

**ALDI FOOD STORES  
HIGH STREET, SKELMERSDALE**

**TRANSPORT ASSESSMENT**

**PREPARED ON BEHALF OF:**

**ALDI STORES LIMITED**



10 King Street  
Newcastle under Lyme  
ST5 1EL

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## **1.0 INTRODUCTION**

### **1.1 Background**

- 1.1.1 This Transport Assessment has been prepared by Cameron Rose Associates on behalf of Aldi Stores Limited in order to examine the highway and transportation issues associated with the proposed redevelopment of a site off High Street, Skelmersdale.
- 1.1.2 The site currently comprises office accommodation, constructed over ground and first floor levels and incorporating a mixture of private and open-plan office areas. The office unit comprised c. 1,915.2 sqm on three acres of land.
- 1.1.3 There is extensive car parking on site within a relatively regular shaped parcel of land which can be accessed from both High Street and the lower section of Westgate
- 1.1.4 The development proposals include the provision of an Aldi food store with a GEA of 1,863 sqm and a non-food retail unit with a GEA of 372 sqm. The proposed parking provision for the development is 151 spaces, including nine disabled, seven motorcycle and 12 parent and child parking spaces.
- 1.1.5 This Transport Assessment has been prepared to support the planning application for the proposed development and includes an analysis of the existing transport provision within the vicinity of the site, including sustainable transport facilities, traffic flows and the operation of the existing highway network. This Assessment considers the adequacy of this existing and consented provision to accommodate the future demands associated with the application proposals.
- 1.1.6 Details of the pedestrian and vehicular access arrangements, quantum of car and cycle parking and servicing arrangements are set out in this report, together with a detailed assessment of the potential traffic impact of the development proposals on the surrounding local highway network.

- 1.1.7 This Transport Assessment has been prepared to support the planning application and has been developed in accordance with the now superseded Department for Transport's 'Guidance on Transport Assessments' (2007) and gives due regard to the National Planning Practice Guidance 'Transport Evidence in Plan Making' document.
- 1.1.8 Pre-application discussions have been held with highway officers at Lancashire County Council, who have agreed the proposed study areas and the parameters that form the body of assessment detailed in this report.
- 1.1.9 This report concludes that the proposed development can be accommodated without detriment to the operational capacity or safety of the local highway network and that it can be readily accessed by sustainable modes.

## 1.2 Structure

- 1.2.1 The structure of the report herein is set out as follows:
- **Section 2.0** considers the location of the development site, the local highway network and the existing infrastructure provision for sustainable modes of transport;
  - **Section 3.0** sets out the details of the development proposals, site access, parking provision and servicing arrangements;
  - **Section 4.0** presents the baseline conditions of the local highway network;
  - **Section 5.0** deals with the potential trip attraction of the proposed development considering the various trip types;
  - **Section 6.0** considers the operational performance of the local highway network for a future assessment year, with and without the development in operations; and
  - **Section 7.0** provides a summary and conclusion to the report derived from the analysis presented in the above chapters.

1.2.2 The report has been prepared solely in connection with the proposed development as stated above. As such, no responsibility is accepted to any third party for all or any part of this report, or in connection with any other development.

## 2.0 THE DEVELOPMENT SITE

### 2.1 Site Location and Surrounding Area

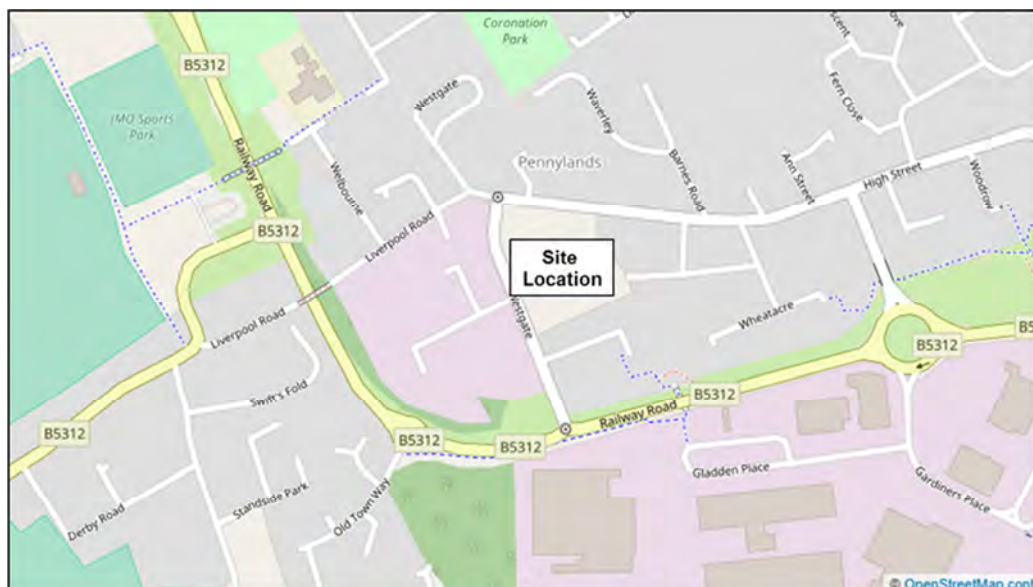
2.1.1 The site is located within Pennylands to the west of Skelmersdale town centre. The site infrastructure comprises offices, constructed over ground and first floor levels and incorporating a mixture of private and open-plan office areas. The office unit comprised c. 1,915.2 sqm on three acres of land.

2.1.2 There is extensive car parking on site within a relatively regular shaped parcel of land which can be accessed from both High Street and the lower section of Westgate

2.1.3 The surrounding land uses are predominantly residential, commercial and industrial development.

2.1.4 The development site is located at the junction of Westgate and High Street, within the Pennylands area of Skelmersdale. The site is accessed off Westgate and High Street. Westgate runs from the B5312 Railway Road in the south to High Street in the north.

2.1.5 The location of the site is illustrated in **Figure 2-1**.



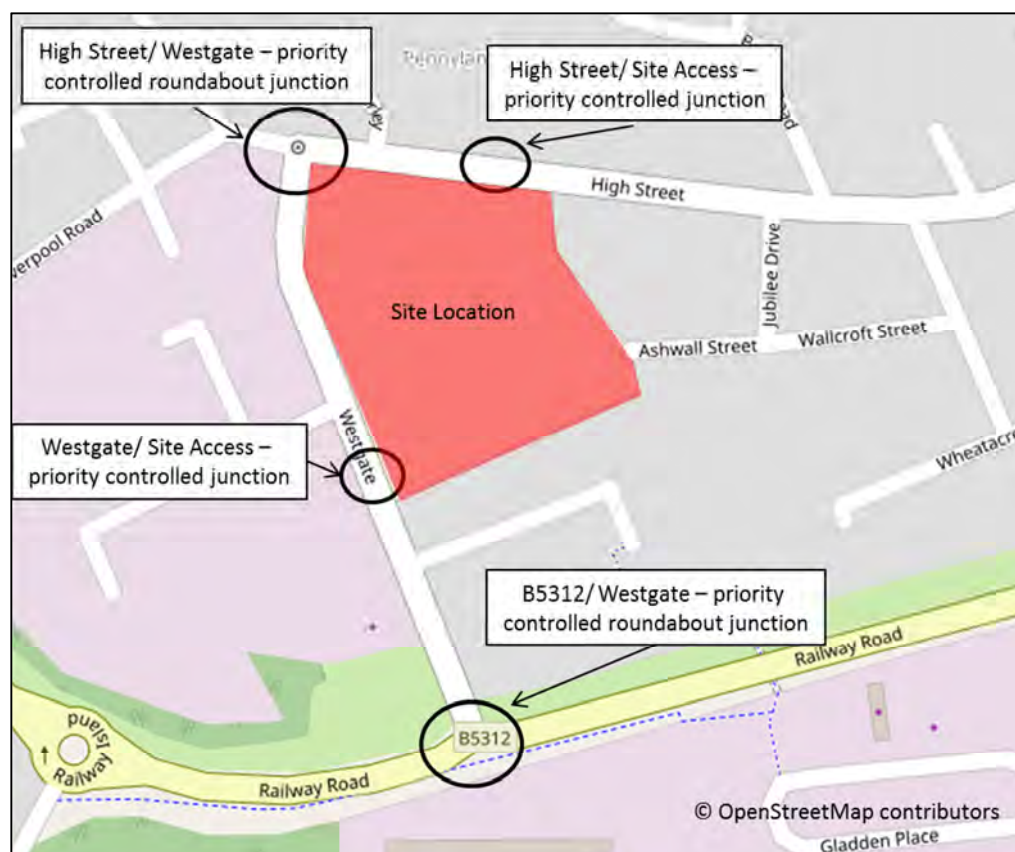
**Figure 2-1: Site Location**

## 2.2 Local Highway Network

2.2.1 Following pre-application discussions held with the local highway authority, it has been confirmed that the Transport Assessment, in addition to the site accesses (off High Street and Westgate), should consider the impact of the development proposals at the following junctions:

- High Street/ Westgate – priority controlled roundabout junction; and
- B5312/ Westgate – priority controlled roundabout junction.

The location of these junctions is shown in **Figure 2-2**.



**Figure 2-2: Extent of the Study Area**

2.2.2 In addition to providing access to the site, Westgate provides access to a number of commercial, industrial and residential land uses. The carriageway width of Westgate in the vicinity of the site is approximately 7.6 metres. Grass verges are present on both sides of the carriageway, but there is a lack of footways. Street lighting is present along its length. Westgate is subject to a speed limit of 30 mph.



2.2.3 High Street in the vicinity of the development site has an approximate width of 8.1 metres. It is a single carriageway two-way road, subject to a 30 mph speed limit. High Street benefits from street lighting and has a footway on both sides of the carriageway. A bus stop, with shelter, is present to the west of the existing access to the site off High Street.

### 2.3 Accessibility by Sustainable Modes

2.3.1 The site is within walking distance of existing public transport connections and is well served by high standard local walking/ cycling connections to the north and the south of the site. There is currently a lack of footway on Westgate, adjacent to the development site; this will be examined in more detail below. It is considered that existing features and those proposed as part of the development proposals would provide opportunities to encourage staff and visitors to the site to seek alternative sustainable transport modes to the private car.

2.3.2 This section provides an appraisal of the existing sustainable transport networks surrounding the proposed site, with due regard to the following:

- walking and cycling network; and
- public transport network.

#### Walking and Cycling

2.3.3 The Institution of Highway and Transportation (IHT) document entitled 'Guidance for Journeys of Foot' (2000) suggests 'acceptable' walking distances for different journey purposes. They suggest that walking distances for pedestrians without mobility impairment, for commuting and education, are up to 500 metres as a desirable distance, up to 1,000 metres as an acceptable distance and 2,000 metres as the preferred maximum. The document recognises that:

*'... that it is not always possible to achieve ideal results in all situations due to site constraints, costs or other practicalities and that compromises must sometimes, rightly, be made'* (Para 1.10).

- 2.3.4 The document goes on to advise that some 80% of walking journeys in urban areas are less than 1.0 mile long and that the average length is 1.0 kilometres (0.6 miles) and that this differs little by age or sex. (Source: IHT document, Providing for Journeys on Foot, Para. 3.30).
- 2.3.5 An acceptable cycle distance is considered to be up to five kilometres. Although now superseded PPG13 notes that:
- ‘Cycling also has the potential to substitute for short car trips, particularly those under 5km and to form part of a longer journey by public transport.’*  
(Para. 77)
- 2.3.6 The Department for Transport (DfT) Local Transport Note 2/08 also states that many utility cycle journeys are under three miles, although for commuters, a trip distance of over five miles is not uncommon. (Para. 1.5.1)
- 2.3.7 With the exception of Westgate, the surrounding roads have good quality lit footways, which connect the site with the existing built-up areas.
- 2.3.8 As part of the redevelopment scheme, it is proposed to implement a footway along the eastern side of Westgate (site side). The new footway will be 2.0 metres in width and constructed along the full length of the site, a length of approximately 133 metres. The existing crossing location on Westgate, connecting the site to the public car park opposite, will also be relocated from its currently location at the junction, around the bend. This will require the implementation of a short section of new footway on the western side of Westgate.
- 2.3.9 Cycle facilities in the vicinity of the proposed development are illustrated in **Figure 2-3**. This illustrates a combination of on and off-street cycle routes in the vicinity of the development site.
- 2.3.10 As part of the development proposals, 20 cycle parking spaces in the form of 10 Sheffield type stands will be incorporated into the design.



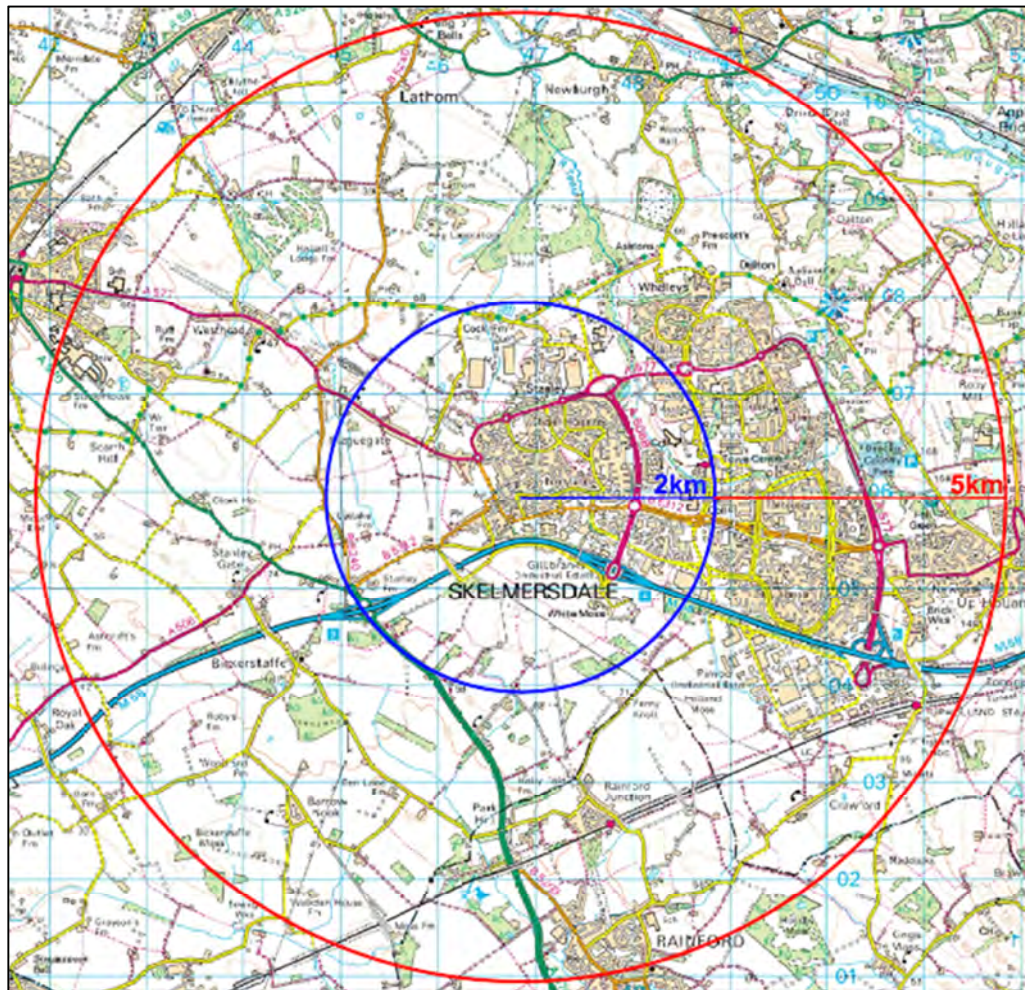
**Figure 2-3: Cycle Facilities in the Vicinity of the Development Site**

2.3.11 **Figure 2-4** indicates a two kilometre walking catchment and five kilometre cycle catchment from the development site. The walking catchment encompasses a large residential area, including Pennylands and Chapel House.

2.3.12 This makes journeys on foot between local residential/ employment areas and the site a viable option. The proximity of these areas to the site also make commuter based walking trips to and from the site a realistic option.

2.3.13 Within a five kilometre cycle catchment, the majority of Skelmersdale is accessible, including the town centre and the residential areas of Ashurst, Birch Green, Elmers Green, Tanhouse and Newgate.

2.3.14 This catchment indicates that cycling could be seen as a viable form of commutable transport for those working on-site and living in the surrounding residential areas. Thus the location of the proposed development would provide the opportunity for employees and visitors/ customers to access the site by bicycle. Walking and cycling links in the vicinity enhance the viability of such trips.



**Figure 2-4: Walking and Cycling Catchment**

2.3.15 A suitable level of street lighting is present throughout the area. Generally, the pedestrian/ cycle facilities encourage movement on foot/ cycle within the vicinity of the development site and provide adequate links to the nearest bus stops and other retail, employment and leisure facilities, thus encouraging sustainable travel to the store. Proposed improvements to pedestrian facilities on Westgate will enhance the connectivity of the site further.

### **Public Transport**

#### Bus Services

2.3.16 Guidance published by the Institute of Highways and Transportation ‘Planning for Public Transport in Developments’ (1999) recommends that the maximum walking distance to a bus stop should be 400 metres, equating to an approximate five minute walk.



2.3.17 The closest bus stops to the proposed development are located adjacent to the site access, on High Street. Further stops are accessible within 200 metres of the development on the B5312. These stops are within the recommended walking distance to a bus stop, which is used to assess a good level of bus accessibility.

2.3.18 The bus stop of High Street, along the site boundary will be upgraded as part of the redevelopment proposals. Further details are provided in **Section 3.0**.

2.3.19 The locations of bus stops in close proximity to the development site are shown in **Figure 2-5**.



**Figure 2-5: Bus Stop Locations**

2.3.20 A selection of the routes and frequencies of the bus services operating in close proximity of the site are summarised in **Table 2-1**.

**Table 2-1: Bus Services and Headways**

Service	Destination	Bus Headways (minutes)		
		Mon – Fri	Saturday	Sunday
310	SKELMERSDALE - LIVERPOOL via Holborn Hill, Aughton, Maghull, Aintree, Walton	30	30	-
375	WIGAN - SOUTHPORT via Hall Green, Bescar	60	60	60
385	WIGAN - SOUTHPORT via Hall Green, Pinfold	60	60	-

2.3.21 The above table demonstrates that there are a variety of local destinations, including Liverpool, Wigan and Southport that can be reached via the bus services operating within an acceptable walking distance of the proposed store.

**Summary**

2.3.22 Overall it is evident that the development site is accessible to pedestrians, cyclists and users of public transport. The site is within walking distance of existing public transport connections and is well served by high standard local walking/ cycling connections. It is considered that these features would provide opportunities to encourage staff and visitors to the site to consider alternative sustainable transport modes to the private car.

### 3.0 THE PROPOSED DEVELOPMENT

#### 3.1 Existing Site

3.1.1 The existing office accommodation is constructed over ground and first floor levels and incorporates a mixture of private and open-plan office areas. The office unit comprised c. 1,915.2 sqm on three acres of land.

3.1.2 There is extensive car parking on site within a relatively regular shaped parcel of land which can be accessed from both High Street and the lower section of Westgate

#### 3.2 Proposed Site Layout

3.2.1 The development proposals include:

- Unit A: an Aldi food store with a 1,863 sqm Gross External Area (GEA); and
- Unit B: Non-food retail unit with a 372 sqm GIA. :

The proposed parking provision for the development is 151 spaces, including nine disabled, seven motorcycle and 12 parent and child parking spaces.

3.2.2 A copy of the site plan is included in **Appendix A**.

#### 3.3 Proposed Off-Site Highway Works

3.3.1 The proposed package of off-site highway works are detailed in drawing 449-01/GA-01 attached in **Appendix B** and include:

- Formation of a new access off High Street and reinstatement of existing access with full height kerb and associated footway construction;
- New kerbs line tie-in and associated road markings on the High Street arm of the junction of High Street/ Westgate;
- Removal of parking bay on High Street to the east of the proposed access and replace with bus stop provision with associated bus boarding kerb and cantilever shelter with quarter ends;

- Relocate light column on High Street to facilitate the construction of a new access;
- Provision of a new 2.0 metre footway to be constructed along the full length of the site, along Westgate for a distance of 133 metres; and
- Relocation of the existing crossing location on Westgate, connecting the site to the public car park opposite, around the bend. This will require the implementation of a short section of new footway on the western side of Westgate.

### 3.4 Proposed Means of Access

#### Vehicular Access

- 3.4.1 It is proposed that the development will take access from two locations. The first will utilise the existing access off Westgate and take the form of a priority controlled T-junction. The second access is proposed off High Street, approximately 40 metres to the east of its junction with Westgate, via a newly formed priority controlled junction. The existing access to the site off High Street will be closed and footway reinstated. This is illustrated in drawing 449-01/GA-01 attached in **Appendix B**.
- 3.4.2 To facilitate the proposed access off High Street and at the request of the local Highway Authority, a full street lighting review will be undertaken at this location and any lighting columns affected by the proposals will be relocated. The bus stop on the southern side of High Street, in the vicinity of the proposed site access, will also be upgraded, with associated bus boarding kerbs and cantilever shelter with quarter ends. To facilitate these works the parking bays on High Street to the east of the site access will be removed. These works are illustrated in drawing 449-01/GA-01 attached in **Appendix B**.



### Pedestrian Access

- 3.4.3 In addition to pedestrian access via the proposed site accesses, a dedicated pedestrian access is also proposed off Westgate. In order to facilitate this access a new 2.0 metre footway is to be constructed along the full length of the site, along Westgate. The new footway will be provided for a length of 133 metres.
- 3.4.4 The existing crossing location on Westgate, connecting the site to the public car park opposite, will also be relocated from its currently location at the junction, around the bend. This will require the implementation of a short section of new footway on the western side of Westgate.
- 3.4.5 Designated pedestrian routes within the application site will provide safe routes for pedestrians to move through the car park. This is illustrated in drawing 449-01/GA-01 attached in **Appendix B**.

### **3.5 Car and Cycle Parking Provision**

- 3.5.1 The proposed Aldi foodstore will also provide 151 spaces, including nine disabled, seven motorcycle and 12 parent and child parking spaces.
- 3.5.2 Parking standards for West Lancashire Borough Council have been considered for this development site. These standards are set out in the West Lancashire Local Plan 2012 - 2027 adopted October 2013. The guidance allocates the development site as Area B.
- 3.5.3 The standards state:
- Food Retail - one car parking space per 14 sqm GFA should be provided for A1 Food Retail; and
  - Non-Food Retail – one car parking space per 20 sqm GFA should be provided for Non-food retail
- 3.5.4 The parking guidance indicates a maximum provision of 152 spaces. The level of parking is therefore sufficient in policy terms. This has been confirmed by highway officers at Lancashire County Council during pre-application discussions.

- 3.5.5 Disabled parking provision should be provided at 6% of total car parking provision i.e. nine spaces based on the provision of 151 car parking spaces. The level of disabled parking meets requirements.
- 3.5.6 There is no requirement for parent and child spaces. Based on operational requirements, 12 parent and child spaces will be provided.
- 3.5.7 Standards for motorcycle parking provision state one space per 350 sqm (minimum of two spaces) for the food element of the development and one space per 500 sqm (minimum two spaces) for the non-food element, resulting in seven spaces. The level of motorcycle parking provision meets standards.
- 3.5.8 Standards for bicycle parking provision state one space per 140 sqm (minimum of two spaces) for the food element of the development and one space per 200 sqm (minimum of two spaces) for the non-food element, resulting in 15 spaces. 20 cycle parking spaces in the form of 10 “Sheffield” type bicycle stands will be provided at the development.
- 3.5.9 The site layout has been designed in a cycle friendly way; ensuring permeability for pedestrians and cyclists. The design of the stores car park will encourage low traffic speeds, enhancing safety for pedestrians and cyclists.
- 3.5.10 A framework Travel Plan accompanies this planning application and includes cycle specific measures, including: on-site infrastructure, connecting with the existing off-site infrastructure, sustainable travel initiatives and monitoring and targets.
- 3.5.11 The level of parking proposed is anticipated to increase the attractiveness of cycling as a mode of transport to customers and employees of the site. Secure staff lockers will also be provided. The location of cycle parking is illustrated in the site layout plan contained in **Appendix A**.

### 3.6 Servicing

- 3.6.1 As is common practice in Aldi food stores, service vehicles would access the store via the customer access off Westgate. Approximately four 16.5 metre articulated service vehicles would access the site per day, in association with the proposed discount food store. In addition to a daily milk delivery and bin collection via rigid vehicle.
- 3.6.2 A track plot analysis of a 16.5 metre refrigerated articulated vehicle has been undertaken using AutoTrack, a specialist computer package that allows designers to assess the swept path of different vehicles as they negotiate path alignments. The swept path of these vehicles to and from the Aldi service ramp is satisfactory, as demonstrated in drawing 449-01/ATR-01 attached in **Appendix B**.
- 3.6.3 The non-food retail unit will be served from a lay-by adjacent to the store. Vehicles will access the development via the access off Westgate and egress via the access on High Street. The non-food retail unit will be serviced less frequently than the Aldi food store.
- 3.6.4 A track plot analysis of a 12.0 metre refrigerated articulated vehicle has been undertaken using AutoTrack, a specialist computer package that allows designers to assess the swept path of different vehicles as they negotiate path alignments. The swept path of these vehicles to and from the non-food retail unit lay-by is satisfactory, as demonstrated in drawing 449-01/ATR-02 attached in **Appendix B**.

## 4.0 BASELINE TRAFFIC CONDITIONS

### 4.1 Introduction

4.1.1 This section provides an appraisal of the transport network surrounding the proposed development site, including the baseline traffic flows on the study area network and an analysis of accident records for the local highway network.

4.1.2 As requested by the local highway authority, the study area includes the following junctions surrounding the site:

- High Street/ Site Access – priority controlled junction;
- Westgate/ Site Access – priority controlled junction;
- High Street/ Westgate – priority controlled roundabout junction; and
- B5312/ Westgate – priority controlled roundabout junction.

4.1.3 The following sections therefore present the methodology adopted to establish baseline conditions within the study area.

### 4.2 Baseline Traffic Flows

4.2.1 Peak hour traffic flows have been derived from independent manual turning counts undertaken by PCC Traffic Consultancy on Friday 2 and Saturday 3 November 2018 at the junctions detailed above.

4.2.2 Surveys were undertaken for a Weekday AM (0730 – 1000), Weekday PM (1500 – 1830) and Saturday (1000 – 1600) peak periods. Analysis of the data has determined that the peak hours are 0800 – 0900 during the Weekday AM peak, 1500 – 1600 during the Weekday PM peak and 1145 – 1245 during the Saturday peak. The resulting turning flows at the junction are illustrated in **Figure 4-1** for the 2018 survey traffic flows. Raw data is contained in **Appendix D**.

### 4.3 Committed Development Traffic Flows

4.3.1 Lancashire County Council has confirmed that there are no committed developments that will impact on the study area.

#### 4.4 Assessment Years

4.4.1 The 2018 survey traffic flows will be growthed to a design year five years after application registration, 2023.

4.4.2 Growth factors will be applied to the surveyed traffic flows to calculate 2023 base traffic flows. This will be undertaken using TEMPRO 7 NTM AF15 Dataset with adjusted local growth for the West Lancashire 011 super output area (E02005314), which encompasses the development site. The growth factors are presented in **Table 4-1**.

**Table 4-1 – Proposed Growth Factors (West Lancashire 011)**

Growth Period	AM Weekday Peak Periods	PM Weekday Peak Period	Saturday Peak Period
2018 – 2023	1.0585	1.0540	1.0524

4.4.3 The resulting 2023 (design year) baseline traffic flows is illustrated in **Figure 4-2**.

#### 4.5 Personal Injury Accident Data

4.5.1 Personal Injury Accident data has been obtained from Lancashire County Council MARIO database for the proposed study area for the most recent five year period for which data is complete (from the time of reviewing). The collisions have been reviewed in **Table 4-2**.

**Table 4-2 – Summary of Personal Injury Collisions**

Location	Slight	Serious	Fatal
High Street/ Site Access	0	0	0
Westgate/ Site Access	0	0	0
High Street/ Westgate	0	0	0
B5312/ Westgate	2	0	0
<b>Total</b>	<b>2</b>	<b>0</b>	<b>0</b>

4.5.2 In total for the study area under consideration two personal injury accidents were recorded, all of which were slight in severity. One accident involved a goods vehicle (3.5 tonnes maximum gross weight (mgw) and under) and a car. The other accident involved a car and other motor vehicle.

- 4.5.3 The total number of accidents at the B5312/ Westgate junction equates to 0.4 accidents per annum, which is not uncommon for a network which carries 1,007 – 1,094 vehicles during the peak hours.
- 4.5.4 The personal injury accident data would suggest that there is no particular trend or pattern of road accidents in the vicinity of the site resulting from any deficiencies in the local road network, or the operation of the site.

## 5.0 DEVELOPMENT TRIP ATTRACTION, ASSIGNMENT AND DISTRIBUTION

5.1.1 The trip attraction of the proposed site must be considered against the permitted use of the site as an office development. Obviously, office land uses have very different travel demands compared to the proposed use of the site i.e. food retail use. Whilst any traffic activity associated with an office use would be negligible during the Saturday peak hour, an office would generate activity during the AM and PM peak hour.

### 5.2 Extant Development Trip Attraction - Office Use

5.2.1 The existing office accommodation is constructed over ground and first floor levels and incorporates a mixture of private and open-plan office areas. The office unit comprised 1,915.2 sqm on three acres of land.

5.2.2 There is extensive car parking on site within a relatively regular shaped parcel of land which can be accessed from both High Street and the lower section of Westgate

5.2.3 The trip attraction for the B1 office land use has been calculated from the TRICS database. The TRICS outputs are included in **Appendix E**. The trip rates and associated trip attraction are detailed in **Table 5-1**.

**Table 5-1: B1 Land Use Trip Rates and Associated Trip Attraction**

	Peak Period	Arrivals	Departures	Two-Way
Trip Rates	AM Peak (0800 – 0900)	2.599	0.327	2.926
	PM Peak (1500 – 1600)	0.409	0.642	1.051
	Saturday Peak	0.000	0.000	0.000
Trip Attraction	AM Peak (0800 – 0900)	50	6	56
	PM Peak (1500 – 1600)	8	12	20
	Saturday Peak	0	0	0

### 5.3 Proposed Development Trip Generation

5.3.1 The development proposals include the provision of an Aldi food store with a GEA of 1,863 sqm and a non-food retail unit with a GEA of 372 sqm a. The trip attraction of each land use will be addressed in turn.

Aldi Food Store

5.3.2 In order to determine the potential trip attraction of the store, trip rates have been derived from an existing Aldi store, located on Todmorden Road in Burnley. Parking Eye data was obtained for the store, for the week commencing 4 June 2018. The data is contained in **Appendix F**.

5.3.3 The traffic attraction of the proposed food store has been estimated on the basis of survey data collected from the Todmorden Road store. This store has a GEA of 1,777 sqm.

5.3.4 The trip attraction during the peak periods at the Todmorden Road store is presented in **Table 5-2**.

**Table 5-2: Peak Hour Trip Attraction at the Aldi, Todmorden Road Store**

Day	Peak Period	Arrivals	Departures	Two-Way
Friday	AM Peak (0800 – 0900)	82	56	138
	PM Peak (1500 – 1600)	154	145	299
Saturday	Saturday Peak (1200 – 1300)	151	160	311

5.3.5 These have been calculated based on the GEA of the Todmorden Road store. These are presented in **Table 5-3**.

**Table 5-3: Peak Hour Trip Rates per 100 sqm GEA**

Day	Peak Period	Arrivals	Departures	Two-Way
Friday	AM Peak (0800 – 0900)	4.615	3.151	7.766
	PM Peak (1500 – 1600)	8.666	8.160	16.826
Saturday	Saturday Peak (1200 – 1300)	8.497	9.004	17.501

5.3.6 The quantum of traffic attracted by the proposed 1,863 sqm Aldi foodstore, based on these trip rates, is summarised in **Table 5-4**.



**Table 5-4: Proposed Aldi Food Store Vehicular Trip Attraction**

Peak Period	Arrivals	Departures	Two-Way
AM Peak (0800 – 0900)	86	59	145
PM Peak (1500 – 1600)	161	152	313
Saturday Peak (1200 – 1300)	158	168	326

5.3.7 The trip attraction of the proposed food store is anticipated to be 145 two-way trips in the weekday AM peak, 313 two-way trips in the weekday PM peak hour and 326 in the Saturday peak hour.

Non-Food Retail Land Use

5.3.8 The development trip rates have been based on the trip rate profiles for the TRICS category Retail Park – excluding Food of similar sizes and locations to that of the proposed development. The application seeks up to 372 sqm of non-food retail uses.

5.3.9 The resulting average trip rates are detailed in **Table 5-5**. The full calculation and output from TRICS is attached in **Appendix G**.

**Table 5-5: Retail Park Vehicular Trip Rates per 100 sqm GFA**

Peak Period	Trip Rates		
	Arrivals	Departures	Two-Way
AM Peak (0800 – 0900)	0.206	0.037	0.243
PM Peak (1500 – 1600)	1.422	1.459	2.881
Saturday Peak (1200 – 1300)	1.657	1.531	3.188

5.3.10 The quantum of traffic attracted by the non-food retail element of the proposed development, based on these trip rates, is summarised in **Table 5-6**.

**Table 5-6: Retail Park Vehicular Trip Attraction (TRICS)**

Peak Period	Trip Attraction		
	Arrivals	Departures	Two-Way
AM Peak (0800 – 0900)	1	0	1
PM Peak (1500 – 1600)	5	5	11
Saturday Peak (1200 – 1300)	6	6	12

5.3.11 The approach adopted to calculate the trip attraction of the non-food retail element of the development would result in a two-way trip attraction during the AM peak of one vehicle, PM peak of 11 vehicles and a two-way trip attraction during the Saturday peak of 12 vehicles.

Net Increase in Trip Attraction

5.3.12 The net increase in trips is detailed in **Table 5-7**, resulting in an increase of 90 trips during the AM peak, an increase of 304 trips during the PM peak and an increase in 338 trips during the Saturday peak.

**Table 5-7: Net Increase in Vehicular Trip Attraction (Existing v Proposed Use)**

Peak Period		Arrivals	Departures	Two-Way
AM Peak (0800 – 0900)	Existing	50	6	56
	Proposed	87	59	146
	<b>Net Increase</b>	<b>37</b>	<b>53</b>	<b>90</b>
PM Peak (1500 – 1600)	Existing	8	12	20
	Proposed	167	157	324
	<b>Net Increase</b>	<b>159</b>	<b>145</b>	<b>304</b>
Saturday Peak (1200 – 1300)	Existing	0	0	0
	Proposed	164	173	338
	<b>Net Increase</b>	<b>164</b>	<b>173</b>	<b>338</b>

5.3.13 It should be noted that no account of linked trips between land uses at the proposed site have been accounted for in the above analysis. This could account for between 10 – 15% of trips. The above analysis is therefore considered to be robust.

### Trips Types

5.3.14 It is widely accepted that, the total number of trips attracted to a new retail development are not comprised wholly of new trips to the local highway network. Many of the trips may in fact already exist on the network, albeit at another location, or where a visit to the store will be incorporated into an existing pattern of travel behaviour. The following vehicular trip types have been identified in association with new retail developments (Guidance on Transport Assessment, DfT, 2007):

- New Trips: Trips that do not appear anywhere on the road network prior to the opening of the development.
- Pass-by Trips: Trips which are already present on the road network directly adjacent to the point of access to the site, which will turn into the site.
- Linked Trips: Trips that will have multiple destinations either within the proposed development site, between both the development site and existing adjacent sites, or between the development site and an established town centre.
- Diverted Trips: Trips which are already present on the local road network but not the road from which the site access is taken and will divert from their existing use to access the site.
- Transferred Trips: Trips which are already present on the local road network, accessing similar sites in close proximity to the proposed development. Slightly different from diverted trips, these wholly transfer from using an existing development to a new one, i.e. shoppers switching to a new foodstore that is more conveniently located for them.

5.3.15 The importance of non-primary trips, i.e. Pass-by, Linked, Diverted and Transferred trips are emphasised by retailers who suggest that they rely heavily on these trip types in order to survive.

5.3.16 The premise of non-primary trips is one that is particularly true during peak hours as customers are unlikely to embark on a single purpose home based trip to undertake food shopping at these times. During the hours of peak traffic demand on the local highway network, it is likely that the majority of customers to the proposed food store, who travel by car, would have already been present on the local highway network i.e. as part of a trip from home to school or work to home.

5.3.17 Studies have suggested that the proportion of new shopping trips to a new food store can be zero. The Mclver and Dickenson research suggests that the proportions set out in **Table 5-8** are typical.

**Table 5-8: Mclver and Dickenson Trip Type Proportions**

Trip Type	Weekday	Saturday
Transferred	60%	70%
Diverted	25%	20%
Pass by	15%	10%

5.3.18 However in order to provide a robust assessment in this Transport Assessment, it has been assumed that 20% of the vehicular total trips attracted to the proposed discount food store will be new trips on the network, i.e. trips that do not appear anywhere on the road network prior to the opening of the development (the TRICS research paper 95/2). The remaining 80% of total trips will be non-primary trips comprising pass-by, diverted and transferred trips from other retail units in the local area. These will be proportioned in line with the research provided in **Table 5-8**.

5.3.19 For the purpose of the assessment it will be assumed that:

- 20% of journeys will be new to the network;
- 15% of journeys will be pass-by trips during the Weekday peaks and 10% of journeys will be pass-by trips during the Saturday peak i.e. trips that are already on High Street and Westgate;
- 25% of journeys will be diverted trips from the B5312 during the Weekday peaks and 20% of journeys will be diverted trips during the Saturday peak; and

- 40% of journeys will be existing trips to other supermarkets which will transfer to the new facility during the Weekday peaks and 50% of journeys will be transferred trips during the Saturday peak.

5.3.20 The resulting trip attraction for each trip type are summarised in **Table 5-9**.

**Table 5-9: Vehicle Trip Attraction by Trip Type**

Peak	Trip Type	Proportion	Trip Attraction		
			Arrivals	Departures	Two-Way
AM Peak	New	20%	17	12	29
	Pass-by	15%	13	9	22
	Diverted	25%	22	15	36
	Transferred	40%	35	24	58
	<b>Total</b>	<b>100%</b>	<b>87</b>	<b>59</b>	<b>146</b>
PM Peak	New	20%	33	31	65
	Pass-by	15%	25	24	49
	Diverted	25%	42	39	81
	Transferred	40%	67	63	130
	<b>Total</b>	<b>100%</b>	<b>167</b>	<b>157</b>	<b>324</b>
Saturday Peak	New	20%	33	35	68
	Pass-by	10%	16	17	34
	Diverted	20%	33	35	68
	Transferred	50%	82	87	169
	<b>Total</b>	<b>100%</b>	<b>164</b>	<b>173</b>	<b>338</b>

5.3.21 It should be noted that for robustness it has been assumed that all Transferred trips are New to the study area network. Therefore during the Weekday AM and PM peaks 60% of trips are assumed to be new to the network; and during the Saturday peak 70% of trips are assumed to be new to the network.

## 5.4 Trip Distribution and Assignment

### Extant Office Use

5.4.1 The office trips will be distributed onto the local highway network based upon existing turning proportions based on the surveyed traffic flows.

5.4.2 The distribution of office trips on the local highway network is shown in **Figure 5-1**. The assignment of the extant office development traffic in these proportions is illustrated in **Figure 5-2**. **Figure 5-3** illustrated the 2023 Base plus extant development traffic flows.

- 5.4.3 It should be noted that the operational capacity assessments undertaken in **Section 6.0** compares the 2023 base plus development scenario to the 2023 base scenario (excluding the extant development) i.e. **Figure 4-2** not **Figure 5-3**. This contributes to the robustness of the assessment.

#### Proposed Retail Use

- 5.4.4 As detailed in **Table 5-11**, the trips attracted to the development are split into New, Transferred, Pass-by and Diverted Trips. The distribution associated with each trip type is detailed below.

#### *New and Transferred Retail Trips Distribution*

- 5.4.5 For robustness, all transferred trips are assumed to be entirely new to the study area and therefore no discounting has been applied to account for trips previously made to other supermarkets.
- 5.4.6 The distribution of New and Transferred trips on the local highway network will be based on existing turning proportions based on the surveyed traffic flows.
- 5.4.7 The distribution of New/ Transferred trips is shown in **Figure 5-4**. The assignment of the proposed development traffic in these proportions is illustrated in **Figure 5-5**.

#### *Pass by Retail Trip Distribution*

- 5.4.8 Given that the anticipated catchment of the proposed development will be local, it is likely that a proportion of trips to the development, in the peak hours, will be Pass-by Trips made by people already travelling along Westgate and High Street. These trips effectively comprise trips which will turn into the proposed development on their way to/ from other destinations. This would therefore represent a discount to traffic passing the site access for the duration of the Pass-by Trip to the development, but the trip is subsequently added back to the network once the visit has ended. Thus no reduction will be made to the traffic on the local highway network outside of the site access junction. Albeit that the possible trip timeline is extended beyond the highway network peak hours.

5.4.9 The pass-by trip proportion will be split between the two access based on existing two-way traffic flows on both High Street and Westgate.

5.4.10 The distribution of Pass-by trips is shown in **Figure 5-6**. The assignment of the proposed development traffic in these proportions is illustrated in **Figure 5-7**.

#### *Diverted Retail Trips Distribution*

5.4.11 It is likely that an element of car borne trips to the proposed foodstore, in the network peak hours, will be diverted trips from other routes. Given the location of the development, it is likely that an element of car borne trips to the food store will be diverted from these routes.

5.4.12 The distribution of diverted trips from the B5312 will be based on existing turning proportions.

5.4.13 The distribution of Diverted trips is shown in **Figure 5-8**. The assignment of the proposed development traffic in these proportions is illustrated in **Figure 5-9**.

#### Summary

5.4.14 The total proposed development traffic is illustrated in **Figure 5-10** and the 2023 Base plus Development traffic flows are illustrated in **Figure 5-11**.

## 6.0 IMPACT OF DEVELOPMENT PROPOSALS ON THE OPERATIONAL PERFORMANCE OF THE LOCAL HIGHWAY NETWORK

### 6.1 Introduction

6.1.1 The following capacity assessments will demonstrate that the impact of this level of traffic would not be material on the operational performance of the local highway network.

### 6.2 Junction Capacity Assessments

6.2.1 Capacity assessments have been undertaken for a Weekday AM, Weekday PM and Saturday peak period. Assessments have been undertaken for the following junction, using the software noted:

- High Street/ Site Access – PICADY;
- Westgate/ Site Access – PICADY;
- High Street/ Westgate – ARCADY; and
- B5312/ Westgate – ARCADY.

6.2.2 PICADY and ARCADY are industry recognised tools for assessing roundabout junctions and it refers to the Ratio of Flow to Capacity (RFC) and queuing predicted on each arm. RFC values between 0.00 and 0.85 are generally accepted as representing stable and acceptable operating conditions. Values between 0.85 and unity represent variable operation (i.e. possible queues building up at the junction during the period under consideration and increases in vehicular delay moving through the junction).

#### **High Street/ Site Access**

6.2.3 The results of the PICADY assessment are set out in **Appendix H** and summarised in **Table 6-1**.



**Table 6-1: High Street/ Site Access – PICADY Results**

Scenario	Arm	AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		RFC	Q	RFC	Q	RFC	Q
2023 Base + Development	Site Access - left	0.02	0	0.05	0	0.04	0
	Site Access - right	0.02	0	0.06	0	0.07	0
	High Street (w)	0.02	0	0.06	0	0.06	0

6.2.4 The operational capacity assessments demonstrate that the site access is sufficient to accommodate development traffic, for a future assessment year. The maximum Ratio of Flow to Capacity (RFC) occurs during the Saturday peak period of 0.07 with no associated queue.

#### **Westgate/ Site Access**

6.2.5 The results of the PICADY assessment are set out in **Appendix I** and summarised in **Table 6-2**.

**Table 6-2: Westgate/ Site Access – PICADY Results**

Scenario	Arm	AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		RFC	Q	RFC	Q	RFC	Q
2023 Base + Development	Site Access - left	0.04	0	0.12	0	0.11	0
	Site Access - right	0.03	0	0.08	0	0.11	0
	Westgate (s)	0.09	0	0.17	0	0.17	0

6.2.6 The operational capacity assessments demonstrate that the site access is sufficient to accommodate development traffic, for a future assessment year. The maximum Ratio of Flow to Capacity (RFC) occurs during the PM and Saturday peak period of 0.17 with no associated queue.

#### **High Street/ Westgate**

6.2.7 The results of the ARCADY assessment are set out in **Appendix J** and summarised in **Table 6-3**.

**Table 6-3: High Street/ Westgate – ARCADY Results**

Scenario	Arm	AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		RFC	Q	RFC	Q	RFC	Q
2018 Survey	High Street (e)	0.18	0	0.18	0	0.12	0
	Westgate	0.27	0	0.24	0	0.20	0
	High Street (w)	0.17	0	0.24	0	0.20	0
2023 Base*	High Street (e)	0.20	0	0.19	0	0.13	0
	Westgate	0.28	0	0.25	0	0.21	0
	High Street (w)	0.18	0	0.25	0	0.21	0
2023 Base + Development	High Street (e)	0.22	0	0.23	0	0.17	0
	Westgate	0.31	0	0.32	1	0.30	0
	High Street (w)	0.20	0	0.29	0	0.26	0

\* Excludes extant use of the site

6.2.8 The results of the operational capacity assessments demonstrate that the proposed development will have a minimal impact on the operational performance of the junction, compared with the 2023 base scenario. The junction will continue to operate within its practical capacity, with minimal queues on all arms.

### **B5312/ Westgate**

6.2.9 The results of the ARCADY assessment are set out in **Appendix K** and summarised in **Table 6-4**.

**Table 6-4: B5312/ Westgate – ARCADY Results**

Scenario	Arm	AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		RFC	Q	RFC	Q	RFC	Q
2018 Survey	B5312 (w)	0.53	1	0.60	2	0.61	2
	Westgate	0.29	1	0.38	1	0.36	1
	B5312 (e)	0.66	2	0.66	2	0.55	1
2023 Base*	B5312 (w)	0.56	1	0.63	2	0.65	2
	Westgate	0.31	1	0.41	1	0.39	1
	B5312 (e)	0.71	2	0.70	2	0.59	1
2023 Base + Development	B5312 (w)	0.58	1	0.68	2	0.71	2
	Westgate	0.36	1	0.53	1	0.52	1
	B5312 (e)	0.73	3	0.75	3	0.64	2

\* Excludes extant use of the site

6.2.10 The results of the operational capacity assessments demonstrate that the proposed development will have a minimal impact on the operational performance of the junction, compared with the 2023 base scenario. The junction will continue to operate within its practical capacity, with a maximum increase in queue on any arm of one pcu.

### **6.3 Summary**

6.3.1 The results of the operational capacity assessment coincide with the view expressed by the local Highway Authority, during pre-application discussions, namely that they were not aware of any operational capacity issues on the local highway network.

6.3.2 It is therefore considered that in operational capacity terms, the proposed development will not have a material impact on the operational performance of the local highway network. Accordingly, reference is made to paragraph 109 of NPPF which states that *'Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe'*.

## 7.0 SUMMARY AND CONCLUSIONS

### 7.1 Summary

7.1.1 This Transport Assessment has been prepared by Cameron Rose Associates on behalf of Aldi Stores Limited in order to examine the highway and transportation issues associated with the proposed redevelopment of a site off High Street in Skelmersdale.

7.1.2 The site currently comprises office accommodation, constructed over ground and first floor levels and incorporating a mixture of private and open-plan office areas. The office unit comprised c. 1,915.2 sqm on three acres of land.

7.1.3 There is extensive car parking on site within a relatively regular shaped parcel of land which can be accessed from both High Street and the lower section of Westgate

7.1.4 The development proposals include the provision of an Aldi food store with a GEA of 1,863 sqm and a non-food retail unit with a GEA of 372 sqm a. The proposed parking provision for the development is 151 spaces, including nine disabled, seven motorcycle and 12 parent and child parking spaces.

7.1.5 It is proposed that the development will take access from two locations. The first will utilise the existing access off Westgate and take the form of a priority controlled T-junction. The second access is proposed off High Street, approximately 40 metres to the east of its junction with Westgate, via a newly formed priority controlled junction. The existing access to the site off High Street will be closed and footway reinstated.

7.1.6 The proposed package of off-site highway works include:

- Formation of a new access off High Street and reinstatement of existing access with full height kerb and associated footway construction;
- New kerbs line tie-in and associated road markings on the High Street arm of the junction of High Street/ Westgate;

- Removal of parking bay on High Street to the east of the proposed access and replace with bus stop provision with associated bus boarding kerb and cantilever shelter with quarter ends;
- Relocate light column on High Street to facilitate the construction of a new access;
- Provision of a new 2.0 metre footway to be constructed along the full length of the site, along Westgate for a distance of 133 metres; and
- Relocation of the existing crossing location on Westgate, connecting the site to the public car park opposite, around the bend. This will require the implementation of a short section of new footway on the western side of Westgate.

7.1.7 Following a pre-application discussions with the local highway authority, it has been confirmed that the Transport Assessment should consider the impact of the development proposals at the site access junctions and the High Street/ Westgate and B5132/ Westgate junctions.

7.1.8 In order to determine the potential trip attraction of the store, trip rates have been derived from an existing Aldi store, located on Todmorden Road in Burnley.

7.1.9 For the non-food element of the development trip rates have been based on the trip rate profiles for the TRICS category Retail Park – excluding Food of similar sizes and locations to that of the proposed development

7.1.10 The development proposals will result in a net increase in trips of 90 trips during the AM peak, an increase of 304 trips during the PM peak and an increase in 338 trips during the Saturday peak, compared with the extant office use of the site.

7.1.11 In terms of new trips on the network, the analysis has demonstrated that the proposed Aldi foodstore will generate an additional 29 two-way trips during the Weekday AM peak, 65 two-way trips during the PM peak and 68 two-way trips during the Saturday peak.

7.1.12 In order to present a robust analysis, Transferred trips have been assumed to be entirely new to the study area network i.e. trips not currently travelling through the study area network. The operational capacity assessments have therefore assumed that an additional 58 two-way trips during the Weekday AM peak, 130 two-way trips during the PM peak and 169 two-way trips during the Saturday peak, will travel through the study area to/ from the proposed store.

7.1.13 Operational capacity assessments undertaken at the junctions within the study area have demonstrated that the proposed development will not have a material impact on the operational performance of the local highway network.

## **7.2 Conclusions**

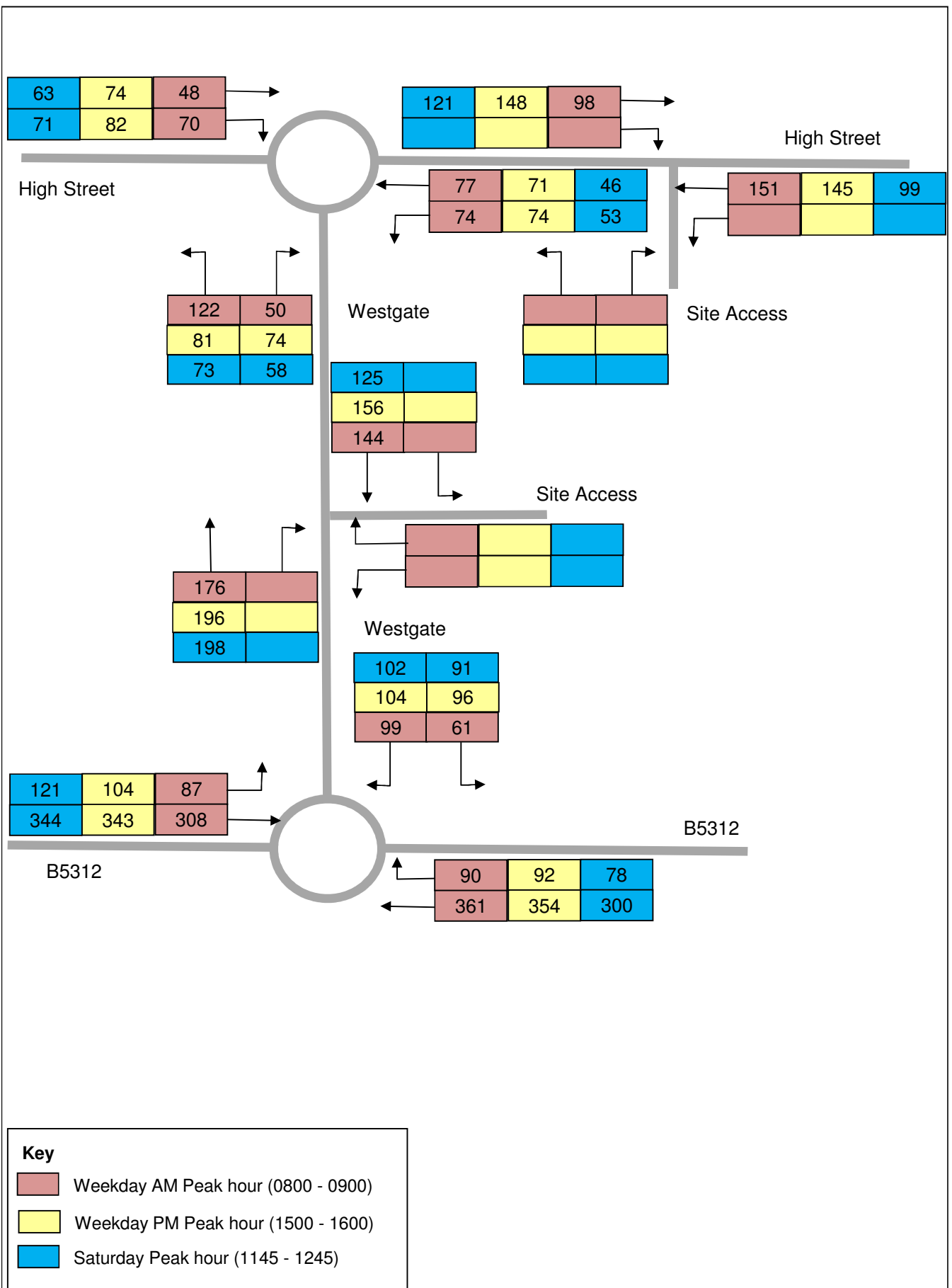
7.2.1 The impacts of residual trips from the development have been assessed and it is evident that these would not have a significant impact on the operational performance and safety of the local highway network.

7.2.2 The impact of the redevelopment would not have a severe impact on the operational performance of the local highway network, as per paragraph 109 of NPPF which states that *'Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe'*.

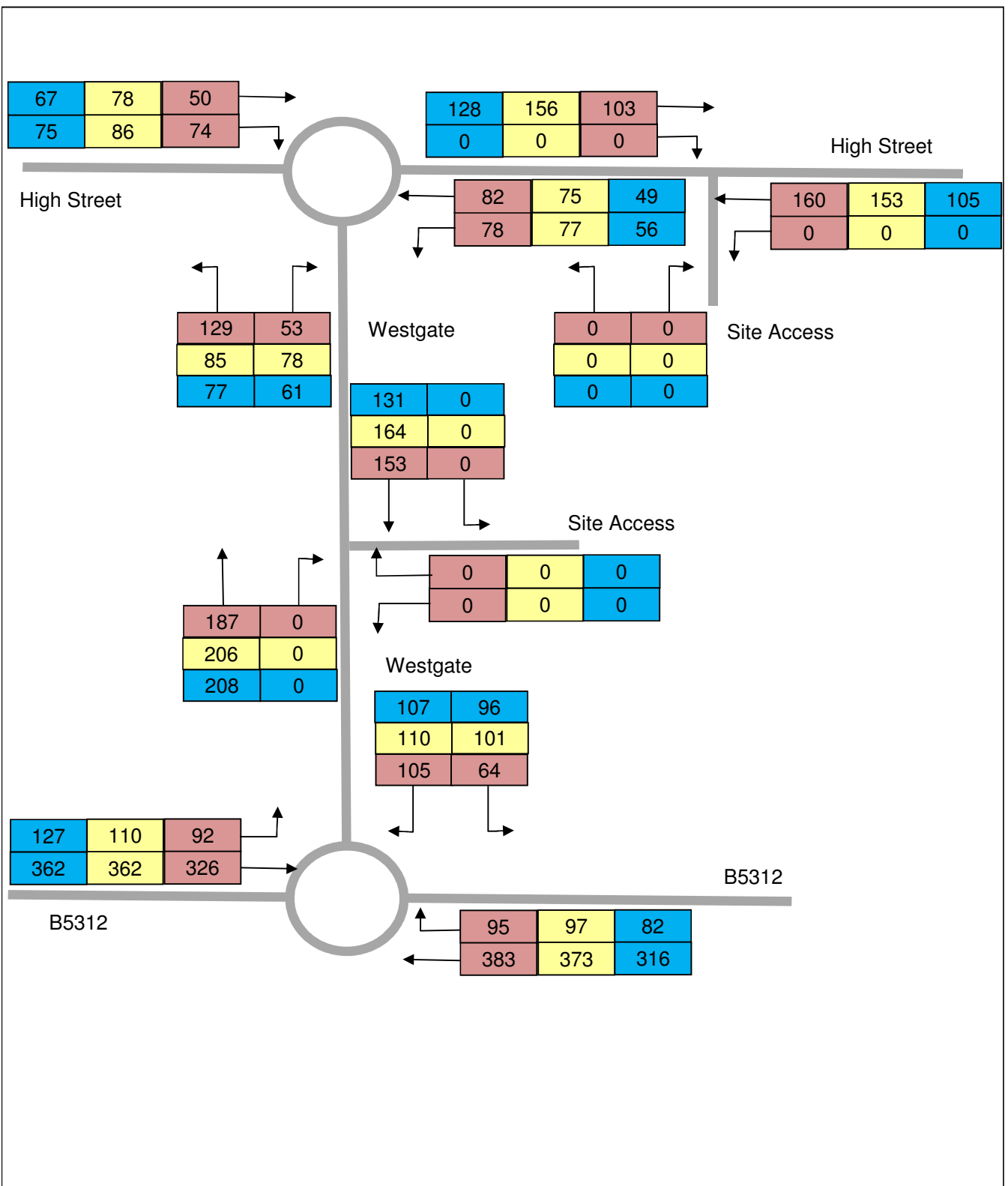
7.2.3 It is concluded that there are no overriding reasons preventing the Local Planning Authority from recognising that the proposal is acceptable with regard to the local highway network.



## FIGURES

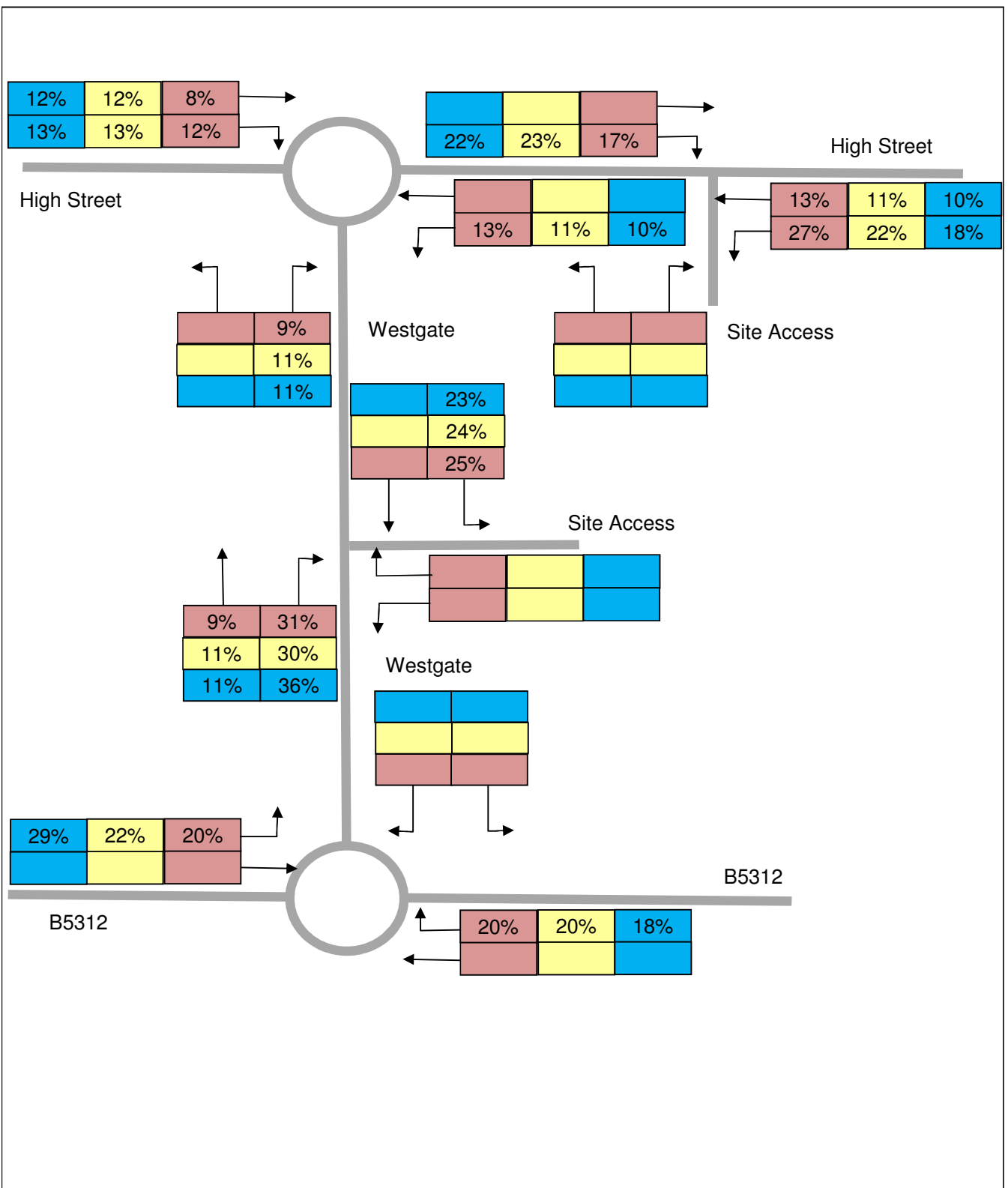




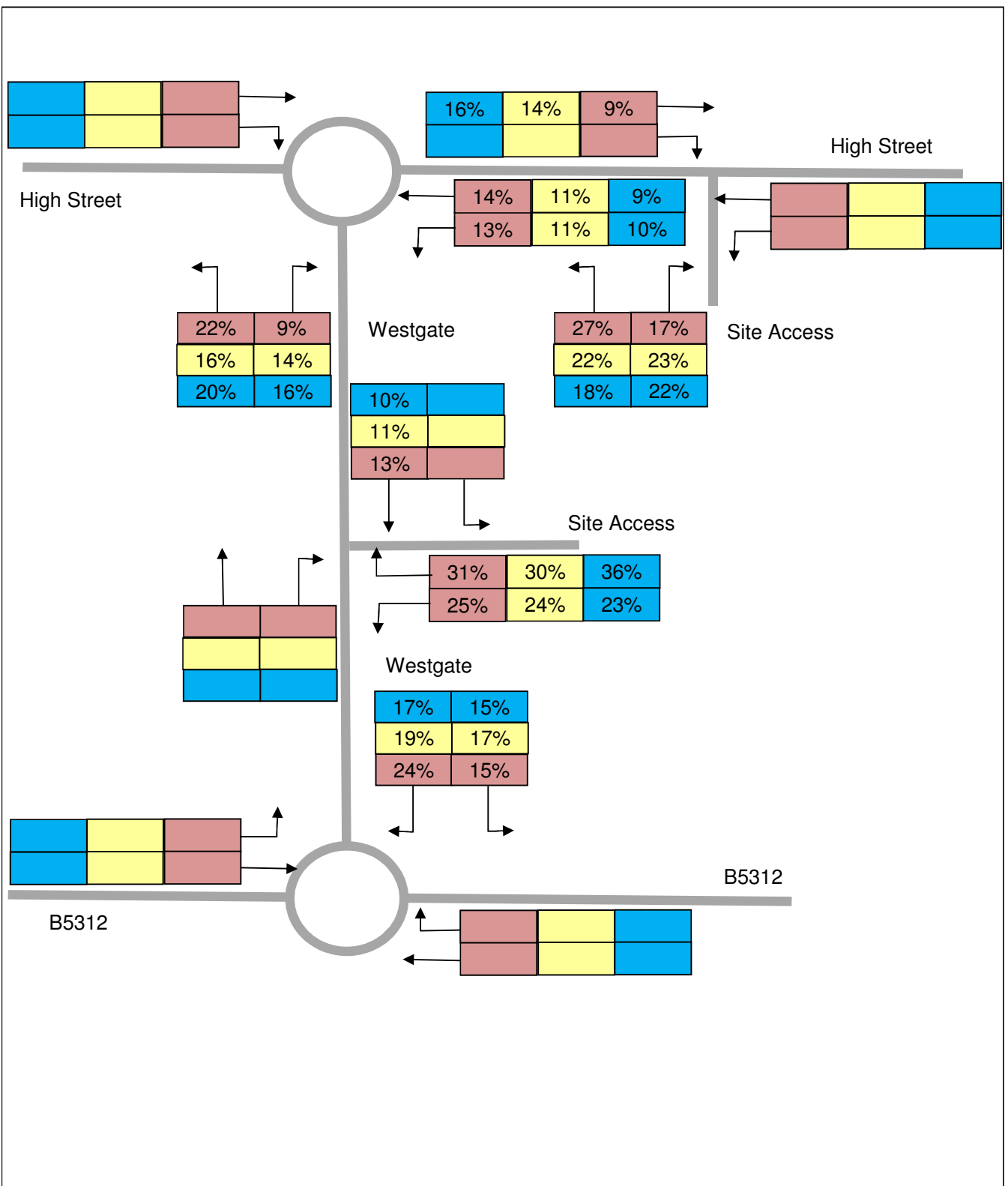


**Key**

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<span style="display:inline-block; width:15px; height:10px; background-color: #17a2b8; border: 1px solid black;"></span>	Saturday Peak hour (1145 - 1245)

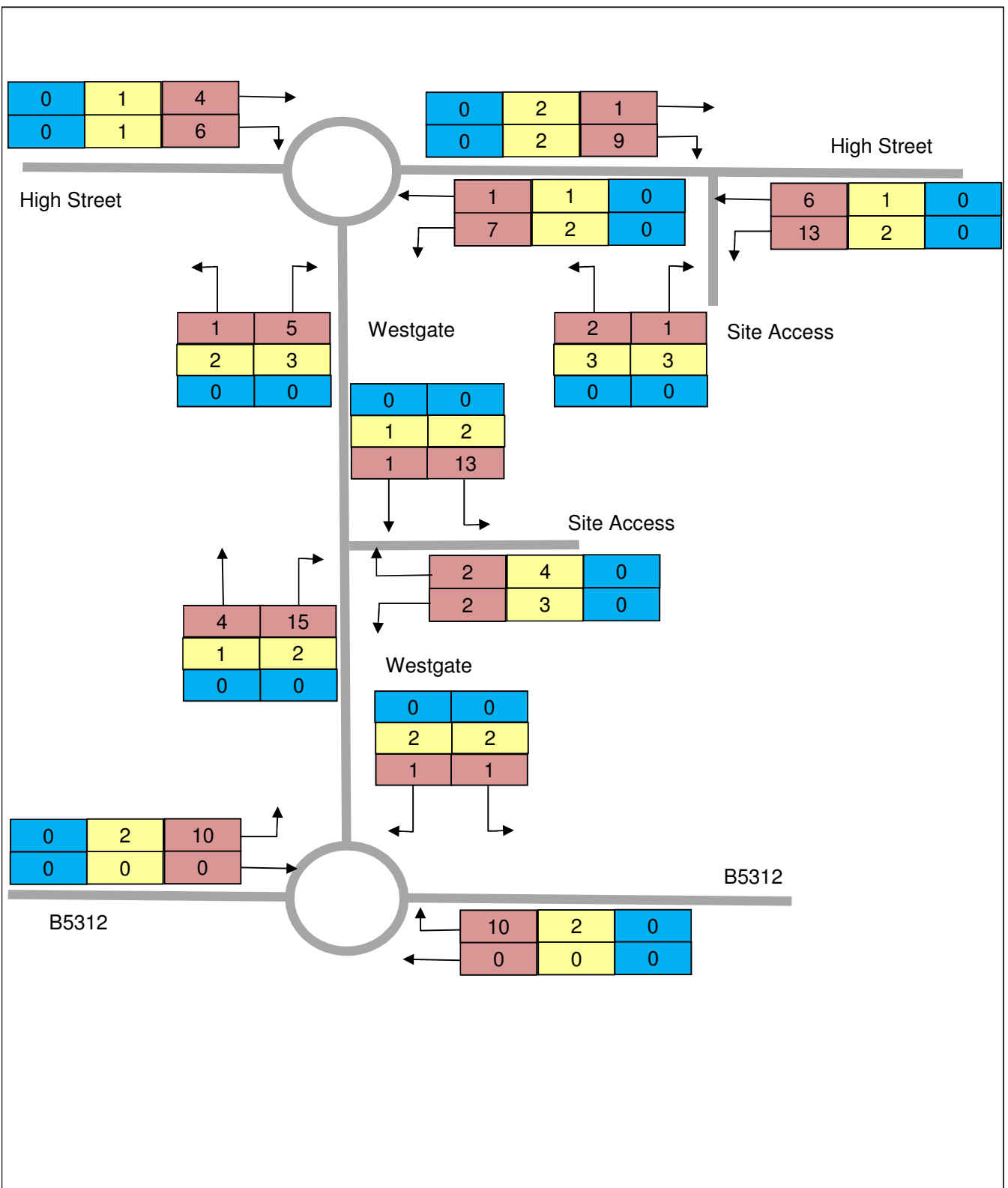


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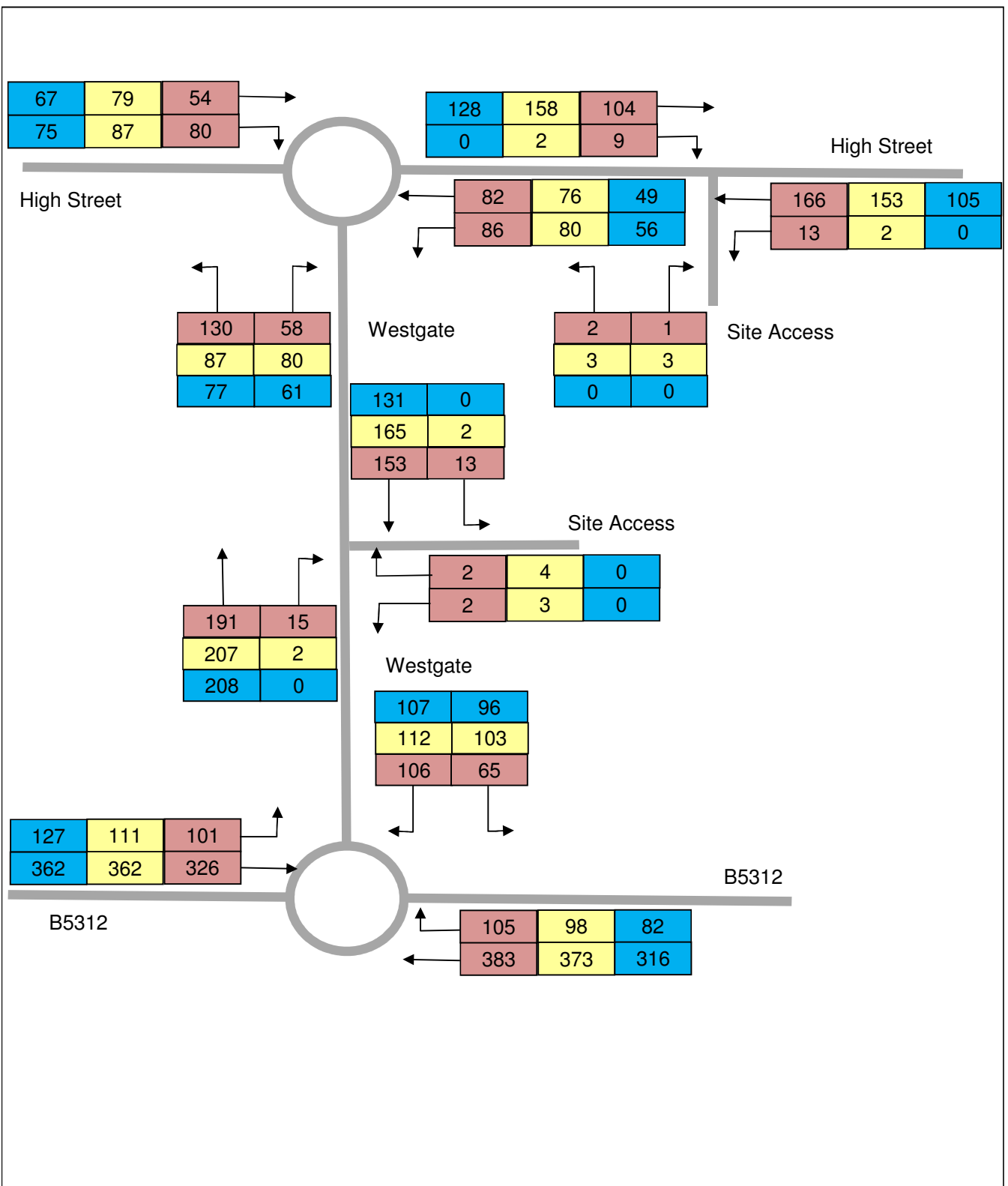
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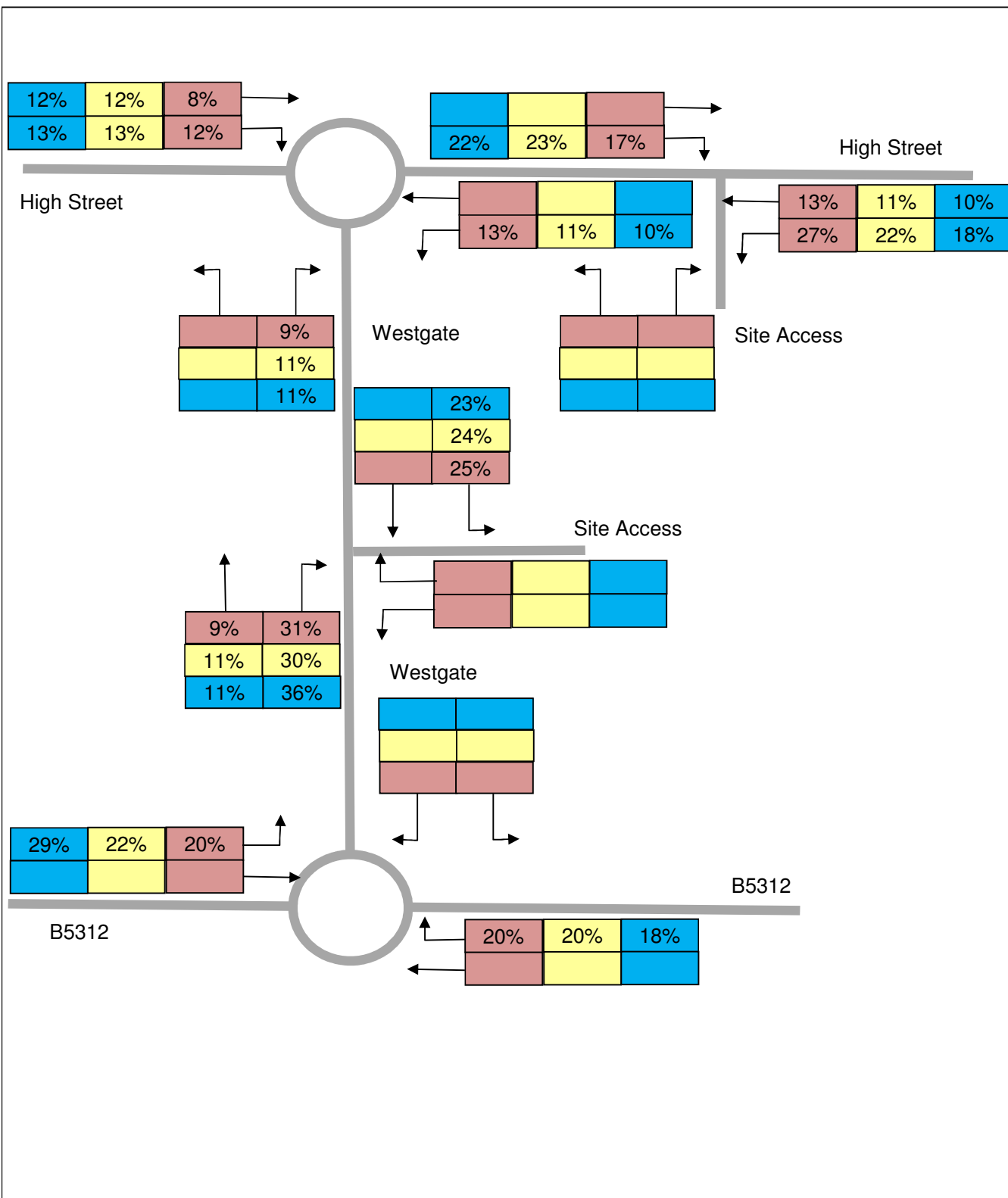
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	Weekday AM Peak hour (0800 - 0900)
	Weekday PM Peak hour (1500 - 1600)
	Saturday Peak hour (1145 - 1245)



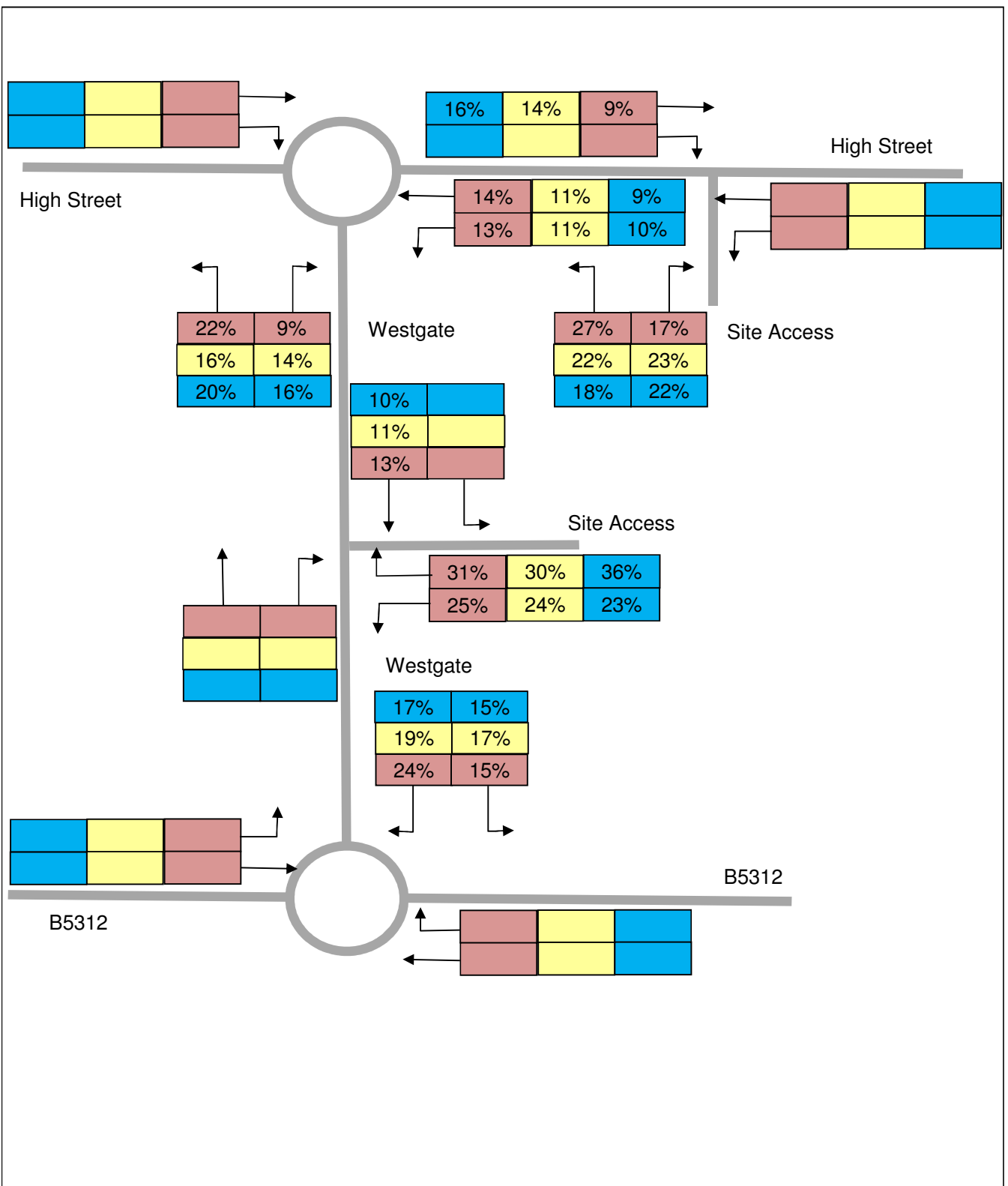
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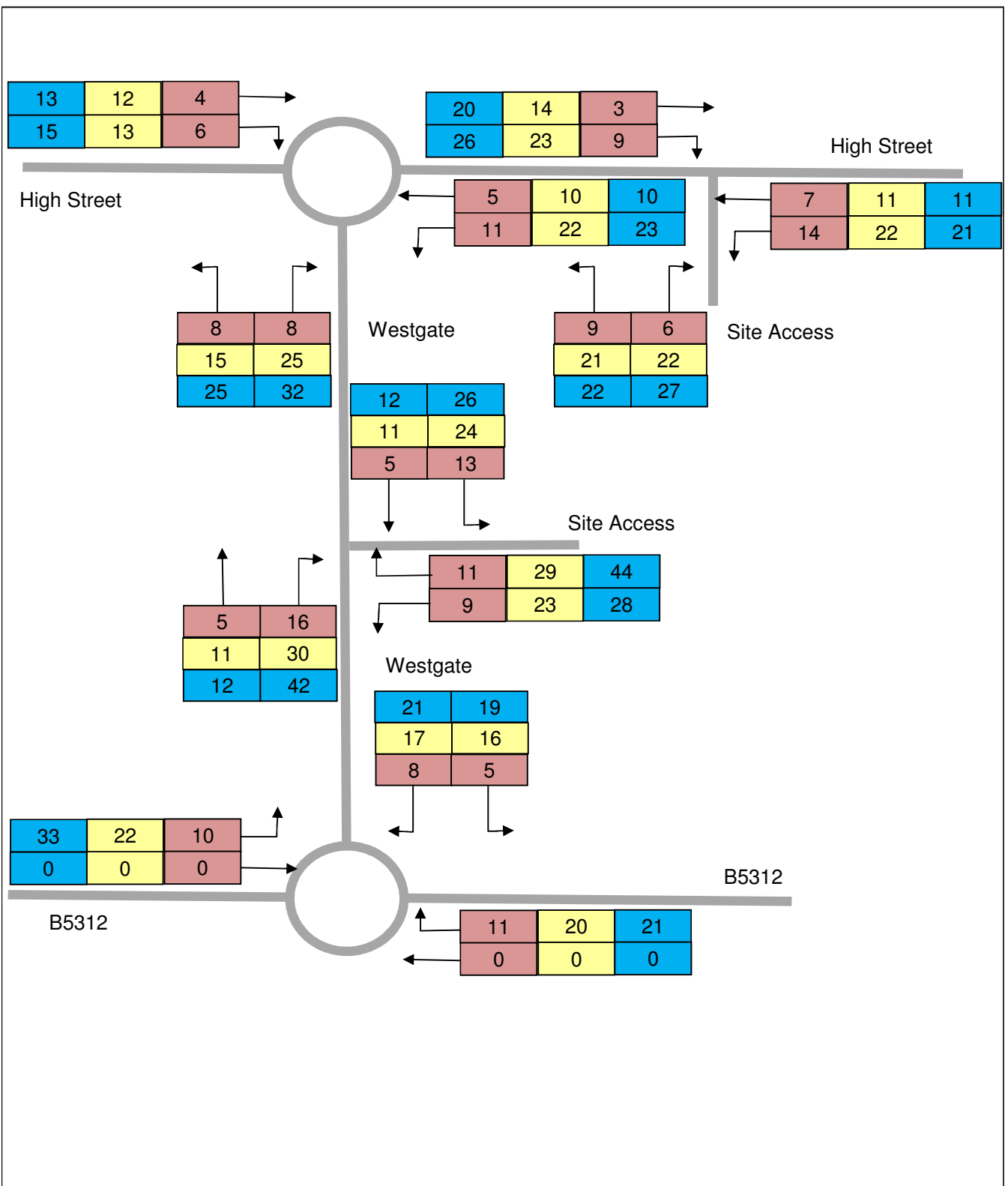


**Key**

	Weekday AM Peak hour (0800 - 0900)
	Weekday PM Peak hour (1500 - 1600)
	Saturday Peak hour (1145 - 1245)



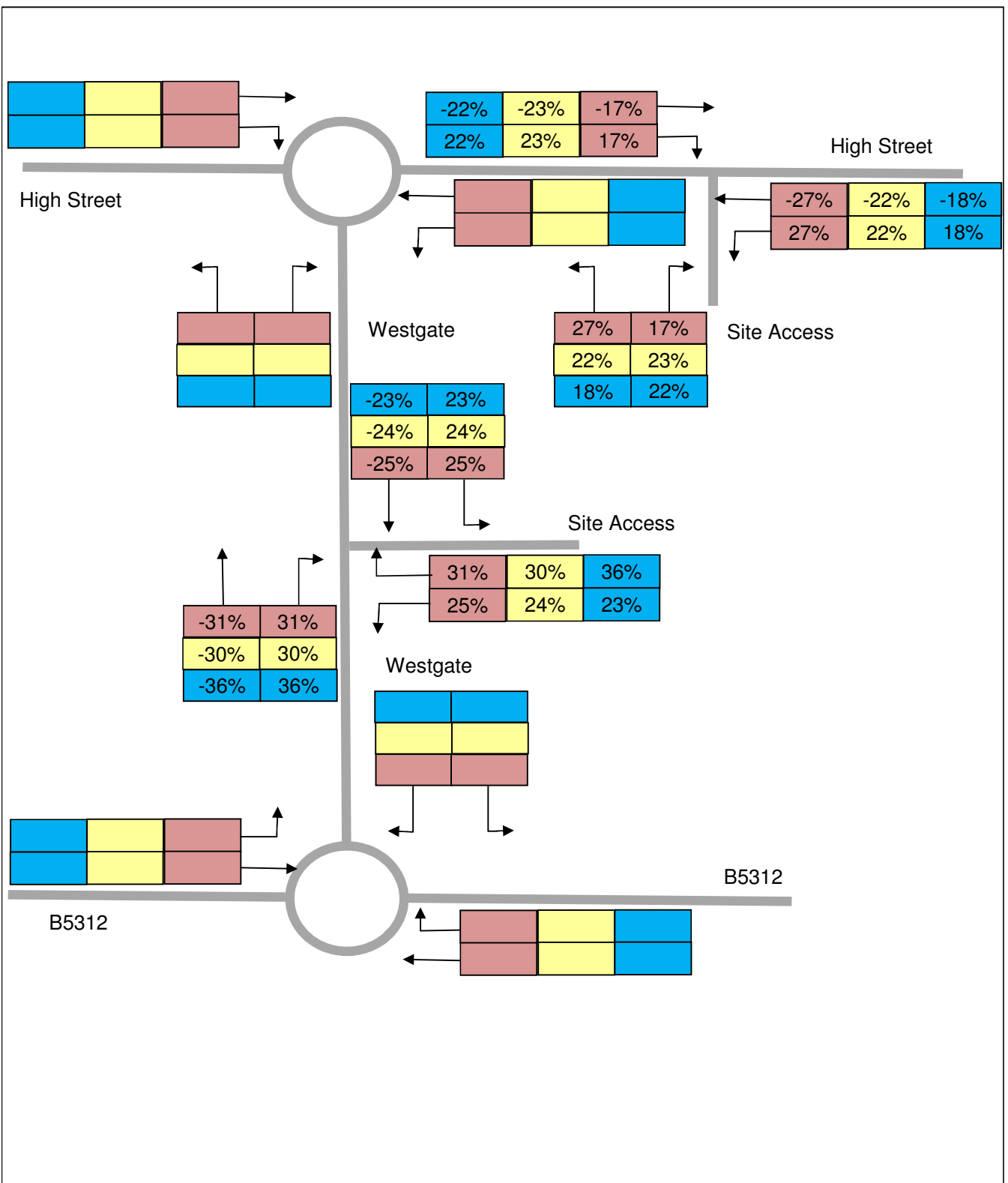
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<span style="display:inline-block; width:15px; height:10px; background-color: #c0504d; border: 1px solid black;"></span>	Weekday AM Peak hour (0800 - 0900)
<span style="display:inline-block; width:15px; height:10px; background-color: #ffff00; border: 1px solid black;"></span>	Weekday PM Peak hour (1500 - 1600)
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**Key**

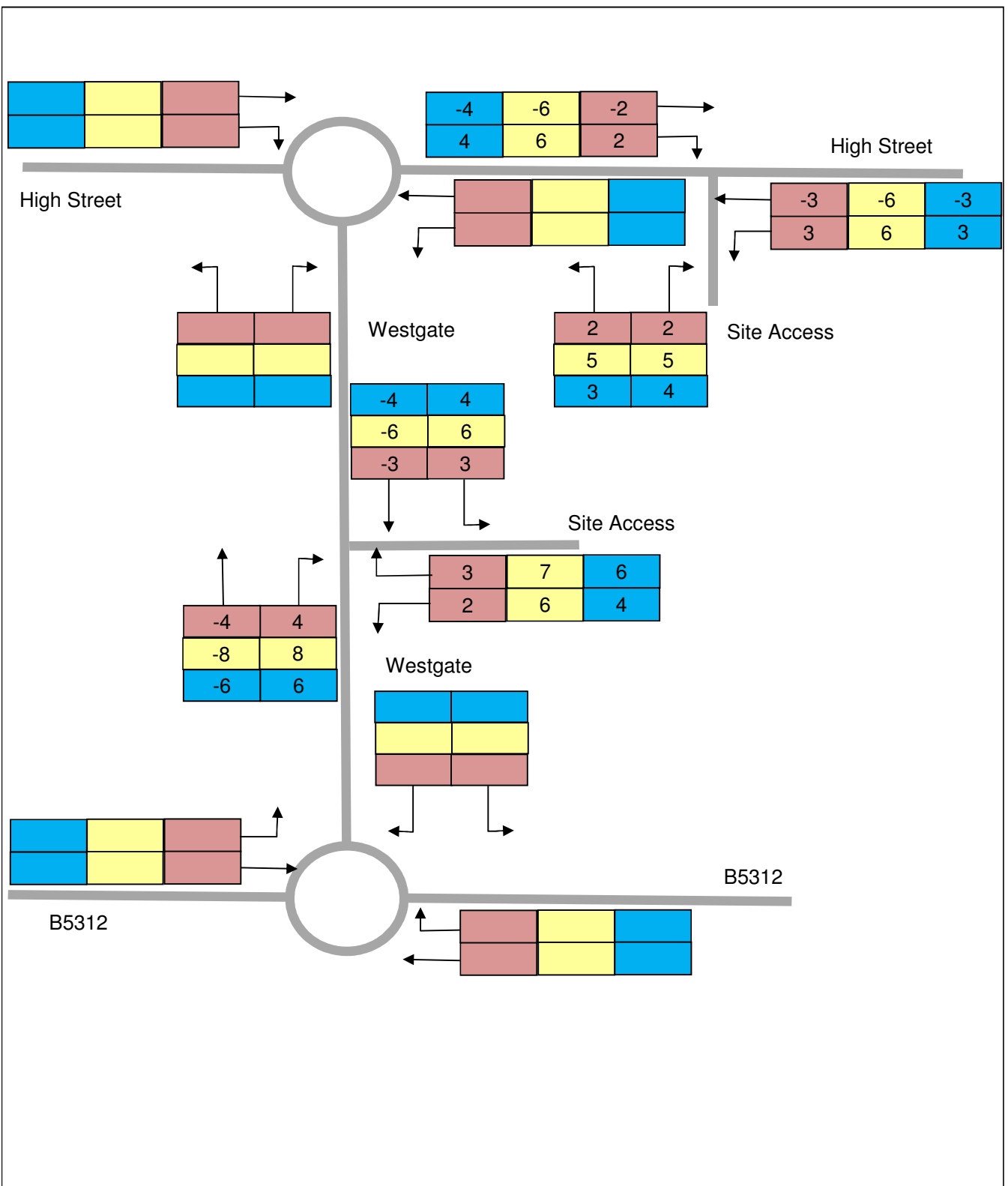
	Weekday AM Peak hour (0800 - 0900)
	Weekday PM Peak hour (1500 - 1600)
	Saturday Peak hour (1145 - 1245)



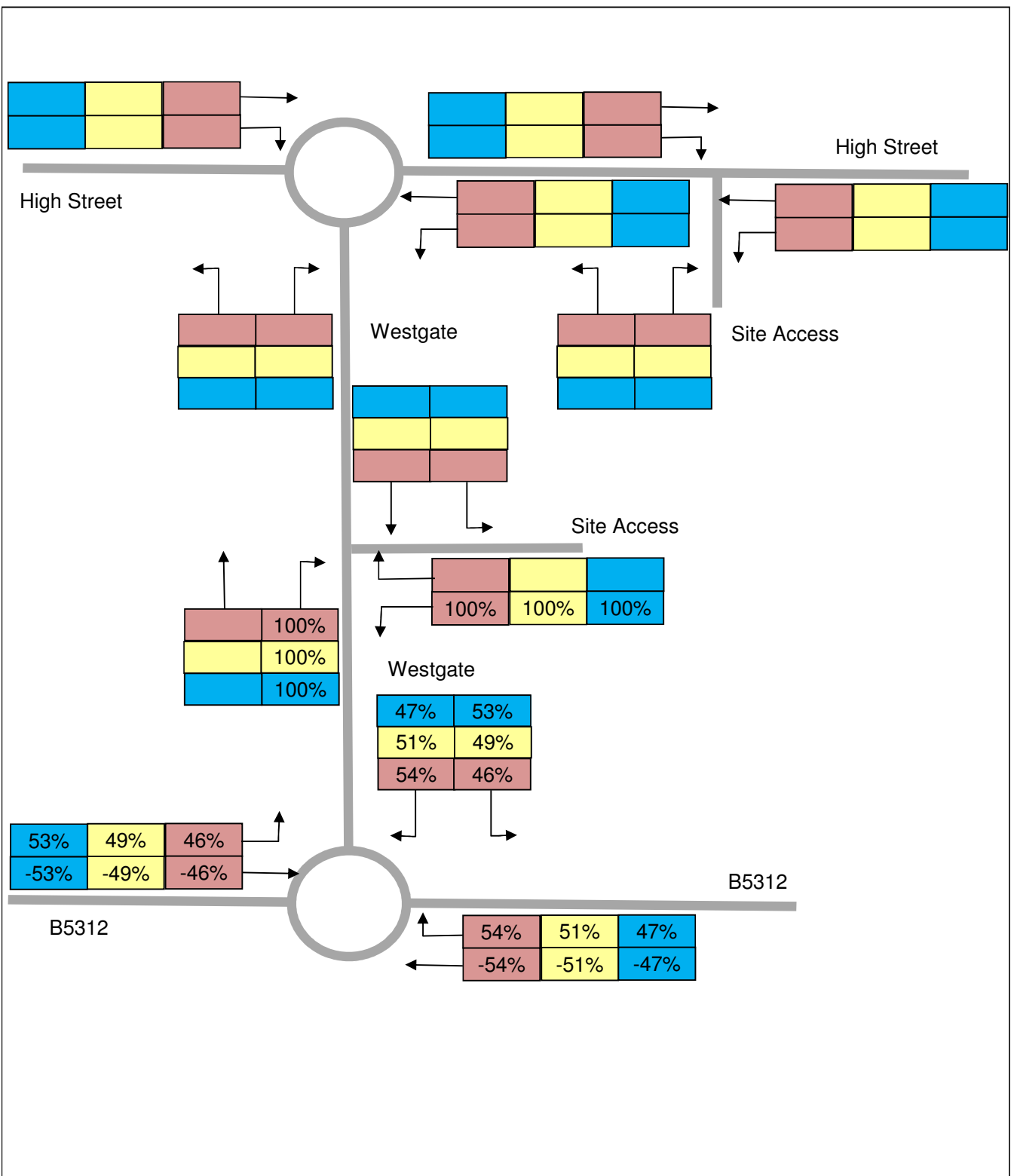


**Key**

<span style="display: inline-block; width: 15px; height: 10px; background-color: #C0504D; border: 1px solid black;"></span>	Weekday AM Peak hour (0800 - 0900)
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<span style="display: inline-block; width: 15px; height: 10px; background-color: #00AEEF; border: 1px solid black;"></span>	Saturday Peak hour (1145 - 1245)

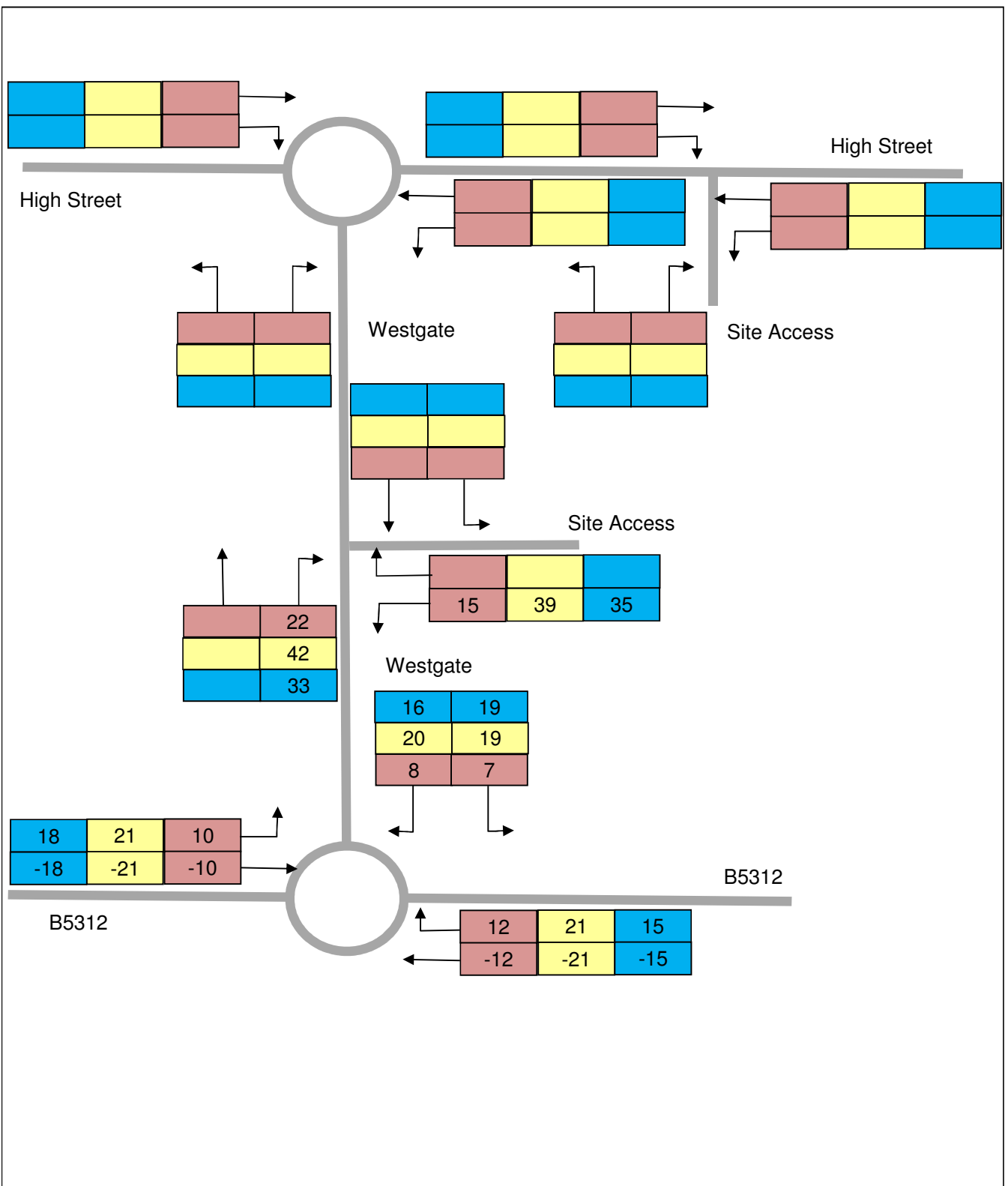


Key	
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<span style="display: inline-block; width: 15px; height: 10px; background-color: #00B0F0; border: 1px solid black;"></span>	Saturday Peak hour (1145 - 1245)



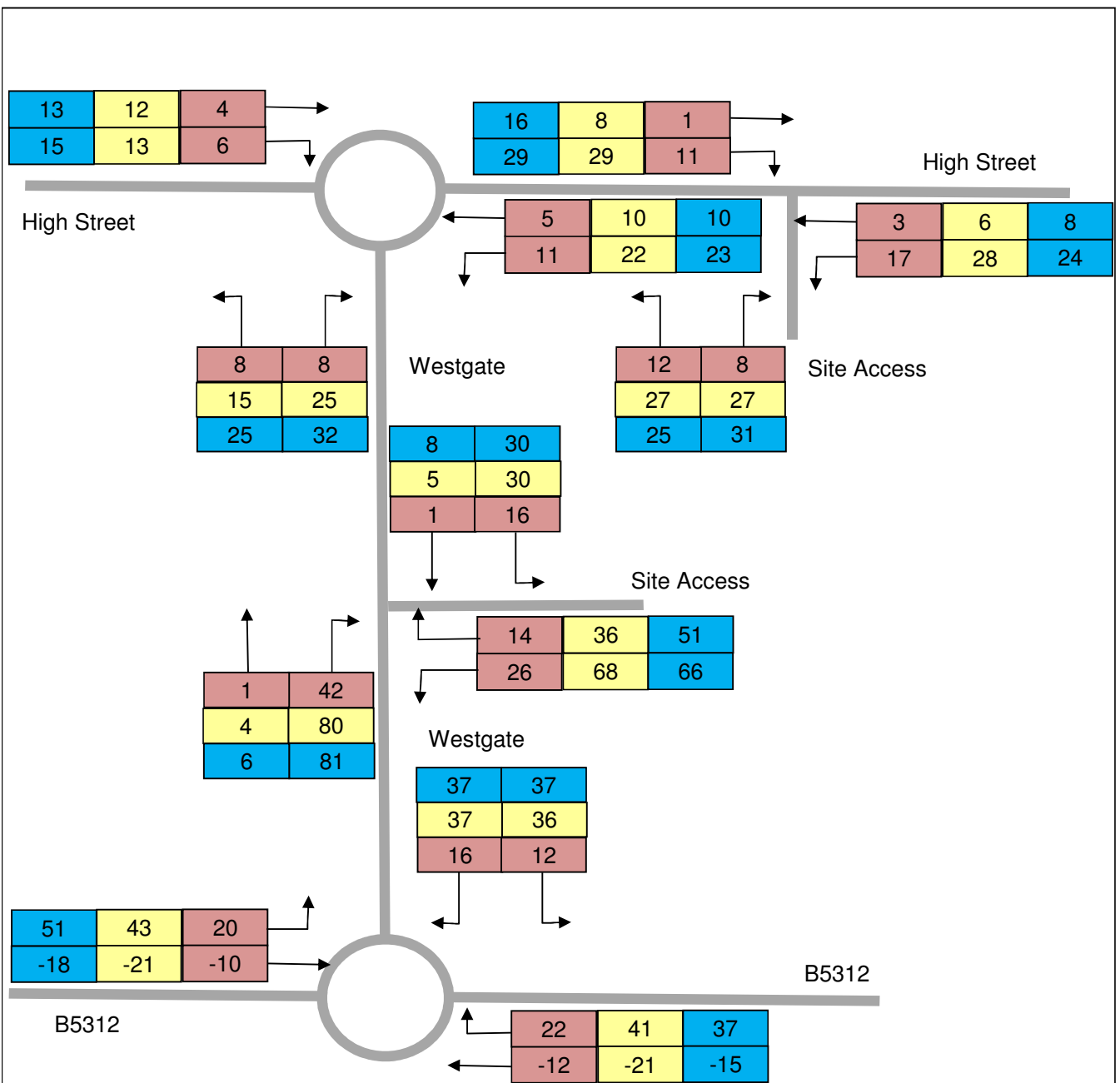
**Key**

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- Weekday PM Peak hour (1500 - 1600)
- Saturday Peak hour (1145 - 1245)



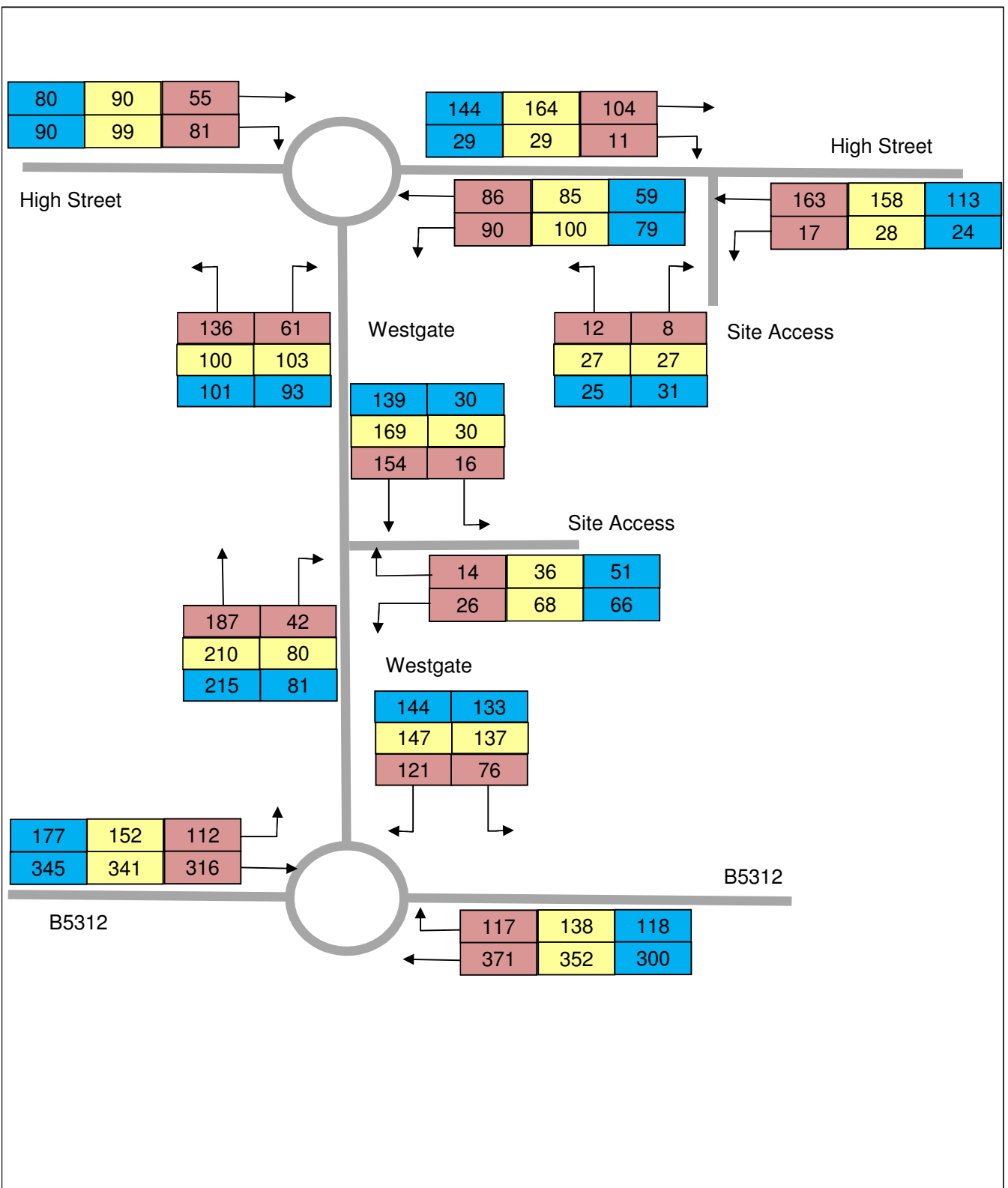
**Key**

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	Weekday PM Peak hour (1500 - 1600)
	Saturday Peak hour (1145 - 1245)



**Key**

- Weekday AM Peak hour (0800 - 0900)
- Weekday PM Peak hour (1500 - 1600)
- Saturday Peak hour (1145 - 1245)



**Key**

	Weekday AM Peak hour (0800 - 0900)
	Weekday PM Peak hour (1500 - 1600)
	Saturday Peak hour (1145 - 1245)



## **APPENDICES**



## **APPENDIX A**

### **SITE LAYOUT**





**TOTAL OWNERSHIP AREA (Red Line)**  
**FOODSTORE PLOT APPROX 3.07 ACRES (1.24 HA)**

- Existing trees retained
- Trees to be removed

PROPOSED SITE PLAN  
 SCALE 1:250 @ A1  
 SCALE 1:250  
 CAD file reference: J:/ALDI/MIDDLETON/2269BOL/17.0 DRAWINGS/100 SERIES

Rev	Date	Description	Rev By	CHK'd By
C	04.12.18	Tree survey comments included within scheme, car parking amended to full retained trees.	CM	LEEB
B	17.10.18	Disabled spaces and motorcycle spaces increased, tracking included and tree survey shown.	CM	LEEB
A	08.08.18	Landscaping proposals included.	CM	LEEB

Project Title: **PROPOSED ALDI FOODSTORE**  
 WESTGATE SKELMERSDALE  
 WN8 8AP

Client: **ALDI STORES LTD**

Status: **PLANNING**

Scale: **1:250** Drawing Size: **A1**

Date: **06.08.18** Drawn By: **RG** Checked: **LEEB**

Drawing Title: **PROPOSED SITE PLAN**

Job-Dwg No: **2269BOL-112** Rev: **C**

23, John North  
 Wakefield, WF1 3QA  
 T: 01924 291800

Carvers Warehouse 77 Dale Street  
 Manchester M1 2HG  
 T: 0161 2366555

The Old Rectory 79 High Street  
 Newport Pagnell MK16 9AB  
 T: 01908 211577

101 London Road  
 Reading RG1 5BT  
 T: 0118 950700

10 Gess Court, St Christophers Place  
 London W1U 1JJ  
 T: 0207 4091215

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## **APPENDIX B**

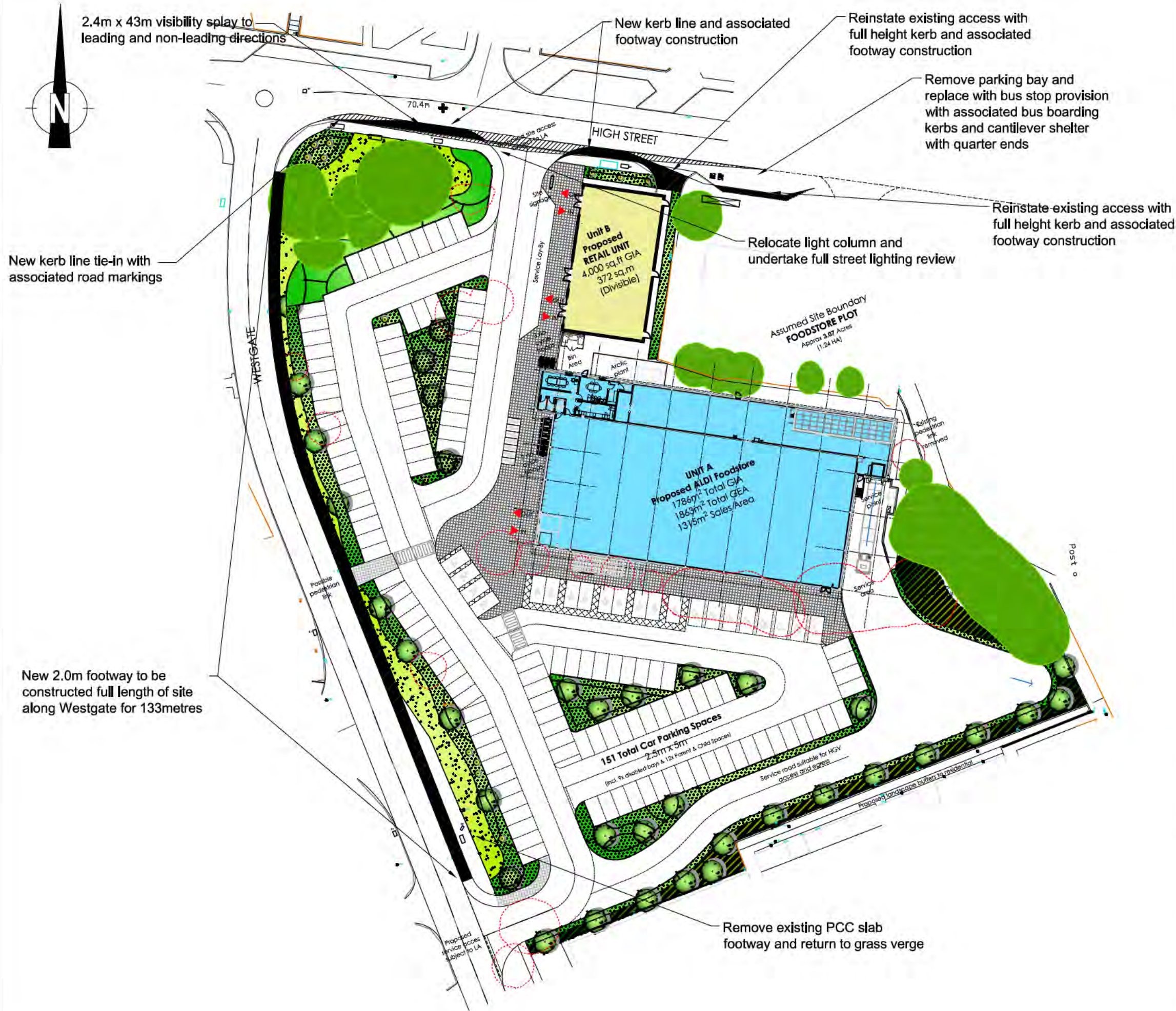
### **GENERAL ACCESS ARRANGEMENT AND SWEEP PATH AUTOTRACK ANALYSIS**



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Revision History		Date
A	Updated Design Proposals	16/10/18
B	Updated Layout	10/12/18
C	desc	date c
D	desc	date d
E	desc	date e
F	desc	date f
G	desc	date g
H	desc	date h
I	desc	date i
J	desc	date j

10 King Street  
Newcastle-under-Lyme  
Staffordshire  
ST5 1EL  
01782 627029

www.cameron-rose.co.uk

**client:** Aldi Stores Limited

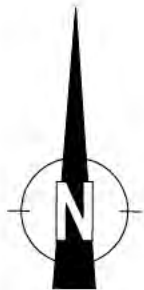
**project:** Westgate Skelmersdale

**drawing title:** Site Access and Off-Site Highway Works Preliminary Design

<b>scale(s):</b> 1/1000	<b>date:</b> 19/12/17	<b>drawn by:</b> UJM	<b>checked:</b> CAB
<b>drawing number:</b> 449-01/GA-01			
<b>xrefs:</b>		<b>status:</b> Information	
		<b>rev:</b> B	

DATE PRINTED:





**Aldi 16.5m Articulated Service Vehicle  
Entry Manoeuvre**

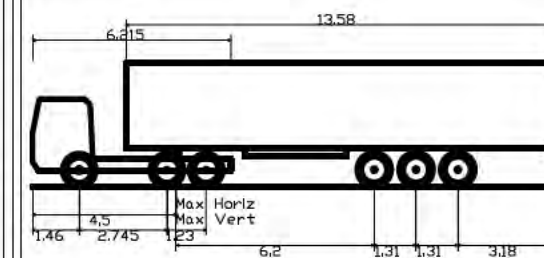


**Aldi 16.5m Articulated Service Vehicle  
Exit Manoeuvre**

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Aldi Articulated Vehicle (16.5m)	
Overall Length	16,500m
Overall Width	2,600m
Overall Body Height	3,863m
Min Body Ground Clearance	0,511m
Max Track Width	2,500m
Lock to Lock Time	8,00s
Wall to Wall Turning Radius	8,250m

**Revision History**

**Date**

Revision	Description	Date
A	Revised Layout	10/12/18
B	desc	date b
C	desc	date c
D	desc	date d
E	desc	date e
F	desc	date f
G	desc	date g
H	desc	date h
I	desc	date i
J	desc	date j

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**CAMERON ROSE**

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**client:** Aldi Stores Limited

**project:** Westgate Skelmersdale

**drawing title:** Site Access and Track Plot Analysis Entry and Exit Manoeuvre

**scale(s):** 1/750 **date:** 16/10/18 **drawn by:** **checked:**

**drawing number:** 449-01/ATR-01 **UM** **CAB**

**xrefs:** **status:** Information

**rev:** A

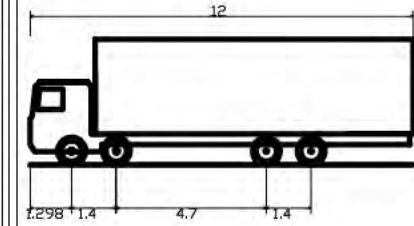
DATE PRINTED:



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Rigid Truck	
Overall Length	12.000m
Overall Width	2.500m
Overall Body Height	3.928m
Min Body Ground Clearance	0.412m
Track Width	2.471m
Lock to Lock Time	6.00s
Curb to Curb Turning Radius	11.900m



Revision History	Date
A Revised Layout	10/12/18
B desc	date b
C desc	date c
D desc	date d
E desc	date e
F desc	date f
G desc	date g
H desc	date h
I desc	date i
J desc	date j

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**CRA**  
**CAMERON ROSE**

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client: Aldi Stores Limited

project: Westgate Skelmersdale

drawing title: Retail Terrace Track Plot Analysis - South to North Entry and Exit Manoeuvre

scale(s): 1/750	date: 16/10/18	drawn by: UJM	checked: CAB
drawing number: 449-01/ATR-02			
xrefs:		status: Information	
		rev: A	

DATE PRINTED:

12m Rigid Service Vehicle Exit Manoeuvre

12m Rigid Service Vehicle Entry Manoeuvre





12m Rigid Service Vehicle Exit Manoeuvre

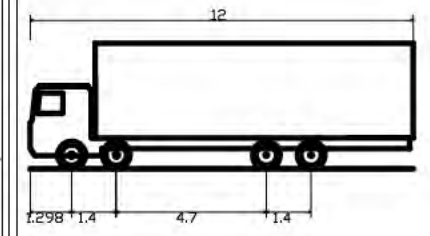


12m Rigid Service Vehicle Entry Manoeuvre

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Rigid Truck	
Overall Length	12.000m
Overall Width	2.500m
Overall Body Height	3.928m
Min Body Ground Clearance	0.412m
Track Width	2.471m
Lock to Lock Time	6.00s
Curb to Curb Turning Radius	11.900m

Revision History		Date
A	Revised Layout	10/12/18
B	desc	date b
C	desc	date c
D	desc	date d
E	desc	date e
F	desc	date f
G	desc	date g
H	desc	date h
I	desc	date i
J	desc	date j

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**CAMERON ROSE**

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client:	Aldi Stores Limited
project:	Westgate Skelmersdale
drawing title:	Retail Terrace Track Plot Analysis - North to South Entry and Exit Manoeuvre

scale(s):	1/750	date:	16/10/18	drawn by:	UM	checked:	CAB
drawing number:	449-01/ATR-03	status:	Information	rev:	A		

DATE PRINTED:





**APPENDIX C**

**INTERIM TRAVEL PLAN**

**ALDI FOOD STORES  
HIGH STREET, SKELMERSDALE**

**FRAMEWORK TRAVEL PLAN**

**PREPARED ON BEHALF OF:**

**ALDI STORES LIMITED**



10 King Street  
Newcastle under Lyme  
ST5 1EL



## **CONTENTS**

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<b>2.0</b>	<b>DEVELOPMENT PROPOSALS .....</b>	<b>2</b>
<b>3.0</b>	<b>PROPOSED TRAVEL PLAN INITIATIVES.....</b>	<b>3</b>
<b>4.0</b>	<b>IMPLEMENTATION AND REVIEW.....</b>	<b>7</b>
<b>5.0</b>	<b>TARGETS - STAFF .....</b>	<b>10</b>
<b>6.0</b>	<b>CONCLUSIONS .....</b>	<b>11</b>

## **1.0 INTRODUCTION**

- 1.1.1 This Travel Plan Framework has been produced by Cameron Rose Associates on behalf of Aldi Stores Limited, in support of their application for an Aldi food store with a GEA of 1,863 sqm and a non-food retail unit with a GEA of 372 sqm. . This document is relevant to both staff and customers of the proposed development and will suggest initiatives to maximise the sustainable transport opportunities of the site and will, prior to trading, be developed as a stand-alone document.
- 1.1.2 This Framework Travel Plan sets out the overall outcomes, targets and indicators for the site. Aldi will administer the Plan centrally. The Travel Plan will be consistent with the wider targets and requirements set out in the Framework Travel Plan. The Travel Plan will be completed within six months of occupation of the site, to allow time for travel characteristic surveys to be undertaken and suitable consultation with Lancashire County Council.

## 2.0 DEVELOPMENT PROPOSALS

- 2.1.1 The development proposals include the provision of an Aldi food store with a GEA of 1,863 sqm and a non-food retail unit with a GEA of 372 sqm. The remainder of the site would be used to provide car parking spaces and stands to accommodate up to 20 bicycles (seven for the Aldi foodstore and three for the non-food unit).
- 2.1.2 The proposed site layout is included as **Appendix A** to the Transport Assessment (TA).
- 2.1.3 The existing highway infrastructure has been discussed in **Section 3.0** of the TA and the full details of the development proposal in **Section 4.0**. The development proposal includes provision for on-site cycle parking for staff, customers, changing and locker facilities for staff, additional pedestrian infrastructure on the local highway network and improvements to public transport facilities.
- 2.1.4 The proposed development would provide retail opportunity within a reasonable walking and cycling distance of a large residential catchment, reducing the need for these residents to travel further for their food shopping needs. Frequent bus services to a range of local destinations can be accessed within a short walk of the site, with services operating from on High Street and on the B5312.

### **3.0 PROPOSED TRAVEL PLAN INITIATIVES**

3.1.1 The primary source of traffic generation and therefore greatest opportunity for modal shift is customers. It is clear however, that the end users cannot dictate their customers' choice of transport but can seek to influence it by provision of adequate facilities and information.

3.1.2 Features of the development proposal that would encourage non-car trips to the site include:

- Frequent bus services to a number of local destinations accessible within a short walking distance of the site;
- 14 cycle parking spaces, through the provision of seven Sheffield loop stands at the Aldi foodstore and six cycle parking spaces, through the provision of three Sheffield loop stands at the non-food retail unit. A total provision of 20 cycle parking spaces at the development;
- Changing and locker facilities would be provided for staff;
- Pedestrian and cycle links from the store to the local highway network;
- Upgrade of bus stop to be relocated on High Street to Quality Bus Standard; and
- Provision of a new 2.0 metre footway on Westgate along the site boundary.

### **3.2 Other Initiatives**

3.2.1 Staff and customers will be encouraged to use sustainable forms of transport such as walking, cycling and bus travel to access the store by the provision of appropriate facilities and providing the relevant information on-site.

3.2.2 To further encourage travel to the site by modes other than the private car, Aldi will consider other modal initiatives, further details of which are provided below.

### **3.3 Cycling**

3.3.1 Cycling is a key mode of sustainable transport and it is therefore important to encourage cycling as part of the site's Travel Plan; this will be achieved by implementing the initiatives detailed below;

- The provision of safe and convenient cycle parking facilities for shoppers and employees as described above;
- Provision for in-store cycle equipment storage facilities for employees; and
- Bicycles and cycling equipment are regularly available as 'special purchases' within Aldi stores. This provides a good opportunity for staff and customers alike to purchase bicycles at greatly discounted rates thus encouraging this mode of transport.

### **3.4 Walking**

3.4.1 The pedestrian environment has to be such that it provides pedestrians with safe and convenient routes to and from their origin/ destinations. To encourage this mode of transport, Aldi will provide the following:

- Improved footway connections between the site and the surrounding network, through the provision of a footway on Westgate, along the boundary of the site;
- Direct pedestrian links within the site by means of suitable footpaths and pedestrian crossings; and
- The provision of adequate street lighting and lighting within the site to provide pedestrians with a well-lit environment hence enhancing safety and encouraging pedestrian movements.

### **3.5 Car Sharing Scheme**

- 3.5.1 The availability of car sharing schemes is limited in the case of food retail, as the stores cannot dictate car sharing among customers and employee numbers are small. Nevertheless employees from the store will be supported and encouraged to car-share if another member of staff lives close by and shift patterns align.
- 3.5.2 The Travel Plan Co-ordinator will promote the use of car sharing amongst employees and will promote national car sharing schemes such as Lift Share ([www.liftshare.com](http://www.liftshare.com)). These schemes will be promoted to employees upon commencement of employment and continually promoted through promotional material displayed on notice boards, within the staff room. This information will be provided by the Travel Plan Co-ordinator within three months of the stores opening and continually monitored to ensure the information provided is up to date.

### **3.6 Servicing**

- 3.6.1 As is common practice in Aldi foodstores and in line with the current servicing arrangement of the store, service vehicles would access the store via the customer access off Westgate for the Aldi food store and off High Street for the non-food retail unit.
- 3.6.2 Aldi service deliveries are carried out in such a way as to minimise vehicle kilometres travelled. Each store receives an average of four deliveries by articulated lorry per day, in addition to a milk delivery and bin collection via rigid vehicle. This is substantially lower than the delivery pattern associated with larger food superstores.
- 3.6.3 The articulated vehicles operate from a central distribution centre. Each lorry delivers to a number of stores in a specific circuit and in this way minimises vehicle kilometres and therefore reduces emissions.
- 3.6.4 Deliveries to the store will aim to arrive outside of the established highway peak periods namely 0800 - 0900 during the morning and 1500 – 1600 during the evening

### **3.7 Provision of Information**

3.7.1 Each new member of staff will be briefed on all aspects of the Travel Plan as part of their staff induction. In this way, each new member of staff will be aware of the advantages, accessibility and convenience of non-car modes of transport to and from the site.

3.7.2 If the message is to be portrayed to staff and customers that sustainable forms of transport are preferable to the private car, then it is essential that adequate information is available; to this end:

- Bus stop location, timetable information and route plans will be provided;
- The above information will be provided to new employees as part of the staff induction process;
- Information on the beneficial effects of cycling on both health and the environment will be provided in the form of leaflets to all staff; and
- Copies of relevant cycle maps will be provided, thus encouraging sustainable forms of transport.

3.7.3 The Travel Plan Co-ordinator will be responsible for co-ordinating the Travel Plan across the site and ensuring that the information is up to date and accessible to employees.

#### **4.0 IMPLEMENTATION AND REVIEW**

- 4.1.1 In order to establish an effective Travel Plan, a coherent understanding of staff travel patterns and attitudes to travel will need to be collected. A Travel Plan Co-ordinator will be appointed who will be responsible for on-going monitoring and annual surveys. Information gathered will be submitted to Lancashire County Council.
- 4.1.2 A Travel Plan Co-ordinator will be appointed prior to the opening of the store, to implement the Travel Plan and to promote the aims and objectives of the Plan amongst employees and visitors of the site. The Travel Plan Co-ordinator will play a key role in the promotion of the Plan across the site and in the delivery of the Plan measures.
- 4.1.3 The Final Travel Plan will set out specific details on the role of the Travel Plan Co-ordinator.
- 4.1.4 The Travel Plan Co-ordinator will oversee the overall operation of the Travel Plan and be responsible for monitoring the effectiveness of the Plan and liaising with Lancashire County Council.
- 4.1.5 The Travel Plan Co-ordinator will be responsible for the preparation of the Final Travel Plan and will be required to develop and implement the Travel Plan and to monitor the effectiveness of the Plan.
- 4.1.6 Lancashire County Council will be notified of the name of the Travel Plan Co-ordinator upon their appointment and similarly the Travel Plan Co-ordinator will be advised of the names of the relevant contact details at the various organisations with whom they will be required to consult, including Lancashire County Council's Travel Planning officers, public transport operators and other key stakeholders.
- 4.1.7 It is envisaged that the Travel Plan Co-ordinators role at Aldi will be fulfilled by the Store Manager. The Travel Plan Co-ordinators role at the office will be undertaken by a member of staff. The contact details of the Store Manager and office employee will be provided to Lancashire County Council, prior to the stores opening.



4.1.8 The Travel Plan Co-ordinator will be the first point of contact for employees, visitors and other outside organisations in all matters regarding the detailed Travel Plan that will be developed.

4.1.9 The general responsibilities of the Travel Plan Co-ordinator will include:

- Implementing Travel Plan measures across the site and for ensuring that these measures are realistic and achievable, through continued review and assessment of their success;
- Developing, managing and implementing the Travel Plan strategy so that effective sustainable transport solutions can be achieved;
- On-going review and assessment of the Travel Plan to determine if objectives are being achieved and initiating new measures when required. The Travel Plan Co-ordinator will also be expected to update the Travel Plan to ensure their success;
- Ensuring that all employees and visitors have good travel information and are made aware of all of the travel choices they have available to them, to promote sustainable travel;
- To use effective marketing and awareness-raising schemes to assist in the promotion of the Travel Plan and sustainable travel across the site; and
- To work together with the local highway authority to ensure that the management and monitoring of the Travel Plan is efficiently and effectively undertaken and that the Travel Plan measures are being delivered.

4.1.10 The Travel Plan will be implemented and monitored as set out below:

- Prior to development occupation a final travel plan and staff travel survey pro-forma will be agreed;

- Three months after occupation the initial staff travel survey will be undertaken and reported to Lancashire County Council within two months (this information will be gathered after this time to ensure representative data once staff have established themselves into their new travel routine); and
- Annually thereafter for a period of five year after occupation the staff travel survey will be undertaken and reported to Lancashire County Council within two months of survey completion.

## 4.2 Summary of Framework for Implementation

4.2.1 There are a number of elements of the Travel Plan which will need to be submitted, agreed and implemented at different timescales.

4.2.2 The following table therefore summarises the key areas of implementation and sets the framework which will form the basis of the agreement between Aldi and Lancashire County Council.

**Table 4.1: Framework for Implementation**

Item/Measure	Timescale
Agreement of Framework Travel Plan	Prior to issue of planning permission
Issue draft Final Travel Plan (excluding details of staff travel patterns) to Lancashire County Council for approval	3 months prior to occupation of the development
Undertake staff travel surveys	Within 3 months of opening of food store/ office. Then annually for a period of five years.
Issue Travel Plan with staff travel patterns and set targets	Within 2 months of undertaking surveys
Infrastructure measures (pedestrian/ cycle access, cycle parking, off-site highway works) to be implemented	Prior to occupation of the development
Appointment of Travel Plan Co-ordinator	3 months prior to occupation of the development
Issue 'Employee Travel Packs' to all employees	At commencement of employment
Develop/ promote car-share scheme	Within travel packs & on notice boards.
Period of formal monitoring of Travel Plan by the Developer	5 years from Occupation of the Development

## **5.0 TARGETS - STAFF**

- 5.1.1 Travel Plan targets will be formally set following the initial employee surveys and updated annually. The Travel Plan Co-ordinator will liaise with the Council to set suitable targets.
- 5.1.2 Travel Plans evolve over time and adapt to changing conditions. As the staff travel patterns may be liable to change over time, it will be necessary to carry out reviews of staff travel behaviour. The results from these reviews will enable the Travel Plan initiatives to be adapted as necessary.
- 5.1.3 It should be recognised that a genuine modal shift ultimately relates to an individual choosing an alternative means of travel to the private car rather than any apparent modal shifts caused by staff turnover (i.e. a cyclist replaced by a car driver or vice versa). Specific circumstances will be taken into account at the time of the annual reviews.

## 6.0 CONCLUSIONS

- 6.1.1 To achieve the target set out within this Travel Plan, Aldi will encourage its employees and customers alike, to take into account the benefits of sustainable forms of transport that are available to them given the highly accessible location of the site.
- 6.1.2 Aldi will undertake local infrastructure improvements to further enhance sustainable transport options in the vicinity of the site. This, allied with progressive management practices and the provision of adequate information, will influence and encourage staff and customers to choose sustainable transport options in preference to the private car.
- 6.1.3 The Travel Plan will seek to achieve significant reductions in car usage for journeys to and from the store. This will produce resultant benefits in terms of air quality and emissions and will also significantly reduce car parking demand and traffic generation associated with the development.



**APPENDIX D**

**TRAFFIC COUNT DATA**



# Skelmersdale - Manual Traffic Survey, Friday 2nd November 2018

Junction: (1) High Street / Westgate

Approach: High Street

TIME	Left to Westgate (South)								Ahead to Westgate (West)								U-Turn							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0730 - 0745	0	0	4	4	0	0	1	9	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0
0745 - 0800	1	0	9	1	0	0	1	12	0	0	9	3	0	0	0	12	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>1</b>	<b>0</b>	<b>13</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>21</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
0800 - 0815	0	0	17	3	0	0	1	21	0	0	8	1	0	0	0	9	0	0	0	0	0	0	0	0
0815 - 0830	0	0	15	6	0	0	1	22	0	0	11	0	0	0	0	11	0	0	0	0	0	0	0	0
0830 - 0845	0	0	14	2	1	0	1	18	0	0	23	3	0	0	0	26	0	0	0	1	0	0	0	1
0845 - 0900	0	0	7	0	1	0	0	8	0	0	30	1	0	0	0	31	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>53</b>	<b>11</b>	<b>2</b>	<b>0</b>	<b>3</b>	<b>69</b>	<b>0</b>	<b>0</b>	<b>72</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>77</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
0900 - 0915	0	0	6	2	0	0	2	10	0	0	11	0	0	0	0	11	0	0	0	0	0	0	0	0
0915 - 0930	0	0	6	0	0	0	0	6	0	0	11	1	1	0	0	13	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>22</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Session Total</b>	<b>1</b>	<b>0</b>	<b>78</b>	<b>18</b>	<b>2</b>	<b>0</b>	<b>7</b>	<b>106</b>	<b>0</b>	<b>0</b>	<b>107</b>	<b>9</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>117</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
1500 - 1515	0	0	16	0	0	0	1	17	1	0	37	3	0	0	0	41	0	0	0	0	0	0	0	0
1515 - 1530	0	0	11	3	0	0	1	15	0	0	16	1	0	0	0	17	0	0	0	0	0	0	0	0
1530 - 1545	0	0	18	2	0	0	2	22	0	0	6	0	0	0	0	6	0	0	0	0	0	0	0	0
1545 - 1600	0	0	12	0	0	0	1	13	0	0	8	0	0	0	0	8	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>57</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>67</b>	<b>1</b>	<b>0</b>	<b>67</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>72</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
1600 - 1615	0	0	12	2	0	0	0	14	0	0	19	0	0	0	0	19	0	0	0	0	0	0	0	0
1615 - 1630	0	0	12	3	0	0	2	17	0	0	12	2	0	0	0	14	0	0	0	0	0	0	0	0
1630 - 1645	0	0	10	1	0	0	0	11	0	0	12	1	0	0	0	13	0	0	0	0	0	0	0	0
1645 - 1700	0	0	7	0	0	0	2	9	0	0	16	3	0	0	0	19	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>41</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>51</b>	<b>0</b>	<b>0</b>	<b>59</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>65</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
1700 - 1715	0	0	11	1	0	0	2	14	0	0	16	2	0	0	0	18	0	0	0	0	0	0	0	0
1715 - 1730	0	0	8	2	0	0	0	10	1	0	14	1	0	0	0	16	0	0	0	0	0	0	0	0
1730 - 1745	0	0	11	1	0	0	0	12	0	0	15	1	0	0	0	16	0	0	1	0	0	0	0	1
1745 - 1800	0	0	11	0	0	0	2	13	0	0	13	3	0	0	0	16	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>41</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>49</b>	<b>1</b>	<b>0</b>	<b>58</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>66</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
1800 - 1815	0	0	16	0	0	0	1	17	0	0	12	0	0	0	0	12	0	0	1	0	0	0	0	1
1815 - 1830	0	0	10	1	0	0	1	12	0	0	9	0	0	0	0	9	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>26</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>29</b>	<b>0</b>	<b>0</b>	<b>21</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>21</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
<b>Session Total</b>	<b>0</b>	<b>0</b>	<b>165</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>196</b>	<b>2</b>	<b>0</b>	<b>205</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>224</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>



# Skelmersdale - Manual Traffic Survey, Friday 2nd November 2018

**Junction: (1) High Street / Westgate**

**Approach: Westgate (South)**

TIME	Left to Westgate (West)								Right to High Street							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0730 - 0745	0	0	17	2	0	0	0	19	0	0	4	3	0	0	2	9
0745 - 0800	0	0	12	3	0	0	0	15	0	0	1	1	0	0	2	4
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>29</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>34</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>13</b>
0800 - 0815	0	0	8	2	1	0	0	11	0	0	4	1	0	0	3	8
0815 - 0830	0	0	22	3	2	0	0	27	0	0	6	3	0	0	0	9
0830 - 0845	0	0	33	1	0	0	0	34	0	0	9	5	0	0	3	17
0845 - 0900	0	0	46	2	0	0	0	48	0	0	4	2	0	0	1	7
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>109</b>	<b>8</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>120</b>	<b>0</b>	<b>0</b>	<b>23</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>41</b>
0900 - 0915	0	0	22	3	0	0	0	25	0	0	4	2	0	0	0	6
0915 - 0930	0	0	17	2	0	0	0	19	0	0	4	1	0	0	1	6
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>39</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>44</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>12</b>
<b>Session Total</b>	<b>0</b>	<b>0</b>	<b>177</b>	<b>18</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>198</b>	<b>0</b>	<b>0</b>	<b>36</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>66</b>
1500 - 1515	0	0	22	2	0	0	0	24	0	0	13	3	0	0	1	17
1515 - 1530	0	0	20	1	0	0	0	21	0	1	16	2	0	0	1	20
1530 - 1545	0	0	16	3	0	0	0	19	0	0	15	1	0	0	1	17
1545 - 1600	0	0	16	1	0	0	0	17	0	0	13	1	0	0	1	15
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>74</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>81</b>	<b>0</b>	<b>1</b>	<b>57</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>69</b>
1600 - 1615	0	0	19	1	1	0	0	21	0	0	13	5	0	0	0	18
1615 - 1630	0	0	11	6	0	0	0	17	0	0	12	1	0	0	1	14
1630 - 1645	0	0	13	0	0	0	0	13	0	0	10	2	0	0	1	13
1645 - 1700	0	0	21	0	0	0	0	21	0	0	10	5	0	0	0	15
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>64</b>	<b>7</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>72</b>	<b>0</b>	<b>0</b>	<b>45</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>60</b>
1700 - 1715	0	0	18	2	0	0	0	20	0	0	12	2	0	0	1	15
1715 - 1730	0	0	21	1	0	0	0	22	0	0	15	4	0	0	0	19
1730 - 1745	0	0	21	2	0	0	0	23	1	0	21	2	0	0	0	24
1745 - 1800	0	0	15	0	0	0	0	15	0	0	19	0	0	0	0	19
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>75</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>80</b>	<b>1</b>	<b>0</b>	<b>67</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>77</b>
1800 - 1815	0	0	18	2	0	0	0	20	0	0	17	1	0	0	1	19
1815 - 1830	1	0	20	0	0	0	0	21	0	0	19	1	0	0	2	22
<b>Hourly Total</b>	<b>1</b>	<b>0</b>	<b>38</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>41</b>	<b>0</b>	<b>0</b>	<b>36</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>41</b>
<b>Session Total</b>	<b>1</b>	<b>0</b>	<b>251</b>	<b>21</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>274</b>	<b>1</b>	<b>1</b>	<b>205</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>247</b>



# Skelmersdale - Manual Traffic Survey, Friday 2nd November 2018

Junction: (1) High Street / Westgate

Approach: Westgate (West)

TIME	Ahead to High Street								Right to Westgate (South)								U-Turn							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0730 - 0745	1	0	4	0	0	0	0	5	0	0	7	2	1	0	0	10	0	0	0	0	0	0	0	0
0745 - 0800	0	0	7	1	0	0	0	8	0	0	7	0	0	0	0	7	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>1</b>	<b>0</b>	<b>11</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
0800 - 0815	0	0	6	4	0	0	0	10	0	0	15	1	0	0	0	16	0	0	0	0	0	0	0	0
0815 - 0830	0	0	5	1	1	0	0	7	0	0	10	2	0	0	0	12	0	0	0	0	0	0	0	0
0830 - 0845	0	0	9	1	0	0	0	10	0	0	8	1	2	0	0	11	0	0	0	0	0	0	0	0
0845 - 0900	0	0	17	3	0	0	0	20	1	0	28	2	0	0	0	31	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>37</b>	<b>9</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>47</b>	<b>1</b>	<b>0</b>	<b>61</b>	<b>6</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>70</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
0900 - 0915	0	0	18	1	0	0	0	19	0	0	15	3	0	0	0	18	0	0	0	0	0	0	0	0
0915 - 0930	0	0	12	0	0	0	0	12	0	1	15	1	0	0	0	17	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>30</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>31</b>	<b>0</b>	<b>1</b>	<b>30</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>35</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Session Total</b>	<b>1</b>	<b>0</b>	<b>78</b>	<b>11</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>91</b>	<b>1</b>	<b>1</b>	<b>105</b>	<b>12</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>122</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
1500 - 1515	0	0	7	2	0	0	0	9	0	0	21	3	0	0	0	24	0	0	0	0	0	0	0	0
1515 - 1530	1	0	31	0	0	0	0	32	0	0	20	2	0	0	0	22	0	0	1	0	0	0	0	1
1530 - 1545	0	0	19	2	0	0	0	21	0	0	17	2	0	0	0	19	0	0	0	0	0	0	0	0
1545 - 1600	0	0	12	1	0	0	0	13	0	0	16	1	0	0	0	17	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>1</b>	<b>0</b>	<b>69</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>75</b>	<b>0</b>	<b>0</b>	<b>74</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>82</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
1600 - 1615	0	0	20	0	0	0	0	20	0	0	13	2	1	0	0	16	0	0	0	0	0	0	0	0
1615 - 1630	0	0	13	1	0	0	0	14	0	0	15	2	0	0	0	17	0	0	0	0	0	0	0	0
1630 - 1645	0	0	14	3	0	0	0	17	0	0	19	1	0	0	0	20	0	0	0	0	0	0	0	0
1645 - 1700	0	0	26	0	0	0	0	26	0	0	27	0	0	0	0	27	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>73</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>77</b>	<b>0</b>	<b>0</b>	<b>74</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>80</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
1700 - 1715	0	0	25	1	0	0	0	26	0	0	21	2	0	0	0	23	0	0	0	0	0	0	0	0
1715 - 1730	2	0	25	2	0	0	0	29	0	0	18	1	0	0	0	19	0	0	0	0	0	0	0	0
1730 - 1745	0	0	21	1	0	0	0	22	0	0	27	1	0	0	0	28	0	0	0	0	0	0	0	0
1745 - 1800	0	0	17	3	0	0	0	20	0	0	12	1	0	0	0	13	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>2</b>	<b>0</b>	<b>88</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>97</b>	<b>0</b>	<b>0</b>	<b>78</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>83</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
1800 - 1815	0	0	16	1	0	0	0	17	0	0	15	0	0	0	0	15	0	0	0	0	0	0	0	0
1815 - 1830	0	0	14	1	0	0	0	15	0	0	7	1	0	0	0	8	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>30</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>32</b>	<b>0</b>	<b>0</b>	<b>22</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>23</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Session Total</b>	<b>3</b>	<b>0</b>	<b>260</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>281</b>	<b>0</b>	<b>0</b>	<b>248</b>	<b>19</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>268</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>





# Skelmersdale - Manual Traffic Survey, Saturday 3rd November 2018

Junction: (1) High Street / Westgate

Approach: High Street

TIME	Left to Westgate (South)								Ahead to Westgate (West)								U-Turn							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
1000 - 1015	0	0	8	1	0	0	2	11	0	0	15	0	0	0	0	15	0	0	0	0	0	0	0	0
1015 - 1030	0	0	11	2	0	0	0	13	0	0	11	1	0	0	0	12	0	0	0	0	0	0	0	0
1030 - 1045	0	0	11	2	0	0	1	14	0	0	10	3	0	0	0	13	0	0	0	0	0	0	0	0
1045 - 1100	0	0	5	1	0	0	1	7	0	0	8	1	0	0	0	9	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>35</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>45</b>	<b>0</b>	<b>0</b>	<b>44</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>49</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
1100 - 1115	0	0	11	1	0	0	0	12	0	0	7	0	0	0	0	7	0	0	1	0	0	0	0	1
1115 - 1130	0	0	11	0	0	0	1	12	2	0	14	0	0	0	0	16	0	0	0	0	0	0	0	0
1130 - 1145	0	0	5	3	1	0	1	10	0	1	14	3	0	0	0	18	0	0	0	0	0	0	0	0
1145 - 1200	0	0	7	2	0	0	1	10	0	0	16	0	0	0	0	16	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>34</b>	<b>6</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>44</b>	<b>2</b>	<b>1</b>	<b>51</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>57</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
1200 - 1215	0	0	10	0	0	0	1	11	1	0	7	0	0	0	0	8	0	0	0	0	0	0	0	0
1215 - 1230	0	0	14	2	0	0	1	17	0	0	9	1	0	0	0	10	0	0	0	0	0	0	0	0
1230 - 1245	0	0	9	0	0	0	1	10	0	0	11	2	0	0	0	13	0	0	1	0	0	0	0	1
1245 - 1300	0	0	10	0	0	0	1	11	0	0	8	2	0	0	0	10	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>43</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>49</b>	<b>1</b>	<b>0</b>	<b>35</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>41</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
1300 - 1315	0	0	7	1	0	0	1	9	0	0	9	0	0	0	0	9	0	0	0	0	0	0	0	0
1315 - 1330	0	0	16	1	0	0	1	18	0	0	10	0	0	0	0	10	0	0	0	0	0	0	0	0
1330 - 1345	0	0	12	1	0	0	1	14	0	0	11	0	0	0	0	11	0	0	0	0	0	0	0	0
1345 - 1400	0	0	14	1	0	0	1	16	0	0	7	2	0	0	0	9	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>49</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>57</b>	<b>0</b>	<b>0</b>	<b>37</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>39</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
1400 - 1415	0	0	6	0	0	0	1	7	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	0
1415 - 1430	0	0	6	1	0	0	1	8	0	1	8	0	0	0	0	9	0	0	0	0	0	0	0	0
1430 - 1445	0	0	8	1	0	0	1	10	0	0	10	0	0	0	0	10	0	0	0	0	0	0	0	0
1445 - 1500	0	1	8	0	0	0	1	10	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>0</b>	<b>1</b>	<b>28</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>35</b>	<b>0</b>	<b>1</b>	<b>27</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL</b>	<b>0</b>	<b>1</b>	<b>189</b>	<b>20</b>	<b>1</b>	<b>0</b>	<b>19</b>	<b>230</b>	<b>3</b>	<b>2</b>	<b>194</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>214</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>



# Skelmersdale - Manual Traffic Survey, Saturday 3rd November 2018

Junction: (1) High Street / Westgate

Approach: Westgate (South)

TIME	Left to Westgate (West)								Right to High Street								U-Turn							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
1000 - 1015	0	0	9	1	0	0	0	10	0	0	9	1	0	0	1	11	0	0	0	0	0	0	0	0
1015 - 1030	0	0	9	1	0	0	0	10	0	0	6	0	0	0	1	7	0	0	0	0	0	0	0	0
1030 - 1045	0	0	13	1	0	0	0	14	0	0	9	1	0	0	1	11	0	0	0	0	0	0	0	0
1045 - 1100	0	0	10	2	0	0	0	12	0	0	2	0	0	0	1	3	0	0	1	0	0	0	0	1
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>41</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>46</b>	<b>0</b>	<b>0</b>	<b>26</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>32</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
1100 - 1115	0	0	10	2	0	0	0	12	0	0	4	0	0	0	1	5	0	0	0	0	0	0	0	0
1115 - 1130	0	0	13	1	0	0	0	14	0	0	9	0	1	0	1	11	0	0	0	0	0	0	0	0
1130 - 1145	0	0	12	1	0	0	0	13	0	0	12	0	0	0	1	13	0	0	0	0	0	0	0	0
1145 - 1200	0	0	16	0	0	0	0	16	0	0	9	3	0	0	1	13	0	0	1	0	0	0	0	1
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>51</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>55</b>	<b>0</b>	<b>0</b>	<b>34</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>4</b>	<b>42</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
1200 - 1215	0	0	16	1	0	0	0	17	0	0	11	1	0	0	1	13	0	0	0	0	0	0	0	0
1215 - 1230	0	1	19	2	0	0	0	22	0	0	14	2	0	0	1	17	0	0	0	0	0	0	0	0
1230 - 1245	2	0	18	0	0	0	0	20	0	0	9	0	0	0	1	10	0	0	1	0	0	0	0	1
1245 - 1300	0	0	13	1	0	0	0	14	0	0	9	4	0	0	1	14	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>2</b>	<b>1</b>	<b>66</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>73</b>	<b>0</b>	<b>0</b>	<b>43</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>54</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
1300 - 1315	0	0	21	0	0	0	0	21	0	0	17	1	0	0	1	19	0	0	0	0	0	0	0	0
1315 - 1330	0	1	12	1	0	0	0	14	0	0	8	0	0	0	1	9	0	0	0	0	0	0	0	0
1330 - 1345	0	0	7	2	0	0	0	9	0	0	11	1	0	0	1	13	0	0	1	0	0	0	0	1
1345 - 1400	0	0	13	1	0	0	0	14	0	0	8	3	0	0	1	12	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>0</b>	<b>1</b>	<b>53</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>58</b>	<b>0</b>	<b>0</b>	<b>44</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>53</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
1400 - 1415	0	0	12	1	0	0	0	13	0	1	9	2	0	0	0	12	0	0	0	0	0	0	0	0
1415 - 1430	0	0	6	0	0	0	0	6	0	0	11	1	0	0	1	13	0	0	0	0	0	0	0	0
1430 - 1445	0	0	14	0	0	0	0	14	0	0	12	0	0	0	0	12	0	0	0	0	0	0	0	0
1445 - 1500	0	0	12	0	0	0	0	12	0	1	18	2	0	0	3	24	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>44</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>45</b>	<b>0</b>	<b>2</b>	<b>50</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>61</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL</b>	<b>2</b>	<b>2</b>	<b>255</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>277</b>	<b>0</b>	<b>2</b>	<b>197</b>	<b>22</b>	<b>1</b>	<b>0</b>	<b>20</b>	<b>242</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>



# Skelmersdale - Manual Traffic Survey, Saturday 3rd November 2018

Junction: (1) High Street / Westgate

Approach: Westgate (West)

TIME	Ahead to High Street								Right to Westgate (South)								U-Turn							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
1000 - 1015	0	0	8	2	0	0	0	10	0	0	13	0	0	0	0	13	0	0	0	0	0	0	0	0
1015 - 1030	0	0	7	1	0	0	0	8	0	0	13	3	0	0	0	16	0	0	0	0	0	0	0	0
1030 - 1045	0	0	16	2	0	0	0	18	0	0	7	2	0	0	0	9	0	0	0	0	0	0	0	0
1045 - 1100	2	0	11	1	0	0	0	14	0	0	5	1	0	0	0	6	0	0	1	0	0	0	0	1
<b>Hourly Total</b>	<b>2</b>	<b>0</b>	<b>42</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50</b>	<b>0</b>	<b>0</b>	<b>38</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>44</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
1100 - 1115	0	0	13	1	0	0	0	14	0	0	9	1	0	0	1	11	0	0	0	0	0	0	0	0
1115 - 1130	1	0	11	1	0	0	0	13	0	0	15	1	0	0	0	16	0	0	0	0	0	0	0	0
1130 - 1145	1	0	13	0	0	0	0	14	0	0	14	2	0	0	0	16	0	0	0	0	0	0	0	0
1145 - 1200	0	0	15	2	0	0	0	17	0	0	15	2	0	0	0	17	0	0	1	0	0	0	0	1
<b>Hourly Total</b>	<b>2</b>	<b>0</b>	<b>52</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>58</b>	<b>0</b>	<b>0</b>	<b>53</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>60</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
1200 - 1215	0	0	16	0	0	0	0	16	0	0	18	2	0	0	0	20	0	0	0	0	0	0	0	0
1215 - 1230	1	0	13	0	0	0	0	14	0	1	16	1	0	0	0	18	0	0	0	0	0	0	0	0
1230 - 1245	0	0	17	0	0	0	0	17	0	0	15	2	0	0	0	17	0	0	1	0	0	0	0	1
1245 - 1300	0	0	10	1	0	0	0	11	0	0	11	0	0	0	0	11	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>1</b>	<b>0</b>	<b>56</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>58</b>	<b>0</b>	<b>1</b>	<b>60</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>66</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
1300 - 1315	1	0	15	1	0	0	0	17	0	1	13	2	0	0	0	16	0	0	0	0	0	0	0	0
1315 - 1330	0	0	12	0	0	0	0	12	0	0	23	1	0	0	0	24	0	0	0	0	0	0	0	0
1330 - 1345	0	0	13	1	0	0	0	14	0	1	13	2	0	0	0	16	0	0	0	0	0	0	0	0
1345 - 1400	0	0	12	0	0	0	0	12	0	0	7	1	0	0	0	8	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>1</b>	<b>0</b>	<b>52</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>55</b>	<b>0</b>	<b>2</b>	<b>56</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>64</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
1400 - 1415	0	0	9	1	0	0	0	10	0	0	13	1	0	0	0	14	0	0	0	0	0	0	0	0
1415 - 1430	0	0	9	1	0	0	0	10	0	0	12	1	0	0	0	13	0	0	0	0	0	0	0	0
1430 - 1445	0	0	10	0	0	0	0	10	0	0	8	0	0	0	0	8	0	0	0	0	0	0	0	0
1445 - 1500	0	0	10	0	0	0	0	10	0	0	8	0	0	0	0	8	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>38</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>40</b>	<b>0</b>	<b>0</b>	<b>41</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>43</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL</b>	<b>6</b>	<b>0</b>	<b>240</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>261</b>	<b>0</b>	<b>3</b>	<b>248</b>	<b>25</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>277</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>



# Skelmersdale - Manual Traffic Survey, Friday 2nd November 2018

Junction: (4) Westgate / Railway Road

Approach: Westgate

TIME	Left to Railway Road (East)								Right to Railway Road (West)								U-Turn							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0730 - 0745	0	0	5	1	0	0	1	7	0	0	9	5	1	0	0	15	0	0	0	0	0	0	0	0
0745 - 0800	0	0	9	3	0	0	1	13	0	0	14	3	0	0	0	17	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>23</b>	<b>8</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>32</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
0800 - 0815	0	0	12	2	0	0	1	15	0	0	23	9	0	0	0	32	0	0	0	0	0	0	0	0
0815 - 0830	0	0	11	1	0	0	1	13	0	0	15	6	0	0	0	21	0	0	0	0	0	0	0	0
0830 - 0845	0	0	14	2	0	0	1	17	0	0	12	2	3	0	0	17	0	0	0	0	0	0	0	0
0845 - 0900	0	0	10	2	0	0	0	12	0	0	25	1	1	0	0	27	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>47</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>57</b>	<b>0</b>	<b>0</b>	<b>75</b>	<b>18</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>97</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
0900 - 0915	0	0	12	2	0	0	0	14	0	0	16	5	0	0	0	21	0	0	0	0	0	0	0	0
0915 - 0930	0	0	11	1	0	0	0	12	0	0	14	1	0	0	0	15	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>23</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>26</b>	<b>0</b>	<b>0</b>	<b>30</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>36</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Session Total</b>	<b>0</b>	<b>0</b>	<b>84</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>103</b>	<b>0</b>	<b>0</b>	<b>128</b>	<b>32</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>165</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
1500 - 1515	0	0	20	5	0	0	1	26	0	0	29	3	1	0	0	33	0	0	0	0	0	0	0	0
1515 - 1530	0	0	24	5	0	0	1	30	0	0	15	2	0	0	0	17	0	0	0	0	0	0	0	0
1530 - 1545	0	0	17	1	0	0	1	19	0	0	22	5	1	0	1	29	0	0	0	0	0	0	0	0
1545 - 1600	0	0	14	1	0	0	1	16	0	0	19	4	0	0	0	23	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>75</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>91</b>	<b>0</b>	<b>0</b>	<b>85</b>	<b>14</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>102</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
1600 - 1615	0	0	19	4	1	0	0	24	0	0	20	5	0	0	0	25	0	0	0	0	1	0	0	1
1615 - 1630	0	0	18	5	0	0	2	25	0	0	17	3	0	0	0	20	0	0	0	0	0	0	0	0
1630 - 1645	0	0	20	1	0	0	0	21	0	0	21	3	0	0	0	24	0	0	0	0	0	0	0	0
1645 - 1700	0	0	21	1	0	0	1	23	0	0	23	4	0	0	1	28	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>78</b>	<b>11</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>93</b>	<b>0</b>	<b>0</b>	<b>81</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>97</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
1700 - 1715	1	0	21	2	0	0	2	26	0	0	22	4	0	0	0	26	0	0	0	0	0	0	0	0
1715 - 1730	0	0	10	0	0	0	0	10	0	0	24	3	0	0	0	27	0	0	0	0	0	0	0	0
1730 - 1745	0	0	23	2	0	0	0	25	0	0	22	1	0	0	0	23	0	0	1	0	0	0	0	1
1745 - 1800	0	0	24	1	0	0	2	27	0	0	22	1	0	0	0	23	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>1</b>	<b>0</b>	<b>78</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>88</b>	<b>0</b>	<b>0</b>	<b>90</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>99</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
1800 - 1815	0	0	19	2	0	0	1	22	0	0	18	0	0	0	0	18	0	0	0	0	0	0	0	0
1815 - 1830	0	0	8	1	0	0	1	10	0	0	13	3	0	0	0	16	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>27</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>32</b>	<b>0</b>	<b>0</b>	<b>31</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>34</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Session Total</b>	<b>1</b>	<b>0</b>	<b>258</b>	<b>31</b>	<b>1</b>	<b>0</b>	<b>13</b>	<b>304</b>	<b>0</b>	<b>0</b>	<b>287</b>	<b>41</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>332</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>



# Skelmersdale - Manual Traffic Survey, Friday 2nd November 2018

Junction: (4) Westgate / Railway Road

Approach: Railway Road (East)

TIME	Ahead to Railway Road (West)								Right to Westgate								U-Turn							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0730 - 0745	0	0	70	11	2	1	0	84	0	0	14	7	0	0	2	23	0	0	0	0	0	0	0	0
0745 - 0800	0	0	55	17	1	1	2	76	0	0	15	5	0	0	0	20	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>125</b>	<b>28</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>160</b>	<b>0</b>	<b>0</b>	<b>29</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>43</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
0800 - 0815	0	2	67	15	4	0	0	88	0	0	19	4	2	0	2	27	0	0	0	0	0	0	0	0
0815 - 0830	0	0	66	15	3	1	0	85	0	0	15	3	0	0	0	18	0	0	0	0	0	0	0	0
0830 - 0845	0	1	78	16	3	0	1	99	0	0	16	1	0	0	0	17	0	0	0	0	0	0	0	0
0845 - 0900	0	1	65	11	5	0	0	82	0	0	20	2	0	0	1	23	0	0	0	0	1	0	0	1
<b>Hourly Total</b>	<b>0</b>	<b>4</b>	<b>276</b>	<b>57</b>	<b>15</b>	<b>1</b>	<b>1</b>	<b>354</b>	<b>0</b>	<b>0</b>	<b>70</b>	<b>10</b>	<b>2</b>	<b>0</b>	<b>3</b>	<b>85</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
0900 - 0915	0	0	63	20	1	0	1	85	0	0	17	4	1	1	0	23	0	0	0	0	0	0	0	0
0915 - 0930	0	0	57	17	0	0	0	74	0	0	14	2	0	0	0	16	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>120</b>	<b>37</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>159</b>	<b>0</b>	<b>0</b>	<b>31</b>	<b>6</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>39</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Session Total</b>	<b>0</b>	<b>4</b>	<b>521</b>	<b>122</b>	<b>19</b>	<b>3</b>	<b>4</b>	<b>673</b>	<b>0</b>	<b>0</b>	<b>130</b>	<b>28</b>	<b>3</b>	<b>1</b>	<b>5</b>	<b>167</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
1500 - 1515	1	1	74	20	0	0	0	96	0	0	19	4	0	0	1	24	0	0	0	0	0	0	0	0
1515 - 1530	0	0	70	17	3	0	1	91	0	0	20	3	0	0	0	23	0	0	0	1	0	0	0	1
1530 - 1545	0	1	70	10	4	0	0	85	0	0	14	3	0	0	1	18	0	0	0	0	0	0	0	0
1545 - 1600	0	1	59	12	1	3	0	76	0	0	18	4	0	0	1	23	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>1</b>	<b>3</b>	<b>273</b>	<b>59</b>	<b>8</b>	<b>3</b>	<b>1</b>	<b>348</b>	<b>0</b>	<b>0</b>	<b>71</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>88</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
1600 - 1615	0	2	64	3	1	0	1	71	0	0	23	6	1	0	0	30	0	0	0	0	0	0	0	0
1615 - 1630	2	0	76	3	1	0	1	83	0	0	8	6	0	0	1	15	0	0	0	0	0	0	0	0
1630 - 1645	0	0	72	13	0	0	0	85	0	0	13	1	1	0	1	16	0	0	0	0	0	0	0	0
1645 - 1700	0	0	61	7	0	0	0	68	0	0	15	1	0	0	0	16	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>2</b>	<b>2</b>	<b>273</b>	<b>26</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>307</b>	<b>0</b>	<b>0</b>	<b>59</b>	<b>14</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>77</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
1700 - 1715	0	1	88	5	1	0	0	95	0	0	13	3	0	0	1	17	0	0	0	0	0	0	0	0
1715 - 1730	0	0	78	10	0	0	0	88	0	0	16	0	0	0	0	16	0	0	0	0	0	0	0	0
1730 - 1745	0	0	64	11	1	0	0	76	0	0	10	1	0	0	0	11	0	0	0	0	0	0	0	0
1745 - 1800	0	0	66	7	0	0	0	73	0	0	18	0	0	0	0	18	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>0</b>	<b>1</b>	<b>296</b>	<b>33</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>332</b>	<b>0</b>	<b>0</b>	<b>57</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>62</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
1800 - 1815	0	2	83	7	0	0	0	92	0	0	12	1	0	0	1	14	0	0	0	0	0	0	0	0
1815 - 1830	0	0	40	3	0	0	0	43	0	0	12	1	0	0	2	15	0	0	0	0	0	0	0	0
<b>Hourly Total</b>	<b>0</b>	<b>2</b>	<b>123</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>135</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>29</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Session Total</b>	<b>3</b>	<b>8</b>	<b>965</b>	<b>128</b>	<b>12</b>	<b>3</b>	<b>3</b>	<b>1122</b>	<b>0</b>	<b>0</b>	<b>211</b>	<b>34</b>	<b>2</b>	<b>0</b>	<b>9</b>	<b>256</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>



# Skelmersdale - Manual Traffic Survey, Friday 2nd November 2018

**Junction: (4) Westgate / Railway Road**

**Approach: Railway Road (West)**

TIME	Left to Westgate								Ahead to Railway Road (East)							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0730 - 0745	0	0	14	8	0	0	0	22	1	0	61	8	1	0	0	71
0745 - 0800	0	0	11	9	0	0	1	21	0	0	62	9	2	1	1	75
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>25</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>43</b>	<b>1</b>	<b>0</b>	<b>123</b>	<b>17</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>146</b>
0800 - 0815	0	0	7	3	0	0	0	10	0	0	66	11	3	0	1	81
0815 - 0830	0	0	14	2	0	0	0	16	0	0	54	5	1	1	0	61
0830 - 0845	0	0	21	4	0	0	0	25	0	0	61	6	2	0	0	69
0845 - 0900	0	0	30	4	1	0	0	35	0	1	76	6	2	1	2	88
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>72</b>	<b>13</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>86</b>	<b>0</b>	<b>1</b>	<b>257</b>	<b>28</b>	<b>8</b>	<b>2</b>	<b>3</b>	<b>299</b>
0900 - 0915	0	0	19	4	0	0	0	23	0	0	63	13	1	2	0	79
0915 - 0930	0	0	14	2	0	0	0	16	0	0	54	11	2	0	0	67
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>33</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>39</b>	<b>0</b>	<b>0</b>	<b>117</b>	<b>24</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>146</b>

<b>Session Total</b>	<b>0</b>	<b>0</b>	<b>130</b>	<b>36</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>168</b>	<b>1</b>	<b>1</b>	<b>497</b>	<b>69</b>	<b>14</b>	<b>5</b>	<b>4</b>	<b>591</b>
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1500 - 1515	0	0	21	3	0	0	0	24	0	0	68	10	2	1	0	81
1515 - 1530	1	1	25	5	2	0	1	35	0	1	55	10	1	0	0	67
1530 - 1545	0	0	23	2	0	0	0	25	0	1	90	13	2	1	0	107
1545 - 1600	0	0	19	0	0	0	0	19	0	0	68	13	0	2	0	83
<b>Hourly Total</b>	<b>1</b>	<b>1</b>	<b>88</b>	<b>10</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>103</b>	<b>0</b>	<b>2</b>	<b>281</b>	<b>46</b>	<b>5</b>	<b>4</b>	<b>0</b>	<b>338</b>
1600 - 1615	0	0	25	4	0	0	0	29	0	0	62	8	2	1	1	74
1615 - 1630	0	0	21	4	0	0	0	25	0	1	46	6	1	0	0	54
1630 - 1645	0	0	19	2	0	0	0	21	0	0	73	7	0	1	0	81
1645 - 1700	0	0	17	5	0	0	0	22	0	0	80	2	1	1	1	85
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>82</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>97</b>	<b>0</b>	<b>1</b>	<b>261</b>	<b>23</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>294</b>
1700 - 1715	0	0	21	2	0	0	0	23	0	0	79	5	3	0	1	88
1715 - 1730	0	0	23	5	0	0	0	28	0	0	80	5	0	0	0	85
1730 - 1745	1	0	31	5	0	0	0	37	0	1	71	7	0	0	1	80
1745 - 1800	0	1	24	1	0	0	0	26	0	0	50	3	0	1	0	54
<b>Hourly Total</b>	<b>1</b>	<b>1</b>	<b>99</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>114</b>	<b>0</b>	<b>1</b>	<b>280</b>	<b>20</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>307</b>
1800 - 1815	0	0	30	3	0	0	0	33	0	1	60	3	0	0	0	64
1815 - 1830	0	0	27	1	0	0	0	28	0	0	60	5	0	0	0	65
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>57</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>61</b>	<b>0</b>	<b>1</b>	<b>120</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>129</b>

<b>Session Total</b>	<b>2</b>	<b>2</b>	<b>326</b>	<b>42</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>375</b>	<b>0</b>	<b>5</b>	<b>942</b>	<b>97</b>	<b>12</b>	<b>8</b>	<b>4</b>	<b>1068</b>
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# Skelmersdale - Manual Traffic Survey, Saturday 3rd November 2018

Junction: (4) Westgate / Railway Road

Approach: Westgate

TIME	Left to Railway Road (East)								Right to Railway Road (West)							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
1000 - 1015	0	0	9	2	0	0	2	13	0	0	18	1	0	0	0	19
1015 - 1030	0	0	9	4	0	0	0	13	0	0	19	1	0	0	0	20
1030 - 1045	0	0	11	6	0	0	1	18	0	0	10	3	0	0	0	13
1045 - 1100	0	0	5	0	0	0	1	6	0	0	12	0	0	0	0	12
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>34</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>50</b>	<b>0</b>	<b>0</b>	<b>59</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>64</b>
1100 - 1115	0	0	8	5	0	0	1	14	0	0	20	4	0	0	0	24
1115 - 1130	0	0	16	2	0	0	1	19	0	0	19	3	0	0	0	22
1130 - 1145	0	0	20	2	0	0	1	23	0	0	17	5	0	0	0	22
1145 - 1200	0	0	19	4	0	0	1	24	0	0	16	1	1	0	0	18
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>63</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>80</b>	<b>0</b>	<b>0</b>	<b>72</b>	<b>13</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>86</b>
1200 - 1215	0	0	18	4	0	0	1	23	0	0	16	1	0	0	0	17
1215 - 1230	0	0	24	2	0	0	1	27	0	1	23	3	0	0	0	27
1230 - 1245	0	0	10	1	0	0	1	12	0	0	36	4	0	0	0	40
1245 - 1300	0	0	19	1	0	0	1	21	0	0	21	2	0	0	0	23
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>71</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>83</b>	<b>0</b>	<b>1</b>	<b>96</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>107</b>
1300 - 1315	0	0	18	1	0	0	1	20	0	1	14	1	0	0	0	16
1315 - 1330	0	0	15	2	0	0	1	18	0	0	32	1	0	0	0	33
1330 - 1345	0	0	13	1	0	0	1	15	0	1	26	1	0	0	0	28
1345 - 1400	0	0	11	1	0	0	1	13	0	0	19	1	0	0	0	20
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>57</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>66</b>	<b>0</b>	<b>2</b>	<b>91</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>97</b>
1400 - 1415	0	0	8	2	0	0	1	11	0	0	9	2	0	0	0	11
1415 - 1430	0	0	7	0	0	0	1	8	0	0	20	3	0	0	0	23
1430 - 1445	0	0	13	1	0	0	1	15	0	0	13	1	0	0	0	14
1445 - 1500	0	0	15	0	0	0	1	16	0	1	20	2	0	0	0	23
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>43</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>50</b>	<b>0</b>	<b>1</b>	<b>62</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>71</b>
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>268</b>	<b>41</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>329</b>	<b>0</b>	<b>4</b>	<b>380</b>	<b>40</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>425</b>



# Skelmersdale - Manual Traffic Survey, Saturday 3rd November 2018

**Junction: (4) Westgate / Railway Road**

**Approach: Railway Road (East)**

TIME	Ahead to Railway Road (West)								Right to Westgate							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
1000 - 1015	2	0	60	8	1	0	0	71	0	0	15	2	0	0	1	18
1015 - 1030	0	0	55	6	0	0	0	61	0	0	11	4	0	0	1	16
1030 - 1045	0	1	51	6	0	0	0	58	0	0	10	0	0	0	1	11
1045 - 1100	0	0	65	1	0	0	0	66	0	0	11	4	0	0	1	16
<b>Hourly Total</b>	<b>2</b>	<b>1</b>	<b>231</b>	<b>21</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>256</b>	<b>0</b>	<b>0</b>	<b>47</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>61</b>
1100 - 1115	1	0	48	10	0	0	0	59	0	0	13	4	0	0	1	18
1115 - 1130	0	0	63	4	0	0	0	67	0	0	23	1	0	0	1	25
1130 - 1145	0	0	65	7	0	1	0	73	0	0	19	2	0	0	1	22
1145 - 1200	0	1	68	3	0	0	0	72	0	0	13	3	0	0	1	17
<b>Hourly Total</b>	<b>1</b>	<b>1</b>	<b>244</b>	<b>24</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>271</b>	<b>0</b>	<b>0</b>	<b>68</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>82</b>
1200 - 1215	0	1	75	5	1	0	0	82	0	0	18	0	0	0	1	19
1215 - 1230	0	0	66	7	3	0	0	76	0	1	18	2	0	0	1	22
1230 - 1245	0	0	65	4	0	0	0	69	0	0	13	1	0	0	1	15
1245 - 1300	0	0	53	5	0	0	0	58	0	0	18	1	0	0	1	20
<b>Hourly Total</b>	<b>0</b>	<b>1</b>	<b>259</b>	<b>21</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>285</b>	<b>0</b>	<b>1</b>	<b>67</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>76</b>
1300 - 1315	0	0	55	5	1	0	0	61	0	0	20	0	0	0	1	21
1315 - 1330	0	0	56	6	0	0	0	62	0	0	19	1	0	0	1	21
1330 - 1345	0	0	64	5	1	0	0	70	0	0	11	2	0	0	1	14
1345 - 1400	0	2	46	1	0	2	0	51	0	0	12	0	0	0	1	13
<b>Hourly Total</b>	<b>0</b>	<b>2</b>	<b>221</b>	<b>17</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>244</b>	<b>0</b>	<b>0</b>	<b>62</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>69</b>
1400 - 1415	0	0	39	2	0	0	0	41	0	0	8	1	0	0	0	9
1415 - 1430	1	0	57	5	0	0	0	63	0	0	8	1	0	0	1	10
1430 - 1445	0	0	55	9	0	0	0	64	0	0	12	0	0	0	0	12
1445 - 1500	0	0	47	3	0	0	0	50	0	0	13	0	0	0	3	16
<b>Hourly Total</b>	<b>1</b>	<b>0</b>	<b>198</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>218</b>	<b>0</b>	<b>0</b>	<b>41</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>47</b>
<b>TOTAL</b>	<b>4</b>	<b>5</b>	<b>1153</b>	<b>102</b>	<b>7</b>	<b>3</b>	<b>0</b>	<b>1274</b>	<b>0</b>	<b>1</b>	<b>285</b>	<b>29</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>335</b>





# Skelmersdale - Manual Traffic Survey, Saturday 3rd November 2018

**Junction: (4) Westgate / Railway Road**

**Approach: Railway Road (West)**

TIME	Left to Westgate								Ahead to Railway Road (East)							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
1000 - 1015	0	0	24	3	0	0	0	27	0	1	50	9	1	0	0	61
1015 - 1030	0	0	20	2	0	0	0	22	0	0	52	8	0	1	0	61
1030 - 1045	0	0	20	2	0	0	0	22	0	0	48	1	1	0	0	50
1045 - 1100	0	0	16	1	0	0	0	17	1	0	46	6	1	0	0	54
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>80</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>88</b>	<b>1</b>	<b>1</b>	<b>196</b>	<b>24</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>226</b>
1100 - 1115	0	0	11	3	0	0	0	14	0	0	70	14	0	0	0	84
1115 - 1130	0	0	17	3	0	0	0	20	0	0	56	8	0	0	0	64
1130 - 1145	0	0	19	1	0	0	0	20	1	0	62	7	0	0	0	70
1145 - 1200	0	0	22	3	0	0	0	25	0	0	88	11	1	1	0	101
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>69</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>79</b>	<b>1</b>	<b>0</b>	<b>276</b>	<b>40</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>319</b>
1200 - 1215	0	0	24	3	0	0	0	27	0	2	70	7	0	0	0	79
1215 - 1230	0	0	27	4	0	0	0	31	0	0	75	3	0	0	0	78
1230 - 1245	0	0	34	2	1	0	0	37	0	0	74	9	2	0	0	85
1245 - 1300	0	0	20	1	0	0	0	21	0	0	82	5	0	0	0	87
<b>Hourly Total</b>	<b>0</b>	<b>0</b>	<b>105</b>	<b>10</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>116</b>	<b>0</b>	<b>2</b>	<b>301</b>	<b>24</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>329</b>
1300 - 1315	0	0	25	0	0	0	0	25	1	0	52	3	0	0	0	56
1315 - 1330	0	1	13	0	0	0	0	14	0	0	57	7	0	0	0	64
1330 - 1345	0	0	10	3	0	0	0	13	0	0	59	3	0	0	0	62
1345 - 1400	0	0	20	4	0	0	0	24	0	1	73	2	0	0	0	76
<b>Hourly Total</b>	<b>0</b>	<b>1</b>	<b>68</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>76</b>	<b>1</b>	<b>1</b>	<b>241</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>258</b>
1400 - 1415	0	1	14	3	0	0	0	18	0	0	48	4	0	1	0	53
1415 - 1430	0	0	16	1	0	0	0	17	0	0	47	3	0	0	0	50
1430 - 1445	0	0	20	3	0	0	0	23	0	0	52	5	0	0	0	57
1445 - 1500	0	1	30	2	0	0	0	33	0	0	67	1	0	0	0	68
<b>Hourly Total</b>	<b>0</b>	<b>2</b>	<b>80</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>91</b>	<b>0</b>	<b>0</b>	<b>214</b>	<b>13</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>228</b>
<b>TOTAL</b>	<b>0</b>	<b>3</b>	<b>402</b>	<b>44</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>450</b>	<b>3</b>	<b>4</b>	<b>1228</b>	<b>116</b>	<b>6</b>	<b>3</b>	<b>0</b>	<b>1360</b>



## **APPENDIX E**

### **OFFICE TRICS DATA**

Land Use : 02 - EMPLOYMENT  
Category : A - OFFICE  
VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	KC KENT	1 days
	SC SURREY	1 days
06	WEST MIDLANDS	
	WM WEST MIDLANDS	2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	WY WEST YORKSHIRE	2 days
08	NORTH WEST	
	LC LANCASHIRE	1 days
09	NORTH	
	DH DURHAM	1 days
	TW TYNE & WEAR	2 days
11	SCOTLAND	
	HI HIGHLAND	2 days

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

Secondary 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: 804 to 2725 (units: sqm)  
Range Selected by User: 500 to 3000 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/05 to 11/09/17

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

Selected survey days:

Monday	1 days
Tuesday	8 days
Wednesday	2 days
Thursday	1 days

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

Selected survey types:

Manual count	12 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)	6
Edge of Town	6

*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	2
Development Zone	1
Residential Zone	4
Built-Up Zone	1
No Sub Category	1

*This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.*

Secondary Filtering selection:

Use Class:

B1 12 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:

1,001 to 5,000	3 days
5,001 to 10,000	2 days
10,001 to 15,000	2 days
15,001 to 20,000	2 days
25,001 to 50,000	3 days

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

Population within 5 miles:

5,001 to 25,000	1 days
75,001 to 100,000	2 days
100,001 to 125,000	1 days
125,001 to 250,000	3 days
250,001 to 500,000	3 days
500,001 or More	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	7 days
1.1 to 1.5	5 days

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

Travel Plan:

Yes	2 days
No	10 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	12 days
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*This data displays the number of selected surveys with PTAL Ratings.*

LIST OF SITES relevant to selection parameters

1	DH-02-A-02 DURHAM ROAD NEAR DURHAM BOWBURN Edge of Town Industrial Zone Total Gross floor area: <i>Survey date: TUESDAY</i>	CONSTRUCTION COMPANY      2000 sqm 27/11/12	DURHAM	<i>Survey Type: MANUAL</i>
2	HI -02-A-01 HIGHLANDER WAY INVERNESS  Edge of Town Development Zone Total Gross floor area: <i>Survey date: WEDNESDAY</i>	OFFICE     804 sqm 20/05/09	HIGHLAND	<i>Survey Type: MANUAL</i>
3	HI -02-A-02 TOM SEMPLE ROAD NAIRN BALMAKEITH BUSINESS PK Edge of Town Industrial Zone Total Gross floor area: <i>Survey date: TUESDAY</i>	DATA SCIENCE COMPANY     929 sqm 09/05/06	HIGHLAND	<i>Survey Type: MANUAL</i>
4	KC-02-A-07 KAVELIN WAY ASHFORD HENWOOD IND. ESTATE Edge of Town Commercial Zone Total Gross floor area: <i>Survey date: MONDAY</i>	KCC HIGHWAYS REG.     2525 sqm 05/12/11	KENT	<i>Survey Type: MANUAL</i>
5	LC-02-A-09 FURTHERGATE BLACKBURN  Suburban Area (PPS6 Out of Centre) Built-Up Zone Total Gross floor area: <i>Survey date: TUESDAY</i>	OFFICES     2600 sqm 04/06/13	LANCASHIRE	<i>Survey Type: MANUAL</i>
6	SC-02-A-15 BOXGROVE ROAD GUILDFORD  Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area: <i>Survey date: TUESDAY</i>	ACCOUNTANTS     1896 sqm 05/10/10	SURREY	<i>Survey Type: MANUAL</i>
7	TW-02-A-04 EARLSWAY GATESHEAD TEAM VALLEY TRAD. EST. Edge of Town Industrial Zone Total Gross floor area: <i>Survey date: TUESDAY</i>	HOUSING CO.     2500 sqm 29/09/09	TYNE & WEAR	<i>Survey Type: MANUAL</i>
8	TW-02-A-05 DELTA BANK ROAD GATESHEAD METRO RIVERSIDE PARK Suburban Area (PPS6 Out of Centre) Commercial Zone Total Gross floor area: <i>Survey date: TUESDAY</i>	TELEVISION CO.     1500 sqm 29/09/09	TYNE & WEAR	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

9	WM-02-A-01	COUNCIL OFFICES		WEST MIDLANDS
	A451 NORTON ROAD			
	STOURBRIDGE			
	MARY STEVENS PARK			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Gross floor area:	2725 sqm		
	Survey date: WEDNESDAY	26/04/06		Survey Type: MANUAL
10	WM-02-A-04	OFFICE		WEST MIDLANDS
	BOURNVILLE LANE			
	BIRMINGHAM			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Gross floor area:	1800 sqm		
	Survey date: TUESDAY	10/11/15		Survey Type: MANUAL
11	WY-02-A-03	OFFICE		WEST YORKSHIRE
	VICTORIA ROAD			
	LEEDS			
	HEADINGLEY			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Gross floor area:	2696 sqm		
	Survey date: THURSDAY	17/06/10		Survey Type: MANUAL
12	WY-02-A-05	OFFICES		WEST YORKSHIRE
	PIONEER WAY			
	CASTLEFORD			
	WHITWOOD			
	Edge of Town			
	No Sub Category			
	Total Gross floor area:	1230 sqm		
	Survey date: TUESDAY	23/05/17		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/A - OFFICE 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									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	12	1934	0.289	12	1934	0.056	12	1934	0.345
07:30 - 08:00	12	1934	0.560	12	1934	0.095	12	1934	0.655
08:00 - 08:30	12	1934	1.194	12	1934	0.159	12	1934	1.353
08:30 - 09:00	12	1934	1.405	12	1934	0.168	12	1934	1.573
09:00 - 09:30	12	1934	0.888	12	1934	0.241	12	1934	1.129
09:30 - 10:00	12	1934	0.556	12	1934	0.259	12	1934	0.815
10:00 - 10:30	12	1934	0.362	12	1934	0.271	12	1934	0.633
10:30 - 11:00	12	1934	0.246	12	1934	0.211	12	1934	0.457
11:00 - 11:30	12	1934	0.233	12	1934	0.228	12	1934	0.461
11:30 - 12:00	12	1934	0.233	12	1934	0.254	12	1934	0.487
12:00 - 12:30	12	1934	0.297	12	1934	0.414	12	1934	0.711
12:30 - 13:00	12	1934	0.470	12	1934	0.487	12	1934	0.957
13:00 - 13:30	12	1934	0.526	12	1934	0.358	12	1934	0.884
13:30 - 14:00	12	1934	0.465	12	1934	0.323	12	1934	0.788
14:00 - 14:30	12	1934	0.332	12	1934	0.280	12	1934	0.612
14:30 - 15:00	12	1934	0.215	12	1934	0.332	12	1934	0.547
15:00 - 15:30	12	1934	0.250	12	1934	0.306	12	1934	0.556
15:30 - 16:00	12	1934	0.159	12	1934	0.336	12	1934	0.495
16:00 - 16:30	12	1934	0.228	12	1934	0.707	12	1934	0.935
16:30 - 17:00	12	1934	0.203	12	1934	1.103	12	1934	1.306
17:00 - 17:30	12	1934	0.125	12	1934	1.457	12	1934	1.582
17:30 - 18:00	12	1934	0.090	12	1934	0.862	12	1934	0.952
18:00 - 18:30	11	1998	0.046	11	1998	0.355	11	1998	0.401
18:30 - 19:00	11	1998	0.014	11	1998	0.278	11	1998	0.292
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
<b>Total Rates:</b>			9.386			9.540			18.926

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:	804 - 2725 (units: sqm)
Survey date date range:	01/01/05 - 11/09/17
Number of weekdays (Monday-Friday):	12
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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





## **APPENDIX F**

### **ALDI TODMORDEN ROAD BURNLEY TRAFFIC DATA**

# Vehicles In and Out by Hour by Day

ALDI Todmorden Road, Burnley

Week Commencing 04/06/2018

## Vehicles In

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
00:00	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0
05:00	3	3	2	3	5	6	0
06:00	3	2	2	3	3	4	2
07:00	6	7	10	12	10	11	2
08:00	40	58	54	77	82	82	0
09:00	74	87	86	88	106	113	24
10:00	112	111	92	112	125	132	164
11:00	138	105	107	103	139	147	190
12:00	135	114	100	127	139	151	187
13:00	141	104	106	122	139	167	174
14:00	152	122	95	129	149	175	208
15:00	138	142	153	123	154	168	146
16:00	143	147	120	147	154	159	10
17:00	156	150	137	162	162	92	3
18:00	108	112	125	133	119	108	1
19:00	68	65	76	72	77	68	3
20:00	42	52	52	51	45	47	1
21:00	14	22	25	15	34	17	0
22:00	1	1	0	2	3	2	0
23:00	0	0	0	0	0	0	0
	1474	1404	1342	1481	1645	1649	1115

## Vehicles Out

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
00:00	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0
05:00	0	1	0	0	0	0	0
06:00	2	1	2	2	2	2	1
07:00	2	3	6	5	7	3	0
08:00	35	42	42	53	56	59	1
09:00	53	73	67	86	86	101	1
10:00	99	103	94	105	121	135	119
11:00	116	114	98	111	128	124	185
12:00	148	112	106	120	158	160	185
13:00	151	100	102	115	133	158	184
14:00	136	114	99	132	149	177	194
15:00	137	137	137	120	145	170	196
16:00	163	152	126	154	170	173	38
17:00	152	150	146	160	158	122	3
18:00	124	129	133	142	137	106	4
19:00	79	86	95	87	96	75	3
20:00	53	53	53	60	54	58	1
21:00	18	31	35	27	40	23	0
22:00	6	3	1	2	5	3	0
23:00	0	0	0	0	0	0	0
	1474	1404	1342	1481	1645	1649	1115



**APPENDIX G**

**NON-FOOD RETAIL TRICS DATA**

Land Use : 01 - RETAIL  
Category : K - RETAIL PARK - EXCLUDING FOOD  
VEHICLES

Selected regions and areas:

03	SOUTH WEST	
	GS	GLOUCESTERSHIRE
		1 days
08	NORTH WEST	
	GM	GREATER MANCHESTER
		1 days

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

Secondary 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: 7350 to 8687 (units: sqm)  
Range Selected by User: 2575 to 110000 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/05 to 15/07/17

*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:

Thursday 2 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:

Retail Zone 1  
No Sub Category 1

*This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.*

Secondary Filtering selection:

Use Class:

A1 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®.*

Secondary Filtering selection (Cont.):

Population within 1 mile:

10,001 to 15,000	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:

25,001 to 50,000	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	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.*

Petrol filling station:

Included in the survey count	0 days
Excluded from count or no filling station	2 days

*This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.*

Travel Plan:

No	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	2 days
-----------------	--------

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

LIST OF SITES relevant to selection parameters

1	GM-01-K-14	RETAIL PARK		GREATER MANCHESTER
	SNIPE WAY			
	ASHTON-UNDER-LYNE			
	Edge of Town			
	Retail Zone			
	Total Gross floor area:		7350 sqm	
	<i>Survey date: THURSDAY</i>		<i>22/10/15</i>	<i>Survey Type: MANUAL</i>
2	GS-01-K-02	RETAIL PARK		GLOUCESTERSHIRE
	EASTERN AVENUE			
	BARNWOOD			
	GLOUCESTER			
	Suburban Area (PPS6 Out of Centre)			
	No Sub Category			
	Total Gross floor area:		8687 sqm	
	<i>Survey date: THURSDAY</i>		<i>28/11/13</i>	<i>Survey Type: MANUAL</i>

*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 01 - RETAIL/K - RETAIL PARK - EXCLUDING FOOD 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									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	8019	0.087	2	8019	0.031	2	8019	0.118
08:00 - 09:00	2	8019	0.206	2	8019	0.037	2	8019	0.243
09:00 - 10:00	2	8019	0.910	2	8019	0.630	2	8019	1.540
10:00 - 11:00	2	8019	1.135	2	8019	0.960	2	8019	2.095
11:00 - 12:00	2	8019	1.197	2	8019	1.110	2	8019	2.307
12:00 - 13:00	2	8019	1.422	2	8019	1.272	2	8019	2.694
13:00 - 14:00	2	8019	1.303	2	8019	1.366	2	8019	2.669
14:00 - 15:00	2	8019	1.253	2	8019	1.366	2	8019	2.619
15:00 - 16:00	2	8019	1.422	2	8019	1.459	2	8019	2.881
16:00 - 17:00	2	8019	1.260	2	8019	1.453	2	8019	2.713
17:00 - 18:00	2	8019	0.960	2	8019	0.910	2	8019	1.870
18:00 - 19:00	2	8019	0.823	2	8019	0.954	2	8019	1.777
19:00 - 20:00	2	8019	0.667	2	8019	0.867	2	8019	1.534
20:00 - 21:00	2	8019	0.056	2	8019	0.256	2	8019	0.312
21:00 - 22:00	1	8687	0.000	1	8687	0.000	1	8687	0.000
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			12.701			12.671			25.372

*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:	7350 - 8687 (units: sqm)
Survey date date range:	01/01/05 - 15/07/17
Number of weekdays (Monday-Friday):	2
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

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



## TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL  
 Category : K - RETAIL PARK - EXCLUDING FOOD  
 VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	EX ESSEX	1 days
03	SOUTH WEST	
	DV DEVON	1 days
06	WEST MIDLANDS	
	WM WEST MIDLANDS	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NE NORTH EAST LINCOLNSHIRE	1 days
	NY NORTH YORKSHIRE	1 days
	WY WEST YORKSHIRE	1 days
08	NORTH WEST	
	GM GREATER MANCHESTER	1 days
	LC LANCASHIRE	1 days
09	NORTH	
	CB CUMBRIA	1 days
	TW TYNE & WEAR	1 days
10	WALES	
	CE CEREDIGION	1 days

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

## Secondary 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: 2800 to 110000 (units: sqm)  
 Range Selected by User: 2575 to 110000 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/09 to 15/07/17

*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:

Saturday 11 days

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

Selected survey types:

Manual count 11 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) 5  
 Edge of Town 5  
 Neighbourhood Centre (PPS6 Local Centre) 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:

Industrial Zone 3  
 Commercial Zone 1  
 Residential Zone 2  
 Built-Up Zone 3  
 No Sub Category 2

*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:

A1 11 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:

1,001 to 5,000	1 days
10,001 to 15,000	2 days
15,001 to 20,000	4 days
20,001 to 25,000	1 days
25,001 to 50,000	3 days

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

Population within 5 miles:

5,000 or Less	1 days
25,001 to 50,000	1 days
50,001 to 75,000	1 days
125,001 to 250,000	5 days
250,001 to 500,000	2 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	4 days
1.1 to 1.5	6 days
1.6 to 2.0	1 days

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

Petrol filling station:

Included in the survey count	0 days
Excluded from count or no filling station	11 days

*This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.*

Travel Plan:

No 11 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 11 days

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

LIST OF SITES relevant to selection parameters

1	CB-01-K-01 PARKHOUSE ROAD KINGSTOWN CARLISLE Edge of Town Industrial Zone Total Gross floor area: <i>Survey date: SATURDAY</i>	9225 sqm 06/02/10	CUMBRIA	<i>Survey Type: MANUAL</i>
2	CE-01-K-01 FFORDD PARC Y LLYN  ABERYSTWYTH Edge of Town No Sub Category Total Gross floor area: <i>Survey date: SATURDAY</i>	9570 sqm 09/05/15	CEREDIGION	<i>Survey Type: MANUAL</i>
3	DV-01-K-01 AVOCET ROAD SOWTON IND. ESTATE EXETER Edge of Town Industrial Zone Total Gross floor area: <i>Survey date: SATURDAY</i>	2809 sqm 15/07/17	DEVON	<i>Survey Type: MANUAL</i>
4	EX-01-K-02 CHELMER ROAD CHELMER VILLAGE CHELMSFORD Edge of Town Residential Zone Total Gross floor area: <i>Survey date: SATURDAY</i>	16150 sqm 19/10/13	ESSEX	<i>Survey Type: MANUAL</i>
5	GM-01-K-15 CHEETHAM HILL ROAD SMEDLEY MANCHESTER Suburban Area (PPS6 Out of Centre) Industrial Zone Total Gross floor area: <i>Survey date: SATURDAY</i>	110000 sqm 24/09/16	GREATER MANCHESTER	<i>Survey Type: MANUAL</i>
6	LC-01-K-05 MARINER'S WAY  PRESTON Suburban Area (PPS6 Out of Centre) Commercial Zone Total Gross floor area: <i>Survey date: SATURDAY</i>	3500 sqm 08/10/11	LANCASHIRE	<i>Survey Type: MANUAL</i>
7	NE-01-K-01 VICTORIA STREET NORTH  GRIMSBY Suburban Area (PPS6 Out of Centre) Built-Up Zone Total Gross floor area: <i>Survey date: SATURDAY</i>	4243 sqm 07/06/14	NORTH EAST LINCOLNSHIRE	<i>Survey Type: MANUAL</i>
8	NY-01-K-03 SEAMER ROAD  SCARBOROUGH Edge of Town No Sub Category Total Gross floor area: <i>Survey date: SATURDAY</i>	2800 sqm 19/09/09	NORTH YORKSHIRE	<i>Survey Type: MANUAL</i>
9	TW-01-K-02 MIDDLE ENGINE LANE WILLINGTON WALLSEND Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area: <i>Survey date: SATURDAY</i>	4500 sqm 14/11/15	TYNE & WEAR	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

10	WM-01-K-05	RETAIL PARK	WEST MIDLANDS
	HARBORNE LANE		
	SELLY OAK		
	BIRMINGHAM		
	Neighbourhood Centre (PPS6 Local Centre)		
	Built-Up Zone		
	Total Gross floor area:	11599 sqm	
	Survey date: SATURDAY	10/11/12	Survey Type: MANUAL
11	WY-01-K-02	RETAIL PARK	WEST YORKSHIRE
	LEEDS ROAD		
	HUDDERSFIELD		
	Suburban Area (PPS6 Out of Centre)		
	Built-Up Zone		
	Total Gross floor area:	53814 sqm	
	Survey date: SATURDAY	24/09/16	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 01 - RETAIL/K - RETAIL PARK - EXCLUDING FOOD 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									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	16010	0.124	6	16010	0.056	6	16010	0.180
08:00 - 09:00	11	20746	0.333	11	20746	0.174	11	20746	0.507
09:00 - 10:00	11	20746	0.834	11	20746	0.545	11	20746	1.379
10:00 - 11:00	11	20746	1.352	11	20746	1.008	11	20746	2.360
11:00 - 12:00	11	20746	1.606	11	20746	1.407	11	20746	3.013
12:00 - 13:00	11	20746	1.657	11	20746	1.531	11	20746	3.188
13:00 - 14:00	11	20746	1.649	11	20746	1.614	11	20746	3.263
14:00 - 15:00	11	20746	1.689	11	20746	1.594	11	20746	3.283
15:00 - 16:00	11	20746	1.536	11	20746	1.638	11	20746	3.174
16:00 - 17:00	11	20746	1.244	11	20746	1.534	11	20746	2.778
17:00 - 18:00	11	20746	0.921	11	20746	1.303	11	20746	2.224
18:00 - 19:00	11	20746	0.416	11	20746	0.787	11	20746	1.203
19:00 - 20:00	6	9091	0.165	6	9091	0.370	6	9091	0.535
20:00 - 21:00	3	7765	0.043	3	7765	0.069	3	7765	0.112
21:00 - 22:00	2	7035	0.085	2	7035	0.078	2	7035	0.163
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			13.654			13.708			27.362

*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:	2800 - 110000 (units: sqm)
Survey date date range:	01/01/09 - 15/07/17
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	11
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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



## **APPENDIX H**

### **HIGH STREET/ SITE ACCESS – MODEL OUTPUTS**





B	One lane plus flare				10.00	4.40	3.50	3.50	3.50	✓	1.00	35	38
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## Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	525.870	0.087	0.221	0.139	0.316
1	B-C	701.738	0.098	0.248	-	-
1	C-B	631.874	0.224	0.224	-	-

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 Flows

### Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

## Entry Flows

### General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	180.29	100.000
B	ONE HOUR	✓	19.27	100.000
C	ONE HOUR	✓	115.43	100.000

## Turning Proportions

### Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	17.253	163.037
	B	7.570	0.000	11.704
	C	104.273	11.159	0.000

### Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From				

		To		
		A	B	C
From	A	0.00	0.10	0.90
	B	0.39	0.00	0.61
	C	0.90	0.10	0.00

## Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

### Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	5.63	0.02	A
B-A	0.02	7.89	0.02	A
C-AB	0.02	5.59	0.03	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

### Main Results for each time segment

#### Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	8.81	8.76	0.00	668.01	0.013	0.01	5.460	A
B-A	5.70	5.65	0.00	484.01	0.012	0.01	7.525	A
C-AB	9.53	9.46	0.00	653.69	0.015	0.02	5.588	A
C-A	77.38	77.38	0.00	-	-	-	-	-
A-B	12.99	12.99	0.00	-	-	-	-	-
A-C	122.74	122.74	0.00	-	-	-	-	-

#### Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	10.52	10.51	0.00	661.36	0.016	0.02	5.530	A
B-A	6.80	6.79	0.00	475.92	0.014	0.01	7.673	A

C-AB	11.67	11.66	0.00	658.19	0.018	0.02	5.567	A
C-A	92.10	92.10	0.00	-	-	-	-	-
A-B	15.51	15.51	0.00	-	-	-	-	-
A-C	146.57	146.57	0.00	-	-	-	-	-

### Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	12.89	12.87	0.00	652.27	0.020	0.02	5.629	A
B-A	8.33	8.32	0.00	464.68	0.018	0.02	7.888	A
C-AB	14.80	14.77	0.00	664.53	0.022	0.03	5.540	A
C-A	112.29	112.29	0.00	-	-	-	-	-
A-B	19.00	19.00	0.00	-	-	-	-	-
A-C	179.51	179.51	0.00	-	-	-	-	-

### Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	12.89	12.89	0.00	652.25	0.020	0.02	5.630	A
B-A	8.33	8.33	0.00	464.68	0.018	0.02	7.888	A
C-AB	14.80	14.80	0.00	664.54	0.022	0.03	5.540	A
C-A	112.29	112.29	0.00	-	-	-	-	-
A-B	19.00	19.00	0.00	-	-	-	-	-
A-C	179.51	179.51	0.00	-	-	-	-	-

### Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	10.52	10.54	0.00	661.32	0.016	0.02	5.531	A
B-A	6.80	6.82	0.00	475.93	0.014	0.01	7.676	A
C-AB	11.68	11.70	0.00	658.20	0.018	0.02	5.570	A
C-A	92.09	92.09	0.00	-	-	-	-	-
A-B	15.51	15.51	0.00	-	-	-	-	-
A-C	146.57	146.57	0.00	-	-	-	-	-

### Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	8.81	8.82	0.00	667.89	0.013	0.01	5.461	A
B-A	5.70	5.71	0.00	484.06	0.012	0.01	7.528	A
C-AB	9.54	9.55	0.00	653.70	0.015	0.02	5.588	A
C-A	77.37	77.37	0.00	-	-	-	-	-
A-B	12.99	12.99	0.00	-	-	-	-	-
A-C	122.74	122.74	0.00	-	-	-	-	-

## (Default Analysis Set) - 2023 Base plus Development, PM

### Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor Arm Geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

### Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

### Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 Base plus Development, PM	2023 Base plus Development	PM		ONE HOUR	14:45	16:15	90	15		

## Junction Network

### Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	Two-way	A,B,C	6.50	A

### Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

## Arms

### Arms

Arm	Name	Description	Arm Type
A	High Street (e)		Major
B	Site Access		Minor
C	High Street (w)		Major

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.99		0.00		2.20	100.00	✓	0.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	4.40	3.50	3.50	3.50	✓	1.00	35	38

### Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

### Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	538.447	0.090	0.226	0.142	0.323
1	B-C	685.686	0.096	0.243	-	-
1	C-B	631.874	0.224	0.224	-	-

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 Flows

### Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

## Entry Flows

### General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	186.42	100.000
B	ONE HOUR	✓	53.65	100.000
C	ONE HOUR	✓	192.43	100.000

## Turning Proportions

### Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	28.107	158.314
	B	27.110	0.000	26.541
	C	163.717	28.709	0.000

### Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.15	0.85
	B	0.51	0.00	0.49
	C	0.85	0.15	0.00

## Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

### Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.05	5.99	0.05	A
B-A	0.06	8.36	0.07	A
C-AB	0.06	5.49	0.09	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

### Main Results for each time segment

#### Main results: (14:45-15:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	19.98	19.85	0.00	647.80	0.031	0.03	5.731	A
B-A	20.41	20.24	0.00	485.00	0.042	0.04	7.744	A
C-AB	26.24	26.03	0.00	682.27	0.038	0.05	5.484	A
C-A	118.63	118.63	0.00	-	-	-	-	-
A-B	21.16	21.16	0.00	-	-	-	-	-
A-C	119.19	119.19	0.00	-	-	-	-	-

#### Main results: (15:00-15:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	23.86	23.83	0.00	640.19	0.037	0.04	5.840	A
B-A	24.37	24.33	0.00	474.59	0.051	0.05	7.995	A
C-AB	32.57	32.50	0.00	692.39	0.047	0.07	5.455	A
C-A	140.42	140.42	0.00	-	-	-	-	-
A-B	25.27	25.27	0.00	-	-	-	-	-
A-C	142.32	142.32	0.00	-	-	-	-	-

#### Main results: (15:15-15:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	29.22	29.18	0.00	629.72	0.046	0.05	5.994	A
B-A	29.85	29.79	0.00	460.21	0.065	0.07	8.363	A
C-AB	42.00	41.90	0.00	706.49	0.059	0.09	5.419	A
C-A	169.87	169.87	0.00	-	-	-	-	-

A-B	30.95	30.95	0.00	-	-	-	-	-
A-C	174.31	174.31	0.00	-	-	-	-	-

### Main results: (15:30-15:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	29.22	29.22	0.00	629.68	0.046	0.05	5.994	A
B-A	29.85	29.85	0.00	460.20	0.065	0.07	8.364	A
C-AB	42.02	42.01	0.00	706.51	0.059	0.09	5.421	A
C-A	169.85	169.85	0.00	-	-	-	-	-
A-B	30.95	30.95	0.00	-	-	-	-	-
A-C	174.31	174.31	0.00	-	-	-	-	-

### Main results: (15:45-16:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	23.86	23.90	0.00	640.11	0.037	0.04	5.841	A
B-A	24.37	24.43	0.00	474.59	0.051	0.05	7.997	A
C-AB	32.59	32.68	0.00	692.43	0.047	0.07	5.458	A
C-A	140.39	140.39	0.00	-	-	-	-	-
A-B	25.27	25.27	0.00	-	-	-	-	-
A-C	142.32	142.32	0.00	-	-	-	-	-

### Main results: (16:00-16:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	19.98	20.01	0.00	647.62	0.031	0.03	5.737	A
B-A	20.41	20.45	0.00	484.99	0.042	0.04	7.751	A
C-AB	26.29	26.35	0.00	682.31	0.039	0.05	5.489	A
C-A	118.58	118.58	0.00	-	-	-	-	-
A-B	21.16	21.16	0.00	-	-	-	-	-
A-C	119.19	119.19	0.00	-	-	-	-	-

## (Default Analysis Set) - 2023 Base plus Development, Saturday

### Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor Arm Geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

### Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

### Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 Base plus Development, Saturday	2023 Base plus Development	Saturday		ONE HOUR	11:30	13:00	90	15		

# Junction Network

### Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	Two-way	A,B,C	6.49	A

### Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

# Arms

### Arms

Arm	Name	Description	Arm Type
A	High Street (e)		Major
B	Site Access		Minor
C	High Street (w)		Major

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.99		0.00		2.20	100.00	✓	0.00

*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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	4.40	3.50	3.50	3.50	✓	1.00	35	38

### Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	543.422	0.090	0.229	0.144	0.326
1	B-C	679.337	0.095	0.240	-	-
1	C-B	631.874	0.224	0.224	-	-

*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 Flows

## Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

## Entry Flows

### General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	136.93	100.000
B	ONE HOUR	✓	56.37	100.000
C	ONE HOUR	✓	173.14	100.000

## Turning Proportions

### Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	24.063	112.870
	B	30.993	0.000	25.376
	C	143.748	29.389	0.000

### Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.18	0.82
	B	0.55	0.00	0.45
	C	0.83	0.17	0.00

## Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

### Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

## Results

## Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.04	5.93	0.05	A
B-A	0.07	8.09	0.08	A
C-AB	0.06	5.51	0.09	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

### Main Results for each time segment

#### Main results: (11:30-11:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	19.10	18.98	0.00	649.45	0.029	0.03	5.710	A
B-A	23.33	23.14	0.00	499.57	0.047	0.05	7.552	A
C-AB	26.21	26.00	0.00	680.19	0.039	0.05	5.501	A
C-A	104.14	104.14	0.00	-	-	-	-	-
A-B	18.12	18.12	0.00	-	-	-	-	-
A-C	84.97	84.97	0.00	-	-	-	-	-

#### Main results: (11:45-12:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	22.81	22.79	0.00	643.39	0.035	0.04	5.800	A
B-A	27.86	27.82	0.00	491.02	0.057	0.06	7.770	A
C-AB	32.36	32.30	0.00	689.80	0.047	0.07	5.475	A
C-A	123.29	123.29	0.00	-	-	-	-	-
A-B	21.63	21.63	0.00	-	-	-	-	-
A-C	101.47	101.47	0.00	-	-	-	-	-

#### Main results: (12:00-12:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	27.94	27.90	0.00	635.06	0.044	0.05	5.928	A
B-A	34.12	34.06	0.00	479.21	0.071	0.08	8.086	A
C-AB	41.44	41.35	0.00	703.12	0.059	0.09	5.442	A
C-A	149.19	149.19	0.00	-	-	-	-	-
A-B	26.49	26.49	0.00	-	-	-	-	-
A-C	124.27	124.27	0.00	-	-	-	-	-

#### Main results: (12:15-12:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	27.94	27.94	0.00	635.02	0.044	0.05	5.929	A
B-A	34.12	34.12	0.00	479.21	0.071	0.08	8.088	A
C-AB	41.45	41.45	0.00	703.14	0.059	0.09	5.443	A
C-A	149.17	149.17	0.00	-	-	-	-	-
A-B	26.49	26.49	0.00	-	-	-	-	-
A-C	124.27	124.27	0.00	-	-	-	-	-

**Main results: (12:30-12:45)**

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	22.81	22.85	0.00	643.31	0.035	0.04	5.801	A
B-A	27.86	27.92	0.00	491.01	0.057	0.06	7.776	A
C-AB	32.38	32.46	0.00	689.82	0.047	0.07	5.479	A
C-A	123.27	123.27	0.00	-	-	-	-	-
A-B	21.63	21.63	0.00	-	-	-	-	-
A-C	101.47	101.47	0.00	-	-	-	-	-

**Main results: (12:45-13:00)**

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	19.10	19.13	0.00	649.28	0.029	0.03	5.712	A
B-A	23.33	23.38	0.00	499.55	0.047	0.05	7.562	A
C-AB	26.25	26.30	0.00	680.23	0.039	0.05	5.508	A
C-A	104.10	104.10	0.00	-	-	-	-	-
A-B	18.12	18.12	0.00	-	-	-	-	-
A-C	84.97	84.97	0.00	-	-	-	-	-



## **APPENDIX I**

### **WESTGATE/ SITE ACCESS – MODEL OUTPUTS**





B	One lane plus flare				10.00	3.83	3.50	3.50	3.50	✓	1.00	37	45
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## Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	614.201	0.105	0.266	0.168	0.380
1	B-C	708.766	0.102	0.259	-	-
1	C-B	639.982	0.234	0.234	-	-

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 Flows

### Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

## Entry Flows

### General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	170.30	100.000
B	ONE HOUR	✓	39.57	100.000
C	ONE HOUR	✓	229.12	100.000

## Turning Proportions

### Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	16.476	153.820
	B	13.681	0.000	25.886
	C	187.268	41.855	0.000

### Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From				

		To		
		A	B	C
From	A	0.00	0.10	0.90
	B	0.35	0.00	0.65
	C	0.82	0.18	0.00

## Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

### Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.04	5.72	0.05	A
B-A	0.03	7.20	0.03	A
C-AB	0.09	5.43	0.14	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

### Main Results for each time segment

#### Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	19.49	19.37	0.00	674.35	0.029	0.03	5.496	A
B-A	10.30	10.22	0.00	546.44	0.019	0.02	6.713	A
C-AB	39.14	38.82	0.00	702.72	0.056	0.08	5.422	A
C-A	133.36	133.36	0.00	-	-	-	-	-
A-B	12.40	12.40	0.00	-	-	-	-	-
A-C	115.80	115.80	0.00	-	-	-	-	-

#### Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	23.27	23.25	0.00	667.58	0.035	0.04	5.586	A
B-A	12.30	12.28	0.00	533.18	0.023	0.02	6.910	A

C-AB	48.78	48.69	0.00	715.22	0.068	0.10	5.401	A
C-A	157.20	157.20	0.00	-	-	-	-	-
A-B	14.81	14.81	0.00	-	-	-	-	-
A-C	138.28	138.28	0.00	-	-	-	-	-

### Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	28.50	28.47	0.00	658.21	0.043	0.04	5.716	A
B-A	15.06	15.04	0.00	514.95	0.029	0.03	7.200	A
C-AB	63.22	63.08	0.00	732.55	0.086	0.14	5.380	A
C-A	189.05	189.05	0.00	-	-	-	-	-
A-B	18.14	18.14	0.00	-	-	-	-	-
A-C	169.36	169.36	0.00	-	-	-	-	-

### Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	28.50	28.50	0.00	658.20	0.043	0.05	5.716	A
B-A	15.06	15.06	0.00	514.91	0.029	0.03	7.201	A
C-AB	63.25	63.25	0.00	732.58	0.086	0.14	5.380	A
C-A	189.02	189.02	0.00	-	-	-	-	-
A-B	18.14	18.14	0.00	-	-	-	-	-
A-C	169.36	169.36	0.00	-	-	-	-	-

### Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	23.27	23.31	0.00	667.57	0.035	0.04	5.589	A
B-A	12.30	12.32	0.00	533.11	0.023	0.02	6.912	A
C-AB	48.82	48.95	0.00	715.28	0.068	0.10	5.405	A
C-A	157.16	157.16	0.00	-	-	-	-	-
A-B	14.81	14.81	0.00	-	-	-	-	-
A-C	138.28	138.28	0.00	-	-	-	-	-

### Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	19.49	19.51	0.00	674.32	0.029	0.03	5.499	A
B-A	10.30	10.32	0.00	546.30	0.019	0.02	6.718	A
C-AB	39.22	39.31	0.00	702.78	0.056	0.08	5.429	A
C-A	133.28	133.28	0.00	-	-	-	-	-
A-B	12.40	12.40	0.00	-	-	-	-	-
A-C	115.80	115.80	0.00	-	-	-	-	-

## (Default Analysis Set) - 2023 Base plus Development, PM

### Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor Arm Geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

### Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

### Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 Base plus Development, PM	2023 Base plus Development	PM		ONE HOUR	14:45	16:15	90	15		

## Junction Network

### Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	Two-way	A,B,C	6.36	A

### Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

## Arms

### Arms

Arm	Name	Description	Arm Type
A	Westgate (n)		Major
B	Site Access		Minor
C	Westgate (s)		Major

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.34		0.00		2.20	114.00	✓	0.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	3.83	3.50	3.50	3.50	✓	1.00	37	45

### Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

### Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	614.201	0.105	0.266	0.168	0.380
1	B-C	708.766	0.102	0.259	-	-
1	C-B	639.982	0.234	0.234	-	-

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 Flows

### Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

## Entry Flows

### General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	198.85	100.000
B	ONE HOUR	✓	103.80	100.000
C	ONE HOUR	✓	289.92	100.000

## Turning Proportions

### Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	30.205	168.641
	B	35.914	0.000	67.884
	C	210.204	79.717	0.000

### Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.15	0.85
	B	0.35	0.00	0.65
	C	0.73	0.27	0.00

## Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

### Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.12	6.33	0.13	A
B-A	0.08	8.03	0.09	A
C-AB	0.17	5.84	0.29	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

### Main Results for each time segment

#### Main results: (14:45-15:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	51.11	50.78	0.00	664.87	0.077	0.08	5.860	A
B-A	27.04	26.82	0.00	528.43	0.051	0.05	7.173	A
C-AB	76.55	75.92	0.00	709.34	0.108	0.16	5.681	A
C-A	141.72	141.72	0.00	-	-	-	-	-
A-B	22.74	22.74	0.00	-	-	-	-	-
A-C	126.96	126.96	0.00	-	-	-	-	-

#### Main results: (15:00-15:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	61.03	60.95	0.00	655.96	0.093	0.10	6.050	A
B-A	32.29	32.23	0.00	511.44	0.063	0.07	7.512	A
C-AB	97.00	96.81	0.00	724.36	0.134	0.21	5.740	A
C-A	163.63	163.63	0.00	-	-	-	-	-
A-B	27.15	27.15	0.00	-	-	-	-	-
A-C	151.60	151.60	0.00	-	-	-	-	-

#### Main results: (15:15-15:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	74.74	74.63	0.00	643.48	0.116	0.13	6.326	A
B-A	39.54	39.46	0.00	488.07	0.081	0.09	8.025	A
C-AB	127.31	127.00	0.00	744.44	0.171	0.29	5.835	A
C-A	191.89	191.89	0.00	-	-	-	-	-

A-B	33.26	33.26	0.00	-	-	-	-	-
A-C	185.68	185.68	0.00	-	-	-	-	-

### Main results: (15:30-15:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	74.74	74.74	0.00	643.44	0.116	0.13	6.329	A
B-A	39.54	39.54	0.00	487.98	0.081	0.09	8.027	A
C-AB	127.40	127.39	0.00	744.53	0.171	0.29	5.838	A
C-A	191.81	191.81	0.00	-	-	-	-	-
A-B	33.26	33.26	0.00	-	-	-	-	-
A-C	185.68	185.68	0.00	-	-	-	-	-

### Main results: (15:45-16:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	61.03	61.14	0.00	655.91	0.093	0.10	6.053	A
B-A	32.29	32.36	0.00	511.29	0.063	0.07	7.517	A
C-AB	97.11	97.41	0.00	724.51	0.134	0.21	5.749	A
C-A	163.52	163.52	0.00	-	-	-	-	-
A-B	27.15	27.15	0.00	-	-	-	-	-
A-C	151.60	151.60	0.00	-	-	-	-	-

### Main results: (16:00-16:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	51.11	51.18	0.00	664.77	0.077	0.08	5.869	A
B-A	27.04	27.09	0.00	528.15	0.051	0.05	7.184	A
C-AB	76.72	76.92	0.00	709.49	0.108	0.16	5.697	A
C-A	141.55	141.55	0.00	-	-	-	-	-
A-B	22.74	22.74	0.00	-	-	-	-	-
A-C	126.96	126.96	0.00	-	-	-	-	-

## (Default Analysis Set) - 2023 Base plus Development, Saturday

### Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor Arm Geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

### Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

### Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 Base plus Development, Saturday	2023 Base plus Development	Saturday		ONE HOUR	11:30	13:00	90	15		

# Junction Network

### Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	Two-way	A,B,C	6.45	A

### Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

# Arms

### Arms

Arm	Name	Description	Arm Type
A	Westgate (n)		Major
B	Site Access		Minor
C	Westgate (s)		Major

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.34		0.00		2.20	114.00	✓	0.00

*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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	3.83	3.50	3.50	3.50	✓	1.00	37	45

### Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	614.201	0.105	0.266	0.168	0.380
1	B-C	708.766	0.102	0.259	-	-
1	C-B	639.982	0.234	0.234	-	-

*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 Flows

## Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

## Entry Flows

### General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	169.41	100.000
B	ONE HOUR	✓	117.07	100.000
C	ONE HOUR	✓	295.66	100.000

## Turning Proportions

### Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	30.163	139.243
	B	50.574	0.000	66.498
	C	214.814	80.849	0.000

### Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.18	0.82
	B	0.43	0.00	0.57
	C	0.73	0.27	0.00

## Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

### Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

## Results

## Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.11	6.29	0.13	A
B-A	0.11	8.19	0.13	A
C-AB	0.17	5.77	0.29	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

### Main Results for each time segment

#### Main results: (11:30-11:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	50.06	49.74	0.00	666.94	0.075	0.08	5.830	A
B-A	38.07	37.77	0.00	533.40	0.071	0.08	7.258	A
C-AB	77.87	77.23	0.00	716.31	0.109	0.16	5.631	A
C-A	144.72	144.72	0.00	-	-	-	-	-
A-B	22.71	22.71	0.00	-	-	-	-	-
A-C	104.83	104.83	0.00	-	-	-	-	-

#### Main results: (11:45-12:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	59.78	59.71	0.00	658.21	0.091	0.10	6.015	A
B-A	45.46	45.39	0.00	517.37	0.088	0.10	7.627	A
C-AB	98.73	98.53	0.00	732.64	0.135	0.21	5.680	A
C-A	167.06	167.06	0.00	-	-	-	-	-
A-B	27.12	27.12	0.00	-	-	-	-	-
A-C	125.18	125.18	0.00	-	-	-	-	-

#### Main results: (12:00-12:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	73.22	73.10	0.00	645.86	0.113	0.13	6.283	A
B-A	55.68	55.56	0.00	495.31	0.112	0.13	8.185	A
C-AB	129.59	129.27	0.00	754.41	0.172	0.29	5.763	A
C-A	195.94	195.94	0.00	-	-	-	-	-
A-B	33.21	33.21	0.00	-	-	-	-	-
A-C	153.31	153.31	0.00	-	-	-	-	-

#### Main results: (12:15-12:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	73.22	73.21	0.00	645.81	0.113	0.13	6.286	A
B-A	55.68	55.68	0.00	495.21	0.112	0.13	8.190	A
C-AB	129.67	129.67	0.00	754.50	0.172	0.29	5.766	A
C-A	195.86	195.86	0.00	-	-	-	-	-
A-B	33.21	33.21	0.00	-	-	-	-	-
A-C	153.31	153.31	0.00	-	-	-	-	-

**Main results: (12:30-12:45)**

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	59.78	59.89	0.00	658.14	0.091	0.10	6.020	A
B-A	45.46	45.58	0.00	517.21	0.088	0.10	7.636	A
C-AB	98.84	99.15	0.00	732.79	0.135	0.21	5.689	A
C-A	166.95	166.95	0.00	-	-	-	-	-
A-B	27.12	27.12	0.00	-	-	-	-	-
A-C	125.18	125.18	0.00	-	-	-	-	-

**Main results: (12:45-13:00)**

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	50.06	50.14	0.00	666.80	0.075	0.08	5.840	A
B-A	38.07	38.15	0.00	533.12	0.071	0.08	7.276	A
C-AB	78.05	78.25	0.00	716.46	0.109	0.16	5.646	A
C-A	144.54	144.54	0.00	-	-	-	-	-
A-B	22.71	22.71	0.00	-	-	-	-	-
A-C	104.83	104.83	0.00	-	-	-	-	-



## **APPENDIX J**

**HIGH STREET/ WESTGATE – MODEL OUTPUTS**

# Junctions 8

## ARCADY 8 - Roundabout Module

Version: 8.0.2.316 [14 Feb 2013]  
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**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: High St\_Westgate.arc8

Path: D:\Cameron Rose Associates\Projects\449\_Aldi, Skelmersdale\ANALYSIS\ARCADY

Report generation date: 13/11/2018 14:17:16

## Summary of junction performance

AM					
	Queue (PCU)	Delay (s)	RFC	LOS	
A1 - 2018 Survey					
Arm 1	0.23	4.88	0.18	A	
Arm 2	0.36	6.92	0.27	A	
Arm 3	0.21	5.80	0.17	A	

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

"D1 - 2018 Survey, AM" model duration: 07:45 - 09:15  
 "D2 - 2018 Survey, PM" model duration: 14:45 - 16:15  
 "D3 - 2018 Survey, Saturday" model duration: 11:30 - 13:00  
 "D4 - 2023 Base, AM" model duration: 07:45 - 09:15  
 "D5 - 2023 Base, PM" model duration: 14:45 - 16:15  
 "D6 - 2023 Base, Saturday" model duration: 11:30 - 13:00  
 "D7 - 2023 Base plus Development, AM" model duration: 07:45 - 09:15  
 "D8 - 2023 Base plus Development, PM" model duration: 14:45 - 16:15  
 "D9 - 2023 Base plus Development, Saturday" model duration: 11:30 - 13:00

Run using Junctions 8.0.2.316 at 13/11/2018 14:16:40

## File summary

### File Description

Title	High Street/ Westgate
Location	Skelmersdale
Site Number	
Date	15/10/2018
Version	
Status	(new file)
Identifier	
Client	Aldi Store
Jobnumber	449
Enumerator	Cameron Rose Associates
Description	

## Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

## Units

Distance	Speed	Traffic Units	Traffic Units	Flow	Average Delay	Total Delay	Rate Of Delay
----------	-------	---------------	---------------	------	---------------	-------------	---------------

Units	Units	Input	Results	Units	Units	Units	Units
m	kph	PCU	PCU	perHour	s	-Min	perMin

# (Default Analysis Set) - 2018 Survey, AM

## Data Errors and Warnings

No errors or warnings

## Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

## Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2018 Survey, AM	2018 Survey	AM		ONE HOUR	07:45	09:15	90	15		

# Junction Network

## Junctions

Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	Mini-roundabout	1,2,3	5.92	A

## Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

# Arms

## Arms

Arm	Name	Description
1	High Street (e)	
2	Westgate	
3	High Street (w)	

## Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.75	3.75	4.50	11.40	13.10	5.90	0.00	
2	3.50	3.50	4.00	4.60	11.50	4.40	0.00	
3	4.40	3.60	3.60	0.00	16.50	16.00	0.00	

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

## Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None



## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.573	948.562
2		(calculated)	(calculated)	0.548	755.976
3		(calculated)	(calculated)	0.612	784.361

The slope and intercept shown above include any corrections and adjustments.

## Traffic Flows

### Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

## Entry Flows

### General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	151.90	100.000
2	ONE HOUR	✓	171.60	100.000
3	ONE HOUR	✓	117.70	100.000

## Turning Proportions

### Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	73.900	77.000
	2	50.100	0.000	121.500
	3	47.500	70.200	0.000

### Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.01	0.49	0.51
	2	0.29	0.00	0.71
	3	0.40	0.60	0.00

## Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000

3	1.000	1.000	1.000
---	-------	-------	-------

### Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.18	4.88	0.23	A
2	0.27	6.92	0.36	A
3	0.17	5.80	0.21	A

### Main Results for each time segment

#### Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	114.36	113.79	52.54	0.00	918.46	0.125	0.14	4.471	A
2	129.19	128.33	58.43	0.00	723.97	0.178	0.22	6.035	A
3	88.61	88.09	38.22	0.00	760.97	0.116	0.13	5.350	A

#### Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	136.55	136.42	63.04	0.00	912.44	0.150	0.17	4.639	A
2	154.26	154.04	70.05	0.00	717.60	0.215	0.27	6.384	A
3	105.81	105.69	45.87	0.00	756.28	0.140	0.16	5.533	A

#### Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	167.25	167.04	77.18	0.00	904.34	0.185	0.23	4.881	A
2	188.94	188.58	85.78	0.00	708.99	0.266	0.36	6.913	A
3	129.59	129.41	56.16	0.00	749.99	0.173	0.21	5.799	A

#### Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	167.25	167.24	77.29	0.00	904.28	0.185	0.23	4.884	A
2	188.94	188.93	85.88	0.00	708.93	0.267	0.36	6.922	A
3	129.59	129.59	56.26	0.00	749.93	0.173	0.21	5.802	A

#### Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	136.55	136.75	63.21	0.00	912.34	0.150	0.18	4.644	A

2	154.26	154.61	70.22	0.00	717.51	0.215	0.28	6.398	A
3	105.81	105.99	46.04	0.00	756.18	0.140	0.16	5.539	A

### Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	114.36	114.49	52.92	0.00	918.24	0.125	0.14	4.481	A
2	129.19	129.42	58.79	0.00	723.77	0.178	0.22	6.058	A
3	88.61	88.74	38.54	0.00	760.77	0.116	0.13	5.357	A

## (Default Analysis Set) - 2018 Survey, PM

### Data Errors and Warnings

No errors or warnings

### Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

### Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2018 Survey, PM	2018 Survey	PM		ONE HOUR	14:45	16:15	90	15		

## Junction Network

### Junctions

Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	Mini-roundabout	1,2,3	6.00	A

### Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

## Arms

### Arms

Arm	Name	Description
1	High Street (e)	
2	Westgate	
3	High Street (w)	

### Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.75	3.75	4.50	11.40	13.10	5.90	0.00	
2	3.50	3.50	4.00	4.60	11.50	4.40	0.00	
3	4.40	3.60	3.60	0.00	16.50	16.00	0.00	

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

## Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.573	948.562
2		(calculated)	(calculated)	0.548	755.976
3		(calculated)	(calculated)	0.612	784.361

The slope and intercept shown above include any corrections and adjustments.

## Traffic Flows

### Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

## Entry Flows

### General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	144.70	100.000
2	ONE HOUR	✓	154.60	100.000
3	ONE HOUR	✓	157.20	100.000

## Turning Proportions

### Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	73.500	71.200
	2	73.600	0.000	81.000
	3	74.200	82.000	1.000

### Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.51	0.49
	2	0.48	0.00	0.52
	3	0.47	0.52	0.01

## Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

### Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.18	4.88	0.22	A
2	0.24	6.64	0.31	A
3	0.24	6.41	0.31	A

### Main Results for each time segment

#### Main results: (14:45-15:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	108.94	108.40	62.09	0.00	912.98	0.119	0.13	4.471	A
2	116.39	115.63	54.09	0.00	726.35	0.160	0.19	5.887	A
3	118.35	117.61	55.05	0.00	750.67	0.158	0.19	5.682	A

#### Main results: (15:00-15:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	130.08	129.95	74.52	0.00	905.87	0.144	0.17	4.640	A
2	138.98	138.79	64.84	0.00	720.46	0.193	0.24	6.188	A
3	141.32	141.13	66.07	0.00	743.92	0.190	0.23	5.971	A

#### Main results: (15:15-15:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	159.32	159.13	91.23	0.00	896.29	0.178	0.21	4.882	A
2	170.22	169.92	79.40	0.00	712.48	0.239	0.31	6.632	A
3	173.08	172.79	80.89	0.00	734.85	0.236	0.31	6.402	A

#### Main results: (15:30-15:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	159.32	159.31	91.38	0.00	896.20	0.178	0.22	4.884	A
2	170.22	170.21	79.49	0.00	712.43	0.239	0.31	6.638	A

3	173.08	173.07	81.03	0.00	734.76	0.236	0.31	6.408	A
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#### Main results: (15:45-16:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	130.08	130.27	74.76	0.00	905.72	0.144	0.17	4.643	A
2	138.98	139.27	65.00	0.00	720.37	0.193	0.24	6.197	A
3	141.32	141.60	66.30	0.00	743.78	0.190	0.24	5.980	A

#### Main results: (16:00-16:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	108.94	109.07	62.59	0.00	912.70	0.119	0.14	4.480	A
2	116.39	116.59	54.42	0.00	726.17	0.160	0.19	5.907	A
3	118.35	118.54	55.50	0.00	750.39	0.158	0.19	5.698	A

## (Default Analysis Set) - 2018 Survey, Saturday

### Data Errors and Warnings

No errors or warnings

### Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

### Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2018 Survey, Saturday	2018 Survey	Saturday		ONE HOUR	11:30	13:00	90	15		

## Junction Network

### Junctions

Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	Mini-roundabout	1,2,3	5.71	A

### Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

## Arms

### Arms

Arm	Name	Description
1	High Street (e)	
2	Westgate	
3	High Street (w)	

### Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.75	3.75	4.50	11.40	13.10	5.90	0.00	
2	3.50	3.50	4.00	4.60	11.50	4.40	0.00	
3	4.40	3.60	3.60	0.00	16.50	16.00	0.00	

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

## Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.573	948.562
2		(calculated)	(calculated)	0.548	755.976
3		(calculated)	(calculated)	0.612	784.361

The slope and intercept shown above include any corrections and adjustments.

## Traffic Flows

### Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

## Entry Flows

### General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	100.40	100.000
2	ONE HOUR	✓	133.00	100.000
3	ONE HOUR	✓	136.60	100.000

## Turning Proportions

### Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	53.200	46.200
	2	58.200	2.000	72.800
	3	63.200	71.400	2.000

### Turning Proportions (PCU) - Junction 1 (for whole period)

		To

		1	2	3
From	1	0.01	0.53	0.46
	2	0.44	0.02	0.55
	3	0.46	0.52	0.01

## Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

### Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.12	4.55	0.14	A
2	0.20	6.21	0.25	A
3	0.20	6.07	0.25	A

### Main Results for each time segment

#### Main results: (11:30-11:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	75.59	75.23	56.42	0.00	916.23	0.083	0.09	4.278	A
2	100.13	99.50	36.86	0.00	735.78	0.136	0.16	5.654	A
3	102.84	102.21	45.79	0.00	756.33	0.136	0.16	5.499	A

#### Main results: (11:45-12:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	90.26	90.18	67.70	0.00	909.77	0.099	0.11	4.392	A
2	119.56	119.41	44.19	0.00	731.77	0.163	0.19	5.877	A
3	122.80	122.65	54.95	0.00	750.73	0.164	0.19	5.730	A

#### Main results: (12:00-12:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	110.54	110.42	82.89	0.00	901.07	0.123	0.14	4.553	A

2	146.44	146.21	54.11	0.00	726.34	0.202	0.25	6.201	A
3	150.40	150.17	67.28	0.00	743.18	0.202	0.25	6.066	A

### Main results: (12:15-12:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	110.54	110.54	83.01	0.00	901.00	0.123	0.14	4.553	A
2	146.44	146.43	54.17	0.00	726.30	0.202	0.25	6.207	A
3	150.40	150.40	67.38	0.00	743.12	0.202	0.25	6.073	A

### Main results: (12:30-12:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	90.26	90.37	67.91	0.00	909.65	0.099	0.11	4.394	A
2	119.56	119.78	44.29	0.00	731.72	0.163	0.20	5.886	A
3	122.80	123.02	55.12	0.00	750.62	0.164	0.20	5.737	A

### Main results: (12:45-13:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	75.59	75.67	56.85	0.00	915.99	0.083	0.09	4.284	A
2	100.13	100.28	37.08	0.00	735.66	0.136	0.16	5.668	A
3	102.84	102.99	46.14	0.00	756.12	0.136	0.16	5.514	A

## (Default Analysis Set) - 2023 Base, AM

### Data Errors and Warnings

No errors or warnings

### Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

### Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 Base, AM	2023 Base	AM		ONE HOUR	07:45	09:15	90	15		

## Junction Network

### Junctions

Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	Mini-roundabout	1,2,3	6.05	A

### Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

## Arms

## Arms

Arm	Name	Description
1	High Street (e)	
2	Westgate	
3	High Street (w)	

### Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.75	3.75	4.50	11.40	13.10	5.90	0.00	
2	3.50	3.50	4.00	4.60	11.50	4.40	0.00	
3	4.40	3.60	3.60	0.00	16.50	16.00	0.00	

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

### Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.573	948.562
2		(calculated)	(calculated)	0.548	755.976
3		(calculated)	(calculated)	0.612	784.361

The slope and intercept shown above include any corrections and adjustments.

## Traffic Flows

### Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

## Entry Flows

### General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	160.79	100.000
2	ONE HOUR	✓	181.64	100.000
3	ONE HOUR	✓	124.59	100.000

## Turning Proportions

### Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

	To

		1	2	3
From	1	1.059	78.223	81.505
	2	53.031	0.000	128.608
	3	50.279	74.307	0.000

### Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.01	0.49	0.51
	2	0.29	0.00	0.71
	3	0.40	0.60	0.00

## Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

### Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.20	4.97	0.24	A
2	0.28	7.11	0.39	A
3	0.18	5.89	0.22	A

### Main Results for each time segment

#### Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	121.05	120.44	55.61	0.00	916.70	0.132	0.15	4.518	A
2	136.75	135.82	61.85	0.00	722.10	0.189	0.23	6.121	A
3	93.79	93.23	40.45	0.00	759.60	0.123	0.14	5.397	A

#### Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
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1	144.54	144.40	66.72	0.00	910.33	0.159	0.19	4.700	A
2	163.29	163.04	74.15	0.00	715.36	0.228	0.29	6.515	A
3	112.00	111.87	48.55	0.00	754.64	0.148	0.17	5.599	A

#### Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	177.03	176.81	81.69	0.00	901.75	0.196	0.24	4.965	A
2	199.99	199.60	90.79	0.00	706.24	0.283	0.39	7.094	A
3	137.17	136.97	59.44	0.00	747.98	0.183	0.22	5.890	A

#### Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	177.03	177.03	81.81	0.00	901.69	0.196	0.24	4.967	A
2	199.99	199.98	90.90	0.00	706.18	0.283	0.39	7.111	A
3	137.17	137.17	59.55	0.00	747.91	0.183	0.22	5.893	A

#### Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	144.54	144.76	66.92	0.00	910.22	0.159	0.19	4.703	A
2	163.29	163.67	74.33	0.00	715.26	0.228	0.30	6.532	A
3	112.00	112.19	48.74	0.00	754.53	0.148	0.18	5.607	A

#### Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	121.05	121.20	56.02	0.00	916.46	0.132	0.15	4.529	A
2	136.75	137.00	62.23	0.00	721.89	0.189	0.24	6.157	A
3	93.79	93.93	40.80	0.00	759.39	0.124	0.14	5.410	A

## (Default Analysis Set) - 2023 Base, PM

### Data Errors and Warnings

No errors or warnings

### Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

### Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 Base, PM	2023 Base	PM		ONE HOUR	14:45	16:15	90	15		

## Junction Network

### Junctions

Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	Mini-roundabout	1,2,3	6.12	A



1	114.82	114.25	65.44	0.00	911.06	0.126	0.14	4.515	A
2	122.68	121.87	57.00	0.00	724.75	0.169	0.20	5.964	A
3	124.74	123.95	58.02	0.00	748.85	0.167	0.20	5.754	A

### Main results: (15:00-15:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	137.11	136.97	78.54	0.00	903.56	0.152	0.18	4.696	A
2	146.49	146.28	68.34	0.00	718.54	0.204	0.25	6.289	A
3	148.95	148.75	69.64	0.00	741.74	0.201	0.25	6.069	A

### Main results: (15:15-15:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	167.92	167.71	96.15	0.00	893.47	0.188	0.23	4.959	A
2	179.41	179.09	83.68	0.00	710.14	0.253	0.33	6.774	A
3	182.43	182.11	85.26	0.00	732.18	0.249	0.33	6.539	A

### Main results: (15:30-15:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	167.92	167.92	96.32	0.00	893.37	0.188	0.23	4.961	A
2	179.41	179.40	83.78	0.00	710.08	0.253	0.34	6.783	A
3	182.43	182.42	85.41	0.00	732.08	0.249	0.33	6.548	A

### Main results: (15:45-16:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	137.11	137.31	78.81	0.00	903.41	0.152	0.18	4.701	A
2	146.49	146.80	68.51	0.00	718.45	0.204	0.26	6.302	A
3	148.95	149.26	69.89	0.00	741.58	0.201	0.25	6.080	A

### Main results: (16:00-16:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	114.82	114.96	65.97	0.00	910.76	0.126	0.15	4.525	A
2	122.68	122.89	57.36	0.00	724.55	0.169	0.21	5.987	A
3	124.74	124.95	58.50	0.00	748.55	0.167	0.20	5.776	A

## (Default Analysis Set) - 2023 Base, Saturday

### Data Errors and Warnings

No errors or warnings

### Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

### Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 Base, Saturday	2023 Base	Saturday		ONE HOUR	11:30	13:00	90	15		

# Junction Network

### Junctions

Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	Mini-roundabout	1,2,3	5.80	A

### Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

# Arms

### Arms

Arm	Name	Description
1	High Street (e)	
2	Westgate	
3	High Street (w)	

### Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.75	3.75	4.50	11.40	13.10	5.90	0.00	
2	3.50	3.50	4.00	4.60	11.50	4.40	0.00	
3	4.40	3.60	3.60	0.00	16.50	16.00	0.00	

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

### Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.573	948.562
2		(calculated)	(calculated)	0.548	755.976
3		(calculated)	(calculated)	0.612	784.361

The slope and intercept shown above include any corrections and adjustments.

# Traffic Flows

### Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓



# Entry Flows

## General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	105.66	100.000
2	ONE HOUR	✓	139.97	100.000
3	ONE HOUR	✓	143.76	100.000

# Turning Proportions

## Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.052	55.988	48.621
	2	61.250	2.105	76.615
	3	66.512	75.141	2.105

## Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.01	0.53	0.46
	2	0.44	0.02	0.55
	3	0.46	0.52	0.01

# Vehicle Mix

## Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

## Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000

# Results

## Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.13	4.60	0.15	A
2	0.21	6.31	0.27	A
3	0.21	6.18	0.27	A

## Main Results for each time segment

### Main results: (11:30-11:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	79.55	79.17	59.37	0.00	914.54	0.087	0.09	4.307	A
2	105.38	104.71	38.79	0.00	734.73	0.143	0.17	5.708	A
3	108.23	107.56	48.18	0.00	754.87	0.143	0.17	5.555	A

### Main results: (11:45-12:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	94.99	94.90	71.24	0.00	907.74	0.105	0.12	4.429	A
2	125.83	125.67	46.50	0.00	730.50	0.172	0.21	5.950	A
3	129.24	129.07	57.83	0.00	748.97	0.173	0.21	5.806	A

### Main results: (12:00-12:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	116.33	116.21	87.23	0.00	898.58	0.129	0.15	4.601	A
2	154.11	153.86	56.95	0.00	724.78	0.213	0.27	6.302	A
3	158.28	158.03	70.80	0.00	741.02	0.214	0.27	6.172	A

### Main results: (12:15-12:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	116.33	116.33	87.36	0.00	898.50	0.129	0.15	4.602	A
2	154.11	154.10	57.01	0.00	724.75	0.213	0.27	6.307	A
3	158.28	158.28	70.91	0.00	740.96	0.214	0.27	6.177	A

### Main results: (12:30-12:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	94.99	95.11	71.47	0.00	907.61	0.105	0.12	4.432	A
2	125.83	126.07	46.61	0.00	730.44	0.172	0.21	5.958	A
3	129.24	129.48	58.01	0.00	748.85	0.173	0.21	5.816	A

### Main results: (12:45-13:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	79.55	79.63	59.83	0.00	914.28	0.087	0.10	4.313	A
2	105.38	105.54	39.02	0.00	734.60	0.143	0.17	5.725	A
3	108.23	108.39	48.56	0.00	754.64	0.143	0.17	5.571	A

## (Default Analysis Set) - 2023 Base plus Development, AM

### Data Errors and Warnings

No errors or warnings

### Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

## Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 Base plus Development, AM	2023 Base plus Development	AM		ONE HOUR	07:45	09:15	90	15		

## Junction Network

### Junctions

Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	Mini-roundabout	1,2,3	6.25	A

### Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

## Arms

### Arms

Arm	Name	Description
1	High Street (e)	
2	Westgate	
3	High Street (w)	

### Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.75	3.75	4.50	11.40	13.10	5.90	0.00	
2	3.50	3.50	4.00	4.60	11.50	4.40	0.00	
3	4.40	3.60	3.60	0.00	16.50	16.00	0.00	

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

### Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.573	948.562
2		(calculated)	(calculated)	0.548	755.976
3		(calculated)	(calculated)	0.612	784.361

The slope and intercept shown above include any corrections and adjustments.

## Traffic Flows

## Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

## Entry Flows

### General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	176.91	100.000
2	ONE HOUR	✓	197.17	100.000
3	ONE HOUR	✓	135.35	100.000

## Turning Proportions

### Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.059	89.568	86.282
	2	60.809	0.000	136.357
	3	54.624	80.728	0.000

### Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.01	0.51	0.49
	2	0.31	0.00	0.69
	3	0.40	0.60	0.00

## Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

### Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000

## Results

## Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.22	5.12	0.28	A
2	0.31	7.40	0.44	A
3	0.20	6.06	0.25	A

## Main Results for each time segment

### Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	133.19	132.51	60.41	0.00	913.95	0.146	0.17	4.603	A
2	148.44	147.41	65.42	0.00	720.14	0.206	0.26	6.274	A
3	101.90	101.28	46.26	0.00	756.05	0.135	0.15	5.494	A

### Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	159.04	158.87	72.48	0.00	907.03	0.175	0.21	4.810	A
2	177.25	176.97	78.44	0.00	713.01	0.249	0.33	6.713	A
3	121.68	121.53	55.53	0.00	750.37	0.162	0.19	5.723	A

### Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	194.78	194.52	88.75	0.00	897.71	0.217	0.28	5.118	A
2	217.08	216.63	96.04	0.00	703.37	0.309	0.44	7.390	A
3	149.02	148.80	67.98	0.00	742.75	0.201	0.25	6.061	A

### Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	194.78	194.78	88.88	0.00	897.63	0.217	0.28	5.121	A
2	217.08	217.07	96.16	0.00	703.30	0.309	0.44	7.403	A
3	149.02	149.02	68.11	0.00	742.67	0.201	0.25	6.063	A

### Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	159.04	159.29	72.70	0.00	906.90	0.175	0.21	4.818	A
2	177.25	177.69	78.64	0.00	712.90	0.249	0.33	6.731	A
3	121.68	121.90	55.75	0.00	750.23	0.162	0.20	5.733	A

### Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	133.19	133.36	60.87	0.00	913.69	0.146	0.17	4.614	A
2	148.44	148.73	65.84	0.00	719.91	0.206	0.26	6.307	A
3	101.90	102.05	46.67	0.00	755.80	0.135	0.16	5.507	A

# (Default Analysis Set) - 2023 Base plus Development, PM

## Data Errors and Warnings

No errors or warnings

## Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

## Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 Base plus Development, PM	2023 Base plus Development	PM		ONE HOUR	14:45	16:15	90	15		

# Junction Network

## Junctions

Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	Mini-roundabout	1,2,3	6.66	A

## Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

# Arms

## Arms

Arm	Name	Description
1	High Street (e)	
2	Westgate	
3	High Street (w)	

## Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.75	3.75	4.50	11.40	13.10	5.90	0.00	
2	3.50	3.50	4.00	4.60	11.50	4.40	0.00	
3	4.40	3.60	3.60	0.00	16.50	16.00	0.00	

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

## Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.573	948.562
2		(calculated)	(calculated)	0.548	755.976
3		(calculated)	(calculated)	0.612	784.361

The slope and intercept shown above include any corrections and adjustments.

## Traffic Flows

### Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

## Entry Flows

### General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	185.17	100.000
2	ONE HOUR	✓	203.12	100.000
3	ONE HOUR	✓	189.96	100.000

## Turning Proportions

### Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	99.676	85.492
	2	102.689	0.000	100.427
	3	89.737	99.170	1.054

### Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.54	0.46
	2	0.51	0.00	0.49
	3	0.47	0.52	0.01

## Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

### Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.23	5.28	0.30	A
2	0.32	7.50	0.46	A
3	0.29	7.11	0.41	A

### Main Results for each time segment

#### Main results: (14:45-15:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	139.40	138.68	74.95	0.00	905.62	0.154	0.18	4.690	A
2	152.92	151.85	64.82	0.00	720.47	0.212	0.27	6.319	A
3	143.01	142.06	76.77	0.00	737.37	0.194	0.24	6.037	A

#### Main results: (15:00-15:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	166.46	166.28	89.96	0.00	897.02	0.186	0.23	4.925	A
2	182.60	182.30	77.72	0.00	713.40	0.256	0.34	6.776	A
3	170.77	170.51	92.17	0.00	727.95	0.235	0.30	6.455	A

#### Main results: (15:15-15:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	203.87	203.59	110.13	0.00	885.46	0.230	0.30	5.277	A
2	223.64	223.16	95.16	0.00	703.85	0.318	0.46	7.481	A
3	209.15	208.73	112.82	0.00	715.30	0.292	0.41	7.100	A

#### Main results: (15:30-15:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	203.87	203.87	110.34	0.00	885.34	0.230	0.30	5.282	A
2	223.64	223.62	95.29	0.00	703.78	0.318	0.46	7.496	A
3	209.15	209.14	113.06	0.00	715.16	0.292	0.41	7.113	A

#### Main results: (15:45-16:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	166.46	166.74	90.31	0.00	896.81	0.186	0.23	4.934	A
2	182.60	183.06	77.93	0.00	713.29	0.256	0.35	6.797	A
3	170.77	171.18	92.55	0.00	727.71	0.235	0.31	6.475	A

### Main results: (16:00-16:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	139.40	139.59	75.59	0.00	905.25	0.154	0.18	4.702	A
2	152.92	153.22	65.24	0.00	720.24	0.212	0.27	6.354	A
3	143.01	143.28	77.46	0.00	736.95	0.194	0.24	6.068	A

## (Default Analysis Set) - 2023 Base plus Development, Saturday

### Data Errors and Warnings

No errors or warnings

### Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

### Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 Base plus Development, Saturday	2023 Base plus Development	Saturday		ONE HOUR	11:30	13:00	90	15		

## Junction Network

### Junctions

Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	Mini-roundabout	1,2,3	6.42	A

### Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

## Arms

### Arms

Arm	Name	Description
1	High Street (e)	
2	Westgate	
3	High Street (w)	

### Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.75	3.75	4.50	11.40	13.10	5.90	0.00	
2	3.50	3.50	4.00	4.60	11.50	4.40	0.00	
3	4.40	3.60	3.60	0.00	16.50	16.00	0.00	

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

## Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.573	948.562
2		(calculated)	(calculated)	0.548	755.976
3		(calculated)	(calculated)	0.612	784.361

The slope and intercept shown above include any corrections and adjustments.

## Traffic Flows

### Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

## Entry Flows

### General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	139.13	100.000
2	ONE HOUR	✓	196.55	100.000
3	ONE HOUR	✓	172.27	100.000

## Turning Proportions

### Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.052	79.140	58.941
	2	93.238	2.105	101.207
	3	79.899	90.265	2.105

### Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.01	0.57	0.42
	2	0.47	0.01	0.51
	3	0.46	0.52	0.01

## Vehicle Mix

**Average PCU Per Vehicle - Junction 1 (for whole period)**

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

**Heavy Vehicle Percentages - Junction 1 (for whole period)**

		To		
		1	2	3
From	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000

# Results

**Results Summary for whole modelled period**

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.17	4.89	0.21	A
2	0.30	7.17	0.43	A
3	0.26	6.79	0.36	A

**Main Results for each time segment**

**Main results: (11:30-11:45)**

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	104.75	104.23	70.66	0.00	908.07	0.115	0.13	4.475	A
2	147.97	146.96	46.52	0.00	730.50	0.203	0.25	6.160	A
3	129.69	128.85	72.08	0.00	740.24	0.175	0.21	5.881	A

**Main results: (11:45-12:00)**

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	125.08	124.96	84.81	0.00	899.97	0.139	0.16	4.645	A
2	176.69	176.42	55.77	0.00	725.43	0.244	0.32	6.554	A
3	154.87	154.64	86.53	0.00	731.40	0.212	0.27	6.237	A

**Main results: (12:00-12:15)**

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	153.19	153.00	103.83	0.00	889.07	0.172	0.21	4.889	A
2	216.40	215.98	68.29	0.00	718.57	0.301	0.43	7.156	A
3	189.67	189.32	105.92	0.00	719.53	0.264	0.35	6.785	A

**Main results: (12:15-12:30)**

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	153.19	153.19	104.01	0.00	888.96	0.172	0.21	4.892	A
2	216.40	216.40	68.37	0.00	718.52	0.301	0.43	7.168	A

3	189.67	189.66	106.13	0.00	719.40	0.264	0.36	6.795	A
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**Main results: (12:30-12:45)**

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	125.08	125.26	85.12	0.00	899.79	0.139	0.16	4.650	A
2	176.69	177.11	55.91	0.00	725.35	0.244	0.33	6.570	A
3	154.87	155.21	86.86	0.00	731.20	0.212	0.27	6.255	A

**Main results: (12:45-13:00)**

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	104.75	104.87	71.25	0.00	907.74	0.115	0.13	4.484	A
2	147.97	148.25	46.81	0.00	730.34	0.203	0.26	6.189	A
3	129.69	129.92	72.71	0.00	739.86	0.175	0.21	5.906	A



## **APPENDIX K**

**B5312/ WESTGATE – MODEL OUTPUTS**

# Junctions 8

## ARCADY 8 - Roundabout Module

Version: 8.0.2.316 [14 Feb 2013]  
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**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: B5312\_Westgate.arc8

Path: D:\Cameron Rose Associates\Projects\449\_Aldi, Skelmersdale\ANALYSIS\ARCADY

Report generation date: 13/11/2018 14:42:55

## Summary of junction performance

AM					
	Queue (PCU)	Delay (s)	RFC	LOS	
A1 - 2018 Survey					
Arm 1	1.10	9.24	0.53	A	
Arm 2	0.41	8.38	0.29	A	
Arm 3	1.93	14.21	0.66	B	

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

"D1 - 2018 Survey, AM" model duration: 07:45 - 09:15  
 "D2 - 2018 Survey, PM" model duration: 14:45 - 16:15  
 "D3 - 2018 Survey, Saturday" model duration: 11:30 - 13:00  
 "D4 - 2023 Base, AM" model duration: 07:45 - 09:15  
 "D5 - 2023 Base, PM" model duration: 14:45 - 16:15  
 "D6 - 2023 Base, Saturday" model duration: 11:30 - 13:00  
 "D7 - 2023 Base + Development, AM" model duration: 07:45 - 09:15  
 "D8 - 2023 Base + Development, PM" model duration: 14:45 - 16:15  
 "D9 - 2023 Base + Development, Saturday" model duration: 11:30 - 13:00

Run using Junctions 8.0.2.316 at 13/11/2018 14:42:22

## File summary

### File Description

Title	B5312/ Westgate
Location	Skelmersdale
Site Number	
Date	15/10/2018
Version	
Status	(new file)
Identifier	
Client	Aldi Store
Jobnumber	449
Enumerator	Cameron Rose Associates
Description	

## Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

## Units

Distance	Speed	Traffic Units	Traffic Units	Flow	Average Delay	Total Delay	Rate Of Delay
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Units	Units	Input	Results	Units	Units	Units	Units
m	kph	PCU	PCU	perHour	s	-Min	perMin

# (Default Analysis Set) - 2018 Survey, AM

## Data Errors and Warnings

No errors or warnings

## Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

## Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2018 Survey, AM	2018 Survey	AM		ONE HOUR	07:45	09:15	90	15		

# Junction Network

## Junctions

Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	Mini-roundabout	1,2,3	11.34	B

## Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

# Arms

## Arms

Arm	Name	Description
1	B5312 (w)	
2	Westgate	
3	B5312 (e)	

## Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.90	3.00	5.30	8.80	15.00	7.20	0.00	
2	3.50	3.50	4.20	6.60	13.00	7.00	0.00	
3	3.30	3.30	4.10	5.00	16.20	12.90	0.00	

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

## Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None



## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.568	880.754
2		(calculated)	(calculated)	0.556	795.038
3		(calculated)	(calculated)	0.562	812.026

The slope and intercept shown above include any corrections and adjustments.

## Traffic Flows

### Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

## Entry Flows

### General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	394.80	100.000
2	ONE HOUR	✓	159.90	100.000
3	ONE HOUR	✓	452.30	100.000

## Turning Proportions

### Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	86.500	308.300
	2	99.000	0.000	60.900
	3	361.400	89.900	1.000

### Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.22	0.78
	2	0.62	0.00	0.38
	3	0.80	0.20	0.00

## Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000

3	1.000	1.000	1.000
---	-------	-------	-------

### Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.53	9.24	1.10	A
2	0.29	8.38	0.41	A
3	0.66	14.21	1.93	B

### Main Results for each time segment

#### Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	297.23	295.07	67.81	0.00	842.27	0.353	0.54	6.555	A
2	120.38	119.51	231.17	0.00	666.51	0.181	0.22	6.570	A
3	340.52	337.40	73.99	0.00	770.44	0.442	0.78	8.249	A

#### Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	354.92	354.15	81.44	0.00	834.53	0.425	0.73	7.481	A
2	143.75	143.48	277.46	0.00	640.77	0.224	0.29	7.236	A
3	406.61	405.25	88.83	0.00	762.10	0.534	1.12	10.049	B

#### Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	434.68	433.23	99.47	0.00	824.30	0.527	1.09	9.170	A
2	176.05	175.58	339.40	0.00	606.33	0.290	0.40	8.348	A
3	497.99	494.92	108.71	0.00	750.93	0.663	1.89	13.890	B

#### Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	434.68	434.64	100.05	0.00	823.97	0.528	1.10	9.243	A
2	176.05	176.04	340.51	0.00	605.72	0.291	0.41	8.378	A
3	497.99	497.83	108.99	0.00	750.77	0.663	1.93	14.207	B

#### Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	354.92	356.33	82.32	0.00	834.03	0.426	0.75	7.560	A

2	143.75	144.20	279.16	0.00	639.82	0.225	0.29	7.269	A
3	406.61	409.63	89.28	0.00	761.85	0.534	1.17	10.308	B

### Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	297.23	298.02	68.73	0.00	841.75	0.353	0.55	6.630	A
2	120.38	120.66	233.48	0.00	665.22	0.181	0.22	6.613	A
3	340.52	341.98	74.71	0.00	770.04	0.442	0.81	8.438	A

## (Default Analysis Set) - 2018 Survey, PM

### Data Errors and Warnings

No errors or warnings

### Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

### Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2018 Survey, PM	2018 Survey	PM		ONE HOUR	14:45	16:15	90	15		

## Junction Network

### Junctions

Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	Mini-roundabout	1,2,3	11.99	B

### Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

## Arms

### Arms

Arm	Name	Description
1	B5312 (w)	
2	Westgate	
3	B5312 (e)	

### Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.90	3.00	5.30	8.80	15.00	7.20	0.00	
2	3.50	3.50	4.20	6.60	13.00	7.00	0.00	
3	3.30	3.30	4.10	5.00	16.20	12.90	0.00	

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

## Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.568	880.754
2		(calculated)	(calculated)	0.556	795.038
3		(calculated)	(calculated)	0.562	812.026

The slope and intercept shown above include any corrections and adjustments.

## Traffic Flows

### Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

## Entry Flows

### General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	447.20	100.000
2	ONE HOUR	✓	200.50	100.000
3	ONE HOUR	✓	446.60	100.000

## Turning Proportions

### Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	103.900	343.300
	2	104.300	0.000	96.200
	3	353.700	91.900	1.000

### Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.23	0.77
	2	0.52	0.00	0.48
	3	0.79	0.21	0.00

## Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

### Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.60	10.89	1.47	B
2	0.38	9.90	0.60	A
3	0.66	14.04	1.88	B

### Main Results for each time segment

#### Main results: (14:45-15:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	336.68	334.04	69.30	0.00	841.42	0.400	0.66	7.059	A
2	150.95	149.75	257.18	0.00	652.05	0.232	0.30	7.145	A
3	336.22	333.16	77.90	0.00	768.24	0.438	0.77	8.218	A

#### Main results: (15:00-15:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	402.02	400.99	83.24	0.00	833.51	0.482	0.92	8.303	A
2	180.25	179.83	308.72	0.00	623.39	0.289	0.40	8.109	A
3	401.48	400.16	93.55	0.00	759.45	0.529	1.10	9.981	A

#### Main results: (15:15-15:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	492.38	490.25	101.66	0.00	823.05	0.598	1.45	10.745	B
2	220.75	219.98	377.44	0.00	585.18	0.377	0.60	9.834	A
3	491.72	488.73	114.43	0.00	747.71	0.658	1.84	13.737	B

#### Main results: (15:30-15:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	492.38	492.29	102.25	0.00	822.72	0.598	1.47	10.886	B
2	220.75	220.73	379.02	0.00	584.31	0.378	0.60	9.899	A

3	491.72	491.56	114.82	0.00	747.49	0.658	1.88	14.043	B
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### Main results: (15:45-16:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	402.02	404.10	84.12	0.00	833.01	0.483	0.95	8.433	A
2	180.25	181.00	311.12	0.00	622.06	0.290	0.41	8.177	A
3	401.48	404.41	94.16	0.00	759.11	0.529	1.15	10.231	B

### Main results: (16:00-16:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	336.68	337.77	70.24	0.00	840.89	0.400	0.68	7.172	A
2	150.95	151.38	260.05	0.00	650.45	0.232	0.31	7.218	A
3	336.22	337.65	78.75	0.00	767.77	0.438	0.79	8.399	A

## (Default Analysis Set) - 2018 Survey, Saturday

### Data Errors and Warnings

No errors or warnings

### Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

### Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2018 Survey, Saturday	2018 Survey	Saturday		ONE HOUR	11:30	13:00	90	15		

## Junction Network

### Junctions

Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	Mini-roundabout	1,2,3	10.78	B

### Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

## Arms

### Arms

Arm	Name	Description
1	B5312 (w)	
2	Westgate	
3	B5312 (e)	

### Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.90	3.00	5.30	8.80	15.00	7.20	0.00	
2	3.50	3.50	4.20	6.60	13.00	7.00	0.00	
3	3.30	3.30	4.10	5.00	16.20	12.90	0.00	

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

## Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.568	880.754
2		(calculated)	(calculated)	0.556	795.038
3		(calculated)	(calculated)	0.562	812.026

The slope and intercept shown above include any corrections and adjustments.

## Traffic Flows

### Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

## Entry Flows

### General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	464.80	100.000
2	ONE HOUR	✓	193.10	100.000
3	ONE HOUR	✓	377.40	100.000

## Turning Proportions

### Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	120.500	344.300
	2	101.900	0.000	91.200
	3	299.800	77.600	0.000

### Turning Proportions (PCU) - Junction 1 (for whole period)

		To

		1	2	3
From	1	0.00	0.26	0.74
	2	0.53	0.00	0.47
	3	0.79	0.21	0.00

## Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

### Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.61	11.22	1.57	B
2	0.36	9.68	0.57	A
3	0.55	10.79	1.23	B

### Main Results for each time segment

#### Main results: (11:30-11:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	349.93	347.15	57.95	0.00	847.87	0.413	0.69	7.152	A
2	145.38	144.24	257.15	0.00	652.06	0.223	0.28	7.073	A
3	284.13	281.81	76.12	0.00	769.25	0.369	0.58	7.353	A

#### Main results: (11:45-12:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	417.85	416.74	69.58	0.00	841.26	0.497	0.97	8.457	A
2	173.59	173.20	308.70	0.00	623.40	0.278	0.38	7.989	A
3	339.27	338.42	91.40	0.00	760.66	0.446	0.79	8.507	A

#### Main results: (12:00-12:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	511.75	509.44	85.09	0.00	832.46	0.615	1.55	11.062	B

2	212.61	211.89	377.37	0.00	585.22	0.363	0.56	9.620	A
3	415.53	413.84	111.81	0.00	749.18	0.555	1.21	10.679	B

### Main results: (12:15-12:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	511.75	511.66	85.43	0.00	832.27	0.615	1.57	11.220	B
2	212.61	212.59	379.01	0.00	584.31	0.364	0.57	9.682	A
3	415.53	415.46	112.18	0.00	748.98	0.555	1.23	10.789	B

### Main results: (12:30-12:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	417.85	420.11	70.10	0.00	840.97	0.497	1.01	8.601	A
2	173.59	174.29	311.20	0.00	622.01	0.279	0.39	8.053	A
3	339.27	340.92	91.98	0.00	760.33	0.446	0.82	8.616	A

### Main results: (12:45-13:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	349.93	351.10	58.61	0.00	847.49	0.413	0.71	7.271	A
2	145.38	145.78	260.07	0.00	650.44	0.224	0.29	7.141	A
3	284.13	285.03	76.93	0.00	768.79	0.370	0.59	7.457	A

## (Default Analysis Set) - 2023 Base, AM

### Data Errors and Warnings

No errors or warnings

### Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

### Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 Base, AM	2023 Base	AM		ONE HOUR	07:45	09:15	90	15		

## Junction Network

### Junctions

Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	Mini-roundabout	1,2,3	12.63	B

### Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

## Arms

## Arms

Arm	Name	Description
1	B5312 (w)	
2	Westgate	
3	B5312 (e)	

### Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.90	3.00	5.30	8.80	15.00	7.20	0.00	
2	3.50	3.50	4.20	6.60	13.00	7.00	0.00	
3	3.30	3.30	4.10	5.00	16.20	12.90	0.00	

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

### Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.568	880.754
2		(calculated)	(calculated)	0.556	795.038
3		(calculated)	(calculated)	0.562	812.026

The slope and intercept shown above include any corrections and adjustments.

## Traffic Flows

### Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

## Entry Flows

### General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	417.90	100.000
2	ONE HOUR	✓	169.25	100.000
3	ONE HOUR	✓	478.76	100.000

## Turning Proportions

### Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

	To

		1	2	3
From	1	0.000	91.560	326.336
	2	104.792	0.000	64.463
	3	382.542	95.159	1.059

### Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.22	0.78
	2	0.62	0.00	0.38
	3	0.80	0.20	0.00

## Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

### Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.56	9.98	1.26	A
2	0.31	8.82	0.45	A
3	0.71	16.29	2.33	C

### Main Results for each time segment

#### Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	314.61	312.25	71.74	0.00	840.04	0.375	0.59	6.791	A
2	127.42	126.47	244.62	0.00	659.03	0.193	0.24	6.747	A
3	360.44	356.96	78.30	0.00	768.02	0.469	0.87	8.687	A

#### Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	375.68	374.80	86.17	0.00	831.85	0.452	0.81	7.860	A
2	152.16	151.85	293.63	0.00	631.78	0.241	0.31	7.496	A
3	430.40	428.77	94.02	0.00	759.19	0.567	1.28	10.839	B

1	375.68	374.80	86.17	0.00	831.85	0.452	0.81	7.860	A
2	152.16	151.85	293.63	0.00	631.78	0.241	0.31	7.496	A
3	430.40	428.77	94.02	0.00	759.19	0.567	1.28	10.839	B

#### Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	460.11	458.38	105.14	0.00	821.08	0.560	1.24	9.877	A
2	186.35	185.81	359.10	0.00	595.38	0.313	0.45	8.778	A
3	527.12	523.16	115.04	0.00	747.37	0.705	2.27	15.773	C

#### Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	460.11	460.05	105.89	0.00	820.65	0.561	1.26	9.978	A
2	186.35	186.34	360.42	0.00	594.65	0.313	0.45	8.816	A
3	527.12	526.88	115.37	0.00	747.19	0.705	2.33	16.290	C

#### Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	375.68	377.37	87.29	0.00	831.21	0.452	0.84	7.961	A
2	152.16	152.68	295.65	0.00	630.66	0.241	0.32	7.539	A
3	430.40	434.32	94.53	0.00	758.90	0.567	1.35	11.222	B

#### Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	314.61	315.54	72.79	0.00	839.44	0.375	0.61	6.882	A
2	127.42	127.74	247.20	0.00	657.59	0.194	0.24	6.797	A
3	360.44	362.21	79.09	0.00	767.58	0.470	0.90	8.919	A

## (Default Analysis Set) - 2023 Base, PM

### Data Errors and Warnings

No errors or warnings

### Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

### Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 Base, PM	2023 Base	PM		ONE HOUR	14:45	16:15	90	15		

## Junction Network

### Junctions

Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	Mini-roundabout	1,2,3	13.31	B



1	354.86	351.97	73.01	0.00	839.31	0.423	0.72	7.345	A
2	159.10	157.80	270.98	0.00	644.37	0.247	0.32	7.379	A
3	354.38	351.00	82.09	0.00	765.89	0.463	0.85	8.609	A

### Main results: (15:00-15:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	423.73	422.54	87.70	0.00	830.98	0.510	1.02	8.787	A
2	189.98	189.51	325.31	0.00	614.17	0.309	0.44	8.468	A
3	423.16	421.60	98.58	0.00	756.62	0.559	1.24	10.694	B

### Main results: (15:15-15:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	518.96	516.38	107.03	0.00	820.01	0.633	1.67	11.754	B
2	232.68	231.77	397.56	0.00	574.00	0.405	0.67	10.491	B
3	518.27	514.51	120.57	0.00	744.26	0.696	2.18	15.412	C

### Main results: (15:30-15:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	518.96	518.85	107.76	0.00	819.59	0.633	1.70	11.957	B
2	232.68	232.64	399.46	0.00	572.94	0.406	0.68	10.577	B
3	518.27	518.04	121.02	0.00	744.01	0.697	2.23	15.888	C

### Main results: (15:45-16:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	423.73	426.27	88.80	0.00	830.35	0.510	1.06	8.963	A
2	189.98	190.86	328.19	0.00	612.57	0.310	0.46	8.556	A
3	423.16	426.88	99.29	0.00	756.22	0.560	1.30	11.050	B

### Main results: (16:00-16:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	354.86	356.13	74.07	0.00	838.71	0.423	0.74	7.478	A
2	159.10	159.59	274.19	0.00	642.59	0.248	0.33	7.460	A
3	354.38	356.09	83.02	0.00	765.37	0.463	0.88	8.833	A

## (Default Analysis Set) - 2023 Base, Saturday

### Data Errors and Warnings

No errors or warnings

### Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

### Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 Base, Saturday	2023 Base	Saturday		ONE HOUR	11:30	13:00	90	15		

# Junction Network

### Junctions

Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	Mini-roundabout	1,2,3	11.71	B

### Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

# Arms

### Arms

Arm	Name	Description
1	B5312 (w)	
2	Westgate	
3	B5312 (e)	

### Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.90	3.00	5.30	8.80	15.00	7.20	0.00	
2	3.50	3.50	4.20	6.60	13.00	7.00	0.00	
3	3.30	3.30	4.10	5.00	16.20	12.90	0.00	

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

### Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.568	880.754
2		(calculated)	(calculated)	0.556	795.038
3		(calculated)	(calculated)	0.562	812.026

The slope and intercept shown above include any corrections and adjustments.

# Traffic Flows

### Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓



# Entry Flows

## General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	489.16	100.000
2	ONE HOUR	✓	203.22	100.000
3	ONE HOUR	✓	397.18	100.000

# Turning Proportions

## Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	126.814	362.341
	2	107.240	0.000	95.979
	3	315.510	81.666	0.000

## Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.26	0.74
	2	0.53	0.00	0.47
	3	0.79	0.21	0.00

# Vehicle Mix

## Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

## Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000

# Results

## Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.65	12.34	1.81	B
2	0.39	10.30	0.63	B
3	0.59	11.66	1.40	B

## Main Results for each time segment

### Main results: (11:30-11:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	368.26	365.22	60.96	0.00	846.15	0.435	0.76	7.440	A
2	152.99	151.76	270.54	0.00	644.62	0.237	0.31	7.287	A
3	299.01	296.49	80.09	0.00	767.02	0.390	0.63	7.612	A

### Main results: (11:45-12:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	439.74	438.46	73.22	0.00	839.20	0.524	1.08	8.953	A
2	182.69	182.25	324.79	0.00	614.46	0.297	0.42	8.321	A
3	357.05	356.07	96.17	0.00	757.97	0.471	0.87	8.935	A

### Main results: (12:00-12:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	538.57	535.76	89.50	0.00	829.95	0.649	1.78	12.117	B
2	223.75	222.91	396.86	0.00	574.38	0.390	0.63	10.218	B
3	437.30	435.29	117.63	0.00	745.91	0.586	1.38	11.514	B

### Main results: (12:15-12:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	538.57	538.44	89.90	0.00	829.73	0.649	1.81	12.344	B
2	223.75	223.72	398.85	0.00	573.28	0.390	0.63	10.297	B
3	437.30	437.22	118.06	0.00	745.67	0.586	1.40	11.662	B

### Main results: (12:30-12:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	439.74	442.50	73.82	0.00	838.86	0.524	1.12	9.144	A
2	182.69	183.50	327.78	0.00	612.79	0.298	0.43	8.403	A
3	357.05	359.01	96.84	0.00	757.60	0.471	0.91	9.077	A

### Main results: (12:45-13:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	368.26	369.63	61.70	0.00	845.74	0.435	0.78	7.585	A
2	152.99	153.45	273.80	0.00	642.80	0.238	0.32	7.365	A
3	299.01	300.05	80.98	0.00	766.51	0.390	0.65	7.734	A

## (Default Analysis Set) - 2023 Base + Development, AM

### Data Errors and Warnings

No errors or warnings

### Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

## Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 Base + Development, AM	2023 Base + Development	AM		ONE HOUR	07:45	09:15	90	15		

## Junction Network

### Junctions

Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	Mini-roundabout	1,2,3	13.70	B

### Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

## Arms

### Arms

Arm	Name	Description
1	B5312 (w)	
2	Westgate	
3	B5312 (e)	

### Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.90	3.00	5.30	8.80	15.00	7.20	0.00	
2	3.50	3.50	4.20	6.60	13.00	7.00	0.00	
3	3.30	3.30	4.10	5.00	16.20	12.90	0.00	

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

### Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.568	880.754
2		(calculated)	(calculated)	0.556	795.038
3		(calculated)	(calculated)	0.562	812.026

The slope and intercept shown above include any corrections and adjustments.

## Traffic Flows

## Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

## Entry Flows

### General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	428.06	100.000
2	ONE HOUR	✓	197.49	100.000
3	ONE HOUR	✓	489.32	100.000

## Turning Proportions

### Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	111.703	316.352
	2	121.104	0.000	76.386
	3	370.839	117.420	1.059

### Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.26	0.74
	2	0.61	0.00	0.39
	3	0.76	0.24	0.00

## Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

### Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000

## Results

## Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.58	10.72	1.38	B
2	0.36	9.39	0.56	A
3	0.73	18.04	2.62	C

## Main Results for each time segment

### Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	322.26	319.76	88.31	0.00	830.63	0.388	0.63	7.014	A
2	148.68	147.54	237.11	0.00	663.21	0.224	0.29	6.965	A
3	368.38	364.70	90.47	0.00	761.18	0.484	0.92	9.000	A

### Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	384.81	383.84	106.07	0.00	820.55	0.469	0.87	8.224	A
2	177.54	177.16	284.62	0.00	636.79	0.279	0.38	7.826	A
3	439.89	438.07	108.63	0.00	750.97	0.586	1.37	11.436	B

### Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	471.30	469.31	129.32	0.00	807.36	0.584	1.37	10.586	B
2	217.44	216.74	348.00	0.00	601.55	0.361	0.56	9.338	A
3	538.75	534.08	132.91	0.00	737.33	0.731	2.54	17.312	C

### Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	471.30	471.22	130.37	0.00	806.76	0.584	1.38	10.722	B
2	217.44	217.42	349.42	0.00	600.76	0.362	0.56	9.389	A
3	538.75	538.42	133.33	0.00	737.09	0.731	2.62	18.040	C

### Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	384.81	386.75	107.64	0.00	819.66	0.469	0.90	8.354	A
2	177.54	178.22	286.79	0.00	635.58	0.279	0.39	7.884	A
3	439.89	444.54	109.29	0.00	750.60	0.586	1.46	11.933	B

### Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	322.26	323.29	89.68	0.00	829.85	0.388	0.64	7.120	A
2	148.68	149.08	239.73	0.00	661.75	0.225	0.29	7.029	A
3	368.38	370.39	91.42	0.00	760.65	0.484	0.96	9.271	A

# (Default Analysis Set) - 2023 Base + Development, PM

## Data Errors and Warnings

No errors or warnings

## Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

## Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 Base + Development, PM	2023 Base + Development	PM		ONE HOUR	14:45	16:15	90	15		

# Junction Network

## Junctions

Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	Mini-roundabout	1,2,3	16.16	C

## Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

# Arms

## Arms

Arm	Name	Description
1	B5312 (w)	
2	Westgate	
3	B5312 (e)	

## Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.90	3.00	5.30	8.80	15.00	7.20	0.00	
2	3.50	3.50	4.20	6.60	13.00	7.00	0.00	
3	3.30	3.30	4.10	5.00	16.20	12.90	0.00	

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

## Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.568	880.754
2		(calculated)	(calculated)	0.556	795.038
3		(calculated)	(calculated)	0.562	812.026

The slope and intercept shown above include any corrections and adjustments.

## Traffic Flows

### Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

## Entry Flows

### General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	493.56	100.000
2	ONE HOUR	✓	284.29	100.000
3	ONE HOUR	✓	490.37	100.000

## Turning Proportions

### Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	152.256	341.307
	2	147.387	0.000	136.905
	3	351.647	137.664	1.054

### Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.31	0.69
	2	0.52	0.00	0.48
	3	0.72	0.28	0.00

## Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

### Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.68	14.32	2.11	B
2	0.53	13.20	1.13	B
3	0.75	19.73	2.86	C

### Main Results for each time segment

#### Main results: (14:45-15:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	371.58	368.33	103.36	0.00	822.09	0.452	0.81	7.879	A
2	214.03	212.11	255.49	0.00	652.98	0.328	0.48	8.134	A
3	369.17	365.37	109.96	0.00	750.22	0.492	0.95	9.266	A

#### Main results: (15:00-15:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	443.70	442.22	124.15	0.00	810.29	0.548	1.18	9.739	A
2	255.57	254.77	306.74	0.00	624.49	0.409	0.68	9.715	A
3	440.83	438.87	132.08	0.00	737.79	0.598	1.44	11.961	B

#### Main results: (15:15-15:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	543.42	539.90	151.24	0.00	794.91	0.684	2.06	13.919	B
2	313.01	311.29	374.50	0.00	586.82	0.533	1.11	12.982	B
3	539.90	534.63	161.39	0.00	721.32	0.748	2.76	18.753	C

#### Main results: (15:30-15:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	543.42	543.22	152.61	0.00	794.13	0.684	2.11	14.316	B
2	313.01	312.93	376.81	0.00	585.53	0.535	1.13	13.196	B
3	539.90	539.49	162.24	0.00	720.84	0.749	2.86	19.728	C

#### Main results: (15:45-16:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	443.70	447.19	126.21	0.00	809.12	0.548	1.24	10.039	B
2	255.57	257.26	310.20	0.00	622.57	0.411	0.71	9.899	A
3	440.83	446.14	133.37	0.00	737.07	0.598	1.54	12.590	B

**Main results: (16:00-16:15)**

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	371.58	373.19	105.05	0.00	821.13	0.453	0.84	8.065	A
2	214.03	214.88	258.87	0.00	651.11	0.329	0.50	8.268	A
3	369.17	371.35	111.40	0.00	749.41	0.493	0.99	9.578	A

## (Default Analysis Set) - 2023 Base + Development, Saturday

### Data Errors and Warnings

No errors or warnings

### Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

### Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 Base + Development, Saturday	2023 Base + Development	Saturday		ONE HOUR	11:30	13:00	90	15		

## Junction Network

### Junctions

Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	Mini-roundabout	1,2,3	14.28	B

### Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

## Arms

### Arms

Arm	Name	Description
1	B5312 (w)	
2	Westgate	
3	B5312 (e)	

### Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.90	3.00	5.30	8.80	15.00	7.20	0.00	
2	3.50	3.50	4.20	6.60	13.00	7.00	0.00	
3	3.30	3.30	4.10	5.00	16.20	12.90	0.00	

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

## Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.568	880.754
2		(calculated)	(calculated)	0.556	795.038
3		(calculated)	(calculated)	0.562	812.026

The slope and intercept shown above include any corrections and adjustments.

## Traffic Flows

### Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

## Entry Flows

### General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	522.18	100.000
2	ONE HOUR	✓	277.62	100.000
3	ONE HOUR	✓	418.44	100.000

## Turning Proportions

### Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	177.420	344.759
	2	144.344	0.000	133.279
	3	300.199	118.243	0.000

### Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.34	0.66
	2	0.52	0.00	0.48
	3	0.72	0.28	0.00

## Vehicle Mix

**Average PCU Per Vehicle - Junction 1 (for whole period)**

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

**Heavy Vehicle Percentages - Junction 1 (for whole period)**

		To		
		1	2	3
From	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000

# Results

**Results Summary for whole modelled period**

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.71	15.46	2.41	C
2	0.52	12.92	1.08	B
3	0.64	13.72	1.72	B

**Main Results for each time segment**

**Main results: (11:30-11:45)**

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	393.12	389.59	88.22	0.00	830.68	0.473	0.88	8.086	A
2	209.01	207.15	257.22	0.00	652.02	0.321	0.47	8.059	A
3	315.03	312.18	107.70	0.00	751.49	0.419	0.71	8.144	A

**Main results: (11:45-12:00)**

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	469.43	467.75	105.95	0.00	820.62	0.572	1.30	10.152	B
2	249.58	248.81	308.82	0.00	623.33	0.400	0.66	9.592	A
3	376.17	374.96	129.37	0.00	739.32	0.509	1.01	9.847	A

**Main results: (12:00-12:15)**

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	574.93	570.77	129.43	0.00	807.30	0.712	2.34	14.952	B
2	305.67	304.05	376.84	0.00	585.52	0.522	1.06	12.715	B
3	460.71	458.01	158.08	0.00	723.18	0.637	1.69	13.436	B

**Main results: (12:15-12:30)**

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	574.93	574.68	130.15	0.00	806.88	0.713	2.41	15.455	C
2	305.67	305.59	379.42	0.00	584.08	0.523	1.08	12.919	B

3	460.71	460.58	158.89	0.00	722.73	0.637	1.72	13.716	B
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**Main results: (12:30-12:45)**

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	469.43	473.57	107.05	0.00	820.00	0.572	1.37	10.513	B
2	249.58	251.17	312.66	0.00	621.20	0.402	0.68	9.769	A
3	376.17	378.82	130.59	0.00	738.63	0.509	1.06	10.079	B

**Main results: (12:45-13:00)**

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	393.12	394.96	89.39	0.00	830.02	0.474	0.91	8.309	A
2	209.01	209.82	260.76	0.00	650.05	0.322	0.48	8.194	A
3	315.03	316.33	109.09	0.00	750.71	0.420	0.73	8.312	A