

Proposed Employment Development
New Smithfield Market, Manchester

RUSSELLS CONSTRUCTION

Transport Statement

April 2022





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1 INTRODUCTION

1.1 Introduction

1.1.1 Eddisons have been instructed by Russell's Construction Ltd to advise on the traffic and transport issues relating to the proposals for a planning application for the redevelopment of a site at the New Smithfield Market off Lawton Street in the Openshaw area of Manchester.

1.1.2 The location of the site is shown in **Plan 1**.

1.1.3 The proposals will provide an employment development comprising of two B8 employment units with associated car parking.

1.1.4 The report provides information on the traffic and transport aspects of the proposals and will form supplementary information to assist in the determination of the planning application.

1.2 Scope of Report

1.2.1 Following this introduction, Section 2 will provide a detailed description of the existing site and the proposed development and describe the proposed vehicular access strategy to the adjoining highway network.

1.2.2 Section 3 will analyse the existing accessibility of the site by a range of travel modes, whilst Section 4 will discuss the traffic impact of the proposed development on the local highway network. Finally, Section 5 will draw together the conclusions to this report.

2 APPLICATION SITE AND PROPOSALS

2.1 Site Location

2.1.1 The site is located in the Openshaw area of Manchester approximately 4 kilometres east of the city centre.

2.1.2 It is located in the south-east corner of the New Smithfield Market site, to the north and west it is bound by the buildings and hardstanding associated with the Market whilst to the south it is bound by Lawton Street. To the east the site is bound by Press Street.

2.1.3 **Plan 1** illustrates the location of the site.

2.1.4 The site is currently occupied by the eastern sections of the main market buildings as well as smaller storage units and hardstanding.

2.2 Existing Highway Network

2.2.1 As stated, the site is located within the New Smithfield Market and vehicular access into the Market is provided via two locations. The main vehicular access is to the north off Whitworth Street East whilst a secondary access is provided to the south off Lawton Street adjacent to the application site. Access to the site via both locations is gate or barrier controlled.

2.2.2 Whitworth Street East has an approximate carriageway width of 5.8 metres and runs in approximate east-west alignment along the northern boundary of the wider market site. It operates a one-way system in a clockwise direction from its junction with the A635 Ashton Old Road.



- 2.2.3 Vehicles accessing Whitworth Street East do so via the A635 Ashton Old Road/Westlake Street/Widnes Street signal controlled junction. Whilst vehicles egressing Whitworth Street East use the signal controlled A635 Ashton Old Road/Darkley Street/Whitworth Street East junction.
- 2.2.4 To the east Whitchurch Street East provides the major arm of the Whitchurch Street East/Blessemer Street priority controlled junction. Blessemer Street runs in north-south alignment and passes under two railway bridges which have 12ft height restrictions. Beyond these bridges it becomes Preston Street and provides access to Gorton Lane.
- 2.2.5 Lawton Street which bounds the site to the south has an approximate carriageway width of 7.3 metres and runs in an approximate east-west alignment. To the west it provides vehicular access to the Greater Manchester Police Complex. Whilst to the east it provides the major arm of the Lawton Street/ Press Street priority controlled junction, Press Street is one-way for vehicles travelling southbound.
- 2.2.6 A further 35 metres east Lawton Street provides the minor arm of the Cornwall Street/Lawton Street/Ogden Lane priority controlled junction. To the north Cornwall Street provides an access only junction on to the A635 Ashton Old Road, whilst to the south it provides access to Gorton and the A57 Hyde Road. To the east Ogden Lane provides vehicular access to Openshaw and the A635 Ashton Old Road.
- 2.2.7 The A635 Ashton Road is a key east-west route, to the west it provides access into Manchester city centre whilst to the east it provides access to Ashton-under-Lyne and the M60 motorway.



2.3 Planning History

- 2.3.1 The application site benefits from planning consent for the following land-use which was granted consent by Manchester City Council in May 2019 (Planning Ref: 122231/FO/2018);

"Erection of two storey warehouse (Class B8) comprising 1,553 sqm of floor space with an ancillary first floor office (B1c) comprising 123 sqm of floor space with associated access, parking, service yard and landscaping."

- 2.3.2 The application site also benefits from planning consent (Planning Ref: 127742/FO/2020) for the following land-use which was granted consent by Manchester City Council in October 2020;

"Demolition of existing building and erection of a 15.6 metre high warehouse and office building (sui generis use), with associated access, parking, service yard and landscaping"

2.4 Development Proposals

- 2.4.1 The development proposals are for the demolition of the existing units in the site boundary which have a total floor area of around 9,205 sqm and the erection of two B8 Employment unit with ancillary (B1) office space.
- 2.4.2 The existing units are used as for a range of B8 storage uses including sections of the main market buildings. The existing occupiers will be relocated within the market site and therefore will result in an overall reduction in market floorspace on the site.
- 2.4.3 The development proposals will provide a employment development with a total floor area of 11,563 sqm, this equates to an increase in floor area of 2,358 sqm when compared to the existing units on the site.



- 2.4.4 The proposed development will comprise of the following;
- Unit 1 - B8 Warehouse Unit with B1 Ancillary Office with gross internal floor area of 4,141 sqm
 - Unit 2 - B8 Warehouse Unit with B1 Ancillary Office with gross internal floor area of 7,422 sqm
- 2.4.5 As part of development the following parking provision will be provided for the two proposed units;
- Unit 1 – 58 car parking spaces including 4 mobility impaired spaces and 6 EV charging spaces. Cycling parking will be provided for in the form of 4 Sheffield style parking stands (capacity for 8 bicycles).
 - Unit 2 – 116 total parking spaces including 8 mobility impaired spaces and 10 EV charging spaces. Cycling parking will be provided for in the form of 8 Sheffield style parking stands (capacity for 16 bicycles).
- 2.4.6 The proposed parking provision is based on the end-users experience of parking demand at their other units in in the north-west of England.
- 2.4.7 Access to the site will be provided for from the north via the existing main New Smithfield Market access. Whilst access from the south will be from the existing gated access off Lawton Street. To facilitate vehicle access from the north, a new access road through the existing market will need to be provided, this access road is located on the western side of the application site.
- 2.4.8 The proposed site layout is shown on **Plan 2**.



- 2.4.9 To demonstrate that the proposed development can be accessed in a safe and efficient manner, swept path analysis for 16.5 metre articulated HGV's have been undertaken for both vehicular access points.
- 2.4.10 In addition, a swept path analysis has been undertaken to demonstrate that the existing Barton and Redman unit can be serviced safely and efficiently. The swept path analysis is shown on **Plans 3 to 5** and demonstrates that the vehicles can enter and exit the sites in a forward gear.

3 ACCESSIBILITY BY NON CAR MODES

3.1 Introduction

3.1.1 In order to accord with the aspirations of the NPPF, any new proposals should extend the choice in transport and secure mobility in a way that supports sustainable development.

3.1.2 The presumption in favour of sustainable development is a central theme running through the framework and transport planning policies are seen as a key element of delivering sustainable development as well as contributing to wider sustainability and health objectives. One of the core principles of the NPPF is to 'ensure opportunities to promote walking, cycling and public transport use are identified and pursued.'

3.1.3 To achieve this objective, paragraph 108 of the NPPF states when making decisions it should be ensured that:

"Appropriate opportunities to promote sustainable transport modes can be - or have been - taken up given the type of development and its location."

3.1.4 New proposals should therefore attempt to influence the mode of travel to the development in terms of gaining a shift in modal split towards non-car modes, thus assisting in meeting the aspirations of current national and local planning policy.

3.1.5 The accessibility of the proposed site has been considered by the following modes of transport:

- accessibility on foot;
- accessibility by cycle;
- accessibility by bus; and

- accessibility by rail.

3.2 Accessibility on Foot

- 3.2.1 It is important to create a choice of direct, safe and attractive routes between where people live and where they need to travel in their day-to-day life. This philosophy clearly encourages the opportunity to walk whatever the journey purpose and also helps to create more active streets and a more vibrant neighbourhood.
- 3.2.2 Existing footways of around 2 metres in width are located on Lawton Street along the southern boundary of the site. To the east these link with the existing pedestrian infrastructure located on Press Street, Cornwall Road and Ogden Lane which provide pedestrian access to the residential areas located with Openshaw.
- 3.2.3 To the north pedestrian footways with an approximate width of 2 metres are located on either side of Whitworth Street East. These footways provide access to the pedestrian infrastructure located on either side of the A635 Ashton Old Road. Safe pedestrian movement across the A635 Ashton Old Road is provided for at its signal controlled junction with Victoria Street.
- 3.2.4 Within the Institution of Highways and Transportation (IHT) document, entitled "Guidelines for Providing for Journeys on Foot", a distance of 800 metres is identified as the preferred maximum distance for town centres.
- 3.2.5 Good practice suggests that walking is the most important mode of travel at the local level and offers the greatest potential to replace short car journeys, particularly those under 2 kilometres. In addition, the DFT National Travel Survey of 2006 confirms that 78% of all trips less than a mile (1.6km) are carried out on foot.



- 3.2.6 **Plan 6** shows the pedestrian catchment for 800 metres and 2 kilometres from the centre of the site and provides an illustrative indication of the areas that can be reached based on a leisurely walk from the site.
- 3.2.7 As can be seen, the 800-metre catchment includes the existing residential areas in the vicinity of the development site and the bus stops located on the A635 Ashton Old Road. Whilst the 2 kilometre catchments encompasses the entirety of Openshaw and as well as the nearby areas of Ryders Brow and Fairfield. These catchments demonstrate that the proposed development is within walking distance of a large catchment of residential properties.
- 3.2.8 It is therefore concluded that the application site is highly accessible by foot.

3.3 Accessibility by Cycle

- 3.3.1 An alternative mode of travel to the site could be achieved by bicycle.
- 3.3.2 A distance of 5 kilometres is generally accepted as a distance where cycling has the potential to replace short car journeys. This distance equates to a journey of around 25 minutes based on a leisurely cycle speed of 12 kilometres per hour and would encompass Failsworth, Denton, Droylsden and Audenshaw.
- 3.3.3 National Cycle Route 60 is located approximately 230 metres to the east of the site. This cycle route runs which is known as the Fallowfield Loop. This is an off-road cycle path, pedestrian and horse riding route from Chorlton-cum-Hardy through Fallowfield and Levenshulme to Gorton and Fairfield in Manchester
- 3.3.4 To east Blessemer Street is designated as an advisory on-carriageway route on the Greater Manchester cycle map. To the south this route provides access to Gorton and Belle Vue.

3.3.5 The site can, therefore, be considered as being accessible by cycle.

3.4 Accessibility by Bus

3.4.1 The nearest bus stops to the site are located to the east of the site on Ogden Lane, with a walking distance of approximately 200 metres from the centre of the site, further bus stops are situated on the A635 Ashton Old Road which provide access to high frequency bus services.

3.4.2 All the nearest bus stops to the site are shown on **Plan 6**.

3.4.3 A summary of the services available from these bus stops are provided in **Table 3.1** below.

Service No	Route	Monday – Friday Frequency per hour				Sat	Sun
		AM Peak	Midday	PM Peak	Eve		
171	Newton Heath – Gorton - Levenshulme – West Didsbury - Withington	2	1	0	0	1	0
172	Newton Heath – Gorton - Levenshulme – West Didsbury - Withington	0	1	3	1	1	1
219	Manchester – Openshaw – Ashton- Stalybridge	6	6	6	3	6	6
220/221	Manchester – Openshaw – Dukinfield- Stalybridge	4 Services per day in each direction				0	0

Table 3.1 - Bus Service Provision in the Vicinity of the Site

- 3.4.4 As can be seen from Table 3.1, the nearest bus stops to the site provide services to a range of local destinations such as the city centre, Gorton, Levenshulme and Ashton-under-Lyne.
- 3.4.5 The 219 bus service is a high frequency route to and from Manchester city centre providing up to 6 services an hour, the first service leaves the city centre at 5am whilst the last service back to the city centre is around 2345. This service together with the other services in the area provide the opportunity for staff and visitors to travel to and from the site by bus.
- 3.4.6 It is therefore concluded that the proposed development site is accessible by bus.

3.5 Accessibility by Rail

- 3.5.1 The most accessible train station from the site is Gorton which is situated approximately 720 metres to the east. This train station is managed by Northern and has 2 platforms, offering 4 services per hour to destinations such as Manchester Piccadilly, Hyde Central and Rose Hill Marple.
- 3.5.2 This provides opportunities for commuter and visitors to travel to and from the site by rail.

3.6 Accessibility Summary

- 3.6.1 The proposals have been considered in terms of accessibility by non-car modes for the proposed development.
- 3.6.2 The following conclusions can be drawn from this section of the report:
- The site is accessible by foot. The existing infrastructure will provide excellent pedestrian linkages with the surrounding areas located within Openshaw.



- The site is accessible by bus with services operating in the vicinity of the site from existing bus stops located along the A635 Ashton Road and Ogden Lane.
- The site is accessible by rail, with Gorton train station being located within close proximity of the site.

3.6.3 In light of the above, it is considered that the site is highly accessible by non-car modes and will cater for needs of the facility's staff and assist in promoting a choice of travel modes other than the private car.

4 TRAFFIC IMPACT ANALYSIS

4.1 Introduction

- 4.1.1 Having established that the proposed development site is accessible by modes of travel other than the private car and would be in general accordance with transport policies, the following section considers the traffic impact of the development proposals on the local highway network.

4.2 Existing Site Traffic

- 4.2.1 As previously stated, the application site is currently occupied by around 9,205 sqm of B8 employment floorspace which forms part of the New Smithfield Market. This existing floorspace is to be demolished as part of the proposals and the existing occupiers relocated within existing floorspace within the market.
- 4.2.2 To forecast the level of traffic this existing floor space could generate, reference has been made to the B8 Warehousing trip rates contained within the Transport Statement submitted in support of the consented applications on the site (Planning Ref: 122231/FO/2018 and Planning Ref: 127742/FO/2020).
- 4.2.3 These trip rates were agreed with the highways officers at Manchester City Council (MCC) during the determination of the previous planning applications on the site.
- 4.2.4 **Table 4.1** below summarises the agreed trip rates and forecast existing site traffic whilst the full TRICS Output is contained within **Appendix 1**.

Mode	Period	Trip Rate		Trips	
		Arr	Dep	Arr	Dep
Vehicles	AM Peak Hour (0800-0900)	0.495	0.204	46	19
	PM Peak Hour (1700-1800)	0.129	0.407	12	37

Table 4.1 – Existing Site Trip Rates and Traffic Generation (9,205sqm)

- 4.2.5 As can be seen in Table 4.1 above the existing land-use has the potential to generate 64 two-way trips in the weekday AM peak period and 49 two-way vehicular movements during the weekday PM peak period.

4.3 Consented Development

- 4.3.1 As previously stated, the application site benefits from planning consent 8,216 sqm of B8 employment floorspace (Planning Ref: 127742/FO/2020). Table 4.2 below summarises the consented traffic flows using the agreed trip rates.

Mode	Period	Trip Rate		Trips	
		Arr	Dep	Arr	Dep
Vehicles	AM Peak Hour (0800-0900)	0.495	0.204	41	17
	PM Peak Hour (1700-1800)	0.129	0.407	11	33

Table 4.2 – Consented Site Trip Rates and Traffic Generation (8,216sqm)

4.3.2 As can be seen in Table 4.2 above, the consented land-use has the potential to generate 58 two-way trips in the weekday AM peak period and 44 two-way vehicular movements during the weekday PM peak period.

4.3.3 It should be noted that the forecast increases in trips displayed in Table 4.2 were deemed acceptable to the highway's officers at Manchester City Council, with no conditions relating to mitigation measures were attached to the planning consent.

4.4 Proposed Development

4.4.1 The development proposals are for the provision of two employment units with a gross internal area of 11,563 sqm. This equates to increase of 2,358 sqm when compared to the existing units on the site. As previously stated, the existing occupiers of the units located within the application site will be relocated within the existing market. Therefore, the proposals will result in an overall reduction of the market floorspace.

4.4.2 **Table 4.3** below summarises the agreed trip rates and forecast traffic flows for the proposed units.

Mode	Period	Trip Rate		Trips	
		Arr	Dep	Arr	Dep
Vehicles	AM Peak Hour (0800-0900)	0.495	0.204	57	24
	PM Peak Hour (1700-1800)	0.129	0.407	15	47

Table 4.3 – Proposed Site Trip Rates and Traffic Generation (11,563sqm)

- 4.4.3 Table 4.3 above shows that the proposed development is forecast to generate 81 two-way vehicle movements in the weekday AM peak and 62 two-way vehicles movements in the weekday PM peak period. This equates to less than 2 additional vehicle per minute even during the peak periods.
- 4.4.4 As detailed previously, the development proposals will result in an increase of 2,358 sqm floorspace when compared to the existing floor space **Table 4.4** below provides a summary of the forecast traffic generation of the proposed net increase in floor area when compared to the existing floor area on the site

Mode	Period	Trip Rate		Trips	
		Arr	Dep	Arr	Dep
Vehicles	AM Peak Hour (0800-0900)	0.495	0.204	12	5
	PM Peak Hour (1700-1800)	0.129	0.407	3	10

Table 4.4 – Proposed Net Increase Compared to Existing Land-use (2,358sqm)

- 4.4.5 As can be seen in Table 4.4 the proposed development is forecast to result in an increase of just 17 two-way trips in the AM peak period and 13 two-way trips in the PM Peak Period when compared to the existing land-uses on the site. This equates to an additional vehicle around every 4 minutes during the peak periods.
- 4.4.6 As previously stated, the application site benefits from planning consent for 8,216sqm of B8. Therefore, the proposals result in a net increase of 3,347sqm floorspace when compared to the existing land-uses on the site.

- 4.4.7 **Table 4.5** below provides a summary of the forecast traffic generation of the proposed net increase in floor area when compared to the consented development.

Mode	Period	Trip Rate		Trips	
		Arr	Dep	Arr	Dep
Vehicles	AM Peak Hour (0800-0900)	0.495	0.204	17	7
	PM Peak Hour (1700-1800)	0.129	0.407	4	14

Table 4.5 – Proposed Net Increase Compared to Consented Development (3,347sqm)

- 4.4.8 As can be seen in Table 4.5 the proposed development is forecast to result in an increase of just 24 two-way trips in the AM peak period and 18 two-way trips in the PM Peak Period when compared to the consented -use on the site.
- 4.4.9 This equates to around an additional vehicle every 3 minutes even during the peak periods and therefore would result in a minimal impact on the operation of the local highway network.

4.5 Traffic Impact Summary

- 4.5.1 Based on the above, is concluded that the development proposals will have an imperceptible impact on the local highway network when compared to the existing and consented development and no further traffic impact analysis is required.

5 CONCLUSIONS

5.1.1 Eddisons have been instructed to advise on the traffic and transport aspects of proposals for the redevelopment of a site at New Smithfield Market in the Openshaw area of Manchester.

5.1.2 The following conclusions will be drawn with regard to the proposed development:

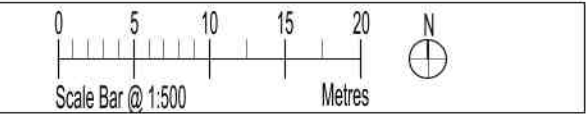
- The proposed development will be accessed by safe and efficient vehicular access arrangements;
- The proposed benefits from being accessible on foot with the existing pedestrian footways providing access to a number of local services;
- The proposed development is located to encourage journeys by bus via the bus services available within a short walk of the site;
- The proposed development will have an imperceptible impact on the local highway.

5.1.3 It can therefore be concluded that the proposals are acceptable in highway terms.

PLANS



- ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE.
- ANY DISCREPANCIES ARE TO BE REPORTED TO CUBE ARCHITECTURE AND DESIGN BEFORE ANY WORK COMMENCES.
- THIS DRAWING SHALL NOT BE SCALED TO ASCERTAIN ANY DIMENSIONS. WORK TO FIGURED DIMS ONLY.
- THIS DRAWING SHALL NOT BE REPRODUCED WITHOUT EXPRESS WRITTEN PERMISSION FROM CUBE ARCHITECTURE AND DESIGN.
- TITLE OVERLAY DRAWINGS AND OWNERSHIP BOUNDARIES ARE PRODUCED USING ALL REASONABLE ENDEAVOURS. CUBE ARCHITECTURE AND DESIGN CANNOT BE RESPONSIBLE FOR THE ACCURACY OR SCALE DISCREPANCY OF BASE PLANS SUPPLIED TO THEM.



EXTERNAL FINISHES KEY

- Macadam or Asphalt surface course finish on suitable binder course and sub-base as per S.E. specification
- Tarmacadam footpath surface course finish on suitable binder course and sub-base as per S.E. specification
- New road finish to match and feather in to existing on suitable binder course and sub-base as per S.E. specification. Build up to be suitable for HGV's.
- Existing surface finish to be replaced/repaired as required to provide service yard surface to match and feather in to existing yard on suitable binder course and sub-base as per S.E. specification. Build up to be suitable for HGV's.
- Reinforced concrete yard slab or plant base on a consolidated sub-base as per S.E. specification
- Gravel surface finish retained in PC edgings as required.
- Concrete block paving laid in stretcher bond
- Extent of new 2.4m High paladin fence PPC to RAL 6005 (Green) include for single leaf gate with Push Pad Fire Escape Panic Latch to internal side for emergency egress.
- Proposed grass areas and planting to separate landscape consultant details / specifications to incorporate native species planting.
- Broxap Sheffield (or sim) cycle shelter with 4No. Sheffield cycle hoops root mounted to provide 8 cycles spaces. Provide 24 total cycle spaces for development.
- Designated electrical vehicle charging point (EVCP)
- Denotes - 168x1800mm Marshalls Rhino service yard bollard-root fixed with class 2 yellow reflective hazard banding

PLAN 2

E	Barton and Redman yard amended	21.03.22	DMR
D	Issued for Planning	04.02.22	DMR
C	Drawing progressed for planning submission	01.02.22	DMR
B	Revised following clients comments	31.01.22	DMR
A	Revised following clients comments	24.01.22	DMR
Rev	Description	Date	By

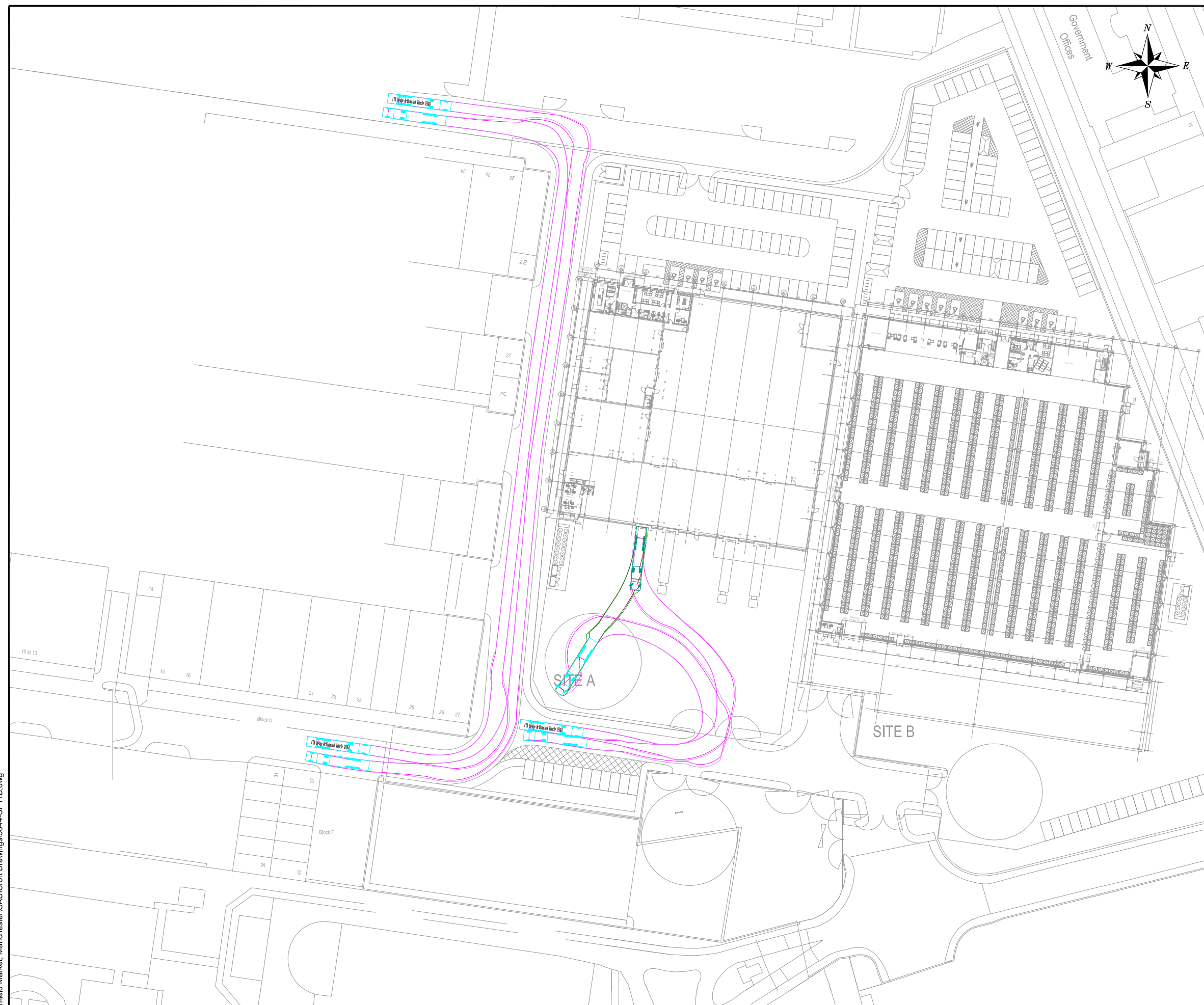
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PLANNING

Client:
RUSSELLS WBHO

Contract:
PROPOSED NEW BUILD DEVELOPMENT
NEW SMITHFIELD MARKET
MANCHESTER

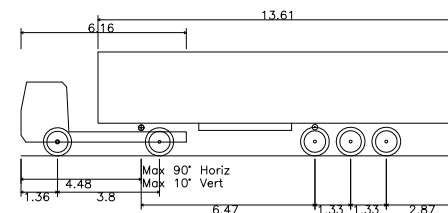
Drawing:
PROPOSED SITE PLAN

Drawing No: AS763-03	Revision: E	Scales: 1:500 @A1
Drawn: DMR	Checked:	Date: JAN '22



NOTES

PLAN 3



FTA Design Articulated Vehicle (2016)	
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	6.600m



REV	DETAILS	DRAWN	CHECKED	DATE
-	-	-	-	-

CLIENT: **RUSSELLS
CONSTRUCTION**

PROJECT:

SMITHFIELD MARKET,
MANCHESTER

DRAWING TITLE:

SWEPT PATH ANALYSIS

SCALES: 1:500 @ A3

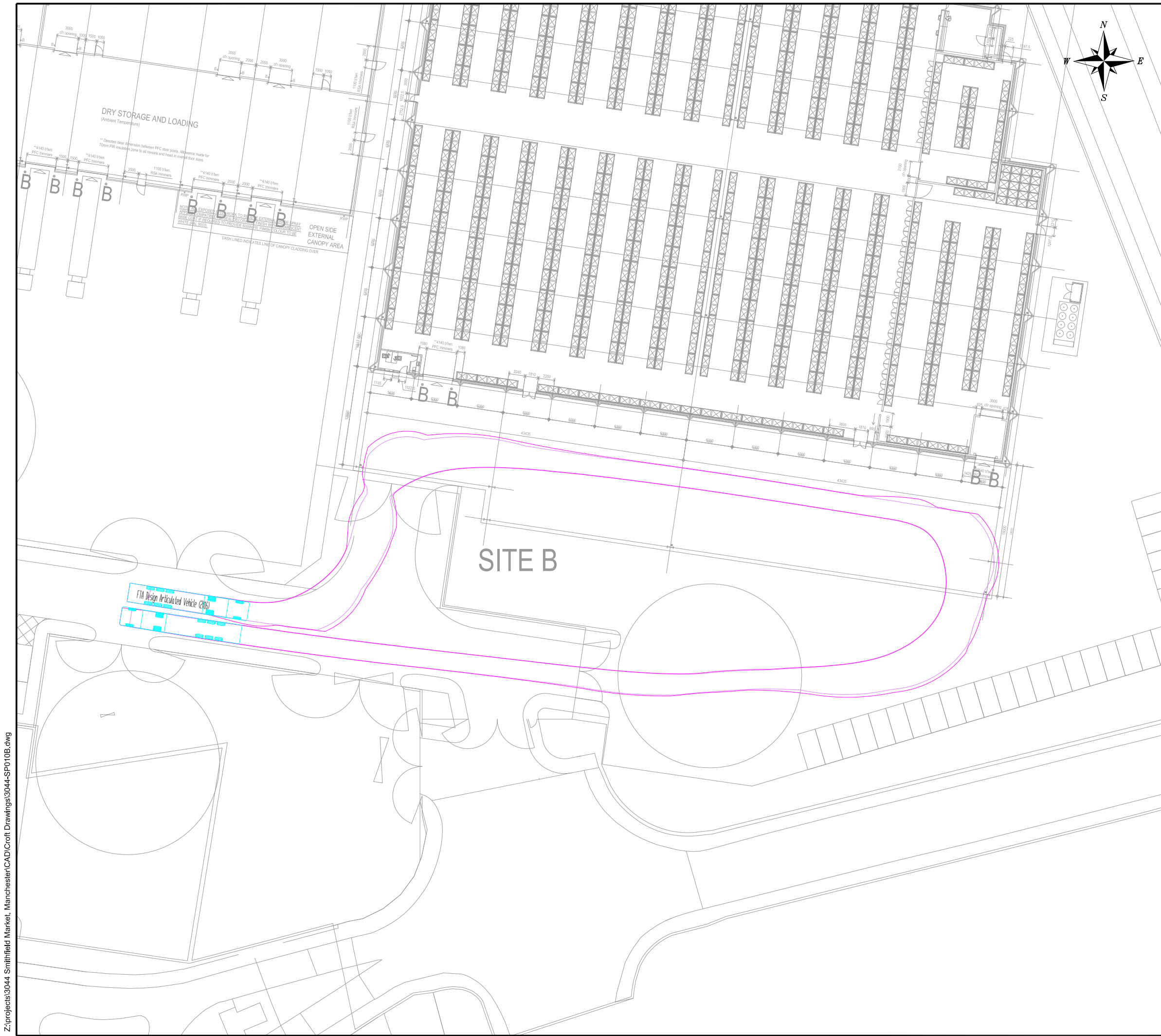
DRAWN: HZ	CHECKED: TSB	DATE: MAR 22
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Croft Transport Planning & Design
340 Deansgate
Manchester
M3 4LY

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

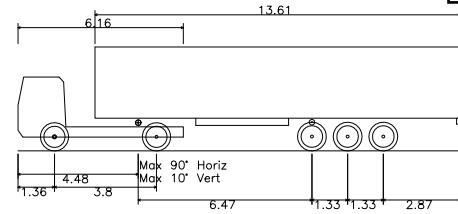
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NOTES

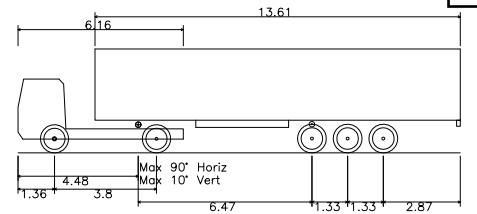
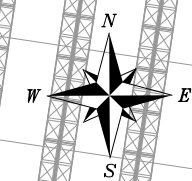
PLAN 4



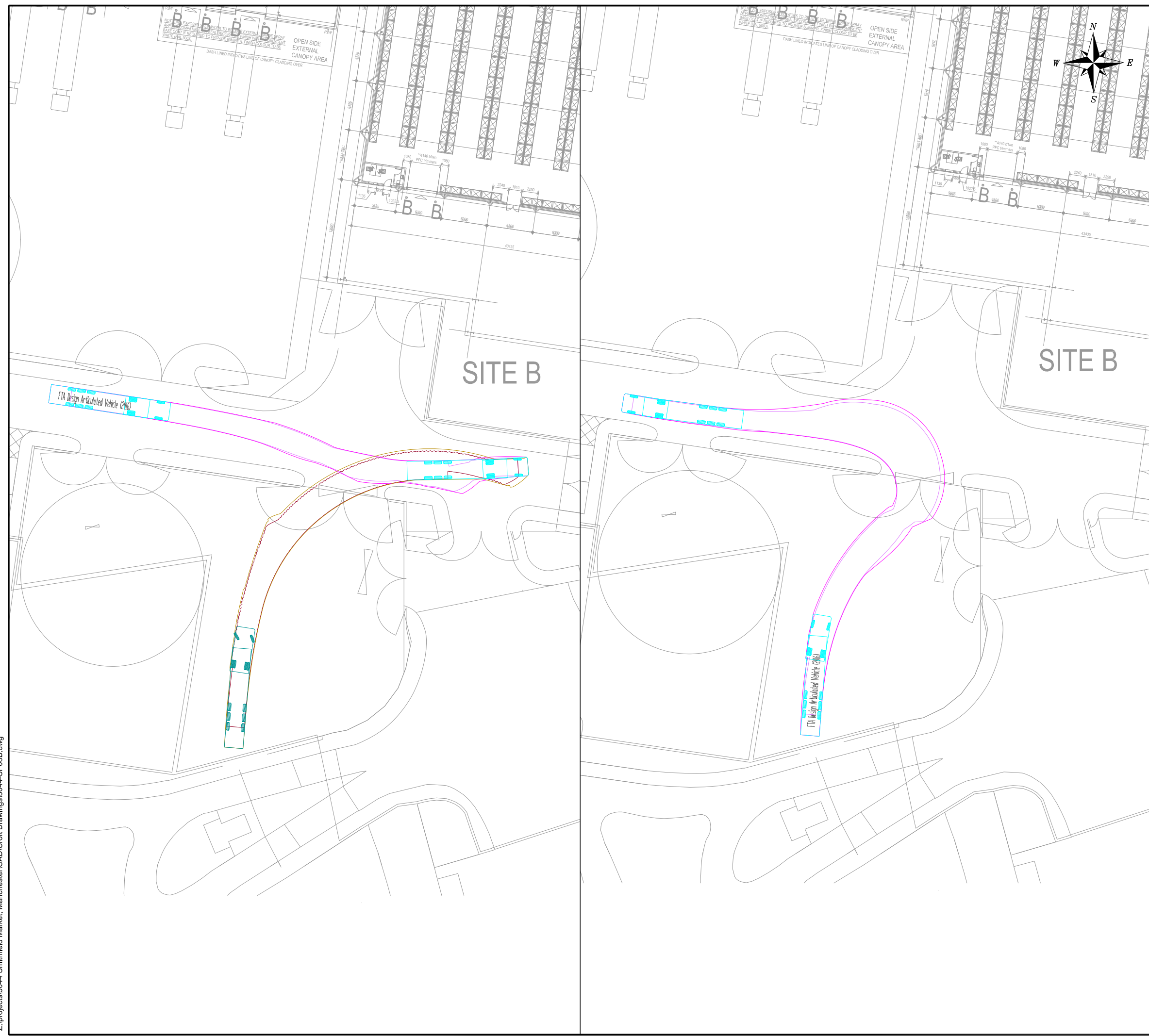
FTA Design Articulated Vehicle (2016)
Overall Length 16.480m
Overall Width 2.550m
Overall Body Height 3.870m
Min Body Ground Clearance 0.515m
Max Track Width 2.470m
Lock to lock time 3.00s
Kerb to Kerb Turning Radius 6.600m



REV	DETAILS		DRAWN	CHECKED	DATE
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PROJECT: SMITHFIELD MARKET, MANCHESTER					
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DRAWING NUMBER: 3044-SP10				REVISION: B	



FTA Design Articulated Vehicle (2016)	
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	6.600m

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REV	DETAILS	DRAWN	CHECKED	DATE
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CONSTRUCTION**

PROJECT: SMITHFIELD MARKET,
MANCHESTER

DRAWING TITLE:

SWEPT PATH ANALYSIS

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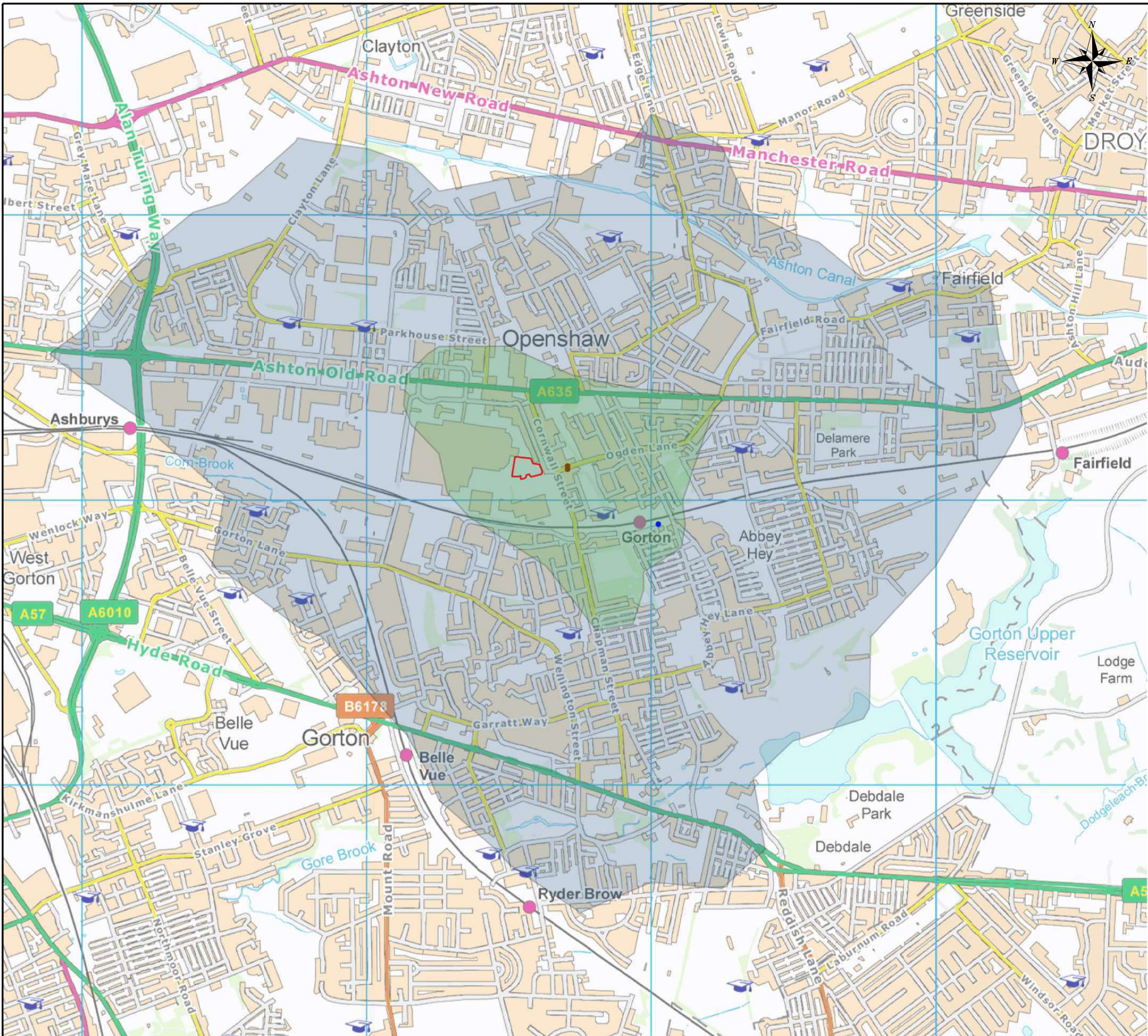
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DRAWING NUMBER: 3044-SP08	REVISION: B
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Z:\projects\2297 Barton and Redman, Smithfield Market, Manchester\GIS\Workspaces\2297-03.dwg



NOTES

Site Location

800m Pedestrian Catchment

2km Pedestrian Catchment

Bus Stops within 400m

Train Station

PLAN 6

APPENDICES

APPENDIX 1

TRICS Output – B8 Commercial Warehousing

Calculation Reference: AUDIT-851401-200706-0712

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : F - WAREHOUSING (COMMERCIAL)
 VEHICLES

Selected regions and areas:

04	EAST ANGLIA	
	SF SUFFOLK	1 days
06	WEST MIDLANDS	
	WM WEST MIDLANDS	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	WY WEST YORKSHIRE	1 days
09	NORTH	
	CB CUMBRIA	1 days
10	WALES	
	BG BRIDGEND	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: 1507 to 4700 (units: sqm)
 Range Selected by User: 634 to 5000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 19/09/16

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

Selected survey days:

Monday	3 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	5 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	1
Edge of Town	4

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

Selected Location Sub Categories:

Industrial Zone	3
Commercial Zone	1
Built-Up 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

5 days

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

Population within 1 mile:

1,000 or Less

1 days

5,001 to 10,000

3 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:

5,001 to 25,000

2 days

25,001 to 50,000

1 days

75,001 to 100,000

1 days

500,001 or More

1 days

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

Car ownership within 5 miles:

0.6 to 1.0

2 days

1.1 to 1.5

3 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No

5 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

5 days

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

LIST OF SITES relevant to selection parameters

1	BG-02-F-01	LOGISTICS COMPANY	BRIDGEND
	PARC CRESCENT		
	BRIDGEND		
	WATERTON IND. EST.		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	3050 sqm	
	Survey date: MONDAY	13/10/14	Survey Type: MANUAL
2	CB-02-F-01	DOMINO'S PIZZA	CUMBRIA
	COWPER ROAD		
	PENRITH		
	GILWILLY IND. ESTATE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	2950 sqm	
	Survey date: TUESDAY	10/06/14	Survey Type: MANUAL
3	SF-02-F-03	ROAD HAULAGE	SUFFOLK
	CENTRAL AVENUE		
	IPSWICH		
	WARREN HEATH		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	4700 sqm	
	Survey date: FRIDAY	18/09/15	Survey Type: MANUAL
4	WM-02-F-02	LOGISTICS FIRM	WEST MIDLANDS
	SOVEREIGN ROAD		
	BIRMINGHAM		
	KINGS NORTON		
	Edge of Town		
	Commercial Zone		
	Total Gross floor area:	3625 sqm	
	Survey date: MONDAY	09/11/15	Survey Type: MANUAL
5	WY-02-F-01	ELECTRONICS DISTRIBUTION	WEST YORKSHIRE
	MORTIMER STREET		
	CLECKHEATON		
	Edge of Town Centre		
	Built-Up Zone		
	Total Gross floor area:	1507 sqm	
	Survey date: MONDAY	19/09/16	Survey Type: MANUAL

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

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	1	1976	0.000	1	1976	0.000	1	1976	0.000
05:30 - 06:00	1	1976	0.152	1	1976	0.000	1	1976	0.152
06:00 - 06:30	1	1976	0.051	1	1976	0.000	1	1976	0.051
06:30 - 07:00	1	1976	0.152	1	1976	0.051	1	1976	0.203
07:00 - 07:30	5	2972	0.121	5	2972	0.081	5	2972	0.202
07:30 - 08:00	5	2972	0.175	5	2972	0.074	5	2972	0.249
08:00 - 08:30	5	2972	0.229	5	2972	0.094	5	2972	0.323
08:30 - 09:00	5	2972	0.303	5	2972	0.108	5	2972	0.411
09:00 - 09:30	5	2972	0.148	5	2972	0.061	5	2972	0.209
09:30 - 10:00	5	2972	0.074	5	2972	0.061	5	2972	0.135
10:00 - 10:30	5	2972	0.128	5	2972	0.135	5	2972	0.263
10:30 - 11:00	5	2972	0.101	5	2972	0.101	5	2972	0.202
11:00 - 11:30	5	2972	0.121	5	2972	0.114	5	2972	0.235
11:30 - 12:00	5	2972	0.087	5	2972	0.108	5	2972	0.195
12:00 - 12:30	5	2972	0.087	5	2972	0.061	5	2972	0.148
12:30 - 13:00	5	2972	0.108	5	2972	0.101	5	2972	0.209
13:00 - 13:30	5	2972	0.128	5	2972	0.141	5	2972	0.269
13:30 - 14:00	5	2972	0.135	5	2972	0.074	5	2972	0.209
14:00 - 14:30	5	2972	0.094	5	2972	0.094	5	2972	0.188
14:30 - 15:00	5	2972	0.101	5	2972	0.087	5	2972	0.188
15:00 - 15:30	5	2972	0.094	5	2972	0.114	5	2972	0.208
15:30 - 16:00	5	2972	0.087	5	2972	0.148	5	2972	0.235
16:00 - 16:30	5	2972	0.121	5	2972	0.121	5	2972	0.242
16:30 - 17:00	5	2972	0.081	5	2972	0.188	5	2972	0.269
17:00 - 17:30	5	2972	0.094	5	2972	0.303	5	2972	0.397
17:30 - 18:00	5	2972	0.034	5	2972	0.188	5	2972	0.222
18:00 - 18:30	4	3338	0.060	4	3338	0.165	4	3338	0.225
18:30 - 19:00	4	3338	0.067	4	3338	0.090	4	3338	0.157
19:00 - 19:30	1	1976	0.253	1	1976	0.152	1	1976	0.405
19:30 - 20:00	1	1976	0.051	1	1976	0.152	1	1976	0.203
20:00 - 20:30	1	1976	0.051	1	1976	0.051	1	1976	0.102
20:30 - 21:00	1	1976	0.101	1	1976	0.152	1	1976	0.253
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			3.589			3.370			6.959

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

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

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Parameter summary

Trip rate parameter range selected:	1507 - 4700 (units: sqm)
Survey date range:	01/01/12 - 19/09/16
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

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 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	1	1976	0.000	1	1976	0.000	1	1976	0.000
05:30 - 06:00	1	1976	0.000	1	1976	0.000	1	1976	0.000
06:00 - 06:30	1	1976	0.051	1	1976	0.000	1	1976	0.051
06:30 - 07:00	1	1976	0.051	1	1976	0.000	1	1976	0.051
07:00 - 07:30	5	2972	0.027	5	2972	0.061	5	2972	0.088
07:30 - 08:00	5	2972	0.034	5	2972	0.054	5	2972	0.088
08:00 - 08:30	5	2972	0.047	5	2972	0.047	5	2972	0.094
08:30 - 09:00	5	2972	0.074	5	2972	0.054	5	2972	0.128
09:00 - 09:30	5	2972	0.040	5	2972	0.040	5	2972	0.080
09:30 - 10:00	5	2972	0.040	5	2972	0.040	5	2972	0.080
10:00 - 10:30	5	2972	0.047	5	2972	0.047	5	2972	0.094
10:30 - 11:00	5	2972	0.047	5	2972	0.061	5	2972	0.108
11:00 - 11:30	5	2972	0.101	5	2972	0.081	5	2972	0.182
11:30 - 12:00	5	2972	0.027	5	2972	0.054	5	2972	0.081
12:00 - 12:30	5	2972	0.040	5	2972	0.013	5	2972	0.053
12:30 - 13:00	5	2972	0.067	5	2972	0.034	5	2972	0.101
13:00 - 13:30	5	2972	0.061	5	2972	0.061	5	2972	0.122
13:30 - 14:00	5	2972	0.067	5	2972	0.027	5	2972	0.094
14:00 - 14:30	5	2972	0.047	5	2972	0.027	5	2972	0.074
14:30 - 15:00	5	2972	0.067	5	2972	0.020	5	2972	0.087
15:00 - 15:30	5	2972	0.081	5	2972	0.054	5	2972	0.135
15:30 - 16:00	5	2972	0.054	5	2972	0.061	5	2972	0.115
16:00 - 16:30	5	2972	0.081	5	2972	0.061	5	2972	0.142
16:30 - 17:00	5	2972	0.040	5	2972	0.013	5	2972	0.053
17:00 - 17:30	5	2972	0.027	5	2972	0.027	5	2972	0.054
17:30 - 18:00	5	2972	0.007	5	2972	0.054	5	2972	0.061
18:00 - 18:30	4	3338	0.007	4	3338	0.037	4	3338	0.044
18:30 - 19:00	4	3338	0.037	4	3338	0.045	4	3338	0.082
19:00 - 19:30	1	1976	0.000	1	1976	0.152	1	1976	0.152
19:30 - 20:00	1	1976	0.000	1	1976	0.152	1	1976	0.152
20:00 - 20:30	1	1976	0.000	1	1976	0.051	1	1976	0.051
20:30 - 21:00	1	1976	0.000	1	1976	0.101	1	1976	0.101
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			1.269			1.529			2.798

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

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



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