Transport Potential

Transport Planning and Design

Transport Assessment

PROPOSED ALDI FOODSTORE

May 2013

Aldi Stores Ltd



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1. INTRODUCTION

1.1 This Transport Assessment (TA) has been prepared to support a planning application for a new Aldi food store on brownfield site, Barnsley Road, Cudworth, South Yorkshire.

1.2 Barnsley Road is the main route through Cudworth connecting to Barnsley in the South and Hemsworth to the North. The award winning Cudworth and West Green bypass opened in 5th July 2010. It is widely reported that the bypass has removed a significant level of through traffic from Cudworth.

1.3 The proposed Aldi store has a finite catchment and as such would look to attract those currently visiting Cudworth and Cudworth resident's that are currently leaving the area to carry out a food retail shop. The closest Aldi store to the site is Doncaster Road, Barnsley at (2.6miles), this is also the closest discount food store.

1.4 Approximately 992 people live within 500m of the subject site, an easy walk in catchment with 4536 people living within 1km of the site, with only 72% of households with access to a car.

1.5 A Public Consultation was held in April 2013, where local support was in excess of 90%.

1.6 This TA has been produced in line with the DfT Guidance on Transport Assessment and the scope agreed with Barnsley Metropolitan Borough Council (BMBC) Highways officers.

1.7 A Travel Plan (TP) is also included in the application pack. It is important to encourage non car use; the Transport Assessment takes account of the effect of TP.

1.8 A pre application meeting involving BMBC planning officers was attended. At this meeting the highways officer provided comments in relation to the scope and the access location.

1.9 The TA provides a background to the existing highways situation in the area and that connected to the existing site use. The proposed development is then discussed and the impact on the network is demonstrated.

2. EXISTING SITUATION

2.1 Cudworth is approximately 3.5 miles from Barnsley Town Centre, Cudworth was original a rural settlement, which altered with the introduction of local deep mining operations.

2.2 The main road through Cudworth historically connected Barnsley to Pontefract.

2.3 The town centre has number of existing retail opportunities with food retail being supplied largely by the Co-operative and Fultons Foods directly adjacent to the site.

2.4 The Co-operative food store is supported by approximately 78 spaces, this is the only real parking provision within Cudworth; this is frequently oversubscribed. The Fulton food store is supported by approximately 5 no. parking spaces. This is directly adjacent to the subject site.

Land Use and Planning History

2.5 The site is currently made up of old hard surfacing and areas of scrubland and has a dropped kerb footway crossing. It was a former local authority building which included a vehicular access between the site and the Methodist Church.

2.6 The site to the rear has been built out as part of a new residential development.

2.7 The site was in use prior to the bypass being built when traffic flows were much higher in Cudworth, with a smaller access, which had reduced visibility.

Accessibility by Non Car Modes

2.8 The site is bound with a 2m wide footway on Barnsley Road, this route is level and the surfacing is consistent.

2.9 The footway width is maintained to the south west towards the co-operative store.

2.10 An uncontrolled pedestrian crossing exists for crossing Barnsley Road. This is lit and is provided with tactile pavers. This facility is provided approximately 125m from the site.

2.11 There are no on street cycle facilities within Cudworth, cycling is carried out on the highway. The Trans Pennine cycle route runs through Cudworth to Worsbrough. The route is 6.4 miles long and is completely off road and noted to take 36 minutes.

2.12 This off road route is 900m from the site and is accessed along Barnsley Road.

2.13 A controlled crossing exists to the north east of the subject site outside The Victoria (PH). This facility is approximately 90m from the site and is on a desire line to the residential area of Belle Green and the residential areas named after motor race circuits (Mallory, Snetterton, etc).

2.14 As a result of the close proximity to the existing retail outlets, there is a very high propensity for linked trips at this development. Previous surveys have suggested that between 50-70% of Aldi shoppers also visited a store in the centre.

2.15 The closest northbound bus stop is located 55m from the site, this stop consists of a lay-by, shelter, timetable, case, flag and pole. The southbound stop is located close to the signal controlled crossing point to the north of the site approximately 120m from the subject site. This stop consists of a lay-by, shelter, timetable, case, flag and pole. This stop is accessed via the signal controlled pedestrian crossing, this is on the desire line between the subject site and the closest southbound stop.

2.16 The table below provides information on the bus operation times, frequency and major destinations.

Number – Route	Start /Finish	Weekday Frequency	Saturday Frequency	Sunday Frequency
27 Barnsley – Cudworth - Wombwell	0801/2256	60 mins	60 mins	60 mins
28 Barnsley – Cudworth – Pontefract	0525/1730	60 mins	60 mins	No Service
29 Barnsley – Cudworth – Upton	0811/2236	30 mins	30 mins	60 mins
30 Barnsley – Cudworth – Pontefract	0713/2311	60 mins	60 mins	60 mins
32 Barnsley – Cudworth – Shafton	0652/2326	15 mins	15 mins	60 mins
34 Barnsley – Cudworth – Barnsley	0655/1805	60 mins	60 mins	No Service
37 Barnsley – Cudworth - Grimethorpe	0800/1550	60 mins	60 mins	60 mins
38 Barnsley – Cudworth – Hemsworth	0906/1606	60 mins	60 mins	No Service
38 Barnsley – Cudworth – Hemsworth	Q	60 mins	60 mins	No Service

Table 2.1 – Bus Frequency Table.

2.17 Overall the site is considered to be highly accessible by non-car modes. This is due to the close proximity to the existing retail units in Cudworth, with the most apparent being Fulton Foods. The site benefits from a high level of public transport accessibility and as such the potential non car travel population catchment is high.

Highway Network

2.18 Barnsley Road, is a key route to the centre of Cudworth. Historically this was the main route through Cudworth carrying some 12,279 vehicles per day. As a result of the construction of the A628 bypass this through traffic has reduced to 5,220 vehicles per day. Therefore 7,059 vehicles were travelling through Cudworth unnecessarily.

2.19 The "One Year After" study highlights that public transport reliability has increased and that the scheme successfully reduced congestion within Cudworth.

2.20 An accident analysis has also been carried out, this identifies a 58% reduction in accidents on the old A628 (Barnsley Road, Cudworth).

2.21 The introduction of a bypass has removed unnecessary traffic from Cudworth, allowing the centre to form a such and not be congested by through traffic.

3. ACCIDENT ANALYSIS

3.1 In accordance with the Transport Assessment guidelines an accident assessment has been carried out within the agreed study area.

3.2 Accidents are investigated to highlight a common theme and to ensure that the development would not affect the accident rate.

3.3 Within the study area, there have been 27 no. accidents of which 0 were reported as fatalities, 3 were reported as severe and 24 were slight.

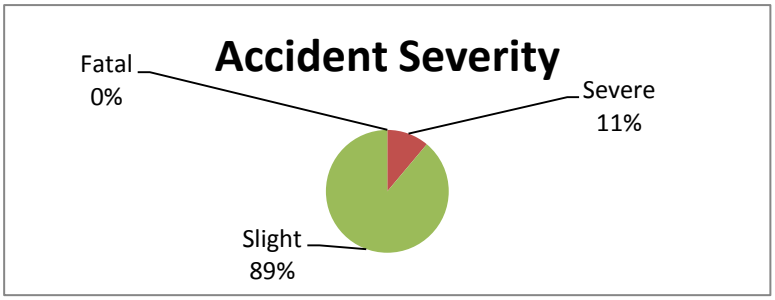


Figure 3.1 – Accident Severity Chart

3.4 A variety of factors have been investigated, the charts below outline the accident analysis in summary.

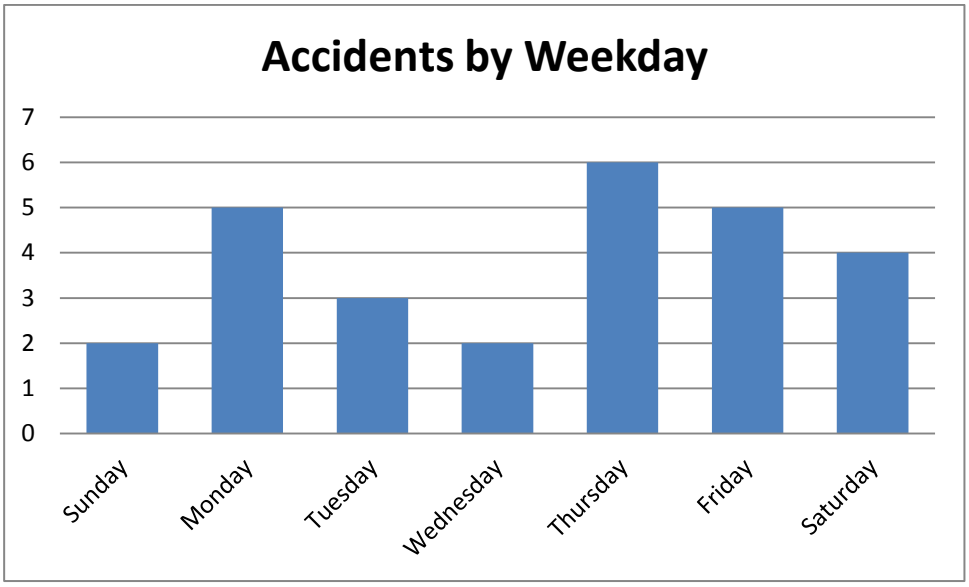


Figure 3.2 – Accident by Weekday

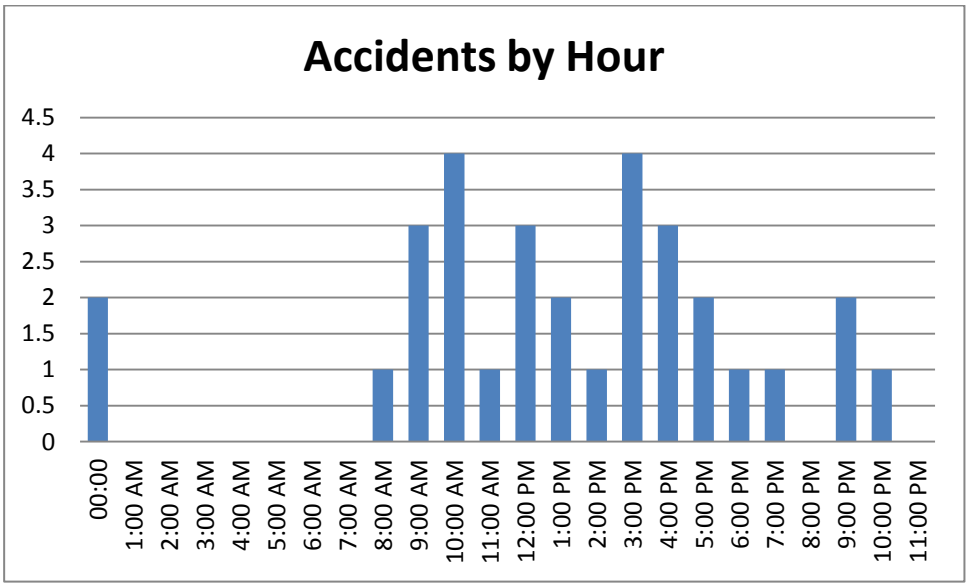


Figure 3.4 Accidents by Hour of Day

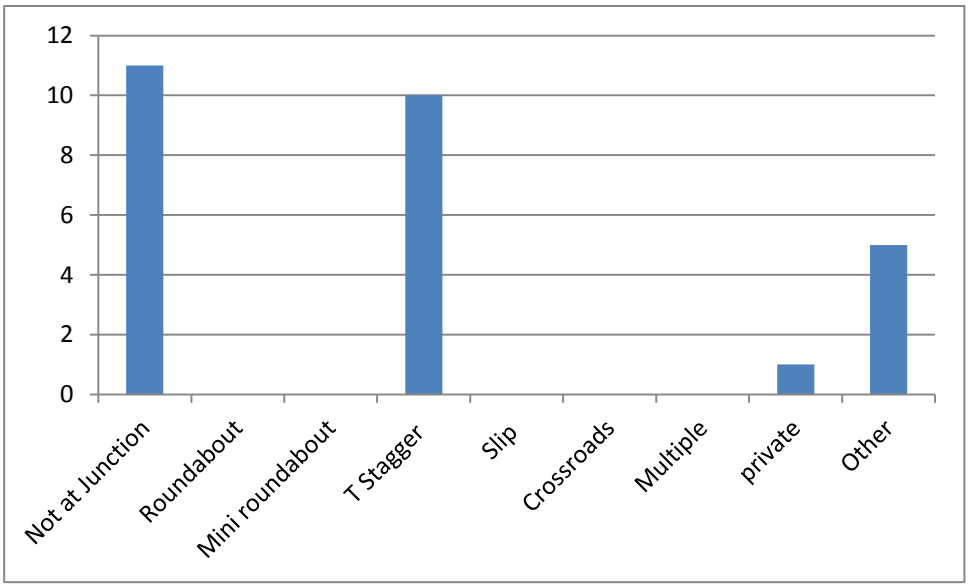


Figure 3.5 – Accident by junction type

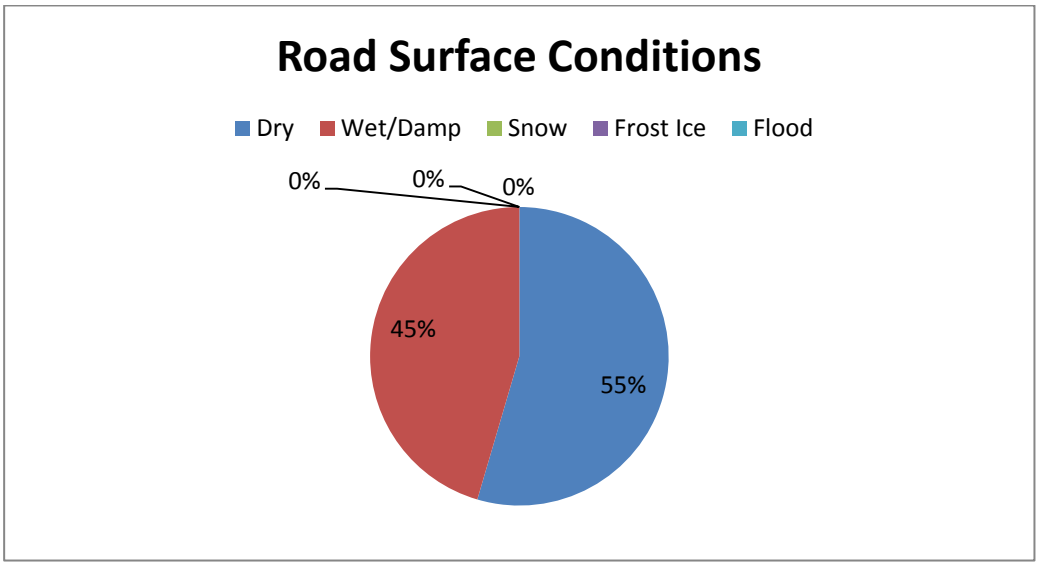


Figure 3.6 – Road Surface Conditions

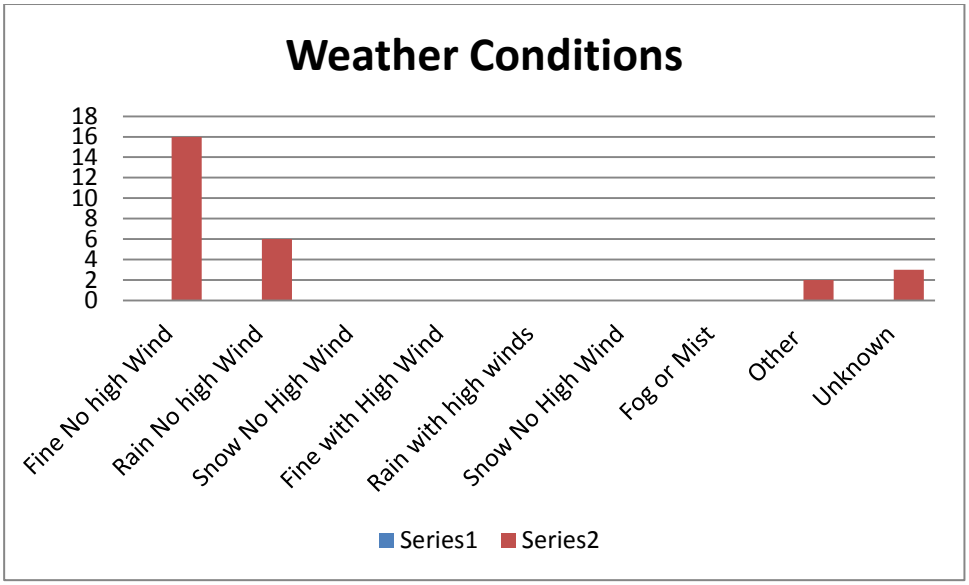


Figure 3.7 – Weather Conditions at Time of Accident

3.5 Having thoroughly investigated the accident data there are no common causation factors.

3.6 The accidents were linked by driver error; many appeared to be rear end shunts with drivers not paying attention. The accident plot is attached to this report.

3.7 Based on the above consenting this development would have no effect on the existing accident rate.

4. PROPOSED DEVELOPMENT

4.1 This Transport Assessment (TA) assess the effect of placing an Aldi Foodstore 1355 Sqm Gross Floor Area (GFA), 990 sqm Retail Floor Area (RFA) supported by 77 car parking spaces.

Access

4.2 The existing site access has been removed as part of the proposal and replaced with a new priority junction.

4.3 At the meeting the highways officer was satisfied with the layout and we have agreed to carry out detailed modelling in relation to not only the proposed access but also Barnsley Road/Bow Street (47m) and Barnsley Road/Syndale Road (34m). The distance between the junctions in brackets () as the junction spacing is sufficient in terms of local and national guidance.

4.4 It was discussed that the provision of a right turn lane may be beneficial. This has been investigated and the proposed layout can be adjusted to implement a right turn lane if necessary.

4.5 The access has been analysed using PICADY, this is discussed in detail in the next section of this report.

Aldi Food Store

4.6 Given the characteristics discussed in the previous chapter, the site has a significant walk in catchment at some 4536 residents within an identified 1km walk in catchment.

4.7 Footways are provided on Barnsley Road to an acceptable standard. The site is located in a highly accessible area as discussed in the previous section of this report.

4.8 Given the prominent location, the Aldi store would capture many pass-by trips and linked trips. Food Stores are unique as people shop somewhere at present; a new food store does not encourage new trips, but redistributes existing trips, generally as a result of the new facility being more convenient. This is discussed in detail in the next section of this report.

4.9 The food store would be supported by a new 77 space car park and 10 cycle spaces.

4.10 All developments proposing more than 10 spaces should provide 6% of the spaces as accessible by disabled motorists. This has been included within the proposed layout. These bays are supplemented further by Parent and Child Bays.

4.11 Servicing is entirely carried out within the site boundary, a standard Aldi layout is proposed, where service vehicles utilise the car park aisles. This is a similar operation to that approved at Barugh Green.

4.12 Aldi utilise a unique delivery system where typically one articulated vehicle delivers direct from the distribution centre daily. This vehicle carries fresh, ambient, chilled and frozen goods as well as internal mail.

4.13 The store also receives one independent bread and milk delivery per day, this is carried out by a local supplier, and this store would be an additional delivery on their existing schedule.

4.14 The servicing arrangement can be carried out when the store is operating and when it is closed, in a similar manner to that approved at Barugh Green.

4.15 The loading bay is level with the rear of the vehicle; this allows the driver to unload the delivery without the use of mechanical aid. The delivery area is equipped with a heavy curtain to each side of the trailer including the top; this contains any noise and light whilst unloading.

5. TRANSPORT PLANNING POLICY

National Planning Policy

5.1 The former Planning Policy Statement (PPS) 13 'Transport' (2011) was replaced by the National Planning Policy Framework (NPPF) on the 27th March 2012. This document condenses all previous PPGs and PPSs in to one document.

5.2 One of the 'core principles' of the NPPF is 'promoting sustainable transport'. The main objective of the NPPF is to "*actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling, and focus significant development in location which are or can be made sustainable*" (page 6). Paragraph 37 states that planning policies should aim for "*a balance of land uses within their area so that people can be encouraged to minimise journey lengths for employment, shopping, leisure, education and other activities."*

5.3 Paragraph 32 of the NPPF continues the requirement of Transport Assessments for all developments that generate significant amounts of movement. In addition a Travel Plan is required which will promote the use of sustainable modes of transport (Paragraph 36).

Local Planning Policy

South Yorkshire Second Local Transport Plan (LTP3) 2011-2016

5.4 The South Yorkshire Second Local Transport Plan sets out the longer term vision of what transport will look like in the future and identifies how local transport plays a key role in supporting the transformation of South Yorkshire.

5.5 The LTP3 describes the four shared priorities which have been agreed between central and local government and which form the basis of South Yorkshire's transport strategy, these being:

- Tackling congestion;
- Delivering accessibility;
- Providing safer roads; and
- Providing better air quality

5.6 The LTP3 notes the key transport challenges that are faced in South Yorkshire, which include:

- Addressing the way in which transport affects the communities of South Yorkshire's quality of life in terms of how they get access to the opportunities they need and the environmental and social effects of car growth; and
- To secure the strategic and local transport infrastructure and services which will develop and sustain the county's long term economic transformation

5.7 Amongst the proposed measures to achieve the priorities highlighted above are:

- Achieving modal shift from the private car by promoting public transport;
- Managing demand and reducing the need to travel through integrating transport, land use and parking policies and enhancing the role of Travel Planning; and
- Supporting physical regeneration, incorporating access and transport to help deliver truly sustainable communities

5.8 With reference to the proposed development and access to public transport, in this sense the site is in a very sustainable location, whilst the Draft Travel Plan submitted in conjunction with this TA will aim to develop the use of sustainable transport modes.

Barnsley Core Strategy

5.9 The core strategy discusses reducing the need to travel and encouraging travel by sustainable modes. This development would provide a real alternative to travelling further distances into key town centres such as Barnsley and Sheffield.

5.10 The Core Strategy Solutions suggests that *"Ensuring that new development is designed and built to provide safe, secure and convenient access for all road users".* This development provides a new access designed to the latest standards in highway design.

5.11 The transport element focuses on encouraging travel where necessary to be on foot. Typically people will walk 800m (19 minutes) to a food store, the DfT suggests that journeys of up to 1km (23 minutes) would be desirable and 2km (46 minutes) acceptable in terms of walking.

5.12 The walk-in catchment for the store would provide a viable alternative to travelling by car with much of the residential area being included. The site has sufficient crossing points, picking up the various desire lines.

Unitary Development Plan (UDP)

5.13 The UDP specifies that there is a desire to provide genuine choices of travel mode as alternatives to the private car be assisting public transport operation, retention and development of the network, and development of facilities for cyclists and pedestrians.

5.14 This development provides a key destination within the local area, the proposal provides people with the opportunity to stay within the urban area that they live to carry out a retail trip.

5.15 Policy T2 – Development will only be allowed if the additional demand for travel can be accommodated on the network without significant detriment to the environment or the safe and ease of movement of vehicles and pedestrians using the network or through measures to assist public transport, cycling or walking.

5.16 This Transport Assessment provides the evidence necessary to demonstrate that the proposal will have an imperceptible impact on the network.

5.17 Policy T14 Development proposals will be required to include measures to facilitate access to and where appropriate by public transport services.

5.18 The development is located within close proximity to bus stops and the bus frequency is very high.

5.19 Policy T17 In support of the councils goals the car parking policies will seek to ensure the provision and management of car parking to secure

- Levels of provision of parking commensurate with the encouragement of means of travel other than the car particularly by commuters
- Avoidance of harm to the free flow of traffic safety levels and the amenity of residents and other road users
- Encouragement of development that increases the number and range of job opportunities

5.20 Policy T22 New development shall be provided with no more car parking servicing and manoeuvring space than is necessary in order to ensure there is no significant adverse impact upon;

- Highway safety
- The local environment including amenity of local residents and adjoining land uses
- The vitality and viability of Barnsley Town centre and commercial centres. Applications providing more parking than necessary will be refused.
- Policy T27 the council will seek to encourage and support walk as a mode of transport and the design and layout of all development will be required to take account of the needs of pedestrians.

5.21 The development entirely accords with the car parking policy by providing 88 spaces.

Summary

5.22 Overall the entire development achieves the aspirations of national and local policy. The development provides a key destination necessary for all and therefore reduces the need for people to leave the local area to carry out a food retail shop.

6. TRIP GENERATION AND EFFECT

6.1 This section investigates the new land use, the trip generation, mode and trip type is discussed in detail.

6.2 The development will cause the largest effect at peak times; this section of the TA investigates the effect of replacing a car sales use with an Aldi store in this location.

Trip Generation

6.3 The TRICS database has been investigated to determine the trip generation. This was also provided as part of our scoping exercise and followed the guidance given in the recently approved Aldi application at Barugh Green, Barnsley.

6.4 The Highways officer requested a floor area calculation, therefore in order to ensure compliance the RFA of the store has been used to calculate trip generation. The output file is provided at Appendix B at the rear of this report.

Aldi Food Store

6.5 Based on the TRICS Good Practice Guide, the following parameters were selected therefore making the sample representative;

Retail – Discount Food Stores

Similar Parking Provision

Weekday and Saturday surveys only

Location - Edge of Town Centre, Suburban

6.6 The Peak hour was determined by the traffic surveys carried out in line with the scoping note agreed with highway officers.

	Walk	Cycle	Public Transport	Vehicle	Total
Proposed Aldi Store (990 RFA) 16:30-17:30 (Weekday)	24 (19.5%)	0 (0.7%)	3 (2.6%)	92 (77.2%)	120 (100%)
Proposed Aldi Store (990 RFA) 11:00-12:00 (Saturday)	30 (19.5%)	2 (0.7%)	4 (2.6%)	120 (77.2%)	156 (100%)

Table 5.1 – Proposed Aldi Peak Hour Trip Generation

Trip Type

6.7 Trips related to food purchases are carried out by each person / household at present. A new food store does not necessarily involve new trips; it does alter trip patterns and habits.

Linked Trips

6.8 These are trips that are already visiting a local destination and whilst carrying out the existing trip visit the Aldi store or visa versa.

6.9 Given that visitors are already attracted to the area, it is likely that during peak periods customers may visit two land uses.

6.10 A variety of studies have been carried out, predominantly TRICS report 95/2 provides information in relation to food store trip types.

Primary Transfer, Diverted and Pass-by Trips

6.11 Trip types at supermarkets were studied in depth by Napier University and Fairhurst and Partners. The following table demonstrates the recorded trip types at Safeway Stores throughout the UK.

Store	Primary Transferred	Diverted	Pass-by
Christchurch	60%	21%	19%
Poole	60%	29%	11%
Swindon	59%	27%	14%
Thanet	61%	33%	6%
Hampton	52%	18%	30%
Croydon	40%	32%	28%
Edinburgh	27%	44%	29%
Kirkcaldy	36%	41%	22%
Average	49%	31%	20%

Table 5.2 – Trip Type Proportion displayed in TRICs Report 95/2

6.12 The important fact to note from the above is that there are no new trips recorded.

6.13 Given the flows in the study area and the volume of traffic using the Syndale Road junction, the propensity to divert from an existing route is considered to be high.

- Primary Transfer 50%
- Diverted 30%
- Pass-by 20%

6.14 Taking into account the above information the following table outlines the trips by type.

	Arrival	Departure
Proposed Aldi Store (990 sqm RFA) 16:30-:17:30	43 (4.335)	50 (5.012)
Linked Trips (20% net total)	8	10
Primary Transfer (50% net total)	22	25
Diverted (30% net total)	13	15
Pass- by (20% net total)	8	10

Table 5.3 – Weekday Trip Generation by Trip Type

	Arrival	Departure
Proposed Aldi Store (990 sqm RFA) 11:30-12:30	56 (5.611)	64 (6.500)
Linked Trips (20% net total)	11	13
Primary Transfer (50% net total)	28	32
Diverted (30% net total)	17	19
Pass- by (20% net total)	11	13

Table 5.4 – Saturday Trip Generation by Trip Type

Trip Distribution

6.15 The Aldi trip distribution is based upon observed turning patterns. The catchment is based upon a 5 minute drive time as described in the retail assessment.

6.16 It is therefore considered that there will not be an increase in traffic within Cudworth at peak times, rather an alteration to existing turning patterns.

6.17 As the trips being redistributed as a result of this proposal are primary transfer trips they are solely making a food trip at present. These trips would arrive and depart to/from the same point.

6.18 Diverted trips have been taken from the study area. Due to the provision of a food store at this location it may be more convenient to divert from the existing route, proportions from each road have been derived from the turning counts.

6.19 Pass-by trips have been distributed based on existing traffic patterns.

Committed Development

6.20 There are no significant committed developments in the area that would have an effect on the study area connected to this development.

Junction Analysis

6.21 It was agreed that the site access and the adjacent junctions required detailed analysis. This is a similar study area to that agreed in Transport Assessment recently approved by BMBC for Aldi Stores.

6.22 An Aldi store has its biggest impact at the proposed new access and immediate junctions as this is where the transfer and diverted trips would be considered as new.

6.23 It was considered that the introduction of a new access onto Barnsley Road may affect the Barnsley Road / Syndale Road junction and due to the close proximity both councillors and the highway officer requested that the Barnsley Road / Bow Street junction was also analysed.

6.24 The flow diagrams assume that all of the primary transfer and diverted trips are new to the access junction, this is considered to be extremely robust.

6.25 Traffic within the study area was studied in November 2012. The peak retail period coincides with the network peak period on a weekday and on a Saturday. In order to identify the peak hour within the peak period a 3 hour survey was carried out between 15:30 and 18:30 on Friday 23rd November 2012 and between 11:00 and 14:00 on Saturday 24th November 2012. The traffic count data is provided at Appendix B.

6.26 The peak hour was recorded as 16:30 -17:30 on a weekday and 11:00 to 12:00 on a Saturday.

6.27 In line with DfT methodology traffic growth has been applied using NRTF and TEMPRO. The details of which are included at Appendix B. The 2012 Base data has been analysed in line with DfT Guidance, The NRTF adjusted by TEMPRO figures have been used to predict the 2013 figures and the assessment period of 5 years to 2018.

6.28 The flow diagrams displaying the traffic generation by type is included at Appendix C.

6.29 The PICADY output has been summarised below the full output is made available at Appendix D.

Arm	RFC	Queue
2012 Base		
Bow Street	0.017	0
Barnsley Road	0.010	0
2013 Base		
Bow Street	0.017	0
Barnsley Road	0.010	0
2013 Base + Aldi Development		
Bow Street	0.018	0
Barnsley Road	0.010	0
2018 Base		
Bow Street	0.023	0
Barnsley Road	0.013	0
2018 Base + Aldi Development		
Bow Street	0.023	0
Barnsley Road	0.013	0

Table 5.5- PM Peak PICADY Summary Table – Bow Street / Barnsley Road

Arm	RFC	Queue
2012 Base		

Bow Street	0.052	0
Barnsley Road	0.013	0
2013 Base		
Bow Street	0.053	0
Barnsley Road	0.013	0
2013 Base + Aldi Development		
Bow Street	0.054	0
Barnsley Road	0.013	0
2018 Base		
Bow Street	0.068	0
Barnsley Road	0.015	0
2018 Base + Aldi Development		
Bow Street	0.069	0
Barnsley Road	0.016	0

Table 5.6- Sat Peak PICADY Summary Table – Bow Street / Barnsley Road

Arm	RFC	Queue
2012 Base		
Syndale Road Left Turn	0.183	0
Syndale Road Right Turn	0.368	1
Barnsley Road	0.236	0
2012 Base		
Syndale Road Left Turn	0.189	0
Syndale Road Right Turn	0.380	1
Barnsley Road	0.242	0
2012 Base		
Syndale Road Left Turn	0.204	0
Syndale Road Right Turn	0.379	1
Barnsley Road	0.267	0
2012 Base		
Syndale Road Left Turn	0.223	0
Syndale Road Right Turn	0.463	1
Barnsley Road	0.279	0
Syndale Road Left Turn	0.239	0
Syndale Road Right Turn	0.467	1
Barnsley Road	0.307	0

Table 5.5- PM Peak PICADY Summary Table – Syndale Road / Barnsley Road

Arm	RFC	Queue
2012 Base		
Syndale Road Left Turn	0.203	0
Syndale Road Right Turn	0.319	1
Barnsley Road	0.180	0
2012 Base		
Syndale Road Left Turn	0.209	0
Syndale Road Right Turn	0.330	1
Barnsley Road	0.185	0
2012 Base		
Syndale Road Left Turn	0.226	0
Syndale Road Right Turn	0.324	1
Barnsley Road	0.214	0
2012 Base		
Syndale Road Left Turn	0.250	0
Syndale Road Right Turn	0.409	1
Barnsley Road	0.217	0
Syndale Road Left Turn	0.271	0
Syndale Road Right Turn	0.407	1
Barnsley Road	0.250	0

Table 5.6- Sat Peak PICADY Summary Table – Bow Street / Barnsley Road

Arm	RFC	Queue
2013 Base + Aldi Development		
Aldi Access	0.128	0
Barnsley Road	0.079	0
2018 Base + Aldi Development		
Aldi Access	0.136	0
Barnsley Road	0.086	0

Table 5.5- PM Peak PICADY Summary Table – Aldi Access / Barnsley Road

Arm	RFC	Queue
2013 Base + Aldi Development		
Aldi Access	0.164	0
Barnsley Road	0.107	0
2018 Base + Aldi Development		
Aldi Access	0.174	0
Barnsley Road	0.121	0

Table 5.6- Sat Peak PICADY Summary Table – Aldi Access / Barnsley Road

6.30 Based on the above the development has a minimal effect on the relation of flow to capacity and no effect on the queue. The queue would be the most obvious change to people using the network.

6.31 The blocking function for right turning traffic has been included within the PICADY assessment as no ghost island right turn facility is proposed or required as part of this assessment.

7. CONCLUSION

7.1 The proposed Aldi Store would re develop this existing brown field site, which offers no benefit to the community at present.

7.2 The site is accessible by all modes of travel, Barnsley Road benefits from two controlled crossing points and an uncontrolled crossing point, all serving key desire lines.

7.3 The site is located with extremely close proximity to the existing retail centre, the proposal doubles the number of parking spaces on offer within the centre and as such the propensity for linked trips is extremely high.

7.4 A new junction is proposed meeting the latest design standards, if a ghost island right turn lane can be included at the design stage then it will be. This junction entirely replaces the existing junction.

7.5 Accident data has been investigated; there is no significant link in accidents, over the past 5 years there are no reported accidents fronting the site.

7.6 Capacity assessments have been carried out; the results demonstrate that there is a negligible impact in the 2013 and 2018 assessment years.

7.7 Given the above, there are no highways or transportation reason as to why this development should not be approved.

APPENDIX A

TRICS Data

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
Category : C - DISCOUNT FOOD STORES
MULTI-MODAL VEHICLES

Selected regions and areas:

06	WEST MIDLANDS		
	SH	SHROPSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	1 days
08	NORTH WEST		
	MS	MERSEYSIDE	1 days
10	WALES		
	GW	GWYNEDD	1 days
	PS	POWYS	1 days
11	SCOTLAND		
	PK	PERTH & KINROSS	1 days
17	ULSTER (NORTHERN IRELAND)		
	DO	DOWN	1 days

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

Filtering Stage 2 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: Retail floor area
Actual Range: 800 to 1350 (units: sqm)
Range Selected by User: 649 to 1350 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/05 to 25/11/11

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	2 days
Wednesday	2 days
Friday	2 days

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

Selected survey types:

Manual count	7 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	5
Suburban Area (PPS6 Out of Centre)	2

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	1
Residential Zone	1
Retail Zone	1
No Sub Category	4

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.

Filtering Stage 3 selection:

Use Class:

Not Known	1 days
A1	6 days

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

Population within 1 mile:

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	1 days

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

Population within 5 miles:

5,001 to 25,000	2 days
25,001 to 50,000	3 days
100,001 to 125,000	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	6 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	7 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	7 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.

LIST OF SITES relevant to selection parameters

1 DO-01-C-01 LIDL DOWN
JUBILEE ROAD

NEWTOWNARDS
Edge of Town Centre
Industrial Zone
Total Retail floor area: 1350 sqm
Survey date: FRIDAY 25/11/11 Survey Type: MANUAL

2 GW-01-C-01 LIDL GWYNEDD
HIGH STREET

BANGOR
Edge of Town Centre
No Sub Category
Total Retail floor area: 1100 sqm
Survey date: FRIDAY 10/07/09 Survey Type: MANUAL

3 MS-01-C-03 ALDI MERSEYSIDE
LAUREL ROAD
ELM PARK
LIVERPOOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Retail floor area: 800 sqm
Survey date: WEDNESDAY 20/06/07 Survey Type: MANUAL

4 NY-01-C-02 LIDL NORTH YORKSHIRE
STATION ROAD

THIRSK
Edge of Town Centre
No Sub Category
Total Retail floor area: 1256 sqm
Survey date: TUESDAY 11/10/11 Survey Type: MANUAL

5 PK-01-C-01 ALDI PERTH & KINROSS
GLASGOW ROAD

PERTH
Edge of Town Centre
Retail Zone
Total Retail floor area: 1000 sqm
Survey date: WEDNESDAY 11/05/11 Survey Type: MANUAL

6 PS-01-C-01 ALDI POWYS
RICH WAY

BRECON
Edge of Town Centre
No Sub Category
Total Retail floor area: 975 sqm
Survey date: MONDAY 15/09/08 Survey Type: MANUAL

7 SH-01-C-01 LIDL SHROPSHIRE
CASTLE STREET
HADLEY
TELFORD
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Retail floor area: 1200 sqm
Survey date: TUESDAY 16/06/09 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.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
HI-01-C-01	Higher Car Use in Highlands

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	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	4	1163	0.301	4	1163	0.043	4	1163	0.344
08:00 - 09:00	7	1097	1.653	7	1097	1.133	7	1097	2.786
09:00 - 10:00	7	1097	3.333	7	1097	2.304	7	1097	5.637
10:00 - 11:00	7	1097	4.466	7	1097	3.854	7	1097	8.320
11:00 - 12:00	7	1097	4.739	7	1097	4.244	7	1097	8.983
12:00 - 13:00	7	1097	4.791	7	1097	4.778	7	1097	9.569
13:00 - 14:00	7	1097	4.010	7	1097	4.192	7	1097	8.202
14:00 - 15:00	7	1097	4.856	7	1097	4.531	7	1097	9.387
15:00 - 16:00	7	1097	4.921	7	1097	5.143	7	1097	10.064
16:00 - 17:00	7	1097	4.335	7	1097	5.012	7	1097	9.347
17:00 - 18:00	7	1097	4.101	7	1097	5.025	7	1097	9.126
18:00 - 19:00	7	1097	2.968	7	1097	3.541	7	1097	6.509
19:00 - 20:00	7	1097	1.679	7	1097	2.070	7	1097	3.749
20:00 - 21:00	4	1177	0.574	4	1177	0.871	4	1177	1.445
21:00 - 22:00	2	1175	0.170	2	1175	0.255	2	1175	0.425
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			46.897			46.996			93.893

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.

Parameter summary

Trip rate parameter range selected:	800 - 1350 (units: sqm)
Survey date date range:	01/01/05 - 25/11/11
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

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 for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	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	4	1163	0.000	4	1163	0.000	4	1163	0.000
08:00 - 09:00	7	1097	0.013	7	1097	0.013	7	1097	0.026
09:00 - 10:00	7	1097	0.026	7	1097	0.026	7	1097	0.052
10:00 - 11:00	7	1097	0.052	7	1097	0.039	7	1097	0.091
11:00 - 12:00	7	1097	0.039	7	1097	0.039	7	1097	0.078
12:00 - 13:00	7	1097	0.052	7	1097	0.052	7	1097	0.104
13:00 - 14:00	7	1097	0.065	7	1097	0.065	7	1097	0.130
14:00 - 15:00	7	1097	0.052	7	1097	0.052	7	1097	0.104
15:00 - 16:00	7	1097	0.078	7	1097	0.091	7	1097	0.169
16:00 - 17:00	7	1097	0.065	7	1097	0.052	7	1097	0.117
17:00 - 18:00	7	1097	0.065	7	1097	0.065	7	1097	0.130
18:00 - 19:00	7	1097	0.039	7	1097	0.052	7	1097	0.091
19:00 - 20:00	7	1097	0.013	7	1097	0.013	7	1097	0.026
20:00 - 21:00	4	1177	0.000	4	1177	0.000	4	1177	0.000
21:00 - 22:00	2	1175	0.000	2	1175	0.000	2	1175	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.559			0.559			1.118

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.

Parameter summary

Trip rate parameter range selected:	800 - 1350 (units: sqm)
Survey date date range:	01/01/05 - 25/11/11
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

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 for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	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	4	1163	0.000	4	1163	0.000	4	1163	0.000
08:00 - 09:00	7	1097	0.052	7	1097	0.052	7	1097	0.104
09:00 - 10:00	7	1097	0.026	7	1097	0.013	7	1097	0.039
10:00 - 11:00	7	1097	0.026	7	1097	0.039	7	1097	0.065
11:00 - 12:00	7	1097	0.013	7	1097	0.026	7	1097	0.039
12:00 - 13:00	7	1097	0.026	7	1097	0.026	7	1097	0.052
13:00 - 14:00	7	1097	0.039	7	1097	0.039	7	1097	0.078
14:00 - 15:00	7	1097	0.026	7	1097	0.026	7	1097	0.052
15:00 - 16:00	7	1097	0.026	7	1097	0.013	7	1097	0.039
16:00 - 17:00	7	1097	0.000	7	1097	0.013	7	1097	0.013
17:00 - 18:00	7	1097	0.000	7	1097	0.000	7	1097	0.000
18:00 - 19:00	7	1097	0.000	7	1097	0.000	7	1097	0.000
19:00 - 20:00	7	1097	0.000	7	1097	0.000	7	1097	0.000
20:00 - 21:00	4	1177	0.000	4	1177	0.000	4	1177	0.000
21:00 - 22:00	2	1175	0.000	2	1175	0.000	2	1175	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.234			0.247			0.481

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.

Parameter summary

Trip rate parameter range selected:	800 - 1350 (units: sqm)
Survey date date range:	01/01/05 - 25/11/11
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

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 for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL PSVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	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	4	1163	0.000	4	1163	0.000	4	1163	0.000
08:00 - 09:00	7	1097	0.000	7	1097	0.000	7	1097	0.000
09:00 - 10:00	7	1097	0.000	7	1097	0.000	7	1097	0.000
10:00 - 11:00	7	1097	0.000	7	1097	0.000	7	1097	0.000
11:00 - 12:00	7	1097	0.000	7	1097	0.000	7	1097	0.000
12:00 - 13:00	7	1097	0.000	7	1097	0.000	7	1097	0.000
13:00 - 14:00	7	1097	0.000	7	1097	0.000	7	1097	0.000
14:00 - 15:00	7	1097	0.000	7	1097	0.000	7	1097	0.000
15:00 - 16:00	7	1097	0.013	7	1097	0.000	7	1097	0.013
16:00 - 17:00	7	1097	0.000	7	1097	0.013	7	1097	0.013
17:00 - 18:00	7	1097	0.013	7	1097	0.013	7	1097	0.026
18:00 - 19:00	7	1097	0.000	7	1097	0.000	7	1097	0.000
19:00 - 20:00	7	1097	0.000	7	1097	0.000	7	1097	0.000
20:00 - 21:00	4	1177	0.000	4	1177	0.000	4	1177	0.000
21:00 - 22:00	2	1175	0.000	2	1175	0.000	2	1175	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.026			0.026			0.052

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.

Parameter summary

Trip rate parameter range selected:	800 - 1350 (units: sqm)
Survey date date range:	01/01/05 - 25/11/11
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

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 for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	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	4	1163	0.000	4	1163	0.000	4	1163	0.000
08:00 - 09:00	7	1097	0.026	7	1097	0.000	7	1097	0.026
09:00 - 10:00	7	1097	0.039	7	1097	0.052	7	1097	0.091
10:00 - 11:00	7	1097	0.013	7	1097	0.013	7	1097	0.026
11:00 - 12:00	7	1097	0.065	7	1097	0.026	7	1097	0.091
12:00 - 13:00	7	1097	0.052	7	1097	0.052	7	1097	0.104
13:00 - 14:00	7	1097	0.078	7	1097	0.078	7	1097	0.156
14:00 - 15:00	7	1097	0.052	7	1097	0.065	7	1097	0.117
15:00 - 16:00	7	1097	0.052	7	1097	0.039	7	1097	0.091
16:00 - 17:00	7	1097	0.104	7	1097	0.104	7	1097	0.208
17:00 - 18:00	7	1097	0.130	7	1097	0.169	7	1097	0.299
18:00 - 19:00	7	1097	0.013	7	1097	0.013	7	1097	0.026
19:00 - 20:00	7	1097	0.026	7	1097	0.026	7	1097	0.052
20:00 - 21:00	4	1177	0.000	4	1177	0.021	4	1177	0.021
21:00 - 22:00	2	1175	0.000	2	1175	0.000	2	1175	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.650			0.658			1.308

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.

Parameter summary

Trip rate parameter range selected:	800 - 1350 (units: sqm)
Survey date date range:	01/01/05 - 25/11/11
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

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 for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	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	4	1163	0.344	4	1163	0.043	4	1163	0.387
08:00 - 09:00	7	1097	2.031	7	1097	1.393	7	1097	3.424
09:00 - 10:00	7	1097	4.348	7	1097	2.929	7	1097	7.277
10:00 - 11:00	7	1097	6.236	7	1097	5.247	7	1097	11.483
11:00 - 12:00	7	1097	6.809	7	1097	5.989	7	1097	12.798
12:00 - 13:00	7	1097	6.835	7	1097	7.004	7	1097	13.839
13:00 - 14:00	7	1097	5.494	7	1097	5.807	7	1097	11.301
14:00 - 15:00	7	1097	6.822	7	1097	6.783	7	1097	13.605
15:00 - 16:00	7	1097	7.642	7	1097	7.629	7	1097	15.271
16:00 - 17:00	7	1097	6.379	7	1097	7.252	7	1097	13.631
17:00 - 18:00	7	1097	6.601	7	1097	7.421	7	1097	14.022
18:00 - 19:00	7	1097	4.752	7	1097	5.611	7	1097	10.363
19:00 - 20:00	7	1097	2.747	7	1097	3.398	7	1097	6.145
20:00 - 21:00	4	1177	0.977	4	1177	1.424	4	1177	2.401
21:00 - 22:00	2	1175	0.170	2	1175	0.255	2	1175	0.425
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			68.187			68.185			136.372

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.

Parameter summary

Trip rate parameter range selected:	800 - 1350 (units: sqm)
Survey date date range:	01/01/05 - 25/11/11
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

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 for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	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	4	1163	0.172	4	1163	0.043	4	1163	0.215
08:00 - 09:00	7	1097	0.495	7	1097	0.338	7	1097	0.833
09:00 - 10:00	7	1097	1.146	7	1097	1.055	7	1097	2.201
10:00 - 11:00	7	1097	1.732	7	1097	1.432	7	1097	3.164
11:00 - 12:00	7	1097	1.745	7	1097	1.536	7	1097	3.281
12:00 - 13:00	7	1097	1.745	7	1097	1.927	7	1097	3.672
13:00 - 14:00	7	1097	1.562	7	1097	1.432	7	1097	2.994
14:00 - 15:00	7	1097	1.419	7	1097	1.510	7	1097	2.929
15:00 - 16:00	7	1097	1.953	7	1097	1.810	7	1097	3.763
16:00 - 17:00	7	1097	1.849	7	1097	1.823	7	1097	3.672
17:00 - 18:00	7	1097	1.549	7	1097	1.732	7	1097	3.281
18:00 - 19:00	7	1097	1.224	7	1097	1.614	7	1097	2.838
19:00 - 20:00	7	1097	0.534	7	1097	0.508	7	1097	1.042
20:00 - 21:00	4	1177	0.000	4	1177	0.042	4	1177	0.042
21:00 - 22:00	2	1175	0.000	2	1175	0.000	2	1175	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			17.125			16.802			33.927

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.

Parameter summary

Trip rate parameter range selected:	800 - 1350 (units: sqm)
Survey date date range:	01/01/05 - 25/11/11
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

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 for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	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	4	1163	0.043	4	1163	0.000	4	1163	0.043
08:00 - 09:00	7	1097	0.091	7	1097	0.039	7	1097	0.130
09:00 - 10:00	7	1097	0.169	7	1097	0.182	7	1097	0.351
10:00 - 11:00	7	1097	0.247	7	1097	0.247	7	1097	0.494
11:00 - 12:00	7	1097	0.208	7	1097	0.169	7	1097	0.377
12:00 - 13:00	7	1097	0.260	7	1097	0.338	7	1097	0.598
13:00 - 14:00	7	1097	0.208	7	1097	0.195	7	1097	0.403
14:00 - 15:00	7	1097	0.078	7	1097	0.143	7	1097	0.221
15:00 - 16:00	7	1097	0.260	7	1097	0.195	7	1097	0.455
16:00 - 17:00	7	1097	0.156	7	1097	0.234	7	1097	0.390
17:00 - 18:00	7	1097	0.078	7	1097	0.091	7	1097	0.169
18:00 - 19:00	7	1097	0.065	7	1097	0.065	7	1097	0.130
19:00 - 20:00	7	1097	0.000	7	1097	0.026	7	1097	0.026
20:00 - 21:00	4	1177	0.000	4	1177	0.000	4	1177	0.000
21:00 - 22:00	2	1175	0.000	2	1175	0.000	2	1175	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.863			1.924			3.787

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.

Parameter summary

Trip rate parameter range selected:	800 - 1350 (units: sqm)
Survey date date range:	01/01/05 - 25/11/11
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

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 for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL TRAIN PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	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	4	1163	0.000	4	1163	0.000	4	1163	0.000
08:00 - 09:00	7	1097	0.104	7	1097	0.104	7	1097	0.208
09:00 - 10:00	7	1097	0.000	7	1097	0.000	7	1097	0.000
10:00 - 11:00	7	1097	0.000	7	1097	0.000	7	1097	0.000
11:00 - 12:00	7	1097	0.026	7	1097	0.026	7	1097	0.052
12:00 - 13:00	7	1097	0.052	7	1097	0.052	7	1097	0.104
13:00 - 14:00	7	1097	0.013	7	1097	0.013	7	1097	0.026
14:00 - 15:00	7	1097	0.000	7	1097	0.000	7	1097	0.000
15:00 - 16:00	7	1097	0.039	7	1097	0.039	7	1097	0.078
16:00 - 17:00	7	1097	0.000	7	1097	0.000	7	1097	0.000
17:00 - 18:00	7	1097	0.013	7	1097	0.013	7	1097	0.026
18:00 - 19:00	7	1097	0.000	7	1097	0.000	7	1097	0.000
19:00 - 20:00	7	1097	0.000	7	1097	0.000	7	1097	0.000
20:00 - 21:00	4	1177	0.000	4	1177	0.000	4	1177	0.000
21:00 - 22:00	2	1175	0.000	2	1175	0.000	2	1175	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.247			0.247			0.494

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.

Parameter summary

Trip rate parameter range selected:	800 - 1350 (units: sqm)
Survey date date range:	01/01/05 - 25/11/11
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

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 for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL COACH PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	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	4	1163	0.000	4	1163	0.000	4	1163	0.000
08:00 - 09:00	7	1097	0.000	7	1097	0.000	7	1097	0.000
09:00 - 10:00	7	1097	0.000	7	1097	0.000	7	1097	0.000
10:00 - 11:00	7	1097	0.000	7	1097	0.000	7	1097	0.000
11:00 - 12:00	7	1097	0.000	7	1097	0.000	7	1097	0.000
12:00 - 13:00	7	1097	0.000	7	1097	0.000	7	1097	0.000
13:00 - 14:00	7	1097	0.000	7	1097	0.000	7	1097	0.000
14:00 - 15:00	7	1097	0.000	7	1097	0.000	7	1097	0.000
15:00 - 16:00	7	1097	0.078	7	1097	0.000	7	1097	0.078
16:00 - 17:00	7	1097	0.000	7	1097	0.078	7	1097	0.078
17:00 - 18:00	7	1097	0.052	7	1097	0.052	7	1097	0.104
18:00 - 19:00	7	1097	0.000	7	1097	0.000	7	1097	0.000
19:00 - 20:00	7	1097	0.000	7	1097	0.000	7	1097	0.000
20:00 - 21:00	4	1177	0.000	4	1177	0.000	4	1177	0.000
21:00 - 22:00	2	1175	0.000	2	1175	0.000	2	1175	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.130			0.130			0.260

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.

Parameter summary

Trip rate parameter range selected:	800 - 1350 (units: sqm)
Survey date date range:	01/01/05 - 25/11/11
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

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 for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	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	4	1163	0.043	4	1163	0.000	4	1163	0.043
08:00 - 09:00	7	1097	0.195	7	1097	0.143	7	1097	0.338
09:00 - 10:00	7	1097	0.169	7	1097	0.182	7	1097	0.351
10:00 - 11:00	7	1097	0.247	7	1097	0.247	7	1097	0.494
11:00 - 12:00	7	1097	0.234	7	1097	0.195	7	1097	0.429
12:00 - 13:00	7	1097	0.312	7	1097	0.391	7	1097	0.703
13:00 - 14:00	7	1097	0.221	7	1097	0.208	7	1097	0.429
14:00 - 15:00	7	1097	0.078	7	1097	0.143	7	1097	0.221
15:00 - 16:00	7	1097	0.378	7	1097	0.234	7	1097	0.612
16:00 - 17:00	7	1097	0.156	7	1097	0.312	7	1097	0.468
17:00 - 18:00	7	1097	0.143	7	1097	0.156	7	1097	0.299
18:00 - 19:00	7	1097	0.065	7	1097	0.065	7	1097	0.130
19:00 - 20:00	7	1097	0.000	7	1097	0.026	7	1097	0.026
20:00 - 21:00	4	1177	0.000	4	1177	0.000	4	1177	0.000
21:00 - 22:00	2	1175	0.000	2	1175	0.000	2	1175	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.241			2.302			4.543

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.

Parameter summary

Trip rate parameter range selected:	800 - 1350 (units: sqm)
Survey date date range:	01/01/05 - 25/11/11
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

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 for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	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	4	1163	0.559	4	1163	0.086	4	1163	0.645
08:00 - 09:00	7	1097	2.747	7	1097	1.875	7	1097	4.622
09:00 - 10:00	7	1097	5.702	7	1097	4.218	7	1097	9.920
10:00 - 11:00	7	1097	8.228	7	1097	6.939	7	1097	15.167
11:00 - 12:00	7	1097	8.853	7	1097	7.746	7	1097	16.599
12:00 - 13:00	7	1097	8.944	7	1097	9.374	7	1097	18.318
13:00 - 14:00	7	1097	7.356	7	1097	7.525	7	1097	14.881
14:00 - 15:00	7	1097	8.371	7	1097	8.501	7	1097	16.872
15:00 - 16:00	7	1097	10.025	7	1097	9.712	7	1097	19.737
16:00 - 17:00	7	1097	8.488	7	1097	9.491	7	1097	17.979
17:00 - 18:00	7	1097	8.423	7	1097	9.478	7	1097	17.901
18:00 - 19:00	7	1097	6.054	7	1097	7.304	7	1097	13.358
19:00 - 20:00	7	1097	3.307	7	1097	3.958	7	1097	7.265
20:00 - 21:00	4	1177	0.977	4	1177	1.487	4	1177	2.464
21:00 - 22:00	2	1175	0.170	2	1175	0.255	2	1175	0.425
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			88.204			87.949			176.153

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.

Parameter summary

Trip rate parameter range selected:	800 - 1350 (units: sqm)
Survey date date range:	01/01/05 - 25/11/11
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

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 : C - DISCOUNT FOOD STORES
MULTI-MODAL VEHICLES

Selected regions and areas:

06	WEST MIDLANDS		
	HE	HEREFORDSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	1 days

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

Filtering Stage 2 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:	Retail floor area
Actual Range:	750 to 1050 (units: sqm)
Range Selected by User:	649 to 1350 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/05 to 25/11/11

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	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 undertaking using machines.

Selected Locations:

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

Commercial Zone	1
Built-Up Zone	1

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

Filtering Stage 3 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®.

Population within 1 mile:

10,001 to 15,000	1 days
20,001 to 25,000	1 days

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

Population within 5 miles:

50,001 to 75,000	1 days
125,001 to 250,000	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.

LIST OF SITES relevant to selection parameters

1 HE-01-C-01 ALDI HEREFORDSHIRE
EIGN STREET

HEREFORD
Edge of Town Centre
Built-Up Zone
Total Retail floor area: 750 sqm
Survey date: SATURDAY 04/03/06 Survey Type: MANUAL

2 NY-01-C-01 NETTO NORTH YORKSHIRE
LAYERTHORPE

YORK
Suburban Area (PPS6 Out of Centre)
Commercial Zone
Total Retail floor area: 1050 sqm
Survey date: SATURDAY 21/05/05 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/C - DISCOUNT FOOD STORES
MULTI-MODAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	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	900	1.333	2	900	0.222	2	900	1.555
08:00 - 09:00	2	900	3.111	2	900	0.889	2	900	4.000
09:00 - 10:00	2	900	5.333	2	900	3.278	2	900	8.611
10:00 - 11:00	2	900	5.667	2	900	4.556	2	900	10.223
11:00 - 12:00	2	900	5.611	2	900	6.500	2	900	12.111
12:00 - 13:00	2	900	5.500	2	900	5.667	2	900	11.167
13:00 - 14:00	2	900	5.833	2	900	6.000	2	900	11.833
14:00 - 15:00	2	900	5.056	2	900	4.444	2	900	9.500
15:00 - 16:00	2	900	4.000	2	900	4.833	2	900	8.833
16:00 - 17:00	2	900	3.222	2	900	4.833	2	900	8.055
17:00 - 18:00	2	900	2.389	2	900	3.167	2	900	5.556
18:00 - 19:00	2	900	1.444	2	900	2.056	2	900	3.500
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			48.499			46.445			94.944

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.

Parameter summary

Trip rate parameter range selected:	750 - 1050 (units: sqm)
Survey date date range:	01/01/05 - 25/11/11
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	2
Number of Sundays:	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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	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	900	0.056	2	900	0.056	2	900	0.112
08:00 - 09:00	2	900	0.056	2	900	0.000	2	900	0.056
09:00 - 10:00	2	900	0.000	2	900	0.056	2	900	0.056
10:00 - 11:00	2	900	0.056	2	900	0.056	2	900	0.112
11:00 - 12:00	2	900	0.000	2	900	0.000	2	900	0.000
12:00 - 13:00	2	900	0.000	2	900	0.000	2	900	0.000
13:00 - 14:00	2	900	0.000	2	900	0.000	2	900	0.000
14:00 - 15:00	2	900	0.000	2	900	0.000	2	900	0.000
15:00 - 16:00	2	900	0.000	2	900	0.000	2	900	0.000
16:00 - 17:00	2	900	0.000	2	900	0.000	2	900	0.000
17:00 - 18:00	2	900	0.000	2	900	0.000	2	900	0.000
18:00 - 19:00	2	900	0.000	2	900	0.000	2	900	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.168			0.168			0.336

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.

Parameter summary

Trip rate parameter range selected:	750 - 1050 (units: sqm)
Survey date date range:	01/01/05 - 25/11/11
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	2
Number of Sundays:	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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL PSVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	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	900	0.000	2	900	0.000	2	900	0.000
08:00 - 09:00	2	900	0.056	2	900	0.000	2	900	0.056
09:00 - 10:00	2	900	0.000	2	900	0.000	2	900	0.000
10:00 - 11:00	2	900	0.000	2	900	0.000	2	900	0.000
11:00 - 12:00	2	900	0.000	2	900	0.000	2	900	0.000
12:00 - 13:00	2	900	0.000	2	900	0.000	2	900	0.000
13:00 - 14:00	2	900	0.000	2	900	0.000	2	900	0.000
14:00 - 15:00	2	900	0.000	2	900	0.000	2	900	0.000
15:00 - 16:00	2	900	0.000	2	900	0.000	2	900	0.000
16:00 - 17:00	2	900	0.000	2	900	0.056	2	900	0.056
17:00 - 18:00	2	900	0.000	2	900	0.000	2	900	0.000
18:00 - 19:00	2	900	0.000	2	900	0.000	2	900	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.056			0.056			0.112

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.

Parameter summary

Trip rate parameter range selected:	750 - 1050 (units: sqm)
Survey date date range:	01/01/05 - 25/11/11
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	2
Number of Sundays:	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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	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	900	0.000	2	900	0.000	2	900	0.000
08:00 - 09:00	2	900	0.056	2	900	0.000	2	900	0.056
09:00 - 10:00	2	900	0.167	2	900	0.056	2	900	0.223
10:00 - 11:00	2	900	0.167	2	900	0.167	2	900	0.334
11:00 - 12:00	2	900	0.000	2	900	0.111	2	900	0.111
12:00 - 13:00	2	900	0.000	2	900	0.056	2	900	0.056
13:00 - 14:00	2	900	0.222	2	900	0.111	2	900	0.333
14:00 - 15:00	2	900	0.167	2	900	0.111	2	900	0.278
15:00 - 16:00	2	900	0.444	2	900	0.278	2	900	0.722
16:00 - 17:00	2	900	0.056	2	900	0.222	2	900	0.278
17:00 - 18:00	2	900	0.111	2	900	0.278	2	900	0.389
18:00 - 19:00	2	900	0.056	2	900	0.056	2	900	0.112
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.446			1.446			2.892

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.

Parameter summary

Trip rate parameter range selected:	750 - 1050 (units: sqm)
Survey date date range:	01/01/05 - 25/11/11
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	2
Number of Sundays:	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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	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	900	1.389	2	900	0.278	2	900	1.667
08:00 - 09:00	2	900	3.667	2	900	0.944	2	900	4.611
09:00 - 10:00	2	900	8.333	2	900	4.667	2	900	13.000
10:00 - 11:00	2	900	9.111	2	900	7.278	2	900	16.389
11:00 - 12:00	2	900	10.167	2	900	10.667	2	900	20.834
12:00 - 13:00	2	900	9.778	2	900	9.056	2	900	18.834
13:00 - 14:00	2	900	10.333	2	900	10.556	2	900	20.889
14:00 - 15:00	2	900	10.056	2	900	8.444	2	900	18.500
15:00 - 16:00	2	900	7.611	2	900	8.389	2	900	16.000
16:00 - 17:00	2	900	5.611	2	900	8.278	2	900	13.889
17:00 - 18:00	2	900	4.056	2	900	5.389	2	900	9.445
18:00 - 19:00	2	900	2.722	2	900	3.722	2	900	6.444
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			82.834			77.668			160.502

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.

Parameter summary

Trip rate parameter range selected:	750 - 1050 (units: sqm)
Survey date date range:	01/01/05 - 25/11/11
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	2
Number of Sundays:	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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	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	900	0.111	2	900	0.111	2	900	0.222
08:00 - 09:00	2	900	1.222	2	900	0.611	2	900	1.833
09:00 - 10:00	2	900	1.722	2	900	2.333	2	900	4.055
10:00 - 11:00	2	900	5.278	2	900	5.111	2	900	10.389
11:00 - 12:00	2	900	5.333	2	900	5.611	2	900	10.944
12:00 - 13:00	2	900	5.444	2	900	6.111	2	900	11.555
13:00 - 14:00	2	900	4.722	2	900	4.444	2	900	9.166
14:00 - 15:00	2	900	6.056	2	900	6.778	2	900	12.834
15:00 - 16:00	2	900	6.667	2	900	6.056	2	900	12.723
16:00 - 17:00	2	900	3.556	2	900	4.333	2	900	7.889
17:00 - 18:00	2	900	3.778	2	900	4.722	2	900	8.500
18:00 - 19:00	2	900	1.944	2	900	1.500	2	900	3.444
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			45.833			47.721			93.554

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

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

Parameter summary

Trip rate parameter range selected:	750 - 1050 (units: sqm)
Survey date date range:	01/01/05 - 25/11/11
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	2
Number of Sundays:	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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	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	900	0.000	2	900	0.000	2	900	0.000
08:00 - 09:00	2	900	0.000	2	900	0.000	2	900	0.000
09:00 - 10:00	2	900	0.111	2	900	0.222	2	900	0.333
10:00 - 11:00	2	900	0.222	2	900	0.111	2	900	0.333
11:00 - 12:00	2	900	0.500	2	900	0.389	2	900	0.889
12:00 - 13:00	2	900	0.056	2	900	0.222	2	900	0.278
13:00 - 14:00	2	900	0.333	2	900	0.333	2	900	0.666
14:00 - 15:00	2	900	0.167	2	900	0.278	2	900	0.445
15:00 - 16:00	2	900	0.111	2	900	0.222	2	900	0.333
16:00 - 17:00	2	900	0.000	2	900	0.167	2	900	0.167
17:00 - 18:00	2	900	0.000	2	900	0.056	2	900	0.056
18:00 - 19:00	2	900	0.000	2	900	0.000	2	900	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.500			2.000			3.500

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.

Parameter summary

Trip rate parameter range selected:	750 - 1050 (units: sqm)
Survey date date range:	01/01/05 - 25/11/11
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	2
Number of Sundays:	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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL TRAIN PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	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	900	0.000	2	900	0.000	2	900	0.000
08:00 - 09:00	2	900	0.000	2	900	0.000	2	900	0.000
09:00 - 10:00	2	900	0.000	2	900	0.000	2	900	0.000
10:00 - 11:00	2	900	0.000	2	900	0.000	2	900	0.000
11:00 - 12:00	2	900	0.000	2	900	0.000	2	900	0.000
12:00 - 13:00	2	900	0.000	2	900	0.000	2	900	0.000
13:00 - 14:00	2	900	0.000	2	900	0.000	2	900	0.000
14:00 - 15:00	2	900	0.000	2	900	0.000	2	900	0.000
15:00 - 16:00	2	900	0.000	2	900	0.000	2	900	0.000
16:00 - 17:00	2	900	0.000	2	900	0.000	2	900	0.000
17:00 - 18:00	2	900	0.000	2	900	0.000	2	900	0.000
18:00 - 19:00	2	900	0.000	2	900	0.000	2	900	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.

Parameter summary

Trip rate parameter range selected:	750 - 1050 (units: sqm)
Survey date date range:	01/01/05 - 25/11/11
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	2
Number of Sundays:	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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL COACH PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	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	900	0.000	2	900	0.000	2	900	0.000
08:00 - 09:00	2	900	0.000	2	900	0.000	2	900	0.000
09:00 - 10:00	2	900	0.000	2	900	0.000	2	900	0.000
10:00 - 11:00	2	900	0.000	2	900	0.000	2	900	0.000
11:00 - 12:00	2	900	0.000	2	900	0.000	2	900	0.000
12:00 - 13:00	2	900	0.000	2	900	0.000	2	900	0.000
13:00 - 14:00	2	900	0.000	2	900	0.000	2	900	0.000
14:00 - 15:00	2	900	0.000	2	900	0.000	2	900	0.000
15:00 - 16:00	2	900	0.000	2	900	0.000	2	900	0.000
16:00 - 17:00	2	900	0.000	2	900	0.000	2	900	0.000
17:00 - 18:00	2	900	0.000	2	900	0.000	2	900	0.000
18:00 - 19:00	2	900	0.000	2	900	0.000	2	900	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.

Parameter summary

Trip rate parameter range selected:	750 - 1050 (units: sqm)
Survey date date range:	01/01/05 - 25/11/11
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	2
Number of Sundays:	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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	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	900	0.000	2	900	0.000	2	900	0.000
08:00 - 09:00	2	900	0.000	2	900	0.000	2	900	0.000
09:00 - 10:00	2	900	0.111	2	900	0.222	2	900	0.333
10:00 - 11:00	2	900	0.222	2	900	0.111	2	900	0.333
11:00 - 12:00	2	900	0.500	2	900	0.389	2	900	0.889
12:00 - 13:00	2	900	0.056	2	900	0.222	2	900	0.278
13:00 - 14:00	2	900	0.333	2	900	0.333	2	900	0.666
14:00 - 15:00	2	900	0.167	2	900	0.278	2	900	0.445
15:00 - 16:00	2	900	0.111	2	900	0.222	2	900	0.333
16:00 - 17:00	2	900	0.000	2	900	0.167	2	900	0.167
17:00 - 18:00	2	900	0.000	2	900	0.056	2	900	0.056
18:00 - 19:00	2	900	0.000	2	900	0.000	2	900	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.500			2.000			3.500

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.

Parameter summary

Trip rate parameter range selected:	750 - 1050 (units: sqm)
Survey date date range:	01/01/05 - 25/11/11
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	2
Number of Sundays:	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.

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	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	900	1.500	2	900	0.389	2	900	1.889
08:00 - 09:00	2	900	4.944	2	900	1.556	2	900	6.500
09:00 - 10:00	2	900	10.333	2	900	7.278	2	900	17.611
10:00 - 11:00	2	900	14.778	2	900	12.667	2	900	27.445
11:00 - 12:00	2	900	16.000	2	900	16.778	2	900	32.778
12:00 - 13:00	2	900	15.278	2	900	15.444	2	900	30.722
13:00 - 14:00	2	900	15.611	2	900	15.444	2	900	31.055
14:00 - 15:00	2	900	16.444	2	900	15.611	2	900	32.055
15:00 - 16:00	2	900	14.833	2	900	14.944	2	900	29.777
16:00 - 17:00	2	900	9.222	2	900	13.000	2	900	22.222
17:00 - 18:00	2	900	7.944	2	900	10.444	2	900	18.388
18:00 - 19:00	2	900	4.722	2	900	5.278	2	900	10.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			131.609			128.833			260.442

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.

Parameter summary

Trip rate parameter range selected:	750 - 1050 (units: sqm)
Survey date date range:	01/01/05 - 25/11/11
Number of weekdays (Monday-Friday):	0
Number of Saturdays:	2
Number of Sundays:	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 B

Traffic Count Data

Site 1:	Barnsley Road/Syndale Road	A:	Barnsley Road (North)
Day:	Friday	B:	Syndale Road
Date:	23 November 2012	C:	Barnsley Road (South)
Weather:	Fine/Clear		

	A - B									A - C							
Time	Car	LGV	OGVI	0GV2	P/C	M/C	PSV	Total		Car	LGV	OGVI	0GV2	P/C	M/C	PSV	Total
15:00	47	4	0	0	0	0	3	54		115	19	3	0	0	0	0	137
15:15	26	5	0	0	0	0	3	34		123	9	1	0	0	2	6	141
15:30	34	1	2	0	0	1	0	38		100	14	1	0	0	1	2	118
15:45	18	6	1	0	0	0	0	25		88	15	1	0	1	2	3	110
16:00	31	9	0	0	0	0	1	41		89	21	1	0	0	0	1	112
16:15	22	3	1	0	0	0	0	26		86	13	5	1	0	1	0	106
16:30	35	4	0	0	0	0	0	39		96	10	0	0	0	1	4	111
16:45	22	6	0	0	0	1	0	29		86	9	2	0	0	0	2	99
17:00	32	9	0	0	0	0	0	41		98	19	3	0	0	2	2	124
17:15	31	3	0	0	0	1	0	35		92	10	2	0	1	0	0	105
17:30	**33**	**6**	**0**	**0**	**0**	**1**	**0**	**40**		**79**	**11**	**1**	**0**	**0**	**0**	**1**	**92**
17:45	32	6	0	0	0	1	0	39		76	9	2	0	0	2	3	92
18:00	28	2	0	0	0	0	0	30		90	8	0	0	0	2	1	101
18:15	19	3	0	0	0	1	0	23		73	8	0	0	0	1	1	83
Total	410	67	4	0	0	6	7	494		1291	175	22	1	2	14	26	1531

B - A

Time	Car	LGV	OGVI	0GV2	P/C	M/C	PSV	Total
15:00	21	4	1	0	0	1	0	27
15:15	17	4	0	0	0	0	0	21
15:30	18	2	0	0	0	0	0	20
15:45	15	4	0	0	0	0	0	19
16:00	23	0	0	0	0	0	0	23
16:15	16	1	0	0	0	2	1	20
16:30	19	2	0	0	0	1	0	22
16:45	22	7	1	0	0	0	1	31
17:00	30	6	0	0	0	0	0	36
17:15	19	4	0	0	0	2	0	25
17:30	**14**	**3**	**0**	**0**	**0**	**0**	**0**	**17**
17:45	29	2	0	0	0	0	0	31
18:00	28	2	1	0	0	0	0	31
18:15	16	0	0	0	0	0	0	16
Total	287	41	3	0	0	6	2	339

B - C

Time	Car	LGV	OGVI	0GV2	P/C	M/C	PSV	Total
15:00	18	1	0	0	0	0	0	19
15:15	22	0	0	0	0	1	0	23
15:30	13	2	1	0	0	0	0	16
15:45	15	1	0	0	0	0	1	17
16:00	26	1	0	0	0	0	1	28
16:15	18	2	0	0	0	0	1	21
16:30	17	1	0	0	0	0	0	18
16:45	17	2	0	0	0	0	2	21
17:00	20	2	0	0	0	0	1	23
17:15	18	0	0	0	0	0	0	18
17:30	**17**	**2**	**0**	**0**	**0**	**0**	**0**	**19**
17:45	18	2	0	0	0	0	3	23
18:00	21	2	0	0	0	0	0	23
18:15	11	1	0	0	0	0	0	12
Total	251	19	1	0	0	1	9	281

C - A

Time	Car	LGV	OGVI	0GV2	P/C	M/C	PSV	Total
15:00	76	12	4	0	0	0	3	95
15:15	85	14	1	0	0	1	2	103
15:30	93	13	0	1	0	1	1	109
15:45	95	9	1	0	0	1	3	109
16:00	89	15	1	0	0	2	2	109
16:15	72	10	1	0	0	1	2	86
16:30	102	11	0	0	0	0	2	115
16:45	106	12	2	0	0	0	2	122
17:00	96	10	1	0	0	0	0	107
17:15	97	12	2	0	0	0	4	115
17:30	**72**	**10**	**0**	**0**	**0**	**4**	**3**	**89**
17:45	98	12	0	0	0	0	1	111
18:00	76	12	0	0	0	2	0	90
18:15	75	14	0	0	0	1	2	92
Total	1232	166	13	1	0	13	27	1452

C - B

Time	Car	LGV	OGVI	0GV2	P/C	M/C	PSV	Total
15:00	20	2	0	0	0	1	1	24
15:15	18	1	0	0	0	0	0	19
15:30	14	4	0	0	0	0	1	19
15:45	18	2	0	0	0	0	1	21
16:00	21	3	0	0	0	0	1	25
16:15	20	2	0	0	0	1	0	23
16:30	31	3	0	0	0	1	2	37
16:45	28	1	0	0	0	0	1	30
17:00	28	2	0	0	0	0	0	30
17:15	24	0	0	0	0	0	0	24
17:30	**22**	**3**	**0**	**0**	**0**	**0**	**2**	**27**
17:45	27	1	1	0	0	0	1	30
18:00	15	2	0	0	0	0	0	17
18:15	23	3	0	0	0	1	1	28
Total	309	29	1	0	0	4	11	354

Site 1:	Barnsley Road/Syndale Road	A:	Barnsley Road (North)
Day:	Saturday	B:	Syndale Road
Date:	24 November 2012	C:	Barnsley Road (South)
Weather:	Fine/Overcast/Gloomy		

	A - B								A - C							
Time	Car	LGV	OGVI	0GV2	P/C	M/C	PSV	Total	Car	LGV	OGVI	0GV2	P/C	M/C	PSV	Total
11:00	27	3	1	0	0	0	0	31	90	12	2	0	2	1	2	109
11:15	26	2	2	1	0	0	0	31	97	12	3	0	0	1	1	114
11:30	28	8	0	0	0	0	0	36	104	9	0	0	0	0	2	115
11:45	31	1	0	1	0	0	0	33	84	16	4	0	0	0	3	107
12:00	25	5	1	0	0	1	0	32	86	14	4	0	1	0	2	107
12:15	21	4	0	0	0	0	0	25	86	8	2	0	0	0	2	98
12:30	21	1	3	0	0	0	0	25	99	10	3	0	0	6	0	118
12:45	21	5	0	0	4	1	0	31	87	11	0	0	0	1	4	103
13:00	18	2	1	1	0	0	0	22	87	11	1	0	0	0	2	101
13:15	26	1	1	0	0	1	0	29	82	3	2	0	1	1	2	91
13:30	30	4	0	0	0	0	0	34	96	10	1	0	0	0	1	108
13:45	19	2	0	0	0	0	0	21	71	9	0	0	0	0	3	83
14:00	19	1	0	0	0	0	0	20	97	8	1	0	3	0	1	110
14:15	17	2	0	0	0	0	0	19	85	10	0	0	0	1	3	99
Total	329	41	9	3	4	3	0	389	1251	143	23	0	7	11	28	1463

	B - A								B - C							
Time	Car	LGV	OGVI	0GV2	P/C	M/C	PSV	Total	Car	LGV	OGVI	0GV2	P/C	M/C	PSV	Total
11:00	12	2	1	0	0	0	0	15	13	1	0	0	0	0	1	15
11:15	9	2	0	0	0	0	0	11	12	0	0	0	0	0	1	13
11:30	16	1	0	0	0	0	0	17	22	1	1	1	0	0	1	26
11:45	31	1	2	0	0	1	0	35	30	1	0	0	0	0	1	32
12:00	29	3	1	0	0	0	0	33	19	2	0	0	0	0	1	22
12:15	25	5	0	0	0	0	0	30	17	1	1	0	0	0	0	19
12:30	20	1	0	0	0	0	0	21	16	3	0	0	0	0	2	21
12:45	21	1	0	0	0	0	0	22	19	2	1	0	0	0	0	22
13:00	14	3	0	0	0	0	0	17	18	1	0	0	0	1	2	22
13:15	13	3	1	0	0	0	0	17	17	0	0	0	0	0	1	18
13:30	26	1	1	0	0	0	0	28	14	2	0	0	0	2	0	18
13:45	19	2	1	0	0	0	0	22	14	2	2	0	0	0	2	20
14:00	28	0	0	0	0	1	0	29	15	3	0	0	0	0	1	19
14:15	14	2	0	0	0	1	0	17	16	2	0	0	0	0	0	18
Total	277	27	7	0	0	3	0	314	242	21	5	1	0	3	13	285

	C - A								C - B							
Time	Car	LGV	OGVI	0GV2	P/C	M/C	PSV	Total	Car	LGV	OGVI	0GV2	P/C	M/C	PSV	Total
11:00	82	9	2	0	0	0	3	96	12	1	0	0	0	0	1	14
11:15	83	9	0	0	0	0	2	94	18	2	1	0	0	0	2	23
11:30	86	9	1	0	0	0	3	99	22	1	0	0	0	0	1	24
11:45	79	9	1	0	0	0	1	90	15	1	0	0	0	0	1	17
12:00	80	10	3	0	0	1	1	95	18	1	0	0	0	1	0	20
12:15	70	9	3	0	0	0	4	86	8	2	0	0	0	0	2	12
12:30	83	11	2	0	1	1	2	100	17	0	0	0	0	0	0	17
12:45	88	7	0	0	0	5	1	101	20	2	0	0	0	0	1	23
13:00	59	10	3	0	0	0	3	75	26	5	0	0	0	0	2	33
13:15	79	6	1	1	2	0	3	92	23	5	0	0	0	0	0	28
13:30	60	10	1	0	2	2	0	75	18	2	2	0	0	1	2	25
13:45	64	6	1	0	0	1	1	73	13	2	0	0	0	0	1	16
14:00	77	7	0	0	0	0	4	88	17	0	0	0	0	0	0	17
14:15	80	7	1	0	0	0	1	89	15	2	0	0	0	0	1	18
Total	1070	119	19	1	5	10	29	1253	242	26	3	0	0	2	14	287

Site 2:	Barnsley Road/Bow Street	A:	Barnsley Road (North)
Day:	Friday	B:	Bow Street
Date:	23 November 2012	C:	Barnsley Road (South)
Weather:	Fine/Clear		

	A - B								A - C							
Time	Car	LGV	OGVI	0GV2	P/C	M/C	PSV	Total	Car	LGV	OGVI	0GV2	P/C	M/C	PSV	Total
15:00	7	0	0	0	0	0	0	7	123	19	3	0	0	0	0	145
15:15	5	0	0	0	0	0	0	5	142	10	1	0	0	3	6	162
15:30	0	0	0	0	0	0	0	0	114	16	2	0	0	1	2	135
15:45	0	0	0	0	0	0	0	0	102	16	1	0	0	2	4	125
16:00	0	0	0	0	0	0	0	0	114	22	1	0	1	0	2	140
16:15	3	1	0	0	0	0	0	4	97	13	5	1	0	1	1	118
16:30	1	0	0	0	0	0	0	1	109	12	0	0	0	1	4	126
16:45	0	0	0	0	0	0	0	0	105	10	2	0	0	0	4	121
17:00	1	1	0	0	0	0	0	2	114	21	3	0	0	2	3	143
17:15	2	0	0	0	0	0	0	2	117	11	2	0	1	0	0	131
17:30	1	0	0	0	0	0	0	1	94	12	0	0	0	0	1	107
17:45	1	0	0	0	0	0	0	1	93	10	3	0	0	2	6	114
18:00	1	0	0	0	0	0	0	1	110	11	0	0	0	2	1	124
18:15	0	0	0	0	0	0	0	0	88	9	0	0	0	1	1	99
Total	22	2	0	0	0	0	0	24	1522	192	23	1	2	15	35	1790

	B - A								B - C							
Time	Car	LGV	OGVI	0GV2	P/C	M/C	PSV	Total	Car	LGV	OGVI	0GV2	P/C	M/C	PSV	Total
15:00	1	0	0	0	0	0	0	1	5	1	0	0	0	0	0	6
15:15	12	0	0	0	0	0	0	12	17	1	0	0	0	0	0	18
15:30	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	4
15:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
16:00	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0	2
16:15	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3
16:30	1	1	0	0	0	0	0	2	3	1	0	0	0	0	0	4
16:45	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
18:15	2	0	0	0	0	0	0	2	2	1	1	0	0	0	0	4
Total	20	2	0	0	0	0	0	22	37	7	1	0	0	0	0	45

	C - A								C - B							
Time	Car	LGV	OGVI	0GV2	P/C	M/C	PSV	Total	Car	LGV	OGVI	0GV2	P/C	M/C	PSV	Total
15:00	97	13	3	0	0	1	4	118	8	3	0	0	0	0	0	11
15:15	89	16	2	0	0	1	2	110	0	0	0	0	0	0	0	0
15:30	111	17	0	1	0	1	2	132	0	0	0	0	0	0	0	0
15:45	109	12	1	0	0	1	4	127	1	0	0	0	0	0	0	1
16:00	110	17	1	0	0	2	3	133	0	0	0	0	0	0	0	0
16:15	96	12	1	0	0	2	2	113	1	0	0	0	1	0	0	2
16:30	129	13	0	0	0	1	4	147	1	1	0	0	0	0	0	2
16:45	133	14	2	0	0	0	3	152	1	0	0	0	0	0	0	1
17:00	123	12	1	0	0	0	0	136	2	0	0	0	0	0	0	2
17:15	120	11	2	0	0	0	4	137	1	0	0	0	0	0	0	1
17:30	92	12	0	0	0	4	5	113	1	0	0	0	0	0	0	1
17:45	123	14	1	0	0	0	2	140	0	0	0	0	0	0	0	0
18:00	92	15	0	0	0	2	0	109	0	0	0	0	0	0	0	0
18:15	96	16	1	0	0	2	3	118	1	0	1	0	0	0	0	2
Total	1520	194	15	1	0	17	38	1785	17	4	1	0	1	0	0	23

Site 2:	Barnsley Road/Bow Street	A:	Barnsley Road (North)
Day:	Saturday	B:	Bow Street
Date:	24 November 2012	C:	Barnsley Road (South)
Weather:	Fine/Overcast/Gloomy		

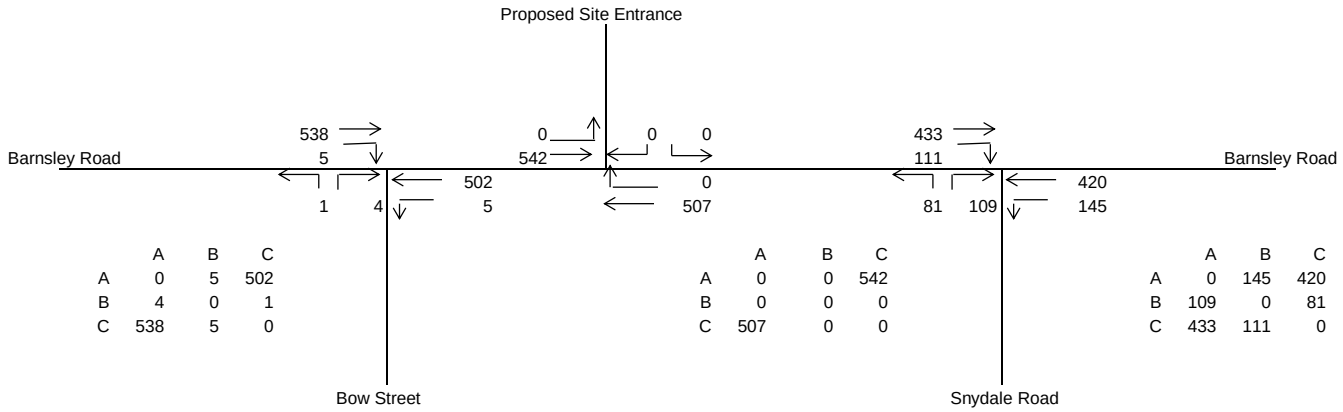
	A - B								A - C							
Time	Car	LGV	OGVI	0GV2	P/C	M/C	PSV	Total	Car	LGV	OGVI	0GV2	P/C	M/C	PSV	Total
11:00	1	0	0	0	0	0	0	1	102	13	2	0	2	1	3	123
11:15	0	0	0	0	0	0	0	0	110	12	3	0	0	1	2	128
11:30	1	0	0	0	0	0	0	1	129	11	1	1	0	0	3	145
11:45	2	0	0	0	0	0	0	2	105	16	4	0	0	0	4	129
12:00	1	0	0	0	0	0	0	1	113	18	3	0	1	0	3	138
12:15	1	0	0	0	0	0	0	1	99	9	4	0	0	0	2	114
12:30	3	1	0	0	0	0	0	4	110	11	3	0	0	6	2	132
12:45	1	0	0	0	0	0	0	1	102	14	1	0	0	1	4	122
13:00	0	0	0	0	0	0	0	0	109	11	1	0	0	1	4	126
13:15	0	1	0	0	0	0	0	1	95	4	2	0	1	1	3	106
13:30	2	0	0	0	0	0	0	2	107	11	1	0	0	1	1	121
13:45	0	0	0	0	0	0	0	0	85	10	2	0	0	1	5	103
14:00	1	0	0	0	1	0	0	2	115	11	1	0	2	0	2	131
14:15	0	0	0	0	0	0	0	0	102	12	0	0	0	1	3	118
Total	13	2	0	0	1	0	0	16	1483	163	28	1	6	14	41	1736

	B - A								B - C							
Time	Car	LGV	OGVI	0GV2	P/C	M/C	PSV	Total	Car	LGV	OGVI	0GV2	P/C	M/C	PSV	Total
11:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
11:15	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
11:30	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
11:45	2	0	0	0	0	0	0	2	4	0	0	0	0	0	0	4
12:00	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
12:15	1	0	0	0	0	0	0	1	2	0	0	0	0	0	0	2
12:30	0	2	0	0	0	0	0	2	1	1	0	0	0	0	0	2
12:45	3	0	0	0	0	0	0	3	2	0	0	0	0	0	0	2
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15	3	0	1	0	0	0	0	4	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
13:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
14:00	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
14:15	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
Total	17	2	1	0	0	0	0	20	22	1	0	0	0	0	0	23

	C - A								C - B							
Time	Car	LGV	OGVI	0GV2	P/C	M/C	PSV	Total	Car	LGV	OGVI	0GV2	P/C	M/C	PSV	Total
11:00	94	10	2	0	0	0	4	110	0	0	0	0	0	0	0	0
11:15	97	10	1	0	0	0	4	112	3	0	0	0	0	0	0	3
11:30	106	10	1	0	0	0	4	121	1	0	0	0	0	0	0	1
11:45	89	10	1	0	0	0	2	102	2	0	0	0	0	0	0	2
12:00	100	12	3	0	0	2	1	118	0	0	0	0	0	0	0	0
12:15	76	11	3	0	0	0	6	96	1	0	0	0	0	0	0	1
12:30	100	9	2	0	1	1	2	115	1	0	0	0	0	0	0	1
12:45	106	9	0	0	0	5	2	122	0	0	0	0	0	0	0	0
13:00	84	16	3	0	0	0	5	108	0	1	0	0	0	0	0	1
13:15	97	10	0	1	2	0	3	113	2	0	0	0	0	0	0	2
13:30	79	14	3	0	2	3	2	103	1	0	0	0	0	0	0	1
13:45	79	8	1	0	0	1	2	91	2	0	0	0	0	0	0	2
14:00	95	7	0	0	0	0	4	106	2	0	0	0	0	0	0	2
14:15	96	8	1	0	0	0	2	107	2	0	0	0	0	0	0	2
Total	1298	144	21	1	5	12	43	1524	17	1	0	0	0	0	0	18

APPENDIX C

Traffic Flow Diagrams



	A	B	C
A	0	5	502
B	4	0	1
C	538	5	0

	A	B	C
A	0	0	542
B	0	0	0
C	507	0	0

	A	B	C
A	0	145	420
B	109	0	81
C	433	111	0

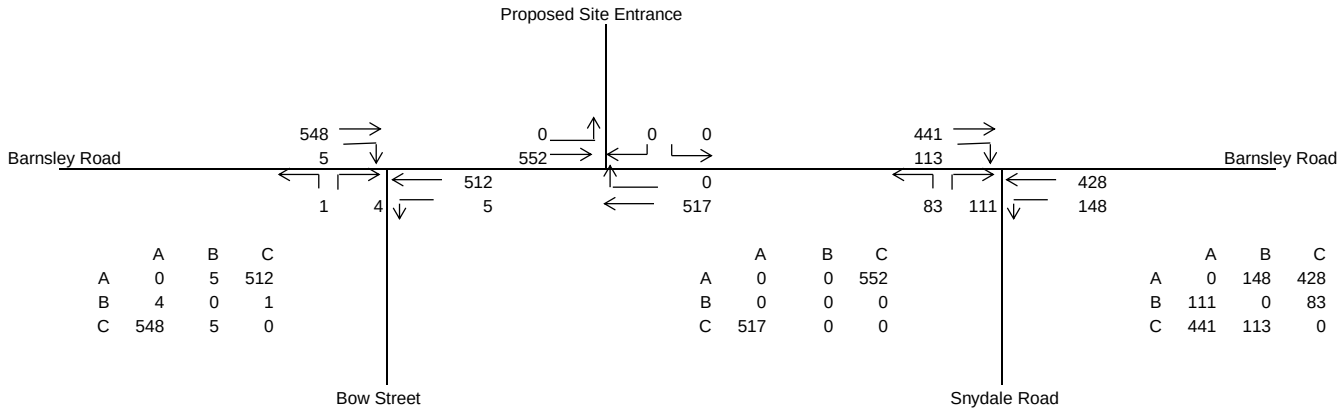
Transport Potential

Scheme
Proposed Aldi Store, Cudworth

On Behalf of
Aldi Stores Ltd

Title

BASE 2012
PM PEAK



	A	B	C
A	0	5	512
B	4	0	1
C	548	5	0

	A	B	C
A	0	0	552
B	0	0	0
C	517	0	0

	A	B	C
A	0	148	428
B	111	0	83
C	441	113	0

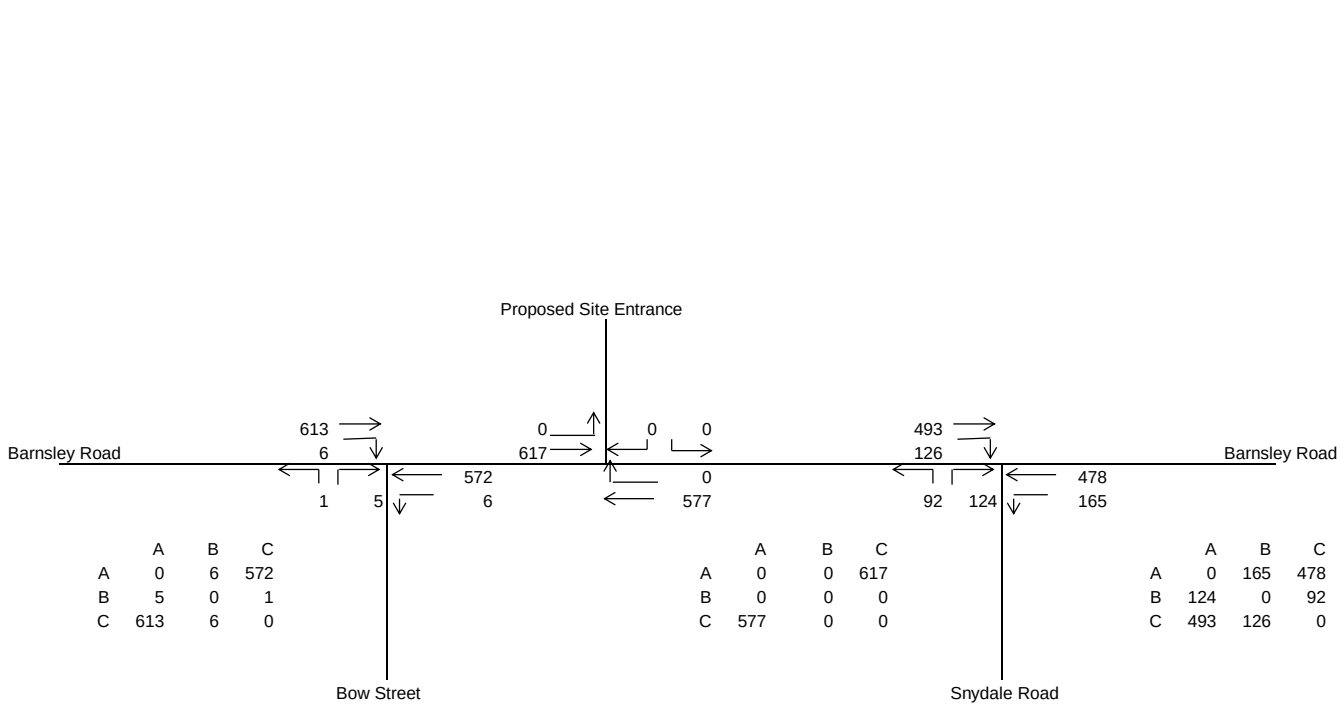
Transport Potential

Scheme
Proposed Aldi Store, Cudworth

On Behalf of
Aldi Stores Ltd

Title

BASE 2013
PM PEAK



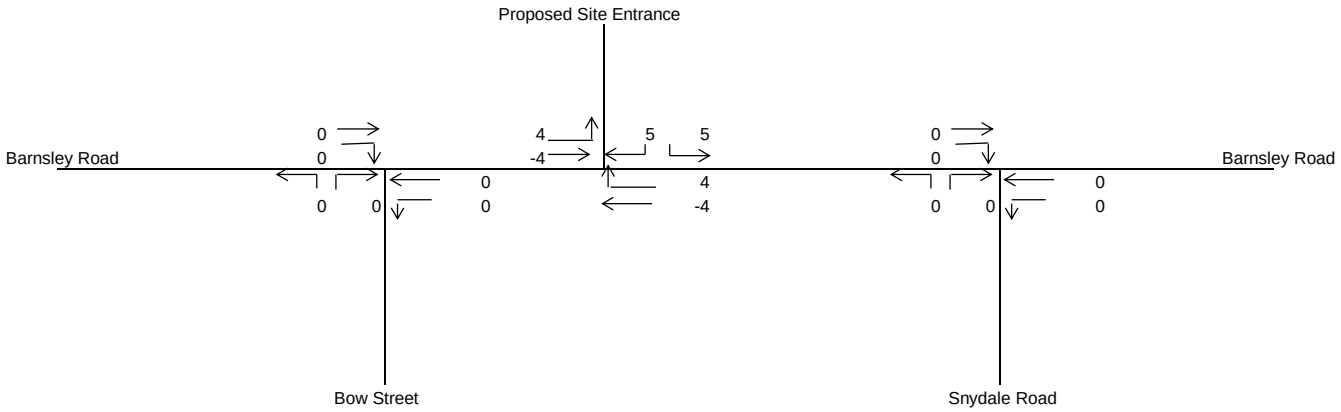
Transport Potential

Scheme
Proposed Aldi Store, Cudworth

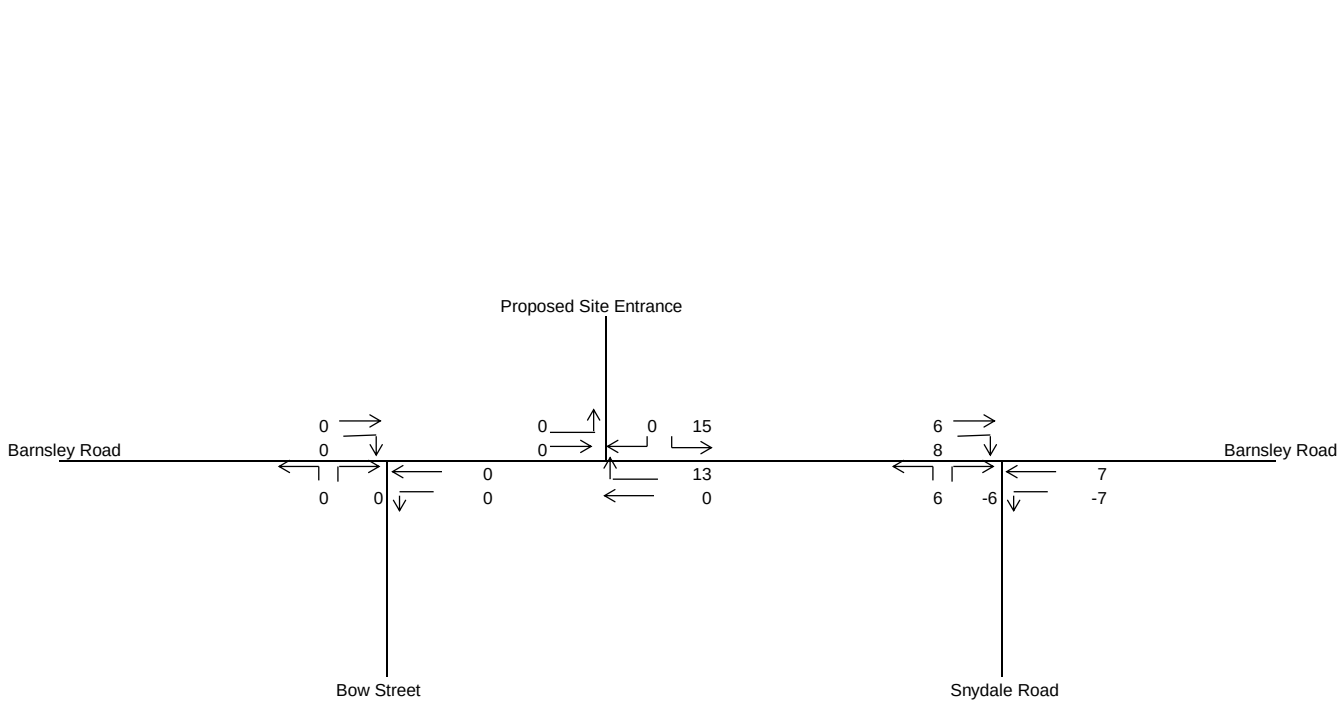
On Behalf of
Aldi Stores Ltd

Title

BASE 2018
PM PEAK



	Transport Potential	Scheme Proposed Aldi Store, Cudworth	Title **PASS-BY TRIPS** **PM PEAK**
		On Behalf of Aldi Stores Ltd	



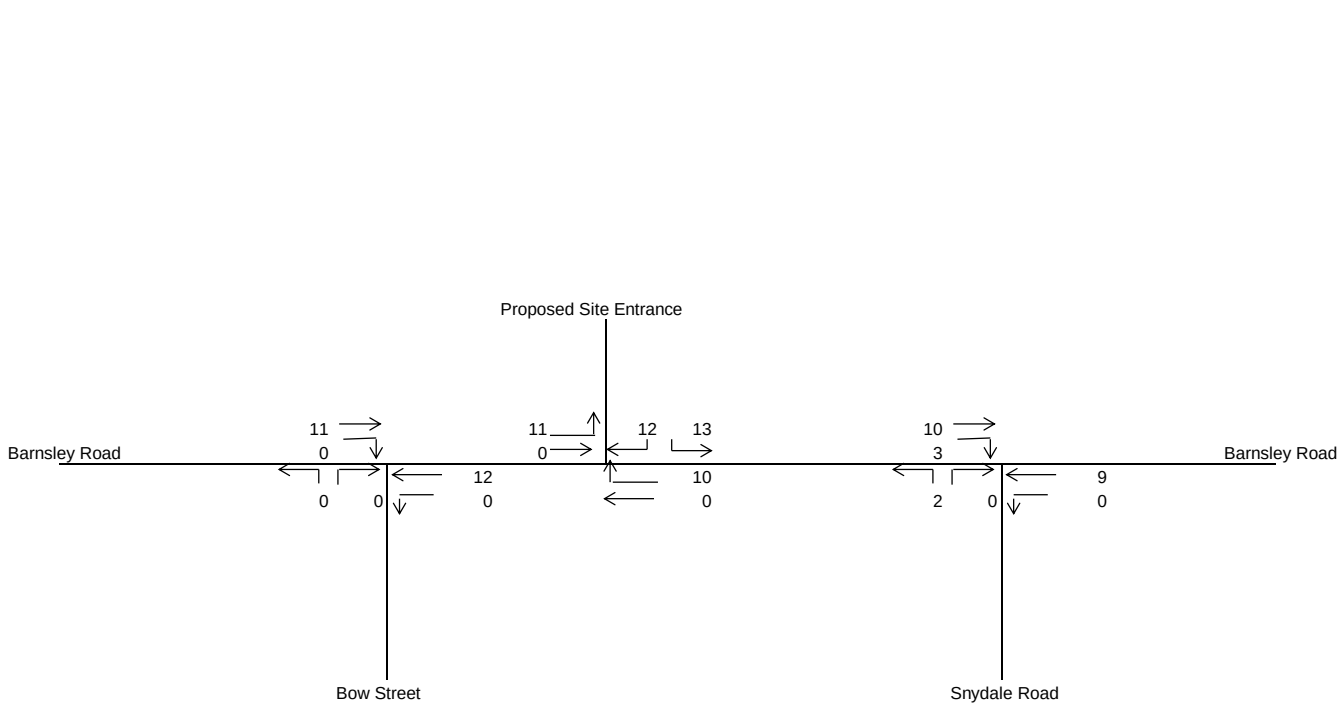
Transport Potential

Scheme
Proposed Aldi Store, Cudworth

On Behalf of
Aldi Stores Ltd

Title

DIVERTED TRIPS
PM PEAK



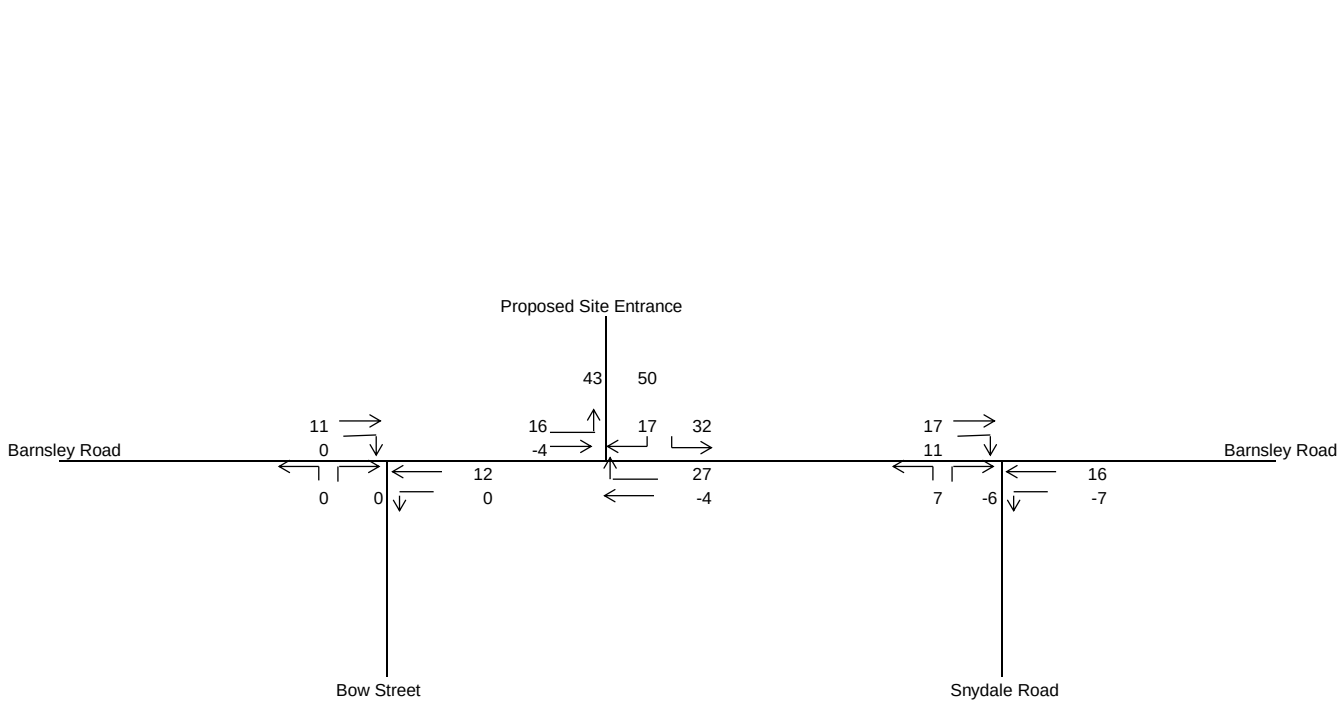
Transport Potential

Scheme
Proposed Aldi Store, Cudworth

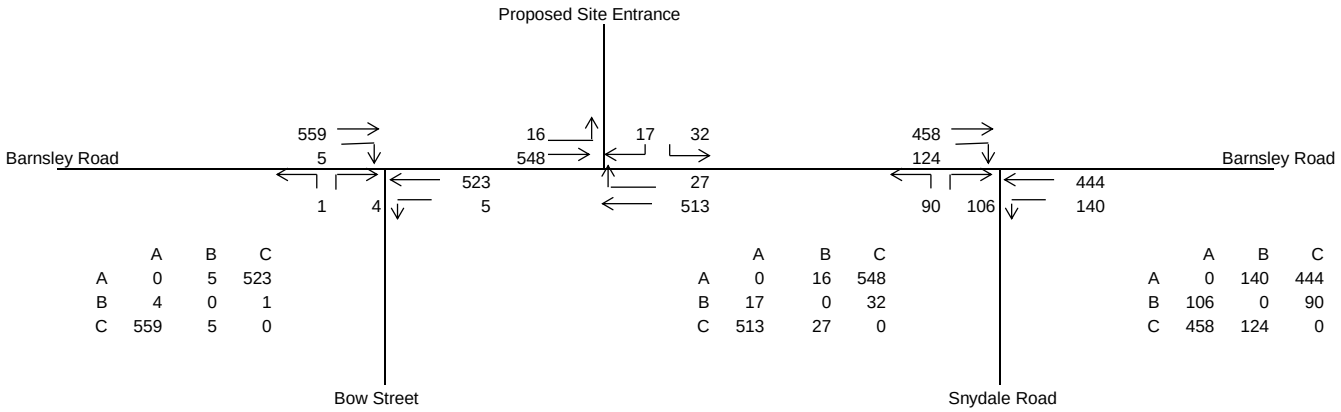
On Behalf of
Aldi Stores Ltd

Title

PRIMARY TRANSFER TRIPS
PM PEAK



	Transport Potential	Scheme Proposed Aldi Store, Cudworth On Behalf of Aldi Stores Ltd	Title **TOTAL DEVELOPMENT TRIPS** **PM PEAK**



	A	B	C
A	0	5	523
B	4	0	1
C	559	5	0

	A	B	C
A	0	16	548
B	17	0	32
C	513	27	0

	A	B	C
A	0	140	444
B	106	0	90
C	458	124	0

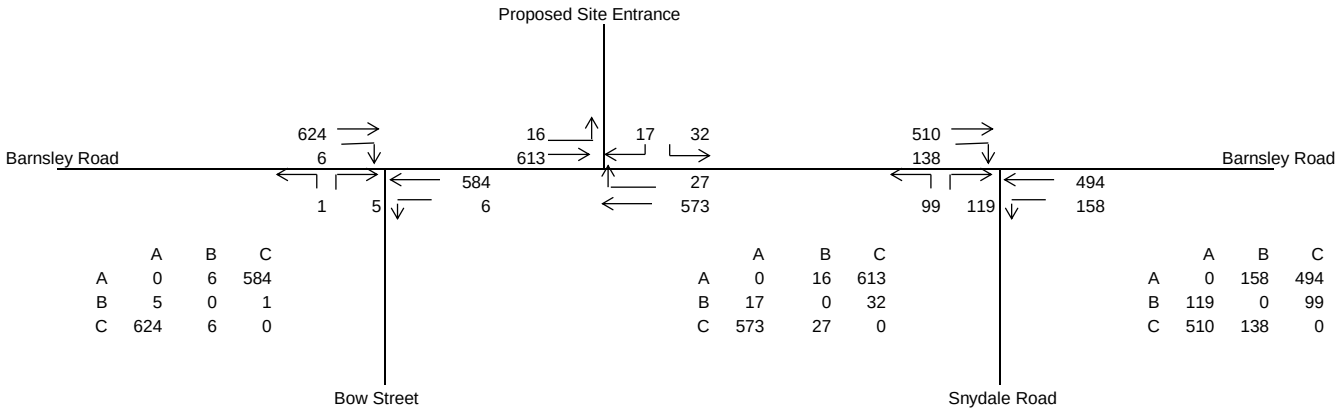
Transport Potential

Scheme
Proposed Aldi Store, Cudworth

On Behalf of
Aldi Stores Ltd

Title

BASE 2013
PM PEAK



	A	B	C
A	0	6	584
B	5	0	1
C	624	6	0

	A	B	C
A	0	16	613
B	17	0	32
C	573	27	0

	A	B	C
A	0	158	494
B	119	0	99
C	510	138	0

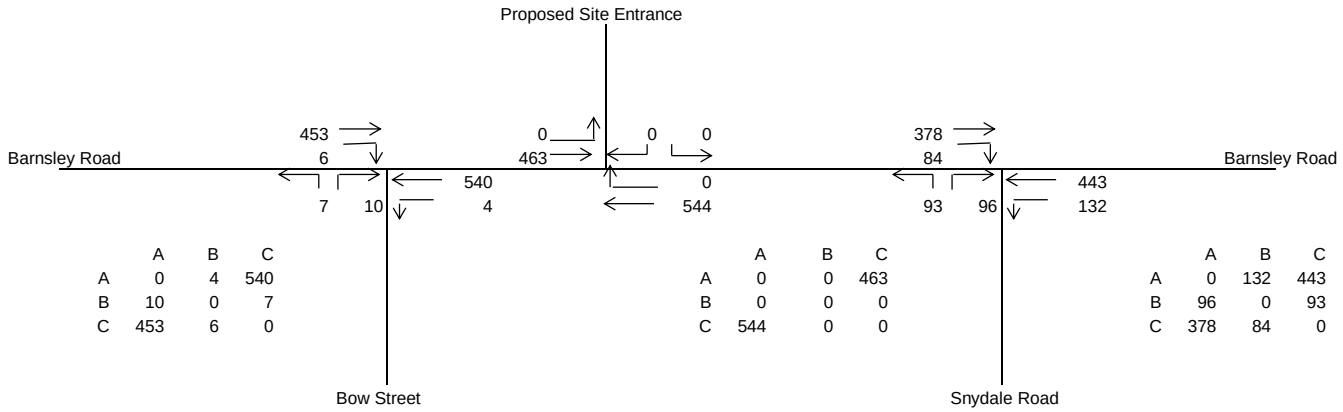
Transport Potential

Scheme
Proposed Aldi Store, Cudworth

On Behalf of
Aldi Stores Ltd

Title

BASE 2013
PM PEAK



	A	B	C
A	0	4	540
B	10	0	7
C	453	6	0

	A	B	C
A	0	0	463
B	0	0	0
C	544	0	0

	A	B	C
A	0	132	443
B	96	0	93
C	378	84	0

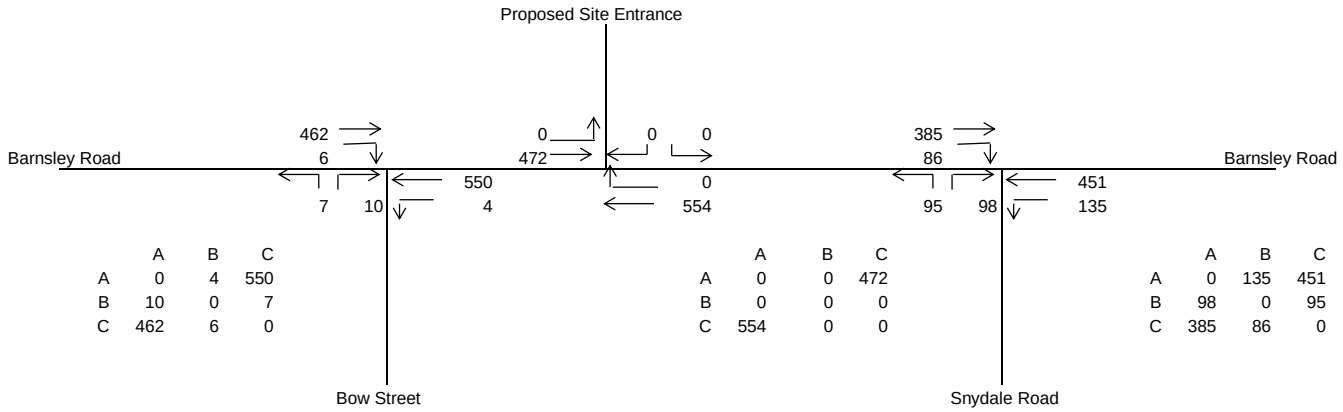
Transport Potential

Scheme
Proposed Aldi Store, Cudworth

On Behalf of
Aldi Stores Ltd

Title

BASE 2012
SAT PEAK



	A	B	C
A	0	4	550
B	10	0	7
C	462	6	0

	A	B	C
A	0	0	472
B	0	0	0
C	554	0	0

	A	B	C
A	0	135	451
B	98	0	95
C	385	86	0

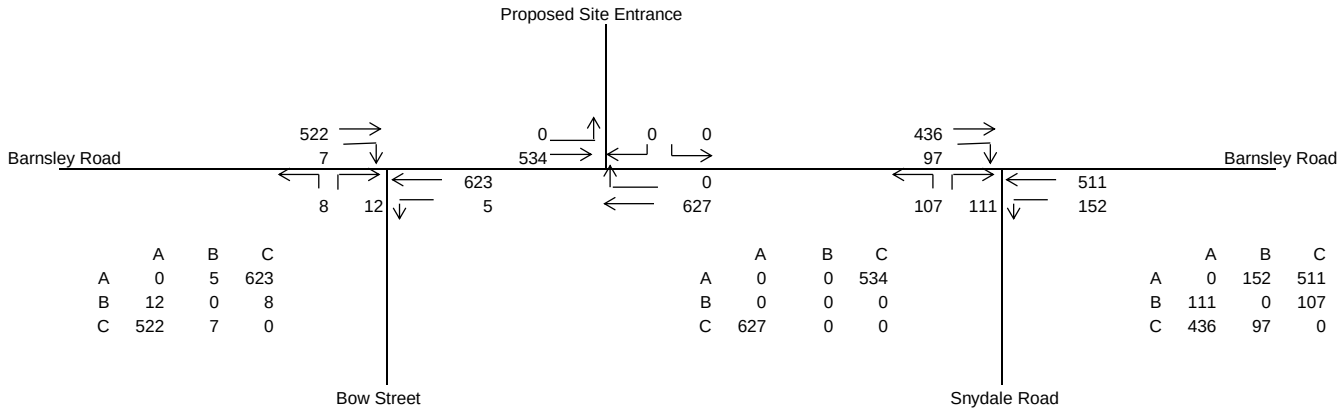
Transport Potential

Scheme
Proposed Aldi Store, Cudworth

On Behalf of
Aldi Stores Ltd

Title

BASE 2013
SAT PEAK



	A	B	C
A	0	5	623
B	12	0	8
C	522	7	0

	A	B	C
A	0	0	534
B	0	0	0
C	627	0	0

	A	B	C
A	0	152	511
B	111	0	107
C	436	97	0

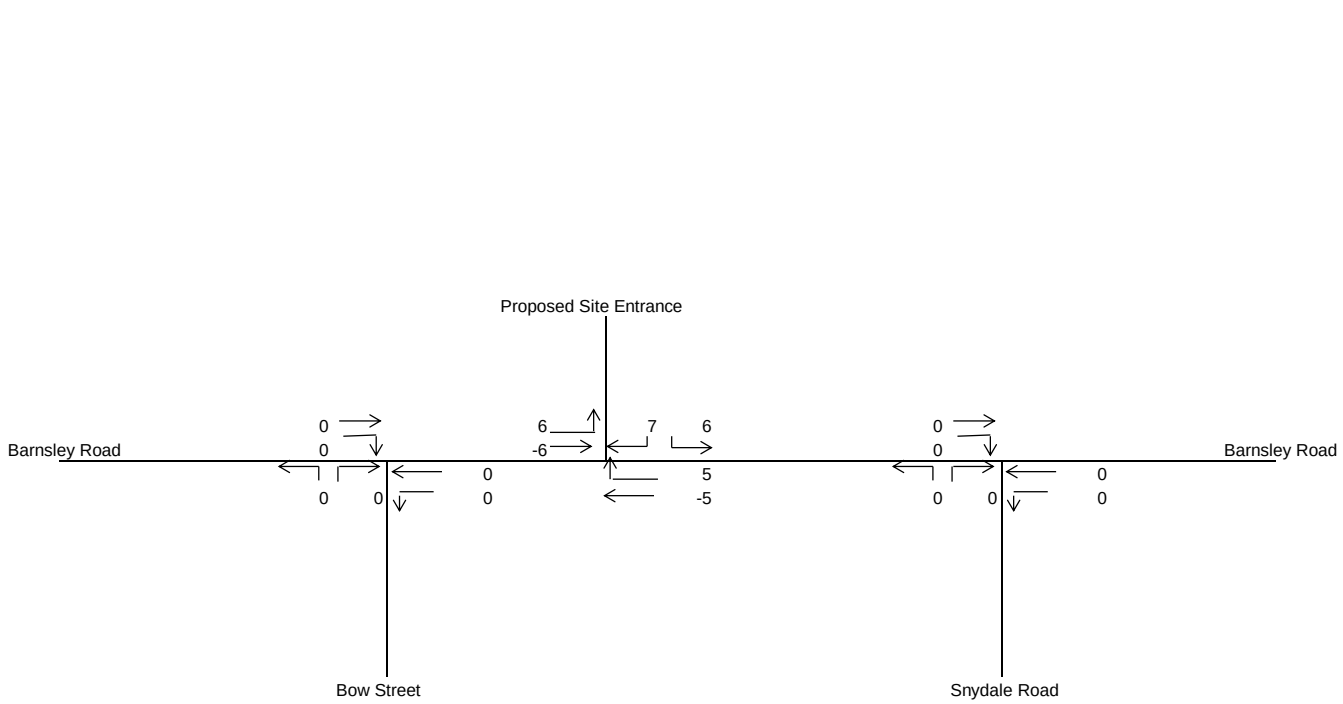
Transport Potential

Scheme
Proposed Aldi Store, Cudworth

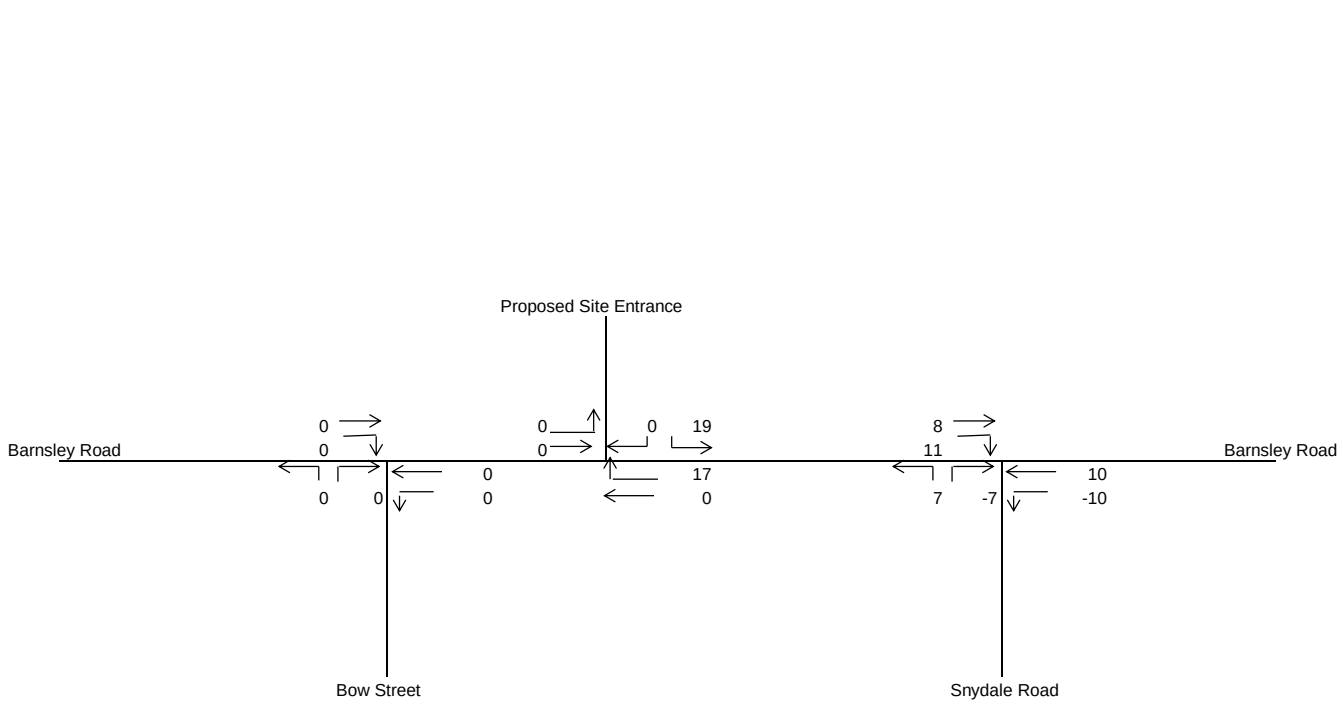
On Behalf of
Aldi Stores Ltd

Title

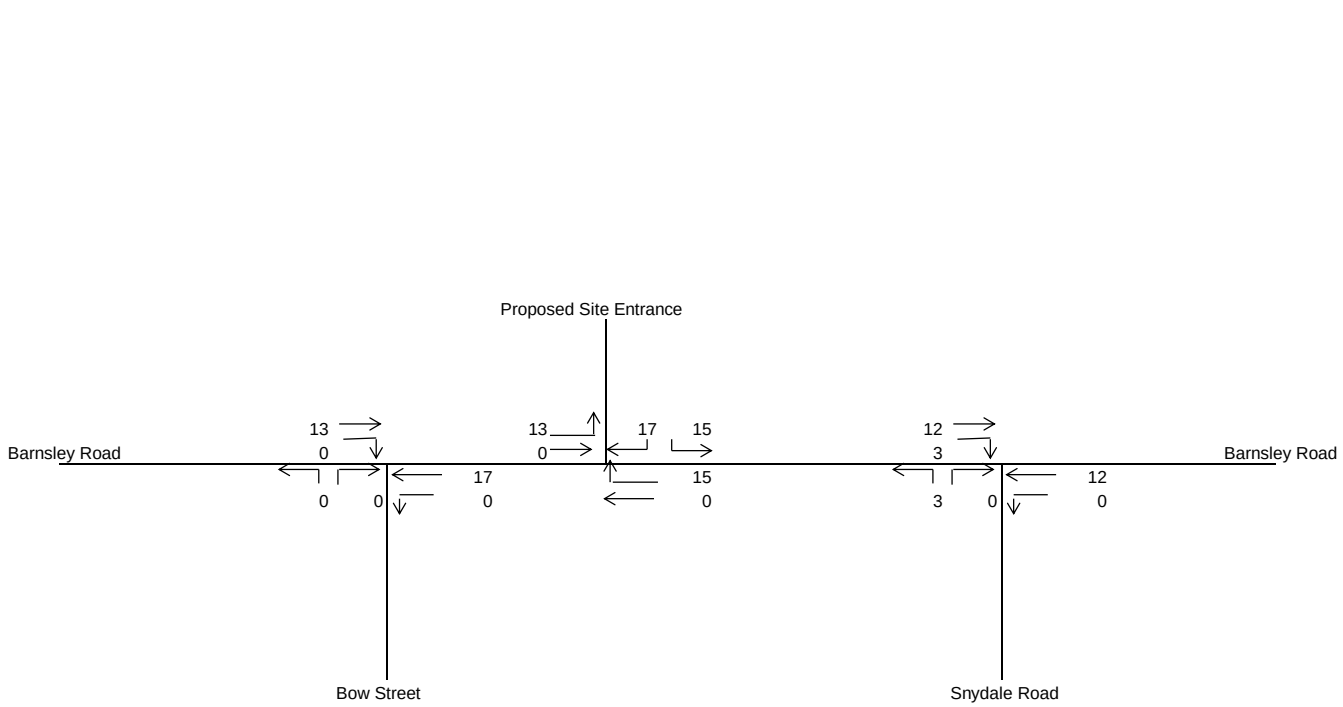
BASE 2018
SAT PEAK



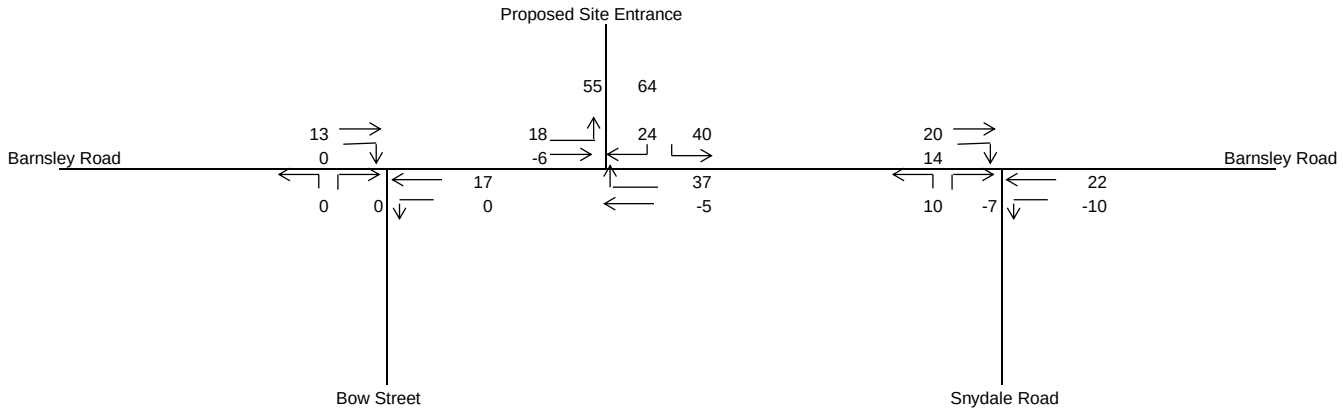
	Transport Potential	Scheme Proposed Aldi Store, Cudworth	Title **PASS-BY TRIPS** **SAT PEAK**
		On Behalf of Aldi Stores Ltd	



	Transport Potential	Scheme Proposed Aldi Store, Cudworth On Behalf of Aldi Stores Ltd	Title **DIVERTED TRIPS** **SAT PEAK**



	Transport Potential	Scheme Proposed Aldi Store, Cudworth On Behalf of Aldi Stores Ltd	Title **PRIMARY TRANSFER TRIPS** **SAT PEAK**



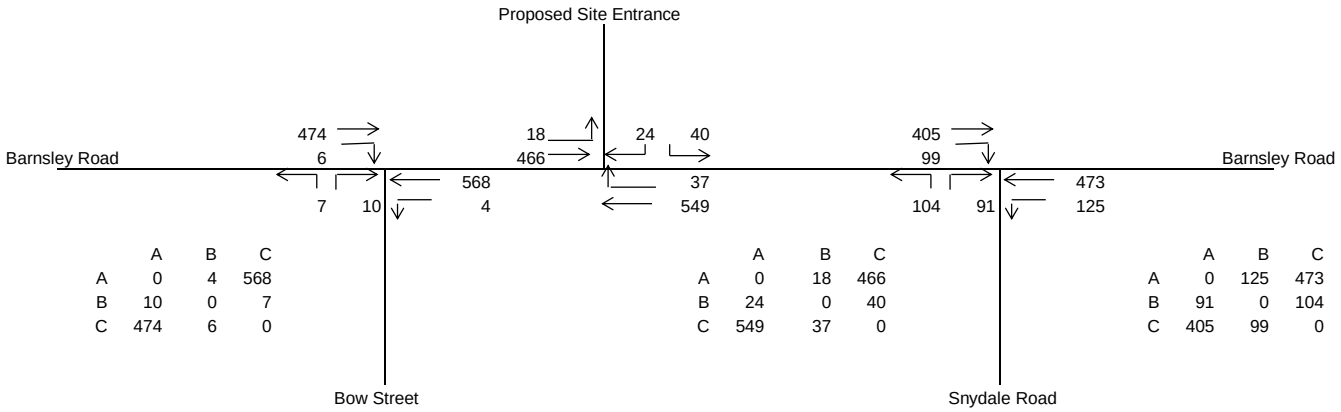
Transport Potential

Scheme
Proposed Aldi Store, Cudworth

On Behalf of
Aldi Stores Ltd

Title

TOTAL DEVELOPMENT TRIPS
SAT PEAK



	A	B	C
A	0	4	568
B	10	0	7
C	474	6	0

	A	B	C
A	0	18	466
B	24	0	40
C	549	37	0

	A	B	C
A	0	125	473
B	91	0	104
C	405	99	0

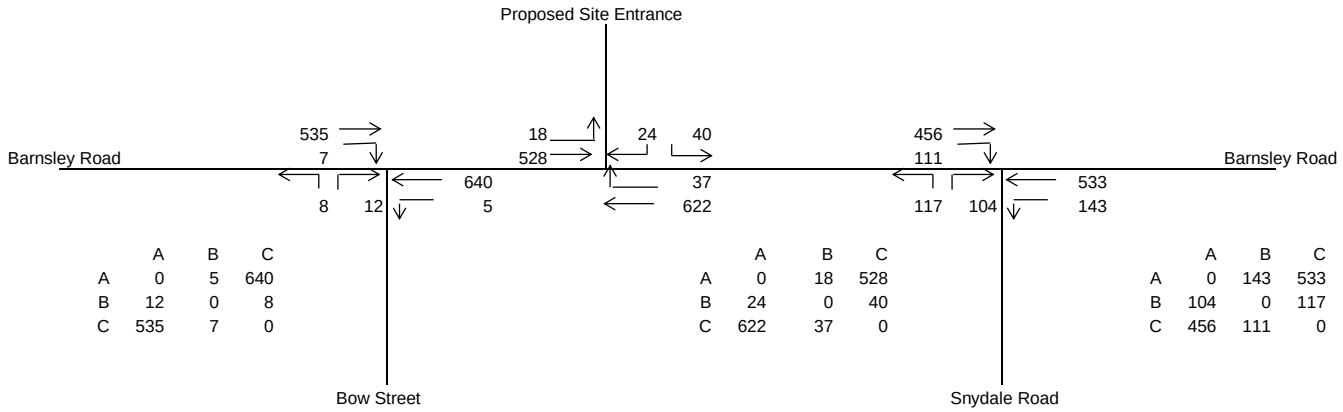
Transport Potential

Scheme
Proposed Aldi Store, Cudworth

On Behalf of
Aldi Stores Ltd

Title

BASE 2013
SAT PEAK



	A	B	C
A	0	5	640
B	12	0	8
C	535	7	0

	A	B	C
A	0	18	528
B	24	0	40
C	622	37	0

	A	B	C
A	0	143	533
B	104	0	117
C	456	111	0

Transport Potential

Scheme
Proposed Aldi Store, Cudworth

On Behalf of
Aldi Stores Ltd

Title

BASE 2013
SAT PEAK

NRTF Table 3

	2	3	4	5	6	7	8	9
	Rural Roads				Urban Roads			
	Motorways	Trunk & Principal dual	Other	Total	Motorways	Trunk & Principal dual	Other	Total
1996	100	100	100	100	100	100	100	100
1997	103.0	101.9	101.4	101.9	101.9	101.2	101.9	101.6
1998	106.1	103.9	102.7	103.9	103.9	102.4	103.9	103.1
1999	109.3	105.9	104.1	105.9	105.9	103.6	105.9	104.7
2000	112.6	107.9	105.6	107.9	107.9	104.8	107.9	106.4
2001	116	110	107	110	110	106	110	108
2002	119.2	111.8	108.4	111.9	111.8	107.0	112.0	109.6
2003	122.4	113.6	109.8	113.7	113.6	107.9	114.1	111.2
2004	125.8	115.4	111.3	115.7	115.4	108.9	116.2	112.8
2005	129.2	117.2	112.8	117.6	117.2	109.9	118.3	114.5
2006	132.8	119.1	114.3	119.6	119.1	110.9	120.5	116.2
2007	136.4	121.0	115.8	121.6	121.0	111.9	122.7	117.9
2008	140.2	123.0	117.3	123.6	123.0	112.9	125.0	119.6
2009	144.0	125.0	118.8	125.7	125.0	113.9	127.3	121.4
2010	147.9	127.0	120.4	127.8	127.0	115.0	129.6	123.2
2011	152	129	122	130	129	116	132	125
2012	155.3	130.6	123.3	131.9	130.2	116.9	134.0	126.5
2013	158.6	132.2	124.7	133.8	131.5	117.7	136.0	128.0
2014	162.0	133.9	126.0	135.7	132.8	118.6	138.0	129.6
2015	165.5	135.5	127.4	137.7	134.1	119.5	140.0	131.2
2016	169.0	137.2	128.8	139.6	135.3	120.4	142.1	132.8
2017	172.7	138.9	130.2	141.7	136.6	121.3	144.2	134.4
2018	176.4	140.7	131.6	143.7	138.0	122.2	146.4	136.0
2019	180.2	142.4	133.1	145.8	139.3	123.1	148.5	137.6
2020	184.0	144.2	134.5	147.9	140.6	124.1	150.8	139.3
2021	188	146	136	150	142	125	153	141
2022	190.7	147.3	137.0	151.4	142.8	125.6	154.6	142.1
2023	193.5	148.5	137.9	152.9	143.6	126.2	156.3	143.1
2024	196.3	149.8	138.9	154.4	144.4	126.8	157.9	144.2
2025	199.1	151.1	139.9	155.8	145.1	127.4	159.6	145.3
2026	202.0	152.4	140.9	157.3	145.9	128.0	161.3	146.4
2027	204.9	153.7	141.9	158.8	146.7	128.6	163.0	147.5
2028	207.9	155.0	142.9	160.3	147.6	129.2	164.7	148.6
2029	210.9	156.3	143.9	161.9	148.4	129.8	166.5	149.7
2030	213.9	157.6	145.0	163.4	149.2	130.4	168.2	150.9
2031	217	159	146	165	150	131	170	152

Factors for different time periods

NRTF Table 3 Rates: Enter the figures in red

Type of Road : **8**

Factor in 2012 = 134.0

Factor in 2018 = 146.4

Factor from 2012 to 2018 = 1.093

TEMPRO Factors

AM peak Local Factor from	2012	to	2018	=	#DIV/0!		
'Av. Day' GB Factor from	2012	to	2018	=	#DIV/0!		
PM peak Local Factor from	2012	to	2018	=	1.068	1.0707	1.066
'Av. Day' GB Factor from	2012	to	2018	=	1.025		
Saturday Local Factor from	2012	to	2018	=	1.081	1.0806	1.0823
'Av. Day' GB Factor from	2012	to	2018	=	1.025		

Overall Traffic Growth

AM Factor from	2012	to	2018	=	**#DIV/0!**
PM Factor from	2012	to	2018	=	**1.139**
Saturday Factor from	2012	to	2018	=	**1.153**

APPENDIX D

PICADY Output

TRL LIMITED

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
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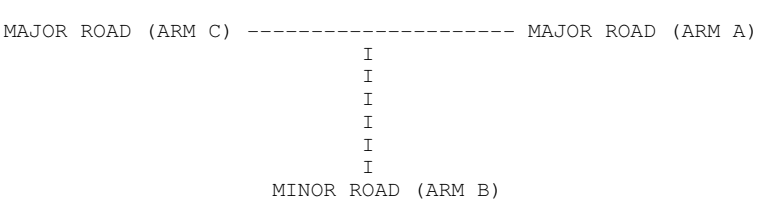
Run with file:- "C:\Users\C Smith\Documents\PICADY\CUDWORTH BOW STREET.vpi" (drive-on-the-left) at 22:22:28 on Wednesday, 1

RUN INFORMATION
****

RUN TITLE	: Aldi Cudworth
LOCATION	: Bow Street
DATE	: 17/04/13
CLIENT	: Aldi Stores
ENUMERATOR	: C Smith [CSMITH-HP]
JOB NUMBER	:
STATUS	: TIA
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY
****

INPUT DATA



ARM A IS Barnsley Road E
ARM B IS Bow Street
ARM C IS Barnsley Road W

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.30 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)187.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (1)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 25.0 M.
- VISIBILITY TO RIGHT	(VB-A) 26.0 M.
- LANE 1 WIDTH	(WB-C) 3.30 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
659.54	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
513.44	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
682.26	0.26	0.26

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2012 PM BASE

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	6.34	9.51	6.34
ARM B	15.00	45.00	75.00	0.06	0.09	0.06
ARM C	15.00	45.00	75.00	6.79	10.18	6.79

Demand set: 2012 PM BASE

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.15 - 17.45	ARM A	0.000	0.010	0.990
		0.0	5.0	502.0
		(0.0)%	(0.0)%	(0.0)%
	ARM B	0.800	0.000	0.200
		4.0	0.0	1.0
		(0.0)%	(0.0)%	(0.0)%
	ARM C	0.991	0.009	0.000
		538.0	5.0	0.0
		(0.0)%	(0.0)%	(0.0)%

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2012 PM BASE
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-AC	0.06	6.53	0.010		0.00	0.01	0.1		0.15
C-AB	0.06	9.71	0.006		0.00	0.01	0.1		0.10
A-B	0.06								
A-C	6.30								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-AC	0.07	6.05	0.012		0.01	0.01	0.2		0.17
C-AB	0.07	9.39	0.008		0.01	0.01	0.1		0.11
A-B	0.07								
A-C	7.52								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	0.09	5.39	0.017		0.01	0.02	0.2		0.19
C-AB	0.09	8.94	0.010		0.01	0.01	0.2		0.11
A-B	0.09								
A-C	9.21								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	0.09	5.39	0.017		0.02	0.02	0.3		0.19
C-AB	0.09	8.94	0.010		0.01	0.01	0.2		0.11
A-B	0.09								
A-C	9.21								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	0.07	6.05	0.012		0.02	0.01	0.2		0.17
C-AB	0.07	9.39	0.008		0.01	0.01	0.1		0.11
A-B	0.07								
A-C	7.52								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	0.06	6.53	0.010		0.01	0.01	0.2		0.15
C-AB	0.06	9.71	0.006		0.01	0.01	0.1		0.10
A-B	0.06								
A-C	6.30								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	6.9	4.6	1.2	0.17	1.2	0.17
C-AB	6.9	4.6	0.8	0.11	0.8	0.11
A-B	6.9	4.6				
A-C	691.0	460.6				
ALL	1452.1	968.1	1.9	0.00	1.9	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
659.54	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
513.44	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
682.26	0.26	0.26

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2013 PM NO DEVELOPMENT

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	6.46	9.69	6.46
ARM B	15.00	45.00	75.00	0.06	0.09	0.06
ARM C	15.00	45.00	75.00	6.91	10.37	6.91

Demand set: 2013 PM NO DEVELOPMENT

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS / (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.15 - 17.45	ARM A	0.000	0.010	0.990
		0.0	5.0	512.0
		(0.0)%	(0.0)%	(0.0)%
	ARM B	0.800	0.000	0.200
		4.0	0.0	1.0
		(0.0)%	(0.0)%	(0.0)%
	ARM C	0.991	0.009	0.000
		548.0	5.0	0.0
		(0.0)%	(0.0)%	(0.0)%

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2013 PM NO DEVELOPMENT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-AC	0.06	6.49	0.010		0.00	0.01	0.1		0.16
C-AB	0.06	9.68	0.006		0.00	0.01	0.1		0.10
A-B	0.06								
A-C	6.42								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-AC	0.07	6.00	0.012		0.01	0.01	0.2		0.17
C-AB	0.07	9.35	0.008		0.01	0.01	0.1		0.11
A-B	0.07								
A-C	7.67								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	0.09	5.31	0.017		0.01	0.02	0.3		0.19
C-AB	0.09	8.90	0.010		0.01	0.01	0.2		0.11
A-B	0.09								
A-C	9.40								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	0.09	5.31	0.017		0.02	0.02	0.3		0.19
C-AB	0.09	8.90	0.010		0.01	0.01	0.2		0.11
A-B	0.09								
A-C	9.40								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	0.07	6.00	0.012		0.02	0.01	0.2		0.17
C-AB	0.07	9.35	0.008		0.01	0.01	0.1		0.11
A-B	0.07								
A-C	7.67								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	0.06	6.49	0.010		0.01	0.01	0.2		0.16
C-AB	0.06	9.68	0.006		0.01	0.01	0.1		0.10
A-B	0.06								
A-C	6.42								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	6.9	4.6	1.2	0.17	1.2	0.17
C-AB	6.9	4.6	0.8	0.11	0.8	0.11
A-B	6.9	4.6				
A-C	704.7	469.8				
ALL	1479.7	986.4	1.9	0.00	1.9	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
659.54	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
513.44	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
682.26	0.26	0.26

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2018 PM NO DEVELOPMENT

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	7.22	10.84	7.22
ARM B	15.00	45.00	75.00	0.08	0.11	0.08
ARM C	15.00	45.00	75.00	7.74	11.61	7.74

Demand set: 2018 PM NO DEVELOPMENT

TIME	FROM/TO	ARM A	ARM B	ARM C
16.15 - 17.45				
	ARM A	0.000	0.010	0.990
		0.0	6.0	572.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.833	0.000	0.167
		5.0	0.0	1.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.990	0.010	0.000
		613.0	6.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2018 PM NO DEVELOPMENT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-AC	0.08	6.11	0.012		0.00	0.01	0.2		0.17
C-AB	0.08	9.48	0.008		0.00	0.01	0.1		0.11
A-B	0.08								
A-C	7.18								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-AC	0.09	5.55	0.016		0.01	0.02	0.2		0.18
C-AB	0.09	9.11	0.010		0.01	0.01	0.2		0.11
A-B	0.09								
A-C	8.57								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	0.11	4.79	0.023		0.02	0.02	0.3		0.21
C-AB	0.11	8.60	0.013		0.01	0.01	0.2		0.12
A-B	0.11								
A-C	10.50								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	0.11	4.79	0.023		0.02	0.02	0.3		0.21
C-AB	0.11	8.60	0.013		0.01	0.01	0.2		0.12
A-B	0.11								
A-C	10.50								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	0.09	5.55	0.016		0.02	0.02	0.3		0.18
C-AB	0.09	9.11	0.010		0.01	0.01	0.2		0.11
A-B	0.09								
A-C	8.57								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	0.08	6.10	0.012		0.02	0.01	0.2		0.17
C-AB	0.08	9.48	0.008		0.01	0.01	0.1		0.11
A-B	0.08								
A-C	7.18								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	8.3	5.5	1.6	0.19	1.6	0.19
C-AB	8.3	5.5	0.9	0.11	0.9	0.11
A-B	8.3	5.5				
A-C	787.3	524.9				
ALL	1655.8	1103.9	2.5	0.00	2.5	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
659.54	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
513.44	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
682.26	0.26	0.26

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2013 PM WITH DEVELOPMENT

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	6.60	9.90	6.60
ARM B	15.00	45.00	75.00	0.06	0.09	0.06
ARM C	15.00	45.00	75.00	7.05	10.58	7.05

Demand set: 2013 PM WITH DEVELOPMENT

TIME	FROM/TO	ARM A	ARM B	ARM C
16.15 - 17.45				
	ARM A	0.000	0.009	0.991
		0.0	5.0	523.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.800	0.000	0.200
		4.0	0.0	1.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.991	0.009	0.000
		559.0	5.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2013 PM WITH DEVELOPMENT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-AC	0.06	6.43	0.010		0.00	0.01	0.1		0.16
C-AB	0.06	9.64	0.007		0.00	0.01	0.1		0.10
A-B	0.06								
A-C	6.56								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-AC	0.07	5.93	0.013		0.01	0.01	0.2		0.17
C-AB	0.07	9.31	0.008		0.01	0.01	0.1		0.11
A-B	0.07								
A-C	7.84								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	0.09	5.24	0.018		0.01	0.02	0.3		0.19
C-AB	0.09	8.84	0.010		0.01	0.01	0.2		0.11
A-B	0.09								
A-C	9.60								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	0.09	5.24	0.018		0.02	0.02	0.3		0.19
C-AB	0.09	8.84	0.010		0.01	0.01	0.2		0.11
A-B	0.09								
A-C	9.60								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	0.07	5.93	0.013		0.02	0.01	0.2		0.17
C-AB	0.07	9.31	0.008		0.01	0.01	0.1		0.11
A-B	0.07								
A-C	7.84								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	0.06	6.43	0.010		0.01	0.01	0.2		0.16
C-AB	0.06	9.64	0.007		0.01	0.01	0.1		0.10
A-B	0.06								
A-C	6.56								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	6.9	4.6	1.2	0.17	1.2	0.17
C-AB	6.9	4.6	0.8	0.11	0.8	0.11
A-B	6.9	4.6				
A-C	719.9	479.9				
ALL	1509.9	1006.6	2.0	0.00	2.0	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
659.54	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
513.44	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
682.26	0.26	0.26

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2018 PM WITH DEVELOPMENT

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	7.38	11.06	7.38
ARM B	15.00	45.00	75.00	0.08	0.11	0.08
ARM C	15.00	45.00	75.00	7.88	11.81	7.88

Demand set: 2018 PM WITH DEVELOPMENT

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.15 - 17.45	ARM A	0.000	0.010	0.990
		0.0	6.0	584.0
		(0.0)%	(0.0)%	(0.0)%
	ARM B	0.833	0.000	0.167
		5.0	0.0	1.0
		(0.0)%	(0.0)%	(0.0)%
	ARM C	0.990	0.010	0.000
		624.0	6.0	0.0
		(0.0)%	(0.0)%	(0.0)%

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2018 PM WITH DEVELOPMENT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-AC	0.08	6.05	0.012		0.00	0.01	0.2		0.17
C-AB	0.08	9.44	0.008		0.00	0.01	0.1		0.11
A-B	0.08								
A-C	7.33								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-AC	0.09	5.49	0.016		0.01	0.02	0.2		0.19
C-AB	0.09	9.06	0.010		0.01	0.01	0.2		0.11
A-B	0.09								
A-C	8.75								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	0.11	4.70	0.023		0.02	0.02	0.3		0.22
C-AB	0.11	8.55	0.013		0.01	0.01	0.2		0.12
A-B	0.11								
A-C	10.72								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	0.11	4.70	0.023		0.02	0.02	0.4		0.22
C-AB	0.11	8.55	0.013		0.01	0.01	0.2		0.12
A-B	0.11								
A-C	10.72								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	0.09	5.49	0.016		0.02	0.02	0.3		0.19
C-AB	0.09	9.06	0.010		0.01	0.01	0.2		0.11
A-B	0.09								
A-C	8.75								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	0.08	6.05	0.012		0.02	0.01	0.2		0.17
C-AB	0.08	9.44	0.008		0.01	0.01	0.1		0.11
A-B	0.08								
A-C	7.33								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	8.3	5.5	1.6	0.19	1.6	0.19
C-AB	8.3	5.5	0.9	0.11	0.9	0.11
A-B	8.3	5.5				
A-C	803.8	535.9				
ALL	1687.5	1125.0	2.5	0.00	2.5	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
659.54	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
513.44	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
682.26	0.26	0.26

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2012 SAT BASE

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) PEAK	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	6.80	10.20	6.80	
ARM B	15.00	45.00	75.00	0.21	0.32	0.21	
ARM C	15.00	45.00	75.00	5.74	8.61	5.74	

Demand set: 2012 SAT BASE

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.15 - 17.45				
	ARM A	0.000	0.007	0.993
		0.0	4.0	540.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.588	0.000	0.412
		10.0	0.0	7.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.987	0.013	0.000
		453.0	6.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2012 SAT BASE
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-AC	0.21	7.11	0.030		0.00	0.03	0.4		0.14
C-AB	0.08	9.59	0.008		0.00	0.01	0.1		0.11
A-B	0.05								
A-C	6.78								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-AC	0.25	6.65	0.038		0.03	0.04	0.6		0.16
C-AB	0.09	9.24	0.010		0.01	0.01	0.1		0.11
A-B	0.06								
A-C	8.09								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	0.31	6.00	0.052		0.04	0.05	0.8		0.18
C-AB	0.11	8.77	0.013		0.01	0.01	0.2		0.12
A-B	0.07								
A-C	9.91								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	0.31	6.00	0.052		0.05	0.05	0.8		0.18
C-AB	0.11	8.77	0.013		0.01	0.01	0.2		0.12
A-B	0.07								
A-C	9.91								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	0.25	6.65	0.038		0.05	0.04	0.6		0.16
C-AB	0.09	9.24	0.010		0.01	0.01	0.1		0.11
A-B	0.06								
A-C	8.09								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	0.21	7.11	0.030		0.04	0.03	0.5		0.15
C-AB	0.08	9.59	0.008		0.01	0.01	0.1		0.11
A-B	0.05								
A-C	6.78								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.0
16.45	0.0
17.00	0.1
17.15	0.1
17.30	0.0
17.45	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	23.4	15.6	3.7	0.16	3.7	0.16
C-AB	8.3	5.5	0.9	0.11	0.9	0.11
A-B	5.5	3.7				
A-C	743.3	495.5				
ALL	1404.0	936.0	4.6	0.00	4.6	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
659.54	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
513.44	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
682.26	0.26	0.26

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2013 SAT NO DEVELOPMENT

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	6.93	10.39	6.93
ARM B	15.00	45.00	75.00	0.21	0.32	0.21
ARM C	15.00	45.00	75.00	5.85	8.77	5.85

Demand set: 2013 SAT NO DEVELOPMENT

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.15 - 17.45				
	ARM A	0.000	0.007	0.993
		0.0	4.0	550.0
		(0.0)%	(0.0)%	(0.0)%
	ARM B	0.588	0.000	0.412
		10.0	0.0	7.0
		(0.0)%	(0.0)%	(0.0)%
	ARM C	0.987	0.013	0.000
		462.0	6.0	0.0
		(0.0)%	(0.0)%	(0.0)%

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2013 SAT NO DEVELOPMENT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-AC	0.21	7.07	0.030		0.00	0.03	0.4		0.15
C-AB	0.08	9.56	0.008		0.00	0.01	0.1		0.11
A-B	0.05								
A-C	6.90								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-AC	0.25	6.60	0.039		0.03	0.04	0.6		0.16
C-AB	0.09	9.21	0.010		0.01	0.01	0.1		0.11
A-B	0.06								
A-C	8.24								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	0.31	5.94	0.053		0.04	0.05	0.8		0.18
C-AB	0.11	8.72	0.013		0.01	0.01	0.2		0.12
A-B	0.07								
A-C	10.09								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	0.31	5.94	0.053		0.05	0.06	0.8		0.18
C-AB	0.11	8.72	0.013		0.01	0.01	0.2		0.12
A-B	0.07								
A-C	10.09								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	0.25	6.60	0.039		0.06	0.04	0.6		0.16
C-AB	0.09	9.21	0.010		0.01	0.01	0.1		0.11
A-B	0.06								
A-C	8.24								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	0.21	7.07	0.030		0.04	0.03	0.5		0.15
C-AB	0.08	9.56	0.008		0.01	0.01	0.1		0.11
A-B	0.05								
A-C	6.90								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.0
16.45	0.0
17.00	0.1
17.15	0.1
17.30	0.0
17.45	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	23.4	15.6	3.8	0.16	3.8	0.16
C-AB	8.3	5.5	0.9	0.11	0.9	0.11
A-B	5.5	3.7				
A-C	757.0	504.7				
ALL	1430.1	953.4	4.7	0.00	4.7	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
659.54	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
513.44	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
682.26	0.26	0.26

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2018 SAT NO DEVELOPMENT

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	7.85	11.77	7.85
ARM B	15.00	45.00	75.00	0.25	0.38	0.25
ARM C	15.00	45.00	75.00	6.61	9.92	6.61

Demand set: 2018 SAT NO DEVELOPMENT

TIME	FROM/TO	ARM A	ARM B	ARM C
16.15 - 17.45				
	ARM A	0.000	0.008	0.992
		0.0	5.0	623.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.600	0.000	0.400
		12.0	0.0	8.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.987	0.013	0.000
		522.0	7.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2018 SAT NO DEVELOPMENT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-AC	0.25	6.71	0.037		0.00	0.04	0.6		0.15
C-AB	0.09	9.32	0.009		0.00	0.01	0.1		0.11
A-B	0.06								
A-C	7.82								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-AC	0.30	6.17	0.049		0.04	0.05	0.7		0.17
C-AB	0.10	8.92	0.012		0.01	0.01	0.2		0.11
A-B	0.07								
A-C	9.33								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	0.37	5.41	0.068		0.05	0.07	1.0		0.20
C-AB	0.13	8.36	0.015		0.01	0.02	0.2		0.12
A-B	0.09								
A-C	11.43								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	0.37	5.41	0.068		0.07	0.07	1.1		0.20
C-AB	0.13	8.36	0.015		0.02	0.02	0.2		0.12
A-B	0.09								
A-C	11.43								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	0.30	6.17	0.049		0.07	0.05	0.8		0.17
C-AB	0.10	8.92	0.012		0.02	0.01	0.2		0.11
A-B	0.07								
A-C	9.33								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	0.25	6.71	0.037		0.05	0.04	0.6		0.15
C-AB	0.09	9.32	0.009		0.01	0.01	0.1		0.11
A-B	0.06								
A-C	7.82								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.0
16.45	0.1
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	27.5	18.4	4.8	0.17	4.8	0.17
C-AB	9.6	6.4	1.1	0.12	1.1	0.12
A-B	6.9	4.6				
A-C	857.5	571.7				
ALL	1620.1	1080.0	5.9	0.00	5.9	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
659.54	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
513.44	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
682.26	0.26	0.26

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2013 SAT WITH DEVELOPMENT

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	7.15	10.73	7.15
ARM B	15.00	45.00	75.00	0.21	0.32	0.21
ARM C	15.00	45.00	75.00	6.00	9.00	6.00

Demand set: 2013 SAT WITH DEVELOPMENT

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS / (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.15 - 17.45	ARM A	0.000	0.007	0.993
		0.0	4.0	568.0
		(0.0)%	(0.0)%	(0.0)%
	ARM B	0.588	0.000	0.412
		10.0	0.0	7.0
		(0.0)%	(0.0)%	(0.0)%
	ARM C	0.988	0.013	0.000
		474.0	6.0	0.0
		(0.0)%	(0.0)%	(0.0)%

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2013 SAT WITH DEVELOPMENT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-AC	0.21	6.99	0.030		0.00	0.03	0.4		0.15
C-AB	0.08	9.50	0.008		0.00	0.01	0.1		0.11
A-B	0.05								
A-C	7.13								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-AC	0.25	6.51	0.039		0.03	0.04	0.6		0.16
C-AB	0.09	9.14	0.010		0.01	0.01	0.1		0.11
A-B	0.06								
A-C	8.51								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	0.31	5.82	0.054		0.04	0.06	0.8		0.18
C-AB	0.11	8.63	0.013		0.01	0.01	0.2		0.12
A-B	0.07								
A-C	10.42								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	0.31	5.82	0.054		0.06	0.06	0.8		0.18
C-AB	0.11	8.63	0.013		0.01	0.01	0.2		0.12
A-B	0.07								
A-C	10.42								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	0.25	6.51	0.039		0.06	0.04	0.6		0.16
C-AB	0.09	9.14	0.010		0.01	0.01	0.2		0.11
A-B	0.06								
A-C	8.51								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	0.21	6.99	0.030		0.04	0.03	0.5		0.15
C-AB	0.08	9.50	0.008		0.01	0.01	0.1		0.11
A-B	0.05								
A-C	7.13								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.0
16.45	0.0
17.00	0.1
17.15	0.1
17.30	0.0
17.45	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	23.4	15.6	3.8	0.16	3.8	0.16
C-AB	8.3	5.5	0.9	0.11	0.9	0.11
A-B	5.5	3.7				
A-C	781.8	521.2				
ALL	1471.4	980.9	4.8	0.00	4.8	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
659.54	0.25	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
513.44	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
682.26	0.26	0.26

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2018 SAT WITH DEVELOPMENT

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	8.06	12.09	8.06
ARM B	15.00	45.00	75.00	0.25	0.38	0.25
ARM C	15.00	45.00	75.00	6.78	10.16	6.78

Demand set: 2018 SAT WITH DEVELOPMENT

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.15 - 17.45	ARM A	0.000	0.008	0.992
		0.0	5.0	640.0
		(0.0)%	(0.0)%	(0.0)%
	ARM B	0.600	0.000	0.400
		12.0	0.0	8.0
		(0.0)%	(0.0)%	(0.0)%
	ARM C	0.987	0.013	0.000
		535.0	7.0	0.0
		(0.0)%	(0.0)%	(0.0)%

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2018 SAT WITH DEVELOPMENT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-AC	0.25	6.64	0.038		0.00	0.04	0.6		0.16
C-AB	0.09	9.26	0.009		0.00	0.01	0.1		0.11
A-B	0.06								
A-C	8.03								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-AC	0.30	6.09	0.049		0.04	0.05	0.7		0.17
C-AB	0.10	8.85	0.012		0.01	0.01	0.2		0.11
A-B	0.07								
A-C	9.59								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	0.37	5.30	0.069		0.05	0.07	1.1		0.20
C-AB	0.13	8.28	0.016		0.01	0.02	0.2		0.12
A-B	0.09								
A-C	11.74								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	0.37	5.30	0.069		0.07	0.07	1.1		0.20
C-AB	0.13	8.28	0.016		0.02	0.02	0.2		0.12
A-B	0.09								
A-C	11.74								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	0.30	6.09	0.049		0.07	0.05	0.8		0.17
C-AB	0.10	8.85	0.012		0.02	0.01	0.2		0.11
A-B	0.07								
A-C	9.59								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	0.25	6.64	0.038		0.05	0.04	0.6		0.16
C-AB	0.09	9.26	0.009		0.01	0.01	0.1		0.11
A-B	0.06								
A-C	8.03								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.0
16.45	0.1
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.0
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-AC	27.5	18.4	4.9	0.18	4.9	0.18
C-AB	9.6	6.4	1.1	0.12	1.1	0.12
A-B	6.9	4.6				
A-C	880.9	587.3				
ALL	1661.3	1107.6	6.0	0.00	6.0	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 21:33:02 on 17/05/2013]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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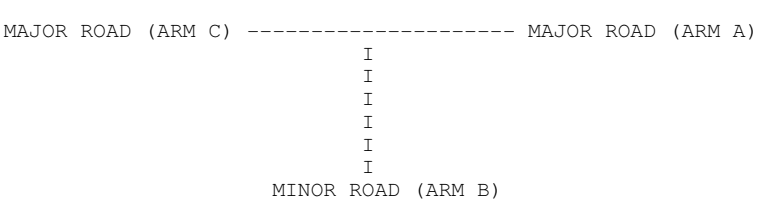
Run with file:- "C:\Users\C Smith\Documents\PICADY\CUDWORTH SYNDALE.vpi" (drive-on-the-left) at 22:35:02 on Wednesday, 17 A

RUN INFORMATION

RUN TITLE	: ALDI CUDWORTH
LOCATION	: SYNDALE ROAD
DATE	: 17/04/13
CLIENT	: ALDI STORES
ENUMERATOR	: C Smith [CSMITH-HP]
JOB NUMBER	:
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS BARNSLEY ROAD E
ARM B IS SYNDALE ROAD
ARM C IS BARNSLEY ROAD W

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 8.40 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.50 M.
- VISIBILITY	(VC-B)111.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (5)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 50.0 M.
- VISIBILITY TO RIGHT	(VB-A) 36.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	7.50 M.
WIDTH AT 10 M FROM JUNCTION	5.78 M.
WIDTH AT 15 M FROM JUNCTION	4.98 M.
WIDTH AT 20 M FROM JUNCTION	4.00 M.
- LENGTH OF FLARED SECTION	DERIVED: 3 PCU

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
659.08	0.23	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2012 PM BASE

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	7.06	10.59	7.06
ARM B	15.00	45.00	75.00	2.38	3.56	2.38
ARM C	15.00	45.00	75.00	6.80	10.20	6.80

Demand set: 2012 PM BASE

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.15 - 17.45				
	ARM A	0.000	0.257	0.743
		0.0	145.0	420.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.574	0.000	0.426
		109.0	0.0	81.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.796	0.204	0.000
		433.0	111.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2012 PM BASE
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	1.02	9.12	0.111		0.00	0.12	1.8		0.12
B-A	1.37	6.65	0.206		0.00	0.25	3.6		0.19
C-AB	1.39	9.36	0.149		0.00	0.17	2.6		0.13
A-B	1.82								
A-C	5.27								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	1.21	8.72	0.139		0.12	0.16	2.3		0.13
B-A	1.63	6.14	0.266		0.25	0.36	5.1		0.22
C-AB	1.66	9.05	0.184		0.17	0.22	3.3		0.14
A-B	2.17								
A-C	6.29								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	1.49	8.11	0.183		0.16	0.22	3.2		0.15
B-A	2.00	5.44	0.368		0.36	0.57	8.0		0.29
C-AB	2.04	8.61	0.236		0.22	0.31	4.6		0.15
A-B	2.66								
A-C	7.71								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	1.49	8.11	0.183		0.22	0.22	3.3		0.15
B-A	2.00	5.44	0.368		0.57	0.57	8.6		0.29
C-AB	2.04	8.61	0.236		0.31	0.31	4.6		0.15
A-B	2.66								
A-C	7.71								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	1.21	8.71	0.139		0.22	0.16	2.5		0.13
B-A	1.63	6.14	0.266		0.57	0.37	5.8		0.22
C-AB	1.66	9.05	0.184		0.31	0.23	3.4		0.14
A-B	2.17								
A-C	6.29								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	1.02	9.11	0.112		0.16	0.13	1.9		0.12
B-A	1.37	6.65	0.206		0.37	0.26	4.1		0.19
C-AB	1.39	9.36	0.149		0.23	0.18	2.6		0.13
A-B	1.82								
A-C	5.27								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.1	
16.45	0.2	
17.00	0.2	
17.15	0.2	
17.30	0.2	
17.45	0.1	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.3	
16.45	0.4	
17.00	0.6	*
17.15	0.6	*
17.30	0.4	
17.45	0.3	

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.2
16.45	0.2
17.00	0.3
17.15	0.3
17.30	0.2
17.45	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	111.5	74.3	15.2	0.14	15.2	0.14
B-A	150.0	100.0	35.2	0.23	35.2	0.23
C-AB	152.8	101.9	21.2	0.14	21.2	0.14
A-B	199.6	133.1				
A-C	578.1	385.4				
ALL	1788.0	1192.0	71.6	0.04	71.6	0.04

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
659.08	0.23	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2013 PM NO DEVELOPMENT

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	7.20	10.80	7.20
ARM B	15.00	45.00	75.00	2.42	3.64	2.42
ARM C	15.00	45.00	75.00	6.93	10.39	6.93

Demand set: 2013 PM NO DEVELOPMENT

TIME	FROM/TO	ARM A	ARM B	ARM C
16.15 - 17.45				
	ARM A	0.000	0.257	0.743
		0.0	148.0	428.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.572	0.000	0.428
		111.0	0.0	83.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.796	0.204	0.000
		441.0	113.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2013 PM NO DEVELOPMENT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	1.04	9.09	0.115		0.00	0.13	1.9		0.12
B-A	1.39	6.60	0.211		0.00	0.26	3.7		0.19
C-AB	1.42	9.33	0.152		0.00	0.18	2.6		0.13
A-B	1.86								
A-C	5.37								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	1.24	8.67	0.143		0.13	0.17	2.4		0.13
B-A	1.66	6.08	0.274		0.26	0.37	5.3		0.23
C-AB	1.69	9.01	0.188		0.18	0.23	3.4		0.14
A-B	2.22								
A-C	6.41								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	1.52	8.05	0.189		0.17	0.23	3.4		0.15
B-A	2.04	5.36	0.380		0.37	0.59	8.4		0.30
C-AB	2.07	8.57	0.242		0.23	0.32	4.7		0.15
A-B	2.72								
A-C	7.85								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	1.52	8.04	0.189		0.23	0.23	3.5		0.15
B-A	2.04	5.36	0.380		0.59	0.60	9.0		0.30
C-AB	2.07	8.57	0.242		0.32	0.32	4.8		0.15
A-B	2.72								
A-C	7.85								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	1.24	8.66	0.144		0.23	0.17	2.6		0.14
B-A	1.66	6.08	0.274		0.60	0.38	6.0		0.23
C-AB	1.69	9.01	0.188		0.32	0.23	3.5		0.14
A-B	2.22								
A-C	6.41								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	1.04	9.08	0.115		0.17	0.13	2.0		0.12
B-A	1.39	6.60	0.211		0.38	0.27	4.2		0.19
C-AB	1.42	9.33	0.152		0.23	0.18	2.7		0.13
A-B	1.86								
A-C	5.37								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.1	
16.45	0.2	
17.00	0.2	
17.15	0.2	
17.30	0.2	
17.45	0.1	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.3	
16.45	0.4	
17.00	0.6	*
17.15	0.6	*
17.30	0.4	
17.45	0.3	

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.2
16.45	0.2
17.00	0.3
17.15	0.3
17.30	0.2
17.45	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	114.2	76.2	15.7	0.14	15.7	0.14
B-A	152.8	101.9	36.8	0.24	36.8	0.24
C-AB	155.5	103.7	21.8	0.14	21.8	0.14
A-B	203.7	135.8				
A-C	589.1	392.7				
ALL	1822.4	1214.9	74.3	0.04	74.3	0.04

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
659.08	0.23	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2018 PM NO DEVELOPMENT

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	8.04	12.06	8.04
ARM B	15.00	45.00	75.00	2.70	4.05	2.70
ARM C	15.00	45.00	75.00	7.74	11.61	7.74

Demand set: 2018 PM NO DEVELOPMENT

TIME	FROM/TO	ARM A	ARM B	ARM C
16.15 - 17.45		TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S)		
	ARM A	0.000	0.257	0.743
		0.0	165.0	478.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.574	0.000	0.426
		124.0	0.0	92.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.796	0.204	0.000
		493.0	126.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2018 PM NO DEVELOPMENT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	1.15	8.84	0.131		0.00	0.15	2.2		0.13
B-A	1.56	6.30	0.247		0.00	0.32	4.6		0.21
C-AB	1.58	9.14	0.173		0.00	0.21	3.1		0.13
A-B	2.07								
A-C	6.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	1.38	8.36	0.165		0.15	0.20	2.9		0.14
B-A	1.86	5.71	0.325		0.32	0.47	6.7		0.26
C-AB	1.89	8.78	0.215		0.21	0.27	4.1		0.14
A-B	2.47								
A-C	7.16								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	1.69	7.58	0.223		0.20	0.28	4.1		0.17
B-A	2.28	4.91	0.463		0.47	0.83	11.5		0.37
C-AB	2.31	8.29	0.279		0.27	0.38	5.7		0.17
A-B	3.03								
A-C	8.77								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	1.69	7.56	0.223		0.28	0.29	4.3		0.17
B-A	2.28	4.91	0.464		0.83	0.84	12.6		0.38
C-AB	2.31	8.29	0.279		0.38	0.38	5.8		0.17
A-B	3.03								
A-C	8.77								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	1.38	8.34	0.165		0.29	0.20	3.1		0.14
B-A	1.86	5.71	0.325		0.84	0.49	7.9		0.26
C-AB	1.89	8.78	0.215		0.38	0.28	4.2		0.15
A-B	2.47								
A-C	7.16								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	1.15	8.83	0.131		0.20	0.15	2.3		0.13
B-A	1.56	6.29	0.247		0.49	0.33	5.2		0.21
C-AB	1.58	9.14	0.173		0.28	0.21	3.2		0.13
A-B	2.07								
A-C	6.00								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.1	
16.45	0.2	
17.00	0.3	
17.15	0.3	
17.30	0.2	
17.45	0.2	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.3	
16.45	0.5	
17.00	0.8	*
17.15	0.8	*
17.30	0.5	
17.45	0.3	

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.2
16.45	0.3
17.00	0.4
17.15	0.4
17.30	0.3
17.45	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	126.6	84.4	18.8	0.15	18.8	0.15
B-A	170.7	113.8	48.5	0.28	48.5	0.28
C-AB	173.4	115.6	26.0	0.15	26.0	0.15
A-B	227.1	151.4				
A-C	657.9	438.6				
ALL	2034.4	1356.2	93.3	0.05	93.3	0.05

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
659.08	0.23	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2013 PM WITH DEVELOPMENT

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	7.30	10.95	7.30
ARM B	15.00	45.00	75.00	2.45	3.68	2.45
ARM C	15.00	45.00	75.00	7.28	10.91	7.28

Demand set: 2013 PM WITH DEVELOPMENT

TIME	FROM/TO	ARM A	ARM B	ARM C
16.15 - 17.45				
	ARM A	0.000	0.240	0.760
		0.0	140.0	444.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.541	0.000	0.459
		106.0	0.0	90.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.787	0.213	0.000
		458.0	124.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2013 PM WITH DEVELOPMENT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	1.13	9.19	0.123		0.00	0.14	2.0		0.12
B-A	1.33	6.40	0.208		0.00	0.26	3.7		0.20
C-AB	1.56	9.31	0.167		0.00	0.20	3.0		0.13
A-B	1.76								
A-C	5.57								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	1.35	8.76	0.154		0.14	0.18	2.6		0.13
B-A	1.59	5.87	0.271		0.26	0.36	5.2		0.23
C-AB	1.86	8.98	0.207		0.20	0.26	3.9		0.14
A-B	2.10								
A-C	6.65								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	1.65	8.12	0.203		0.18	0.25	3.7		0.15
B-A	1.95	5.13	0.379		0.36	0.59	8.4		0.31
C-AB	2.28	8.53	0.267		0.26	0.36	5.4		0.16
A-B	2.57								
A-C	8.15								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	1.65	8.11	0.204		0.25	0.25	3.8		0.15
B-A	1.95	5.13	0.379		0.59	0.60	9.0		0.31
C-AB	2.28	8.53	0.267		0.36	0.36	5.5		0.16
A-B	2.57								
A-C	8.15								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	1.35	8.75	0.154		0.25	0.18	2.8		0.14
B-A	1.59	5.86	0.271		0.60	0.38	6.0		0.24
C-AB	1.86	8.98	0.207		0.36	0.26	4.0		0.14
A-B	2.10								
A-C	6.65								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	1.13	9.18	0.123		0.18	0.14	2.2		0.12
B-A	1.33	6.40	0.208		0.38	0.27	4.2		0.20
C-AB	1.56	9.31	0.167		0.26	0.20	3.0		0.13
A-B	1.76								
A-C	5.57								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.1	
16.45	0.2	
17.00	0.3	
17.15	0.3	
17.30	0.2	
17.45	0.1	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.3	
16.45	0.4	
17.00	0.6	*
17.15	0.6	*
17.30	0.4	
17.45	0.3	

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.2
16.45	0.3
17.00	0.4
17.15	0.4
17.30	0.3
17.45	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	123.9	82.6	17.1	0.14	17.1	0.14
B-A	145.9	97.3	36.4	0.25	36.4	0.25
C-AB	170.7	113.8	24.7	0.14	24.7	0.14
A-B	192.7	128.5				
A-C	611.1	407.4				
ALL	1874.7	1249.8	78.2	0.04	78.2	0.04

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
659.08	0.23	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2018 PM WITH DEVELOPMENT

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	8.15	12.22	8.15
ARM B	15.00	45.00	75.00	2.72	4.09	2.72
ARM C	15.00	45.00	75.00	8.10	12.15	8.10

Demand set: 2018 PM WITH DEVELOPMENT

TIME	FROM/TO	ARM A	ARM B	ARM C
16.15 - 17.45				
	ARM A	0.000	0.242	0.758
		0.0	158.0	494.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.546	0.000	0.454
		119.0	0.0	99.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.787	0.213	0.000
		510.0	138.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2018 PM WITH DEVELOPMENT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	1.24	8.92	0.139		0.00	0.16	2.3		0.13
B-A	1.49	6.10	0.245		0.00	0.32	4.5		0.22
C-AB	1.73	9.11	0.190		0.00	0.23	3.4		0.13
A-B	1.98								
A-C	6.20								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	1.48	8.42	0.176		0.16	0.21	3.1		0.14
B-A	1.78	5.51	0.324		0.32	0.47	6.7		0.27
C-AB	2.07	8.75	0.236		0.23	0.31	4.6		0.15
A-B	2.37								
A-C	7.40								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	1.82	7.62	0.239		0.21	0.31	4.5		0.17
B-A	2.18	4.68	0.467		0.47	0.84	11.6		0.39
C-AB	2.53	8.25	0.307		0.31	0.44	6.6		0.17
A-B	2.90								
A-C	9.07								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	1.82	7.60	0.239		0.31	0.31	4.7		0.17
B-A	2.18	4.68	0.467		0.84	0.85	12.7		0.40
C-AB	2.53	8.25	0.307		0.44	0.44	6.7		0.17
A-B	2.90								
A-C	9.07								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	1.48	8.41	0.176		0.31	0.22	3.4		0.14
B-A	1.78	5.50	0.324		0.85	0.49	7.8		0.27
C-AB	2.07	8.75	0.236		0.44	0.31	4.7		0.15
A-B	2.37								
A-C	7.40								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	1.24	8.91	0.139		0.22	0.16	2.5		0.13
B-A	1.49	6.10	0.245		0.49	0.33	5.2		0.22
C-AB	1.73	9.11	0.190		0.31	0.24	3.6		0.14
A-B	1.98								
A-C	6.20								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.2	
16.45	0.2	
17.00	0.3	
17.15	0.3	
17.30	0.2	
17.45	0.2	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.3	
16.45	0.5	
17.00	0.8	*
17.15	0.9	*
17.30	0.5	
17.45	0.3	

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.2
16.45	0.3
17.00	0.4
17.15	0.4
17.30	0.3
17.45	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	136.3	90.8	20.4	0.15	20.4	0.15
B-A	163.8	109.2	48.5	0.30	48.5	0.30
C-AB	189.9	126.6	29.5	0.16	29.5	0.16
A-B	217.5	145.0				
A-C	680.0	453.3				
ALL	2089.4	1392.9	98.5	0.05	98.5	0.05

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
659.08	0.23	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2012 SAT BASE

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	7.19	10.78	7.19
ARM B	15.00	45.00	75.00	2.36	3.54	2.36
ARM C	15.00	45.00	75.00	5.78	8.66	5.78

Demand set: 2012 SAT BASE

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.15 - 17.45				
	ARM A	0.000	0.230	0.770
		0.0	132.0	443.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.508	0.000	0.492
		96.0	0.0	93.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.818	0.182	0.000
		378.0	84.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2012 SAT BASE
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	1.17	9.40	0.124		0.00	0.14	2.0		0.12
B-A	1.20	6.62	0.182		0.00	0.22	3.1		0.18
C-AB	1.05	9.33	0.113		0.00	0.13	1.9		0.12
A-B	1.66								
A-C	5.56								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	1.39	9.00	0.155		0.14	0.18	2.7		0.13
B-A	1.44	6.16	0.234		0.22	0.30	4.3		0.21
C-AB	1.26	9.01	0.140		0.13	0.16	2.4		0.13
A-B	1.98								
A-C	6.64								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	1.71	8.42	0.203		0.18	0.25	3.7		0.15
B-A	1.76	5.52	0.319		0.30	0.46	6.5		0.26
C-AB	1.54	8.57	0.180		0.16	0.22	3.3		0.14
A-B	2.42								
A-C	8.13								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	1.71	8.41	0.203		0.25	0.25	3.8		0.15
B-A	1.76	5.52	0.319		0.46	0.46	6.9		0.27
C-AB	1.54	8.57	0.180		0.22	0.22	3.3		0.14
A-B	2.42								
A-C	8.13								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	1.39	8.99	0.155		0.25	0.19	2.9		0.13
B-A	1.44	6.16	0.234		0.46	0.31	4.9		0.21
C-AB	1.26	9.01	0.140		0.22	0.16	2.5		0.13
A-B	1.98								
A-C	6.64								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	1.17	9.39	0.124		0.19	0.14	2.2		0.12
B-A	1.20	6.62	0.182		0.31	0.23	3.5		0.19
C-AB	1.05	9.33	0.113		0.16	0.13	1.9		0.12
A-B	1.66								
A-C	5.56								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.1
16.45	0.2
17.00	0.3
17.15	0.3
17.30	0.2
17.45	0.1

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.2
16.45	0.3
17.00	0.5
17.15	0.5
17.30	0.3
17.45	0.2

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.1
16.45	0.2
17.00	0.2
17.15	0.2
17.30	0.2
17.45	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	128.0	85.3	17.2	0.13	17.2	0.13
B-A	132.1	88.1	29.3	0.22	29.3	0.22
C-AB	115.6	77.1	15.2	0.13	15.2	0.13
A-B	181.7	121.1				
A-C	609.8	406.5				
ALL	1687.5	1125.0	61.7	0.04	61.7	0.04

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
659.08	0.23	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2013 SAT NO DEVELOPMENT

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	7.32	10.99	7.32
ARM B	15.00	45.00	75.00	2.41	3.62	2.41
ARM C	15.00	45.00	75.00	5.89	8.83	5.89

Demand set: 2013 SAT NO DEVELOPMENT

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.15 - 17.45	ARM A	0.000	0.230	0.770
		0.0	135.0	451.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.508	0.000	0.492
		98.0	0.0	95.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.817	0.183	0.000
		385.0	86.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2013 SAT NO DEVELOPMENT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	1.19	9.36	0.127		0.00	0.14	2.1		0.12
B-A	1.23	6.58	0.187		0.00	0.23	3.2		0.19
C-AB	1.08	9.30	0.116		0.00	0.13	1.9		0.12
A-B	1.69								
A-C	5.66								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	1.42	8.95	0.159		0.14	0.19	2.7		0.13
B-A	1.47	6.10	0.241		0.23	0.31	4.5		0.22
C-AB	1.29	8.98	0.144		0.13	0.17	2.5		0.13
A-B	2.02								
A-C	6.76								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	1.74	8.35	0.209		0.19	0.26	3.8		0.15
B-A	1.80	5.45	0.330		0.31	0.48	6.9		0.27
C-AB	1.58	8.53	0.185		0.17	0.22	3.4		0.14
A-B	2.48								
A-C	8.28								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	1.74	8.35	0.209		0.26	0.26	3.9		0.15
B-A	1.80	5.45	0.330		0.48	0.49	7.3		0.27
C-AB	1.58	8.53	0.185		0.22	0.23	3.4		0.14
A-B	2.48								
A-C	8.28								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	1.42	8.94	0.159		0.26	0.19	2.9		0.13
B-A	1.47	6.10	0.241		0.49	0.32	5.1		0.22
C-AB	1.29	8.98	0.144		0.23	0.17	2.5		0.13
A-B	2.02								
A-C	6.76								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	1.19	9.35	0.127		0.19	0.15	2.3		0.12
B-A	1.23	6.57	0.187		0.32	0.23	3.6		0.19
C-AB	1.08	9.30	0.116		0.17	0.13	2.0		0.12
A-B	1.69								
A-C	5.66								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.1
16.45	0.2
17.00	0.3
17.15	0.3
17.30	0.2
17.45	0.1

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.2
16.45	0.3
17.00	0.5
17.15	0.5
17.30	0.3
17.45	0.2

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.1
16.45	0.2
17.00	0.2
17.15	0.2
17.30	0.2
17.45	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	130.8	87.2	17.8	0.14	17.8	0.14
B-A	134.9	89.9	30.5	0.23	30.5	0.23
C-AB	118.4	78.9	15.7	0.13	15.7	0.13
A-B	185.8	123.9				
A-C	620.8	413.8				
ALL	1720.5	1147.0	64.0	0.04	64.0	0.04

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
659.08	0.23	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2018 SAT NO DEVELOPMENT

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	8.29	12.43	8.29
ARM B	15.00	45.00	75.00	2.72	4.09	2.72
ARM C	15.00	45.00	75.00	6.66	9.99	6.66

Demand set: 2018 SAT NO DEVELOPMENT

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.15 - 17.45	ARM A	0.000	0.229	0.771
		0.0	152.0	511.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.509	0.000	0.491
		111.0	0.0	107.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.818	0.182	0.000
		436.0	97.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2018 SAT NO DEVELOPMENT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	1.34	9.08	0.148		0.00	0.17	2.5		0.13
B-A	1.39	6.26	0.222		0.00	0.28	4.0		0.20
C-AB	1.22	9.08	0.134		0.00	0.15	2.3		0.13
A-B	1.91								
A-C	6.41								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	1.60	8.60	0.186		0.17	0.23	3.3		0.14
B-A	1.66	5.72	0.291		0.28	0.40	5.8		0.25
C-AB	1.45	8.71	0.167		0.15	0.20	3.0		0.14
A-B	2.28								
A-C	7.66								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	1.96	7.87	0.249		0.23	0.33	4.8		0.17
B-A	2.04	4.98	0.409		0.40	0.67	9.4		0.34
C-AB	1.78	8.20	0.217		0.20	0.27	4.1		0.16
A-B	2.79								
A-C	9.38								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	1.96	7.86	0.250		0.33	0.33	4.9		0.17
B-A	2.04	4.98	0.409		0.67	0.68	10.1		0.34
C-AB	1.78	8.20	0.217		0.27	0.28	4.2		0.16
A-B	2.79								
A-C	9.38								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	1.60	8.59	0.187		0.33	0.23	3.6		0.14
B-A	1.66	5.72	0.291		0.68	0.42	6.6		0.25
C-AB	1.45	8.71	0.167		0.28	0.20	3.0		0.14
A-B	2.28								
A-C	7.66								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	1.34	9.07	0.148		0.23	0.18	2.7		0.13
B-A	1.39	6.26	0.223		0.42	0.29	4.5		0.21
C-AB	1.22	9.08	0.134		0.20	0.16	2.3		0.13
A-B	1.91								
A-C	6.41								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.2	
16.45	0.2	
17.00	0.3	
17.15	0.3	
17.30	0.2	
17.45	0.2	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.3	
16.45	0.4	
17.00	0.7	*
17.15	0.7	*
17.30	0.4	
17.45	0.3	

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.2
16.45	0.2
17.00	0.3
17.15	0.3
17.30	0.2
17.45	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	147.3	98.2	21.8	0.15	21.8	0.15
B-A	152.8	101.9	40.5	0.26	40.5	0.26
C-AB	133.5	89.0	18.9	0.14	18.9	0.14
A-B	209.2	139.5				
A-C	703.4	468.9				
ALL	1946.3	1297.5	81.1	0.04	81.1	0.04

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
659.08	0.23	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2013 SAT WITH DEVELOPMENT

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	7.47	11.21	7.47
ARM B	15.00	45.00	75.00	2.44	3.66	2.44
ARM C	15.00	45.00	75.00	6.30	9.45	6.30

Demand set: 2013 SAT WITH DEVELOPMENT

TIME	FROM/TO	ARM A	ARM B	ARM C
16.15 - 17.45				
	ARM A	0.000	0.209	0.791
		0.0	125.0	473.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.467	0.000	0.533
		91.0	0.0	104.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.804	0.196	0.000
		405.0	99.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2013 SAT WITH DEVELOPMENT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	1.30	9.49	0.137		0.00	0.16	2.3		0.12
B-A	1.14	6.33	0.180		0.00	0.22	3.1		0.19
C-AB	1.24	9.27	0.134		0.00	0.15	2.3		0.12
A-B	1.57								
A-C	5.93								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	1.56	9.07	0.172		0.16	0.21	3.0		0.13
B-A	1.36	5.83	0.234		0.22	0.30	4.3		0.22
C-AB	1.48	8.94	0.166		0.15	0.20	3.0		0.13
A-B	1.87								
A-C	7.09								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	1.91	8.45	0.226		0.21	0.29	4.2		0.15
B-A	1.67	5.15	0.324		0.30	0.47	6.7		0.29
C-AB	1.82	8.48	0.214		0.20	0.27	4.0		0.15
A-B	2.29								
A-C	8.68								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	1.91	8.44	0.226		0.29	0.29	4.3		0.15
B-A	1.67	5.15	0.324		0.47	0.47	7.1		0.29
C-AB	1.82	8.48	0.214		0.27	0.27	4.1		0.15
A-B	2.29								
A-C	8.68								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	1.56	9.06	0.172		0.29	0.21	3.2		0.13
B-A	1.36	5.83	0.234		0.47	0.31	4.9		0.22
C-AB	1.48	8.94	0.166		0.27	0.20	3.0		0.13
A-B	1.87								
A-C	7.09								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	1.30	9.49	0.138		0.21	0.16	2.5		0.12
B-A	1.14	6.32	0.181		0.31	0.22	3.5		0.19
C-AB	1.24	9.27	0.134		0.20	0.16	2.3		0.12
A-B	1.57								
A-C	5.93								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.2
16.45	0.2
17.00	0.3
17.15	0.3
17.30	0.2
17.45	0.2

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.2
16.45	0.3
17.00	0.5
17.15	0.5
17.30	0.3
17.45	0.2

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.2
16.45	0.2
17.00	0.3
17.15	0.3
17.30	0.2
17.45	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	143.1	95.4	19.5	0.14	19.5	0.14
B-A	125.3	83.5	29.5	0.24	29.5	0.24
C-AB	136.3	90.8	18.7	0.14	18.7	0.14
A-B	172.1	114.7				
A-C	651.0	434.0				
ALL	1785.2	1190.1	67.8	0.04	67.8	0.04

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
659.08	0.23	0.23

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2018 SAT WITH DEVELOPMENT

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	8.45	12.67	8.45
ARM B	15.00	45.00	75.00	2.76	4.14	2.76
ARM C	15.00	45.00	75.00	7.09	10.63	7.09

Demand set: 2018 SAT WITH DEVELOPMENT

TIME	FROM/TO	ARM A	ARM B	ARM C
16.15 - 17.45				
	ARM A	0.000	0.212	0.788
		0.0	143.0	533.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.471	0.000	0.529
		104.0	0.0	117.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.804	0.196	0.000
		456.0	111.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2018 SAT WITH DEVELOPMENT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-C	1.47	9.20	0.160		0.00	0.19	2.7		0.13
B-A	1.30	6.02	0.217		0.00	0.27	3.9		0.21
C-AB	1.39	9.04	0.154		0.00	0.18	2.7		0.13
A-B	1.79								
A-C	6.69								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-C	1.75	8.70	0.202		0.19	0.25	3.6		0.14
B-A	1.56	5.46	0.285		0.27	0.39	5.6		0.26
C-AB	1.66	8.67	0.192		0.18	0.23	3.5		0.14
A-B	2.14								
A-C	7.99								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	2.15	7.94	0.270		0.25	0.36	5.3		0.17
B-A	1.91	4.69	0.407		0.39	0.66	9.3		0.35
C-AB	2.04	8.15	0.250		0.23	0.33	4.9		0.16
A-B	2.62								
A-C	9.78								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	2.15	7.93	0.271		0.36	0.37	5.5		0.17
B-A	1.91	4.69	0.407		0.66	0.67	10.0		0.36
C-AB	2.04	8.15	0.250		0.33	0.33	5.0		0.16
A-B	2.62								
A-C	9.78								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	1.75	8.68	0.202		0.37	0.26	4.0		0.14
B-A	1.56	5.46	0.286		0.67	0.41	6.5		0.26
C-AB	1.66	8.67	0.192		0.33	0.24	3.6		0.14
A-B	2.14								
A-C	7.99								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	1.47	9.18	0.160		0.26	0.19	3.0		0.13
B-A	1.30	6.01	0.217		0.41	0.28	4.4		0.21
C-AB	1.39	9.04	0.154		0.24	0.18	2.8		0.13
A-B	1.79								
A-C	6.69								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.2	
16.45	0.2	
17.00	0.4	
17.15	0.4	
17.30	0.3	
17.45	0.2	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.30	0.3	
16.45	0.4	
17.00	0.7	*
17.15	0.7	*
17.30	0.4	
17.45	0.3	

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.2
16.45	0.2
17.00	0.3
17.15	0.3
17.30	0.2
17.45	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	161.0	107.4	24.1	0.15	24.1	0.15
B-A	143.1	95.4	39.7	0.28	39.7	0.28
C-AB	152.8	101.9	22.5	0.15	22.5	0.15
A-B	196.8	131.2				
A-C	733.6	489.1				
ALL	2015.1	1343.4	86.3	0.04	86.3	0.04

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

========== end of file ==========

Printed at 21:34:00 on 17/05/2013]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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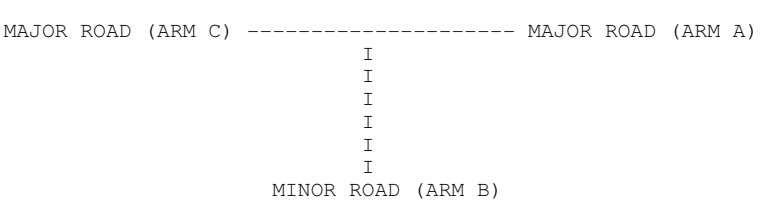
Run with file:- "C:\Users\C Smith\Documents\PICADY\CUDWORTH ACCESS.vpi" (drive-on-the-left) at 11:42:23 on Tuesday, 23 Apri

RUN INFORMATION

RUN TITLE	: ALDI CUDWORTH
LOCATION	: CUDWORTH
DATE	: 17/04/13
CLIENT	: ALDI STORES LTD
ENUMERATOR	: C Smith [CSMITH-HP]
JOB NUMBER	:
STATUS	:
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS BARNSLEY ROAD W
ARM B IS SITE ACCESS
ARM C IS BARNSLEY ROAD E

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.80 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.50 M.
- VISIBILITY	(VC-B)150.00 M.
- BLOCKS TRAFFIC (SPACES)	YES (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 51.0 M.
- VISIBILITY TO RIGHT	(VB-A) 27.0 M.
- LANE 1 WIDTH	(WB-C) 3.50 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
673.02	0.24	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
532.77	0.23	0.09	0.14	0.32

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
682.41	0.24	0.24

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2013 PM WITH DEVELOPMENT

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	7.05	10.58	7.05
ARM B	15.00	45.00	75.00	0.61	0.92	0.61
ARM C	15.00	45.00	75.00	6.75	10.13	6.75

Demand set: 2013 PM WITH DEVELOPMENT

TIME	FROM/TO	ARM A	ARM B	ARM C
16.15 - 17.45				
	ARM A	0.000	0.028	0.972
		0.0	16.0	548.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.347	0.000	0.653
		17.0	0.0	32.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.950	0.050	0.000
		513.0	27.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2013 PM WITH DEVELOPMENT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-AC	0.61	8.09	0.076		0.00	0.08	1.2		0.13
C-AB	0.59	13.86	0.043		0.00	0.06	0.9		0.08
C-A	6.18								
A-B	0.20								
A-C	6.88								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-AC	0.73	7.64	0.096		0.08	0.11	1.5		0.14
C-AB	0.84	14.55	0.058		0.06	0.09	1.4		0.07
C-A	7.25								
A-B	0.24								
A-C	8.21								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	0.90	7.01	0.128		0.11	0.15	2.1		0.16
C-AB	1.22	15.35	0.079		0.09	0.15	2.2		0.07
C-A	8.69								
A-B	0.29								
A-C	10.06								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	0.90	7.01	0.128		0.15	0.15	2.2		0.16
C-AB	1.22	15.35	0.079		0.15	0.15	2.2		0.07
C-A	8.69								
A-B	0.29								
A-C	10.06								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	0.73	7.64	0.096		0.15	0.11	1.7		0.14
C-AB	0.84	14.55	0.058		0.15	0.09	1.4		0.07
C-A	7.25								
A-B	0.24								
A-C	8.21								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	0.61	8.09	0.076		0.11	0.08	1.3		0.13
C-AB	0.59	13.86	0.043		0.09	0.06	0.9		0.08
C-A	6.18								
A-B	0.20								
A-C	6.88								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.1
16.45	0.1
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.1
16.45	0.1
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	67.4	45.0	10.0	0.15	10.0	0.15
C-AB	79.5	53.0	9.1	0.11	9.1	0.11
C-A	663.8	442.5				
A-B	22.0	14.7				
A-C	754.3	502.9				
ALL	1587.0	1058.0	19.0	0.01	19.0	0.01

* DELAY IS THAT OCCURING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
673.02	0.24	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
532.77	0.23	0.09	0.14	0.32

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
682.41	0.24	0.24

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2018 PM WITH DEVELOPMENT

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	7.86	11.79	7.86
ARM B	15.00	45.00	75.00	0.61	0.92	0.61
ARM C	15.00	45.00	75.00	7.50	11.25	7.50

Demand set: 2018 PM WITH DEVELOPMENT

TIME	FROM/TO	ARM A	ARM B	ARM C
16.15 - 17.45		TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S)		
	ARM A	0.000	0.025	0.975
		0.0	16.0	613.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.347	0.000	0.653
		17.0	0.0	32.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.955	0.045	0.000
		573.0	27.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2018 PM WITH DEVELOPMENT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-AC	0.61	7.83	0.079		0.00	0.08	1.2		0.14
C-AB	0.63	14.16	0.044		0.00	0.06	1.0		0.07
C-A	6.90								
A-B	0.20								
A-C	7.69								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-AC	0.73	7.32	0.100		0.08	0.11	1.6		0.15
C-AB	0.92	14.96	0.061		0.06	0.10	1.5		0.07
C-A	8.07								
A-B	0.24								
A-C	9.18								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	0.90	6.60	0.136		0.11	0.16	2.3		0.18
C-AB	1.36	15.86	0.086		0.10	0.16	2.5		0.07
C-A	9.65								
A-B	0.29								
A-C	11.25								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	0.90	6.60	0.136		0.16	0.16	2.3		0.18
C-AB	1.36	15.87	0.086		0.16	0.16	2.5		0.07
C-A	9.65								
A-B	0.29								
A-C	11.25								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	0.73	7.32	0.100		0.16	0.11	1.7		0.15
C-AB	0.92	14.97	0.061		0.16	0.10	1.5		0.07
C-A	8.07								
A-B	0.24								
A-C	9.18								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	0.61	7.83	0.079		0.11	0.09	1.3		0.14
C-AB	0.63	14.16	0.045		0.10	0.07	1.0		0.07
C-A	6.90								
A-B	0.20								
A-C	7.69								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.1
16.45	0.1
17.00	0.2
17.15	0.2
17.30	0.1
17.45	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.1
16.45	0.1
17.00	0.2
17.15	0.2
17.30	0.1
17.45	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	67.4	45.0	10.5	0.16	10.5	0.16
C-AB	87.2	58.1	9.9	0.11	9.9	0.11
C-A	738.7	492.5				
A-B	22.0	14.7				
A-C	843.7	562.5				
ALL	1759.1	1172.7	20.5	0.01	20.5	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
673.02	0.24	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
532.77	0.23	0.09	0.14	0.32

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
682.41	0.24	0.24

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2013 SAT WITH DEVELOPMENT

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	6.05	9.08	6.05
ARM B	15.00	45.00	75.00	0.80	1.20	0.80
ARM C	15.00	45.00	75.00	7.32	10.99	7.32

Demand set: 2013 SAT WITH DEVELOPMENT

TIME	FROM/TO	ARM A	ARM B	ARM C
16.15 - 17.45				
	ARM A	0.000	0.037	0.963
		0.0	18.0	466.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.375	0.000	0.625
		24.0	0.0	40.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.937	0.063	0.000
		549.0	37.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2013 SAT WITH DEVELOPMENT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-AC	0.80	8.17	0.098		0.00	0.11	1.6		0.14
C-AB	0.87	14.47	0.060		0.00	0.10	1.4		0.07
C-A	6.48								
A-B	0.23								
A-C	5.85								
16.30-16.45									
B-AC	0.96	7.75	0.124		0.11	0.14	2.0		0.15
C-AB	1.18	15.12	0.078		0.10	0.14	2.1		0.07
C-A	7.60								
A-B	0.27								
A-C	6.98								
16.45-17.00									
B-AC	1.17	7.16	0.164		0.14	0.19	2.8		0.17
C-AB	1.72	16.02	0.107		0.14	0.23	3.5		0.07
C-A	9.04								
A-B	0.33								
A-C	8.55								
17.00-17.15									
B-AC	1.17	7.16	0.164		0.19	0.20	2.9		0.17
C-AB	1.72	16.02	0.107		0.23	0.23	3.5		0.07
C-A	9.03								
A-B	0.33								
A-C	8.55								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	0.96	7.75	0.124		0.20	0.14	2.2		0.15
C-AB	1.18	15.12	0.078		0.23	0.15	2.2		0.07
C-A	7.60								
A-B	0.27								
A-C	6.98								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	0.80	8.17	0.098		0.14	0.11	1.7		0.14
C-AB	0.87	14.47	0.060		0.15	0.10	1.5		0.07
C-A	6.48								
A-B	0.23								
A-C	5.85								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.1
16.45	0.1
17.00	0.2
17.15	0.2
17.30	0.1
17.45	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.1
16.45	0.1
17.00	0.2
17.15	0.2
17.30	0.1
17.45	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	88.1	58.7	13.2	0.15	13.2	0.15
C-AB	113.2	75.5	14.4	0.13	14.4	0.13
C-A	693.4	462.3				
A-B	24.8	16.5				
A-C	641.4	427.6				
ALL	1560.9	1040.6	27.6	0.02	27.6	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
673.02	0.24	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
532.77	0.23	0.09	0.14	0.32

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
682.41	0.24	0.24

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

Demand set: 2018 SAT WITH DEVELOPMENT

TIME PERIOD BEGINS 16.15 AND ENDS 17.45

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	6.82	10.24	6.82
ARM B	15.00	45.00	75.00	0.80	1.20	0.80
ARM C	15.00	45.00	75.00	8.24	12.36	8.24

Demand set: 2018 SAT WITH DEVELOPMENT

TIME	FROM/TO	ARM A	ARM B	ARM C
16.15 - 17.45		TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S)		
	ARM A	0.000 0.0 (0.0)	0.033 18.0 (0.0)	0.967 528.0 (0.0)
	ARM B	0.375 24.0 (0.0)	0.000 0.0 (0.0)	0.625 40.0 (0.0)
	ARM C	0.944 622.0 (0.0)	0.056 37.0 (0.0)	0.000 0.0 (0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2018 SAT WITH DEVELOPMENT
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.15-16.30									
B-AC	0.80	7.90	0.102		0.00	0.11	1.6		0.14
C-AB	0.95	14.91	0.064		0.00	0.11	1.6		0.07
C-A	7.32								
A-B	0.23								
A-C	6.63								
16.30-16.45									
B-AC	0.96	7.42	0.129		0.11	0.15	2.1		0.15
C-AB	1.31	15.65	0.083		0.11	0.16	2.4		0.07
C-A	8.57								
A-B	0.27								
A-C	7.91								
16.45-17.00									
B-AC	1.17	6.74	0.174		0.15	0.21	3.0		0.18
C-AB	2.03	16.85	0.121		0.16	0.28	4.2		0.07
C-A	10.06								
A-B	0.33								
A-C	9.69								
17.00-17.15									
B-AC	1.17	6.74	0.174		0.21	0.21	3.1		0.18
C-AB	2.04	16.85	0.121		0.28	0.28	4.3		0.07
C-A	10.06								
A-B	0.33								
A-C	9.69								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	0.96	7.42	0.129		0.21	0.15	2.3		0.15
C-AB	1.31	15.66	0.084		0.28	0.16	2.4		0.07
C-A	8.56								
A-B	0.27								
A-C	7.91								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	0.80	7.90	0.102		0.15	0.11	1.8		0.14
C-AB	0.95	14.92	0.064		0.16	0.11	1.6		0.07
C-A	7.32								
A-B	0.23								
A-C	6.63								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.1
16.45	0.1
17.00	0.2
17.15	0.2
17.30	0.2
17.45	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.30	0.1
16.45	0.2
17.00	0.3
17.15	0.3
17.30	0.2
17.45	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	88.1	58.7	14.0	0.16	14.0	0.16
C-AB	128.8	85.9	16.5	0.13	16.5	0.13
C-A	778.3	518.9				
A-B	24.8	16.5				
A-C	726.8	484.5				
ALL	1746.7	1164.5	30.6	0.02	30.6	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

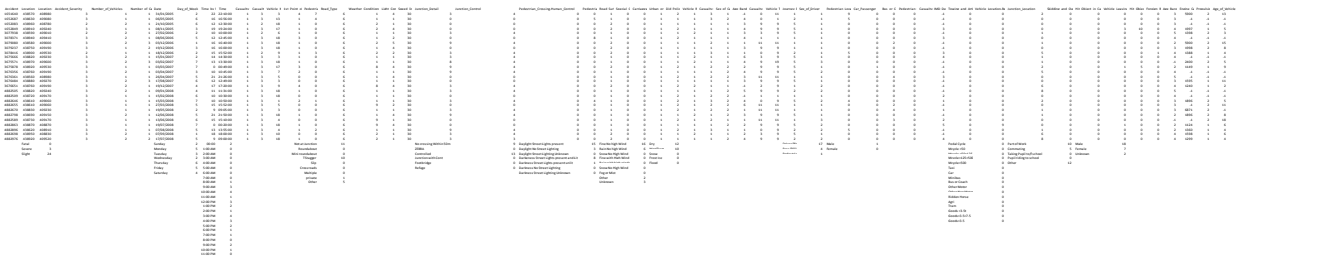
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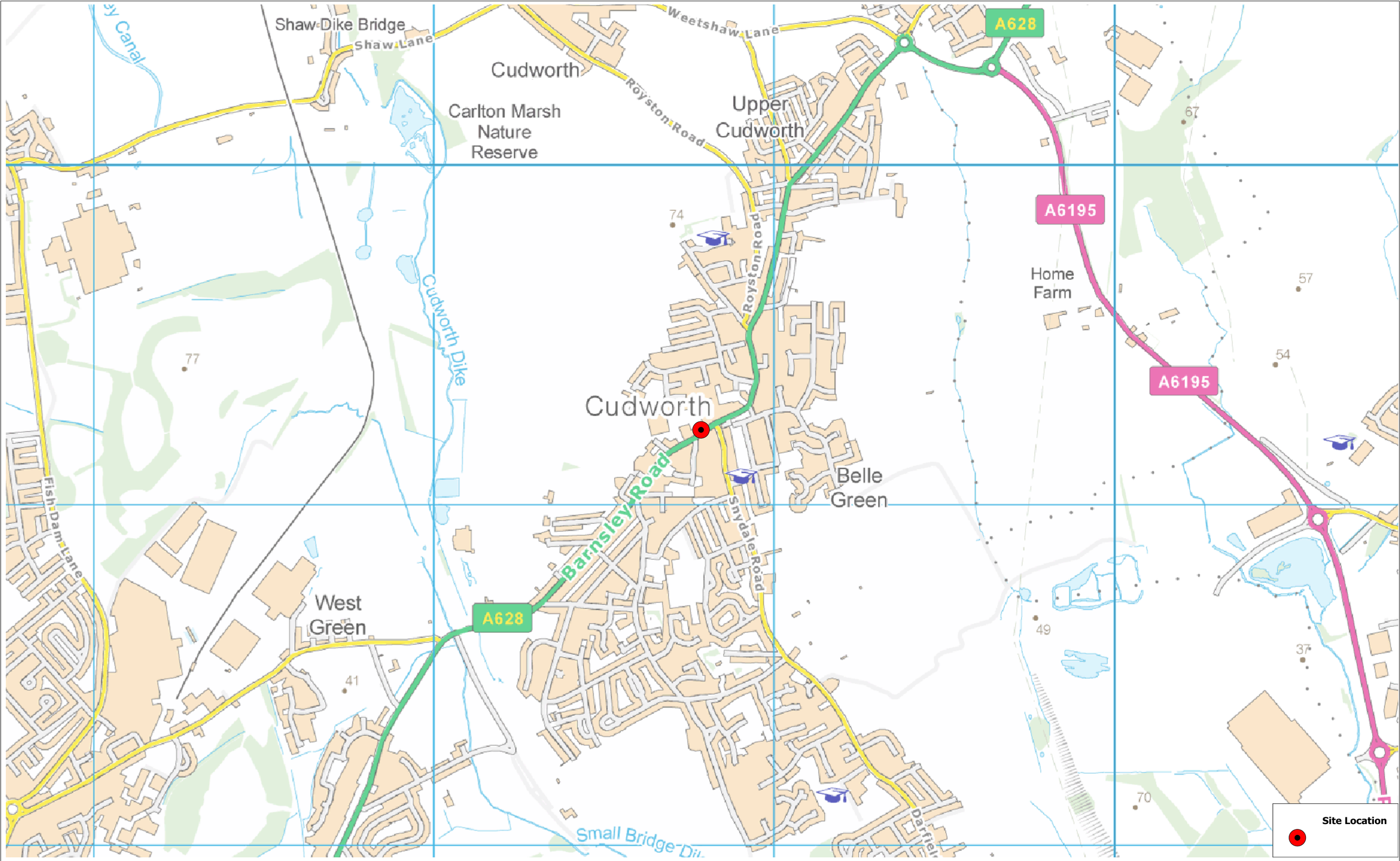
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APPENDIX E

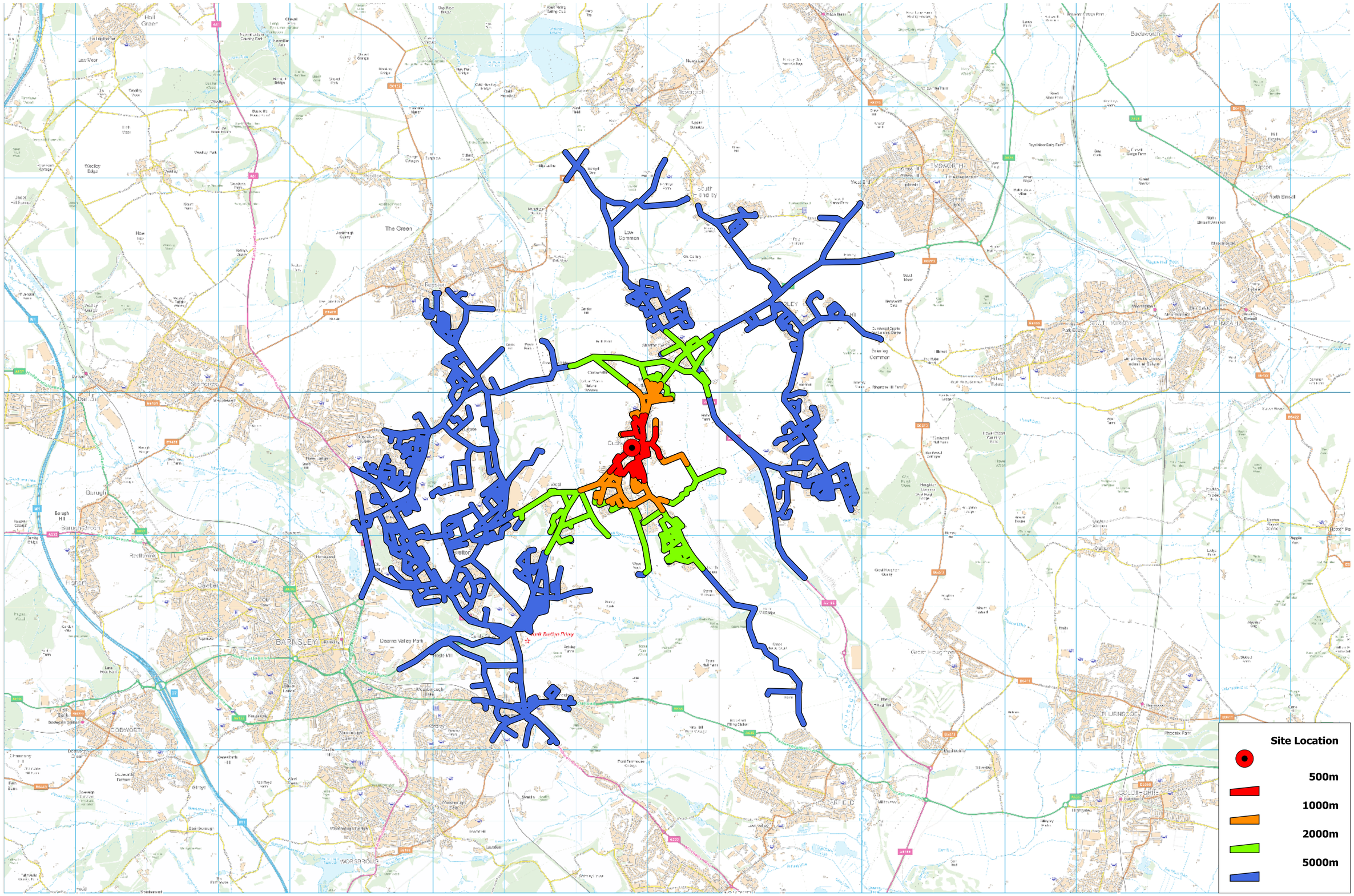
Accident Data



DRAWINGS



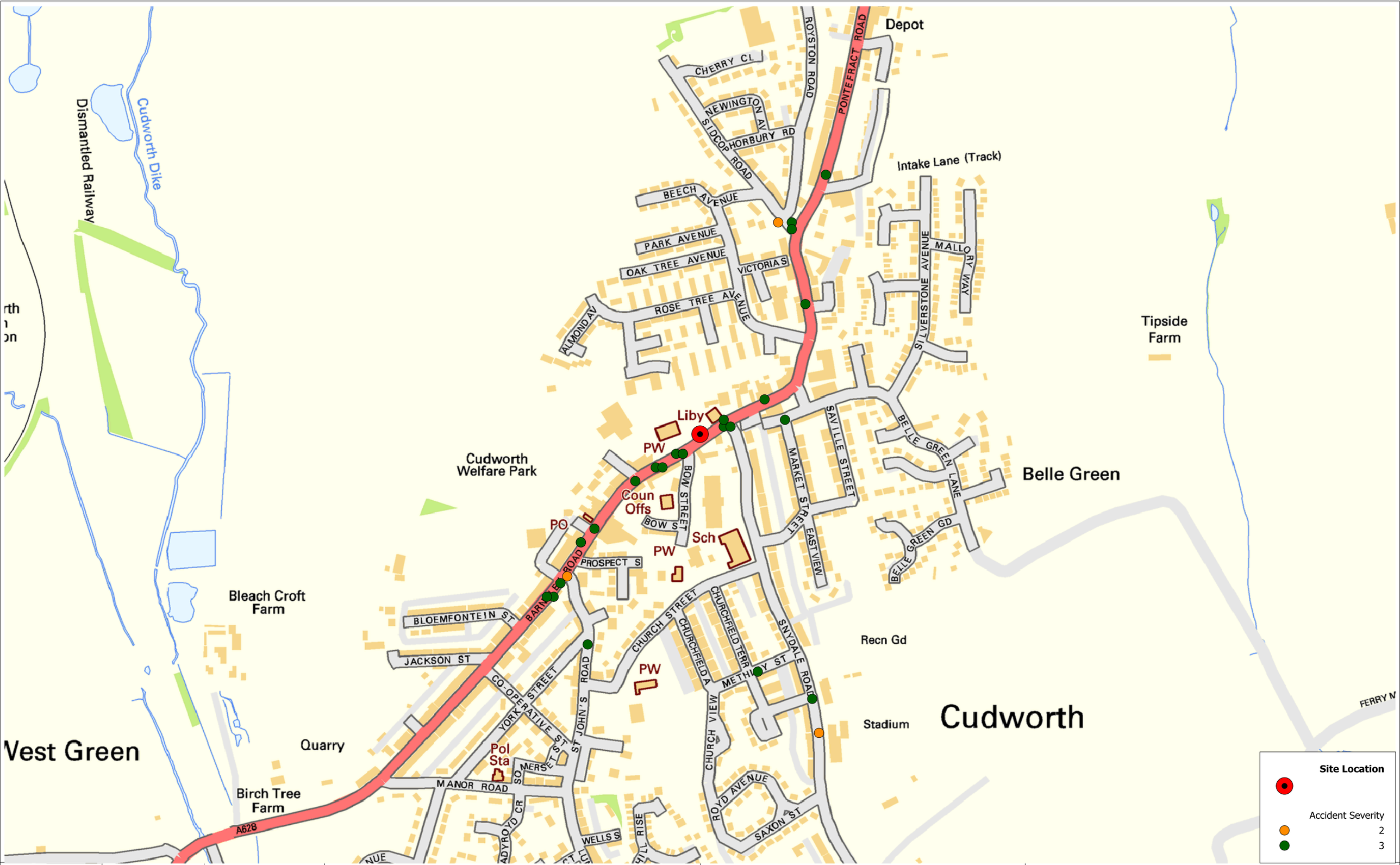
Scale 1:10000	DRAWN BY PR	CHECKED BY CS	Transport Potential	SCHEME Cudworth
DRAWING REFERENCE TPL/01		REV		ON BEHALF OF Aldi Stores LTD
DATE Apr 2013	CAD REF GIS/cudworth		Transport Potential LTD, 14-15 Regent Parade, Harrogate, HG1 5AQ.	DRAWING TITLE Location Plan



Scale 1:50000	DRAWN BY PR	CHECKED BY CS	SCHEME Cudworth	DRAWING TITLE Distance Isochrones
DRAWING REFERENCE TPL/02	REV		ON BEHALF OF Aldi Stores LTD	
DATE Apr 2013	CAD REF GIS/cudworth			

Transport Potential

Transport Potential LTD, 14-15 Regent Parade, Harrogate, HG1 5AQ.



Scale 1:5000	DRAWN BY PR	CHECKED BY CS	
DRAWING REFERENCE TPL/03		REV	
DATE Apr 2013	CAD REF GIS/cudworth		

Transport Potential

Transport Potential LTD, 14-15 Regent Parade, Harrogate, HG1 5AQ.

SCHEME

Cudworth

ON BEHALF OF

Aldi Stores LTD

DRAWING TITLE

Accident Plots