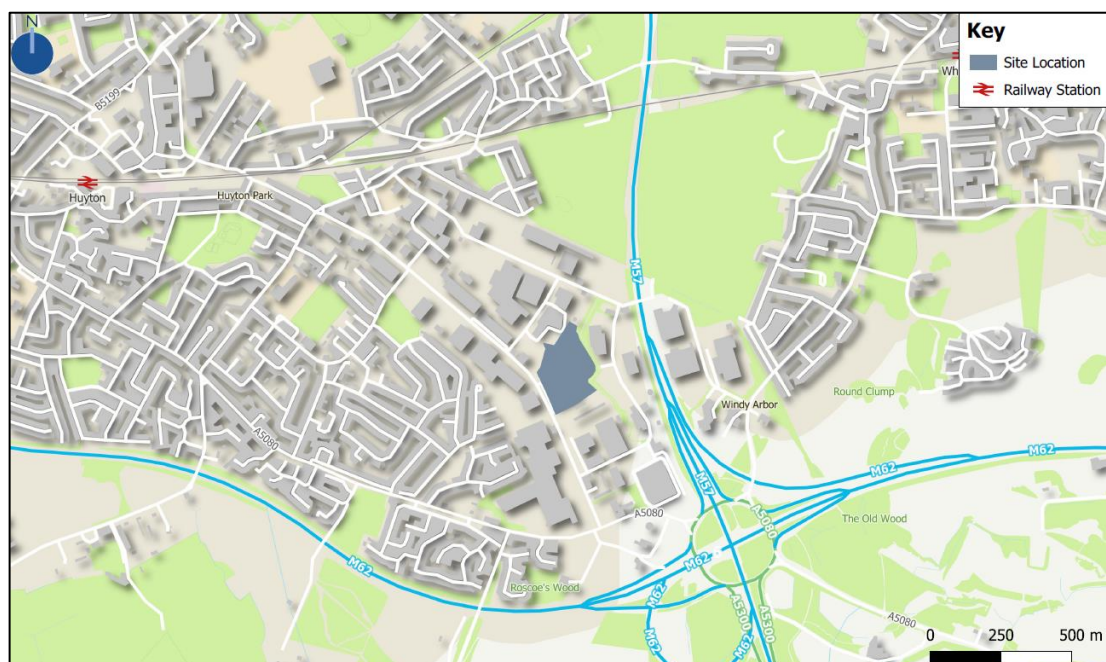
3.1 Preamble

- 3.1.1 This section of the report provides details of the site as existing, its permitted uses, access arrangements and accessibility by all modes.

3.2 Site Description

- 3.2.1 The site is located at Wilson Road, Huyton Business Park, L36 6AE ('the site') and occupied by John Mason International.
- 3.2.2 The site is currently operating under a B8 commercial floor space classification. Pedestrian access is taken from Wilson Road. Similarly, there are two existing vehicular accesses, also taken via Wilson Road. The site itself is situated to the west of the M57 and to the north of the M62 as shown in the site context plan included as **Figure 3.1** as an extract and included to scale at the end of this report.

Figure 3.1 Site Context Plan



3.3 Local Highway Network

- 3.3.1 The site fronts onto Wilson Road, which is a single-carriageway, two-way road with a speed restriction of 30mph. Wilson Road extends from the A5080 (Cronton Road) in the south towards the B5199 in the north and it also provides a direct route through Huyton Town Centre.

- 3.3.2 The A5080 provides the site with direct access to the junction for the M57/M62 meaning that the site benefits from being within proximity to the wider network and other major destinations, including Liverpool, Wigan, West Lancashire, and St Helens.
- 3.3.3 Whilst Wilson Road is not characterised by any form of road markings, there are no formal on-street parking spaces within the immediate vicinity of the site. The site does, however, benefit from a number of off-street car parking spaces which are currently located to the north, east and south of the existing building. Spaces include both car, trailer parking spaces and parking spaces for motorhomes.

3.4 Local Facilities

- 3.4.1 The site is situated within proximity to a number of key facilities that may be useful or necessary for employees of the site. **Table 3.1** provides a summary of these local facilities and the approximate walking/cycling distances.

Table 3.1 Local Facilities

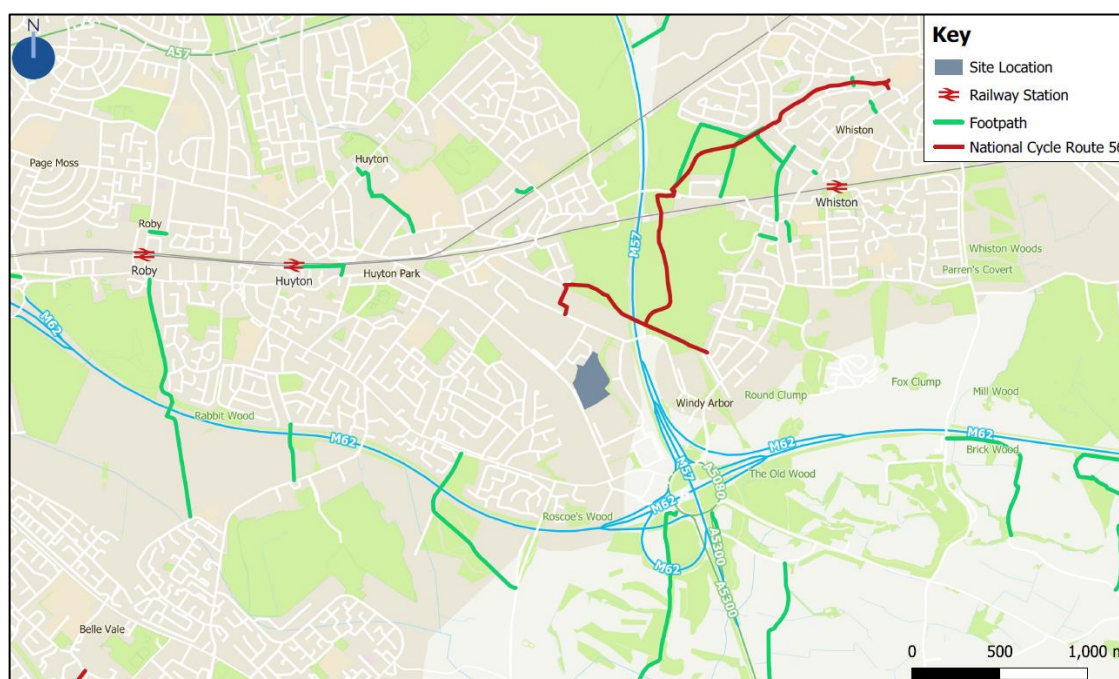
Facility		Distance	Travel Time (mins)	
			Walk	Cycle
Medical Facilities				
Doctors	Tarbock Medical Centre	1.2km	15	3
Dentist	EvoDental Liverpool Clinic	450m	6	1
Pharmacy	Davey’s Chemist	1.3km	16	4
Retail Facilities				
Food Retail	Aldi	650m	8	3
	Tesco Esso Express	700m	8	3
Community Facilities				
Post Office	Huyton Post Office	1.5km	19	5
ATM	Tesco Esso Express	700m	8	3
Petrol Garage	Tesco Esso Express	700m	8	3
Public House	Chapel Brook & Brewery Fayre	450m	5	1
Gym	Dedicated Super Gym	600m	7	2
	Village Gym Liverpool	1.6km	21	7

- 3.4.2 **Table 3.1** confirms that a range of facilities are located within close proximity to the site, ensuring that these trips attractors can be accessed by modes other than the private car and realistically on foot. Thereby, this reflects the fundamental requirements of national, regional, and local planning policy for creating sustainable communities. The Chartered Institute of Highways and Transportations (CIHT) March 2015 guidance document, 'Planning for Walking', states that 'walkable neighbourhoods' are those with a typical catchment of around 800m, with many of the identified land uses being within this walking distance threshold.

3.5 Pedestrian and Cycle Infrastructure Plan

- 3.5.1 In terms of pedestrian infrastructure, footways within proximity of the site are approximately 2m wide which according to MfS (Manual for Streets) are of an adequate width for accessible travel. There is also a zebra crossing located to the north of the site, along Wilson Road to aid safe crossing of the carriageway. Dropped kerbs and tactile paving are also present on the surrounding pedestrian footways to aid safe crossing. Lighting is also present within the vicinity of the site.
- 3.5.2 **Figure 3.2** shows the location of public rights of ways (PROW) in the form of footpaths which are within proximity of the site.

Figure 3.2 Pedestrian and Cycle Infrastructure Plan



- 3.5.3 In terms of cycle infrastructure, there are currently limited cycle facilities within proximity to the site. The site does however benefit from being situated approximately 650m south of part of National Cycle Route (NCR) 56 which provides an off-road route towards Whiston and subsequently Prescott. It is noted however that there will be an improvement to NCR56 with an extension being under construction which will extend the existing route towards Prescott Town Centre in the north and Widnes in the south.
- 3.5.4 A copy of the plan which shows the extent of the cycle route extension has been included at the end of this report as **Appendix A** whilst the existing cycle infrastructure has been illustrated in **Figure 3.2**.

3.6 Public Transport

Bus Services

- 3.6.1 The nearest bus stops to the site are located approximately 210m to the north, which equates to around a 3-minute walk. There is a bus stop on either side of the carriageway, of which both are characterised by a flag and post with some timetable information. The bus stops are served by routes 248, 870 and 897, with destinations included Prescott Bus Station and Huyton Bus Station.
- 3.6.2 There are also two bus stops located 600m to the south of the site, again one on either side of the carriageway. These bus stops are characterised by a flag and a post with timetable information as well as a layby. Bus routes provided at these stops include routes 7 and 61. Other routes also use these bus stops; however, they are school services and therefore have been omitted from this report.
- 3.6.3 The bus services, their routes and frequencies are summarised in **Table 3.2**, whilst the bus stop locations are shown on the public transport plan included to scale at the end of this report, and as an extract both being **Figure 3.3**.

Table 3.2 Bus Services

Bus Route Number	Route	Peak Hour Frequency			Weekday Services	
		Weekday	Saturday	Sunday	First	Last
Buses on Wilson Road						
248	Huyton Bus Station – Prescot Bus Station	3 per day	3 per day	None	06:34	07:38
870	Prescot Road/Orleads Road – Ellis Ashton Street/Brickfields	1 per day Tuesday-Friday	None	None	N/A	N/A
897	Stretton Way / Wilson Road - South Boundary Road / Admin Road	2 per day	2 per day	2 per day	05:59	06:49
Buses on Cronton Road						
7	Liverpool One Bus Station – Kensington – Knowsley Bus Station	2 per hour	2 per hour	2 per hour	05:48	23:00
61	Bowring Park Road – Halton Hospital	1-2 per hour	1-2 per hour	1 per hour	05:54	20:33

- 3.6.4 **Table 3.2** highlights that the site is served by a number of bus routes which provide the site with access to various destinations, including Prescott Bus Station and Halton Hospital.

Railway Services

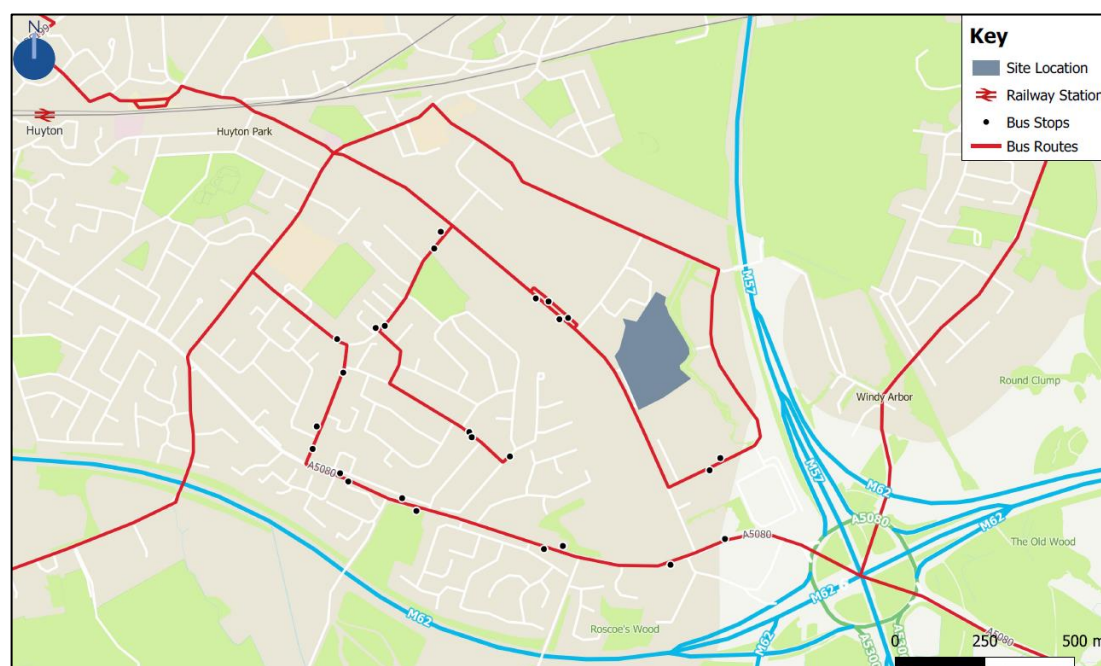
- 3.6.5 Huyton Railway Station is the closest station to the site, located some 2km to the north, equating to a 23-minute walk or a 5-minute cycle. The station is served by Northern Railway providing regular and direct services towards Liverpool Lime Street, Blackpool North, Crewe, and Wigan North. The location of the railway station is shown on **Figure 3.3**.
- 3.6.6 The local railway services by destination, frequency and journey time are summarised in **Table 3.3**.

Table 3.3 Rail Services

Direct Service Destination	Peak Hour Frequency			Approx. Time
	Weekday	Saturday	Sunday	
Liverpool Lime Street	2-3 per hour	2-3 per hour	2 per hour	11-18 minutes
Crewe	2 per day	2 per day	None	2 hours
Blackpool North	1 every 2 hours	1 every 2 hours	1 per hour	1 hour 15 minutes
Wigan North	1-2 per hour	1-2 per hour	1 per hour	20-31 minutes
Manchester Piccadilly	1 per hour	1 per hour	1 per hour	46 minutes

- 3.6.7 **Table 3.3** confirms that Huyton station is well served by rail, with frequent services to other major destinations including Liverpool and Wigan.

Figure 3.3 Public Transport Plan



- 3.6.8 **Figure 3.3** also highlights that the site benefits from bus services which travel towards Huyton Railway Station, making the railway services set out in **Table 3.3** accessible to any employees of the existing site.

3.7 Methods of Travel to Work

- 3.7.1 In order to establish local travel characteristics for the site, the 2011 Census has been queried for method of travel to work data for the Middle Super Output Area (MSOA) Knowsley 015, which includes this site. The results of this search are included as **Table 3.4**.

Table 3.4 Method of Travel to Work Census Information - Workplace

Method of Travel to Work	%
Underground, metro, light rail or tram	0%
Train	3%
Bus, minibus, or coach	12%
Taxi	2%
Motorcycle, scooter or moped	1%
Driving a car or van	62%
Passenger in a car or van	8%
Bicycle	2%
On foot	10%
Other method of travel to work	0%
Total	100%

- 3.7.2 **Table 3.4** demonstrates that in the locality of the site, some 62% of employees travel to work via the private car, 15% travel to work via public transport and a further 12% travel to work using active modes of transport. Active modes of transport include commuting via foot or bicycle.

3.8 Summary

- 3.8.1 In summary, it can be concluded that the development site benefits from access to frequent rail services into Liverpool, Crewe and Manchester Piccadilly from Huyton Railway Station which is around a 23-minute walk or 5-minute cycle from the development site.
- 3.8.2 In terms of bus services, as previously mentioned, there are several services which are accessible to the development site. The site also benefits from a number of local amenities within a reasonable walking distance, demonstrating that employees will be able to travel without relying on the use of the private car.
- 3.8.3 It can therefore be concluded that in terms of transport, the site is in a sustainable location whilst also being suitably located to the strategic road network.

4. Development Proposals

4.1 Scale of Development

- 4.1.1 The development will consist of the demolition of all of the existing buildings located on site and the construction of a single, two-storey, B8 Warehouse with ancillary office floor space and a separate gatehouse located to the south of the proposed building. The final occupier of the site has not yet been established and therefore a B8 classification provides a level of flexibility.
- 4.1.2 There will be a large servicing yard to the rear of the development, which will be accessed via the gatehouse and there will also be a number of trailer parking spaces located within this area.
- 4.1.3 A ground floor plan has been included at the end of this report as **Appendix A**.

4.2 Access

- 4.2.1 There will be a single vehicular access taken from Wilson Road, located on the southwestern boundary of the site. This singular access point will provide access to both car parking and the servicing area/trailer parking to the rear of the proposed building.
- 4.2.2 A footway will be provided alongside this access, fronting onto Wilson Road; however, an alternative access will be provided to the north of the secondary car park through a landscaped area. This access provides a more direct route from the site towards local bus stops and the railway station, it also falls on the most appropriate pedestrian desire line.
- 4.2.3 In addition to the proposed pedestrian accesses, there will be footways around the perimeter of the proposed building. Pedestrians will be able to use these footways to access the development site via a footway located on the eastbound carriageway of the site access. Although there will not be a formal footway on the westbound carriageway of the site entrance and subsequently throughout the entire car park, it is envisaged that appropriate road markings will be in place within the car park, separating vehicular traffic and pedestrian movements.

4.3 Car and Cycle Parking

- 4.3.1 Car parking will be provided to the south of the proposed development site, whereby there will be two separate car parking areas with access taken from Wilson Road. Car parking is to be provided in line with Knowsley car parking standards, as set out previously in **Table 2.1**. Therefore, a total of 190 spaces are to be provided which includes 10 accessible spaces. A total of 15 motorcycle parking spaces will also be provided adjacent to the accessible parking bays.
- 4.3.2 The standard car parking spaces provided will measure 2.4m wide and 4.8m long and the accessible spaces will be 3.6m wide and 4.8m long. In order to ensure that each of the car parking spaces is accessible, a review has been carried out using AutoCAD. These drawings

demonstrate that the car park works effectively, and they have been included at the end of this report as Drawing 22036-MA-XX-XX-DR-C-0120.

4.4 Cycle Parking

- 4.4.1 In terms of cycle parking, this will be also provided in line with the Knowsley Cycle Parking Standards, which state that 1 space should be provided for every 850sqm of B8 floorspace meaning that 23 spaces should be provided. However, 16 Sheffield stands will be provided allowing up to 32 bikes to be parked at any one time. The cycle parking will be located to the south of the development site.

4.5 Delivery and Servicing

- 4.5.1 Delivery and servicing will take place onsite via the dedicated delivery and servicing area located to the rear of the proposed development. Vehicles will be able to enter and exit the site in forwards gear, as shown in drawing 22036-MA-XX-XX-DR-C-0122.

5. Trip Generation and Distribution

5.1 Preamble

5.1.1 This section of the report details the existing traffic flows related to the site and the estimated multi-modal trip generation for the proposed uses.

5.2 Existing Trip Generation

5.2.1 For the purposes of calculating the likely trip generation of the proposed use, the TRICS database has been searched for comparable proxy sites, two proxy sites were identified. The trip calculation selection parameters included:

- Land Use: 02-Employment
- Category: G-Parcel Distribution Centres
- Use Class: B8
- Location: Suburban, Edge of Town, Commercial Zone, Development Zone

5.2.2 A trip generation exercise was previously undertaken to inform pre application relating to the emerging development proposals. The proposed trip rates were reviewed by WSP on behalf of National Highways and a response was issued as set out in WSP's document dated 16th December 2021. The trip rates extracted for the pre application submission were deemed to be too low and not comparable. Therefore, the proxy sites have been carefully selected for this TS in order to ensure that they are comparable and produce higher trip rates in comparison to those previously selected. The document referenced has been included at the end of this report as **Appendix C**.

5.2.3 The total vehicle, LGV, Servicing Vehicles and PSV trip rates derived from this search are summarised in **Table 5.1**, with the full TRICS output included **Appendix D** at the end of this report.

Table 5.1 Existing Trip Rates – per 100sqm

Mode	AM Peak			PM Peak		
	In	Out	Total	In	Out	Total
Total Vehicle Trips	0.51	0.48	0.99	0.44	0.65	1.09
Servicing Vehicle Trips	0.17	0.40	0.57	0.29	0.16	0.45
LGV Trips	0.08	0.23	0.31	0.25	0.08	0.33
PSV Trips	0.02	0.02	0.04	0.02	0.01	0.03
HGV Trips	0.09	0.17	0.26	0.04	0.08	0.12

5.2.4 The trip rates in **Table 5.1** have been applied to the existing floor area, totally some 9,863sqm and have been summarised in **Table 5.2**.

Table 5.2 Existing Trip Generation – 9,863sqm

Mode	AM Peak			PM Peak		
	In	Out	Total	In	Out	Total
Total Vehicle Trips	50	47	97	43	64	108
Servicing Vehicle Trips	17	40	56	28	16	44
LGV Trips	8	23	30	25	8	32
PSV Trips	2	1	4	1	1	2
HGV Trips	9	17	26	4	8	12

- 5.2.5 **Table 5.3** demonstrates that the existing site is likely to generate some 97 two way vehicular movements in the AM peak and 108 movements in the PM peak.

5.3 Proposed Trip Generation

- 5.3.1 For consistency, the same trip rates were taken from the TRICS search used for the existing situation and have been applied to the total sqm of the proposed development. The result of this calculation is summarised in **Table 5.3**.

Table 5.3 Trip Generation – B8 Commercial Warehouse (19,116sqm)

Mode	AM Peak			PM Peak		
	In	Out	Total	In	Out	Total
Total Vehicle Trips	97	91	189	84	125	208
Servicing Vehicle Trips	32	77	109	55	30	85
LGV Trips	15	44	59	48	15	63
PSV Trips	4	3	7	3	2	5
HGV Trips	18	32	50	7	16	23

- 5.3.2 **Table 5.3** demonstrates that the site would generate an estimated 189 two-way vehicle trip in the AM peak and 208 in the PM peak.

5.4 Net Impact

- 5.4.1 In order to understand the net impact of the site on the existing highway network the difference in total vehicles trips has been summarised in **Table 5.4**.

Table 5.4 Net Impact

Mode	AM Peak			PM Peak		
	In	Out	Total	In	Out	Total
Total Vehicle Trips	49	46	95	42	63	105

- 5.4.2** Table 5.4 demonstrates that there will be an increase of 95 two-way vehicular trips in the AM peak and 105 in the PM peak. This gives an uplift of 24 HGV movements in the AM peak and 11 in the PM peak.

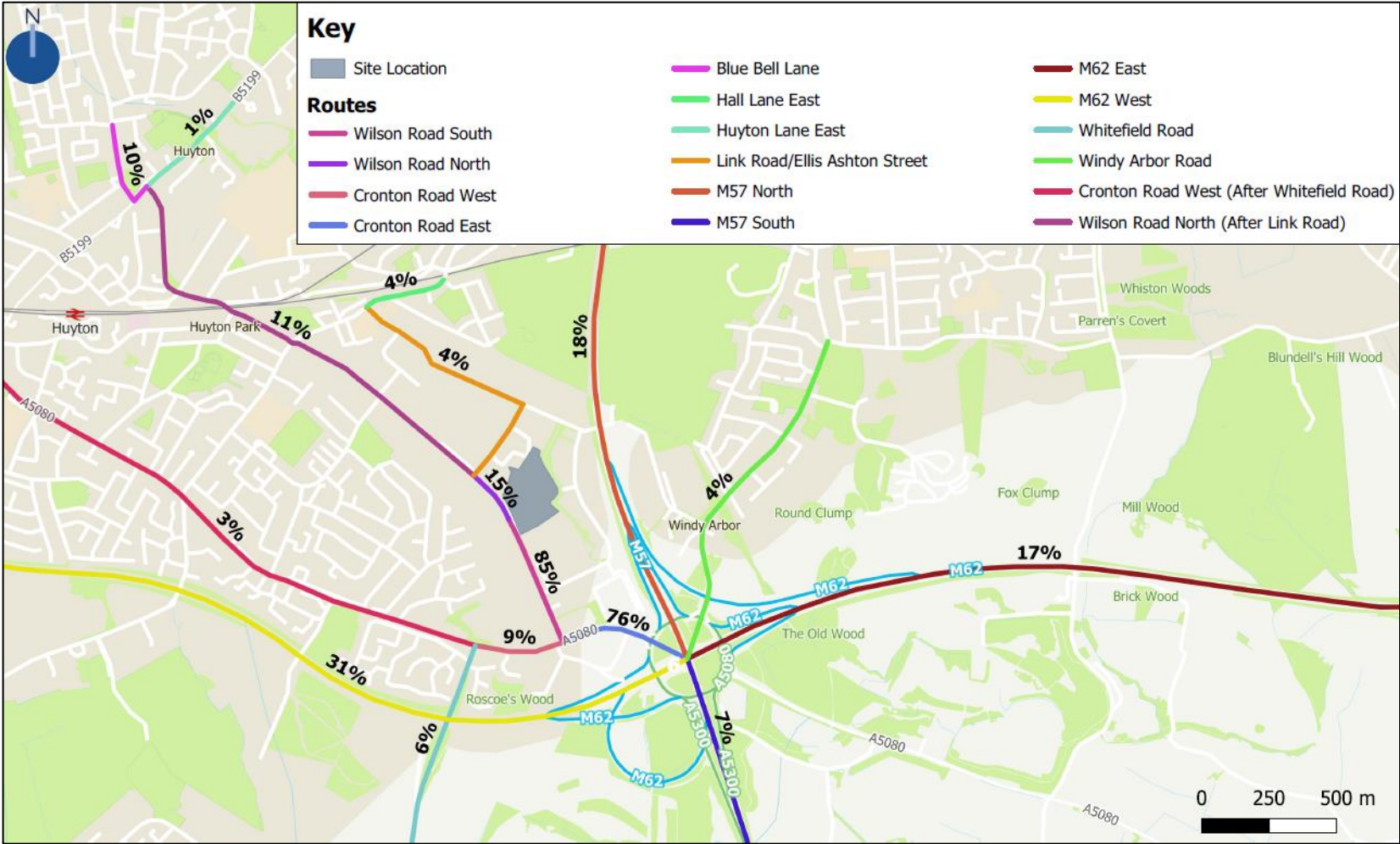
5.5 Trip Distribution

- 5.5.1** To demonstrate the likely traffic impact, a high-level assessment of the estimated trip distribution has been undertaken using a Trip Distribution Model and Census 2011 Data Table 'WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level)' with the place of usual residence identified as E02001341 Knowsley 015.
- 5.5.2** The trip distribution has been demonstrated using the existing highway network. The results are summarized in **Table 5.5** and are shown diagrammatically in **Figure 5.1**.

Table 5.5 Trip Distribution

Road	% Distribution of Existing Highway Network
Wilson Road South	85%
Cronton Road East	76%
M62 West	31%
M57 North	18%
M62 East	17%
Wilson Road North	15%
Lathoma Road/Blue Bell Lane	10%
Cronton Road West	9%
M57 South	7%
Whitefield Lane	6%
Link Road	4%
Hall Lane East	4%
Windy Arbor Road	4%
Huyton Lane East	1%

Figure 5.1 Trip Distribution



- 5.5.3 As shown in **Figure 5.1**, 85% of traffic to the site will be travelling in a northbound direction and the remaining 15% will be travelling southbound towards the site. It is also noted that the highest number of people travelling to the site for work come from Liverpool with the main route being via the M62.
- 5.5.4 It should also be noted that it is assumed that all HGV movements to and from the site will go via the junction for the M57/M62. Therefore, a total of 50 movements in the morning peak and 16 in the PM peak will travel south along Wilson Road onto Cronton Road (east) and then towards the Motorway Junction. It is considered that this can be accommodated on the highway network without material impact.
- 5.5.5 **Table 5.6** demonstrates the level of trips along each link for the proposed 19,116sqm of B8 floorspace at the site. This assumes little to no modal shift as the result of either third-party transport interventions or other improvements associated with the site.

Table 5.6 Distributed Trips Per Link – 19,116sqm B8 Floorspace

Link	%	19,116sqm B8 Floorspace								
		AM Peak (08:00-09:00)			PM Peak (17:00-18:00)			Daily Flows		
		In	Out	Total	In	Out	Total	In	Out	Total
Wilson Road South	85%	85	80	165	73	109	182	1374	1378	2752
Cronton Road East	76%	76	71	147	65	97	162	1225	1228	2453
M62 West	31%	30	29	59	26	39	65	491	493	984
M57 North	18%	18	16	34	15	23	38	284	285	569
M62 East	17%	17	16	33	15	22	37	278	279	557
Wilson Road North (before Link Road)	15%	14	14	28	12	19	31	234	235	469
Wilson Road North (after Link Road)	11%	11	10	21	9	14	23	177	177	355
Lathoma Road/Blue Bell Lane	10%	10	9	19	8	12	21	156	156	312
Cronton Road West (before Whitefield Lane)	9%	9	9	18	8	12	20	149	150	299
M57 South	7%	6	6	13	6	8	14	105	105	209
Whitefield Lane	6%	6	6	12	5	8	13	98	98	196
Windy Arbor Road	4%	4	4	8	4	5	9	67	67	134
Link Road	4%	4	3	7	3	5	8	57	57	114
Hall Lane East	4%	4	3	7	3	5	8	57	57	114
Huyton Lane East	1%	1	1	3	1	2	3	21	21	42

5.6 Junction Modelling

- 5.6.1 The proposed access to the site has been assessed using PICADY in order to understand whether the proposed junction has the capacity to accommodate the potential trip generation, as set out in **Table 5.3**. The Geometrical inputs of the proposed access have

been measured from Ordnance Survey (OS) mapping and have been input into the PICADY model.

- 5.6.2 The results of the junction capacity modelling have been summarised in **Table 5.7** and the full outputs are included as **Appendix E**.

Table 5.7 Proposed Site Access T-Junction

Proposed Site Access	Baseline + Development			
	AM Peak		PM Peak	
	RFC	Queue	RFC	Queue
Access – Wilson Road North and South	0.18	0.2	0.25	0.3
Wilson Road South - Access	0.18	0.2	0.15	0.2

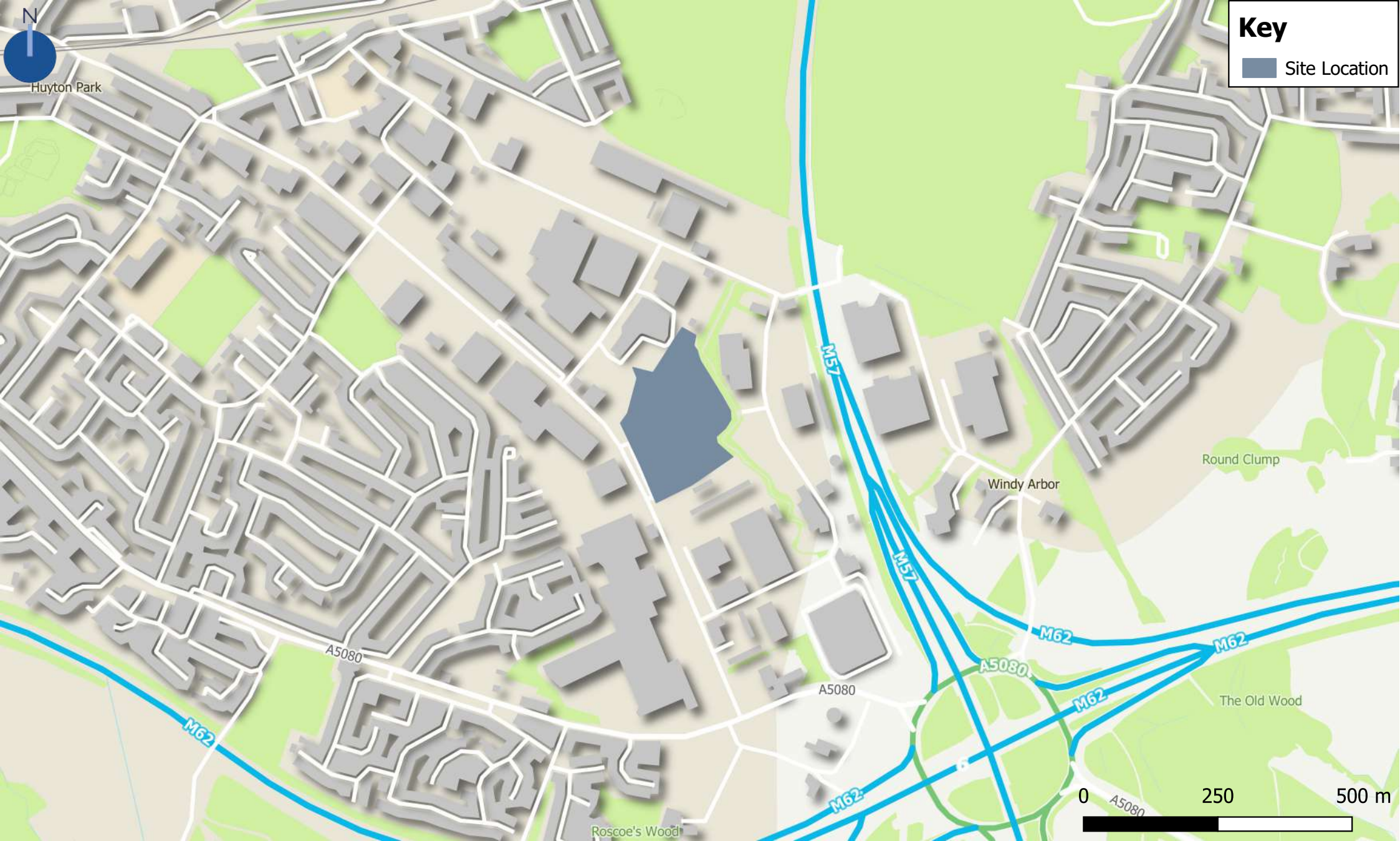
- 5.6.3 It is evident from this appraisal, that the proposed access to the development site has the potential to accommodate the traffic generated by the proposed development.

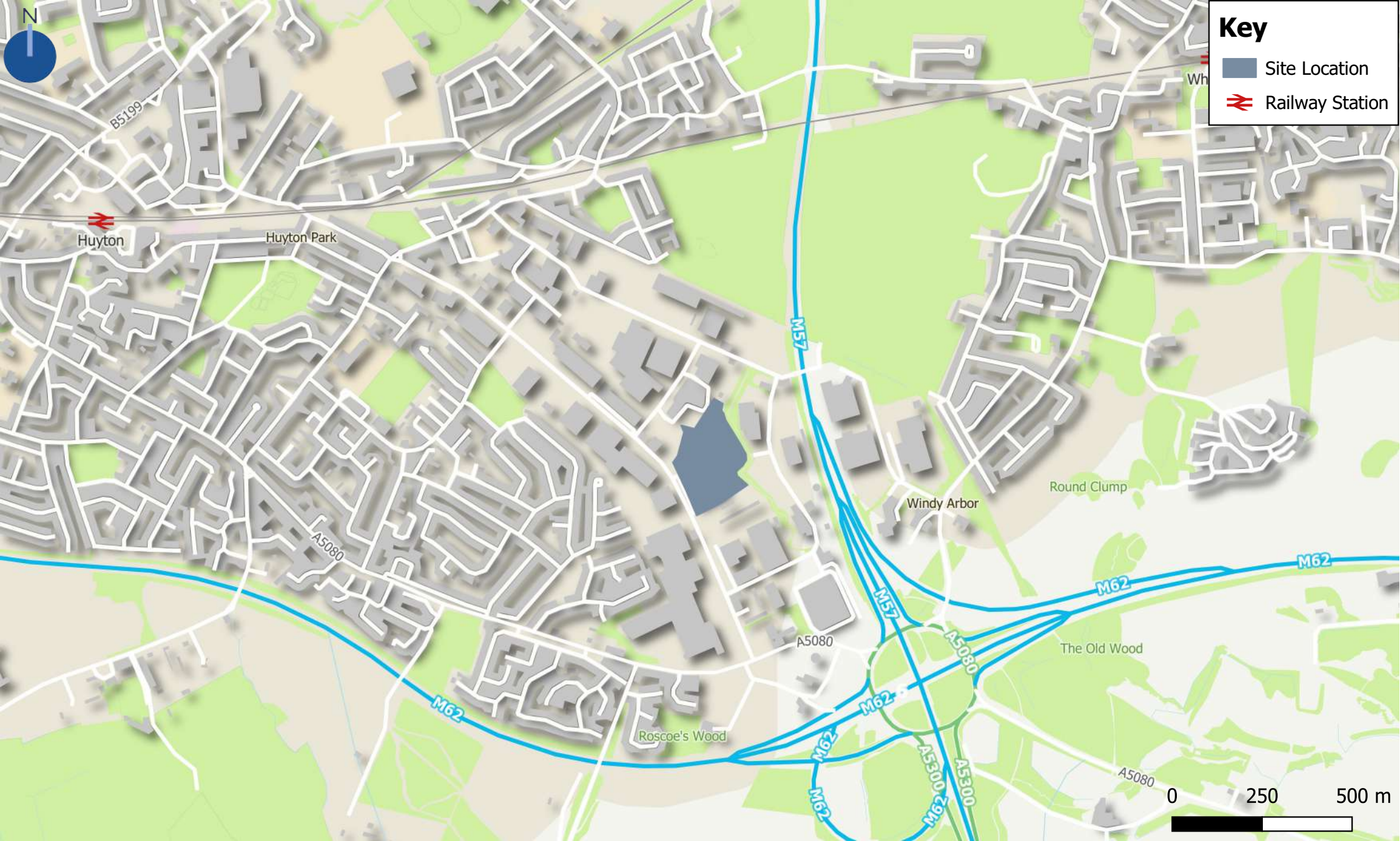
6. Summary and Conclusion

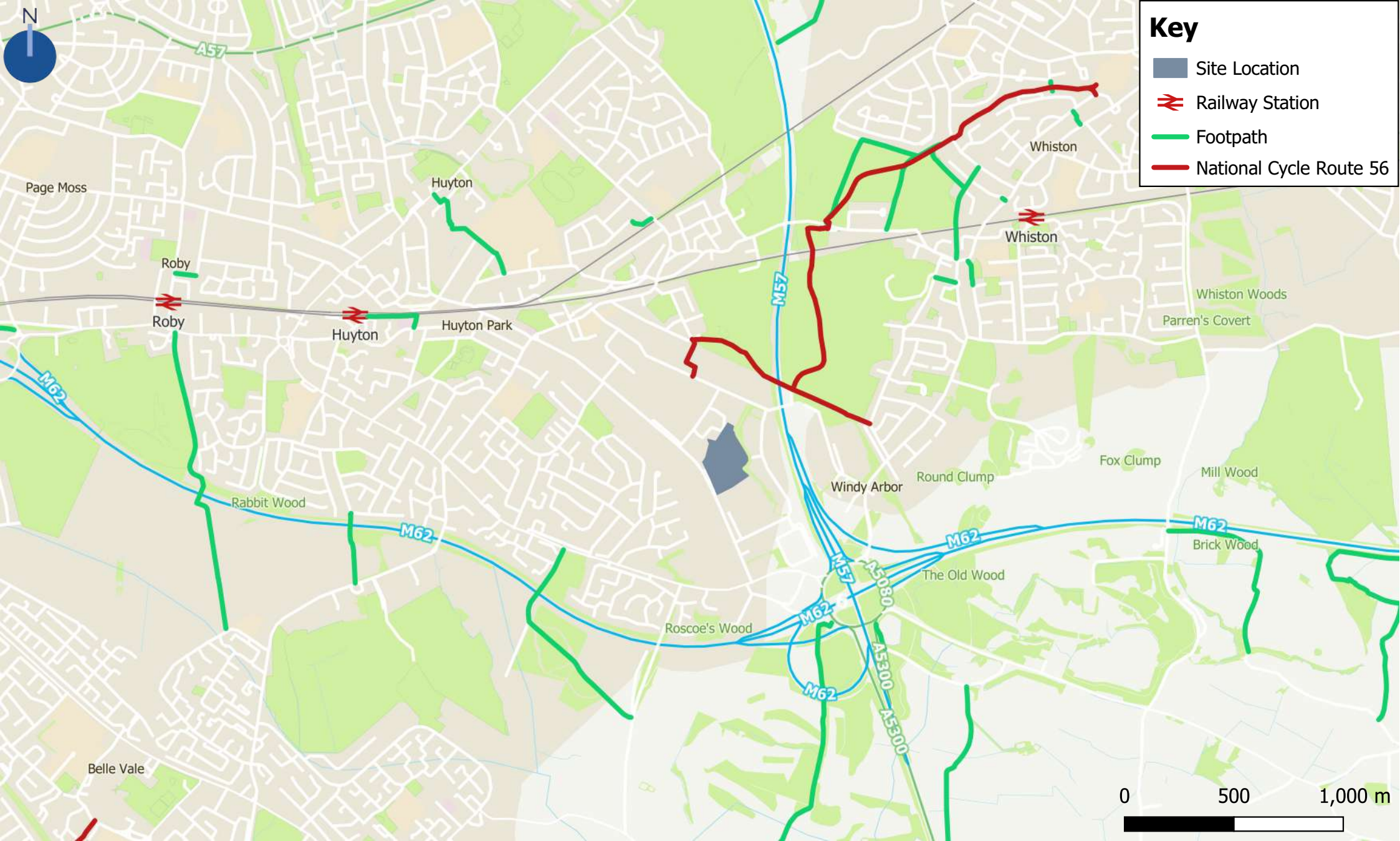
- 6.1.1 Markides Associates (MA) have been instructed to prepare this Transport Statement (TS) by Linden Hill – Capital Assets – ALX Limited in support of an application for the development of a commercial (Use Class B8) unit located at Land at John Mason International Site, Wilson Road, Huyton Business Park, L36 6AE ('the site').
- 6.1.2 This TS demonstrates that the site is located close to public transport and local facilities. Train and bus services are provided into towards Liverpool Lime Street, Blackpool North, Crewe, and Wigan North. Amenities around the site include educational, employment and leisure facilities which will not require the use of single occupancy vehicle trips.
- 6.1.3 With regards to delivery and servicing, it has been demonstrated that a suitable strategy can be provided that ensures vehicles can serve the site appropriately.
- 6.1.4 The trip generation assessment demonstrates that whilst there will be an increase in the number of vehicle trips to and from the site, the number of these trips will have a nominal impact on the local highway network with an uplift of only 24 HGVs in the morning peak hour and 11 HGVs in the evening peak hour, respectively.
- 6.1.5 For the reasons identified above, it is considered that the development should be supported in respect of transport matters.

FIGURES

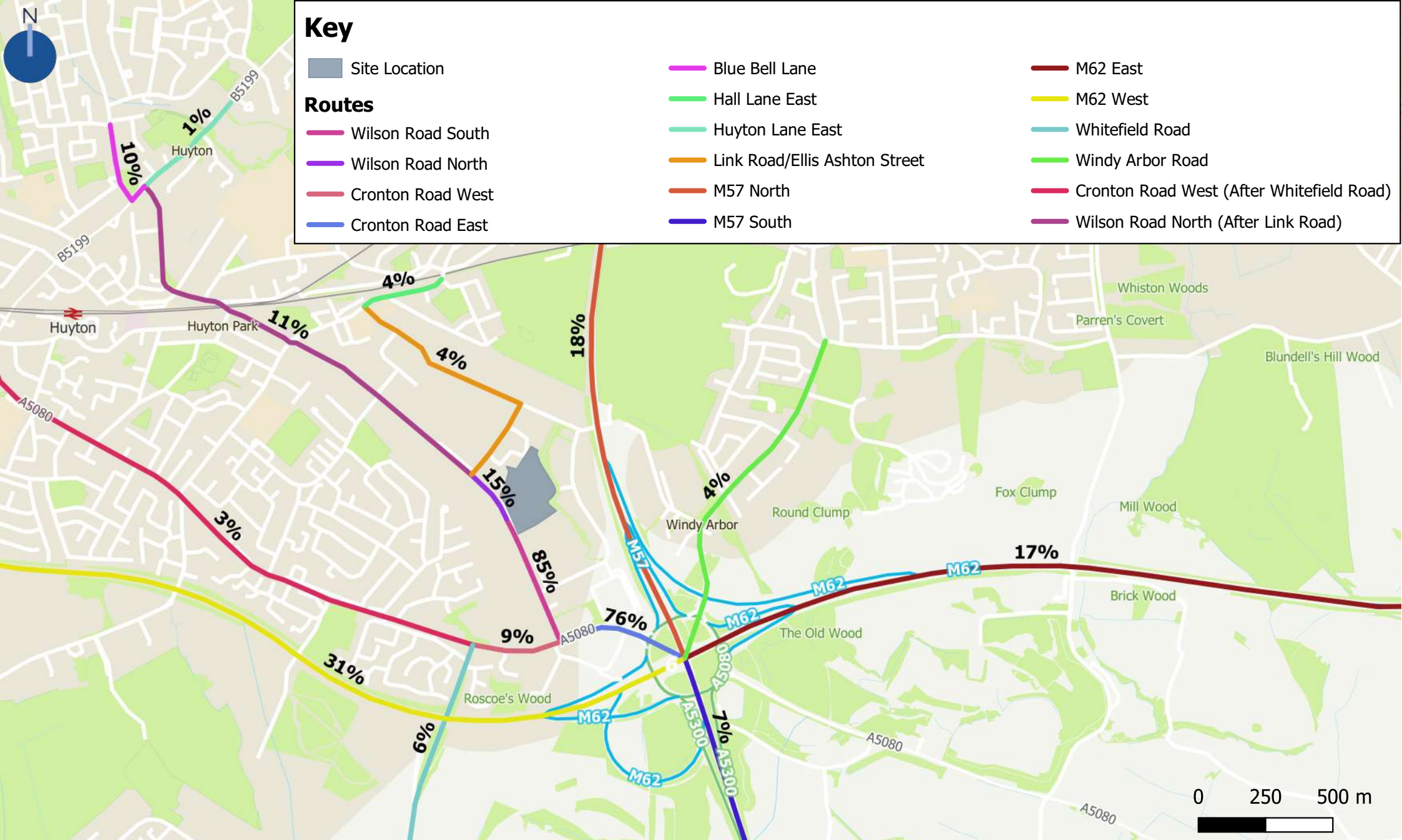
Figure 1.1	Site Location Plan
Figure 3.1	Site Context Plan
Figure 3.2	Pedestrian and Cycle Infrastructure Plan
Figure 3.3	Public Transport Plan
Figure 5.1	Trip Distribution











DRAWINGS

22036-MA-XX-XX-DR-C-0120 – Vehicle Swept Path (Large Car)

22036-MA-XX-XX-DR-C-0122 – Arctic and Rigid Swept Path Analysis



DO NOT SCALE OFF THIS DRAWING

Large Car (2016)	
Overall Length	5.116m
Overall Width	1.899m
Overall Body Height	1.536m
Min Body Ground Clearance	0.311m
Track Width	1.834m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	6.150m

Revision History

Rev	Comment	By	Chkd	Appr	Date
P02	UPDATED LAYOUT	CDT	EG	EG	19.04.22
P01	FOR INFORMATION	CDT	EG	EG	01.04.22

Current Revision

Rev	Comment	By	Chkd	Appr	Date
P02	UPDATED LAYOUT	CDT	EG	EG	19.04.22

S2 - FOR INFORMATION

TYTHORN INVESTMENTS

MARKIDES ASSOCIATES
TRANSPORT PLANNING AND ENGINEERING

2nd floor
71-81 Southwark Bridge Road
London SE1 1LQ

Telephone: 0207 442 2225
E: enquiries@markidesassociates.co.uk
W: www.markidesassociates.co.uk

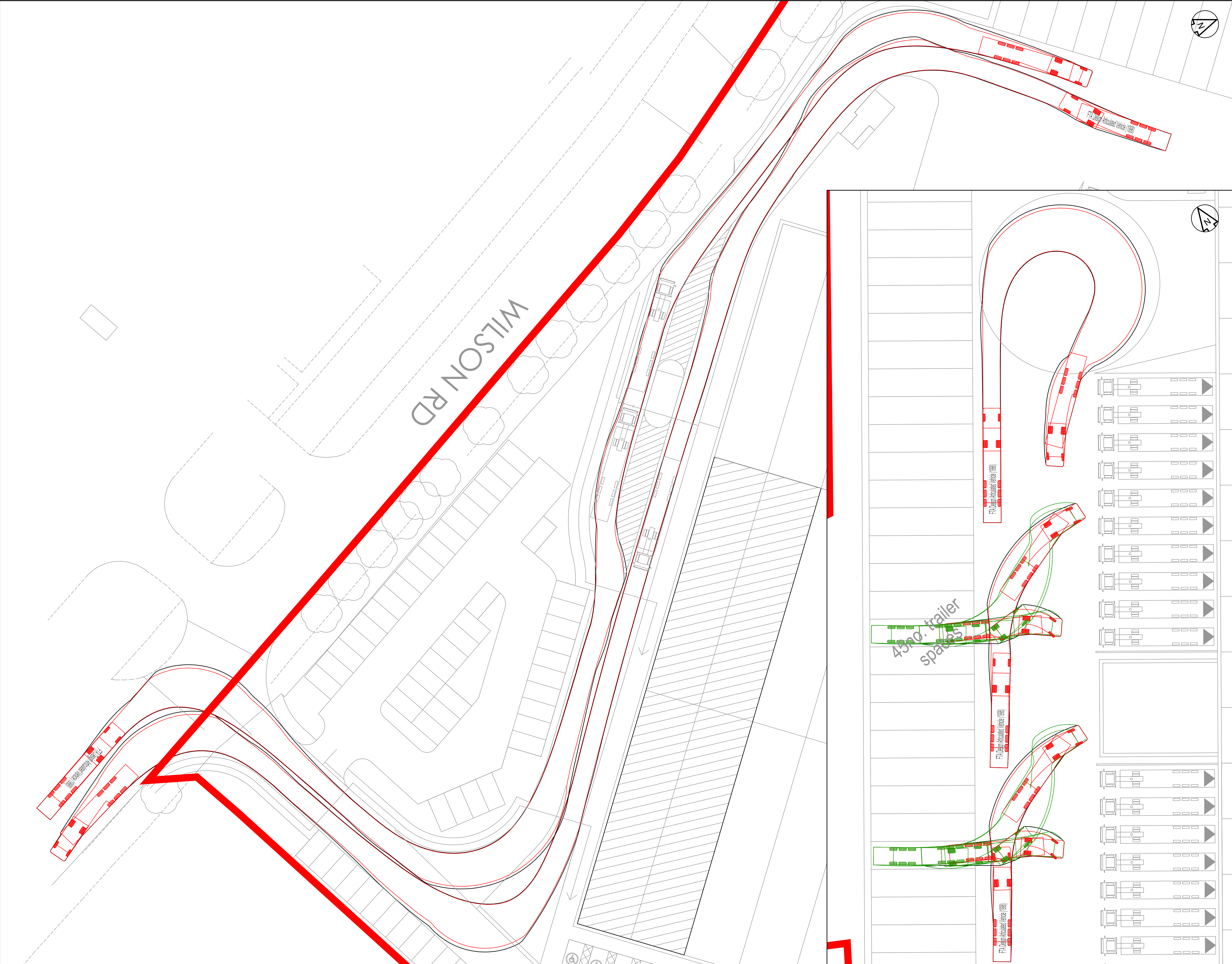
Project
**LAND AT JOHN MASON INTERNATIONAL
SITE HUYTON BUSINESS PARK**

Drawing Title
VEHICLE SWEEP PATH (LARGE CAR)

Markides Associates reference: 22036/01

1:200 @ A1

22036-MA-XX-XX-DR-C-0120 - P02



DO NOT SCALE OFF THIS DRAWING

FTA Design Articulated Vehicle (1998)

Overall Length	16.480m
Overall Width	2.550m
Overall Body Height	3.870m
Min Body Ground Clearance	0.515m
Max Track Width	2.470m
Lock to lock time	3.00s
Kerb to Kerb Turning Radius	6.550m

Revision History						
P02	UPDATED LAYOUT	CDT	EG	EG		19.04.22
P01	FOR INFORMATION	CDT	EG	EG		01.04.22
Rev	Comment	By	Chkd	Appr		Date
Current Revision						
P02	UPDATED LAYOUT	CDT	EG	EG		19.04.22
Rev	Comment	By	Chkd	Appr		Date

S2 - FOR INFORMATION

TYTHORN INVESTMENTS

MARKIDES ASSOCIATES
TRANSPORT PLANNING AND ENGINEERING

2nd floor
The Bridge
71-81 Southwark Bridge Road
London SE1 0LQ

Telephone: 0207 442 2225
E: enquiries@markidesassociates.co.uk
W: www.markidesassociates.co.uk

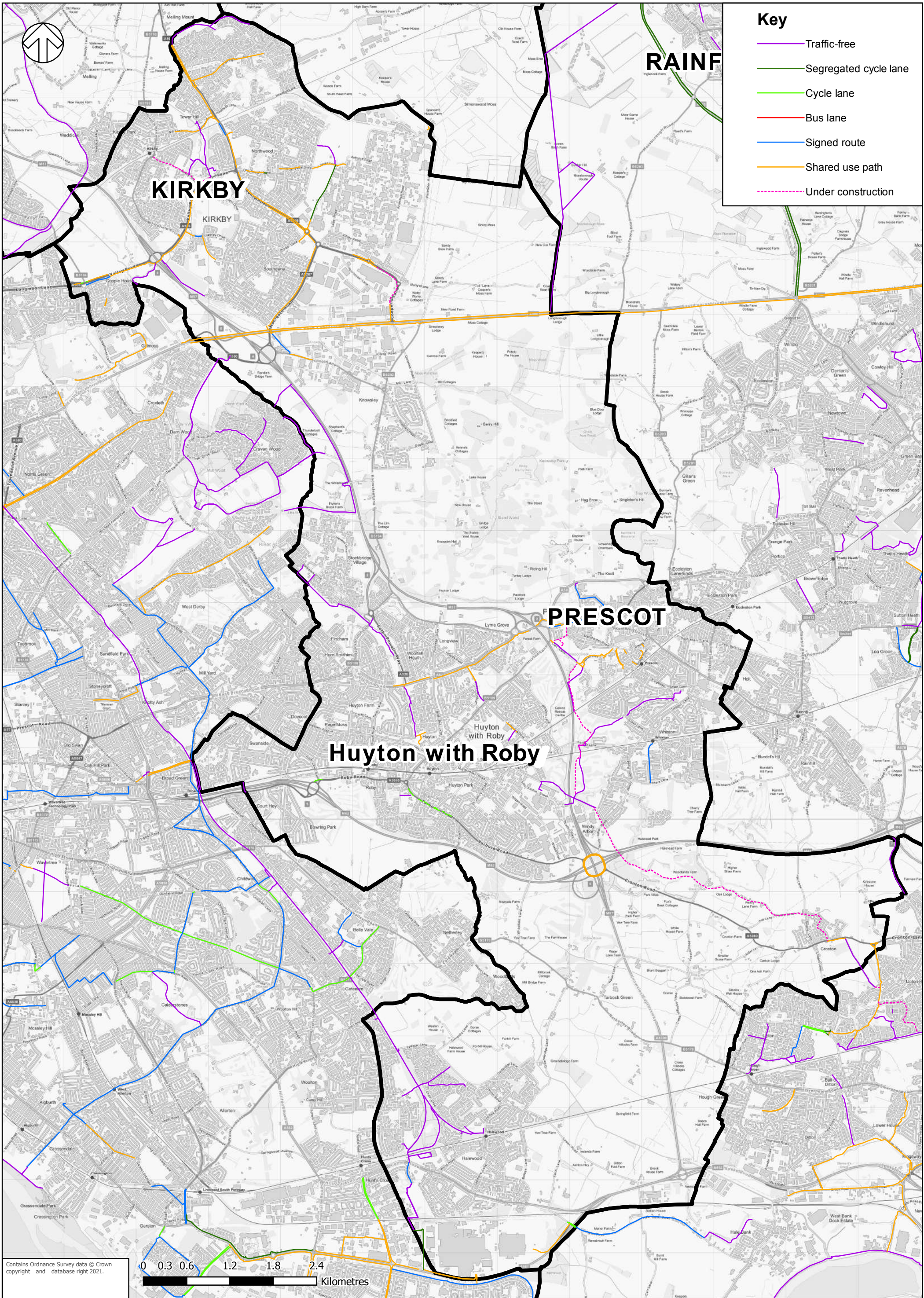
Project
**LAND AT JOHN MASON INTERNATIONAL
SITE HUYTON BUSINESS PARK**

Drawing Title
VEHICLE SWEEP PATH (ARTIC)

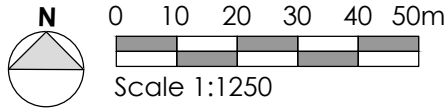
Markides Associates reference: 22036/01 1:250 @ A1

22036-MA-XX-XX-DR-C-0122 - P02

APPENDIX A – PROPOSED CYCLE EXTENSION



APPENDIX B - GROUND FLOOR LAYOUT



- NOTES
- AEWTP029C
- 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:

Principal Designer:

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

DESIGN HAZARD IDENTIFICATION

- No significant Hazards have been identified in this drawing

NOTES

- HGV circulation subject to tracking analysis

P2	11/04/22	CM	AL
Revised issue indicating pedestrian route			
P1	24/03/22	CM	AL
Initial Issue			
REV	Date	Drawn by: -	Checked by: -
Status	Purpose of Issue		
S2	For Comment		
drawing stage	Feasibility		
client	Linden Hill Capital Management		
project	35 Wilson Road Huyton		
drawing title	Feasibility Site Plan Option 5 Alternative Single Unit		
date	24/03/22	drawn	CM
scale@A3	1:1250	checked	AL

APPENDIX C – WSP REPORT



Review of TA Scoping Note

DATE:	16 December 2021	CONFIDENTIALITY:	Confidential
SUBJECT:	NW 095 TA Scoping Review – John Mason International Site		
PROJECT:	National Highways NW Spatial Planning	AUTHOR:	AD
CHECKED:	ML	APPROVED:	NM

Introduction

Hydrock have been appointed as the developer's transport consultation to assess the transport impacts of a proposed B2 / B8 development of 26,000m² GFA on the John Mason International site on Wilson Road in Huyton.

Hydrock have recently sent a scoping note to National Highways seeking to agree the methodology of the TA to assess the impacts of the proposed employment development. National Highways have subsequently commissioned WSP to review the scoping note to comment on the appropriateness of the proposed methodology.

BACKGROUND / PREVIOUS APPLICATIONS

WSP have reviewed a number of planning applications in and around Halsnead Garden Village on behalf of National Highways, the most recent of which is Symmetry Park application (planning ref: 20/00494/HYB). WSP are aware that there is a Grampian-style condition in place for this consent which ensures that none of the development approved in outline is occupied until the improvements at Tarbock Island are complete.

Without prejudice to developer's proposed planning application and any subsequent work produced by Hydrock, given the type, and location of the proposals, a similar condition may also apply.

Development Proposals

A speculative B2 / B8 is being proposed, but the note states that the current proposals are still being developed - the intention is to submit an outline application that provides maximum flexibility to respond to commercial demand / requirements once the lease-break on the existing occupier is enacted.

As such, it is stated that an outline application will be relatively high level to establish the principle of employment development (comprising Class E (g) (iii) light industrial (used to be B1c). Class B2 general industrial and Class B8 storage / distribution. The current building size is 10,000m² GFA, while the proposed development would be around 26,000m² GFA, therefore representing an uplift of around 16,000m².

Review of TA Scoping Note

DATE:	16 December 2021	CONFIDENTIALITY:	Confidential
SUBJECT:	NW 095 TA Scoping Review – John Mason International Site		
PROJECT:	National Highways NW Spatial Planning	AUTHOR:	AD
CHECKED:	ML	APPROVED:	NM

Figure 1 - Site Location (extracted from Scoping Note)



Trip Generation

The scoping note presents the proposed trip generation methodology, which is underpinned by trip rates extracted from the TRICS database. These theoretical trip rates were used to estimate the traffic generated by the existing site, the traffic generated by the proposed development, and the subsequent net traffic impact.

The tables below show the trip generation on the existing site GFA and the trip generation proposed on the new site GFA, which could be 26,000m². The third table shows the difference in trip generation between the existing and proposed.

Table 1 - Extant Use Trip Rates / Trips

Table 1.1: B8 Extant Land Use Trip Rates/Trips					Extant Circa 10,000sqm			
Trip Rate per 100sqm	Weekday AM Peak		Weekday PM Peak		Weekday AM Peak		Weekday PM Peak	
	(08:00-09:00)		(17:00-18:00)		(08:00-09:00)		(17:00-18:00)	
	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Total Vehicle Trips	0.147	0.082	0.071	0.159	15	8	7	16
HGV Trips	0.029	0.043	0.047	0.027	3	4	5	3

Review of TA Scoping Note

DATE:	16 December 2021	CONFIDENTIALITY:	Confidential
SUBJECT:	NW 095 TA Scoping Review – John Mason International Site		
PROJECT:	National Highways NW Spatial Planning	AUTHOR:	AD
CHECKED:	ML	APPROVED:	NM

Table 2 - Proposed Use Trip Rates / Trips

Table 1.2: B8 Land Use Trip Rates/Trips					Proposed Circa 26,000sqm			
Trip Rate per 100sqm	Weekday AM Peak		Weekday PM Peak		Weekday AM Peak		Weekday PM Peak	
	(08:00-09:00)		(17:00-18:00)		(08:00-09:00)		(17:00-18:00)	
	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Total Vehicle Trips	0.147	0.082	0.071	0.159	38	21	18	41
HGV Trips	0.029	0.043	0.047	0.027	8	11	12	7

Table 3 - Difference in Trips - Extant v Proposed

	Weekday AM Peak		Weekday PM Peak	
	(08:00-09:00)		(17:00-18:00)	
	IN	OUT	IN	OUT
Total Vehicle Trips	24	13	11	25
HGV Trips	5	7	8	4

On review of Hydrock’s B8 TRICS extracts, only six sites were included, which is considered to be low. It also appears that Hydrock’s TRICS exercise only used sites from the following regions:

- South East
- East Anglia
- West Midlands
- Yorkshire and North Lincolnshire
- North

WSP have reviewed the TRICS Good Practice Guide 2021, which states the following concerning the practice of removing sites based solely on region:

“It is not considered good practice to exclude survey sites within the TRICS® database on the sole basis of such sites being located within any particular region. We consider that a more robust use of the TRICS® filtering process takes place on a case-by-case basis, taking into account the numerous factors that can influence trip generation, with the TRICS® location type being at the forefront of these.”

As such, WSP have undertaken independent check on TRICS, using broadly the same parameters but including more regions. This resulted in trip rates higher than the ones presented by Hydrock. It is therefore

Review of TA Scoping Note

DATE:	16 December 2021	CONFIDENTIALITY:	Confidential
SUBJECT:	NW 095 TA Scoping Review – John Mason International Site		
PROJECT:	National Highways NW Spatial Planning	AUTHOR:	AD
CHECKED:	ML	APPROVED:	NM

recommended that Hydrock present further information to provide trip rates which are derived from a larger group of sites which reflect the proposed uses.

Furthermore, the scoping note states the following:

“While the floor areas for the proposed development may fluctuate a little, we would be grateful if you could confirm the above principals are reasonable, subject to the proposed floor area not increasing significantly nor becoming a more intensive land use”.

Given the current uncertainty on the floorspace and uses of the proposed development, Hydrock should ensure that their proposed development assessment traffic flows reflect the uses that could come forward, potentially presenting flows for alternative development scenarios if appropriate.

Traffic Distribution

The scoping note is light on detail regarding trip distribution methodology, but states that light vehicles will be distributed by a gravity model, and HGV’s will all be routed via M62 Junction 6.

This approach is acceptable in principle, but the TA should include the supporting information for the light vehicle gravity model, and any assumptions for the routing of HGVs on the SRN should also be evidenced.

Committed Development & Background Growth

The scoping note does not provide any details on committed developments or background traffic growth. Regardless of whether an operational capacity assessment is undertaken at M62 J6, the TA should account for local committed developments and background traffic growth. This will enable an understanding of the impact of the proposals on the network, accounting for the traffic that is forecast to be using the network in the opening year of the proposed development.

The TA should present assessment traffic flows which accord with the assessment requirements set out in National Highways’ Planning for the Future, and the DfT Circular 02/2013, Hydrock may seek to apply background traffic growth to reflect the likely network flows in the assessment years.

In terms of committed developments, Hydrock should contact Knowsley Council as the local planning authority to establish the appropriate committed developments to include, and provide evidence of this correspondence.

Proposed Assessment Methodology

Based on Hydrock’s calculation of the net traffic impact of the development proposals (set out in table 1.3) Hydrock have proposed only to assess the proposed site access onto Wilson Road and not undertake operational assessments of the M62 Junction 6.

Short of undertaking a full operational assessment, Hydrock propose that the TA will present the proposed development traffic flows travelling through the M62 J6 for review, and also present the site 12-hour trip

Review of TA Scoping Note

DATE:	16 December 2021	CONFIDENTIALITY:	Confidential
SUBJECT:	NW 095 TA Scoping Review – John Mason International Site		
PROJECT:	National Highways NW Spatial Planning	AUTHOR:	AD
CHECKED:	ML	APPROVED:	NM

generation profile for completeness. WSP suggest this exercise should include the full build-up of forecast traffic flows which accord with the assessment requirements set out in National Highways’ Planning for the Future, and the DfT Circular 02/2013.

Given WSP’s comments on the presented trip rates, WSP will wait until these elements are resolved before commenting on potential requirements for an operational assessment of the M62 J6.

Summary & Conclusion

Hydrock have been appointed as the developer’s transport consultation to assess the transport impacts of a proposed B8 development of 26,000m² on the John Mason International site on Wilson Road in Huyton.

Hydrock have recently sent a scoping note to National Highways seeking to agree the methodology of the TA to assess the impacts of the proposed employment development. National Highways have subsequently commissioned WSP to review the scoping note to comment on the appropriateness of the proposed methodology.

WSP have reviewed a number of planning applications in and around Halsnead Garden Village on behalf of National Highways, the most recent of which is Symmetry Park application (planning ref: 20/00494/HYB). WSP are aware that there is a Grampian-style condition in place for this consent which ensures that none of the development approved in outline is occupied until the improvements at Tarbock Island are complete.

Without prejudice to developer’s proposed planning application and any subsequent work produced by Hydrock, given the type, and location of the proposals, a similar condition may also apply.

Other key comments regarding the proposed assessment methodology are presented below:

- The scoping note presents the proposed trip generation methodology, which is underpinned by trip rates extracted from the TRICS database. These theoretical trip rates were used to estimate the traffic generated by the existing site, the traffic generated by the proposed development, and the subsequent net traffic impact.
- On review of Hydrock’s B8 TRICS extracts, only six sites were included, which is considered to be low. It also appears that Hydrock’s TRICS exercise only used sites from five regions. WSP reviewed the TRICS Good Practice Guide 2021, which discourages the practice of removing sites based solely on region. As such WSP have undertaken independent check on TRICS, using broadly the same parameters but including more regions. This resulted in trip rates higher than the ones presented by Hydrock. It is therefore recommended that Hydrock present further information to provide trip rates which are derived from a larger group of sites which reflect the proposed uses.
- Given the current uncertainty on the floorspace and uses of the proposed development, Hydrock should ensure that their proposed development assessment traffic flows reflect the

Review of TA Scoping Note

DATE:	16 December 2021	CONFIDENTIALITY:	Confidential
SUBJECT:	NW 095 TA Scoping Review – John Mason International Site		
PROJECT:	National Highways NW Spatial Planning	AUTHOR:	AD
CHECKED:	ML	APPROVED:	NM

uses that could come forward, potentially presenting flows for alternative development scenarios if appropriate.

- The scoping note is light on detail regarding trip distribution methodology, but states that light vehicles will be distributed by a gravity model, and HGV's will all be routed via M62 Junction 6. This approach is acceptable in principle, but the TA should include the supporting information for the light vehicle gravity model, and any assumptions for the routing of HGVs on the SRN should also be evidenced.
- The scoping note does not provide any details on committed developments or background traffic growth. Regardless of whether an operational capacity assessment is undertaken at M62 J6, the TA should account for local committed developments and background traffic growth. This will enable an understanding of the impact of the proposals on the network, accounting for the totality of traffic that is forecast to be using the network in the opening year of the proposed development.
- The TA should present assessment traffic flows which accord with the assessment requirements set out in National Highways' Planning for the Future, and the DfT Circular 02/2013, Hydrock may seek to apply background traffic growth to reflect the likely network flows in the assessment years.
- In terms of committed developments, Hydrock should contact Knowsley Council as the local planning authority to establish the appropriate committed developments to include, and provide evidence of this correspondence.
- Based on Hydrock's calculation of the net traffic impact of the development proposals (set out in table 1.3) Hydrock have proposed only to assess the proposed site access onto Wilson Road and not undertake operational assessments of the M62 Junction 6.
- Short of undertaking a full operational assessment, Hydrock propose that the TA will present the proposed development traffic flows travelling through the M62 J6 for review, and also present the site 12-hour trip generation profile for completeness. WSP suggest this exercise should include the full build-up of forecast traffic flows which accord with the assessment requirements set out in National Highways' Planning for the Future, and the DfT Circular 02/2013.
- Given WSP's comments on the presented trip rates, WSP will wait until these elements are resolved before commenting on potential requirements for an operational assessment of the M62 J6.



Review of TA Scoping Note

DATE:	16 December 2021	CONFIDENTIALITY:	Confidential
SUBJECT:	NW 095 TA Scoping Review – John Mason International Site		
PROJECT:	National Highways NW Spatial Planning	AUTHOR:	AD
CHECKED:	ML	APPROVED:	NM

APPENDIX D - B8 TRICS OUTPUT

Calculation Reference: AUDIT-860401-220324-0311

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : G - PARCEL DISTRIBUTION CENTRES
 MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON	
	HO HOUNSLOW	1 days
02	SOUTH EAST	
	SO SLOUGH	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: 3862 to 15583 (units: sqm)
 Range Selected by User: 1600 to 22679 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/13 to 11/05/21

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

Selected survey days:

Tuesday	1 days
Friday	1 days

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

Selected survey types:

Manual count	2 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
Edge of Town	1

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:

Commercial Zone	1
Development Zone	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 2 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:

1,001 to 5,000 1 days

25,001 to 50,000 1 days

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

Population within 5 miles:

250,001 to 500,000 2 days

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 1 days

1.1 to 1.5 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:

Yes 2 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 1 days

1b Very poor 1 days

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

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

LIST OF SITES relevant to selection parameters

1	HO-02-G-06 FOREST ROAD FELTHAM	DPD & DPD LOCAL		HOUNSLOW
	Suburban Area (PPS6 Out of Centre) Commercial Zone			
	Total Gross floor area:	3862	sqm	
	Survey date: FRIDAY	26/04/19		Survey Type: MANUAL
2	SO-02-G-02 HORTON ROAD SLOUGH COLNBROOK Edge of Town Development Zone	DHL		SLOUGH
	Total Gross floor area:	15583	sqm	
	Survey date: TUESDAY	11/05/21		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/G - PARCEL DISTRIBUTION CENTRES

MULTI-MODAL TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.12

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	1	15583	0.039	1	15583	0.032	1	15583	0.071
01:00 - 02:00	1	15583	0.096	1	15583	0.071	1	15583	0.167
02:00 - 03:00	1	15583	0.141	1	15583	0.135	1	15583	0.276
03:00 - 04:00	1	15583	0.205	1	15583	0.193	1	15583	0.398
04:00 - 05:00	1	15583	0.308	1	15583	0.225	1	15583	0.533
05:00 - 06:00	2	9723	0.489	2	9723	0.154	2	9723	0.643
06:00 - 07:00	2	9723	0.766	2	9723	0.324	2	9723	1.090
07:00 - 08:00	2	9723	0.597	2	9723	0.741	2	9723	1.338
08:00 - 09:00	2	9723	0.509	2	9723	0.478	2	9723	0.987
09:00 - 10:00	2	9723	0.339	2	9723	0.478	2	9723	0.817
10:00 - 11:00	2	9723	0.221	2	9723	0.406	2	9723	0.627
11:00 - 12:00	2	9723	0.206	2	9723	0.339	2	9723	0.545
12:00 - 13:00	2	9723	0.314	2	9723	0.298	2	9723	0.612
13:00 - 14:00	2	9723	0.375	2	9723	0.406	2	9723	0.781
14:00 - 15:00	2	9723	0.293	2	9723	0.334	2	9723	0.627
15:00 - 16:00	2	9723	0.324	2	9723	0.437	2	9723	0.761
16:00 - 17:00	2	9723	0.627	2	9723	0.494	2	9723	1.121
17:00 - 18:00	2	9723	0.437	2	9723	0.653	2	9723	1.090
18:00 - 19:00	2	9723	0.350	2	9723	0.365	2	9723	0.715
19:00 - 20:00	1	15583	0.629	1	15583	0.462	1	15583	1.091
20:00 - 21:00	1	15583	0.302	1	15583	0.244	1	15583	0.546
21:00 - 22:00	1	15583	0.218	1	15583	0.520	1	15583	0.738
22:00 - 23:00	1	15583	0.340	1	15583	0.314	1	15583	0.654
23:00 - 24:00	1	15583	0.116	1	15583	0.160	1	15583	0.276
Total Rates:			8.241			8.263			16.504

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected:	3862 - 15583 (units: sqm)
Survey date range:	01/01/13 - 11/05/21
Number of weekdays (Monday-Friday):	2
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	3
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 02 - EMPLOYMENT/G - PARCEL DISTRIBUTION CENTRES

MULTI-MODAL OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	1	15583	0.032	1	15583	0.032	1	15583	0.064
01:00 - 02:00	1	15583	0.019	1	15583	0.019	1	15583	0.038
02:00 - 03:00	1	15583	0.064	1	15583	0.083	1	15583	0.147
03:00 - 04:00	1	15583	0.116	1	15583	0.103	1	15583	0.219
04:00 - 05:00	1	15583	0.109	1	15583	0.122	1	15583	0.231
05:00 - 06:00	2	9723	0.118	2	9723	0.087	2	9723	0.205
06:00 - 07:00	2	9723	0.077	2	9723	0.082	2	9723	0.159
07:00 - 08:00	2	9723	0.082	2	9723	0.129	2	9723	0.211
08:00 - 09:00	2	9723	0.093	2	9723	0.159	2	9723	0.252
09:00 - 10:00	2	9723	0.093	2	9723	0.062	2	9723	0.155
10:00 - 11:00	2	9723	0.098	2	9723	0.134	2	9723	0.232
11:00 - 12:00	2	9723	0.046	2	9723	0.046	2	9723	0.092
12:00 - 13:00	2	9723	0.072	2	9723	0.051	2	9723	0.123
13:00 - 14:00	2	9723	0.041	2	9723	0.036	2	9723	0.077
14:00 - 15:00	2	9723	0.041	2	9723	0.093	2	9723	0.134
15:00 - 16:00	2	9723	0.036	2	9723	0.057	2	9723	0.093
16:00 - 17:00	2	9723	0.175	2	9723	0.129	2	9723	0.304
17:00 - 18:00	2	9723	0.036	2	9723	0.082	2	9723	0.118
18:00 - 19:00	2	9723	0.062	2	9723	0.087	2	9723	0.149
19:00 - 20:00	1	15583	0.058	1	15583	0.135	1	15583	0.193
20:00 - 21:00	1	15583	0.116	1	15583	0.051	1	15583	0.167
21:00 - 22:00	1	15583	0.090	1	15583	0.122	1	15583	0.212
22:00 - 23:00	1	15583	0.212	1	15583	0.083	1	15583	0.295
23:00 - 24:00	1	15583	0.083	1	15583	0.051	1	15583	0.134
Total Rates:			1.969			2.035			4.004

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/G - PARCEL DISTRIBUTION CENTRES

MULTI-MODAL PSVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
01:00 - 02:00	1	15583	0.013	1	15583	0.000	1	15583	0.013
02:00 - 03:00	1	15583	0.006	1	15583	0.006	1	15583	0.012
03:00 - 04:00	1	15583	0.000	1	15583	0.006	1	15583	0.006
04:00 - 05:00	1	15583	0.019	1	15583	0.019	1	15583	0.038
05:00 - 06:00	2	9723	0.010	2	9723	0.015	2	9723	0.025
06:00 - 07:00	2	9723	0.021	2	9723	0.010	2	9723	0.031
07:00 - 08:00	2	9723	0.021	2	9723	0.031	2	9723	0.052
08:00 - 09:00	2	9723	0.021	2	9723	0.015	2	9723	0.036
09:00 - 10:00	2	9723	0.010	2	9723	0.005	2	9723	0.015
10:00 - 11:00	2	9723	0.005	2	9723	0.010	2	9723	0.015
11:00 - 12:00	2	9723	0.015	2	9723	0.015	2	9723	0.030
12:00 - 13:00	2	9723	0.005	2	9723	0.021	2	9723	0.026
13:00 - 14:00	2	9723	0.026	2	9723	0.015	2	9723	0.041
14:00 - 15:00	2	9723	0.010	2	9723	0.026	2	9723	0.036
15:00 - 16:00	2	9723	0.031	2	9723	0.021	2	9723	0.052
16:00 - 17:00	2	9723	0.015	2	9723	0.015	2	9723	0.030
17:00 - 18:00	2	9723	0.015	2	9723	0.010	2	9723	0.025
18:00 - 19:00	2	9723	0.010	2	9723	0.021	2	9723	0.031
19:00 - 20:00	1	15583	0.039	1	15583	0.019	1	15583	0.058
20:00 - 21:00	1	15583	0.006	1	15583	0.006	1	15583	0.012
21:00 - 22:00	1	15583	0.039	1	15583	0.039	1	15583	0.078
22:00 - 23:00	1	15583	0.032	1	15583	0.032	1	15583	0.064
23:00 - 24:00	1	15583	0.019	1	15583	0.019	1	15583	0.038
Total Rates:			0.388						0.764

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/G - PARCEL DISTRIBUTION CENTRES

MULTI-MODAL CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
01:00 - 02:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
02:00 - 03:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
03:00 - 04:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
04:00 - 05:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
05:00 - 06:00	2	9723	0.000	2	9723	0.010	2	9723	0.010
06:00 - 07:00	2	9723	0.005	2	9723	0.005	2	9723	0.010
07:00 - 08:00	2	9723	0.005	2	9723	0.010	2	9723	0.015
08:00 - 09:00	2	9723	0.000	2	9723	0.005	2	9723	0.005
09:00 - 10:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
10:00 - 11:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
11:00 - 12:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
12:00 - 13:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
13:00 - 14:00	2	9723	0.000	2	9723	0.005	2	9723	0.005
14:00 - 15:00	2	9723	0.010	2	9723	0.005	2	9723	0.015
15:00 - 16:00	2	9723	0.000	2	9723	0.005	2	9723	0.005
16:00 - 17:00	2	9723	0.005	2	9723	0.000	2	9723	0.005
17:00 - 18:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
18:00 - 19:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
19:00 - 20:00	1	15583	0.013	1	15583	0.000	1	15583	0.013
20:00 - 21:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
21:00 - 22:00	1	15583	0.000	1	15583	0.006	1	15583	0.006
22:00 - 23:00	1	15583	0.006	1	15583	0.013	1	15583	0.019
23:00 - 24:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
Total Rates:			0.044						0.108

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/G - PARCEL DISTRIBUTION CENTRES

MULTI-MODAL VEHICLE OCCUPANTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	1	15583	0.039	1	15583	0.032	1	15583	0.071
01:00 - 02:00	1	15583	0.083	1	15583	0.071	1	15583	0.154
02:00 - 03:00	1	15583	0.135	1	15583	0.128	1	15583	0.263
03:00 - 04:00	1	15583	0.205	1	15583	0.186	1	15583	0.391
04:00 - 05:00	1	15583	0.289	1	15583	0.205	1	15583	0.494
05:00 - 06:00	2	9723	0.483	2	9723	0.139	2	9723	0.622
06:00 - 07:00	2	9723	0.787	2	9723	0.319	2	9723	1.106
07:00 - 08:00	2	9723	0.612	2	9723	0.885	2	9723	1.497
08:00 - 09:00	2	9723	0.525	2	9723	0.468	2	9723	0.993
09:00 - 10:00	2	9723	0.334	2	9723	0.478	2	9723	0.812
10:00 - 11:00	2	9723	0.237	2	9723	0.442	2	9723	0.679
11:00 - 12:00	2	9723	0.206	2	9723	0.339	2	9723	0.545
12:00 - 13:00	2	9723	0.329	2	9723	0.283	2	9723	0.612
13:00 - 14:00	2	9723	0.370	2	9723	0.442	2	9723	0.812
14:00 - 15:00	2	9723	0.298	2	9723	0.329	2	9723	0.627
15:00 - 16:00	2	9723	0.329	2	9723	0.473	2	9723	0.802
16:00 - 17:00	2	9723	0.633	2	9723	0.525	2	9723	1.158
17:00 - 18:00	2	9723	0.458	2	9723	0.674	2	9723	1.132
18:00 - 19:00	2	9723	0.355	2	9723	0.360	2	9723	0.715
19:00 - 20:00	1	15583	0.655	1	15583	0.456	1	15583	1.111
20:00 - 21:00	1	15583	0.302	1	15583	0.244	1	15583	0.546
21:00 - 22:00	1	15583	0.186	1	15583	0.545	1	15583	0.731
22:00 - 23:00	1	15583	0.308	1	15583	0.295	1	15583	0.603
23:00 - 24:00	1	15583	0.096	1	15583	0.141	1	15583	0.237
Total Rates:			8.254			8.459			16.713

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/G - PARCEL DISTRIBUTION CENTRES

MULTI-MODAL PEDESTRIANS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
01:00 - 02:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
02:00 - 03:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
03:00 - 04:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
04:00 - 05:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
05:00 - 06:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
06:00 - 07:00	2	9723	0.041	2	9723	0.000	2	9723	0.041
07:00 - 08:00	2	9723	0.026	2	9723	0.015	2	9723	0.041
08:00 - 09:00	2	9723	0.005	2	9723	0.010	2	9723	0.015
09:00 - 10:00	2	9723	0.010	2	9723	0.015	2	9723	0.025
10:00 - 11:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
11:00 - 12:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
12:00 - 13:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
13:00 - 14:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
14:00 - 15:00	2	9723	0.005	2	9723	0.021	2	9723	0.026
15:00 - 16:00	2	9723	0.015	2	9723	0.031	2	9723	0.046
16:00 - 17:00	2	9723	0.021	2	9723	0.036	2	9723	0.057
17:00 - 18:00	2	9723	0.000	2	9723	0.021	2	9723	0.021
18:00 - 19:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
19:00 - 20:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
20:00 - 21:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
21:00 - 22:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
22:00 - 23:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
23:00 - 24:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
Total Rates:			0.123			0.149			0.272

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/G - PARCEL DISTRIBUTION CENTRES

MULTI-MODAL BUS/TRAM PASSENGERS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
01:00 - 02:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
02:00 - 03:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
03:00 - 04:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
04:00 - 05:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
05:00 - 06:00	2	9723	0.005	2	9723	0.000	2	9723	0.005
06:00 - 07:00	2	9723	0.067	2	9723	0.000	2	9723	0.067
07:00 - 08:00	2	9723	0.021	2	9723	0.129	2	9723	0.150
08:00 - 09:00	2	9723	0.021	2	9723	0.005	2	9723	0.026
09:00 - 10:00	2	9723	0.000	2	9723	0.021	2	9723	0.021
10:00 - 11:00	2	9723	0.005	2	9723	0.000	2	9723	0.005
11:00 - 12:00	2	9723	0.015	2	9723	0.000	2	9723	0.015
12:00 - 13:00	2	9723	0.015	2	9723	0.005	2	9723	0.020
13:00 - 14:00	2	9723	0.051	2	9723	0.026	2	9723	0.077
14:00 - 15:00	2	9723	0.026	2	9723	0.000	2	9723	0.026
15:00 - 16:00	2	9723	0.129	2	9723	0.067	2	9723	0.196
16:00 - 17:00	2	9723	0.005	2	9723	0.015	2	9723	0.020
17:00 - 18:00	2	9723	0.005	2	9723	0.021	2	9723	0.026
18:00 - 19:00	2	9723	0.031	2	9723	0.000	2	9723	0.031
19:00 - 20:00	1	15583	0.045	1	15583	0.000	1	15583	0.045
20:00 - 21:00	1	15583	0.013	1	15583	0.000	1	15583	0.013
21:00 - 22:00	1	15583	0.051	1	15583	0.013	1	15583	0.064
22:00 - 23:00	1	15583	0.013	1	15583	0.148	1	15583	0.161
23:00 - 24:00	1	15583	0.000	1	15583	0.006	1	15583	0.006
Total Rates:			0.518			0.456			0.974

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/G - PARCEL DISTRIBUTION CENTRES

MULTI-MODAL TOTAL RAIL PASSENGERS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
01:00 - 02:00	1	15583	0.006	1	15583	0.000	1	15583	0.006
02:00 - 03:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
03:00 - 04:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
04:00 - 05:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
05:00 - 06:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
06:00 - 07:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
07:00 - 08:00	2	9723	0.000	2	9723	0.005	2	9723	0.005
08:00 - 09:00	2	9723	0.005	2	9723	0.005	2	9723	0.010
09:00 - 10:00	2	9723	0.005	2	9723	0.010	2	9723	0.015
10:00 - 11:00	2	9723	0.005	2	9723	0.000	2	9723	0.005
11:00 - 12:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
12:00 - 13:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
13:00 - 14:00	2	9723	0.021	2	9723	0.000	2	9723	0.021
14:00 - 15:00	2	9723	0.010	2	9723	0.005	2	9723	0.015
15:00 - 16:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
16:00 - 17:00	2	9723	0.000	2	9723	0.021	2	9723	0.021
17:00 - 18:00	2	9723	0.010	2	9723	0.000	2	9723	0.010
18:00 - 19:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
19:00 - 20:00	1	15583	0.026	1	15583	0.000	1	15583	0.026
20:00 - 21:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
21:00 - 22:00	1	15583	0.006	1	15583	0.006	1	15583	0.012
22:00 - 23:00	1	15583	0.000	1	15583	0.006	1	15583	0.006
23:00 - 24:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
Total Rates:			0.094			0.058			0.152

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/G - PARCEL DISTRIBUTION CENTRES

MULTI-MODAL COACH PASSENGERS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
01:00 - 02:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
02:00 - 03:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
03:00 - 04:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
04:00 - 05:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
05:00 - 06:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
06:00 - 07:00	2	9723	0.005	2	9723	0.000	2	9723	0.005
07:00 - 08:00	2	9723	0.005	2	9723	0.051	2	9723	0.056
08:00 - 09:00	2	9723	0.010	2	9723	0.000	2	9723	0.010
09:00 - 10:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
10:00 - 11:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
11:00 - 12:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
12:00 - 13:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
13:00 - 14:00	2	9723	0.010	2	9723	0.010	2	9723	0.020
14:00 - 15:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
15:00 - 16:00	2	9723	0.010	2	9723	0.026	2	9723	0.036
16:00 - 17:00	2	9723	0.000	2	9723	0.005	2	9723	0.005
17:00 - 18:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
18:00 - 19:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
19:00 - 20:00	1	15583	0.045	1	15583	0.000	1	15583	0.045
20:00 - 21:00	1	15583	0.013	1	15583	0.006	1	15583	0.019
21:00 - 22:00	1	15583	0.026	1	15583	0.045	1	15583	0.071
22:00 - 23:00	1	15583	0.006	1	15583	0.006	1	15583	0.012
23:00 - 24:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
Total Rates:			0.130			0.149			0.279

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/G - PARCEL DISTRIBUTION CENTRES
 MULTI-MODAL PUBLIC TRANSPORT USERS
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
01:00 - 02:00	1	15583	0.006	1	15583	0.000	1	15583	0.006
02:00 - 03:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
03:00 - 04:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
04:00 - 05:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
05:00 - 06:00	2	9723	0.005	2	9723	0.000	2	9723	0.005
06:00 - 07:00	2	9723	0.072	2	9723	0.000	2	9723	0.072
07:00 - 08:00	2	9723	0.026	2	9723	0.185	2	9723	0.211
08:00 - 09:00	2	9723	0.036	2	9723	0.010	2	9723	0.046
09:00 - 10:00	2	9723	0.005	2	9723	0.031	2	9723	0.036
10:00 - 11:00	2	9723	0.010	2	9723	0.000	2	9723	0.010
11:00 - 12:00	2	9723	0.015	2	9723	0.000	2	9723	0.015
12:00 - 13:00	2	9723	0.015	2	9723	0.005	2	9723	0.020
13:00 - 14:00	2	9723	0.082	2	9723	0.036	2	9723	0.118
14:00 - 15:00	2	9723	0.036	2	9723	0.005	2	9723	0.041
15:00 - 16:00	2	9723	0.139	2	9723	0.093	2	9723	0.232
16:00 - 17:00	2	9723	0.005	2	9723	0.041	2	9723	0.046
17:00 - 18:00	2	9723	0.015	2	9723	0.021	2	9723	0.036
18:00 - 19:00	2	9723	0.031	2	9723	0.000	2	9723	0.031
19:00 - 20:00	1	15583	0.116	1	15583	0.000	1	15583	0.116
20:00 - 21:00	1	15583	0.026	1	15583	0.006	1	15583	0.032
21:00 - 22:00	1	15583	0.083	1	15583	0.064	1	15583	0.147
22:00 - 23:00	1	15583	0.019	1	15583	0.160	1	15583	0.179
23:00 - 24:00	1	15583	0.000	1	15583	0.006	1	15583	0.006
Total Rates:			0.742				0.663	1.405	

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/G - PARCEL DISTRIBUTION CENTRES

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.12

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	1	15583	0.039	1	15583	0.032	1	15583	0.071
01:00 - 02:00	1	15583	0.090	1	15583	0.071	1	15583	0.161
02:00 - 03:00	1	15583	0.135	1	15583	0.128	1	15583	0.263
03:00 - 04:00	1	15583	0.205	1	15583	0.186	1	15583	0.391
04:00 - 05:00	1	15583	0.289	1	15583	0.205	1	15583	0.494
05:00 - 06:00	2	9723	0.489	2	9723	0.149	2	9723	0.638
06:00 - 07:00	2	9723	0.905	2	9723	0.324	2	9723	1.229
07:00 - 08:00	2	9723	0.669	2	9723	1.095	2	9723	1.764
08:00 - 09:00	2	9723	0.566	2	9723	0.494	2	9723	1.060
09:00 - 10:00	2	9723	0.350	2	9723	0.525	2	9723	0.875
10:00 - 11:00	2	9723	0.247	2	9723	0.442	2	9723	0.689
11:00 - 12:00	2	9723	0.221	2	9723	0.339	2	9723	0.560
12:00 - 13:00	2	9723	0.345	2	9723	0.288	2	9723	0.633
13:00 - 14:00	2	9723	0.453	2	9723	0.483	2	9723	0.936
14:00 - 15:00	2	9723	0.350	2	9723	0.360	2	9723	0.710
15:00 - 16:00	2	9723	0.483	2	9723	0.602	2	9723	1.085
16:00 - 17:00	2	9723	0.663	2	9723	0.602	2	9723	1.265
17:00 - 18:00	2	9723	0.473	2	9723	0.715	2	9723	1.188
18:00 - 19:00	2	9723	0.386	2	9723	0.360	2	9723	0.746
19:00 - 20:00	1	15583	0.783	1	15583	0.456	1	15583	1.239
20:00 - 21:00	1	15583	0.327	1	15583	0.250	1	15583	0.577
21:00 - 22:00	1	15583	0.270	1	15583	0.616	1	15583	0.886
22:00 - 23:00	1	15583	0.334	1	15583	0.468	1	15583	0.802
23:00 - 24:00	1	15583	0.096	1	15583	0.148	1	15583	0.244
Total Rates:			9.168			9.338			18.506

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/G - PARCEL DISTRIBUTION CENTRES

MULTI-MODAL CARS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	1	15583	0.006	1	15583	0.000	1	15583	0.006
01:00 - 02:00	1	15583	0.058	1	15583	0.051	1	15583	0.109
02:00 - 03:00	1	15583	0.058	1	15583	0.039	1	15583	0.097
03:00 - 04:00	1	15583	0.077	1	15583	0.083	1	15583	0.160
04:00 - 05:00	1	15583	0.128	1	15583	0.071	1	15583	0.199
05:00 - 06:00	2	9723	0.273	2	9723	0.051	2	9723	0.324
06:00 - 07:00	2	9723	0.355	2	9723	0.093	2	9723	0.448
07:00 - 08:00	2	9723	0.355	2	9723	0.365	2	9723	0.720
08:00 - 09:00	2	9723	0.319	2	9723	0.072	2	9723	0.391
09:00 - 10:00	2	9723	0.103	2	9723	0.082	2	9723	0.185
10:00 - 11:00	2	9723	0.062	2	9723	0.051	2	9723	0.113
11:00 - 12:00	2	9723	0.087	2	9723	0.108	2	9723	0.195
12:00 - 13:00	2	9723	0.144	2	9723	0.118	2	9723	0.262
13:00 - 14:00	2	9723	0.180	2	9723	0.226	2	9723	0.406
14:00 - 15:00	2	9723	0.103	2	9723	0.113	2	9723	0.216
15:00 - 16:00	2	9723	0.139	2	9723	0.257	2	9723	0.396
16:00 - 17:00	2	9723	0.159	2	9723	0.231	2	9723	0.390
17:00 - 18:00	2	9723	0.123	2	9723	0.468	2	9723	0.591
18:00 - 19:00	2	9723	0.159	2	9723	0.185	2	9723	0.344
19:00 - 20:00	1	15583	0.391	1	15583	0.160	1	15583	0.551
20:00 - 21:00	1	15583	0.064	1	15583	0.096	1	15583	0.160
21:00 - 22:00	1	15583	0.058	1	15583	0.308	1	15583	0.366
22:00 - 23:00	1	15583	0.096	1	15583	0.193	1	15583	0.289
23:00 - 24:00	1	15583	0.013	1	15583	0.083	1	15583	0.096
Total Rates:			3.510			3.504			7.014

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.

TRIP RATE for Land Use 02 - EMPLOYMENT/G - PARCEL DISTRIBUTION CENTRES

MULTI-MODAL LGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
01:00 - 02:00	1	15583	0.006	1	15583	0.000	1	15583	0.006
02:00 - 03:00	1	15583	0.006	1	15583	0.006	1	15583	0.012
03:00 - 04:00	1	15583	0.013	1	15583	0.000	1	15583	0.013
04:00 - 05:00	1	15583	0.051	1	15583	0.006	1	15583	0.057
05:00 - 06:00	2	9723	0.082	2	9723	0.000	2	9723	0.082
06:00 - 07:00	2	9723	0.309	2	9723	0.129	2	9723	0.438
07:00 - 08:00	2	9723	0.118	2	9723	0.201	2	9723	0.319
08:00 - 09:00	2	9723	0.077	2	9723	0.231	2	9723	0.308
09:00 - 10:00	2	9723	0.134	2	9723	0.329	2	9723	0.463
10:00 - 11:00	2	9723	0.051	2	9723	0.206	2	9723	0.257
11:00 - 12:00	2	9723	0.057	2	9723	0.170	2	9723	0.227
12:00 - 13:00	2	9723	0.093	2	9723	0.108	2	9723	0.201
13:00 - 14:00	2	9723	0.118	2	9723	0.118	2	9723	0.236
14:00 - 15:00	2	9723	0.139	2	9723	0.103	2	9723	0.242
15:00 - 16:00	2	9723	0.118	2	9723	0.103	2	9723	0.221
16:00 - 17:00	2	9723	0.278	2	9723	0.113	2	9723	0.391
17:00 - 18:00	2	9723	0.252	2	9723	0.077	2	9723	0.329
18:00 - 19:00	2	9723	0.118	2	9723	0.072	2	9723	0.190
19:00 - 20:00	1	15583	0.135	1	15583	0.148	1	15583	0.283
20:00 - 21:00	1	15583	0.116	1	15583	0.083	1	15583	0.199
21:00 - 22:00	1	15583	0.026	1	15583	0.051	1	15583	0.077
22:00 - 23:00	1	15583	0.000	1	15583	0.006	1	15583	0.006
23:00 - 24:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
Total Rates:			2.297			2.260			4.557

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/G - PARCEL DISTRIBUTION CENTRES

MULTI-MODAL MOTOR CYCLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
01:00 - 02:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
02:00 - 03:00	1	15583	0.006	1	15583	0.000	1	15583	0.006
03:00 - 04:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
04:00 - 05:00	1	15583	0.000	1	15583	0.006	1	15583	0.006
05:00 - 06:00	2	9723	0.005	2	9723	0.000	2	9723	0.005
06:00 - 07:00	2	9723	0.005	2	9723	0.010	2	9723	0.015
07:00 - 08:00	2	9723	0.015	2	9723	0.010	2	9723	0.025
08:00 - 09:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
09:00 - 10:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
10:00 - 11:00	2	9723	0.005	2	9723	0.005	2	9723	0.010
11:00 - 12:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
12:00 - 13:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
13:00 - 14:00	2	9723	0.010	2	9723	0.010	2	9723	0.020
14:00 - 15:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
15:00 - 16:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
16:00 - 17:00	2	9723	0.000	2	9723	0.005	2	9723	0.005
17:00 - 18:00	2	9723	0.010	2	9723	0.015	2	9723	0.025
18:00 - 19:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
19:00 - 20:00	1	15583	0.006	1	15583	0.000	1	15583	0.006
20:00 - 21:00	1	15583	0.000	1	15583	0.006	1	15583	0.006
21:00 - 22:00	1	15583	0.006	1	15583	0.000	1	15583	0.006
22:00 - 23:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
23:00 - 24:00	1	15583	0.000	1	15583	0.006	1	15583	0.006
Total Rates:			0.068				0.073		

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/G - PARCEL DISTRIBUTION CENTRES
 MULTI-MODAL Underground Passengers
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
01:00 - 02:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
02:00 - 03:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
03:00 - 04:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
04:00 - 05:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
05:00 - 06:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
06:00 - 07:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
07:00 - 08:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
08:00 - 09:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
09:00 - 10:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
10:00 - 11:00	2	9723	0.005	2	9723	0.000	2	9723	0.005
11:00 - 12:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
12:00 - 13:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
13:00 - 14:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
14:00 - 15:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
15:00 - 16:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
16:00 - 17:00	2	9723	0.000	2	9723	0.005	2	9723	0.005
17:00 - 18:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
18:00 - 19:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
19:00 - 20:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
20:00 - 21:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
21:00 - 22:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
22:00 - 23:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
23:00 - 24:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
Total Rates:			0.005						0.010

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/G - PARCEL DISTRIBUTION CENTRES
 MULTI-MODAL National Rail Passengers
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
01:00 - 02:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
02:00 - 03:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
03:00 - 04:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
04:00 - 05:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
05:00 - 06:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
06:00 - 07:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
07:00 - 08:00	2	9723	0.000	2	9723	0.005	2	9723	0.005
08:00 - 09:00	2	9723	0.005	2	9723	0.005	2	9723	0.010
09:00 - 10:00	2	9723	0.000	2	9723	0.010	2	9723	0.010
10:00 - 11:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
11:00 - 12:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
12:00 - 13:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
13:00 - 14:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
14:00 - 15:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
15:00 - 16:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
16:00 - 17:00	2	9723	0.000	2	9723	0.010	2	9723	0.010
17:00 - 18:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
18:00 - 19:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
19:00 - 20:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
20:00 - 21:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
21:00 - 22:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
22:00 - 23:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
23:00 - 24:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
Total Rates:			0.005						0.035

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/G - PARCEL DISTRIBUTION CENTRES

MULTI-MODAL Bus Passengers

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
01:00 - 02:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
02:00 - 03:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
03:00 - 04:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
04:00 - 05:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
05:00 - 06:00	2	9723	0.005	2	9723	0.000	2	9723	0.005
06:00 - 07:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
07:00 - 08:00	2	9723	0.010	2	9723	0.000	2	9723	0.010
08:00 - 09:00	2	9723	0.005	2	9723	0.005	2	9723	0.010
09:00 - 10:00	2	9723	0.000	2	9723	0.021	2	9723	0.021
10:00 - 11:00	2	9723	0.005	2	9723	0.000	2	9723	0.005
11:00 - 12:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
12:00 - 13:00	2	9723	0.005	2	9723	0.000	2	9723	0.005
13:00 - 14:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
14:00 - 15:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
15:00 - 16:00	2	9723	0.005	2	9723	0.000	2	9723	0.005
16:00 - 17:00	2	9723	0.000	2	9723	0.010	2	9723	0.010
17:00 - 18:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
18:00 - 19:00	2	9723	0.000	2	9723	0.000	2	9723	0.000
19:00 - 20:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
20:00 - 21:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
21:00 - 22:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
22:00 - 23:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
23:00 - 24:00	1	15583	0.000	1	15583	0.000	1	15583	0.000
Total Rates:			0.035						0.071

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/G - PARCEL DISTRIBUTION CENTRES

MULTI-MODAL Servicing Vehicles

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	1	15583	0.032	1	15583	0.032	1	15583	0.064
01:00 - 02:00	1	15583	0.026	1	15583	0.019	1	15583	0.045
02:00 - 03:00	1	15583	0.071	1	15583	0.090	1	15583	0.161
03:00 - 04:00	1	15583	0.128	1	15583	0.103	1	15583	0.231
04:00 - 05:00	1	15583	0.160	1	15583	0.128	1	15583	0.288
05:00 - 06:00	2	9723	0.195	2	9723	0.087	2	9723	0.282
06:00 - 07:00	2	9723	0.391	2	9723	0.211	2	9723	0.602
07:00 - 08:00	2	9723	0.201	2	9723	0.329	2	9723	0.530
08:00 - 09:00	2	9723	0.170	2	9723	0.401	2	9723	0.571
09:00 - 10:00	2	9723	0.226	2	9723	0.401	2	9723	0.627
10:00 - 11:00	2	9723	0.149	2	9723	0.339	2	9723	0.488
11:00 - 12:00	2	9723	0.103	2	9723	0.216	2	9723	0.319
12:00 - 13:00	2	9723	0.159	2	9723	0.154	2	9723	0.313
13:00 - 14:00	2	9723	0.165	2	9723	0.159	2	9723	0.324
14:00 - 15:00	2	9723	0.175	2	9723	0.185	2	9723	0.360
15:00 - 16:00	2	9723	0.154	2	9723	0.154	2	9723	0.308
16:00 - 17:00	2	9723	0.447	2	9723	0.242	2	9723	0.689
17:00 - 18:00	2	9723	0.288	2	9723	0.159	2	9723	0.447
18:00 - 19:00	2	9723	0.180	2	9723	0.159	2	9723	0.339
19:00 - 20:00	1	15583	0.193	1	15583	0.282	1	15583	0.475
20:00 - 21:00	1	15583	0.231	1	15583	0.135	1	15583	0.366
21:00 - 22:00	1	15583	0.116	1	15583	0.173	1	15583	0.289
22:00 - 23:00	1	15583	0.212	1	15583	0.090	1	15583	0.302
23:00 - 24:00	1	15583	0.083	1	15583	0.051	1	15583	0.134
Total Rates:			4.255			4.299			8.554

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.

APPENDIX E – MODEL OUTPUT

Junctions 9									
PICADY 9 - Priority Intersection Module									
Version: 9.5.1.7462 © Copyright TRL Limited, 2019									
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk									
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution									

Filename: Access.j9

Path: M:\Projects\2022\22036 - Land at John Mason International Site\07. Technical\07.02 Modelling\PICADY

Report generation date: 19/04/2022 14:57:58

«2022, AM

- »Junction Network
- »Arms
- »Traffic Demand
- »Origin-Destination Data
- »Vehicle Mix
- »Results

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
2022										
Stream B-AC	D1	0.2	7.80	0.18	A	D2	0.3	8.58	0.25	A
Stream C-B		0.2	8.29	0.18	A		0.2	8.13	0.15	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

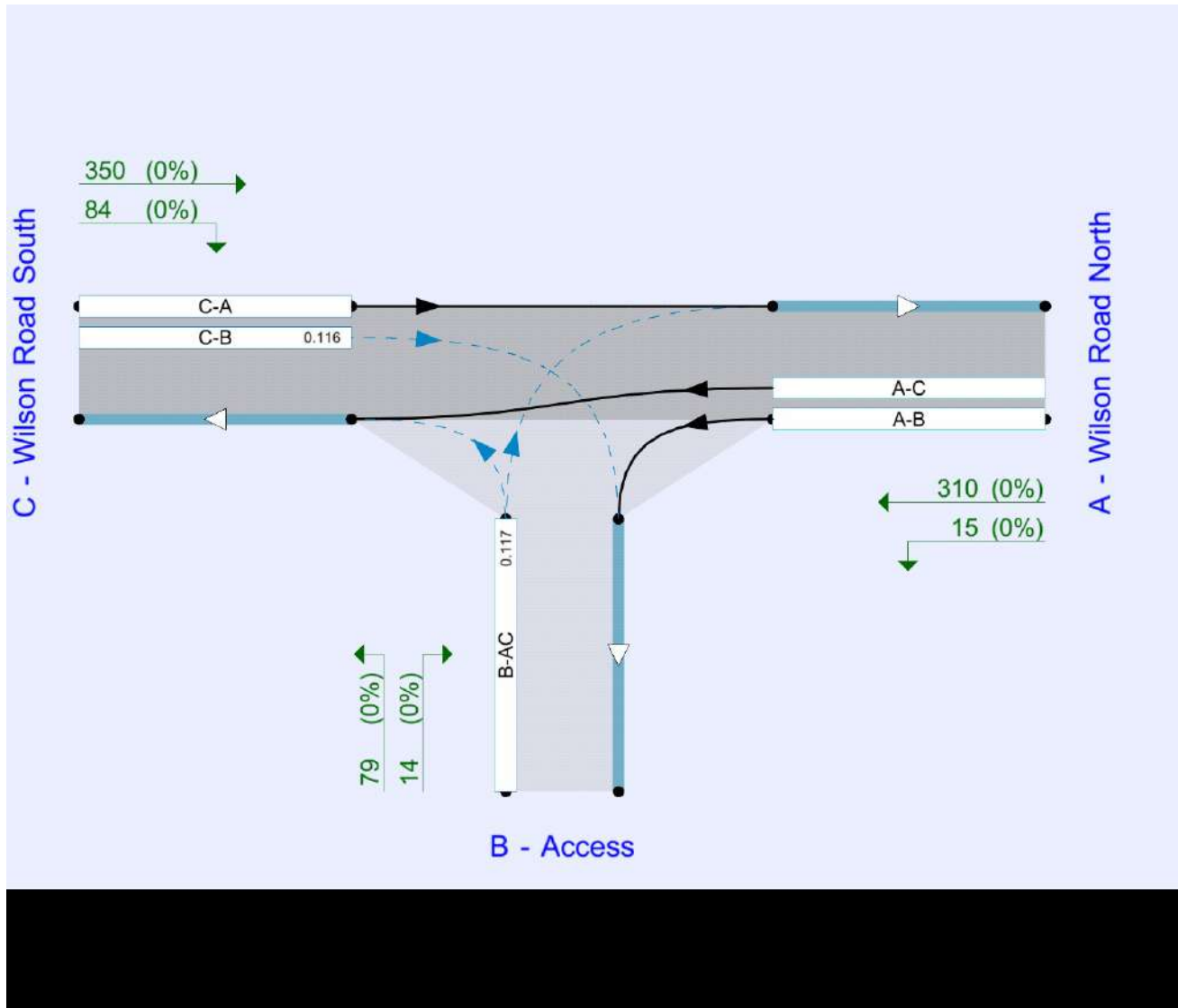
File summary

File Description

Title	Access Model
Location	
Site number	
Date	19/04/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MARKIDES\Markides Associates
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	AM	ONE HOUR	07:45	09:15	15	✓

2022, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Base+Dev	T-Junction	Two-way		1.67	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Wilson Road North		Major
B	Access		Minor
C	Wilson Road South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Wilson Road South	9.20			43.0		-

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Access	One lane	3.65	43	43

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	546	0.086	0.216	0.136	0.309
B-C	693	0.091	0.231	-	-
C-B	599	0.200	0.200	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Wilson Road North		ONE HOUR	✓	325	100.000
B - Access		ONE HOUR	✓	93	100.000
C - Wilson Road South		ONE HOUR	✓	435	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Wilson Road North	B - Access	C - Wilson Road South
From	A - Wilson Road North	0	15	310
	B - Access	14	0	79
	C - Wilson Road South	350	84	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Wilson Road North	B - Access	C - Wilson Road South
From	A - Wilson Road North	0	0	0
	B - Access	0	0	0
	C - Wilson Road South	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.18	7.80	0.2	A	86	128
C-A					321	482
C-B	0.18	8.29	0.2	A	77	116
A-B					14	21
A-C					285	427

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	70	18	598	0.117	70	0.0	0.1	6.811	A
C-A	264	66			264				
C-B	64	16	550	0.116	63	0.0	0.1	7.385	A
A-B	11	3			11				
A-C	234	58			234				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	84	21	584	0.144	84	0.1	0.2	7.197	A
C-A	315	79			315				
C-B	76	19	540	0.140	76	0.1	0.2	7.745	A
A-B	13	3			13				
A-C	279	70			279				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	103	26	564	0.182	102	0.2	0.2	7.793	A
C-A	386	96			386				
C-B	93	23	527	0.176	93	0.2	0.2	8.280	A
A-B	16	4			16				
A-C	342	85			342				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	103	26	564	0.182	103	0.2	0.2	7.799	A
C-A	386	96			386				
C-B	93	23	527	0.176	93	0.2	0.2	8.286	A
A-B	16	4			16				
A-C	342	85			342				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	84	21	584	0.144	84	0.2	0.2	7.209	A
C-A	315	79			315				
C-B	76	19	540	0.140	76	0.2	0.2	7.755	A
A-B	13	3			13				
A-C	279	70			279				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	70	18	598	0.118	70	0.2	0.1	6.829	A
C-A	264	66			264				
C-B	64	16	550	0.116	64	0.2	0.1	7.404	A
A-B	11	3			11				
A-C	234	58			234				

APPENDIX 2

BREEAM Compliance Criteria

In order to ensure the Travel Plan is considered fully Building Research Establishment Environmental Assessment Method (BREEAM) compliant, it must address the following matters, where applicable.

Two credits – Transport Assessment and Travel Plan

1. No later than Concept Design stage, undertake a site-specific transport assessment (or develop a travel statement) and draft travel plan, which can demonstrably be used to influence the site layout and built form.
2. The site-specific travel assessment (or statement) shall cover as a minimum:
 - If relevant, travel patterns and attitudes of existing building or site users towards cycling, walking and public transport, to identify relevant constraints and opportunities.
 - Predicted travel patterns and transport impact of future building or site users.
 - Current local environment for pedestrians and cyclists, accounting for any age-related requirements of occupants and visitors.
 - Reporting of the number and type of existing accessible amenities, see Table 7.1 below, within 500m of the site. - *Must have a section in the report.*

Table 7.1 Amenities in proximity to the site

Amenities
Appropriate food outlet
Access to cash
Access to an outdoor open space (public or private, suitably sized and accessible to building users)
Access to a recreation or leisure facility for fitness or sports
Publicly available postal facility
Community facility
Over the counter services associated with a pharmacy
Public sector GP surgery or general medical centre
Childcare facility or school

- Disabled access accounting for varying levels and types of disability, including visual impairment.
 - Calculation of the existing public transport Accessibility Index (AI), see attached calculator. - *Must have a section in the report.*
 - Current facilities for cyclists.
3. Following a transport assessment (in accordance with the requirements set out in criteria 2), develop a site-specific travel plan that provides a long term management strategy which encourages more sustainable travel. The travel plan includes measures to increase or improve more sustainable modes of transport and movement of people and goods during the building's operation see Methodology.
 4. If the occupier is known, involve them in the development of the travel plan.
 5. Demonstrate that the travel plan will be implemented and supported by the building's management in operation.

Travel Plan Methodology

As a minimum, the following measures shall be considered when developing the travel plan:

- Negotiation with local bus, train or tram companies an increase in the local service provision for the development
- Provision of a public transport information system in a publicly accessible area
- Provision of electric recharging stations
- Provision of parking priority spaces for car sharers
- Consultation with the local authority on the state of the local cycling network and on improvements
- Provision of dedicated and convenient cycle storage
- Provision of cyclists facilities
- Lighting, landscaping and shelter to create pleasant pedestrian and public transport waiting areas
- Restrictions or charging for car parking
- Pedestrian and cyclist friendly (for all types of user regardless of the level of mobility or visual impairment) with the provision of cycle lanes, safe crossing points, direct routes, appropriate tactile surfaces, good lighting and signposting to other amenities, public transport nodes and adjoining off-site pedestrian and cycle routes
- Provision of suitable taxi drop-off or waiting areas
- Ensure rural buildings have appropriate access to transport to serve the local community adequately (where procured to do so, e.g. community centre).

APPENDIX 3

BREEAM Accessibility Index (AI)

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

Building type

Offices/Industrial

No. nodes required

1

Select

NODE 1

	Public transport type	Bus									
	Distance to node (m)	210									
		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	1	1						

Accessibility Index	3.16
---------------------	------

eddisons.com

Eddisons

Eddisons, 340 Deansgate,
Manchester, M3 4LY

T: +44 (0) 161 837 7350

www.eddisons.com