

TRAFFIC IMPACT ASSESSMENT

**Ratoath South SHD
For Beo Properties Limited**

PROJECT NO. L308

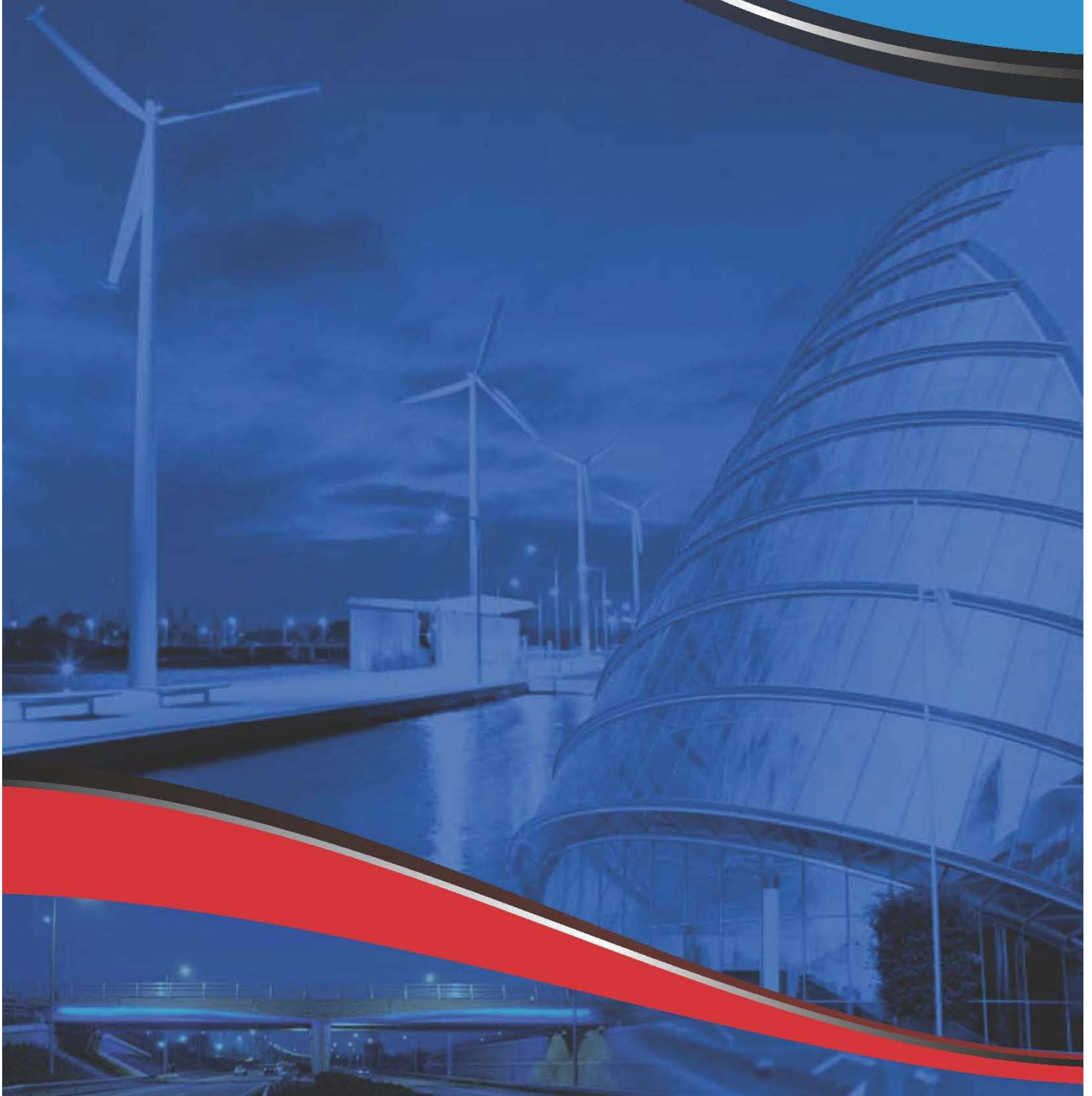
25 May 2022



OCSC

O'CONNOR | SUTTON | CRONIN

**Multidisciplinary
Consulting Engineers**



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At Ratoath,

Co. Meath



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DOCUMENT CONTROL & HISTORY

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<u>TABLE OF CONTENTS</u>	<u>PAGE</u>
1 INTRODUCTION.....	1
2 STUDY METHODOLOGY	3
3 THE RECEIVING ENVIRONMENT	7
4 CHARACTERISTICS OF THE DEVELOPMENT.....	11
5 CAR PARKING STRATEGY.....	28
6 POTENTIAL IMPACT OF DEVELOPMENT CONSTRUCTION	33
7 POTENTIAL IMPACT OF DEVELOPMENT OPERATION.....	35
8 DO NOTHING SCENARIO.....	60
9 REMEDIAL/MITIGATION MEASURES.....	61
10 MONITORING	62

APPENDED

APPENDIX A: TRAFFIC SURVEY DATA

APPENDIX B: TRAFFIC FLOW DIAGRAMS

APPENDIX C: TRICS OUTPUT FILES

APPENDIX D: MODEL CALIBRATION SUMMARY

APPENDIX E: MODEL OUTPUT FILES

1 INTRODUCTION

O'Connor Sutton Cronin & Associates (OCSC) have been commissioned to undertake this Traffic Impact Assessment Report with respect to the proposed residential development at Fairyhouse Road, Ratoath, Co. Meath. The exact site location can be seen in *Figure 1* below.

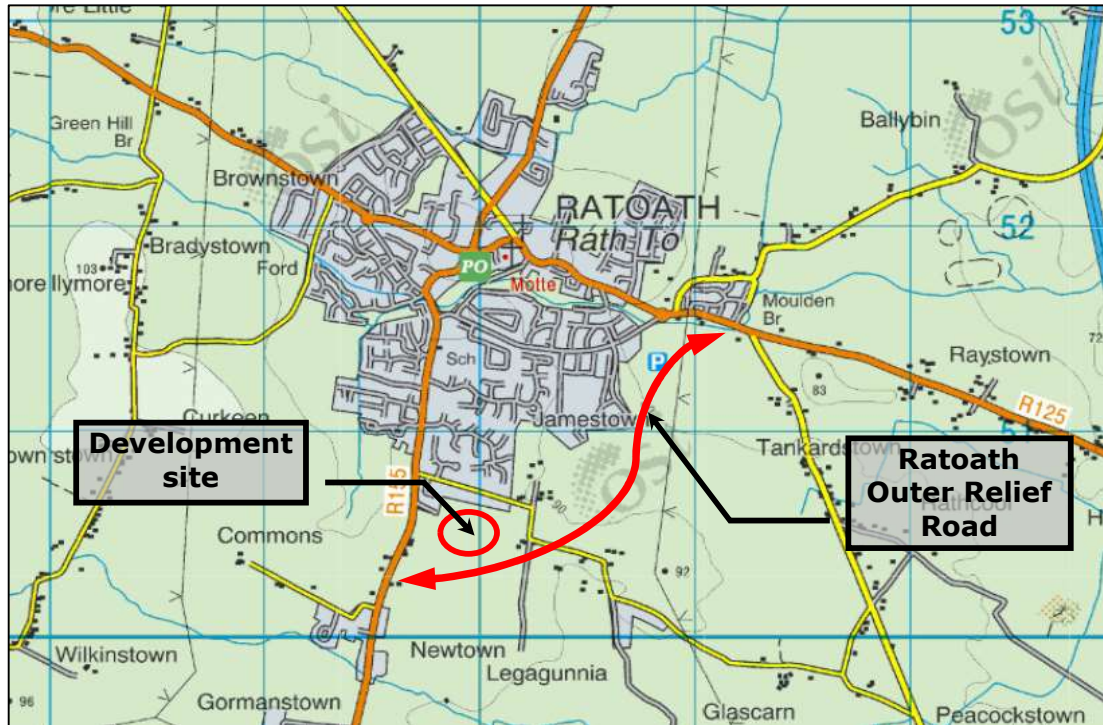


Figure 1: Site Location Map

The subject site is located approximately 1.0 km south of Ratoath town centre and is immediately bounded by Fairyhouse Road to the west, Glascarn Lane to the north and agricultural lands to the east and south. The subject is currently greenfield and used for agricultural purposes and can be accessed from Glascarn Lane to the east and Fairyhouse Road to the west of the site.

The development will principally consist of the construction of 452 no. residential units which are located in 12 neighbourhoods. Building heights ranging from 2-3 storey terraced houses and 3-4-storey duplex buildings (1 storey ground floor units and 2 storey first and second floor units; 2 storey ground and first floor units

and 2 storey second and third floor units) and 6-storey apartment blocks. Private open space associated with the residential units is provided in the form of rear gardens, balconies, terraces and winter gardens. The development includes a crèche with associated outdoor play areas at ground floor and at roof level; 4 no. commercial/retail units; a landscaped public open space which includes a civic plaza; communal open space in the form of communal courtyards for each neighbourhood; associated car and cycle parking serving the full development and uses therein; solar PV panels; a second phase of the Ratoath Outer Relief Road (RORR), that will run along the southern boundary of the application site join up to the existing constructed section of the RORR, with two priority controlled junctions; a series of pedestrian and cycle connections from the Fairyhouse Road (R155), Cairn Court, Glascarn Lane and the new RORR; internal road and shared surface networks including pedestrian and cycle paths; public lighting and all associated site development and infrastructural works, services provision, ESB substations, foul and surface water drainage, extension to the foul network, access roads/footpaths, lighting, landscaping and boundary treatment works and all ancillary works necessary to facilitate the development. Please refer to the development description within the statutory notices for a complete description of the proposed development.

A section of the Ratoath Outer Relief Road (RORR) is proposed as part of this development. The section of the RORR proposed as part of this development runs from a new junction with the R155 east for approximately 1,100m to the end of the site boundary and connects to the completed section of RORR. It is proposed to have two access for the site off the RORR.

The purpose of this report is to provide a detailed and conservative assessment of the potential traffic impact on the operation of the local road network.

In carrying out the above, this assessment has given due consideration to the relevant guidelines including:

- *Traffic & Transport Assessment Guidelines (2014)* as published by the former National Roads Authority (NRA) now Transport Infrastructure Ireland (TII);

- *Guidelines for Traffic Impact Assessment (1997)* as published by the Chartered Institute of Highways & Transportation;
- *Meath Development Plan 2021-2027*.

2 STUDY METHODOLOGY

At the time of completing this assessment, the Covid 19 pandemic was ongoing and the associated restrictions on workplaces, schools and other activities put in place by the Government to combat same had a notable impact on travel patterns and traffic flows across the country.

On this basis, the use of pre-covid but still relatively recent data is considered to be the preferred option to inform an assessment such as this when combined with appropriate TII growth factors.

OCSC contacted a number of surveyors to establish what recent pre-covid traffic survey data may be available locally and were successful in obtaining this for a number of the junctions in the study area from Idaso Ltd. These surveys were carried out in January 2019 (Site 4 – 5), March 2019 (Site 3), February 2018 (Site ATC 01, Site 7 - 8) and September 2018 (Site 9), before any Covid related restrictions were put in place and so are considered a true representation of the typical traffic flows on the network.

This approach was agreed upon at the pre-planning stage with the local authorities along with the scope of the study area was which includes the following junctions and locations:

- Site ATC 01: Fairyhouse Road;
- Site 3: Dunshaughlin Road / R155;
- Site 4: R155 / Somerville;
- Site 5: R155 / Meadowbank Hill;
- Site 7: Main Street / Moulden Bridge;
- Site 8: Main Street / Killbride Road;
- Site 9: Jamestown Park / The Avenue.

The exact locations of these junctions can be seen in *Figure 2* overleaf.



Figure 2: Traffic Count Locations

The surveys at Site 3 – 9 took the form of 15 minute interval junction turning counts and were carried out between the hours of 07:00 – 19:00 on the aforementioned dates. The survey at site ATC 01 was an automated traffic counter which recorded flows in each direction at 15 minutes intervals between 07:00 – 24:00.

The following classification system was used as follows:

- Motorcycle;
- Car;
- Light Goods Vehicle;
- Heavy Goods Vehicle (Class OGV 1 & 2);
- Bus (PSV).

The junction surveys also included the queue length surveys which recorded the maximum queue length observed on a per lane basis at each approach of each junction over 5 minutes intervals.

In order to include the impact of the future Ratoath Outer Relief Road (RORR) in this assessment, an origin-destination survey was also carried out on Wednesday 21st February 2018 which surveyed the total vehicles travelling between Fairyhouse Road – R155 to Main Street – R125. The origin-destination survey locations are shown in the figure below.

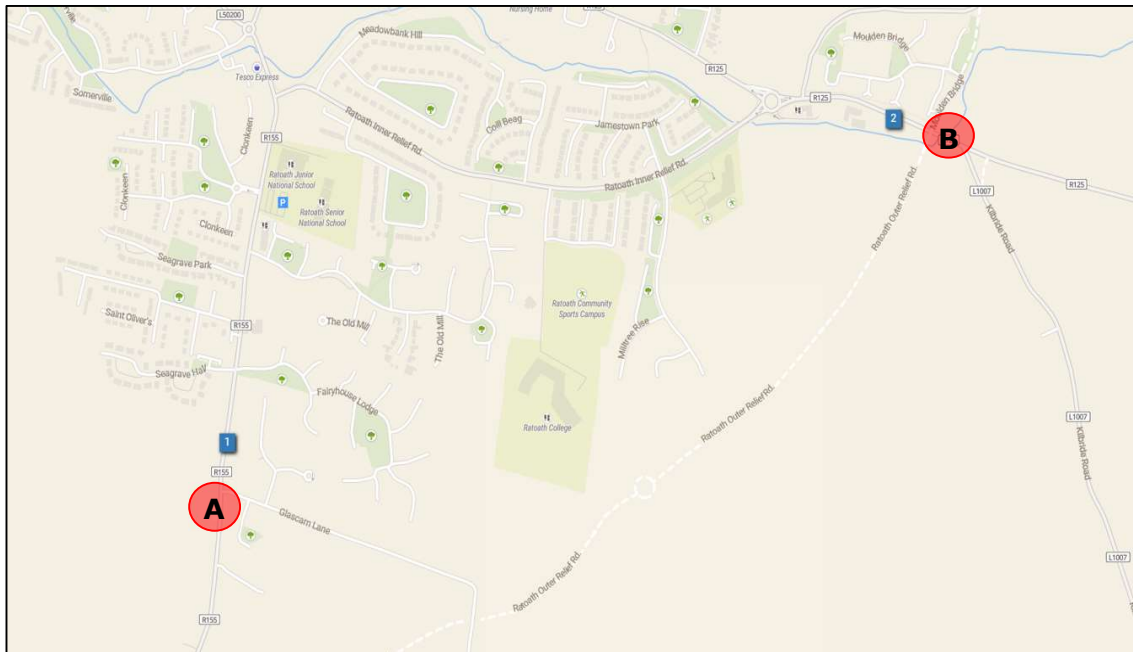


Figure 3: Origin-Destination Survey Locations

A full copy of the results of all traffic surveys can be found in *Appendix A*, to the rear of this report.

The base year flows were then adjusted to the predicted Year of Opening for the development (2024) and the Design Year (2039) using medium-range NRA growth factors¹. Consideration was given to the impact of the proposed Ratoath Outer Relief Road with respect to existing traffic flows and the potential to change travel patterns locally due to the new road creating shorter travel routes.

¹ Unit 5.3 Link Based Growth Rates, Project Appraisal Guidelines; TII, October 2021

The traffic generation potential of this SHD development was then assessed using the Trics² planning database. This database contains information on thousands of sites in Ireland and the U.K. and can be used to predict the traffic that will be generated by numerous types of development. Consideration has also been given to the adjacent zoned lands to the west of the development site which are expected to be developed in the near future, subject to a separate planning application. The associated trip generation potential has been assessed and allowed for accordingly.

The estimated additional traffic was assigned to the local road network and its impact on the operation of the local links and junctions was assessed using guidance from the NRA, CIHT, the *Design Manual for Roads and Bridges* (DMRB) and a number of task-specific traffic software (TRANSYT 15 and Junction 9). The assessment considered the following scenarios:

- Do Nothing – no development taking place in the local area and only allowance for natural background traffic growth;
- Do Something – natural background traffic growth and the additional traffic estimated to be generated by the proposed development, the approved third party SHD developments and potential future phase 1 Masterplan on White land. The proposed RORR will be connected to the completed section of RORR in line with the proposed development;
- Do Maximum – natural background traffic growth, the additional traffic estimated to be generated by the proposed development, the adjoining SHD developments, potential future phase 1 Masterplan on White land, fully constructed RORR and the potential future 100 no. residential development units.

² Trip Rate Information Computer System

3 THE RECEIVING ENVIRONMENT

The receiving environment is urban in nature. The main transportation arteries in the study area are Fairyhouse Road, Meadowbank Hill, The Avenue, R155 and Main Street – R125 with the proposed Ratoath Outer Relief Road (RORR) acting as a key link for the area and to facilitate access to the proposed development.

Outside of the study area development generated traffic will dissipate and so is expected to have a negligible impact on the operation of the wider network. While there is expected to be substantial variation in the type of traffic travelling on the links locally, during the peak travel hours they would be expected to mainly carry commuter traffic based on the nature of the local area.

As noted earlier, base traffic levels have been surveyed on the local network in 2018 & 2019 when prior to Covid 19 global pandemic. By combining these base flows with the traffic generation estimates for the proposed development, the following peaks were identified:

- A.M. Peak Hour: 08:00 – 09:00;
- P.M. Peak Hour: 17:15 – 18:15.

The recorded flows during the above peak hours and across the course of an average day are shown in the following:

- Diagram 1: 2019 A.M. Peak Hour Base Flows (08:00 – 09:00);
- Diagram 2: 2019 A.M. Peak Hour Base Flows (17:15 – 18:15);
- Diagram 3: 2019 Annual Average Daily Traffic Base Flows.

The aforementioned diagrams and all others referenced in this text can be found in *Appendix B*, to the rear of this report. Any apparent discrepancy in flows between sites may be attributed to vehicles accessing developments and minor roads between surveyed junctions.

TA 79/99 "Traffic Capacity of Urban Roads" from the DMRB provides information on the capacity of urban roads based on classification and width. *Table 1* following shows the capacities of various road types based on this manual and uses a 60:40 split in flow.

2 Way Single Carriageway – Busiest Direction of Flow (60/40 split)										
Carriageway Width (m)		Total Number of lanes								
		2			2-3		3	3-4	4	4+
		6.10	6.75	7.30	9.0	10.0		12.3	13.5	18.0
Road Type	UM	Not Applicable								
	UAP1	1020	1320	1590	1860	2010	2550	2800	3050	3300
	UAP2	1020	1260	1470	1550	1650	1700	1900	2100	2700
	UAP3	900	1110	1300	1530	1620	*	*	*	*
	UAP4	750	900	1140	1320	1410	*	*	*	*

Table 1: Urban Road Capacities

The local links have been classified based on the associated definitions in the DMRB. Using the previous table, link capacities have been calculated and current Ratio of Flow to Capacity (RFC) values have been assessed for the key links bordering the site. These are shown for the base year peak hours in Table 2.

It should be noted that given the variation in width across the links in question, an average figure for each has been used which is rounded down to the nearest value shown in the above table, thus ensuring a conservative assessment of link capacity. Where bus lanes are present, a reduced width has been allowed for to account for their reduced usage, thereby ensuring a conservative assessment.

Link	Width (m)	Link Capacity (veh/hr)	A.M. Peak (veh/hr)	RFC (%)	P.M. Peak (veh/hr)	RFC (%)
Fairyhouse Road	6.75	1,260	373	30%	536	43%
Meadowbank Hill / The Avenue	6.1	900	447	50%	429	48%
R155	6.75	1,260	661	52%	797	63%
Main Street	7.3	1,470	764	52%	872	59%

Table 2: Base Year Link RFC Values for Local Network

As can be seen, all links are shown to be operating well within capacity in the base case.

In order to accurately assess the impact of the proposed development in the future, the base traffic flows for the local network have been expanded to the Year of Opening and the Design Year using the medium-range TII growth factors detailed in *Table 3* following.

Year	Growth Rates	
	Light Vehicles	Heavy vehicles
2019 - 2024	8.95%	19.63%
2019 - 2039	28.59%	75.10%

Table 3: Background Traffic Growth Factors

In order to fully assess the future year traffic flow. The future year traffic flows without development can be seen in the following:

- *Diagram 4: 2024 A.M. Peak Hour Flows – Do Nothing;*
- *Diagram 5: 2024 P.M. Peak Hour Flows – Do Nothing;*
- *Diagram 6: 2024 AADT – Do Nothing;*

- *Diagram 7: 2039 A.M. Peak Hour Flows – Do Nothing;*
- *Diagram 8: 2039 P.M. Peak Hour Flows – Do Nothing;*
- *Diagram 9: 2039 AADT – Do Nothing.*



4 CHARACTERISTICS OF THE DEVELOPMENT

EXISTING SITE OVERVIEW

The development site is currently a greenfield site as set out below in *Figure 4*.



Figure 4: Existing Site Layout

PROPOSED DEVELOPMENT OVERVIEW

As outlined in the introduction section earlier, The development will consist of the construction of 452 no. residential units which are located in 12 neighbourhoods. Building heights range across the site from 2- and 3-storey terraced houses, through to 4-storey maisonette buildings, and 6-storey apartment blocks. Private open space associated with the residential units is provided in the form of rear gardens, balconies, terraces and winter gardens. The development includes a crèche with associated outdoor play areas on the ground floor and at roof level; 4 no. commercial/retail units; a landscaped public open space which includes a civic plaza; communal open space in the form of communal courtyards for each neighbourhood; associated car and cycle parking serving the full development and uses therein; solar PV panels; a second phase of the Ratoath Outer Relief Road

(RORR), that will run along the southern boundary of the application site, with 2 no. multi-modal entrances; a series of pedestrian and cycle connections from the Fairyhouse Road (R155), Cairn Court, Glascarn Lane and the new RORR; internal road and shared surface networks including pedestrian and cycle paths; public lighting and all associated site development and infrastructural works, services provision, ESB substations, foul and surface water drainage, extension to the foul network, access roads/footpaths, lighting, landscaping and boundary treatment works and all ancillary works necessary to facilitate the development.

In addition, the development proposals include a section of the RORR which will connect to the complete section of RORR, running for approximately 1,100m from the new junction at R155 to the end of the red site boundary line, connecting to the existing RORR and the two entrances on the proposed RORR to enable the residential access the development site.

The proposed layout is shown in *Figure 5* overleaf.

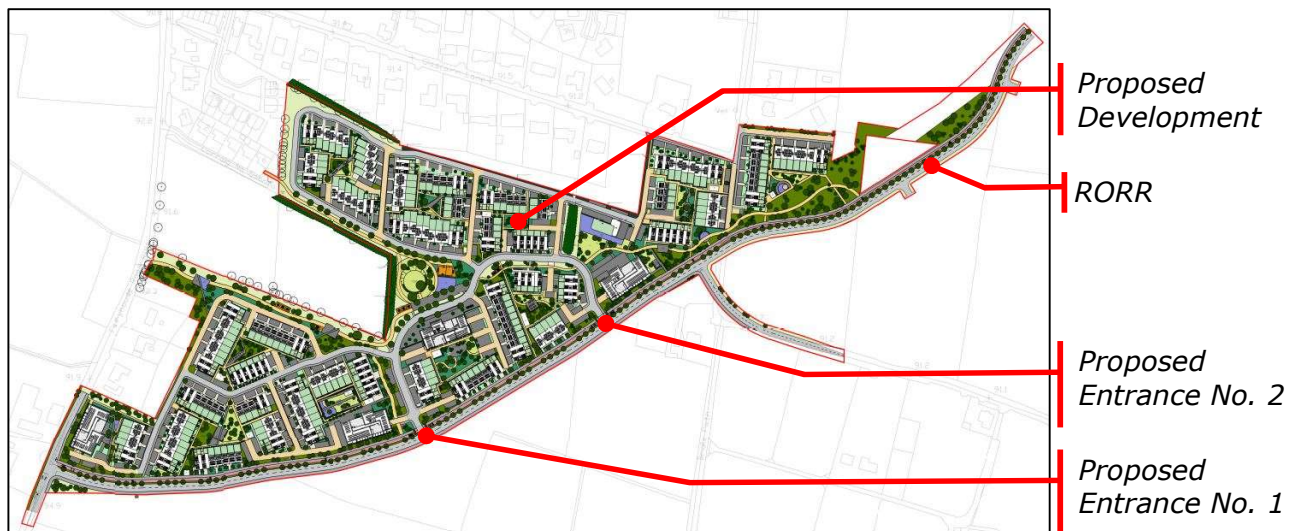


Figure 5: Proposed Site Layout

As shown in Figure 5 above, the proposed Ratoath Outer Relief Road (RORR) forms a southern bypass for Ratoath and links the R125 Ashbourne Road to the R155 Fairyhouse Road. The 1100m section of the proposed route, commences at the

R155 immediately east of the Fairyhouse Road – R155 and continues to the development boundary near Glascarn Lane connecting to the existing RORR.

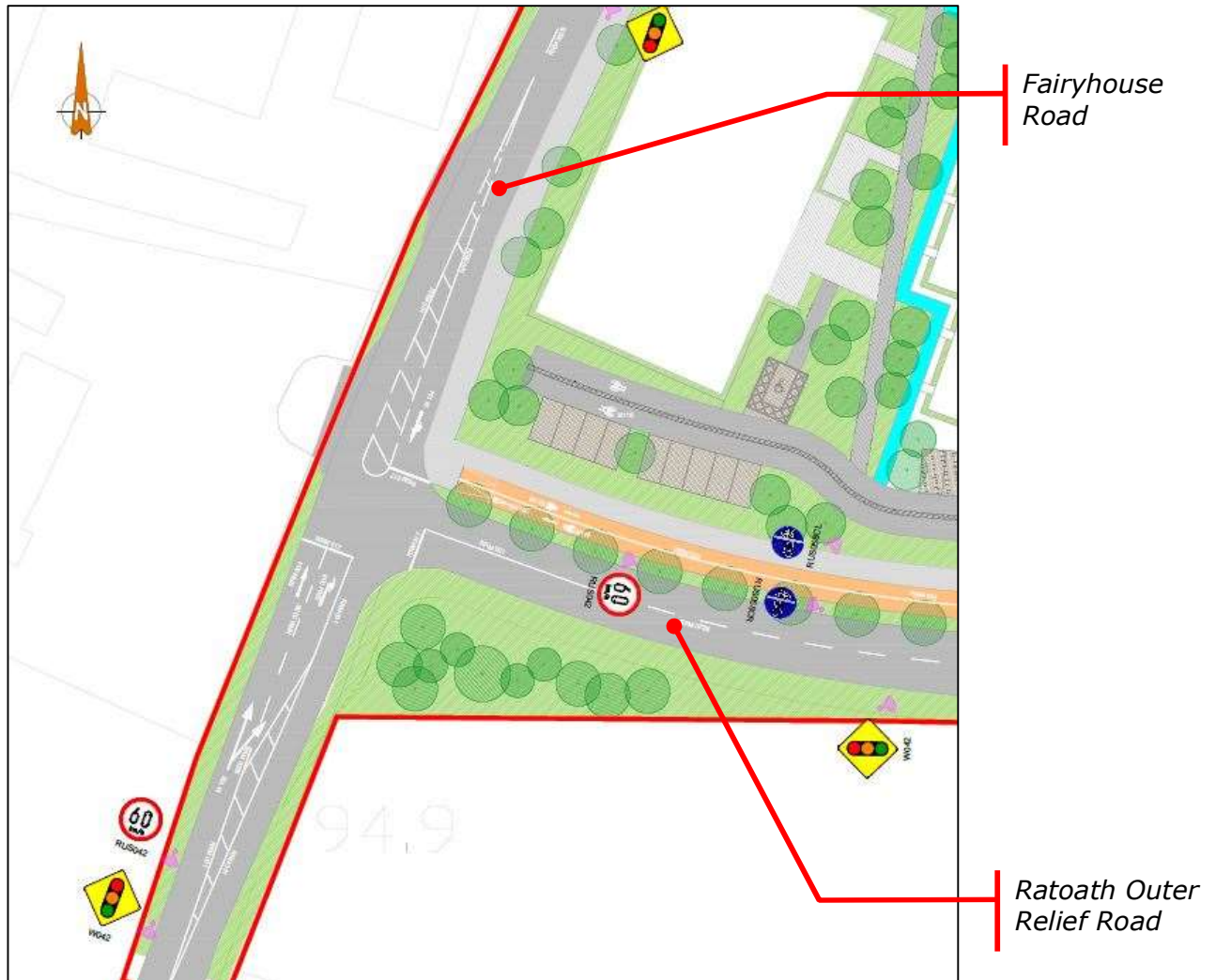


Figure 6: Proposed Signalised Junction Layout on R155

As indicated, the new junction on Fairyhouse Road will form a 3 arm signalised junction. It is proposed to provide a 3 arm signalised junction with dedicated turning lanes to cater for the proposed additional traffic as a result of the proposed development.

In order to ensure a robust analysis, the new R155/Moulden Bridge junction is included as part of this assessment, which was previously approved to operate as

a 4 armed signalised junction in future, with multi-lane approaches on each arm and combined with the new RORR link road and, shown as the figure below.

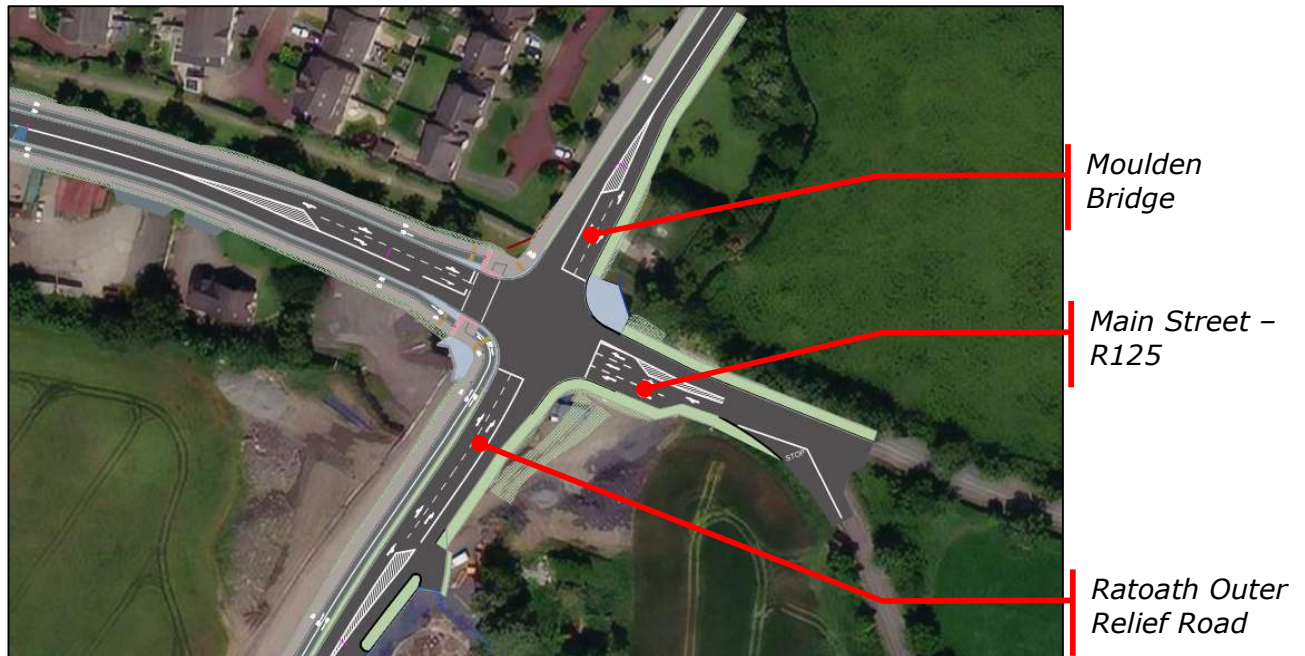


Figure 7: Proposed Signalised Junction Layout on R125

As mentioned previously, the proposed development will be accessed exclusively by the proposed link road, with 2 no entrances as indicated in the previous figure. In addition, it is expected that there will have a low or negligible number of additional vehicles that will access Glascarn Lane.

THIRD-PARTY & FUTURE DEVELOPMENT

In addition, to ensure the conservative assessment is taken, consideration has also been given to the two approved and future development lands adjoining the proposed development site as outlined in the figure overleaf.

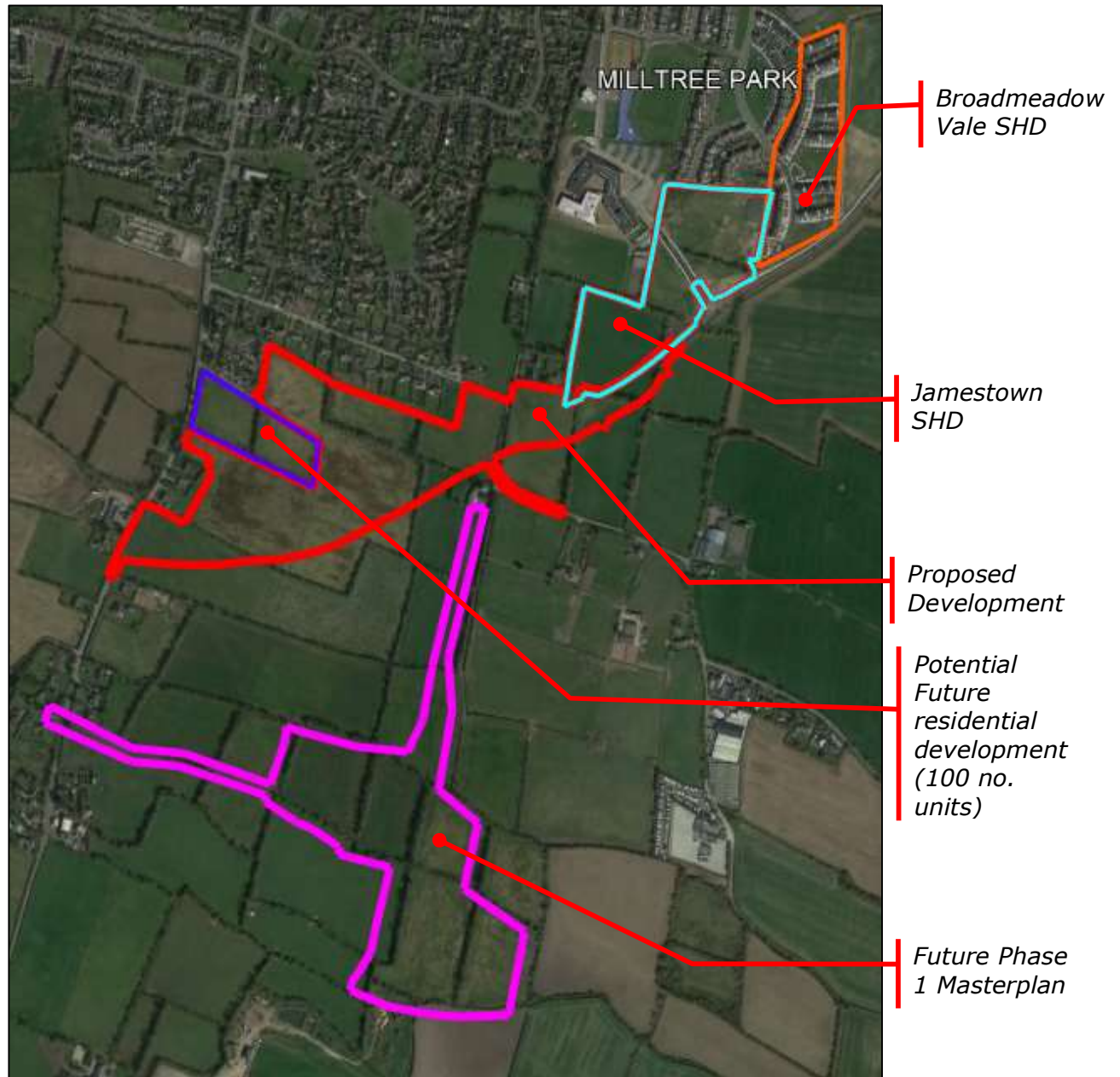


Figure 8: 3rd Party and Potential Future Development Allowed for in Assessment

As noted previously, due to Covid 19 global pandemic, the associated travel restriction was still ongoing at the time of this assessment, and the procurement of the latest traffic survey was not possible under these circumstances. It is noted that the 119 no. residential units on Broadmeadow Vale were being constructed during the time of pre-covid traffic surveys taken, in order to fully understand the impact of the proposed development, these remaining units will be included as

part of the assessment. These remaining units are outlined with an orange boundary line as shown in Figure 8 above. In order to ensure a robust analysis, the adjoining Jamestown SHD (planning reference no. 1104222) has also been included in the assessment, which is outlined in a blue boundary line as shown in Figure 8.

In addition, there is potential for a future 100 no. residential units development on the west of the development and a future phase 1 Masterplan on White land on the south of the proposed development, which is outlined in Figure 8. Although both potential future developments do not form part of this application, they have been considered within this report to ensure a robust and detailed analysis.

TRIP GENERATION

The residential units of the proposed development are expected to be the primary trip generator and form the basis of the development trip generation estimates. The ancillary crèche element is not expected to be a primary trip generator and is instead expected to serve residents at the development. As a result, they have not been included in this assessment from a trip generation perspective.

The traffic generation potential of the proposed development has been estimated using the Trics software modelling database which is an industry-standard tool. When developing traffic generation estimates for any development, a number of surveys are selected from the database based on a range of factors including development type, size, location, public transport etc. The results are then used to establish trip rates for the development in question which is ultimately used to derive estimates for traffic generation. The Trics output files relative to this assessment can be found in *Appendix C* of this report.

The trip generation estimates have been produced for the proposed development as part of this application, the approved third party developments (*Jamestown SHD and Broadmeadow Vale*) and future developments (*100 no. residential units and phase 1 Masterplan on White land*) as outlined previously, the trip generation estimates for the proposed development, the approved third party developments

and future development to the west and south are shown in Table 4, 5, 6 and 7 respectively.

Time Range	<i>Arrivals</i>	<i>Departures</i>
00:00-01:00	0	0
01:00-02:00	0	0
02:00-03:00	0	0
03:00-04:00	0	0
04:00-05:00	0	0
05:00-06:00	0	0
06:00-07:00	0	0
07:00-08:00	32	123
08:00-09:00	61	169
09:00-10:00	68	85
10:00-11:00	58	69
11:00-12:00	62	69
12:00-13:00	71	70
13:00-14:00	75	75
14:00-15:00	84	91
15:00-16:00	118	83
16:00-17:00	129	75
17:00-18:00	156	79
18:00-19:00	130	79
19:00-20:00	0	0
20:00-21:00	0	0
21:00-22:00	0	0
22:00-23:00	0	0
23:00-24:00	0	0
<i>Daily Trips:</i>	1043	1065

Table 4: Proposed Development Estimated Trip Generation

Based on the above, the proposed development is expected to generate approximately 2,108 additional trips per day. Of these, approximately 61 arrivals and 169 departures are expected during the A.M. peak hour (08:00-09:00) while

approximately 150 arrivals and 79 departures are expected in the P.M. peak hour (17:15-18:15).

Time Range	<i>Arrivals</i>	<i>Departures</i>
00:00-01:00	0	0
01:00-02:00	0	0
02:00-03:00	0	0
03:00-04:00	0	0
04:00-05:00	0	0
05:00-06:00	0	0
06:00-07:00	0	0
07:00-08:00	24	93
08:00-09:00	46	127
09:00-10:00	51	64
10:00-11:00	44	52
11:00-12:00	47	52
12:00-13:00	53	53
13:00-14:00	56	57
14:00-15:00	64	68
15:00-16:00	89	63
16:00-17:00	98	57
17:00-18:00	118	59
18:00-19:00	98	59
19:00-20:00	0	0
20:00-21:00	0	0
21:00-22:00	0	0
22:00-23:00	0	0
23:00-24:00	0	0
<i>Daily Trips:</i>	787	804

Table 5: Approved Third Party Developments Estimated Trip Generation

Based on the above, the approved third party developments are expected to generate approximately 1,590 additional trips per day. Of these, approximately 46 arrivals and 127 departures are expected during the A.M. peak hour (08:00-

09:00) while approximately 113 arrivals and 59 departures are expected in the P.M. peak hour (17:15-18:15).

Time Range	<i>Arrivals</i>	<i>Departures</i>
00:00-01:00	0	0
01:00-02:00	0	0
02:00-03:00	0	0
03:00-04:00	0	0
04:00-05:00	0	0
05:00-06:00	0	0
06:00-07:00	0	0
07:00-08:00	7	27
08:00-09:00	13	37
09:00-10:00	15	19
10:00-11:00	13	15
11:00-12:00	14	15
12:00-13:00	15	15
13:00-14:00	16	16
14:00-15:00	18	20
15:00-16:00	26	18
16:00-17:00	28	16
17:00-18:00	34	17
18:00-19:00	28	17
19:00-20:00	0	0
20:00-21:00	0	0
21:00-22:00	0	0
22:00-23:00	0	0
23:00-24:00	0	0
<i>Daily Trips:</i>	227	232

Table 6: Future Residential Developments Estimated Trip Generation

Based on the above, the future 100 no. residential development is expected to generate approximately 458 additional trips per day. Of these, approximately 13 arrivals and 37 departures are expected during the A.M. peak hour (08:00-09:00)

while approximately 33 arrivals and 17 departures are expected in the P.M. peak hour (17:15-18:15).

Time Range	<i>Arrivals</i>	<i>Departures</i>
00:00-01:00	0	0
01:00-02:00	0	0
02:00-03:00	0	0
03:00-04:00	0	0
04:00-05:00	0	0
05:00-06:00	0	0
06:00-07:00	0	0
07:00-08:00	149	73
08:00-09:00	224	87
09:00-10:00	146	73
10:00-11:00	70	57
11:00-12:00	58	80
12:00-13:00	69	87
13:00-14:00	87	72
14:00-15:00	81	86
15:00-16:00	75	113
16:00-17:00	64	148
17:00-18:00	77	187
18:00-19:00	80	136
19:00-20:00	39	31
20:00-21:00	39	35
21:00-22:00	30	27
22:00-23:00	5	5
23:00-24:00	0	0
<i>Daily Trips:</i>	1293	1297

Table 7: Future Phase 1 Masterplan Developments Estimated Trip Generation

Based on the above, the future phase 1 masterplan development is expected to generate approximately 2,591 additional trips per day. Of these, approximately 224 arrivals and 87 departures are expected during the A.M. peak hour (08:00-

09:00) while approximately 78 arrivals and 174 departures are expected in the P.M. peak hour (17:15-18:15).

The additional traffics outlined in *Table 4, Table 5, Table 6 and Table 7* were assigned to the study area based on existing traffic flows in the area combined with an assessment of the local network layout.

The assigned flows mentioned above are shown in the following diagrams:

- *Diagram 10: A.M. Peak Hour Trip Generation & Assignment – Do Something;*
- *Diagram 11: P.M. Peak Hour Trip Generation & Assignment – Do Something;*
- *Diagram 12: AADT Trip Generation & Assignment – Do Something.*

- *Diagram 13: A.M. Peak Hour Trip Generation & Assignment – Do Maximum;*
- *Diagram 14: P.M. Peak Hour Trip Generation & Assignment – Do Maximum;*
- *Diagram 15: AADT Trip Generation & Assignment – Do Maximum.*

Please refer to Appendix B, at the rear of this report, for the proportional breakdown of the distribution and assignment of additional traffic generated by the developments included as part of this assessment.

As outlined previously, an origin-destination survey was also carried out to understand the total vehicles travelling between Fairyhouse Road – R155 to Main Street – R125. The impact of the proposed Ratoath Outer Relief Road (RORR) was analysed by surveying the existing traffic volumes from Fairyhouse Road (R125) to Main Street - R125 via Ratoath Town Centre during the peak hour. The proposed new Ratoath Outer Relief Road (RORR) will make the journey from the R155 to the R125 faster and shorter by bypassing Ratoath Town Centre, it is expected that a large proportion of vehicles would instead travel from the R155 to the R125 via the RORR. This diverted traffic was then assigned to the study area based on existing traffic flows in the area combined with an assessment of the local network layout.

In addition, the existing traffic volumes from/to Fairyhouse Road to/from Main Street – R125 are expected to be reduced via Ratoath Town Centre during the peak hour, which represents the other existing junctions in Ratoath Town Centre will operate a lower level of traffic volumes once the RORR is fully operated, as indicated in the detailed analysis results in the later section of this report. The reassigned background traffic flows mentioned above are shown in the following diagrams:

- *Diagram 16: 2024 A.M. Peak Hour – Reassigned Background Traffic with RORR;*
- *Diagram 17: 2024 P.M. Peak Hour – Reassigned Background Traffic with RORR;*
- *Diagram 18: 2024 AADT – Reassigned Background Traffic with RORR*

- *Diagram 19: 2039 A.M. Peak Hour – Reassigned Background Traffic with RORR;*
- *Diagram 20: 2039 P.M. Peak Hour – Reassigned Background Traffic with RORR;*
- *Diagram 21: 2039 AADT – Reassigned Background Traffic with RORR.*

The proportional breakdown of the reassigned background traffic at the local junctions is shown in the following diagrams:

- *Diagram 22: % 2024 AM Distribution of Background Traffic with RORR.*
- *Diagram 23: % 2024 PM Distribution of Background Traffic with RORR.*
- *Diagram 24: % 2024 AADT Distribution of Background Traffic with RORR.*

- *Diagram 25: % 2039 AM Distribution of Background Traffic with RORR.*
- *Diagram 26: % 2039 PM Distribution of Background Traffic with RORR.*
- *Diagram 27: % 2039 AADT Distribution of Background Traffic with RORR.*

SITE ACCESSIBILITY

The existing public transport facilities located in the vicinity of the proposed development are discussed in the following.

Bus

There is an existing bus stop along Fairyhouse Road for the residents at the development site in the future. It is located in the vicinity of the development site, as outlined in Figure 9 below.



Figure 9: Existing Bus Indicative Site Location

The key routes serving the bus stop within a short walk of the development site are summarised in the table overleaf.

Route	Description
Route 103	Dublin – Tayto Park via Ratoath
Route 105	Drogheda – Blanchardstown via Ratoath
Route 105X	Fairyhouse Road – Ratoath - Dublin
Route 109	Dublin – Kells via Ratoath

Table 8: Local Bus Services

Both existing bus routes are operated by Bus Eireann. More details of these bus services can be found at www.buseireann.ie.

As can be seen from the above Table 8, the bus routes operating in close proximity to the proposed SHD development provide the bus services which link the development site to towns within Meath County (i.e. Ashbourne) and outside Meath County (i.e. Drogheda and Dublin.).

It is expected that the future residents can utilise the existing bus routes to travel to these major towns or city areas.

More details of bus service can be found at www.buseireann.ie.

Rail

The 105 bus route service links the proposed development to the Dunboyne Rail Station which provides access to the following rail service:

- Dublin – Maynooth, Longford and M3 Parkway services;

The bus route to the Dunboyne Rail Station from the proposed development is in the figure below.

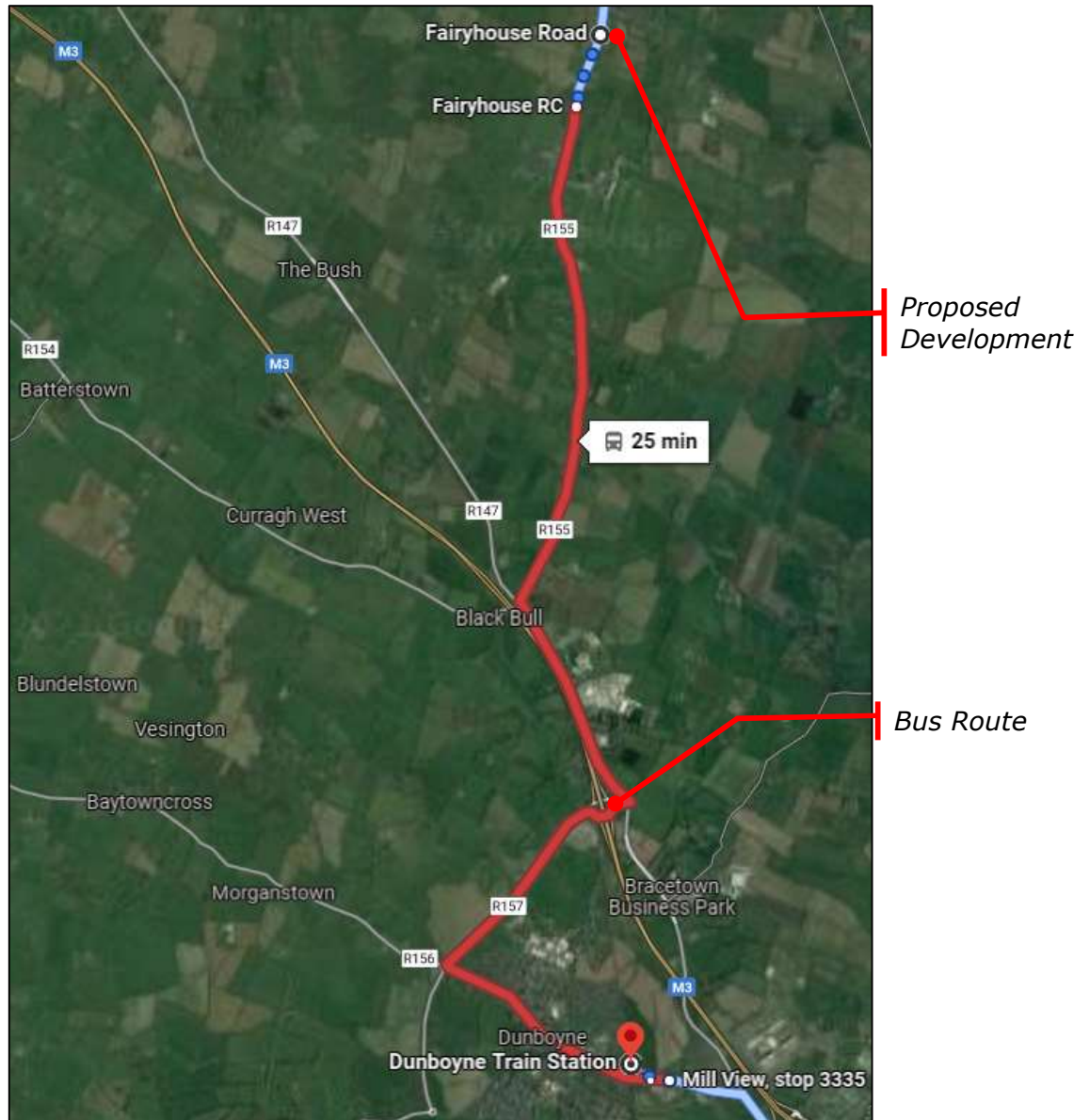


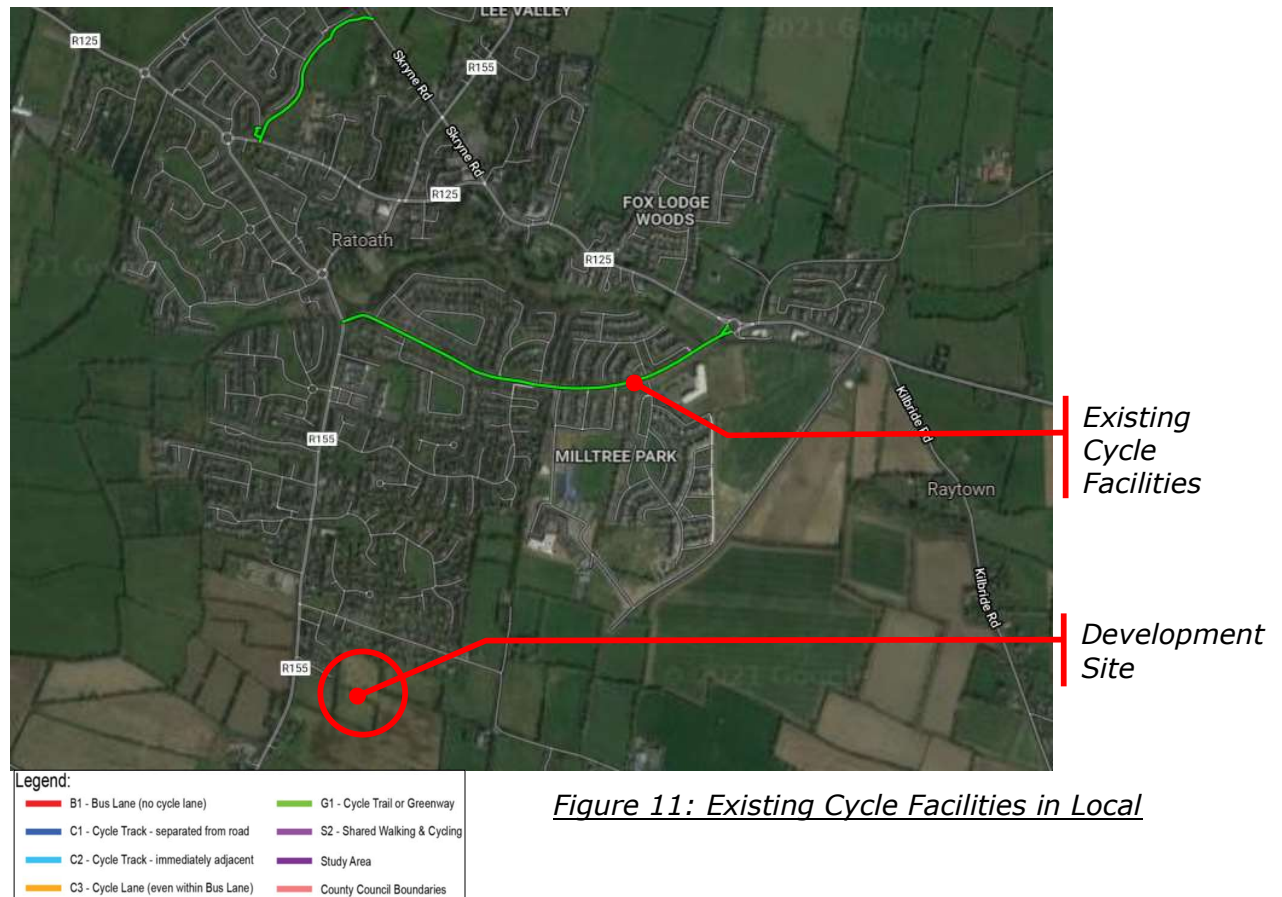
Figure 10: 105 Bus Route to Dunboyne Rail Station

More details of these rail services can be found at www.irishrail.ie

CYCLE

The cyclists are allowed to cycle the road together with other road users in local areas. Relative to the development site, the nearest cycle infrastructure is an

existing dedicated cycle lane running along Meadowbank Hill and The Avenue, as outlined with Green Line in the figure below.



It is noted that Meath County Council has lodged a Part 8 planning development, which will connect Ratoath Town Centre to the RORR via cycle tracks along the R155. It is therefore expected that the future visitors and staff will consider the cycling as an attractive travel option to/from the development site.

Further details of improvement on the existing cycle facilities are covered in the Mobility Management Plan which is submitted as part of this application.

PEDESTRIAN

Given that the proposed development is located within 1,200m (15 minutes) walking distance of Ratoath Town Centre, which has a large number of areas of retail and employment. It is expected that the future residents will consider travelling on foot from/to the proposed development to/from the Ratoath Town Centre.

In terms of pedestrian access, the existing footpath that surrounds the proposed development is considered a good quality public access, which enables the future residents to the nearby bus stops and town centre.

The existing pedestrian facilities located along the R155 can be seen in the figure below. As mentioned earlier, Meath County Council is currently working on a Part 8 planning development to connect Ratoath Town Centre to the RORR via cycle tracks & footpath along the R155.



Figure 12: Existing Pedestrian Facilities

5 CAR PARKING STRATEGY

The proposed car parking strategy at the site has been developed taking into consideration a variety of factors to ensure the appropriate number of spaces are provided which is in line with current sustainable travel and development objectives. These are set out following.

CAR PARKING PROVISION

Car parking provision at the site needs to strike a considerate balance between a number of factors including:

- The promotion of sustainable modes of travel, which are within a reasonable walking distance of the development site;
- Facilitating an appropriate level of car storage at the development;
- Giving due consideration to the prevention of potential overspill parking into the local area.

Chapter 11 of the *Meath Development Plan 2021 – 2027* sets out objectives and requirements in relation to transportation. In particular, *Table 11.2* sets out the parking requirements for various types of developments with the relevant standards recreated below.

- Dwellings – 2 per conventional dwelling;
- Apartment / Flat - 2 per unit ;
- Food Retail –1 per 20 sq.m. gross floor area. Where the floor area exceeds 1,000 sq.m. gross floor area, 1 space per 14 sq.m. gross floor area.
- Non-Food Retail – 1 per 20 sq.m gross floor area.

It is also noted that the *Sustainable Urban Housing, Design Standards for New Apartments (December 2020)* from the Department of Housing, Planning and Local Government are also applicable in this instance with respect to the residential car parking provision. Section 4 of these guidelines set out guidance and defines Peripheral and/or Less Accessible Urban Locations, stating:

"As a benchmark guideline for apartments in relatively peripheral or less accessible urban locations, one car parking space per unit, together with an element of visitor parking such as one space for every 3-4 apartments, should generally be required."

Based on the existing public transport facilities along with the location of the proposed development, it is therefore clear that the development falls into this category meaning it is wholly appropriate to provide one car parking space per apartment & maisonette type unit and one car parking space for every 4 apartment & maisonette units on the development site. This equates to 1.25 car parking spaces per apartment & maisonette type unit.

Thus based on the above, it is proposed to provide 2 car parking spaces per house in line with the *Meath Development Plan 2021 – 2027* & it is proposed to provide 1.25 car parking spaces per apartment & maisonette in line with the *Sustainable Urban Housing, Design Standards for New Apartments (December 2020)*. The parking standards are set out below in Table 9.

Land Use – Residential	Car Spaces	Units/ Sq.m.	Requirement	Provided
Rowhouse	2 per conventional dwelling	150	300	741 (including visitor spaces)
Maisonettes	1.25 per unit	182	227.5	
Flats/ Apartments	1.25 per unit	120	150	
Total			677.5	
Land Use – Commercial	Car Spaces	Units/ Sq.m.	Requirement	Provided

Food Retail	1 per 20 sq.m. gross floor area. Where the floor area exceeds 1,000 sq.m. gross floor area, 1 space per 14 sq.m. gross floor area. *Provision should be made for taxi drop off spaces.	533.6 sq.m.	26.68	-
Non-Food Retail	1 per 20 sq.m. gross floor area.			
Crèches	1 per employee & dedicated set down area and 1 per 4 children plus dedicated set down area	1,009 sq.m. (121 children & 28 staff)	58.25	5 Staff
Total			762	746

Table 9: Car Parking Provision

The provision of parking spaces offers the minimum standards for residential land use but maxima standards for the non-residential car parking standards. Ratoath South SHD is a newly created neighbourhood providing a significant amount of visitor parking over and above the prescribed minimum. This was implemented to function as a dual usage to cater for the casual trade users and encourage park and stride for crèche users. The council encourages innovative design solutions for medium to high-density residential schemes where substantial compliance can be demonstrated.

Based on the above it is proposed to provide 746 car parking spaces (including 139 no. spaces for visitor and 5 no spaces for crèche) in the development site based on its nature.

PARKING MANAGEMENT

A key aspect of the strategy will be the ongoing management of parking at the site. The parking strategy will come into effect from initial contact with prospective residents. It will be made very clear at the initial stage of communication as to what the parking availability is at the site and the lack of long term alternatives in the surrounding area. This is in line with Section 4.24 of the Design Standards for New Apartments.

Measures to prevent unauthorised car parking will be investigated should the need arise and may include:

- A clamping system whereby any cars parked in an unapproved location will be clamped and the owner required to pay a fine for release;
- Ongoing monitoring of visitor and crèche parking to ensure appropriate use.

All residents will be advised of any such measures as part of the initial/ongoing consultation with appropriate signage also provided. It is noted that the parking areas will be strictly reserved for the parking vehicles and prohibit for the storage of materials or goods associated with the development in compliance with the *Draft Meath County Council Development Plan 2021 – 2027*.

CYCLE PARKING PROVISION

The *Sustainable Urban Housing, Design Standards for New Apartments (December 2020)* from the Department of Housing, Planning and Local Government are also applicable in this instance with respect to the provision of cycle parking within the apartment and maisonette type units. The guidelines set out the cycle parking requirements with the relevant standards recreated below

- 1 cycle parking space per bedroom
- 1 space per 2 units allocated for visitor parking

In this instance, it is proposed to provide 816 no. cycle parking spaces (41 no. spaces provided for visitors) that are in excess of the Apartment Guidelines as listed above. These spaces will be provided throughout the development for use by residents & visitors. The design of the cycle parking will be high quality, secure, lockable and covered in line with the Apartment Guidelines requirements.

6 POTENTIAL IMPACT OF DEVELOPMENT CONSTRUCTION

Relative to the operation stage, the construction period will be temporary in nature. Construction traffic is expected to consist of the following categories:

- Private vehicles owned and driven by site construction staff and by full-time site supervisory staff and occasional professional supervisory staff i.e. design team members and supervisory staff from utility companies;
- Materials delivery and removal vehicles.

It is difficult to assess the exact quantum of traffic that will be generated during the construction period as it will vary throughout the construction process as different activities have different associated transportation needs. However, the following points are noted with regard to construction traffic:

- In general, the construction day will begin and end outside of peak travel hours. As a result, the majority of workers travelling to and from the site will arrive before the a.m. peak hour and depart after the p.m. peak hour;
- No on-site parking will be provided for use by critical staff only with the remainder of staff encouraged to travel by the numerous public transport options serving the locality;
- Adequate on-site compounding will be provided to prevent any potential overflow onto the local transport network;
- The potential for construction staff to be brought to the site in vans/minibuses will be investigated;
- Excavation and materials delivery vehicles travelling to and from the site will be spread across the course of the working day meaning the number of HGV's travelling during the peak hours will be relatively low.

Overall it is expected that the level of traffic generated by the construction works will be less than that generated by the operational phase of the development during the peak traffic hours. As a result, a detailed analysis of this stage has not been deemed necessary and the impact is considered to be negligible.

Prior to construction, it is expected that a Construction Management Plan will be submitted by the contractor to the Local Authority for agreement prior to the commencement of construction, giving details on the following:

- Daily and weekly working hours;
- Agreed haul routes for incoming materials;
- Licensed hauliers to be used;
- Disposal sites;
- Travel arrangements for construction personnel;
- Appropriate on-site parking arrangements for construction personnel to prevent overspill parking on the local road network;
- Temporary construction entrances to be provided;
- Wheel wash facilities if required;
- Road cleaning and sweeping measures to be put in place if required;
- Temporary construction signage to be put in place and maintained;
- Any proposed traffic management measures such as temporary traffic lights and signage on any public roads.

7 POTENTIAL IMPACT OF DEVELOPMENT OPERATION

In order to assess the actual impact of the operational development on the local road network, a number of different scenarios have been analysed as follows:

- Base Year (2019) – The current performance of the local road network was initially assessed along with the impact of the proposed development to establish which junctions require more detailed analysis;
- Year of Opening (2024) – The performance of the local road network was then assessed for the Year of Opening. In order to show the true impact of the proposed development, both the Do Nothing and Do Something scenarios were analysed;
- Design Year (2039) – The local road network was analysed for Design Year considering the Do Nothing, Do Something and the Do Maximum scenario.

The junction analysis was carried out using TRANSYT, Junctions 9 and the link capacities for the Year of Opening and the Design Year were assessed based on the same methodology outlined earlier in this report.

BASE YEAR

In order to establish which junctions require more detailed analysis using TRANSYT and Junction 9, the impact of the proposed development relative to the existing traffic flows has been assessed. The criteria used for this scoping exercise are based on the guidance set out in the TII Traffic & Transport Assessment Guidelines (2014) which states that an assessment is required when:

“Traffic to and from the development exceeds 10% of the traffic flow on the adjoining road”

or

“Traffic to and from the Development exceeds 5% of the traffic flow on the adjoining road where congestion exists or the location is sensitive”

or

“Residential development in excess of 200 dwellings”

With regard to the scope of the assessment, the guidelines state:

“In general, the study area should include all road links and associated junctions where traffic to and from the development may be expected to exceed 10% of the existing traffic movements, or 5% in congested or other sensitive locations, including junctions with national roads. Where two or more of the supplementary criteria as indicated in Table 2.3 apply in relation to any of the adjoining links or junctions, then those links and junctions should also be considered for inclusion in the study area”

The referenced Table 2.3 contains a series of sub-thresholds for when a Traffic & Transport Assessment should take place. These are summarised as follows:

- The character and total number of trips in/out combined per day are such that as to cause concern;
- The site is not consistent with national guidance or local plan policy or accessibility criteria contained in the Development Plan;
- The development is part of incremental development that will have significant transport implications;
- The development may generate traffic at peak times in a heavily trafficked/congested area or near a junction with a main traffic route;
- The development may generate traffic, particularly heavy vehicles in a residential area;
- There are concerns over the development’s potential effects on road safety;
- The development is in a tourist area with potential to cause congestion;
- The planning authority considers that the proposal will result in a material change in trip patterns or raises other significant transport implications.

Given the nature and estimated traffic generation potential of the proposed development, it is felt that it does not meet any of the above thresholds.

As a result, the percentage increase in traffic has been used as the scoping basis for this assessment, as shown in the following:

- *Diagram 28: % Impact of Development on A.M. Peak Traffic;*
- *Diagram 29: % Impact of Development on P.M. Peak Traffic;*

The above figures show that the increase in traffic as a result of the proposed development is over 5% at the majority of junctions within the study area, it was considered that all junctions required further consideration.

In order to ensure an accurate assessment, the models for each junction have first been calibrated by comparing its output results for queues against those recorded on-site during the traffic surveys. This allows the model to be adjusted accordingly as part of an iterative process until an acceptable level of correlation is achieved. A summary of this process can be found in *Appendix D* of this report which shows the modelled queues are a good match for the on-site survey results meaning they are considered a good representation of the junctions and are fit for purpose.

YEAR OF OPENING

As noted previously, the assessment considers the Do Nothing, Do Something and Do Maximum scenarios. The Do Something scenarios are established by adding the traffic estimated to be generated by the proposed development and approved third party developments to the local network, as shown in the following:

- *Diagram 30: 2024 A.M. Peak Hour Flows Do Something;*
- *Diagram 31: 2024 P.M. Peak Hour Flows Do Something;*
- *Diagram 32: 2024 AADT Do Something;*
- *Diagram 33: 2024 A.M. Peak Hour Flows Do Maximum;*
- *Diagram 34: 2024 P.M. Peak Hour Flows Do Maximum;*
- *Diagram 35: 2024 AADT Do Maximum;*

Prior to the analysis of the individual junctions, the main links in the network have been assessed for the year of opening Do-Something scenario, with the results shown in *Table 10*.

Link	Width (m)	Link Capacity (veh/hr)	A.M. Peak (veh/hr)	RFC (%)	P.M. Peak (veh/hr)	RFC (%)
Fairyhouse Road	6.75	1,260	616	49%	804	64%
Meadowbank Hill / The Avenue	6.1	900	393	44%	298	33%
R155	6.75	1,260	826	66%	844	67%
RORR	6.1	900	340	38%	510	57%
Main Street	7.3	1,470	1049	71%	1123	76%

Table 10: 2024 Do Something Link RFC Values

Link	Width (m)	Link Capacity (veh/hr)	A.M. Peak (veh/hr)	RFC (%)	P.M. Peak (veh/hr)	RFC (%)
Fairyhouse Road	6.75	1,260	623	49%	815	65%
Meadowbank Hill / The Avenue	6.1	900	393	44%	298	33%
R155	6.75	1,260	831	66%	853	68%
RORR	6.1	900	362	40%	528	59%
Main Street	7.3	1,470	1070	73%	1140	78%

Table 11: 2024 Do Maximum Link RFC Values

As can be seen, the local links continue to operate with reserve capacity with RFC values remaining below 78% in each instance despite the increased traffic levels. The tables following show the results of the Do Nothing, Do Something and Do Maximum analysis for the Year of Opening, thereby allowing for a direct

comparison of both scenarios to highlight the true impact of the proposed development.

When considering the below results, the following should be taken into account:

- The proposed site entrances have only been assessed for the Do Something scenario and Do Maximum Scenario as they do form part of the Do Nothing Scenario;
- For existing signalised junctions in the Do Something and Do Maximum scenarios, the pedestrian phases have not been included given the activities of the pedestrian movements are considered to be low based on the existing pedestrian surveys;
- All RFC values and queue lengths shown represent the maximum experienced by the respective arm;
- All queue lengths are shown in Passenger Car Units (PCUs) with 1 PCU equivalent to a car;

Junction 3

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
R155 (S)	0.8	41	2.7	70
R125 (E)	0	2	0.2	9
R155 (N)	1	48	1	45
R125 (W)	0	1	0	0

Table 12: Junction 3 – 2024 Peak Hour Do Nothing Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
R155 (S)	3.6	38	9	60
R125 (E)	0.5	2	1.1	8
R155 (N)	4.7	54	4.6	47
R125 (W)	0.5	2	0	1

Table 13: Junction 3 – 2024 Peak Hour Do Something Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
R155 (S)	3.6	38	9	60
R125 (E)	0.5	2	1.1	8
R155 (N)	4.8	54	4.6	47
R125 (W)	0.5	2	0	1

Table 14: Junction 3 – 2024 Peak Hour Do Maximum Analysis Results

The results show that the junction operates within capacity with the development in place, with standard RFC value and queue length. In addition, the results show that the impact of the proposed development will result in a positive shift in DOS and Queue lengths at Junction 3 on most arms during both peak hours in the Do Something and Do Maximum scenarios. This is due to the introduction of the Ratoath Outer Relief Road, which is expected to cause a significant traffic volume diversion from Ratoath Town Centre to Ratoath Outer Relief Road once the link road is fully completed.

Junction 4

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
R155 (E)	0.8	41	0.6	35
R155 (S)	0.7	37	3.7	78
Somerville	0.2	14	0.2	12
Sean Eiffe Park	1.9	64	0.5	30

Table 15: Junction 4 – 2024 Peak Hour Do Nothing Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
R155 (E)	1	48	0.6	37
R155 (S)	0.8	42	5.9	86
Somerville	0.2	14	0.2	14
Sean Eiffe Park	3.2	76	0.6	35

Table 16: Junction 4 – 2024 Peak Hour Do Something Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
R155 (E)	1	49	0.7	37
R155 (S)	0.8	42	6.1	86
Somerville	0.2	14	0.2	14
Sean Eiffe Park	3.4	77	0.6	36

Table 17: Junction 4 – 2024 Peak Hour Do Maximum Analysis Results

The results show that the junction operates within capacity with the development in place, with relatively minor increases on most of the arms in RFC values and queue lengths relative to the Do Something Scenario.

Junction 5

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
R155 (N)	18.61	86	13.2	89
R155 (S)	10.45	46	20.85	78
Meadowbank Hill	3.52	70	6.15	68

Table 18: Junction 5 – 2024 Peak Hour Do Nothing Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
R155 (N)	17.55	79	10.37	68
R155 (S)	8.24	40	12.46	58
Meadowbank Hill	4.16	73	5.96	63

Table 19: Junction 5 – 2024 Peak Hour Do Something Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
R155 (N)	17.67	79	10.64	69
R155 (S)	8.33	40	12.57	59
Meadowbank Hill	4.16	73	5.96	63

Table 20: Junction 5 – 2024 Peak Hour Do Maximum Analysis Results

In both peak hours, the junction is shown to operate within the capacity limit for the Do Something and Do Maximum scenario. In addition, the above results show some arms in both the Do Something and Do Maximum scenarios experience a significant improvement in the DOS value and queue length due to the introduction of the Ratoath Outer Relief Road, diverting significant traffic volumes from the Ratoath town centre to RORR link road as mentioned earlier.

Junction 7

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
R125 (E)	0.5	0	1.3	13
R125 (W)	-	-	-	-
Mouldenbridge	1	15	1	8

Table 21: Junction 7 – 2024 Peak Hour Do Nothing Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
RORR	12.49	69	11.13	67
R125 (E)	3	20	26.67	70
Mouldenbridge	1.52	31	1.46	13
R125 (W)	18.45	65	1.45	4

Table 22: Junction 7 – 2024 Peak Hour Do Something Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
RORR	13.65	74	11.28	68
R125 (E)	3	20	27.81	72
Mouldenbridge	1.52	31	1.46	13
R125 (W)	18.45	65	1.45	4

Table 23: Junction 7 – 2024 Peak Hour Do Maximum Analysis Results

The results show that the impact of the proposed development is low in both peak hours, with the junction continuing to operate within capacity in the Do Something and Do Maximum scenario. As can be seen, R125 arms will experience a higher RFC value in both the Do Something and Do Maximum scenarios, due to the introduction of the Ratoath Outer Relief Road. The RORR will link to the existing Junction 7 and form a 4 arms signalised junction, which means the priority of R125 arms will be reduced under the signalised layout.

Junction 8

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
R125 (W)	1.8	22	0.9	15
R125 (E)	-	-	-	-
Kilbride Road	1	9	9.5	66

Table 24: Junction 8 – 2024 Peak Hour Do Nothing Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
R125 (W)	11.5	50	1.6	24
R125 (E)	-	-	-	-
Kilbride Road	1	12	29.3	85

Table 25: Junction 8 – 2024 Peak Hour Do Something Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
R125 (W)	13.3	52	1.6	24
R125 (E)	-	-	-	-
Kilbride Road	1	17	33.2	87

Table 26: Junction 8 – 2024 Peak Hour Do Maximum Analysis Results

The results show that the junction operates within capacity with the development even within the Do Something and Do Maximum Scenario.

Junction 9

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
Jamestown Park	0	3	0	1
The Avenue (E)	2.64	37	3.25	45
Local Access	0	7	0	1
The Avenue (W)	4.66	52	2.55	26

Table 27: Junction 9 – 2024 Peak Hour Do Nothing Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
Jamestown Park	0	3	0	1
The Avenue (E)	1.74	29	1.46	11
Local Access	0	9	0	3
The Avenue (W)	3.67	41	0.35	8

Table 28: Junction 9 – 2024 Peak Hour Do Something Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
Jamestown Park	0	3	0	1
The Avenue (E)	1.74	29	1.46	11
Local Access	0	9	0	3
The Avenue (W)	3.67	41	0.35	8

Table 29: Junction 9 – 2024 Peak Hour Do Maximum Analysis Results

The junction is shown to continue to operate well within capacity with relatively minor queue lengths on all arms. However, the results show a reduction in DOS and queue lengths on some arms when the proposed Ratoath Outer Relief Road is fully completed again in Do Something and Do Maximum Scenario. Hence, it is expected that the background traffic volumes on The Avenue arms will be reduced under these circumstances. The junction is however shown to continue to operate well within capacity with relatively minor queue lengths on all arms.

Junction 10

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	Queue	DOS	Queue
FairyRoad (S)	18	1.59	67	17.67
FairyRoad (N)	42	8.11	12	1.51
ROOR (E)	53	6.46	62	9.67

Table 30: Junction 10 – 2024 Peak Hour Do Something Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	Queue	DOS	Queue
FairyRoad (S)	18	3.88	68	17.82
FairyRoad (N)	43	8.2	12	1.51
ROOR (E)	56	6.95	64	10.12

Table 31: Junction 10 – 2024 Peak Hour Do Maximum Analysis Results

As shown in the figures above, the junction operates well within normal capacity limits with low DOS values and queue lengths on all arms during both peak hours in both scenarios.

Junction 2 - Eastern Development Entrance

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	RFC	Queue	RFC
RORR (E)	0	2	0.3	11
RORR(W)	-	-	-	-
Access Road	0.2	9	0.1	8

Table 32: Eastern Development Entrance – 2024 Peak Hour Do Something Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	RFC	Queue	RFC
RORR (E)	0	2	0.3	11
RORR(W)	-	-	-	-
Access Road	0.2	9	0.1	8

Table 33: Eastern Development Entrance – 2024 Peak Hour Do Maximum

Analysis Results

The results show that the junction operates well within normal capacity limits with extremely low DOS values and queue lengths on all arms during both peak hours.

Junction 6 - Western Development Entrance

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	RFC	Queue	RFC
RORR (E)	0	2	0.2	10
RORR(W)	-	-	-	-
Access Road	0.2	9	0.1	8

Table 34: Western Development Entrance – 2024 Peak Hour Do Something

Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	RFC	Queue	RFC
RORR (E)	0	3	0.4	15
RORR(W)	-	-	-	-
Access Road	0.4	13	0.2	12

Table 35: Western Development Entrance – 2024 Peak Hour Do Maximum

Analysis Results

The results show that the junction operates well within normal capacity limits with extremely low DOS values and queue lengths on all arms during both peak hours.

DESIGN YEAR

As before, the Do Something traffic flows are established by adding the traffic estimated to be generated by the proposed SHD developments to the local network in the design year. The Do Maximum Scenarios are established by adding the additional development on the lands to the west of the development site and potential traffic distribution on the proposed Ratoath Outer Relief Road (RORR), as shown in the following:

- *Diagram 36: 2039 A.M. Peak Hour Flows Do Something;*
- *Diagram 37: 2039 P.M. Peak Hour Flows Do Something;*
- *Diagram 38: 2039 AADT Do Something;*

- *Diagram 39: 2039 A.M. Peak Hour Flows Do Maximum;*
- *Diagram 40: 2039 P.M. Peak Hour Flows Do Maximum;*
- *Diagram 41: 2039 AADT Do Maximum.*

Prior to the analysis of the individual junctions, the main links in the network have been assessed for the year of opening Do Something and Do Maximum scenarios, with the results shown following.

Link	Width (m)	Link Capacity (veh/hr)	A.M. Peak (veh/hr)	RFC (%)	P.M. Peak (veh/hr)	RFC (%)
Fairyhouse Road	6.75	1,260	690	55%	900	71%
Meadowbank Hill / The Avenue	6.1	900	465	52%	354	39%
R155	6.75	1,260	950	75%	984	78%
RORR	6.1	900	362	40%	565	63%
Main Street	7.3	1,470	1189	81%	1277	87%

Table 36: 2039 Do Something Scenario Link RFC Values

Link	Width (m)	Link Capacity (veh/hr)	A.M. Peak (veh/hr)	RFC (%)	P.M. Peak (veh/hr)	RFC (%)
Fairyhouse Road	6.75	1,260	668	53%	885	70%
Meadowbank Hill / The Avenue	6.1	900	465	52%	354	39%
R155	6.75	1,260	940	75%	977	78%
RORR	6.1	900	377	42%	578	64%
Main Street	7.3	1,470	1203	82%	1290	88%

Table 37: 2039 Do Maximum Scenario Link RFC Values

As can be seen, the local links continue to operate below normal capacity limits for the Do Something and Do Maximum Scenario.

The tables following show the results of the Do Nothing, Do Something and Do Maximum analysis for the Design Year, thereby allowing for a direct comparison of all scenarios to highlight the true impact of the proposed development. When considering the following results, the factors outlined for the year of opening analysis continue to apply.

Junction 3

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
R155 (S)	1.3	53	10.6	92
R125 (E)	0	3	0.3	12
R155 (N)	1.7	62	1.7	60
R125 (W)	0	1	0	0

Table 38: Junction 3 – 2039 Peak Hour Do Nothing Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
R155 (S)	4.2	47	19.2	74
R125 (E)	0.5	3	1.5	11
R155 (N)	10.7	67	6.9	59
R125 (W)	0.5	2	0	0

Table 39: Junction 3 – 2039 Peak Hour Do Something Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
R155 (S)	4.4	49	23.4	77
R125 (E)	0.5	3	1.5	11
R155 (N)	10.8	67	7.1	60
R125 (W)	0.5	2	0	1

Table 40: Junction 3 – 2039 Peak Hour Do Maximum Analysis Results

The results show that the impact of the proposed development will result in a positive shift in DOS and Queue lengths at Junction 3 on most arms during both peak hours in both the Do Something and Do Maximum scenarios. This is due to the introduction of the Ratoath Outer Relief Road, which is expected to cause a significant traffic volume diversion from Ratoath Town Centre to Ratoath Outer Relief Road once the link road is fully completed.

Junction 4

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
R155 (E)	1.2	53	0.8	42
R155 (S)	0.9	45	16.9	97
Somerville	0.2	17	0.2	18
Sean Eiffe Park	4.1	80	0.7	39

Table 41: Junction 4 – 2039 Peak Hour Do Nothing Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
R155 (E)	1.7	61	0.9	45
R155 (S)	1.1	49	26.4	101
Somerville	0.2	17	0.2	18
Sean Eiffe Park	8.4	89	0.8	40

Table 42: Junction 4 – 2039 Peak Hour Do Something Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
R155 (E)	1.7	61	0.9	45
R155 (S)	1.1	49	26.4	101
Somerville	0.2	17	0.2	18
Sean Eiffe Park	8.6	91	0.8	43

Table 44: Junction 4 – 2039 Peak Hour Do Maximum Analysis Results

The above results indicate that the roundabout is approaching 100% capacity for the Do Nothing Scenario, which is considered to exceed acceptable levels of RFC for a priority junction (generally accepted as 85%). The results show that the junction operates above the capacity limit with the development in place during PM peak hour, with relatively minor increases in RFC values and queue lengths on most of the arms during peak hours in Do Something and Do Maximum Scenario.

Junction 5

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
R155 (N)	40.84	102	30.4	105
R155 (S)	15.01	66	49.15	102
Meadowbank Hill	5.25	84	33.04	101

Table 45: Junction 5 – 2039 Peak Hour Do Nothing Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
R155 (N)	25.18	91	13.11	78
R155 (S)	11.37	57	16.36	71
Meadowbank Hill	5.67	84	7.89	73

Table 46: Junction 5 – 2039 Peak Hour Do Something Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
R155 (N)	25.47	91	13.4	79
R155 (S)	11.51	58	16.87	73
Meadowbank Hill	5.67	84	7.89	73

Table 47: Junction 5 – 2039 Peak Hour Do Maximum Analysis Results

In both peak hours, the junction is shown to operate above the capacity limit for the Do Nothing scenario, with a maximum RFC value of 105% in the PM Peak. The above results show the junction in both the Do Something and Do Maximum scenarios experience a significant improvement in the DOS value and queue length due to the introduction of the Ratoath Outer Relief Road, diverting significant traffic volumes from Ratoath town centre to the RORR link road as mentioned earlier.

Junction 7

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	Queue	DOS	Queue
R125 (E)	0.5	0	2.8	21
R125 (W)	-	-	-	-
Mouldenbridge	1.8	22	1	12

Table 48: Junction 7 – 2039 Peak Hour Do Nothing Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	Queue	DOS	Queue
RORR	13.68	74	13.08	76
R125 (E)	3.66	23	38.07	82
Mouldenbridge	1.6	36	1.46	15
R125 (W)	24.85	77	1.45	5

Table 49: Junction 7 – 2039 Peak Hour Do Something Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	Queue	DOS	Queue
RORR	15.01	80	13.57	78
R125 (E)	3.66	23	39.93	84
Mouldenbridge	1.64	36	1.46	15
R125 (W)	24.85	77	1.45	5

Table 50: Junction 7 – 2039 Peak Hour Do Maximum Analysis Results

The results show that the junction continues to operate within capacity in the Do Something & Do Maximum scenario. As can be seen, some arms will experience a higher RFC value in the Do Something and Do Maximum scenarios. Again, it is due to the introduction of the Ratoath Outer Relief Road. Based on the figure above, it is noted that significant traffic volumes are expected to be diverted from Ratoath Town Centre to the proposed Ratoath Outer Relief Road once it is fully completed.

The proposed RORR will connect to the existing Junction 7 and form a new 4 arms signalised junction on R125, which means the priority of the existing Main Road – R125 will be reduced under the proposed signalised layout. The junction is however shown to continue to operate within capacity despite the background traffic being increased in future.

Junction 8

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
R125 (W)	2.7	31	1.4	19
R125 (E)	-	-	-	-
Kilbride Road	1	11	26.8	83

Table 51: Junction 8 – 2039 Peak Hour Do Nothing Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
R125 (W)	29	70	2.2	29
R125 (E)	-	-	-	-
Kilbride Road	1.6	18	63.1	103

Table 51: Junction 8 – 2039 Peak Hour Do Something Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
R125 (W)	34.1	74	2.4	30
R125 (E)	-	-	-	-
Kilbride Road	1.6	19	67	106

Table 53: Junction 8 – 2039 Peak Hour Do Maximum Analysis Results

The above results indicate that the DOS values in Do Nothing Scenario are approaching the acceptable levels of RFC for a priority junction (generally accepted as 85%), with a maximum RFC value of 83% experienced on the minor arm. On this basis, the RFC values are further increased on the addition of the proposed development traffic will only exacerbate the junction which is already approaching the acceptable levels of RFC without the development.

Junction 9

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
Jamestown Park	0	4	0	1
The Avenue (E)	3.8	46	4.22	53
Local Access	0	8	0	1
The Avenue (W)	5.63	62	2.91	31

Table 54: Junction 9 – 2039 Peak Hour Do Nothing Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
Jamestown Park	0	4	0	1
The Avenue (E)	2.32	34	1.47	14
Local Access	0.01	10	0	3
The Avenue (W)	4.32	49	0.42	10

Table 55: Junction 9– 2039 Peak Hour Do Something Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
Jamestown Park	0	4	0	1
The Avenue (E)	2.32	34	1.47	14
Local Access	0.01	10	0	3
The Avenue (W)	4.32	49	0.42	10

Table 56: Junction 9– 2039 Peak Hour Do Maximum Analysis Results

The results show a reduction in DOS and queue lengths on some arms when the proposed Ratoath Outer Relief Road is fully completed again in Do Something and Do Maximum Scenario. Hence, it is expected that the background traffic volumes on The Avenue arms will be reduced under these circumstances. The junction is however shown to continue to operate well within capacity with relatively minor queue lengths on all arms.

Junction 10

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	Queue	DOS	Queue
FairyRoad (S)	22	4.11	79	23.54
FairyRoad (N)	48	9.93	12	1.61
ROOR (E)	57	7.08	70	11.64

Table 57: Junction 10– 2039 Peak Hour Do Something Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	Queue	DOS	Queue
FairyRoad (S)	21	4.12	79	23.12
FairyRoad (N)	60	12.18	13	1.69
ROOR (E)	60	7.58	71	12.16

Table 58: Junction 10– 2039 Peak Hour Do Maximum Analysis Results

The junction is shown to continue to operate well within capacity with relatively minor queue lengths on all arms, despite the traffic level being increased.

Junction 6 - Western Development Entrance

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
RORR (E)	0	2	0.3	11
RORR(W)	-	-	-	-
Access Road	0.2	9	0.1	9

Table 59: Western Development Entrance – 2039 Peak Hour Do Something Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	Queue	DOS	Queue	DOS
RORR (E)	0	3	0.4	16
RORR(W)	-	-	-	-
Access Road	0.4	13	0.2	13

Table 60: Western Development Entrance – 2039 Peak Hour Do Maximum

Analysis Results

The results show that the junction operates well within normal capacity limits with extremely low DOS values and queue lengths on all arms during both peak hours.

Junction 2 - Eastern Development Entrance

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	Queue	DOS	Queue
RORR (E)	0	2	0.3	12
RORR(W)	-	-	-	-
Access Road	0.2	9	0.1	9

Table 61: Eastern Development Entrance – 2039 Peak Hour Do Something

Analysis Results

Approach	A.M. Peak Hour		P.M. Peak Hour	
	DOS	Queue	DOS	Queue
RORR (E)	0	2	0.3	12
RORR(W)	-	-	-	-
Access Road	0.2	10	0.1	9

Table 62: Eastern Development Entrance – 2039 Peak Hour Do Maximum

Analysis Results

The results show that the junction operates well within normal capacity limits with extremely low DOS values and queue lengths on all arms during both peak hours.

SUMMARY

The results of the overall assessment show that the proposed development will not have a major or significant impact on the operation of the links and junctions in the local network with relatively minor to no impact on RFC values despite the conservative assessment with respect to trip generation estimates. Junction 5 has been shown to experience capacity issues irrespective of the proposed development.

The introduction of the Ratoath Outer Relief Road has been shown to improve most of the existing junctions by the redistribution of existing traffic patterns on these junctions. The existing roundabout (Junction 4) and existing crossroad junction (Junction 3) on the R155 and R125 are shown in the Do Nothing Scenario to exceed acceptable levels of RFC for a priority junction (generally accepted as 85%). The introduction of the Ratoath Outer Relief Road has been shown to improve both junctions in the Do Something and Do Maximum scenarios by reallocating a significant proportion of traffic volumes at this junction.

The introduction of the signalised junction on Main Street – R125 will improve the safety and experience of pedestrians through the junction. Dedicated pedestrian crossings are proposed on all arms. In addition, the results show that the introduction of the signalised junction layout will improve the overall capacity of this junction.

As outlined previously, the TII background traffic growth factors allowed a 25.13% for light vehicles and 75.1% for heavy vehicles increase before the proposed development is included. Background traffic growth is typically applied to allow for increased traffic due to developments in the area, meaning there is an element of double counting when allowing for the additional development related traffic.

In addition, it should be noted that the growth factors applied have made no allowance for the long term impact of the Covid 19 pandemic, which is expected to change the local travel patterns and traffic growth due to impacts on economic activity.

It is concluded that there are no traffic or transportation-related reasons that should prevent the granting of planning permission for the proposed development.



8 DO NOTHING SCENARIO

The Do Nothing scenario would involve leaving the subject site in its current underdeveloped state. This would have a negative impact on the overall development of the area while simultaneously showing no real benefit in transportation terms.

The Do Nothing scenario would result in the Ratoath Outer Relief Road not being constructed, this new link road has been shown to improve the capacity of the major junctions.

The local transport network has been shown to experience no notable negative impact as a result of a development of the type planned.

9 REMEDIAL/MITIGATION MEASURES

The assessment has shown that no mitigation measures are required to facilitate the proposed development aside from works set out as part of this application.

Mitigation has been identified as potentially being required at Junction 3 and Junction 4 regardless of whether the proposed development is in place or not.



10 MONITORING

While it has been demonstrated that the proposed development can be accommodated, it is nevertheless recommended that the local area should be monitored in terms of transportation efficiencies into the future.

Joshua Tai (B.E, MIEI)

Civil Engineer

OCSC MULTIDISCIPLINARY CONSULTING ENGINEERS



APPENDIX A: TRAFFIC SURVEY DATA

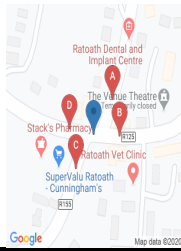
[illegible]

[illegible]

IDASO

Survey Name: HDR 20-015 Ratoath (039 20049)
Site: ATC 02
Location: Curragha Road, Lee Valley, Ratoath
Date: Tue 20-Feb-2018

[illegible]



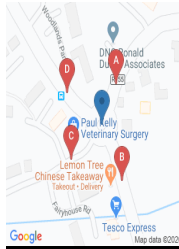
IDASO

Survey Name: HDR 20-015 Ratoath (039 20049)
Site: Site 3
Location: Duns haughlin Rd R125 / R155
Date: Tue 12-Mar-2019

A => A											A => B											A => C											A => D										
TIME	P/C	M/C	CAR	LGV	HGV	SV (BU)	TOT	PCU	P/C	M/C	CAR	LGV	HGV	SV (BU)	TOT	PCU	P/C	M/C	CAR	LGV	HGV	SV (BU)	TOT	PCU	P/C	M/C	CAR	LGV	HGV	SV (BU)	TOT	PCU	P/C	M/C	CAR	LGV	HGV	SV (BU)	TOT	PCU			
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16:45	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	4	0	0	17	2	0	1	20	21	0	0	6	0	1	0	7	8.3											
17:00	0	0	2	0	0	0	2	2	0	0	5	0	0	0	5	5	0	0	23	5	2	1	31	34.6	0	0	6	1	0	0	7	7											
17:15	0	0	0	0	0	0	0	0	0	2	0	4	1	0	7	5.4	0	0	25	3	0	0	28	28	0	0	7	2	1	0	10	11.3											
17:30	0	0	2	0	0	0	2	2	0	0	3	0	0	0	3	3	0	0	23	2	2	0	27	29.6	0	0	5	0	0	0	5	5											
17:45	0	0	1	0	0	0	1	1	1	0	4	1	0	0	5	5	0	0	18	4	1	0	23	24.3	0	0	7	0	0	0	7	7											
18:00	0	0	2	0	0	0	2	2	0	0	3	0	0	0	3	3	0	0	25	3	2	0	30	32.6	0	0	10	1	0	0	11	11											
18:15	0	0	1	0	0	0	1	1	1	0	4	0	0	0	4	4	0	0	25																								

B => A							TOT	B => B							TOT	B => C							TOT	B => D							TOT	PCU
P/C	M/C	CAR	LGV	HGV	SV (BUS)			P/C	M/C	CAR	LGV	HGV	SV (BUS)			P/C	M/C	CAR	LGV	HGV	SV (BUS)			P/C	M/C	CAR	LGV	HGV	SV (BUS)			
0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	1	0	0	3	3	0	0	13	2	0	3	18	21		
0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	0	0	5	2	0	0	7	7	0	0	16	9	1	1	27	29.3		
0	0	3	0	0	0	3	3	0	0	0	0	0	0	0	0	0	4	1	1	0	6	7.3	0	0	15	2	4	1	22	28.2		
0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	8	2	0	0	10	10	0	0	20	5	1	0	26	27.3		
0	0	1	0	1	0	2	3.3	0	0	0	0	0	0	0	0	0	8	1	0	0	9	9	0	0	16	2	0	0	18	18		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	1	0	0	8	8	0	0	23	2	4	2	31	38.2		
0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	8	3	1	0	12	13.3	0	0	28	6	2	1	37	40.6		
0	0	5	1	0	0	6	6	0	0	0	0	0	0	0	0	0	14	8	0	0	22	22	0	0	32	4	4	0	40	45.2		
0	0	3	0	0	0	3	3	0	0	0	0	0	0	0	0	0	22	0	0	0	22	22	0	0	35	10	1	0	46	47.3		
0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	14	2	1	0	17	18.3	0	0	20	8	2	0	30	32.6		
0	0	7	0	0	0	7	7	0	0	0	0	0	0	0	0	0	32	1	0	0	33	33	0	0	34	4	1	2	41	44.3		
0	0	8	1	1	0	10	11.3	0	0	0	0	0	0	0	0	0	14	2	0	0	16	16	0	0	28	2	0	0	30	30		
0	0	4	0	0	0	4	4	0	0	0	0	0	0	0	0	0	13	3	0	0	16	16	0	0	27	4	2	1	34	37.6		
0	0	4	1	0	0	5	5	0	0	0	0	0	0	0	0	0	14	5	0	0	19	19	0	0	33	3	3	1	40	44.9		
0	0	3	0	0	0	3	3	0	0	1	0	0	0	1	1	0	18	2	0	0	20	20	0	0	25	2	1	1	29	31.3		
0	0	3	0	0	0	3	3	0	0	1	0	0	0	1	1	0	14	1	0	0	15	15	0	0	23	5	0	1	29	30		
0	0	4	0	0	0	4	4	0	0	1	0	0	0	1	1	0	17	1	0	0	18	18	1	0	27	5	2	1	36	38.8		
0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	19	2	0	0	21	21	0	0	37	6	1	0	44	45.3		
0	0	2	0	1	0	3	4.3	0	0	0	0	0	0	0	0	0	16	0	0	0	16	16	0	0	34	2	4	0	40	45.2		
0	0	1	2	0	0	3	3	0	0	0	0	0	0	0	0	0	10	3	0	0	13	13	1	0	47	2	1	1	52	53.5		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	3	0	0	35	35	1	0	37	3	3	0	44	47.1		
0	0	3	0	1	0	4	5.3	0	0	0	0	0	0	0	0	0	25	2	0	0	27	27	0	0	34	2	1	1	38	40.3		
0	0	8	0	2	0	10	12.6	0	0	0	0	0	0	0	0	0	28	5	0	1	34	35	0	0	49	5	0	0	54	54		
0	0	3	0	0	0	3	3	0	0	0	0	0	0	0	0	0	33	3	0	0	36	36	0	0	42	5	3	0	50	53.9		
0	0	4	0	0	0	4	4	0	0	0	0	0	0	0	0	0	29	4	1	1	35	37.3	0	0	49	2	2	0	53	55.6		
0	0	3	0	0	0	3	3	0	0	0	0	0	0	0	0	1	22	2	0	0	25	24.2	0	0	30	5	0	1	36	37		
0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	0	0	17	1	1	0	19	20.3	0	0	36	7	2	0	45	47.6		
0	0	3	0	1	0	4	5.3	0	0	0	0	0	0	0	0	0	24	2	1	0	27	28.3	0	0	42	7	3	0	52	55.9		
0	0	3	0	0	0	3	3	0	0	0	0	0	0	0	0	0	19	6	0	0	25	25	0	0	41	4	1	0	46	47.3		
0	0	0	0	1	0	1	2.3	0	0	0	0	0	0	0	0	0	18	3	0	0	21	21	0	0	36	4	0	0	40	40		
0	0	2	2	0	0	4	4	0	0	0	0	0	0	0	0	0	10	0	0	0	10	10	1	0	30	6	2	1	40	42.8		
0	0	5	0	0	0	5	5	0	0	0	0	0	0	0	0	0	24	2	1	0	27	28.3	0	0	41	6	2	0	49	51.6		
0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	0	0	19	3	0	0	22	22	0	0	40	3	4	0	47	52.2		
0	0	4	1	0	0	5	5	0	0	0	0	0	0	0	0	0	21	2	0	0	23	23	0	0	51	8	4	2	65	72.2		
0	0	4	1	0	0	5	5	0	0	1	0	0	0	1	1	1	24	3	0	0	28	27.2	0	0	50	7	3	1	61	65.9		
0	0	5	1	0	0	6	6	0	0	0	0	0	0	0	0	0	18	2	0	0	20	20	0	0	34	7	3	1	45	49.9		
0	0	8	1	0	0	9	9	0	0	0	0	0	0	0	0	1	24	4	0	0	29	28.2	0	0	51	5	0	0	56	56		
0	0	8	0	0	0	8	8	0	0	0	0	0	0	0	0	0	23	4	0	0	27	27	0	0	62	15	0	1	78	79		
0	0	1	1	0	0	2	2	0	0	0	0	0	0	0	0	0	23	6	0	0	29	29	1	0	66	7	0	1	75	75.2		
0	0	4	0	0	0	4	4	0	0	0	0	0	0	0	0	0	30	5	0	0	35	35	0	0	72	15	1	2	90	93.3		
0	0	6	2	0	0	8	8	0	0	0	0	0	0	0	0	0	25	4	0	0	29	29	0	0	74	9	1	0	84	85.3		
0	0	2	0	1	0	3	4.3	0	0	0	0	0	0	0	0	0	24	3	1	0	28	29.3	1	0	92	22	1	1	117	118.5		
0	0	7	0	0	0	7	7	0	0	0	0	0	0	0	0	0	21	6	0	0	27	27	0	0	83	13	4	1	101	107.2		
0	0	5	2	0	0	7	7	0	0	0	0	0	0	0	0	0	35	2	0	0	37	37	0	0	88	8	0	1	97	98		
0	0	6	0	0	0	6	6	0	0	0	0	0	0	0	0	0	36	2	0	0	38	38	0	0	80	9	0	1	90	91		
0	0	6	0	0	0	6	6	0	0	0	0	0	0	0	0	0	22	1	0	0	23	23	0	0	79	5	0	1	85	86		
0	0	4	0	0	0	4	4	0	0	0	0	0	0	0	0	0	17	1	0	0	18	18	0	0	58	3	0	0	61	61		
0	0	3	1	0	0	4	4	0	0	0	0	0	0	0	0	0	29	0	0	0	29	29	0	0	63	5	0	0	68	68		
0	0	165	17	9	0	191	202.7	0	0	5	0	0	0	5	5	3	0	931	122	8	2	1066	1076	6	0	2043	282	74	32	2437	2560	

C=> A						TOT	C=> B						TOT	C=> C						TOT	C=> D						TOT	PCU					
P/C	M/C	CAR	LGV	HGV	SV(BUS)		PCU	P/C	M/C	CAR	LGV	HGV		SV(BUS)	PCU	P/C	M/C	CAR	LGV		HGV	SV(BUS)	PCU	P/C	M/C	CAR			LGV	HGV	SV(BUS)	PCU	
0	0	8	4	0	0	12	12	0	0	8	5	0	0	13	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0	0	15	1	1	0	17	18.3	0	0	5	2	0	1	8	9	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	3.3		
0	0	23	3	1	0	27	28.3	0	0	13	1	0	0	14	14	0	0	0	0	0	0	0	0	0	0	6	0	0	0	6	6		
0	0	19	4	1	0	24	25.3	0	0	17	3	1	0	21	22.3	0	0	0	0	0	0	0	0	0	0	1	0	1	2	3			
0	0	11	2	3	0	16	19.9	0	0	11	0	0	0	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2		
0	0	15	7	2	0	24	26.6	0	0	14	4	1	0	19	20.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0	0	19	4	6	0	29	36.8	0	0	13	4	0	0	17	17	0	0	0	0	0	0	0	0	0	0	4	1	0	0	5	5		
0	0	13	4	2	0	19	21.6	1	0	19	1	0	0	21	20.2	0	0	0	0	0	0	0	0	0	0	5	1	1	1	8	10.3		
0	0	21	2	0	0	23	23	0	0	25	2	0	0	27	27	0	0	0	0	0	0	0	0	0	0	4	2	0	0	6	6		
0	0	14	1	4	2	21	28.2	0	0	32	3	0	0	35	35	0	0	0	0	0	0	0	0	0	0	11	1	1	1	14	16.3		
0	0	25	1	1	0	27	28.3	0	0	48	4	0	0	52	52	0	0	0	0	0	0	0	0	0	0	5	2	1	0	8	9.3		
0	0	11	0	3	0	14	17.9	0	0	21	2	1	0	24	25.3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2		
0	0	5	1	1	0	7	8.3	0	0	20	2	0	0	22	22	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	3		
0	0	8	2	4	0	14	19.2	0	0	19	3	1	0	23	24.3	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	5		
0	0	9	2	6	0	17	24.8	0	0	21	1	0	0	22	22	0	0	0	0	0	0	0	0	0	0	7	1	1	0	9	10.3		
0	0	12	3	1	0	16	17.3	0	0	23	3	0	0	26	26	0	0	0	0	0	0	0	0	0	0	6	0	1	1	8	10.3		
0	0	12	1	0	0	13	13	0	0	15	6	0	0	21	21	0	0	0	0	0	0	0	0	0	0	8	0	0	0	8	8		
0	0	7	3	3	0	13	16.9	0	0	19	1	0	0	20	20	0	0	0	0	0	0	0	0	0	0	11	0	0	0	11	11		
0	0	6	1	2	0	9	11.6	0	0	22	3	1	0	26	27.3	0	0	0	0	0	0	0	0	0	0	8	0	0	0	8	8		
0	0	12	1	2	0	15	17.6	0	0	18	4	1	0	23	24.3	0	0	0	0	0	0	0	0	0	0	6	0	0	0	6	6		
0	0	8	2	5	0	15	21.5	0	0	21	2	0	0	23	23	0	0	0	0	0	0	0	0	0	0	15	2	0	1	18	19		
0	0	17	2	3	0	22	25.9	0	0	15	6	1	0	22	23.3	0	0	0	0	0	0	0	0	0	0	6	1	0	1	8	9		
0	0	13	2	2	0	17	19.6	0	0	38	2	0	0	40	40	0	0	0	0	0	0	0	0	0	0	9	0	0	1	10	11		
0	0	10	0	3	0	13	16.9	0	0	18	1	0	1	20	21	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	4		
0	0	10	4	5	0	19	25.5	0	0	20	3	0	0	23	23	0	0	0	0	0	0	0	0	0	0	6	3	0	0	9	9		
0	0	12	4	1	0	17	18.3	0	0	18	0	1	0	19	20.3	0	0	0	0	0	0	0	0	0	0	10	0	0	1	11	12		
0	0	12	2	3	0	17	20.9	0	0	10	3	0	0	13	13	0	0	1	0	0	0	0	1	1	0	6	1	0	1	8	9		
0	0	10	5	3	0	18	21.9	0	0	22	5	0	0	27	27	0	0	0	0	0	0	0	0	0	0	11	0	0	1	12	13		
0	0	12	1	2	1	16	19.6	0	0	22	3	0	0	25	25	0	0	0	0	0	0	0	0	0	0	8	3	0	1	12	13		
0	0	18	0	2	1	21	24.6	0	0	14	0	0	0	14	14	0	0	0	0	0	0	0	0	0	0	8	0	0	0	8	8		
0	0	13	2	3	0	18	21.9	0	0	9	4	0	0	13	13	0	0	0	0	0	0	0	0	0	0	7	0	0	1	8	9		
0	0	11	2	1	0	14	15.3	0	0	16	2	1	0	19	20.3	0	0	0	0	0	0	0	0	0	0	8	1	0	0	9	9		
0	0	25	1	1	1	28	30.3	0	0	25	4	2	0	31	33.6	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	15	15	
0	0	17	4	3	0	24	27.9	0	0	27	6	0	0	33	33	0	0	0	0	0	0	0	0	0	0	15	0	0	1	16	17		
0	0	15	5	1	0	21	22.3	1	0	23	3	0	0	27	26.2	0	0	1	0	0	0	1	1	0	0	6	1	0	0	7	7		
0	0	20	11	1	0	32	33.3	0	0	21	5	1	0	27	28.3	0	0	0	0	0	0	0	0	0	0	0	4	0	0	1	5	6	
0	0	30	4	5	0	39	45.5	0	0	22	1	0	0	23	23	0	0	0	0	0	0	0	0	0	0	0	15	1	0	0	16	16	
0	0	40	17	1	1	59	61.3	0	0	13	1	0	0	14	14	0	0	0	0	0	0	0	0	0	0	0	10	0	0	1	11	12	
1	0	31	14	1	0	47	47.5	0	0	14	1	0	0	15	15	0	0	0	0	0	0	0	0	0	0	0	11	2	0	0	13	13	
0	0	45	10	3	0	58	61.9	0	0	24	2	0	1	27	28	0	0	0	0	0	0	0	0	0	0	0	10	0	0	1	11	12	
0	0	48	7	0	0	55	55	0	0	16	4	2	0	22	24.6	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	14	14	
0	0	29	1	2	0	32	34.6	0	0	29	2	0	0	31	31	0	0	0	0	0	0	0	0	0	0	0	9	0	0	1	10	11	
0	0	38	5	0	0	43	43	0	0	14	4	0	0	18	18	0	0	1	0	0	0	1	1	0	0	7	0	0	1	8	9		
0	0	34	6	1	0	41	42.3	0	0	18	1	0	0	19	19	0	0	0	0	0	0	0	0	0	0	0	3	0	0	1	4	5	
0	0	25	6	1	0	32	33.3	0	0	23	0	0	0	23	23	0	0	0	0	0	0	0	0	0	0	0	12	1	0	0	13	13	
0	0	36	8	0	0	44	44	0	0	23	1	0	0	24	24	0	0	0	0	0	0	0	0	0	0	0	10	2	0	1	13	14	
0	0	31	7	1	2	41	44.3	0	0	23	1	0	0	24	24	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	11	11	
0	0	26	1	2	0	29	31.6	0	0	34	4	0	0	38	38	0	0	0	0	0	0	0	0	0	0	0	5	0	0	2	7	9	
1	0	901	180	99	8	1189	1325	2	0	955	125	14	3	1099	1119	0	0	3	0	0	0	0	3	3	0	0	347	27	6	23	403	433.8	



IDASO

Survey Name: HDR 20-015 Ratsbath (039 20049)
Site: Site 4
Location: R155 / Somerville
Date: Tue 29-Jan-2019

TIME	A == A							TOT	A == B							TOT	A == C							TOT	A == D							TOT	PCU
	P/C	M/C	CAR	LGV	HGV	SV (BU)	PCU		P/C	M/C	CAR	LGV	HGV	SV (BU)	PCU		P/C	M/C	CAR	LGV	HGV	SV (BU)	PCU		P/C	M/C	CAR	LGV	HGV	SV (BU)	PCU		
07:00	0	0	0	0	0	0	0	0	0	0	45	11	2	0	58	60.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	
07:15	0	0	0	0	0	0	0	0	0	0	50	8	0	1	59	60	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3		
07:30	0	0	0	0	0	0	0	0	0	0	69	10	4	0	83	88.2	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2		
07:45	0	0	0	0	0	0	0	0	0	0	57	9	1	0	67	68.3	0	0	1	0	0	0	1	1	0	0	2	0	0	2	2		
08:00	0	0	0	0	0	0	0	0	0	0	50	2	0	0	52	52	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2		
08:15	0	0	0	0	0	0	0	0	0	0	38	10	2	0	50	52.6	0	0	2	1	1	0	4	5.3	0	0	3	0	0	3	3		
08:30	0	0	1	0	0	0	1	1	0	0	56	5	5	0	66	72.5	0	0	4	1	0	0	5	5	0	0	0	0	0	0	0	0	
08:45	0	0	0	0	0	0	0	0	0	0	43	6	4	1	54	60.2	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	
09:00	0	0	0	0	0	0	0	0	0	0	40	6	1	0	47	48.3	0	0	1	0	0	0	1	1	0	0	1	0	1	0	2	3.3	
09:15	0	0	1	0	0	0	1	1	0	0	33	4	3	0	40	43.9	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	
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10:15	0	0	0	0	0	0	0	0	0	0	31	6	1	0	38	39.3	0	0	3	1	0	0	4	4	0	0	2	0	0	2	2		
10:30	0	0	0	0	0	0	0	0	0	0	19	4	3	0	26	29.9	0	0	3	0	0	0	3	3	0	0	2	1	0	3	3		
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11:00	0	0	0	0	0	0	0	0	0	0	27	6	4	0	37	42.2	0	0	2	0	0	0	2	2	0	0	1	0	0	1	1		
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12:00	0	0	0	0	0	0	0	0	0	0	22	3	3	1	29	33.9	0	0	4	1	0	0	5	5	0	0	2	1	0	3	3		
12:15	0	0	0	0	0	0	0	0	0	0	41	3	1	0	45	46.3	0	0	3	0	0	0	3	3	0	0	0	1	0	1	1		
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12:45	0	0	0	0	0	0	0	0	0	0	31	7	2	0	40	42.6	0	0	5	0	0	0	5	5	0	0	4	0	0	4	4		
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13:45	0	0	1	0	0	0	1	1	0	0	40	5	1	0	46	47.3	0	0	2	1	0	0	3	3	0	0	3	1	0	4	4		
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14:30	0	0	1	0	0	0	1	1	0	0	41	7	4	0	53	57.4	0	0	3	1	0	0	4	4	0	0	4	0	0	4	4		
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15:15	0	0	0	0	0	0	0	0	0	0	46	5	3	0	54	57.9	0	0	3	1	0	0	4	4	0	0	4	0	0	4	4		
15:30	0	0	0	0	0	0	0	0	0	0	50	3	3	0	56	59.9	0	0	4	0	0	0	4	4	0	0	3	1	1	5	6.3		
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16:15	0	0	0	0	0	0	0	0	0	0	41	7	2	0	50	52.6	0	0	9	1	1	0	11	12.3	0	0	3	1	0	4	4		
16:30	0	0	0	0	0	0	0	0	0	0	40	9	1	0	50	51.3	0	0	7	1	0	0	8	8	0	0	5	2	0	7	7		
16:45	0	0	0	0	0	0	0	0	0	0	47	8	1	0	56	57.3	0	0	10	2	0	0	12	12	0	0	12	0	0	12	12		
17:00	0	0	0	0	0	0	0	0	0	0	45	4	3	1	53	57.9	0	0	5	0	0	0	5	5	0	0	5	0	0	5	5		
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17:45	0	0	0	0	0	0	0	0	0	0	36	1	1	0	38	39.3	0	0	15	1	0	0	16	16	0	0	9	2	0	11	11		
18:00	0	0	0	0	0	0	0	0	0	0	56	5	0	0	61	61	0	0	9	0	0	0	9	9	0	0	7	0	0	7	7		
18:15	0	0	0	0	0	0	0	0	0	0	60	3	1	0	64	65.3	0	0	4	0	1	0	5	6.3	0	0	11	0	0	11	11		
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12 TOT	0	0	6	0	0	0	6	6	2	0	1846	228	96	5	2177	2305	1	0	155	24	4	0	184	188.4	0	0	160	21	2	0	183	185.6	

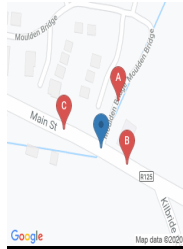
B=> A						B=> B											B=> C											B=> D										
P/C	M/C	CAR	LGV	HGV	SV (BUS)	TOT	PCU	P/C	M/C	CAR	LGV	HGV	SV (BUS)	TOT	PCU	P/C	M/C	CAR	LGV	HGV	SV (BUS)	TOT	PCU	P/C	M/C	CAR	LGV	HGV	SV (BUS)	TOT	PCU							
0	0	15	3	1	0	19	20.3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	11	1	1	1	14	16.3						
0	0	21	5	0	1	27	28	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3	3	3	0	0	19	2	1	1	23	25.3						
0	0	25	5	0	0	30	30	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2	2	0	0	10	3	1	1	15	17.3						
0	0	26	3	2	0	31	33.6	0	0	2	0	0	0	2	2	0	0	4	0	0	0	4	4	4	0	0	21	2	1	3	27	31.3						
0	0	30	5	2	1	38	41.6	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	4	4	0	0	29	2	1	0	32	33.3						
0	0	44	4	0	0	48	48	0	0	1	0	0	0	1	1	0	0	3	1	1	0	5	6.3	0	0	30	1	3	1	35	39.9							
0	0	34	4	0	0	38	38	0	0	0	1	0	0	1	1	0	0	8	1	0	0	9	9	0	0	37	1	0	0	38	38							
0	0	34	1	1	0	36	37.3	0	0	1	0	0	0	7	1	0	0	6	1	0	0	7	7	1	0	37	2	0	0	40	39.2							
0	0	42	5	3	0	50	53.9	0	0	0	0	0	0	0	0	0	0	11	0	0	0	11	11	1	0	36	0	0	0	37	36.2							
0	0	48	2	1	1	52	54.3	0	0	0	0	0	0	0	0	0	0	12	0	0	0	12	12	0	0	33	1	1	1	36	38.3							
0	0	55	5	2	0	62	64.6	0	0	0	0	0	0	0	0	0	0	9	0	0	0	9	9	0	0	33	0	0	1	34	35							
0	0	43	5	3	0	51	54.9	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1	0	0	12	1	2	0	15	17.6							
0	0	32	3	1	0	36	37.3	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	5	0	0	12	3	1	0	16	17.3							
0	0	30	5	3	0	38	41.9	0	0	0	0	0	0	0	0	0	0	4	0	1	0	5	6.3	0	0	13	2	0	2	17	19							
0	0	38	2	3	0	43	46.9	0	0	0	0	0	0	0	0	0	0	2	2	0	0	4	4	0	0	16	1	1	0	18	19.3							
0	0	33	5	1	0	39	40.3	0	0	1	1	0	0	2	2	0	0	5	0	0	0	5	5	0	0	8	1	1	1	11	13.3							
0	0	32	4	2	0	38	40.6	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	3	0	0	10	1	1	0	12	13.3							
0	0	27	6	4	0	37	42.2	0	0	1	1	0	0	2	2	0	0	3	0	0	0	3	3	0	0	15	0	2	1	18	21.6							
0	0	15	2	1	0	18	19.3	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3	3	0	0	12	3	1	0	16	17.3							
0	0	37	5	4	0	46	51.2	0	0	1	0	0	0	1	1	0	0	1	0	0	0	1	1	0	0	16	4	1	1	22	24.3							
0	0	32	3	3	1	39	43.9	0	0	1	0	0	0	1	1	1	0	2	0	0	0	3	2.2	0	0	17	0	1	0	18	19.3							
0	0	25	4	2	0	31	33.6	0	0	1	0	0	0	1	1	0	0	4	0	0	0	4	4	0	0	16	4	1	2	23	26.3							
0	0	31	0	0	0	31	31	0	0	1	0	0	0	1	1	0	0	10	0	0	0	10	10	0	0	29	2	1	0	32	33.3							
0	0	32	4	1	0	37	38.3	0	0	1	0	0	0	1	1	0	0	4	0	0	0	4	4	0	0	27	3	0	1	31	32							
0	0	40	1	4	0	45	50.2	0	0	0	0	0	0	0	0	0	0	4	1	1	0	6	7.3	0	0	24	3	3	0	30	33.9							
0	0	25	7	1	0	33	34.3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	15	3	1	1	20	22.3							
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0	0	30	5	0	0	35	35	0	0	1	0	0	0	1	1	2	0	17	0	0	0	19	17.4	0	0	45	7	0	1	53	54							
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0	0	25	10	6	0	41	48.8	0	0	0	0	0	0	0	0	0	0	3	1	0	0	4	4	0	0	19	1	3	1	24	28.9							
0	0	33	5	2	0	40	42.6	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	5	0	0	23	5	0	0	28	28							
0	0	20	2	1	0	23	24.3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	23	3	1	1	28	30.3							
0	0	43	7	2	1	53	56.6	0	0	1	0	0	0	1	1	0	0	5	1	1	0	7	8.3	2	0	47	3	1	0	53	52.7							
0	0	47	5	4	0	56	61.2	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	4	0	0	38	5	3	1	47	51.9							
0	0	44	4	4	0	52	57.2	0	0	0	0	0	0	0	0	0	3	8	3	0	0	14	11.6	2	0	48	3	1	0	54	53.7							
0	0	48	6	3	0	57	60.9	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	5	1	0	50	2	0	1	54	54.2							
0	0	54	7	1	0	62	63.3	0	0	2	0	0	0	2	2	0	0	9	0	0	0	9	9	0	0	55	3	0	0	58	58							
0	0	66	5	1	0	72	73.3	0	0	0	0	0	0	0	0	0	1	7	0	1	0	9	9.5	0	0	48	6	0	1	55	56							
0	0	71	19	1	0	91	92.3	0	0	2	0	0	0	2	2	0	0	8	1	0	0	9	9	0	0	45	6	3	1	55	59.9							
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0	0	64	14	0	0	78	78	0	0	0	0	0	0	0	0	0	0	13	0	0	0	13	13	1	0	78	9	0	1	89	89.2							
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0	0	73	4	0	0	77	77	0	0	1	0	0	0	1	1	0	0	13	1	1	0	15	16.3	0	0	75	3	0	2	80	82							
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
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C>=>A							TOT	C>=>B							TOT	C>=>C							TOT	C>=>D							TOT	PCU		
P/C	M/C	CAR	LGV	HGV	SV(BUS)			P/C	M/C	CAR	LGV	HGV	SV(BUS)			P/C	M/C	CAR	LGV	HGV	SV(BUS)			P/C	M/C	CAR	LGV	HGV	SV(BUS)					
0	0	4	0	0	0	0	4	4	0	0	6	2	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1		
0	0	6	1	2	0	0	9	11.6	0	0	12	1	0	0	13	13	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1		
0	0	5	1	0	0	0	6	6	0	0	14	0	0	0	14	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0	0	2	1	0	0	0	3	3	1	0	22	0	0	0	23	22.2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1		
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0	0	3	0	0	0	0	3	3	4	0	11	2	0	0	17	13.8	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1		
0	0	4	3	1	0	0	8	9.3	1	0	12	0	0	0	13	12.2	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2			
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0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1			
0	0	2	0	0	0	0	2	2	0	0	4	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2			
0	0	4	0	0	0	0	4	4	0	0	6	2	0	0	8	8	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2			
0	0	3	1	0	0	0	4	4	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3			
0	0	6	0	0	0	0	6	6	0	0	5	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3			
0	0	1	0	0	0	0	1	1	0	0	4	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1			
P/C	0	2	2	0	0	0	4	4	4	0	0	6	0	0	6	6	6	0	0	0	0	0	0	0	0	0	1	0	0	1	1			
0	0	3	1	1	0	0	5	6.3	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2			
0	0	2	0	1	0	0	3	4.3	0	0	9	0	1	0	10	11.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0	0	1	0	0	0	0	1	1	1	0	6	1	0	0	8	7.2	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1			
0	0	6	0	0	0	0	6	6	0	0	7	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0	0	1	0	0	0	0	1	1	0	0	1	2	0	0	3	3	3	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1		
0	0	1	1	0	0	0	2	2	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3			
0	0	3	0	0	0	0	3	3	0	0	9	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1		
0	0	4	0	0	0	0	4	4	0	0	9	1	0	0	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0	0	4	0	0	0	0	4	4	0	0	4	1	0	0	5	5	5	0	0	0	0	0	0	0	0	0	0	8	1	0	9	9		
0	0	4	0	0	0	0	4	4	0	0	5	2	1	0	8	9.3	0	0	0	0	0	0	0	0	0	0	0	3	1	0	4	4		
0	0	4	0	0	0	0	4	4	0	0	4	1	0	0	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0	0	1	2	0	0	0	3	3	3	0	0	6	0	0	6	6	6	0	0	0	0	0	0	0	0	0	0	7	0	0	7	7		
0	0	4	0	0	0	0	4	4	4	0	0	7	0	0	7	7	7	0	0	0	0	0	0	0	0	0	0	1	0	1	2	1.2		
0	0	5	0	0	0	0	5	5	5	0	0	9	0	0	9	9	9	0	0	0	0	0	0	0	0	0	0	1	0	1	2	3.3		
0	0	3	0	0	0	0	3	3	3	0	0	3	1	0	4	4	4	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2		
0	0	1	1	0	0	0	2	2	2	0	0	1	0	1	2	3.3	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	5		
0	0	5	0	0	0	0	5	5	5	0	0	5	1	0	6	6	6	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3		
0	0	4	1	0	0	0	5	5	5	0	0	7	0	0	7	7	7	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3		
0	0	6	1	0	0	0	7	7	7	0	0	6	0	0	6	6	6	0	0	0	0	0	0	0	0	0	1	0	4	0	5	4.2		
0	0	4	0	0	0	0	4	4	4	0	0	7	0	0	7	7	7	0	0	0	0	0	0	0	0	0	0	5	1	0	6	6		
0	0	5	1	0	0	0	6	6	6	0	0	4	0	0	4	4	4	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2		
0	0	1	0	0	0	0	1	1	1	0	0	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	4	1	0	5	5		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0	0	0	155	20	7	0	182	191.1	11	0	298	23	3	0	335	330.1	0	0	0	0	0	0	0	0	0	0	2	0	82	8	2	0	94	95

D>=> A							TOT	D>=> B							TOT	D>=> C							TOT	D>=> D							TOT	PCU	
P/C	M/C	CAR	LGV	HGV	SV (BUS)			P/C	M/C	CAR	LGV	HGV	SV (BUS)			P/C	M/C	CAR	LGV	HGV	SV (BUS)			P/C	M/C	CAR	LGV	HGV	SV (BUS)				
0	0	2	1	0	1		4	5	0	0	30	6	0	1	37	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0		0	0	0	0	63	11	0	1	75	76	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
0	0	0	0	0	0		0	0	0	0	108	19	2	0	129	131.6	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
0	0	2	1	0	0		3	3	1	0	116	6	4	0	127	131.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	1		1	2	0	0	74	8	0	2	84	86	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	1	0	0		3	3	0	0	86	7	2	1	96	99.6	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
0	0	1	0	0	1		2	3	1	0	91	10	2	0	104	105.8	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0
0	0	0	0	0	0		0	0	2	0	75	6	1	0	84	83.7	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0
0	0	0	1	0	1		2	3	0	0	57	1	0	1	59	60	0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	1	1
0	0	2	0	0	1		3	4	0	0	42	1	1	1	45	47.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0		4	4	0	0	25	1	0	0	26	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0		0	0	2	0	18	2	1	1	24	24.7	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
0	0	2	3	0	0		5	5	2	0	10	1	0	0	13	11.4	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0
0	0	1	0	0	0		1	1	0	0	16	1	0	1	18	19	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0
0	0	2	0	0	1		3	4	0	0	16	0	1	0	17	18.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	2		2	4	1	0	7	4	1	1	14	15.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0		0	0	0	0	13	3	3	1	20	24.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	1		2	3	0	0	22	2	1	0	25	26.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	1		3	4	0	0	19	2	1	1	23	25.3	0	0	1	1	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0		1	1	0	0	17	1	2	0	20	22.6	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	2	0	1	0		3	4.3	0	0	15	0	1	0	16	17.3	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0
0	0	1	0	0	1		2	3	0	0	32	0	0	0	32	32	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
0	0	2	0	0	0		2	2	0	0	24	5	0	1	30	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/C	0	3	0	1	0		4	5.3	0	0	19	2	3	0	24	27.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0		1	1	0	0	15	4	3	1	23	27.9	0	0	0	0	1	0	1	2.3	0	0	0	0	0	0	0	0	0
0	0	1	0	0	1		2	3	0	0	25	2	0	0	27	27	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0		1	1	0	0	33	1	1	1	36	38.3	0	0	2	0	0	0	2	2	0	0	1	0	0	0	1	1	1
0	0	0	0	0	1		1	2	0	0	33	4	0	1	38	39	0	0	3	0	0	0	3	3	0	0	0	1	0	0	1	1	1
0	0	1	0	0	2		3	5	0	0	17	2	1	1	21	23.3	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
0	0	4	0	0	0		4	4	0	0	14	5	0	0	19	19	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
0	0	3	0	0	1		4	5	0	0	22	1	2	1	26	29.6	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0
0	0	2	0	0	0		2	2	0	0	30	4	1	0	35	36.3	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0
0	0	1	0	1	0		2	3.3	0	0	14	3	1	0	18	19.3	0	0	9	0	0	0	0	9	9	0	0	1	0	0	0	1	1
0	0	0	0	0	1		1	2	0	0	33	1	0	1	35	36	0	0	4	0	0	0	0	4	4	0	0	2	0	0	0	2	2
0	0	2	1	0	1		4	5	0	0	26	3	1	1	31	33.3	0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0
0	0	5	1	0	0		6	6	0	0	29	2	0	0	31	31	0	0	3	0	0	0	0	3	3	0	0	2	0	0	0	2	2
0	0	2	0	0	0		2	2	0	0	31	0	0	1	32	33	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	4	0	0	2		6	8	0	0	46	1	0	0	47	47	0	0	1	1	0	0	2	2	0	0	0	0	0	0	0	0	0
0	0	4	0	0	0		4	4	0	0	31	6	2	3	42	47.6	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
0	0	2	0	0	1		3	4	0	0	34	3	0	0	37	37	0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0
0	0	2	0	0	0		2	2	0	0	28	4	1	1	34	36.3	0	0	6	2	0	0	8	8	0	0	0	0	0	0	0	0	0
0	0	4	0	0	1		5	6	0	0	33	1	0	0	34	34	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
0	0	2	0	0	0		2	2	1	0	26	1	0	0	28	27.2	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0
0	0	1	1	0	1		3	4	0	0	34	2	0	0	36	36	0	0	3	1	0	0	0	4	4	0	0	0	1	0	0	1	1
0	0	2	0	0	0		2	2	0	0	42	2	0	1	45	46	0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0
0	0	3	0	0	0		3	3	2	0	27	0	0	2	31	31.4	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	76	11	3	23	113	139.9	12	0	1618	151	39	28	1848	1917	0	0	77	9	1	0	87	88.3	0	0	8	2	0	0	10	10	10

TIME	A==> A							A==> B							A==> C									
	P/C	M/C	CAR	LGW	HGV	SV (BU)	TOT	PCU	P/C	M/C	CAR	LGW	HGV	SV (BU)	TOT	PCU	P/C	M/C	CAR	LGW	HGV	SV (BU)	TOT	PCU
07:00	0	0	0	0	0	0	0	0	0	0	28	4	2	0	34	36.6	0	0	6	0	0	1	7	8
07:15	0	0	0	0	0	0	0	0	0	0	35	5	2	0	42	44.6	0	0	7	2	0	2	11	13
07:30	0	0	0	0	0	0	0	0	0	0	29	3	1	0	33	34.3	0	0	6	1	1	1	9	11.3
07:45	0	0	0	0	0	0	0	0	0	0	43	3	2	0	48	50.6	0	0	8	1	0	0	9	9
08:00	0	0	0	0	0	0	0	0	0	0	41	4	2	0	47	49.6	0	0	16	1	0	0	17	17
08:15	0	0	0	0	0	0	0	0	0	0	54	3	2	0	59	61.6	0	0	26	2	2	0	30	32.6
08:30	0	0	0	0	0	0	0	0	0	0	58	6	2	0	66	68	0	0	28	1	0	0	29	3
08:45	0	0	0	0	0	0	0	0	0	0	59	8	1	0	72	70.1	0	0	25	1	0	0	26	26
09:00	0	0	0	0	0	0	0	0	3	0	80	0	4	2	89	93.8	1	0	20	0	0	0	21	20.2
09:15	0	0	0	0	0	0	0	0	1	0	32	2	2	0	37	38.8	0	0	14	2	0	0	16	16
09:30	0	0	0	0	0	0	0	0	0	0	34	2	0	0	36	36	0	0	9	0	0	0	9	9
09:45	0	0	0	0	0	0	0	0	0	0	28	4	4	0	36	41.2	0	0	8	1	1	0	10	11.3
10:00	0	0	0	0	0	0	0	0	0	0	20	2	2	0	24	26.6	0	0	10	3	0	0	13	13
10:15	0	0	0	0	0	0	0	0	0	0	20	1	2	0	23	25.6	0	0	8	1	1	0	10	11.3
10:30	0	0	0	0	0	0	0	0	0	0	27	5	1	0	33	34.3	0	0	9	2	0	0	11	11
10:45	0	0	0	0	0	0	0	0	0	0	21	4	0	0	25	25	0	0	5	0	0	0	5	5
11:00	0	0	0	0	0	0	0	0	0	0	30	3	1	0	34	35.3	0	0	11	0	1	0	12	13.3
11:15	0	0	0	0	0	0	0	0	0	0	25	4	1	0	30	31.3	0	0	7	3	0	0	10	10
11:30	0	0	0	0	0	0	0	0	0	0	23	1	4	0	28	33.2	0	0	6	1	0	0	7	7
11:45	0	0	0	0	0	0	0	0	0	0	20	2	0	0	22	22	0	0	9	1	0	0	10	10
12:00	0	0	0	0	0	0	0	0	0	0	15	4	3	0	22	25.9	1	0	8	0	0	0	9	8.2
12:15	0	0	0	0	0	0	0	0	0	0	23	5	3	0	31	34.9	0	0	12	1	0	0	13	13
12:30	0	0	0	0	0	0	0	0	0	0	33	6	1	0	40	41.3	0	0	17	1	1	0	19	20.3
12:45	0	0	0	0	0	0	0	0	0	0	28	7	1	0	36	37.3	0	0	10	1	0	0	11	11
13:00	0	0	0	0	0	0	0	0	0	0	24	8	1	0	33	34.3	0	0	15	2	1	0	18	19.3
13:15	0	0	0	0	0	0	0	0	0	0	23	2	0	0	25	25	0	0	9	0	1	0	10	11.3
13:30	0	0	0	0	0	0	0	0	0	0	24	2	3	0	29	32.9	0	0	12	0	0	0	12	12
13:45	0	0	0	0	0	0	0	0	0	0	49	2	4	1	56	62.2	3	0	53	2	0	0	58	55.6
14:00	0	0	0	0	0	0	0	0	0	0	35	3	2	1	41	44.6	0	0	13	2	0	0	15	15
14:15	0	0	0	0	0	0	0	0	0	0	25	4	3	0	32	35.9	0	0	14	1	2	0	17	19.6
14:30	0	0	0	0	0	0	0	0	0	0	42	2	0	0	44	44	0	0	9	2	0	0	11	11
14:45	0	0	0	0	0	0	0	0	0	0	34	5	3	1	43	47.9	1	0	7	2	1	0	11	11.5
15:00	0	0	0	0	0	0	0	0	0	0	14	2	2	0	18	20.6	0	0	8	2	2	0	12	14.6
15:15	0	0	0	0	0	0	0	0	0	0	27	3	3	0	33	36.9	0	0	12	1	0	0	13	13
15:30	0	0	0	0	0	0	0	0	0	0	40	3	4	0	47	52.2	11	0	44	1	1	0	57	49.5
15:45	0	0	0	0	0	0	0	0	0	0	42	5	1	0	48	49.3	0	0	29	2	1	0	32	33.3
16:00	0	0	0	0	0	0	0	0	0	0	40	4	1	0	45	46.3	0	0	12	2	0	0	14	14
16:15	0	0	0	0	0	0	0	0	0	0	34	10	3	0	47	50.9	0	0	18	3	1	0	22	23.3
16:30	0	0	0	0	0	0	0	0	0	0	42	6	3	0	51	54.9	0	0	30	3	0	0	33	33
16:45	0	0	0	0	0	0	0	0	0	0	51	7	2	0	60	62.6	0	0	32	2	0	0	34	34
17:00	0	0	0	0	0	0	0	0	0	0	49	7	0	0	56	56	0	0	35	2	0	1	38	39
17:15	0	0	0	0	0	0	0	0	0	0	51	6	0	0	57	57	0	0	35	6	1	0	42	43.3
17:30	0	0	0	0	0	0	0	0	1	0	62	2	0	0	65	64.2	1	0	43	3	0	1	48	48.2
17:45	0	0	0	0	0	0	0	0	1	0	55	3	1	0	60	60.5	0	0	37	3	0	0	40	40
18:00	0	0	0	0	0	0	0	0	0	0	46	4	1	0	51	52.3	0	0	41	0	0	1	42	43
18:15	0	0	0	0	0	0	0	0	0	0	61	5	0	0	66	66	0	0	39	4	0	1	44	45
18:30	0	0	0	0	0	0	0	0	0	0	55	3	1	0	59	60.3	0	0	39	0	0	1	40	41
18:45	0	0	0	0	0	0	0	0	0	0	41	3	0	0	44	44	1	0	44	2	0	1	48	48.2
12 TOT	0	0	0	0	0	0	0	0	10	0	1772	189	79	7	2057	2159	19	0	915	73	18	10	1035	1053

B=>A						B=>B						B=>C													
P/C	M/C	CAR	LGV	HGV	SV (BUS)	TOT	PCU	P/C	M/C	CAR	LGV	HGV	SV (BUS)	TOT	PCU	P/C	M/C	CAR	LGV	HGV	SV (BUS)	TOT	PCU		
0	0	27	4	0	1	32	33	0	0	0	0	0	0	0	0	0	0	19	3	2	0	24	26.6		
0	0	43	5	2	0	50	52.6	0	0	0	0	0	0	0	0	0	0	35	7	1	0	43	44.3		
0	0	40	9	2	0	51	53.6	0	0	0	0	0	0	0	0	0	0	33	5	0	1	39	40		
0	0	70	11	2	0	83	85.6	0	0	0	0	0	0	0	0	0	0	42	6	3	2	53	58.9		
0	0	46	7	0	0	53	53	0	0	0	0	0	0	0	0	0	0	54	3	4	0	61	66.2		
0	0	37	3	4	0	44	49.2	0	0	0	0	0	0	0	0	0	0	51	5	1	1	58	60.3		
0	0	34	4	2	0	40	42.6	0	0	0	0	0	0	0	0	0	0	50	6	0	0	56	56		
0	0	35	4	2	0	41	43.6	0	0	0	0	0	0	0	0	0	0	55	3	1	0	59	60.3		
0	0	40	4	1	0	45	46.3	0	0	0	0	0	0	0	0	0	0	71	5	3	0	79	82.9		
0	0	44	2	2	1	49	52.6	0	0	0	0	0	0	0	0	0	1	82	2	2	2	89	92.8		
1	0	62	5	0	0	68	67.2	0	0	0	0	0	0	0	0	0	0	86	4	2	1	93	96.6		
0	0	21	6	2	0	29	31.6	0	0	0	0	0	0	0	0	0	0	45	5	4	0	54	59.2		
0	0	24	5	2	0	31	33.6	0	0	0	0	0	0	0	0	0	0	38	3	2	0	43	45.6		
0	0	16	3	2	0	21	23.6	0	0	0	0	0	0	0	0	0	0	36	6	3	2	47	52.9		
0	0	22	1	2	0	25	27.6	0	0	0	0	0	0	0	0	0	0	47	4	4	0	55	60.2		
0	0	21	2	1	0	24	25.3	0	0	0	0	0	0	0	0	0	0	46	6	2	1	55	58.6		
0	0	18	0	2	0	20	22.6	0	0	0	0	0	0	0	0	0	0	34	5	2	0	41	43.6		
1	0	17	2	2	0	22	23.8	0	0	0	0	0	0	0	0	0	0	36	4	6	1	47	55.8		
0	0	18	2	4	0	24	29.2	0	0	0	0	0	0	0	0	0	0	31	6	2	0	39	41.6		
0	0	22	6	1	0	29	30.3	0	0	0	0	0	0	0	0	0	0	45	7	5	1	58	65.5		
0	0	12	2	5	0	19	25.5	0	0	0	0	0	0	0	0	0	0	43	3	4	1	51	57.2		
0	0	31	7	0	0	38	38	0	0	0	0	0	0	0	0	0	0	34	7	3	2	46	51.9		
0	0	20	4	1	0	25	26.3	0	0	0	0	0	0	0	0	0	0	61	1	0	0	62	62		
0	0	19	1	2	0	22	24.6	0	0	0	0	0	0	0	0	0	0	52	6	1	1	60	62.3		
0	0	16	4	1	0	21	22.3	0	0	0	0	0	0	0	0	0	0	53	4	7	0	64	73.1		
0	0	31	2	2	0	35	37.6	0	0	0	0	0	0	0	0	0	0	38	8	2	1	49	52.6		
0	0	17	3	1	0	21	22.3	0	0	0	0	0	0	0	0	0	0	46	6	1	0	53	54.3		
0	0	21	4	0	0	25	25	0	0	0	0	0	0	0	0	0	0	48	7	0	1	56	57		
0	0	35	3	1	1	40	42.3	0	0	0	0	0	0	0	0	0	1	103	7	1	1	113	114.5		
0	0	21	1	1	0	23	24.3	0	0	0	0	0	0	0	0	0	0	39	11	7	1	58	68.1		
0	0	17	3	1	0	21	22.3	0	0	0	0	0	0	0	0	0	0	53	6	2	0	61	63.6		
0	0	21	2	4	0	27	32.2	0	0	0	0	0	0	0	0	0	0	32	2	1	1	36	38.3		
0	0	53	1	1	2	57	60.3	0	0	0	0	0	0	0	0	0	0	91	7	2	1	101	104.6		
0	0	48	1	2	1	52	55.6	0	0	0	0	0	0	0	0	0	0	74	11	6	1	92	100.8		
0	0	28	3	0	0	31	31	0	0	0	0	0	0	0	0	0	0	56	8	4	0	68	73.2		
0	0	30	6	1	0	37	38.3	0	0	0	0	0	0	0	0	0	0	75	6	2	1	84	87.6		
2	0	50	5	1	0	58	57.7	0	0	0	0	0	0	0	0	0	0	114	9	1	0	124	125.3		
0	0	48	2	0	0	50	50	0	0	0	0	0	0	0	0	0	0	93	8	1	1	103	105.3		
0	0	49	3	0	0	52	52	0	0	0	0	0	0	0	0	0	0	96	25	5	1	127	134.5		
0	0	43	9	0	0	52	52	0	0	0	0	0	0	0	0	0	0	126	21	2	1	150	153.6		
0	0	38	4	0	0	42	42	0	0	0	0	0	0	0	0	0	0	106	22	1	1	130	132.3		
0	0	44	9	0	0	53	53	0	0	0	0	0	0	0	0	0	0	126	9	3	1	139	143.9		
0	0	40	4	0	1	45	46	0	0	0	0	0	0	0	0	0	0	116	18	0	0	134	134		
1	0	45	4	0	0	50	49.2	0	0	0	0	0	0	0	0	0	0	114	11	0	0	125	125		
0	0	47	2	0	0	49	49	0	0	0	0	0	0	0	0	0	0	118	13	1	1	133	135.3		
0	0	39	1	0	0	40	40	0	0	0	0	0	0	0	0	0	0	90	8	0	1	99	100		
0	0	42	1	1	1	45	47.3	0	0	0	0	0	0	0	0	0	0	77	5	1	0	83	84.3		
0	0	29	1	2	0	32	34.6	0	0	0	0	0	0	0	0	0	0	91	8	1	0	100	101.3		
5	0	1591	177	62	8	1843	1928	0	0	0	0	0	0	0	0	0	0	2	0	3101	352	108	31	3594	3764



IDASO

Survey Name: HDR 20-015 Ratoath (039 20049)
Site: Site 7
Location: Main St/ Moulden Bridge
Date: Wed 21-Feb-2018

TIME	A => A							TOT	PCU	A => B							TOT	PCU	A => C							TOT	PCU
	P/C	M/C	CAR	LGW	OGV1	OGV2	SV(BUS)			P/C	M/C	CAR	LGW	OGV1	OGV2	SV(BUS)			P/C	M/C	CAR	LGW	OGV1	OGV2	SV(BUS)		
07:00	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	6	6	0	0	5	1	0	0	0	6	6
07:15	0	0	0	0	0	0	0	0	0	0	0	10	1	0	0	0	11	11	0	0	2	0	0	0	0	2	2
07:30	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4	0	0	7	1	0	0	0	8	8
07:45	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6	0	0	6	0	0	0	0	6	6
08:00	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8	0	0	6	0	0	0	0	6	6
08:15	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6	0	0	7	0	0	0	0	7	7
08:30	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	7	7	0	0	5	1	0	0	0	6	6
08:45	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7	0	0	12	0	0	0	0	12	12
09:00	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7	0	0	9	0	0	0	0	9	9
09:15	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4	0	0	6	1	0	0	0	7	7
09:30	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	6	6	0	0	3	1	0	0	0	4	4
09:45	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4	0	0	4	0	0	0	0	4	4
10:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	2	1	0	0	0	3	3
10:15	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4	0	0	4	0	0	0	0	4	4
10:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	3	0	0	0	0	3	3
10:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	2	0	0	0	0	2	2
11:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	4	0	0	0	0	4	4
11:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2
11:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	3	0	0	0	0	3	3
12:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2
12:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	6	0	0	0	0	6	6
12:30	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2	0	0	6	0	0	0	0	6	6
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
13:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	5	0	0	0	0	5	5
13:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	6	1	0	0	0	7	7
13:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	4	0	0	0	0	4	4
13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	4
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	3
14:15	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	9	0	0	0	0	9	9
14:30	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	3	1	0	0	0	4	4
14:45	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	3	3.5	0	0	4	1	0	0	0	5	5
15:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	4	2	0	0	0	6	6
15:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	5	0	0	0	0	5	5
15:30	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4	0	0	7	0	0	0	0	7	7
15:45	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4	0	0	7	0	0	0	0	7	7
16:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	4	1	0	0	0	5	5
16:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2
16:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	2	1	0	0	0	3	3
16:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	8	0	0	0	0	8	8
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	0	7	7
17:15	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	6	0	0	0	0	6	6
17:30	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	3	0	0	0	0	3	3
17:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	4	0	0	0	0	4	4
18:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	7	0	0	0	0	7	7
18:15	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	11	0	0	0	0	11	11
18:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	7	0	0	0	0	7	7
18:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	15	0	0	0	0	15	15
12 TOT	0	0	0	0	0	0	0	0	0	0	0	135	7	1	0	0	143	143.5	0	0	244	14	0	0	0	258	258

B=> A							B=> B							B=> C												
P/C	M/C	CAR	LGV	OGV1	OGV2	IV(BUS	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	IV(BUS	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	IV(BUS	TOT	PCU
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	8	4	4	2	50	59.2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42	3	0	1	2	48	51.3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	7	4	0	2	49	53
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	4	1	0	1	56	57.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54	1	2	1	1	59	62.3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54	7	1	0	1	63	64.5
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	36	4	0	2	1	43	46.6
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56	6	1	3	1	67	72.4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	7	2	0	1	47	49
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	39	8	0	0	1	48	49
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	44	6	0	1	1	52	54.3
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	30	7	1	1	0	39	40.8
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	5	1	1	1	45	47.8
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	36	6	1	1	1	45	47.8
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	36	3	0	1	1	41	43.3
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	35	6	2	1	0	44	46.3
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	43	3	2	1	2	51	55.3
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	37	7	1	0	0	45	45.5
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	43	9	0	2	1	55	58.6
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	49	3	0	2	0	54	56.6
0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	42	8	1	2	1	54	58.1
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	50	8	4	1	1	64	68.3
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	47	4	1	0	2	54	56.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52	8	1	3	0	64	68.4
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	53	8	2	2	3	68	74.6
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61	11	3	0	0	75	76.5
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	85	9	2	1	1	98	101.3
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	68	7	1	6	2	84	94.3
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	81	16	1	5	1	104	112
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	75	11	0	2	0	88	90.6
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	94	5	3	1	3	106	111.8
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	77	8	3	2	0	90	94.1
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	76	6	0	3	2	87	92.9
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	91	14	2	0	0	107	108
0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	89	10	6	1	1	107	112.3
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	96	15	2	1	0	114	116.3
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	111	10	3	1	1	126	129.8
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	131	21	4	0	0	156	158
0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	118	26	0	1	1	146	148.3
0	0	1	2	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	124	16	1	0	0	141	141.5
0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	163	23	1	1	1	189	191.8
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	145	28	1	0	0	174	174.5
0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	161	22	0	0	0	183	183
0	0	9	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	191	28	0	0	1	220	221
0	0	8	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	246	24	0	1	0	271	272.3
0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	268	28	0	2	3	301	306.6
0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	0	238	17	0	0	1	256	257
0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	151	3	1	0	1	156	157.5
0	0	97	4	0	0	0	101	101	0	0	0	0	0	0	0	0	0	0	0	4010	504	66	58	46	4684	4838

C>=> A										C>=> B										C>=> C									
P/C	M/C	CAR	LGW	OGV1	OGV2	IV(BU)	TOT	PCU		P/C	M/C	CAR	LGW	OGV1	OGV2	IV(BU)	TOT	PCU		P/C	M/C	CAR	LGW	OGV1	OGV2	IV(BU)	TOT	PCU	
0	0	6	0	0	0	0	6	6		0	0	269	41	1	1	2	314	317.8		0	0	0	0	0	0	0	0	0	
0	0	0	0	0	1	0	1	1.5		0	0	269	32	1	2	3	307	313.1		0	0	0	0	0	0	0	0	0	
0	0	1	0	0	0	0	1	1		0	0	265	23	1	1	3	293	297.8		0	0	0	0	0	0	0	0	0	
0	0	2	1	0	0	0	3	3		0	0	199	24	3	2	3	231	238.1		0	0	0	0	0	0	0	0	0	
0	0	3	1	0	0	0	4	4		0	0	193	18	1	1	1	214	216.8		0	0	0	1	0	0	0	1	1	
0	0	6	0	0	0	0	6	6		0	0	159	15	3	3	1	181	187.4		0	0	0	0	0	0	0	0	0	
0	0	2	0	0	0	0	2	2		0	0	175	14	2	1	1	193	196.3		0	0	0	0	0	0	0	0	0	
0	0	3	1	0	0	0	4	4		0	0	129	17	0	2	0	148	150.6		0	0	0	0	0	0	0	0	0	
0	0	11	0	0	0	0	11	11		0	0	148	9	1	2	0	160	163.1		0	0	0	0	0	0	0	0	0	
0	0	3	1	0	0	0	4	4		0	0	121	9	0	0	1	131	132		0	0	0	0	0	0	0	0	0	
0	0	9	1	0	0	0	10	10		0	0	116	10	1	0	1	128	129.5		0	0	0	0	0	0	0	0	0	
0	0	3	0	0	0	0	3	3		0	0	82	8	3	1	0	94	96.8		0	0	0	0	0	0	0	0	0	
0	0	3	0	0	0	0	3	3		0	0	70	10	2	0	1	83	85		0	0	0	0	0	0	0	0	0	
0	0	3	2	0	0	0	5	5		0	0	67	7	2	2	2	80	85.6		0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0		0	0	56	9	1	1	1	68	70.8		0	0	1	0	0	0	0	1	1	
0	0	0	0	0	0	0	0	0		0	0	58	8	2	1	2	71	75.3		0	0	0	0	0	0	0	0	0	
0	0	4	0	0	0	0	4	4		0	0	53	7	1	1	1	63	65.8		0	0	0	0	0	0	0	0	0	
0	0	4	0	0	0	0	4	4		0	0	63	6	0	1	0	70	71.3		0	0	0	0	0	0	0	0	0	
0	0	4	1	0	0	0	5	5		0	0	42	13	1	0	0	56	56.5		0	0	0	0	0	0	0	0	0	
0	0	3	1	0	0	0	4	4		0	0	49	7	1	1	2	60	63.8		0	0	0	0	0	0	0	0	0	
0	0	6	0	0	0	0	6	6		0	0	58	9	1	5	0	73	80		0	0	0	0	0	0	0	0	0	
0	0	2	0	0	0	0	2	2		0	0	55	10	2	1	1	69	72.3		0	0	0	0	0	0	0	0	0	
0	0	3	0	0	0	0	3	3		0	0	61	7	5	0	0	73	75.5		0	0	0	0	0	0	0	0	0	
0	0	4	0	0	0	0	4	4		0	0	56	8	3	3	0	70	75.4		0	0	0	0	0	0	0	0	0	
0	0	10	0	0	0	0	10	10		0	0	56	10	2	1	1	70	73.3		0	0	0	0	0	0	0	0	0	
0	0	4	0	0	0	0	4	4		0	0	50	6	4	1	1	62	66.3		0	0	0	0	0	0	0	0	0	
0	0	2	0	0	0	0	2	2		0	0	33	7	1	1	1	43	45.8		0	0	0	0	0	0	0	0	0	
0	0	7	0	0	0	0	7	7		0	0	51	9	0	4	1	65	71.2		0	0	0	0	0	0	0	0	0	
0	0	8	1	0	0	0	9	9		0	0	54	8	2	1	2	67	71.3		0	0	0	0	0	0	0	0	0	
0	0	3	2	0	0	0	5	5		0	0	45	5	0	3	1	54	58.9		0	0	0	0	0	0	0	0	0	
0	0	1	1	1	0	0	3	3.5		0	0	43	6	1	0	1	51	52.5		0	0	0	0	0	0	0	0	0	
0	0	7	1	0	0	0	8	8		0	0	54	3	2	1	1	61	64.3		0	0	0	0	0	0	0	0	0	
0	0	9	2	0	0	0	11	11		0	0	49	8	0	3	3	63	69.9		0	0	0	0	0	0	0	0	0	
0	0	8	0	0	0	0	8	8		0	0	47	4	1	1	1	54	56.8		0	0	0	1	0	0	0	1	1	
0	0	9	0	0	0	0	9	9		0	0	67	6	1	0	3	77	80.5		0	0	0	0	0	0	0	0	0	
0	0	9	0	0	0	0	9	9		0	0	60	9	1	2	0	72	75.1		0	0	2	0	0	0	0	2	2	
0	0	3	1	0	0	0	4	4		0	0	38	9	3	0	2	52	55.5		0	0	0	0	0	0	0	0	0	
0	0	8	0	0	0	0	8	8		0	0	48	8	1	0	1	58	59.5		0	0	0	0	0	0	0	0	0	
0	0	10	0	0	0	0	10	10		0	0	38	10	0	1	0	49	50.3		0	0	1	0	0	0	0	1	1	
0	0	4	0	0	0	0	4	4		0	0	41	13	4	0	0	58	60		0	0	0	0	0	0	0	0	0	
0	0	4	0	0	0	0	4	4		0	0	48	12	4	1	1	66	70.3		0	0	0	0	0	0	0	0	0	
0	0	4	0	0	0	0	4	4		0	0	48	5	1	0	1	55	56.5		0	0	0	0	0	0	0	0	0	
0	0	13	1	0	0	0	14	14		0	0	48	4	1	0	0	53	53.5		0	0	0	0	0	0	0	0	0	
0	0	7	1	0	0	0	8	8		0	0	52	4	2	0	1	59	61		0	0	0	0	0	0	0	0	0	
0	0	4	0	0	0	0	4	4		0	0	52	4	0	0	0	56	56		0	0	0	0	0	0	0	0	0	
0	0	11	0	0	0	0	11	11		0	0	69	1	0	0	2	72	74		0	0	0	0	0	0	0	0	0	
0	0	16	0	0	0	0	16	16		0	0	68	0	1	0	3	72	75.5		0	0	0	0	0	0	0	0	0	
0	0	12	0	0	0	0	12	12		0	0	71	1	0	0	0	72	72		0	0	0	0	0	0	0	0	0	
0	0	258	19	2	0	0	279	280		0	0	4043	473	70	52	53	4691	4847		0	0	4	2	0	0	0	6	6	



	A => A										A => B										A => C									
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	IV (BUS)	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	IV (BUS)	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	IV (BUS)	TOT	PCU			
07:00	0	0	0	0	0	0	0	0	0	0	0	0	197	34	1	1	2	235	238.8	0	0	0	77	8	0	0	0	85	85	
07:15	0	0	0	0	0	0	0	0	0	0	0	220	29	1	2	2	254	259.1	0	0	0	59	4	0	0	1	64	65		
07:30	0	0	0	0	0	0	0	0	0	0	0	212	14	1	1	3	231	235.8	0	0	0	57	9	0	0	0	66	66		
07:45	0	0	0	0	0	0	0	0	0	0	0	178	18	2	2	3	203	209.6	0	0	0	27	6	1	0	0	34	34.5		
08:00	0	0	0	0	0	0	0	0	0	0	0	163	15	1	1	1	181	183.8	0	0	0	38	3	0	0	0	41	41		
08:15	0	0	0	0	0	0	0	0	0	0	0	164	15	3	3	1	186	192.4	0	0	0	1	0	0	0	0	1	1		
08:30	0	0	0	0	0	0	0	0	0	0	0	181	15	2	1	1	200	201.3	0	0	0	0	0	0	0	0	0	0		
08:45	0	0	0	0	0	0	0	0	0	0	0	125	17	0	2	0	144	146.6	0	0	0	11	0	0	0	0	11	11		
09:00	0	0	0	0	0	0	0	0	0	0	0	152	9	1	2	0	164	167.1	0	0	0	3	0	0	0	0	3	3		
09:15	0	0	0	0	0	0	0	0	0	0	0	114	7	0	0	1	122	123	0	0	0	11	2	0	0	0	13	13		
09:30	0	0	0	0	0	0	0	0	0	0	0	108	7	1	0	0	116	116.5	0	0	0	13	4	0	0	1	18	19		
09:45	0	0	0	0	0	0	0	0	0	0	0	75	3	3	0	0	81	82.5	0	0	0	11	5	0	1	0	17	18.3		
10:00	0	0	0	0	0	0	0	0	0	0	0	62	10	2	0	1	75	77	0	0	0	10	0	0	0	0	10	10		
10:15	0	0	0	0	0	0	0	0	0	0	0	71	7	2	2	2	84	89.6	0	0	0	0	0	0	0	0	0	0		
10:30	0	0	0	0	0	0	0	0	0	0	0	52	6	1	1	1	61	63.8	0	0	0	5	3	0	0	0	8	8		
10:45	0	0	0	0	0	0	0	0	0	0	0	51	6	1	1	2	61	64.8	0	0	0	10	2	1	0	0	13	13.5		
11:00	0	0	0	0	0	0	0	0	0	0	0	47	5	1	1	1	55	57.8	0	0	0	8	2	0	0	0	10	10		
11:15	0	0	0	0	0	0	0	0	0	0	0	59	5	0	0	0	64	64	0	0	0	5	1	0	1	0	7	8.3		
11:30	0	0	0	0	0	0	0	0	0	0	0	34	10	1	0	0	45	45.5	0	0	0	9	3	0	0	0	12	12		
11:45	0	0	0	0	0	0	0	0	0	0	0	41	7	1	1	2	52	55.8	0	0	0	8	1	0	0	0	9	9		
12:00	0	0	0	0	0	0	0	0	0	0	0	49	6	1	5	0	61	68	0	0	0	10	3	0	0	0	13	13		
12:15	0	0	0	0	0	0	0	0	0	0	0	52	6	2	1	1	62	65.3	0	0	0	5	4	0	0	0	9	9		
12:30	0	0	0	0	0	0	0	0	0	0	0	53	6	4	0	0	63	65	0	0	0	9	2	1	0	0	12	12.5		
12:45	0	0	0	0	0	0	0	0	0	0	0	45	6	2	3	0	56	60.9	0	0	0	11	2	1	0	0	14	14.5		
13:00	0	0	0	0	0	0	0	0	0	0	0	44	10	2	1	1	58	61.3	0	0	0	13	0	0	0	0	13	13		
13:15	0	0	0	0	0	0	0	0	0	0	0	41	6	3	1	1	52	55.8	0	0	0	11	0	1	0	0	12	12.5		
13:30	0	0	0	0	0	0	0	0	0	0	0	27	5	1	1	1	35	37.8	0	0	0	8	2	0	0	0	10	10		
13:45	0	0	0	0	0	0	0	0	0	0	0	39	7	0	4	1	51	57.2	0	0	0	12	2	0	0	0	14	14		
14:00	0	0	0	0	0	0	0	0	0	0	0	46	7	2	1	2	58	62.3	0	0	0	8	1	0	0	0	9	9		
14:15	0	0	0	0	0	0	0	0	0	0	0	41	1	0	3	1	46	50.9	0	0	0	7	4	0	0	0	11	11		
14:30	0	0	0	0	0	0	0	0	0	0	0	42	2	1	0	0	45	45.5	0	0	0	4	4	0	0	1	9	10		
14:45	0	0	0	0	0	0	0	0	0	0	0	44	2	3	1	1	51	54.8	0	0	0	12	1	0	0	0	13	13		
15:00	0	0	0	0	0	0	0	0	0	0	0	39	5	0	3	3	50	56.9	0	0	0	12	3	0	0	0	15	15		
15:15	0	0	0	0	0	0	0	0	0	0	0	37	4	0	1	1	43	45.3	0	0	0	12	0	1	0	0	13	13.5		
15:30	0	0	0	0	0	0	0	0	0	0	0	56	4	1	0	3	64	67.5	0	0	0	15	2	0	0	0	17	17		
15:45	0	0	0	0	0	0	0	0	0	0	0	54	7	1	2	0	64	67.1	0	0	0	9	3	0	0	0	12	12		
16:00	0	0	0	0	0	0	0	0	0	0	0	26	7	3	0	2	38	41.5	0	0	0	14	2	0	0	0	16	16		
16:15	0	0	0	0	0	0	0	0	0	0	0	38	8	1	0	1	48	49.5	0	0	0	11	0	0	0	0	11	11		
16:30	0	0	0	0	0	0	0	0	0	0	0	34	6	0	1	0	41	42.3	0	0	0	5	4	0	0	0	9	9		
16:45	0	0	0	0	0	0	0	0	0	0	0	34	12	4	0	0	50	52	0	0	0	10	1	0	0	0	11	11		
17:00	0	0	0	0	0	0	0	0	0	0	0	40	10	3	1	1	55	58.8	0	0	0	8	2	1	0	0	11	11.5		
17:15	0	0	0	0	0	0	0	0	0	0	0	40	4	1	0	1	46	47.5	0	0	0	11	1	0	0	0	12	12		
17:30	0	0	0	0	0	0	0	0	0	0	0	38	1	1	0	0	40	40.5	0	0	0	13	3	0	0	0	16	16		
17:45	0	0	0	0	0	0	0	0	0	0	0	43	3	1	0	1	48	49.5	0	0	0	10	1	1	0	0	12	12.5		
18:00	0	0	0	0	0	0	0	0	0	0	0	45	4	0	0	0	49	49	0	0	0	9	0	0	0	0	9	9		
18:15	0	0	0	0	0	0	0	0	0	0	0	59	0	0	0	2	61	63	0	0	0	13	1	0	0	0	14	14		
18:30	0	0	0	0	0	0	0	0	0	0	0	58	0	1	0	3	62	65.5	0	0	0	11	0	0	0	0	11	11		
18:45	0	0	0	0	0	0	0	0	0	0	0	56	1	0	0	0	57	57	0	0	0	16	0	0	0	0	16	16		
12 TOT	0	0	0	0	0	0	0	0	0	0	0	3526	379	63	50	50	4068	4215	0	0	0	652	101	8	2	3	766	775		

B=> A												B=> B												B=> C																
P/C	M/C	CAR	LGV	OGV1	OGV2	IV(BUS	TOT	PCU		P/C	M/C	CAR	LGV	OGV1	OGV2	IV(BUS	TOT	PCU		P/C	M/C	CAR	LGV	OGV1	OGV2	IV(BUS	TOT	PCU		P/C	M/C	CAR	LGV	OGV1	OGV2	IV(BUS	TOT	PCU		
0	0	27	3	4	4	1	39	47.2		0	0	0	0	0	0	0	0	0		0	0	0	1	0	0	0	0	1	1		0	0	0	1	0	0	0	0	1	1
0	0	36	3	0	1	2	42	45.3		0	0	0	0	0	0	0	0	0		0	0	0	1	0	0	0	0	1	1		0	0	0	1	0	0	0	0	1	1
0	0	28	6	4	0	2	40	44		0	0	0	0	0	0	0	0	0		0	0	0	1	0	0	0	0	1	1		0	0	0	1	0	0	0	0	1	1
0	0	31	4	0	0	1	36	37		0	0	0	0	0	0	0	0	0		0	0	0	1	1	0	0	0	2	2		0	0	0	1	1	0	0	0	2	2
0	0	43	1	2	1	1	48	51.3		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0
0	0	48	6	1	0	1	56	57.5		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0
0	0	37	4	0	2	1	44	47.6		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0
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[illegible]

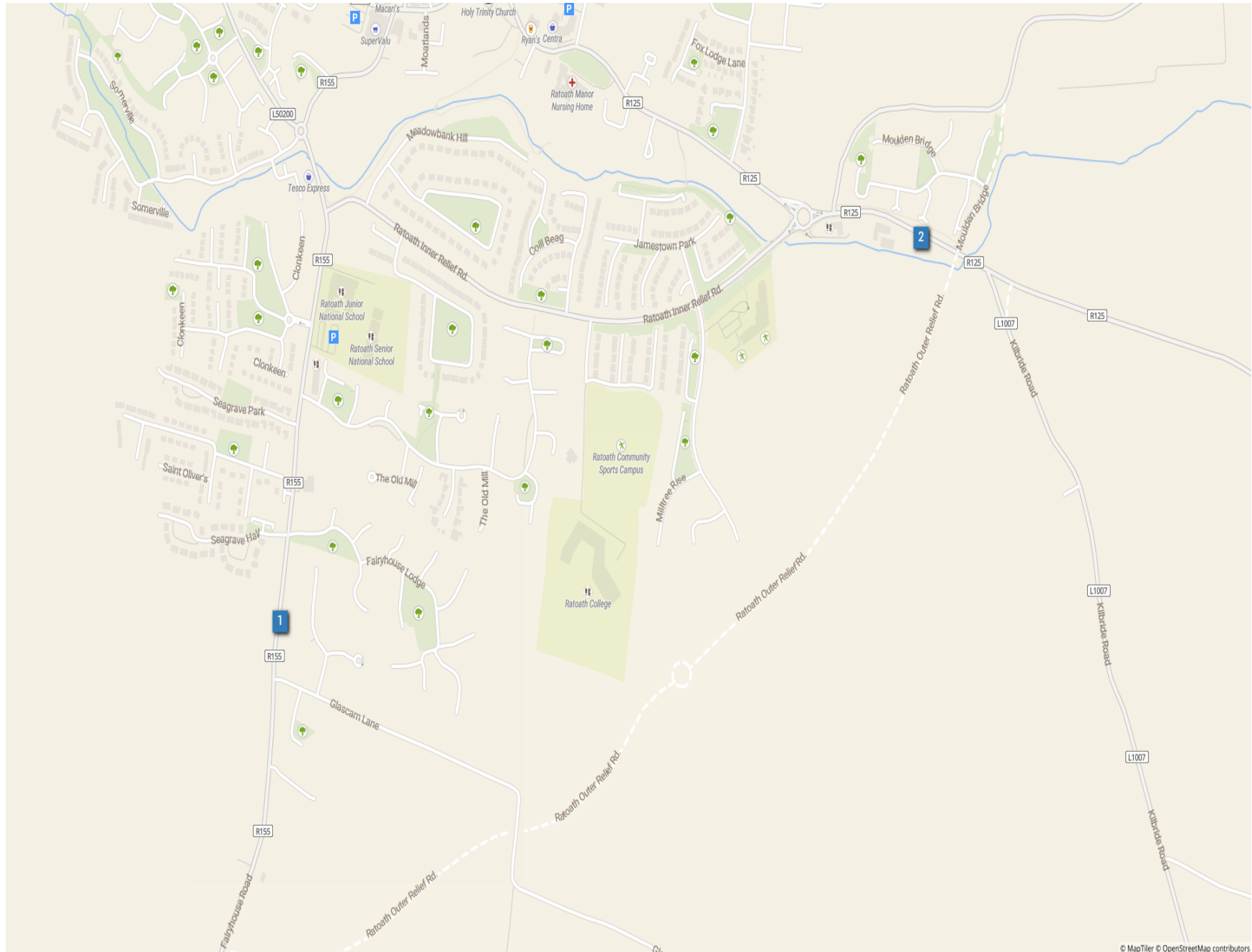
B=> A										TOT	PCU	B=> B										TOT	PCU	B=> C										TOT	PCU	B=> D										TOT	PCU
P/C	M/C	CAR	LGV	OGV1	OGV2	SV	(BUS					P/C	M/C	CAR	LGV	OGV1	OGV2	SV	(BUS					P/C	M/C	CAR	LGV	OGV1	OGV2	SV	(BUS					P/C	M/C	CAR	LGV	OGV1	OGV2	SV	(BUS				
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C=> A								TOT	PCU	C=> B								TOT	PCU	C=> C								TOT	PCU	C=> D								TOT	PCU
P/C	M/C	CAR	LGV	OGV1	OGV2	SV	(BUS			P/C	M/C	CAR	LGV	OGV1	OGV2	SV	(BUS			P/C	M/C	CAR	LGV	OGV1	OGV2	SV	(BUS			P/C	M/C	CAR	LGV	OGV1	OGV2	SV	(BUS		
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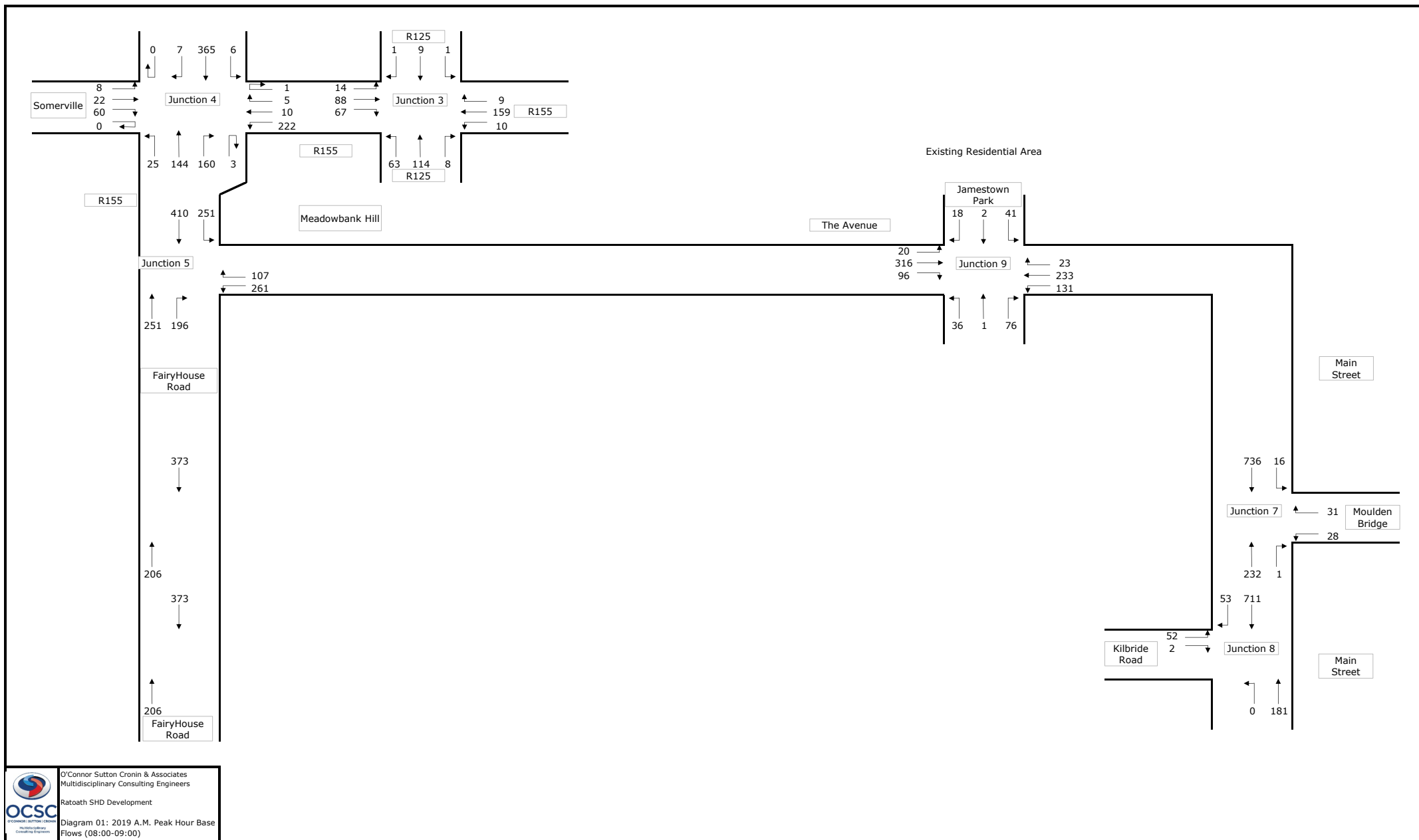
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Survey Name: HDR 20-015 Ratoath (039 20049)

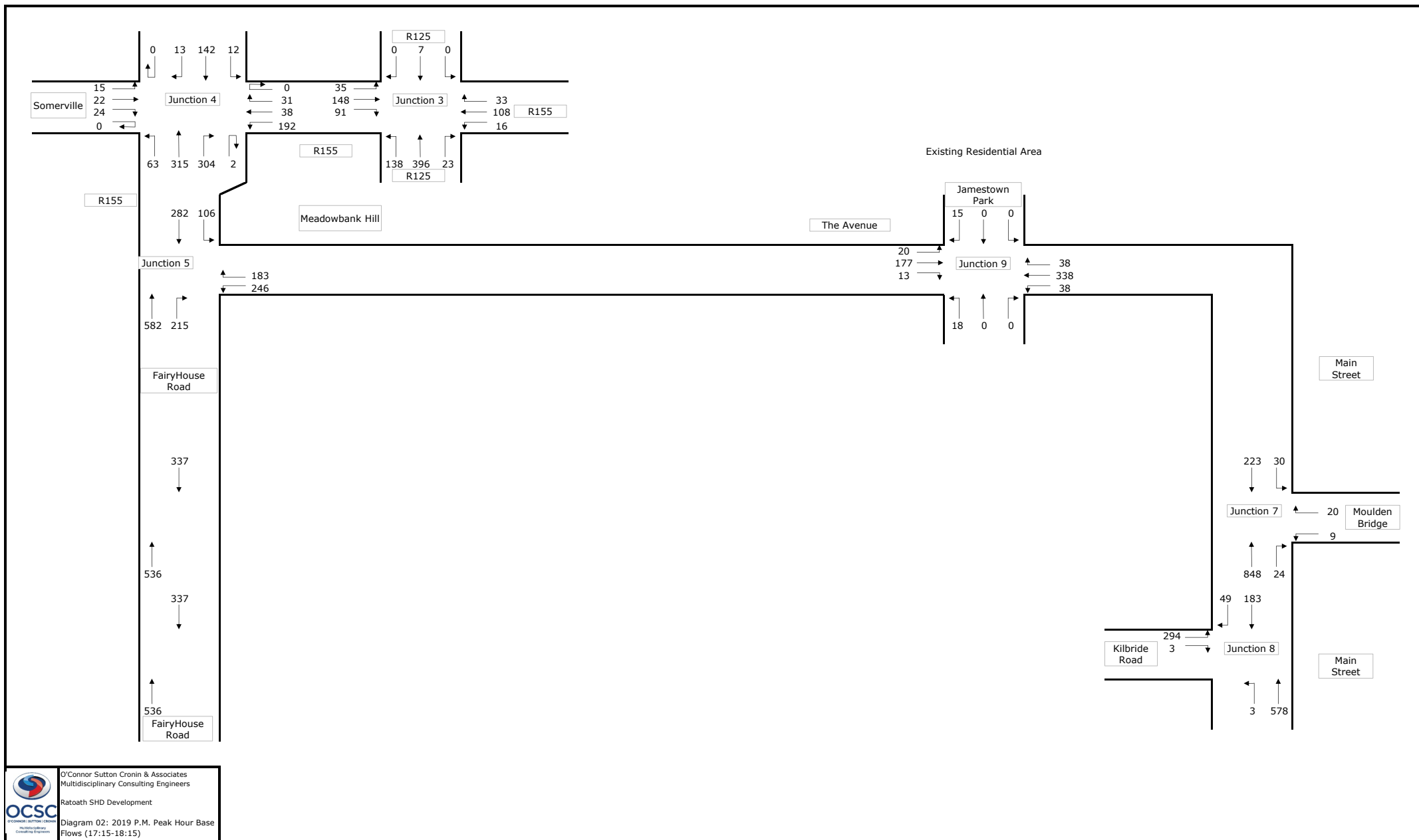
Date: Wed 21 Feb 2018

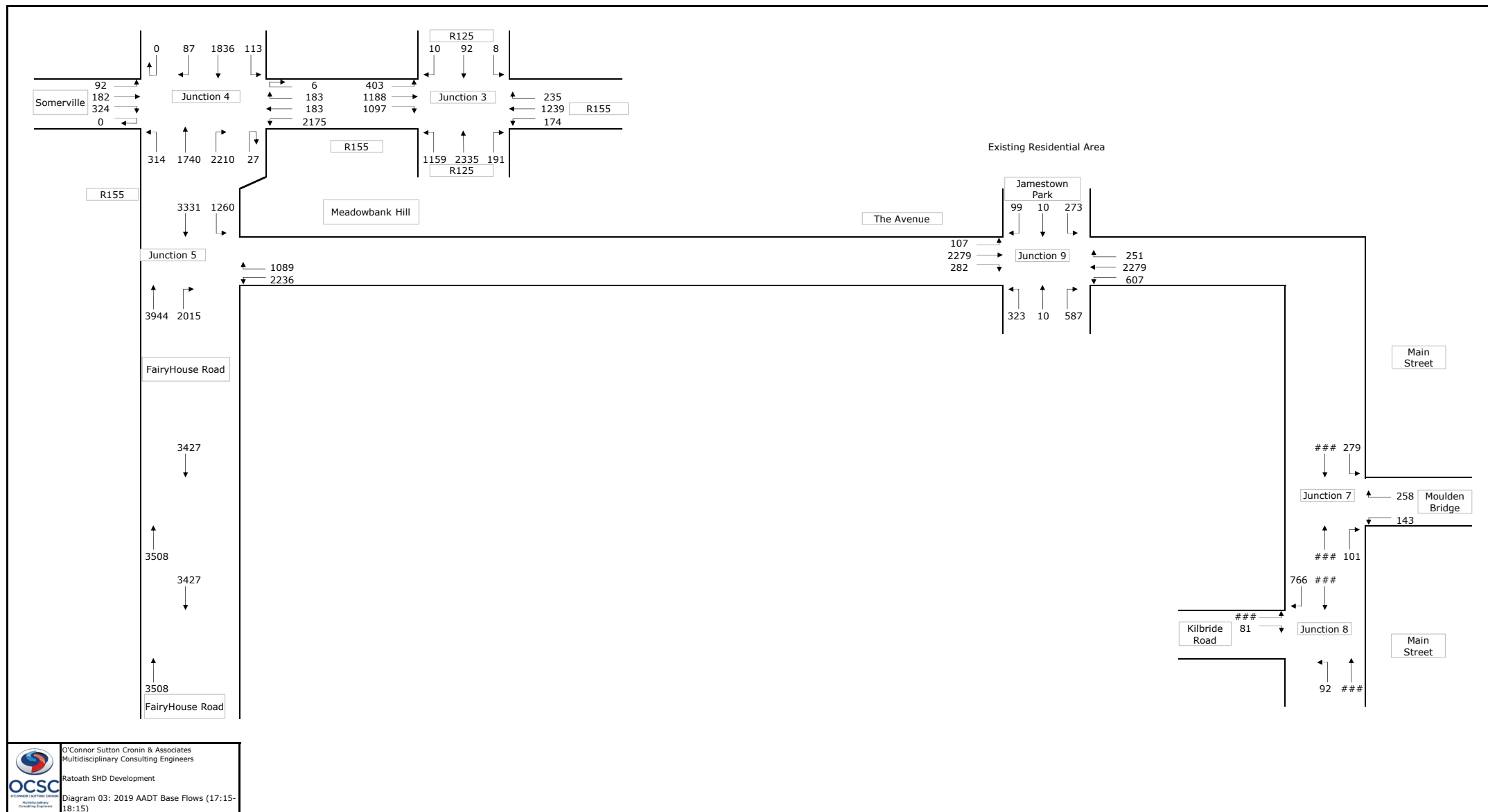


APPENDIX B: TRAFFIC FLOW DIAGRAMS



O'Connor Sutton Cronin & Associates
Multidisciplinary Consulting Engineers
Ratoath SHD Development
Diagram 01: 2019 A.M. Peak Hour Base
Flows (08:00-09:00)

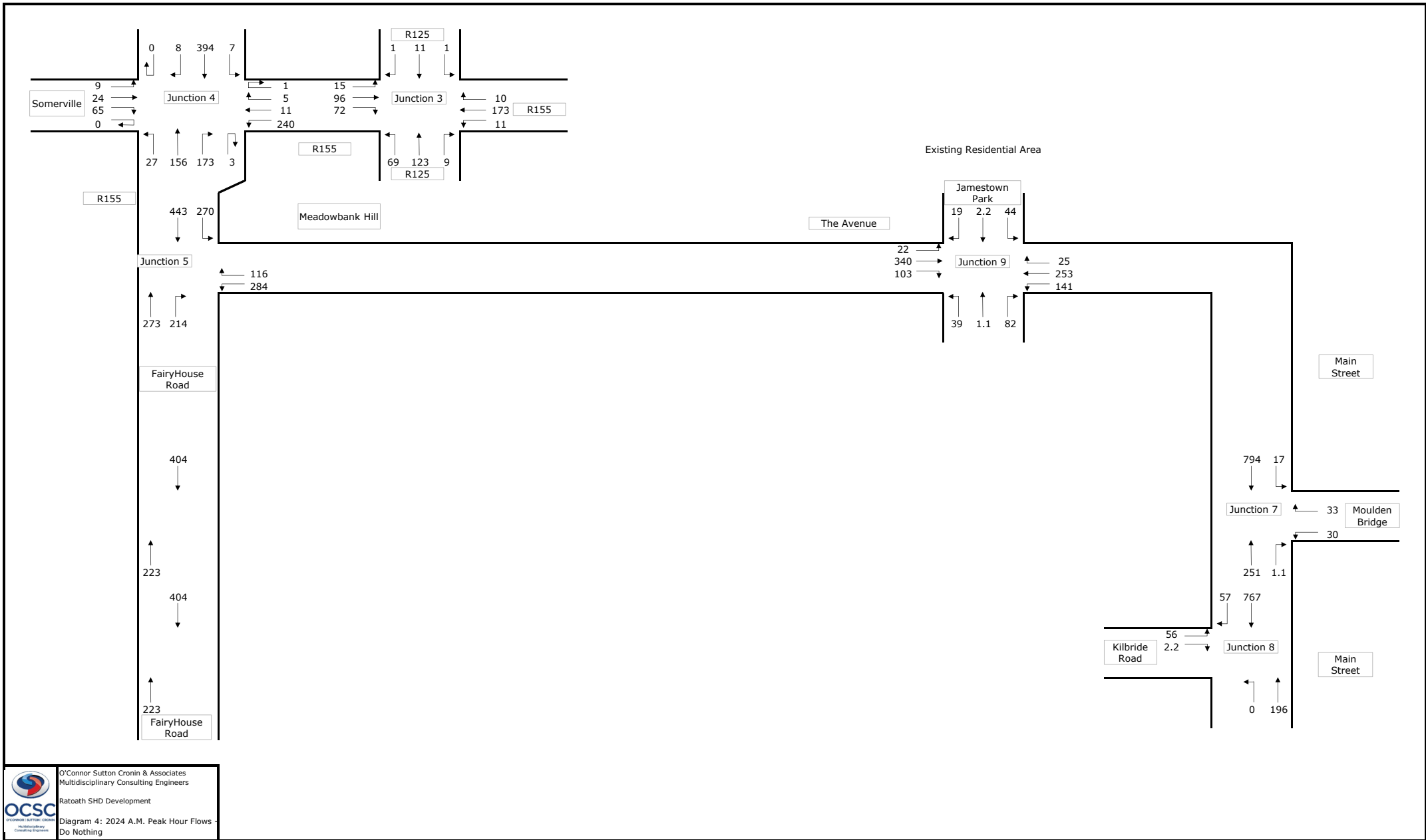


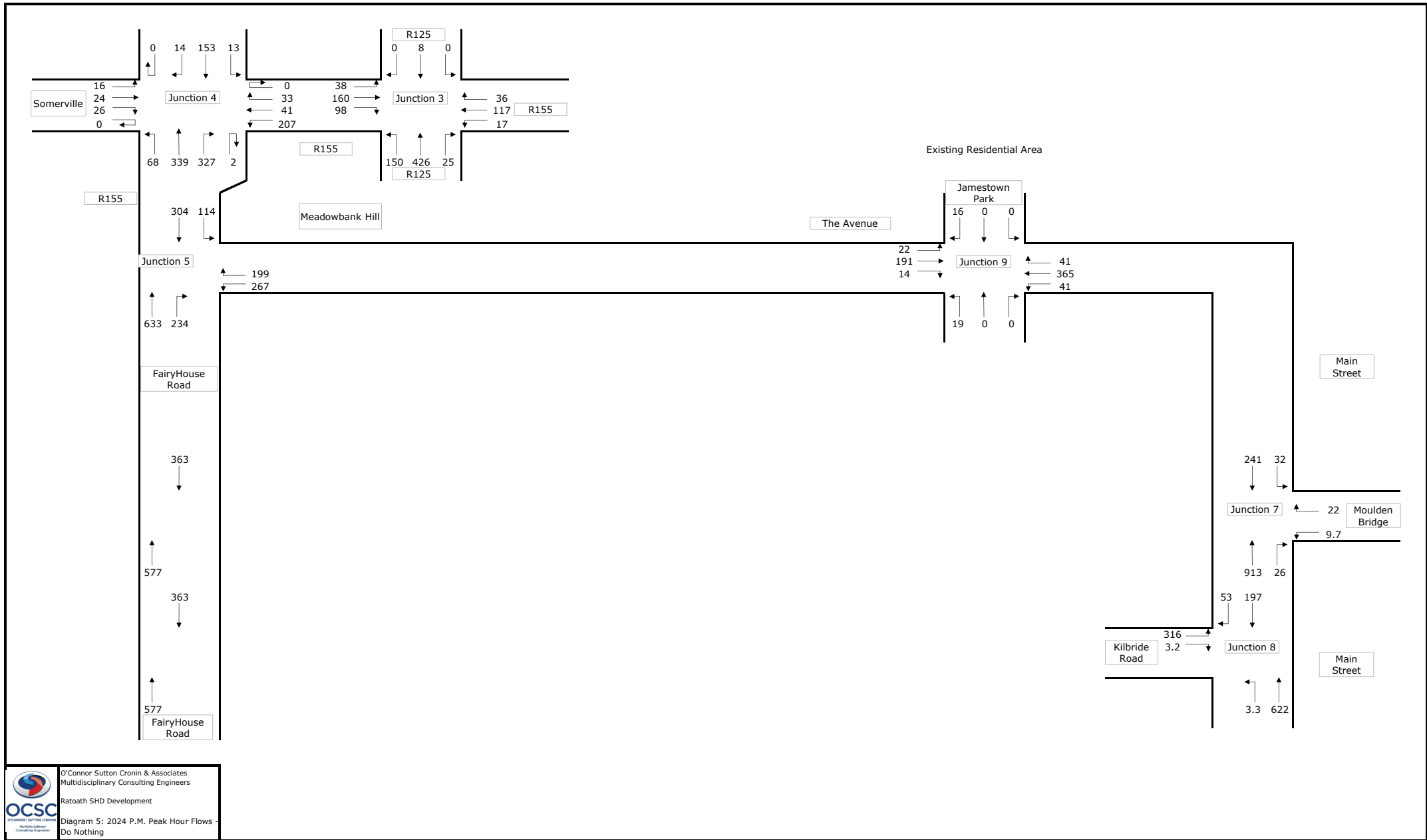


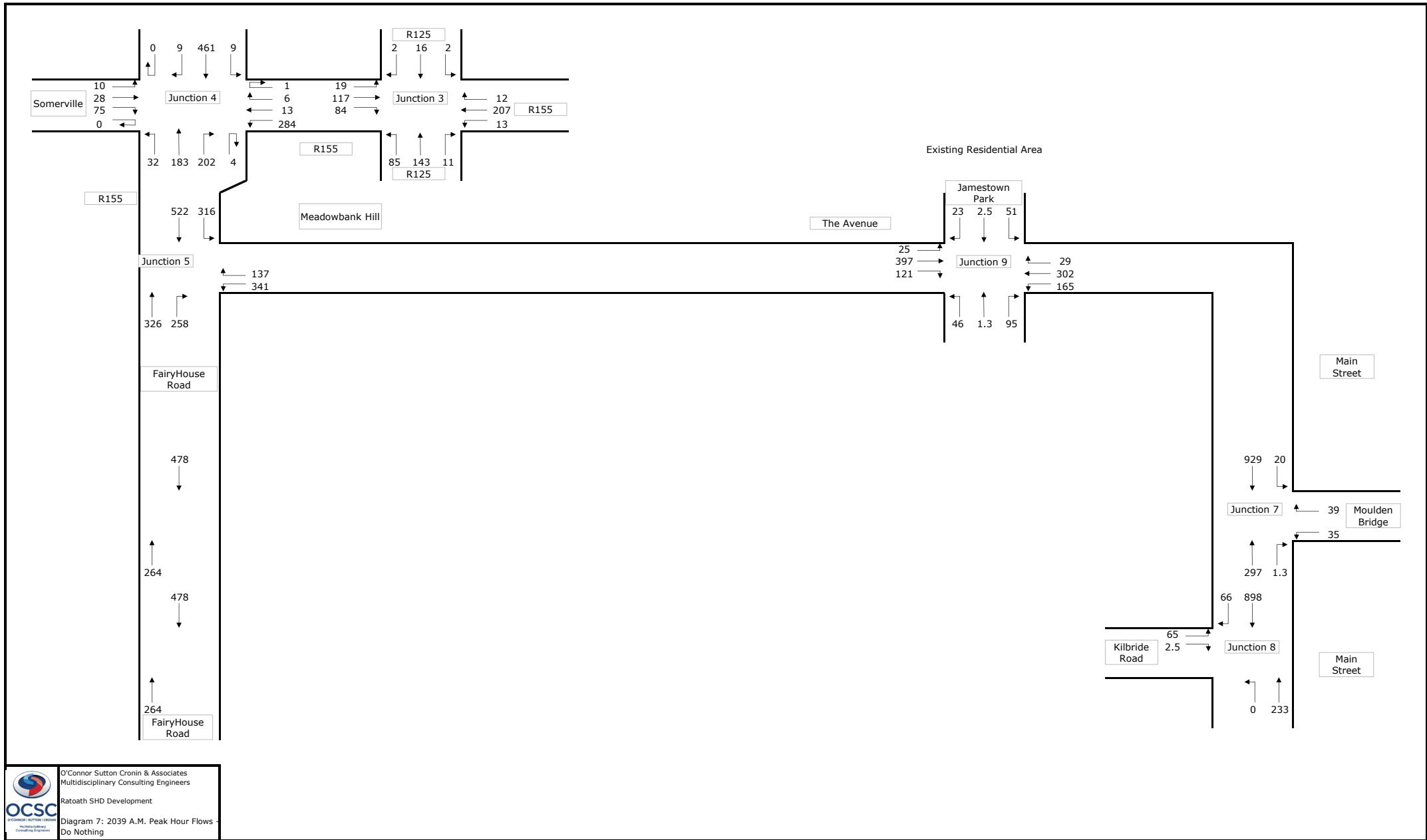
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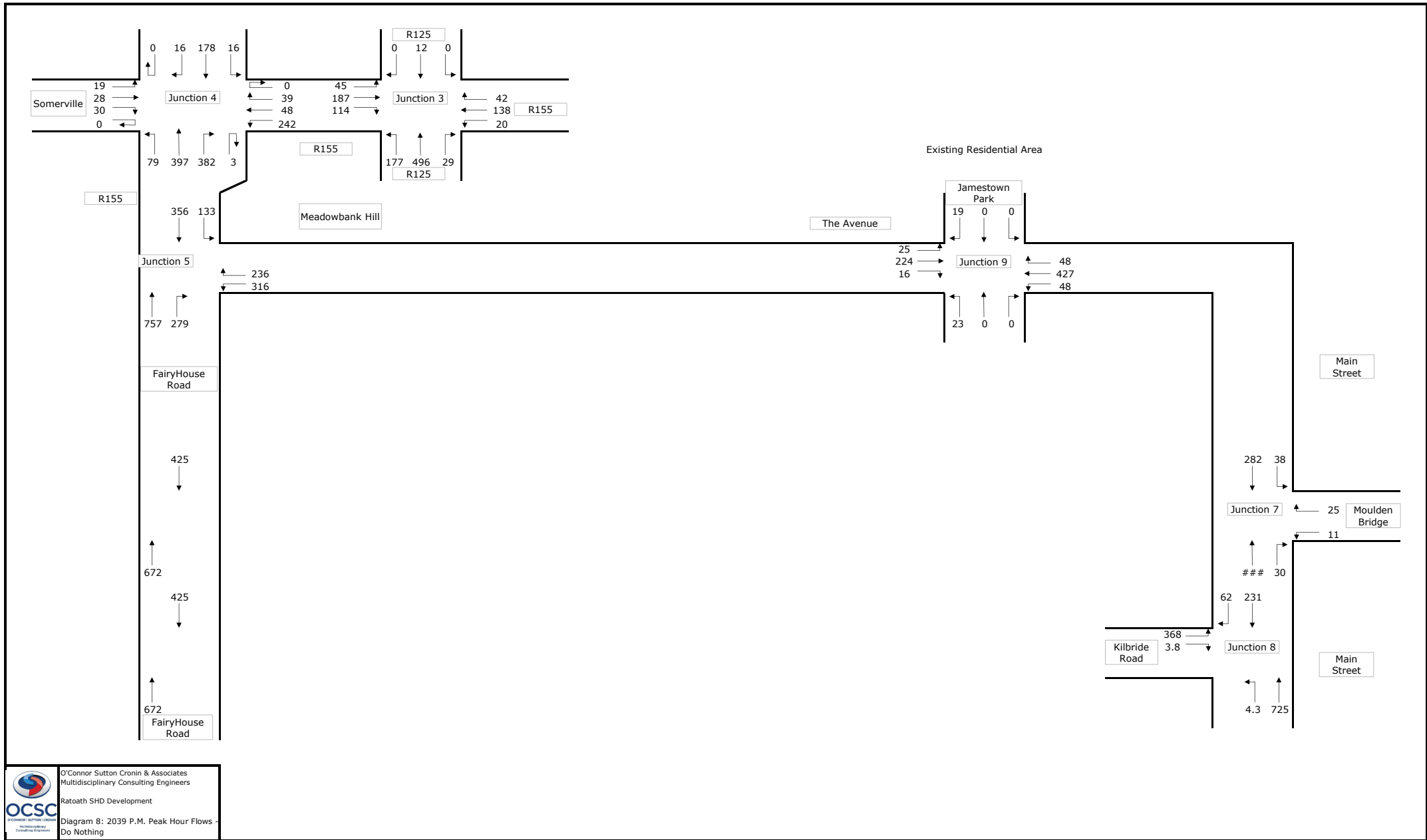
Diagram 03: 2019 AADT Base Flows (17:15-18:15)







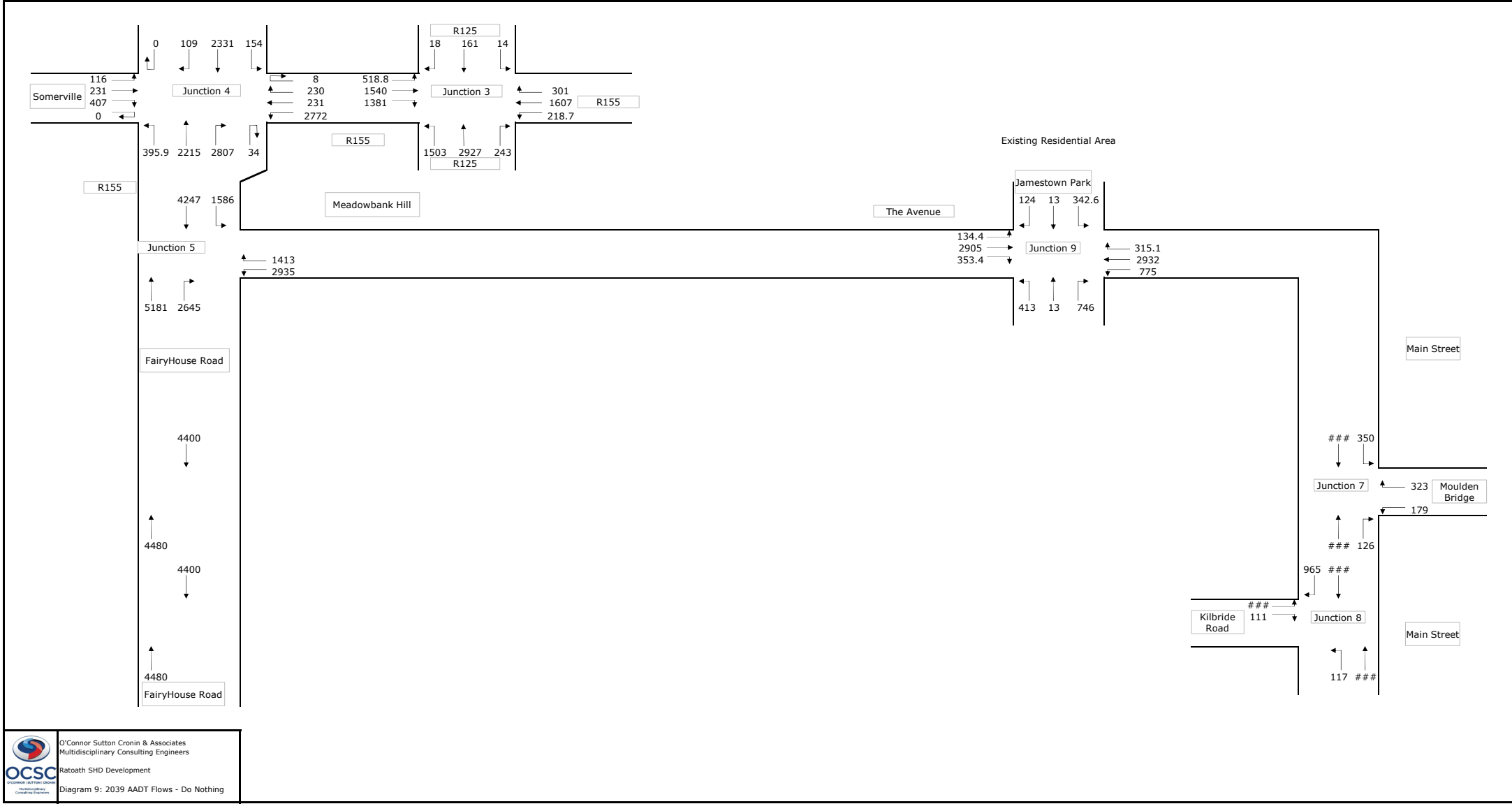
O'Connor Sutton Cronin & Associates
Multidisciplinary Consulting Engineers
Ratoath SHD Development
Diagram 7: 2039 A.M. Peak Hour Flows -
Do Nothing

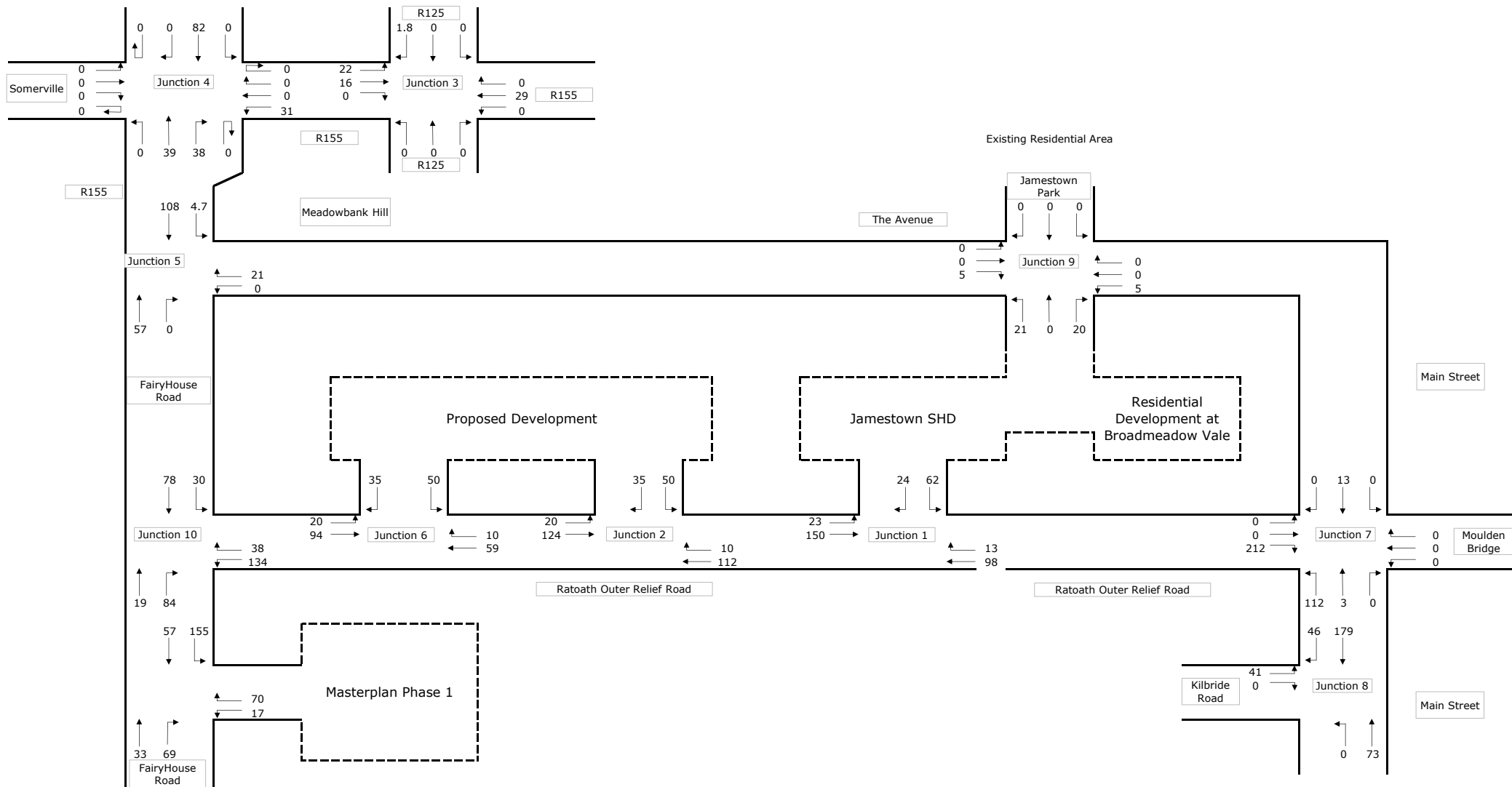


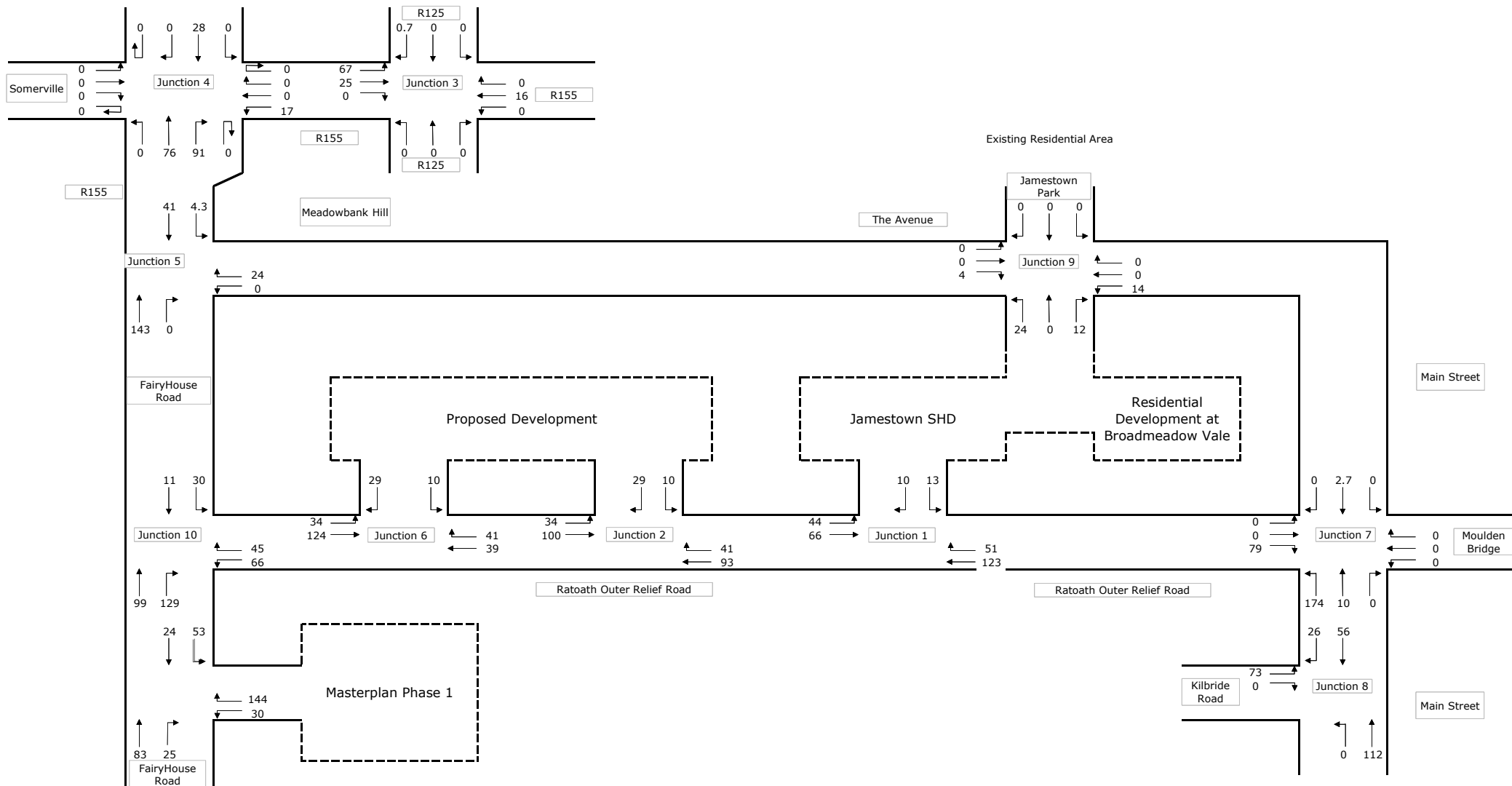
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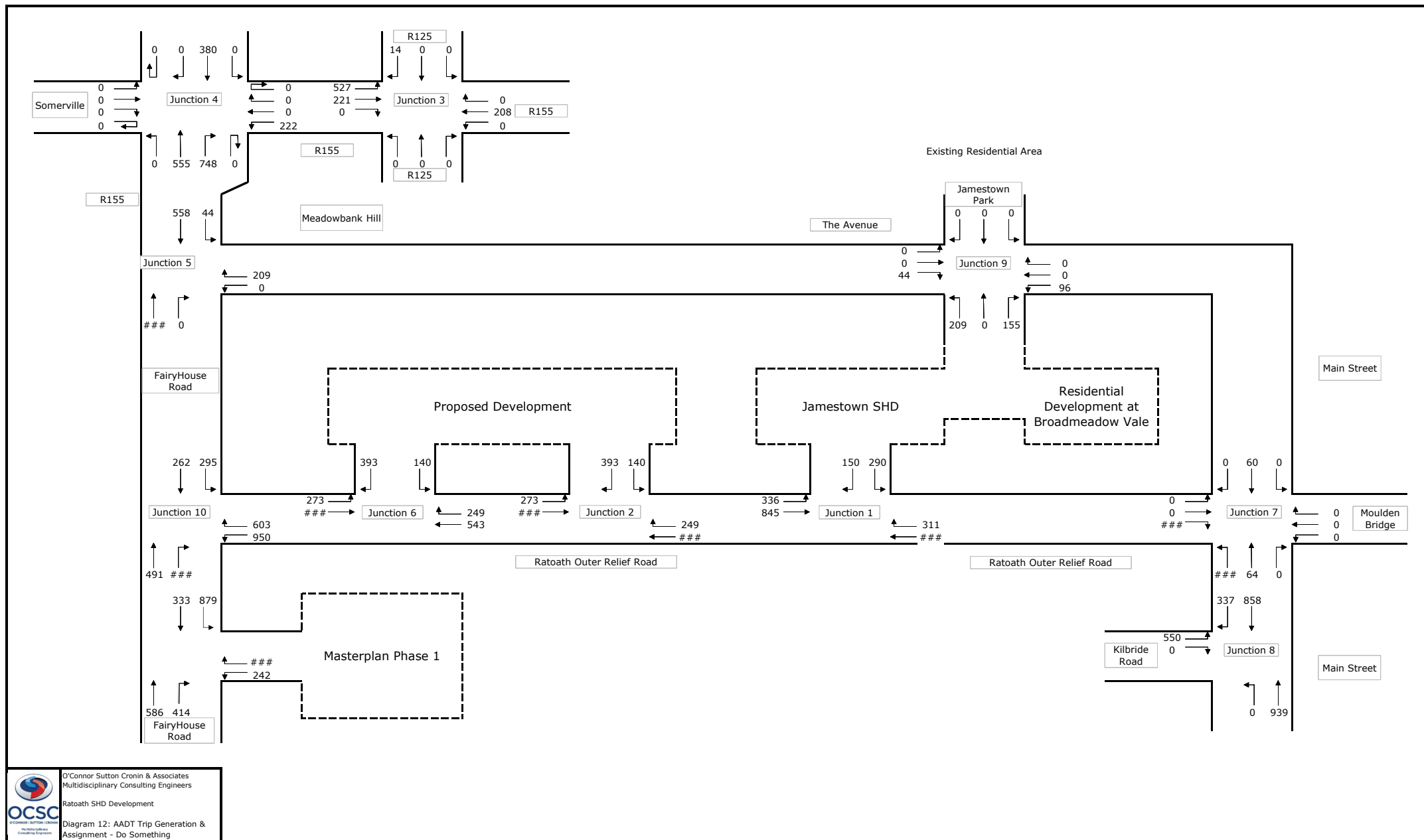
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Diagram 8: 2039 P.M. Peak Hour Flows -
Do Nothing





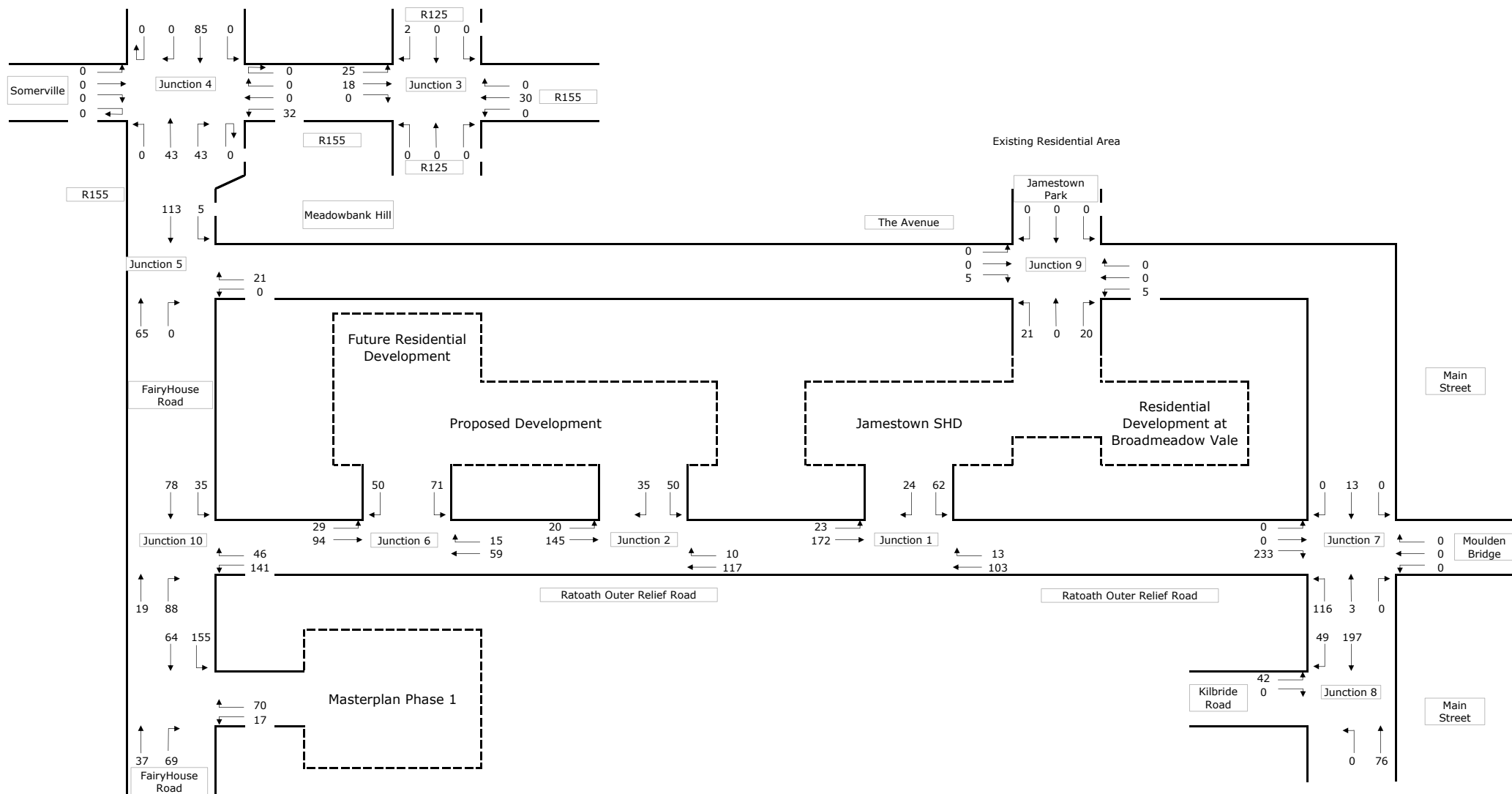


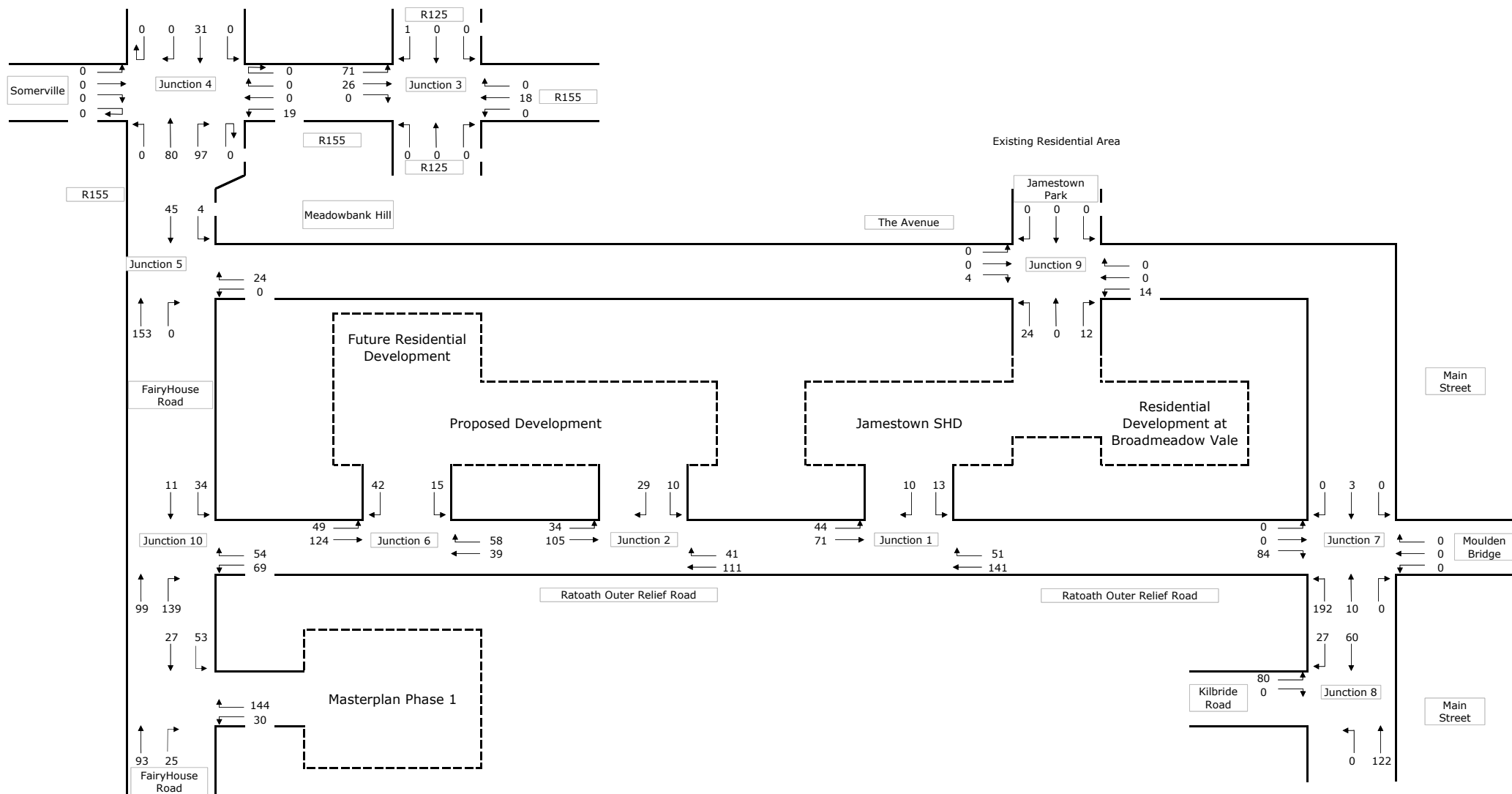


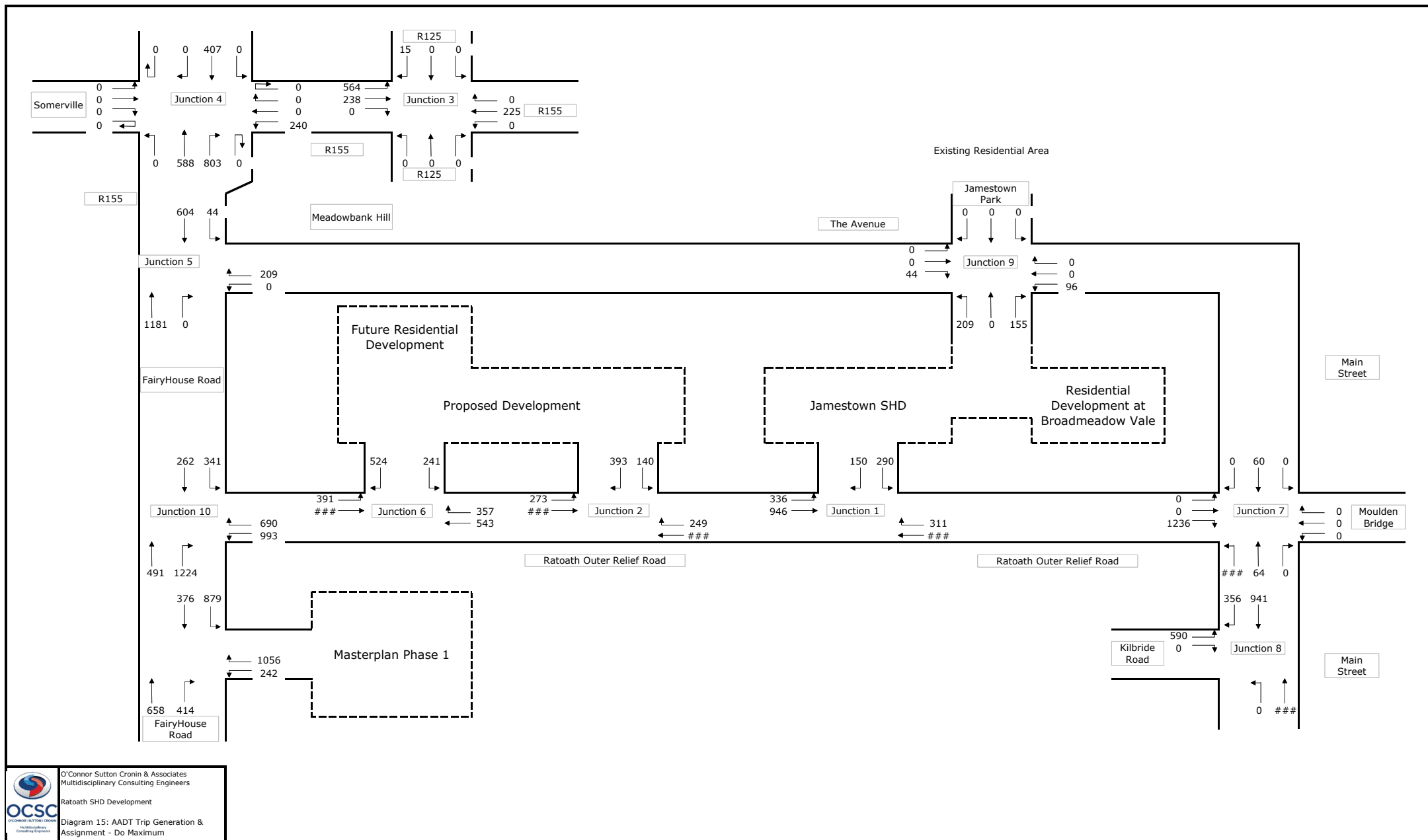
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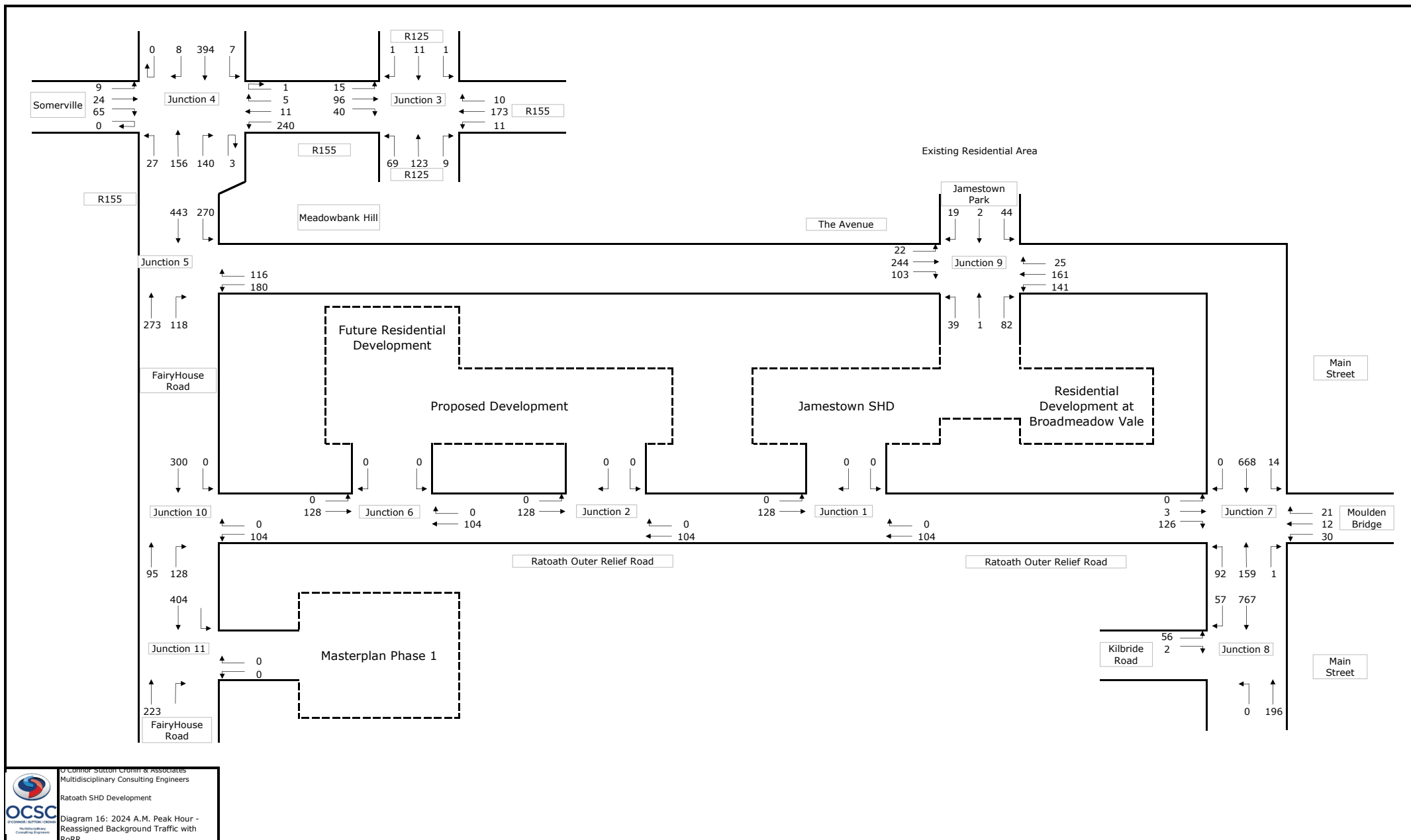
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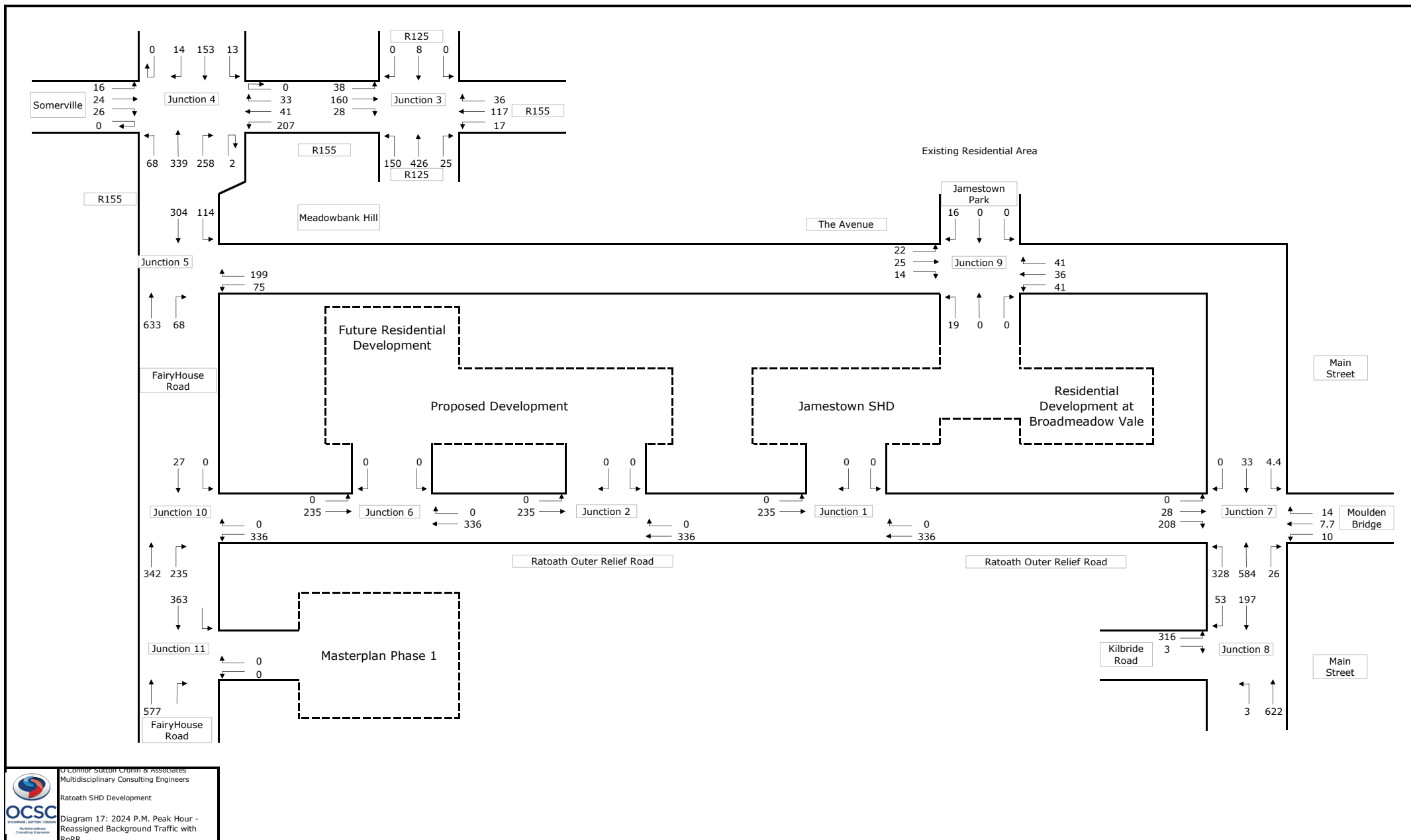
Diagram 12: AADT Trip Generation & Assignment - Do Something

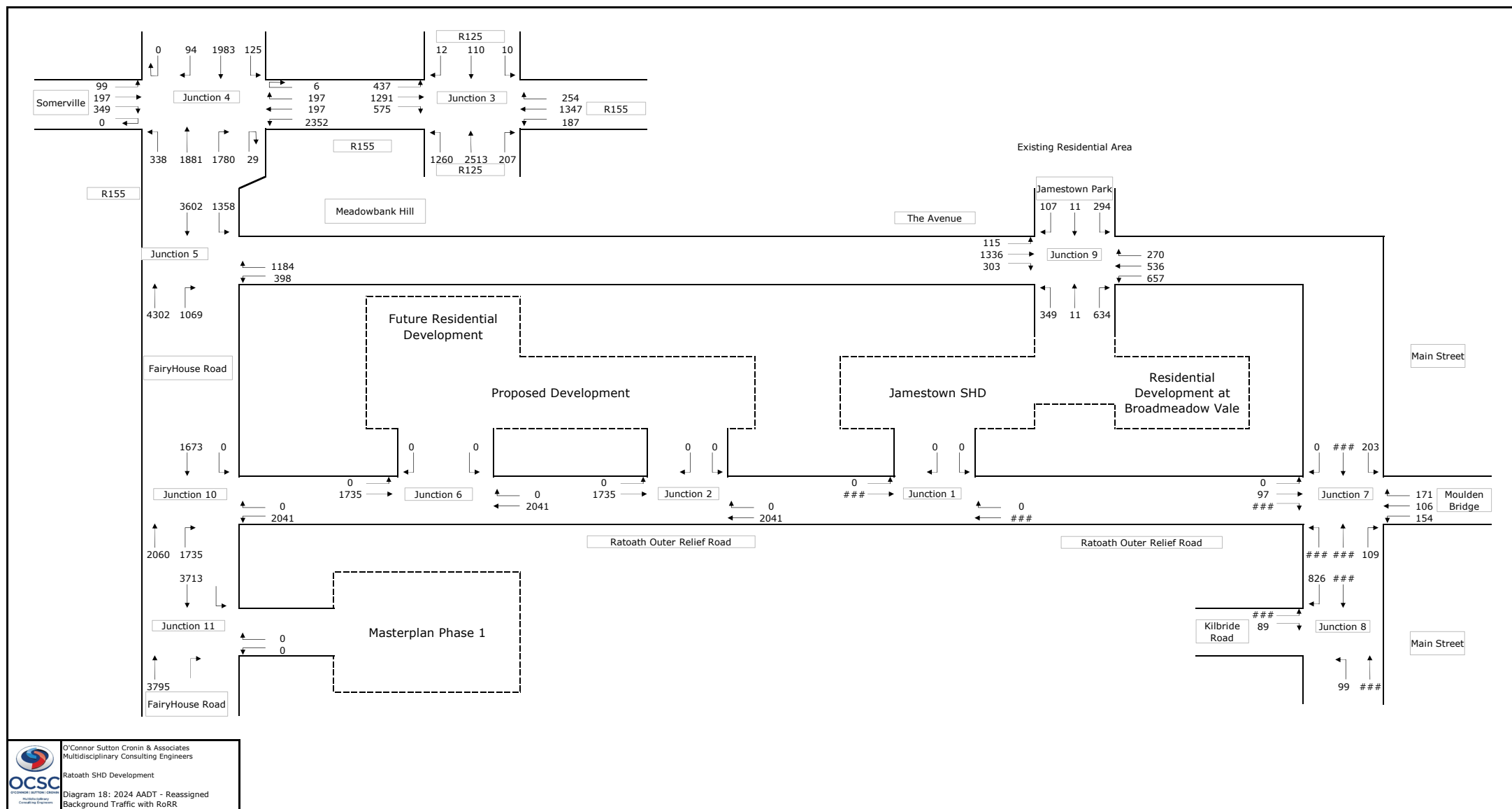


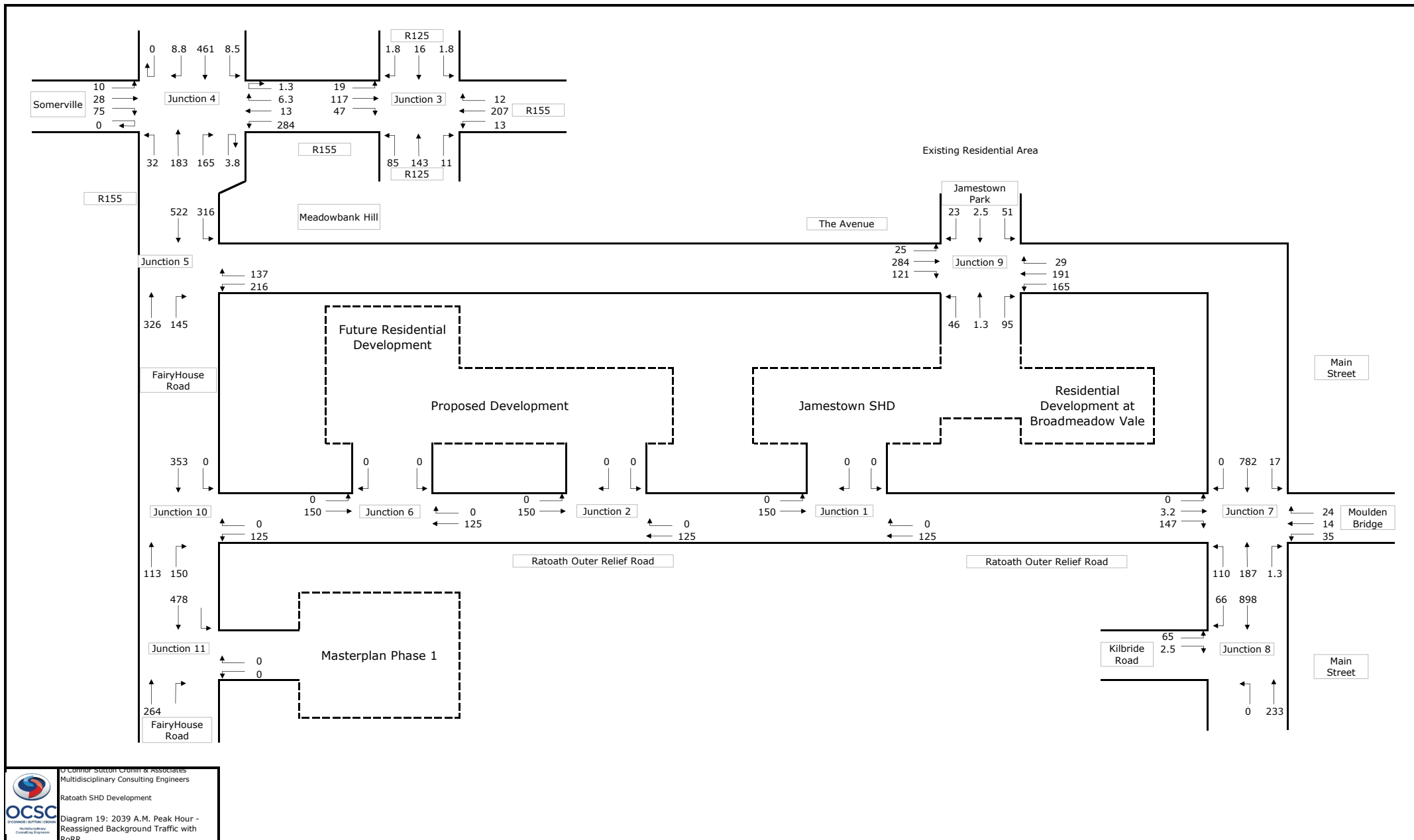




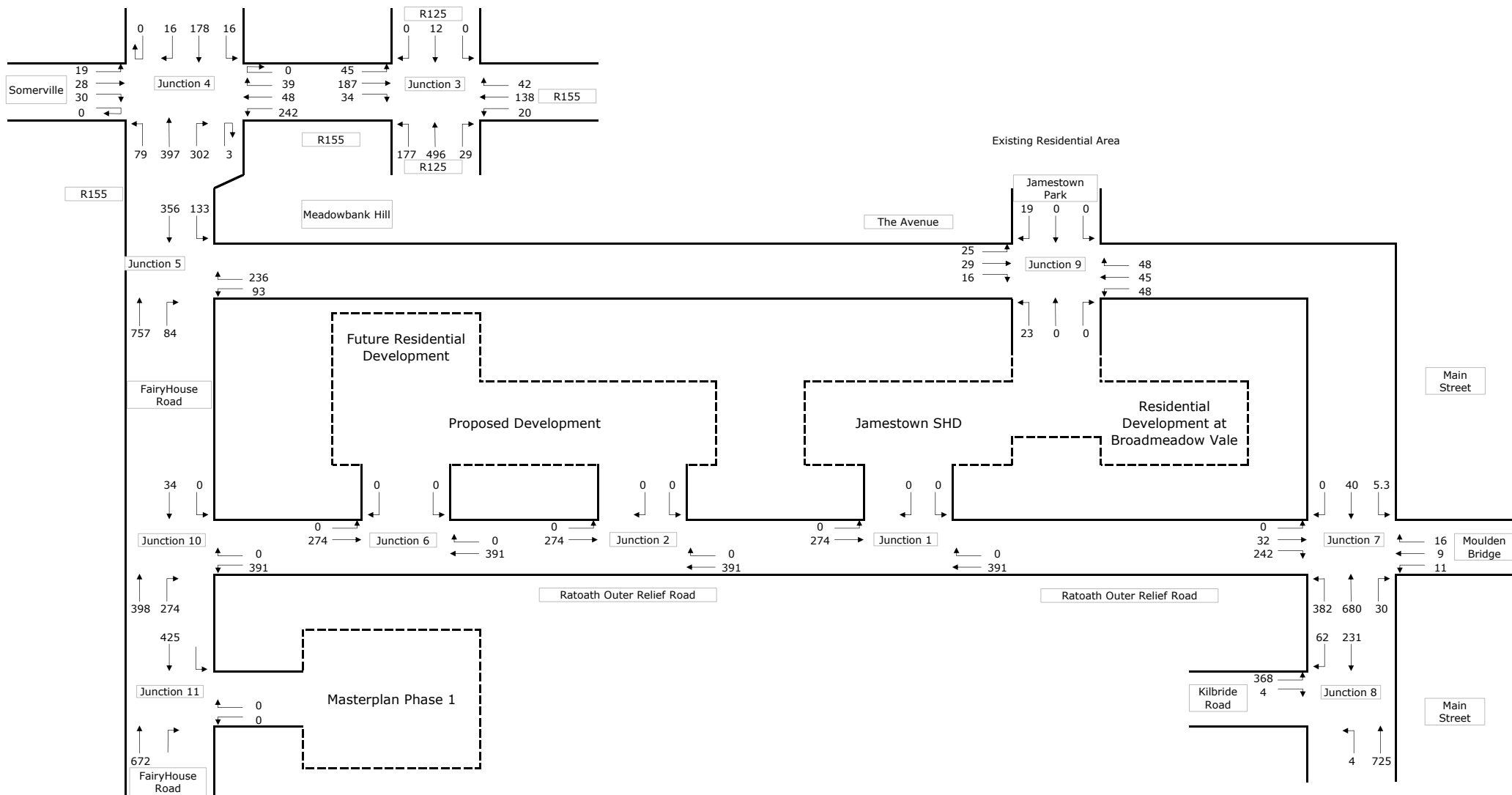




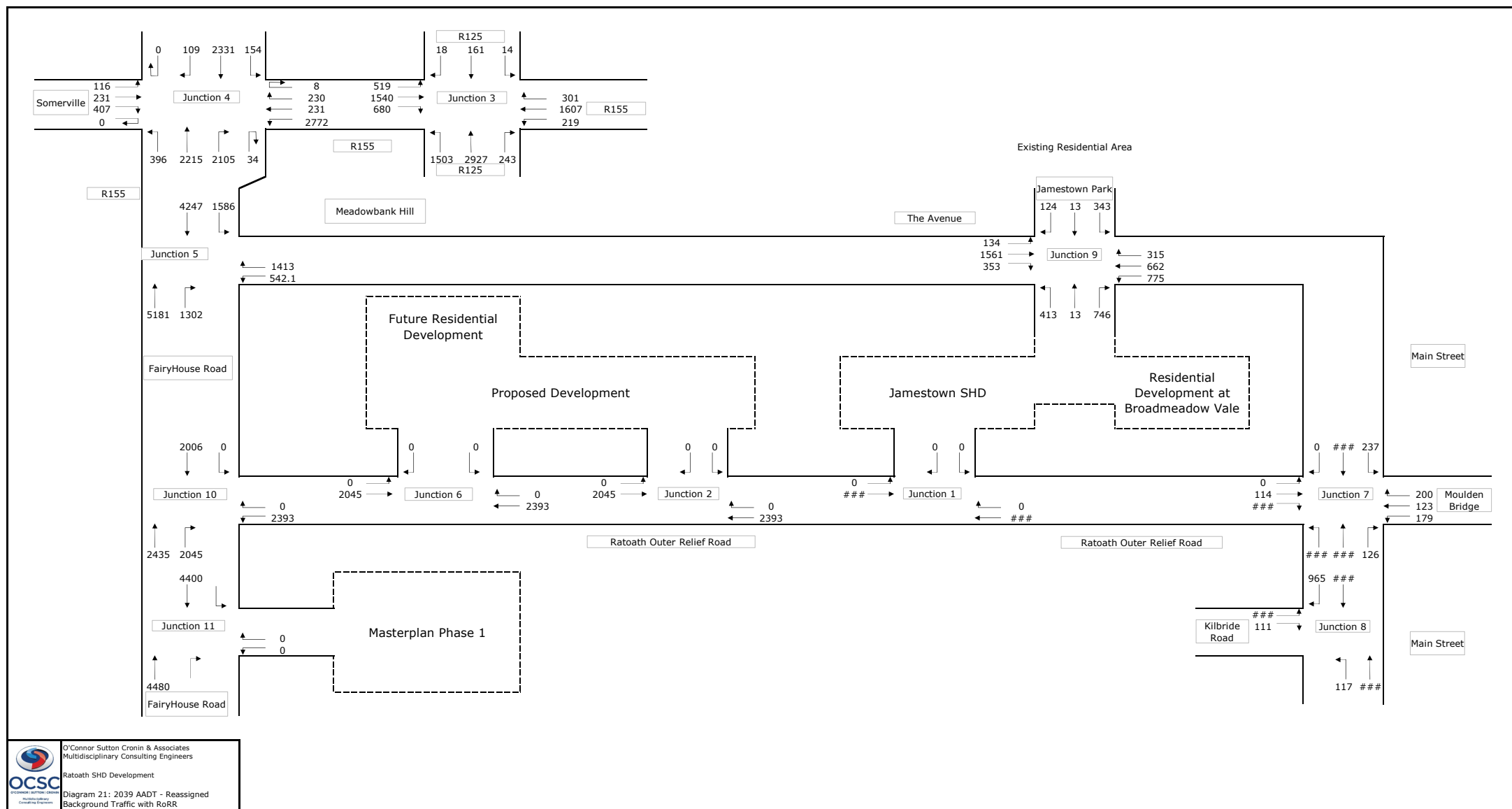


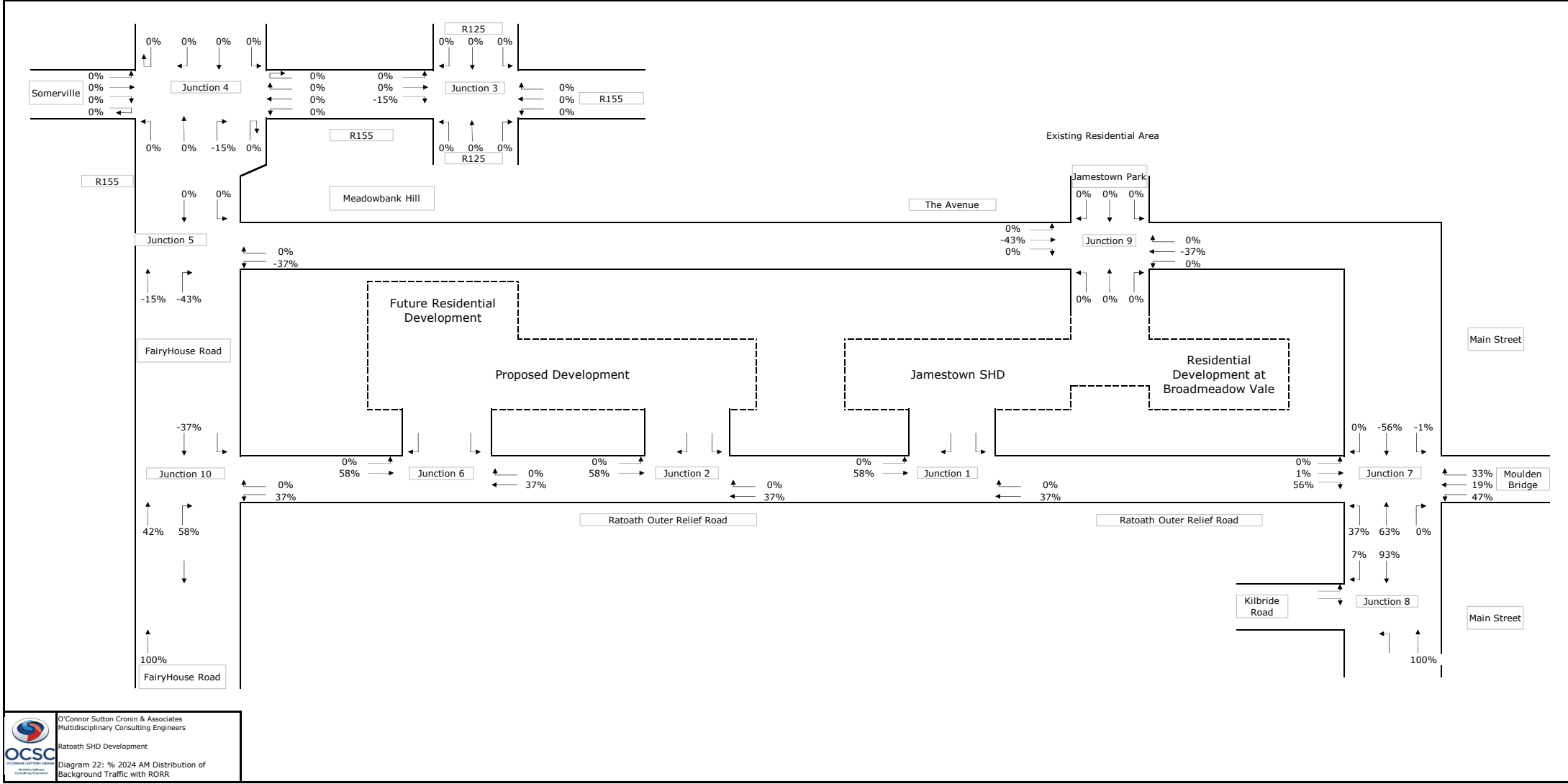


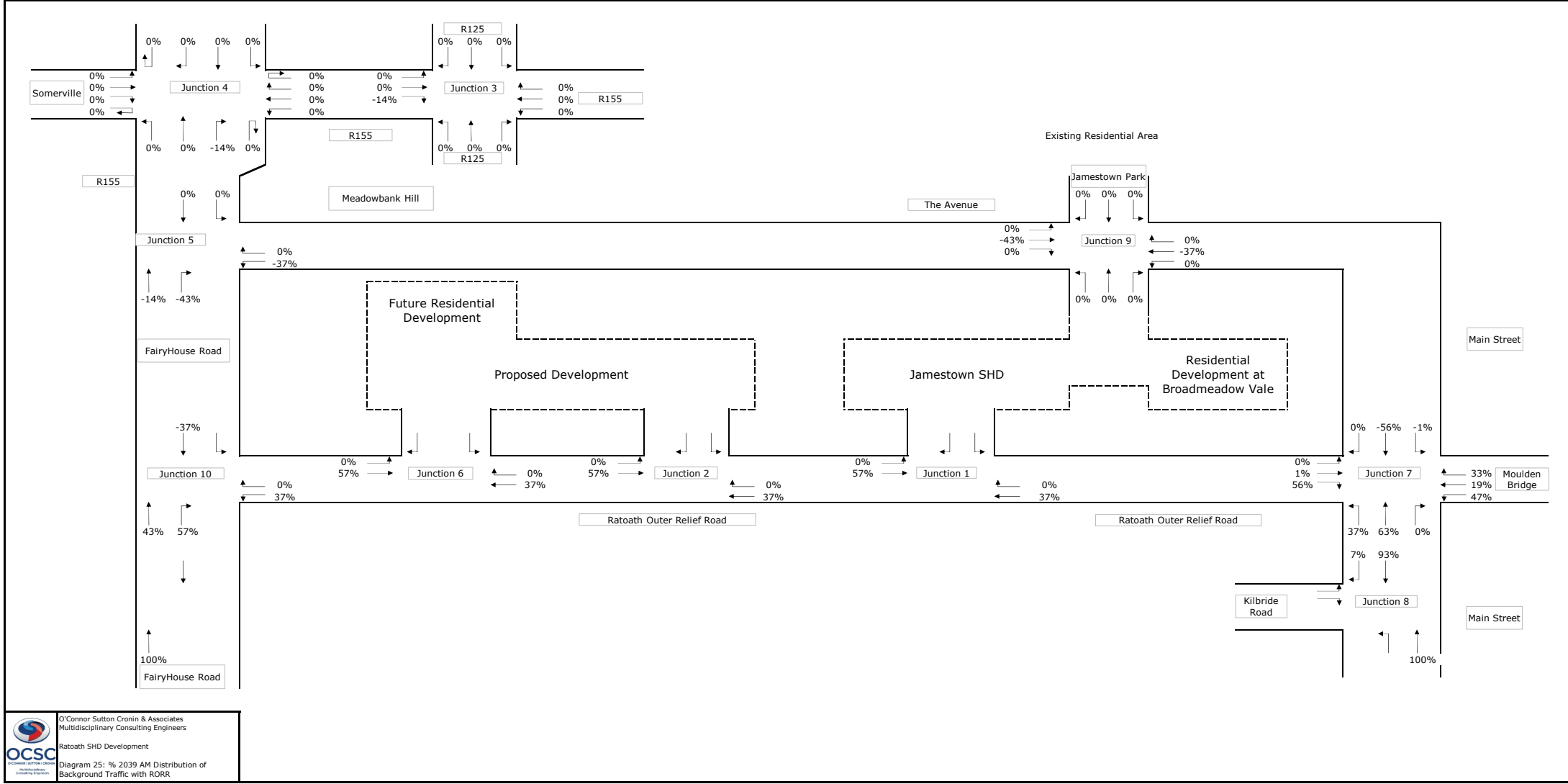
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Diagram 19: 2039 A.M. Peak Hour -
Reassigned Background Traffic with
RoRR



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Diagram 20: 2039 P.M. Peak Hour -
Reassigned Background Traffic with
RoRR



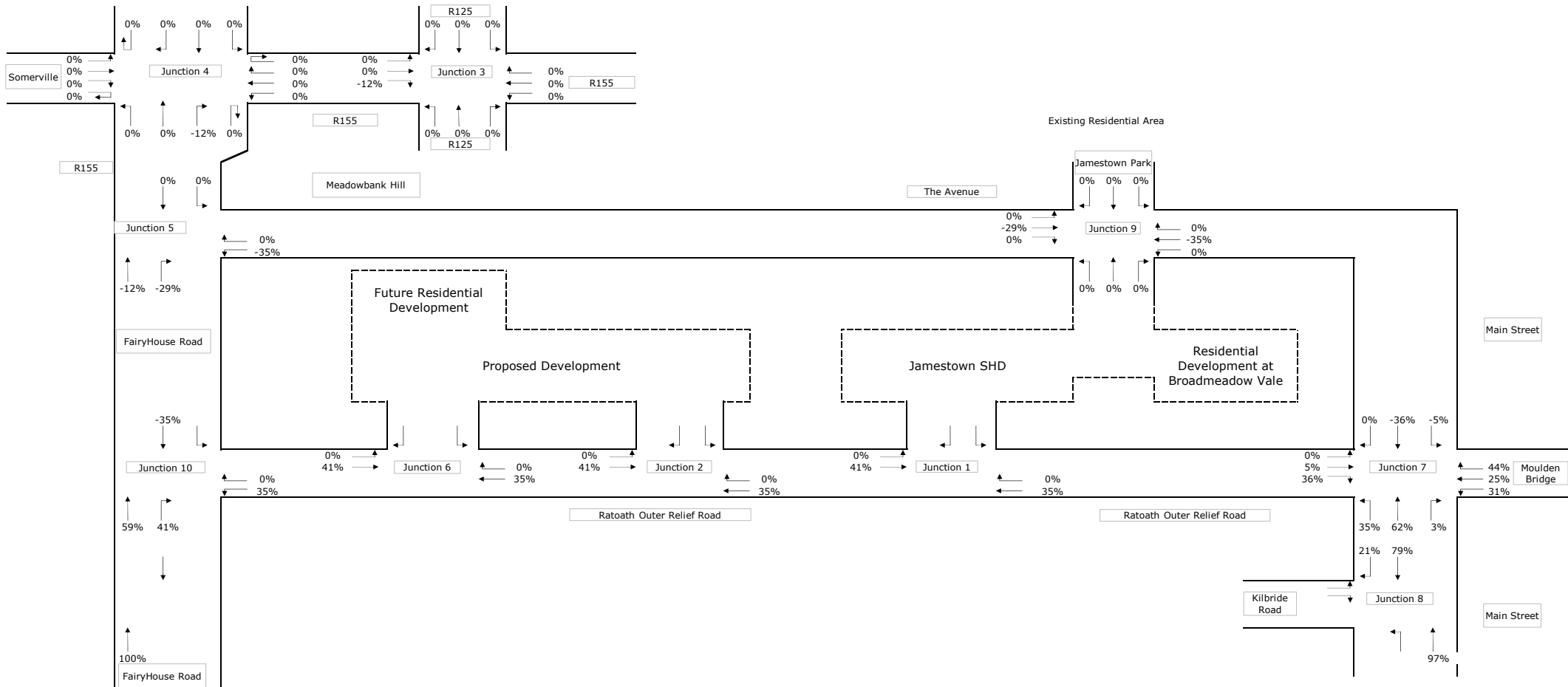




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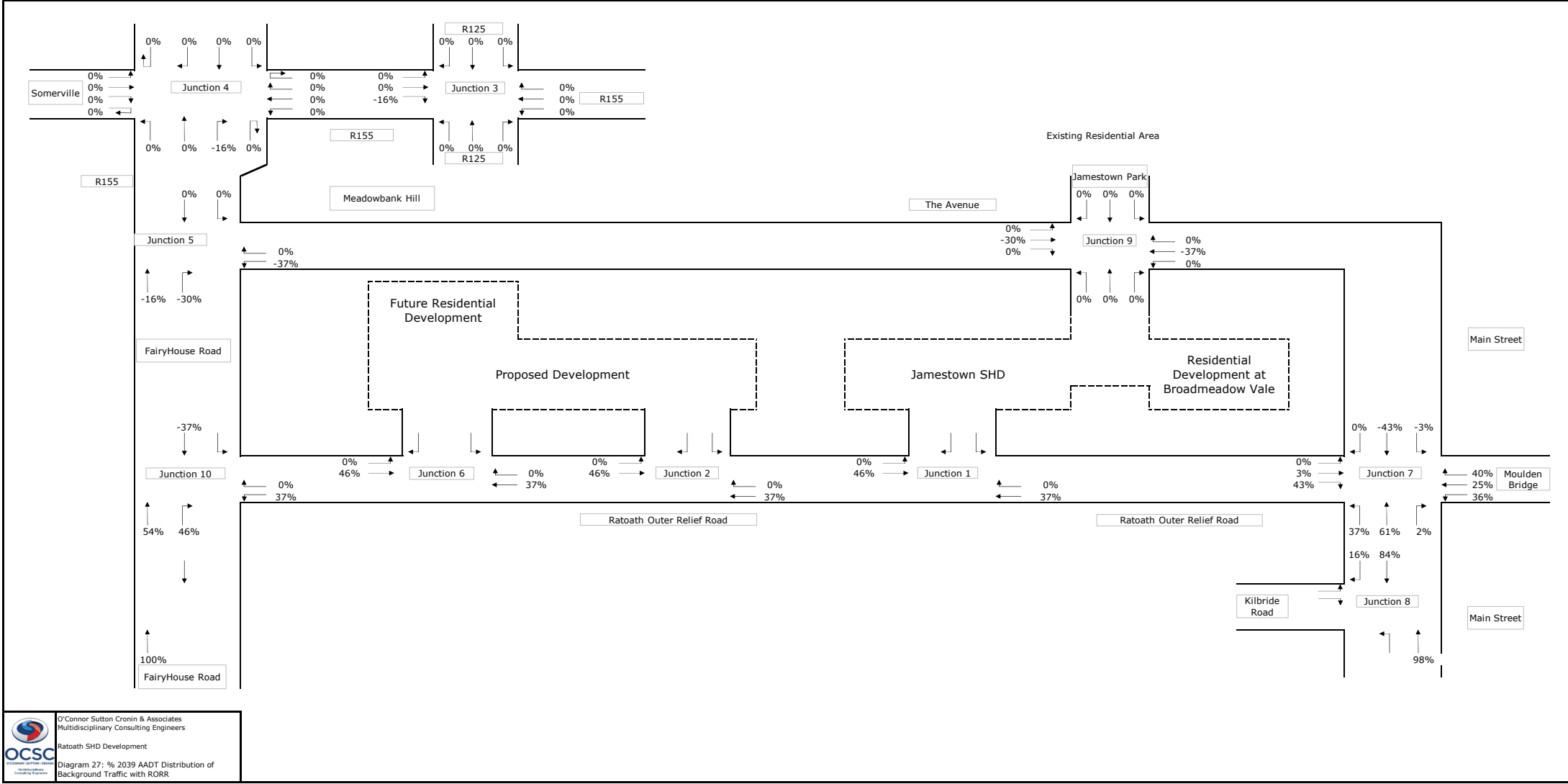
Diagram 25: % 2039 AM Distribution of
Background Traffic with RORR

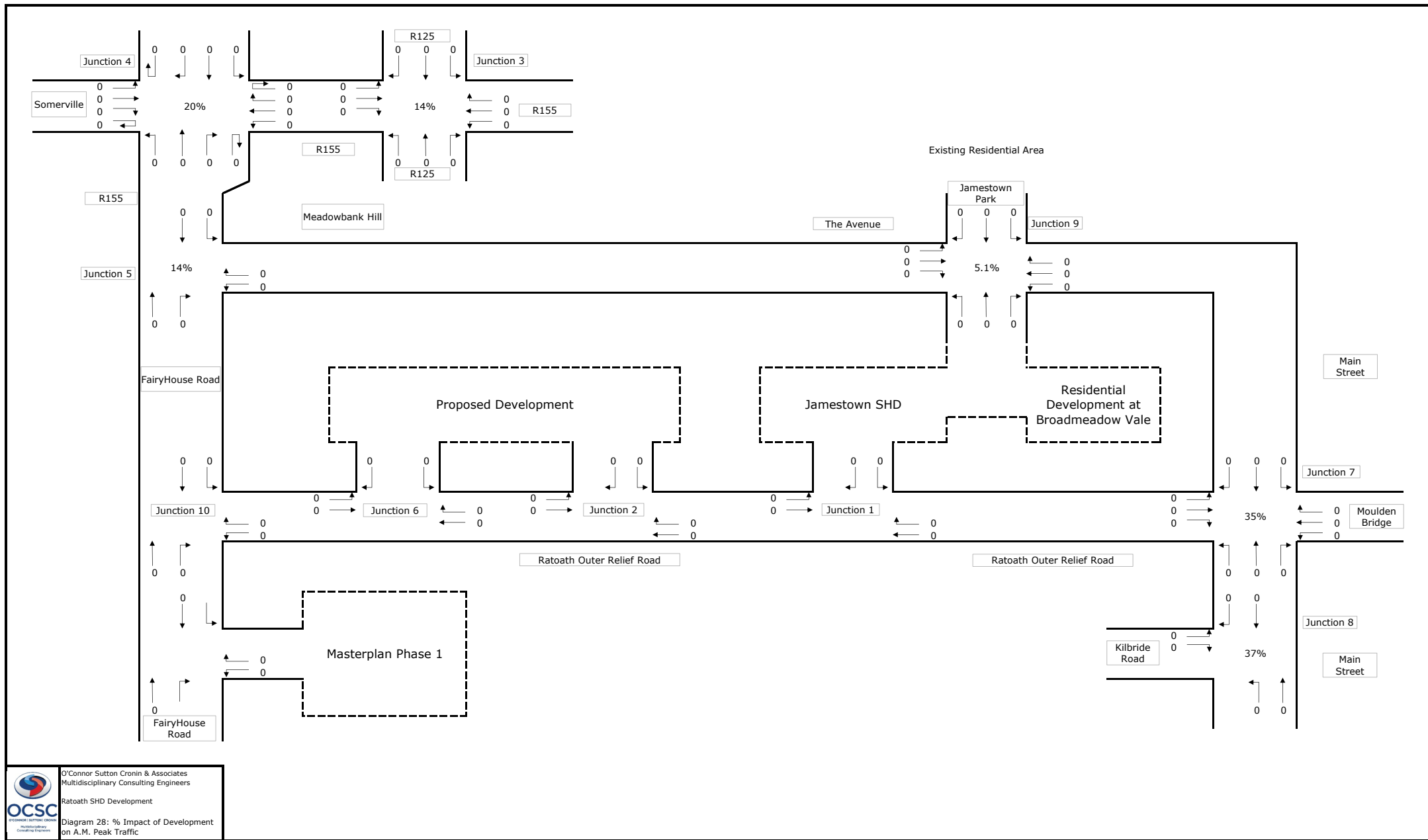


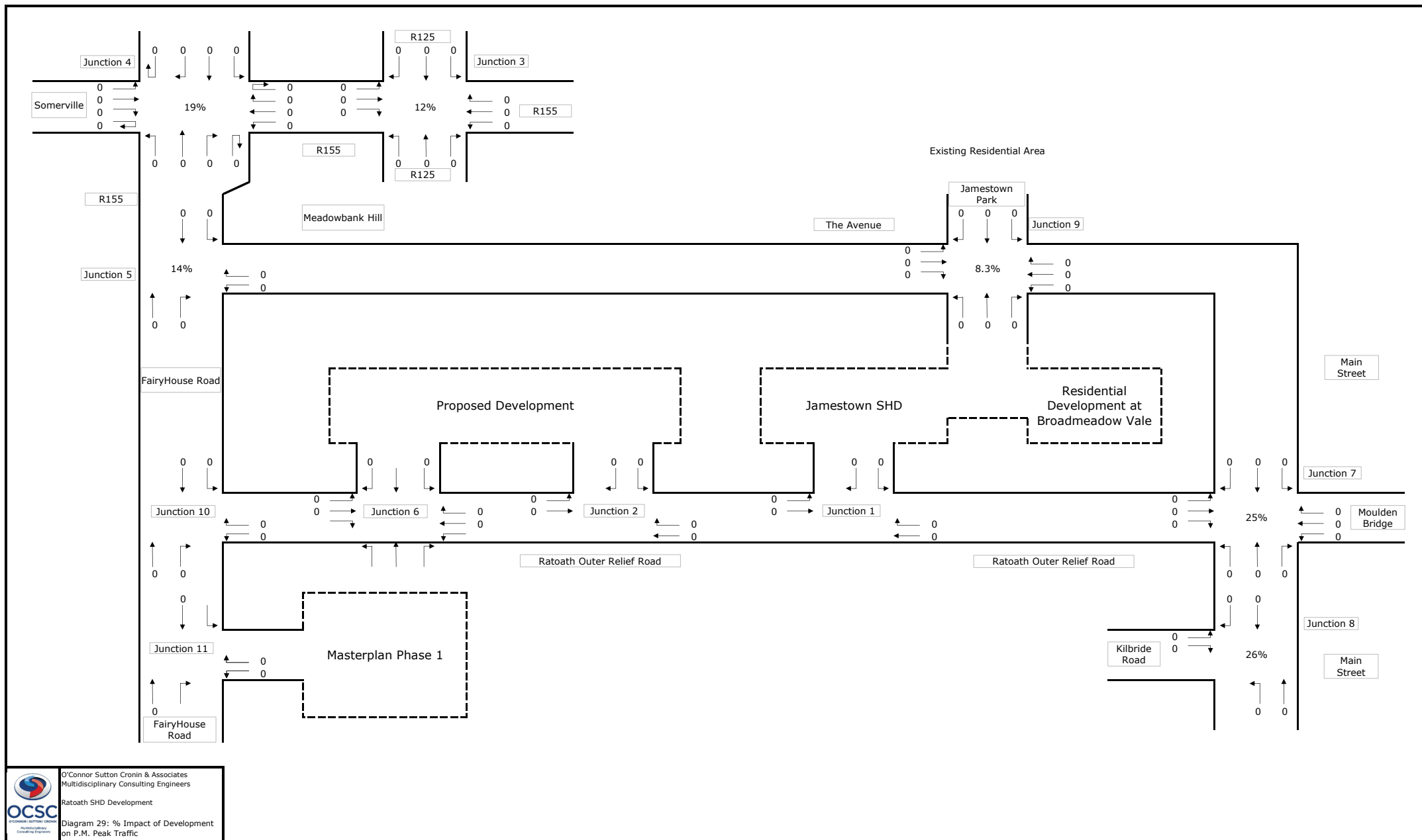
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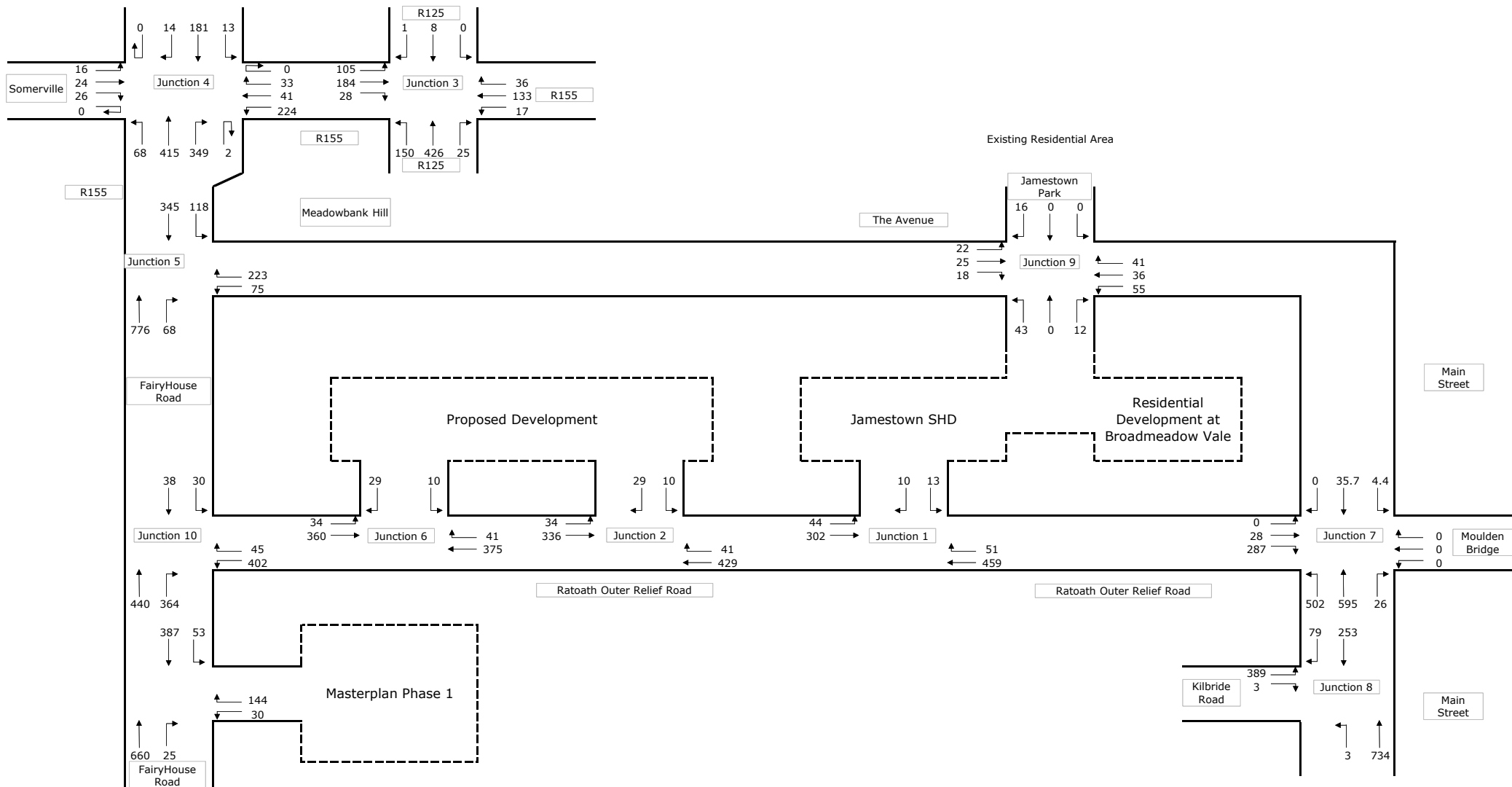
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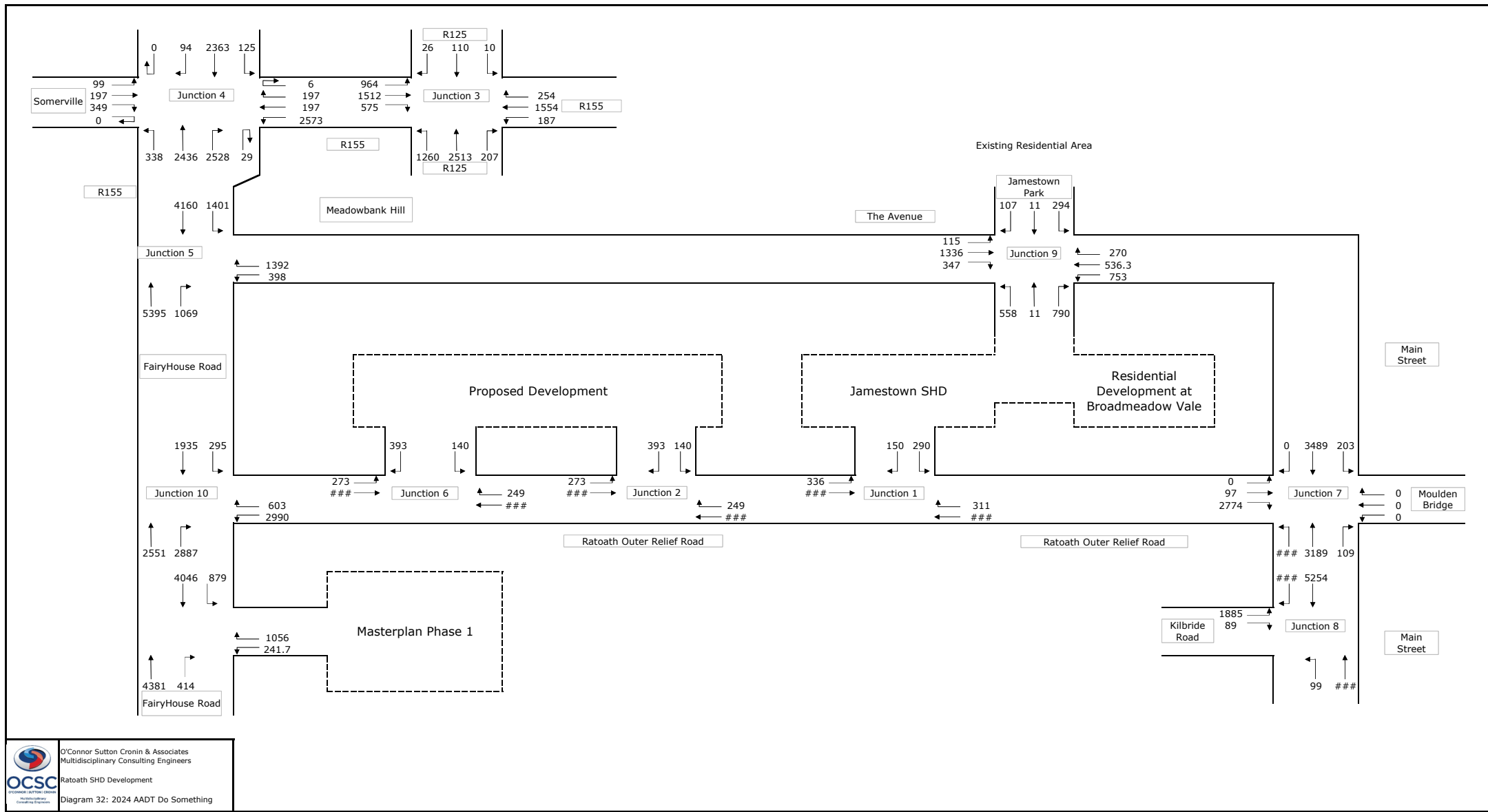
Diagram 26: % 2039 PM Distribution of
Background Traffic with RORR

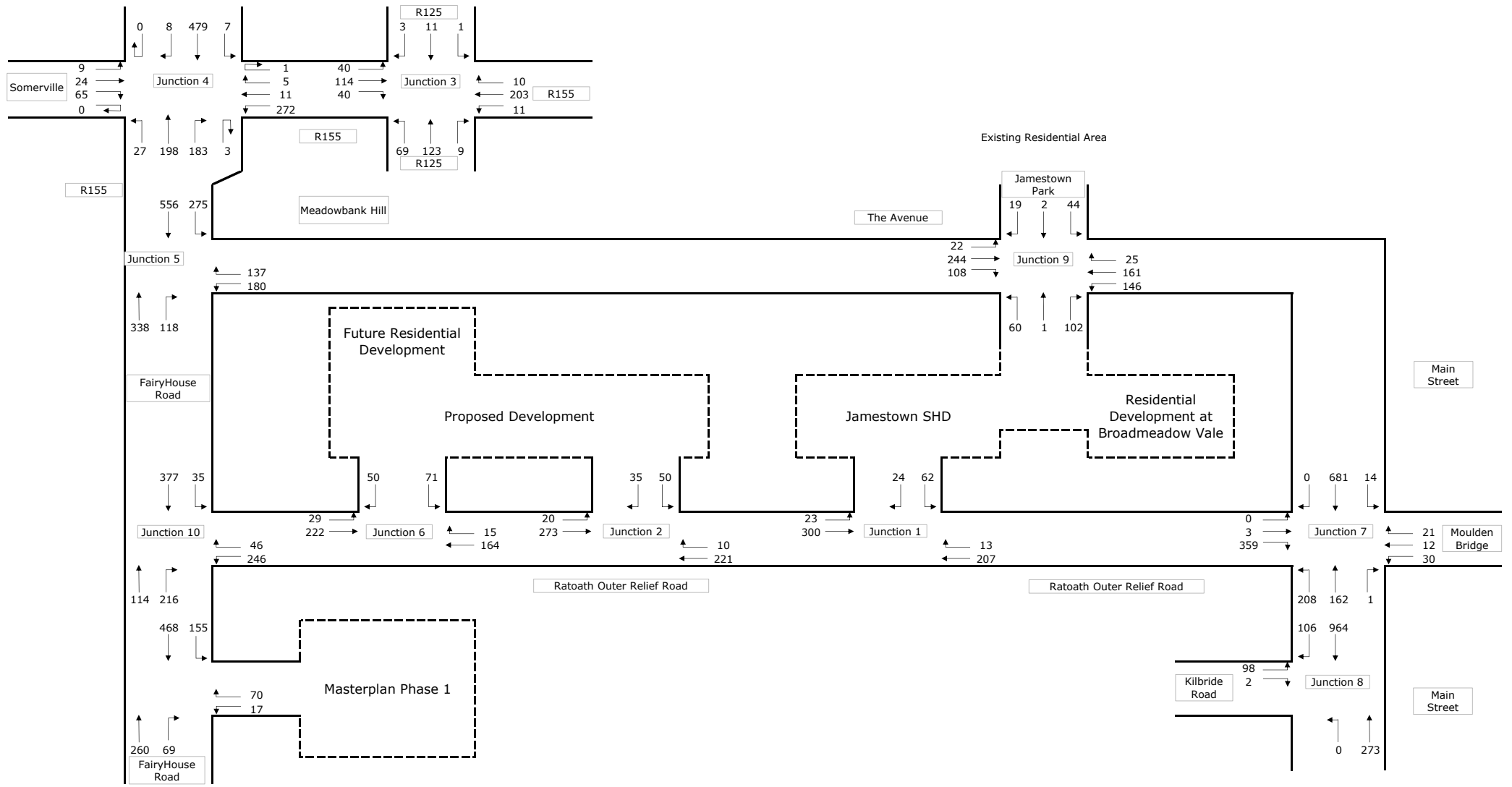


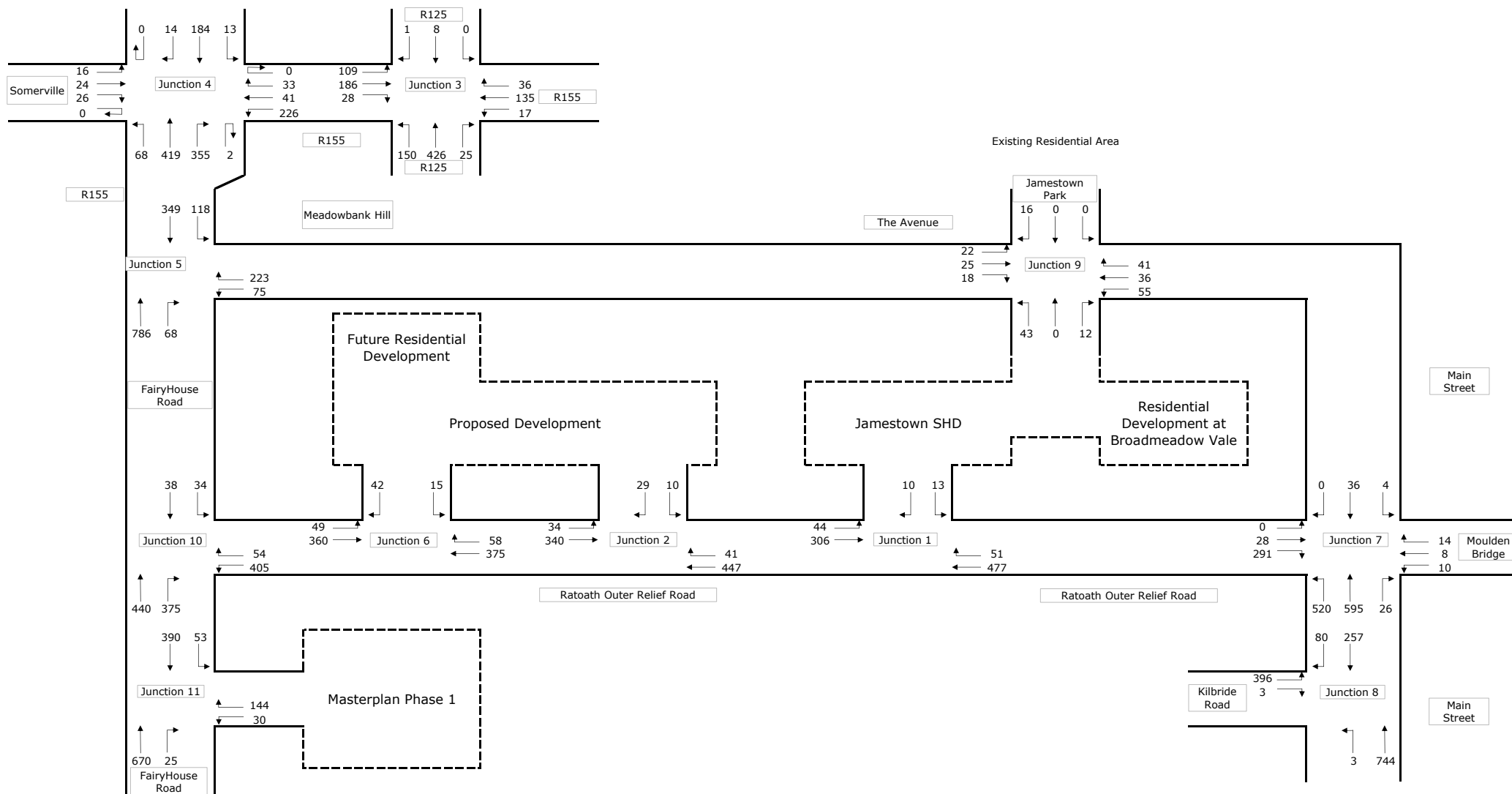








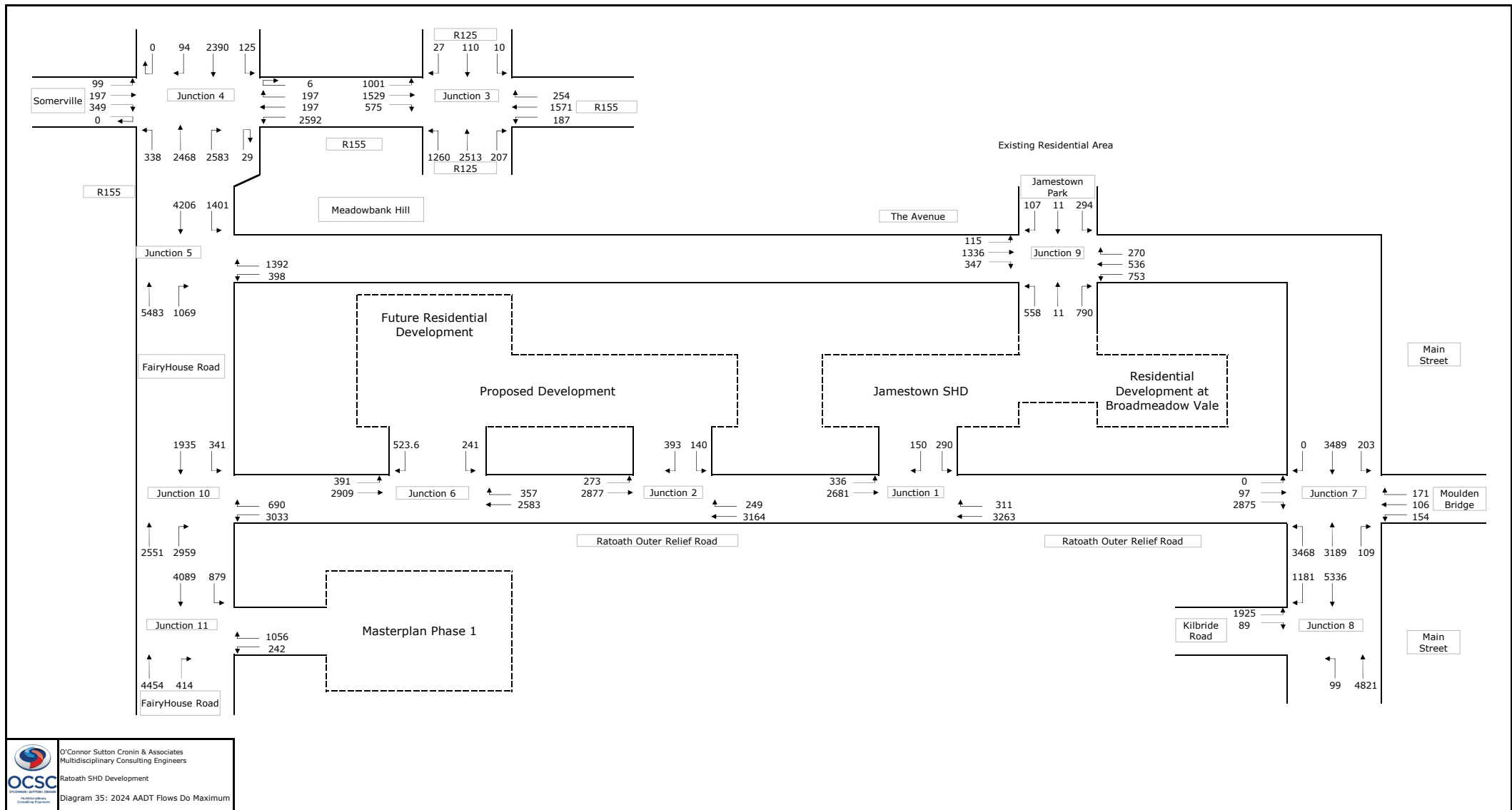


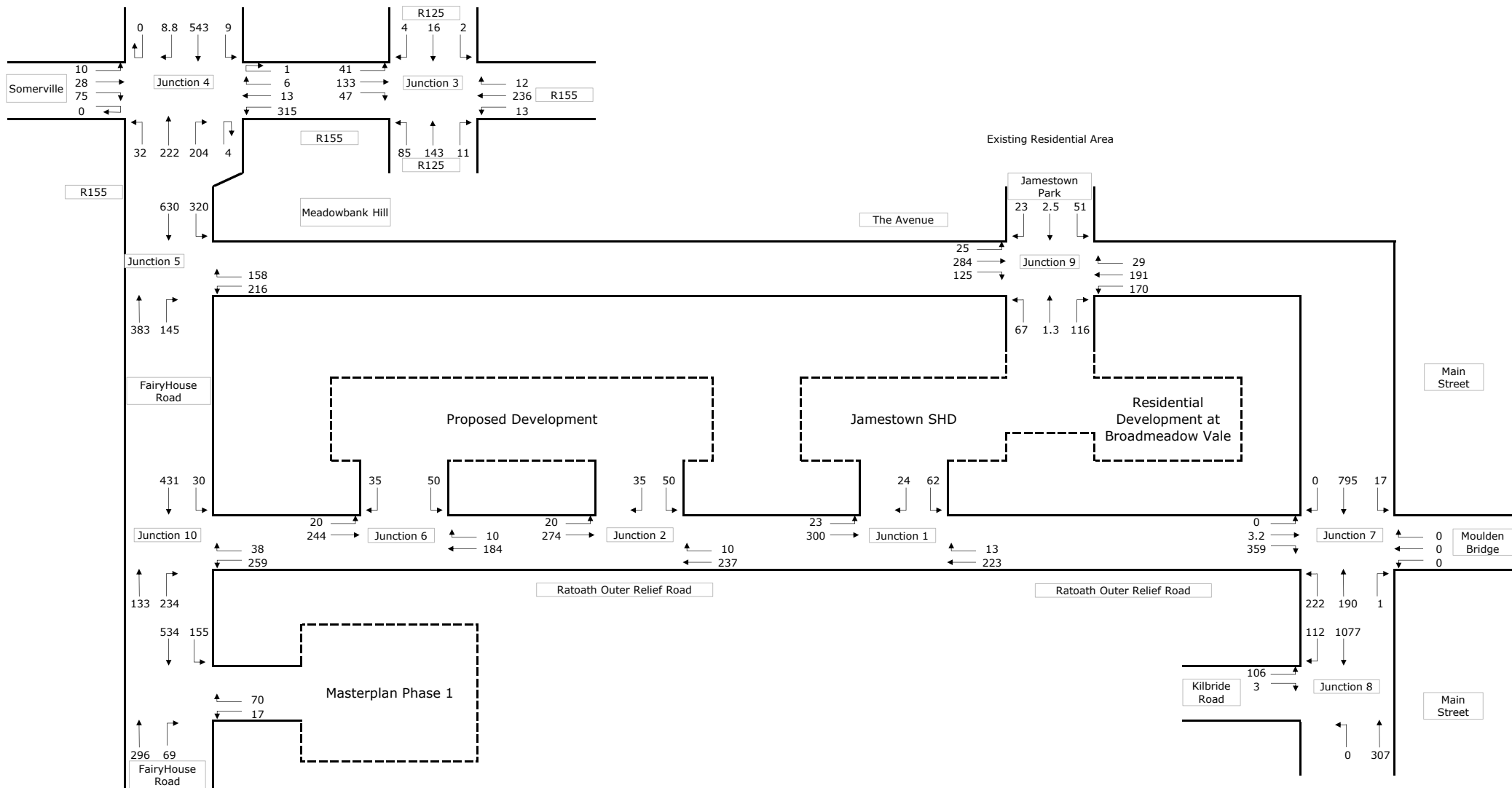


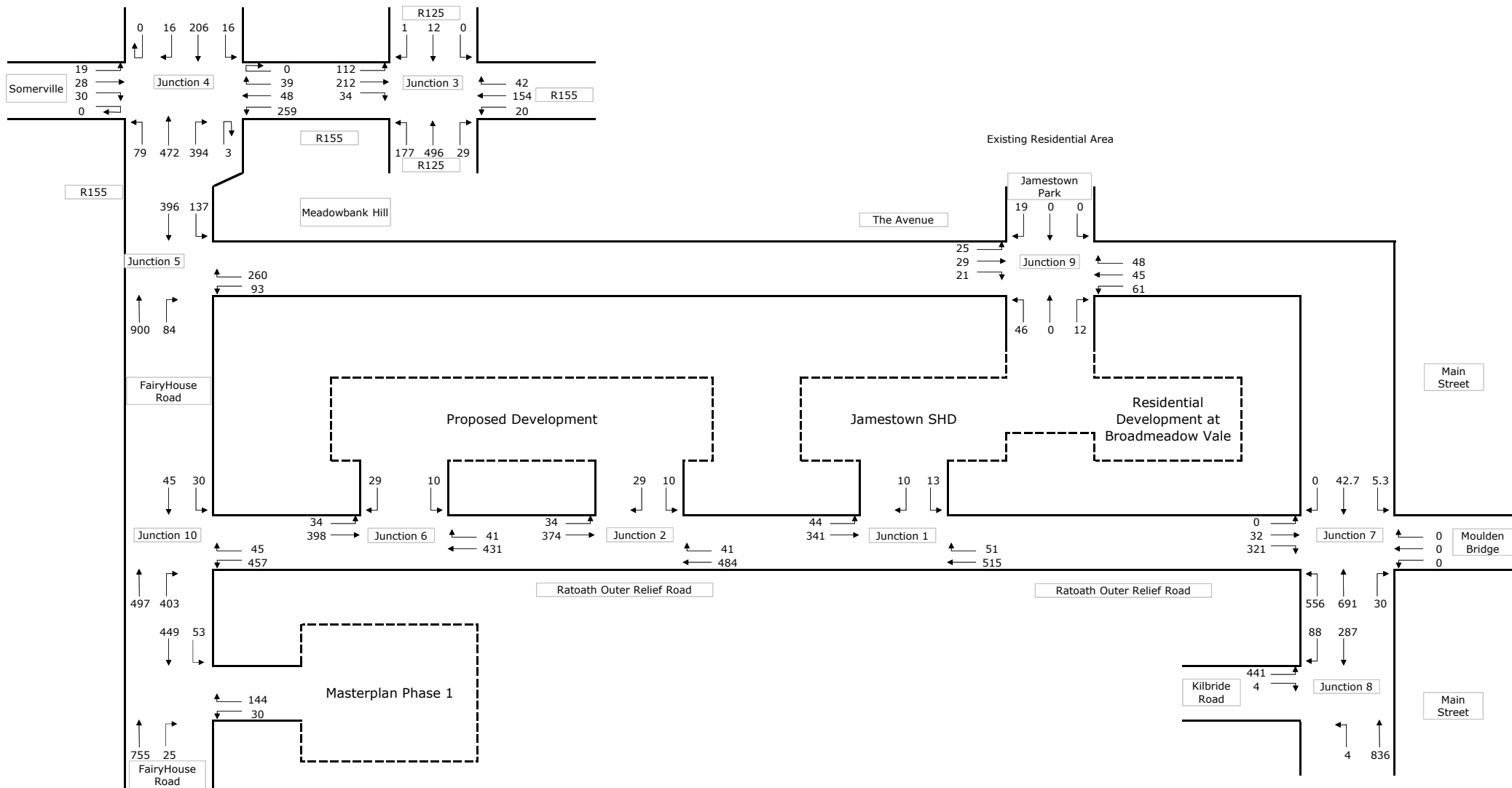
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Multidisciplinary Consulting Engineers

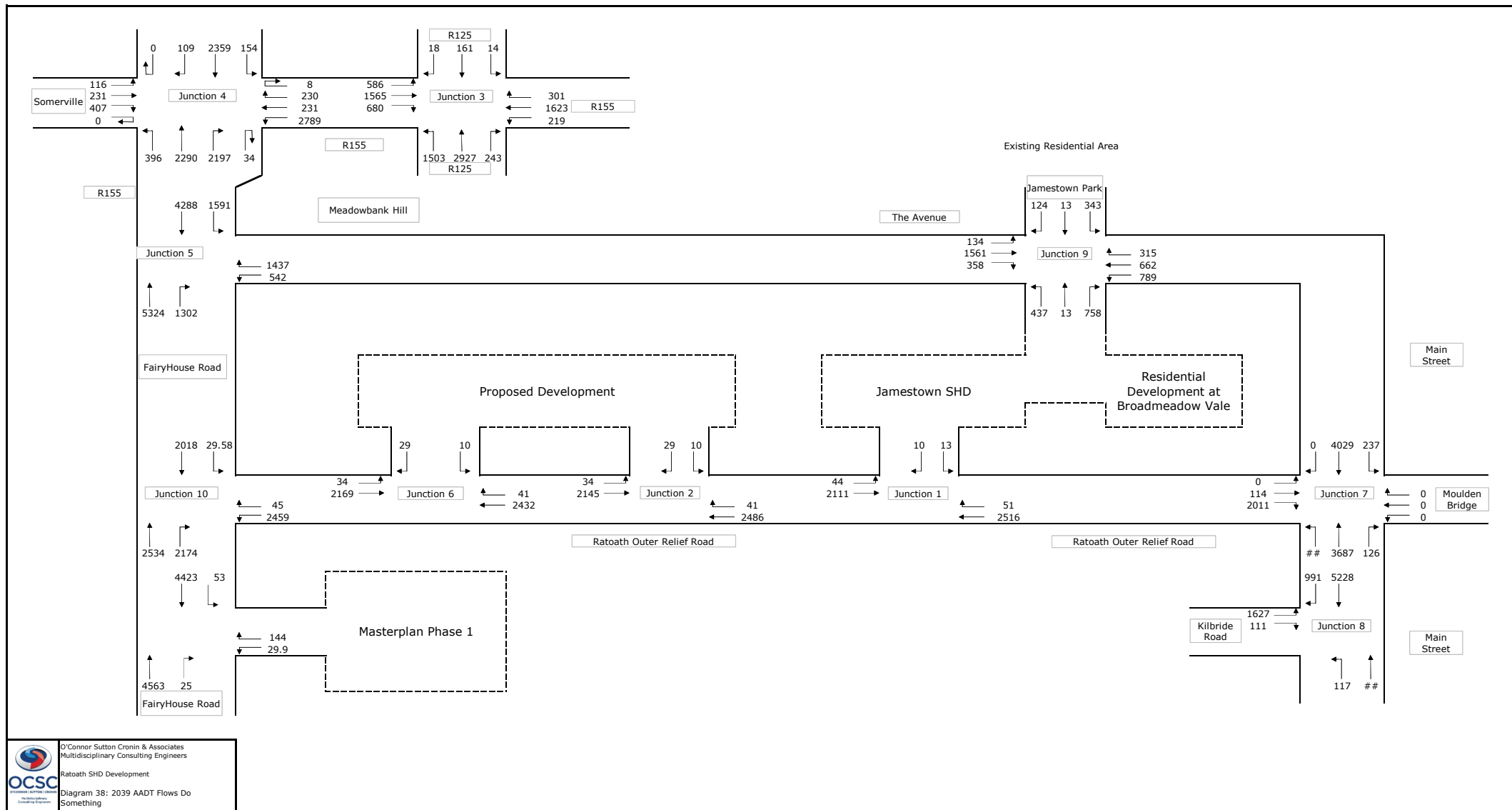
Ratoath SHD Development

Diagram 34: 2024 P.M. Peak Hour Flows
Do Maximum

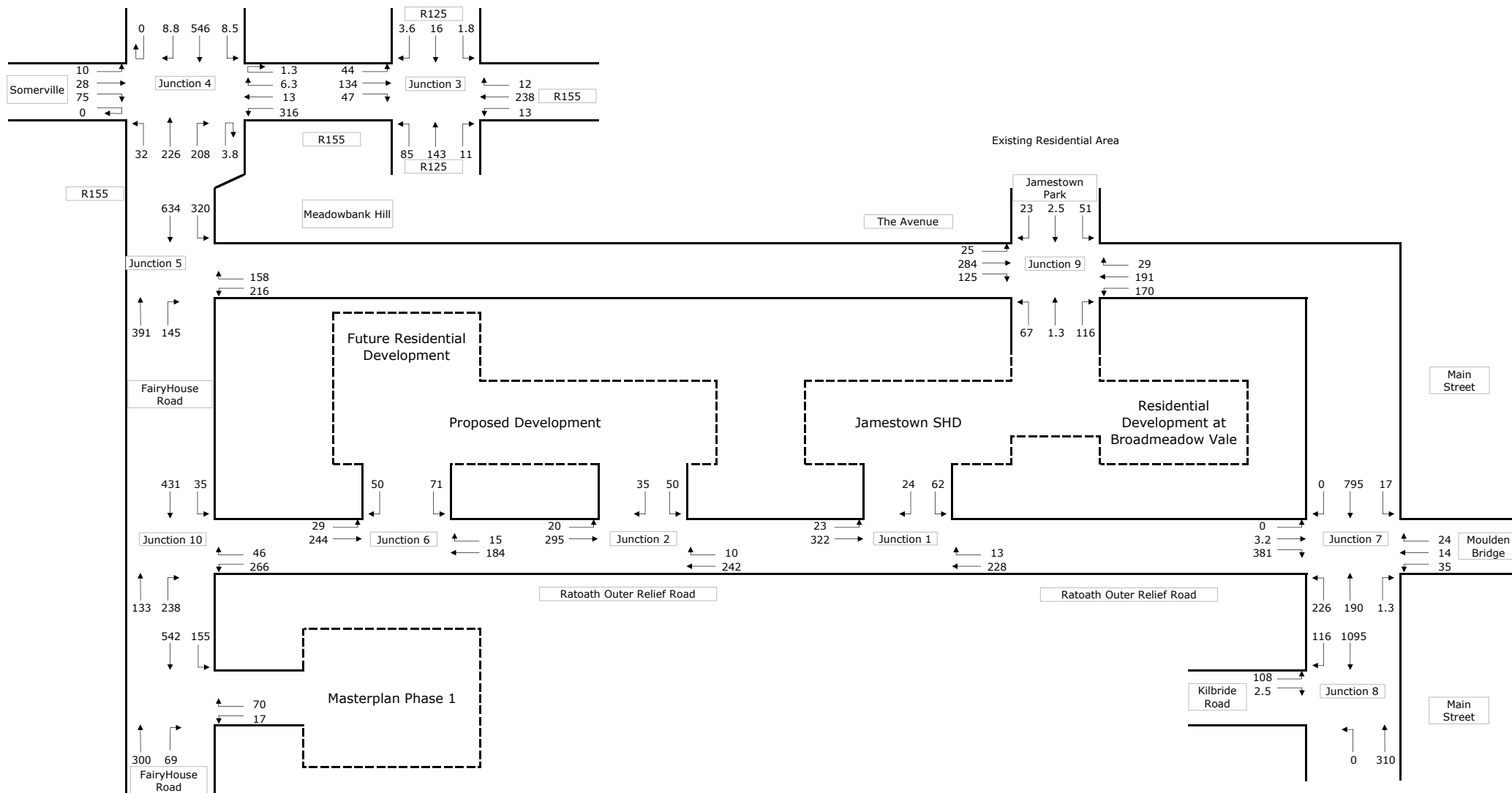


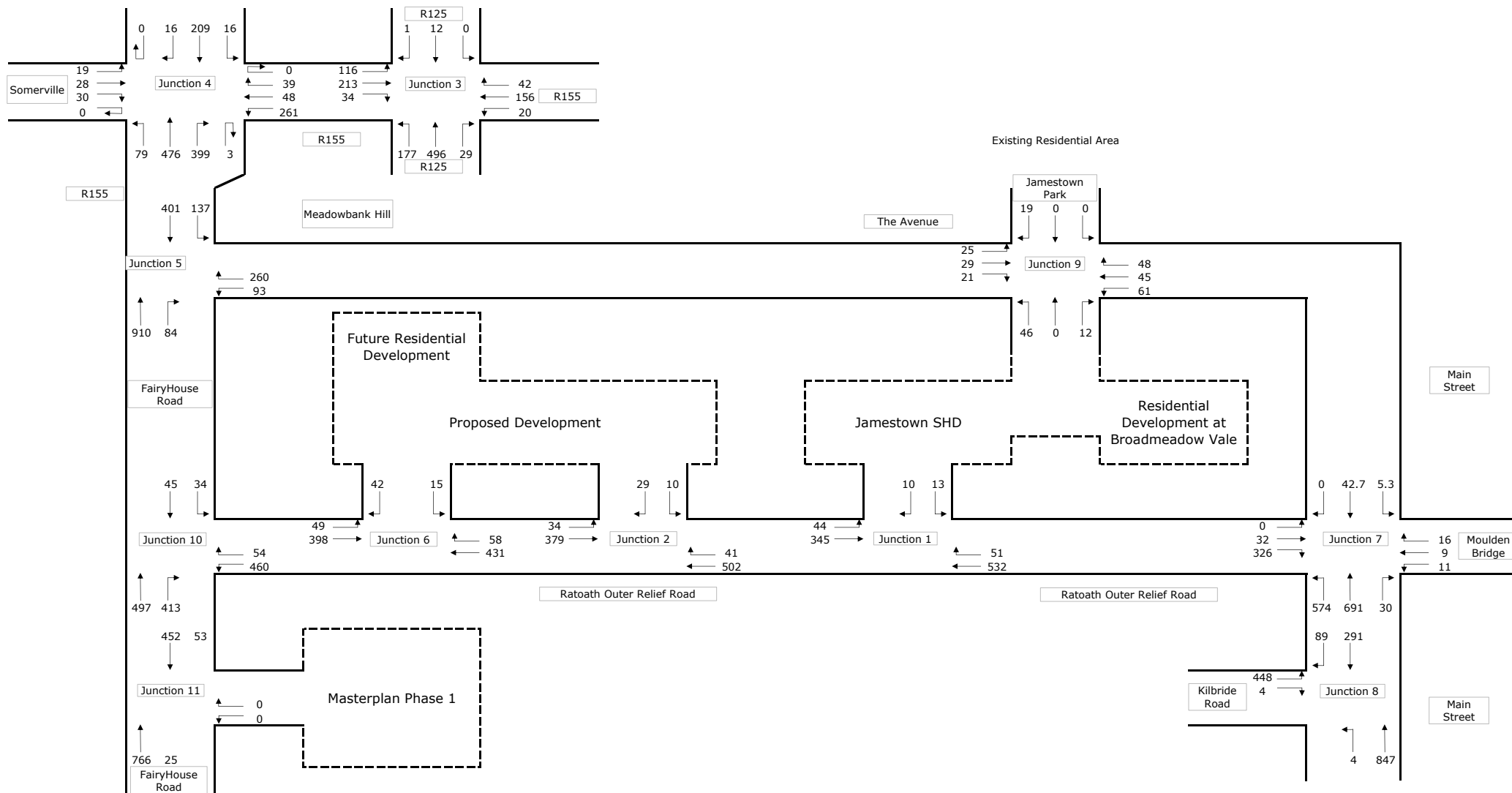


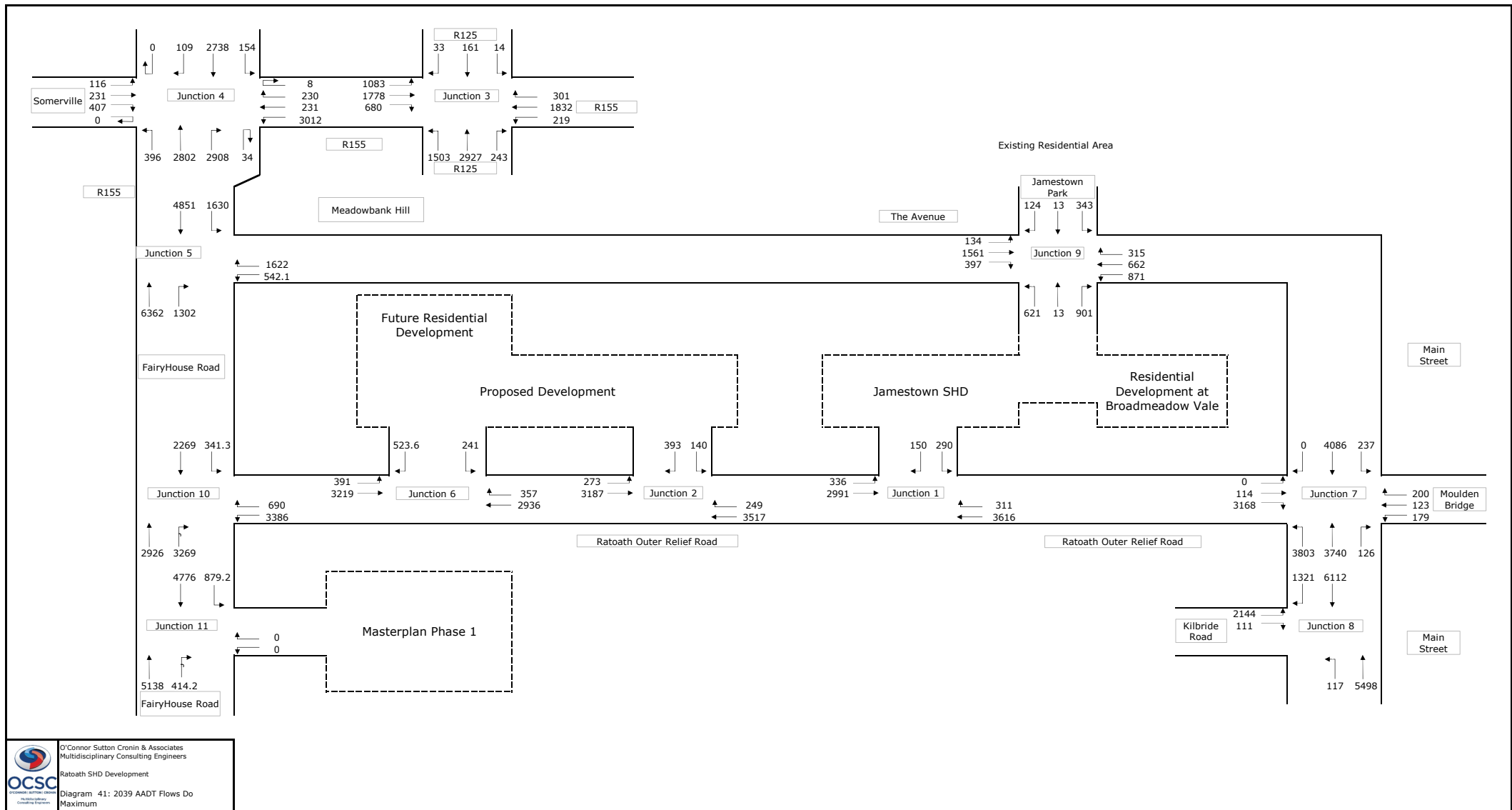


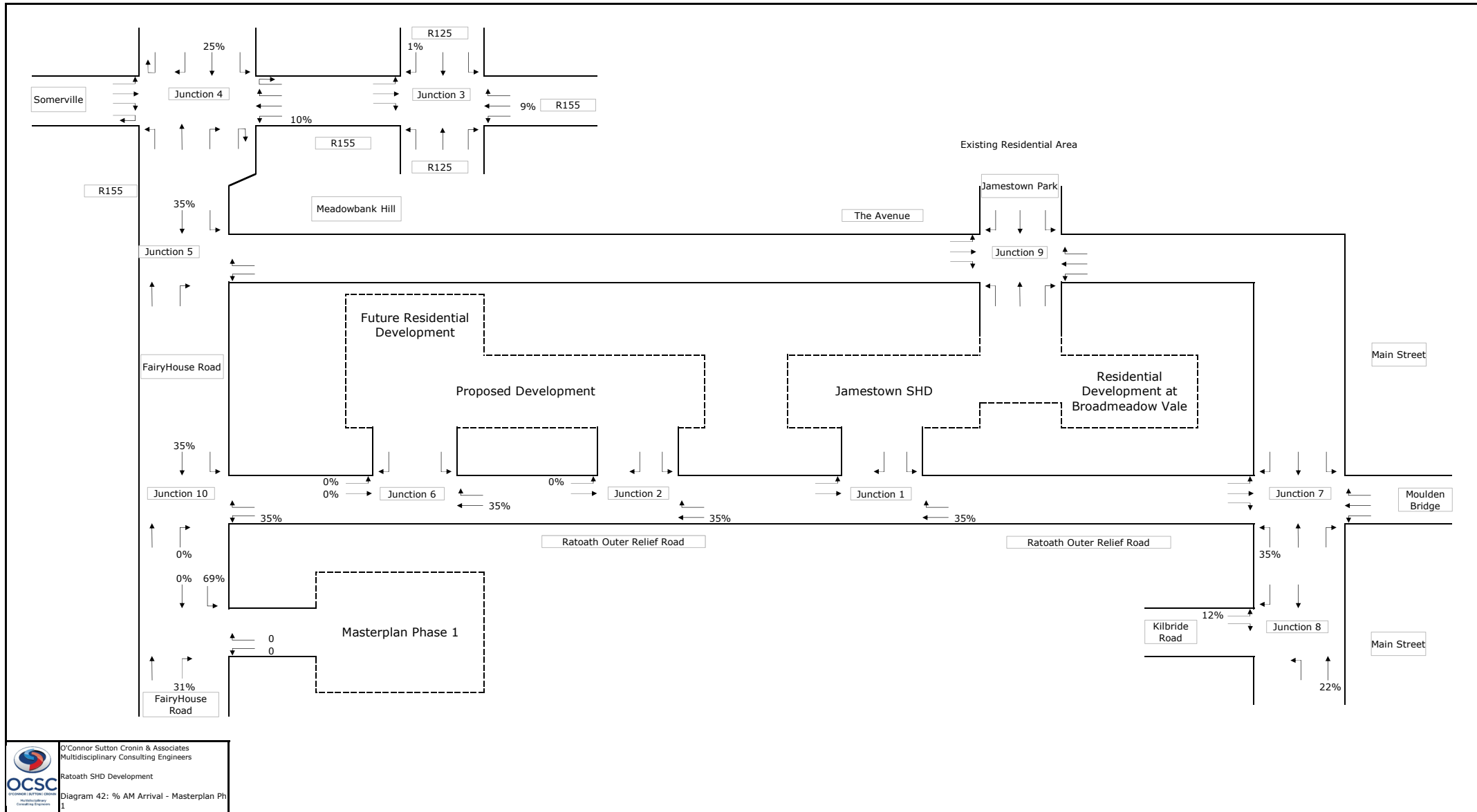


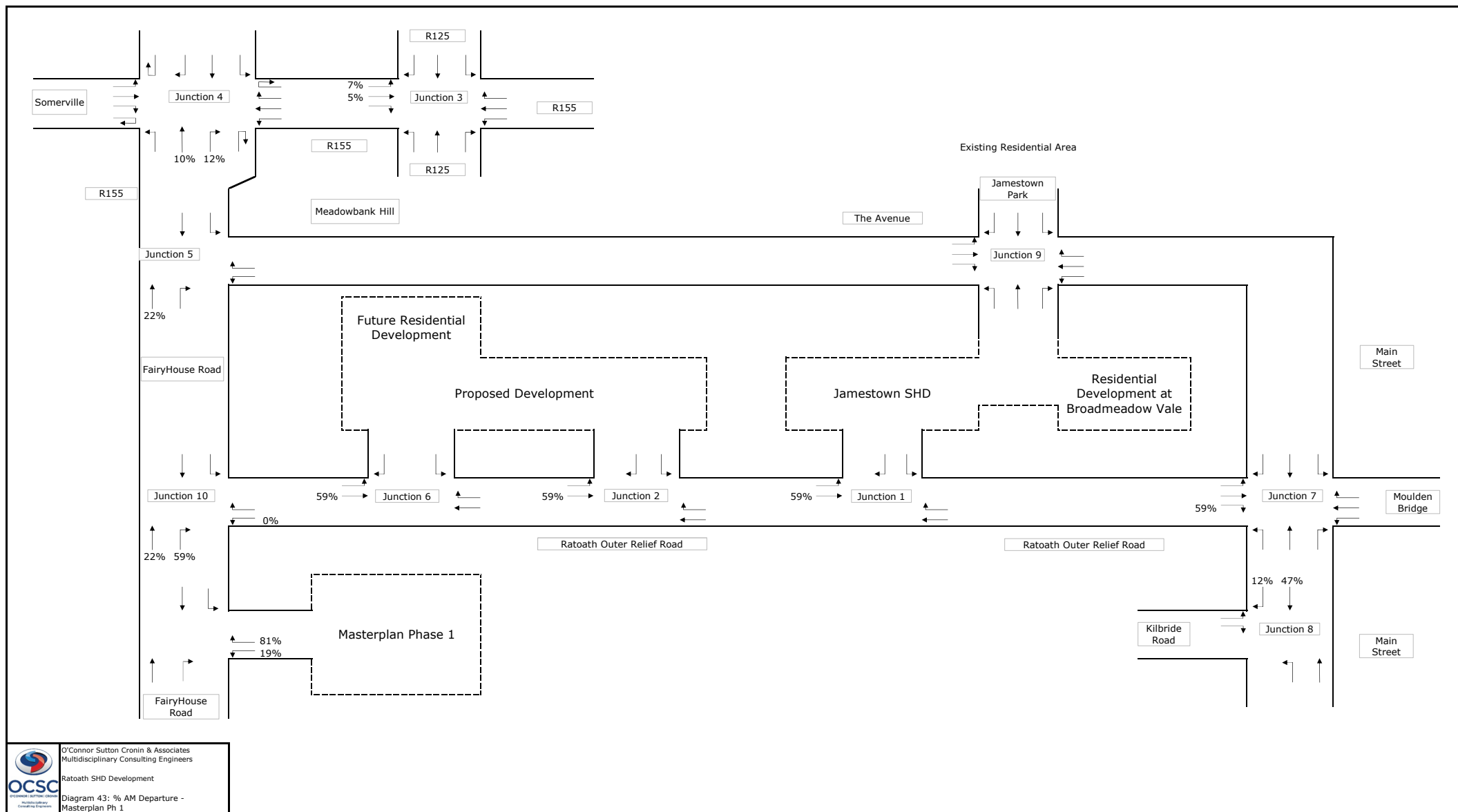
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Diagram 38: 2039 AADT Flows Do Something

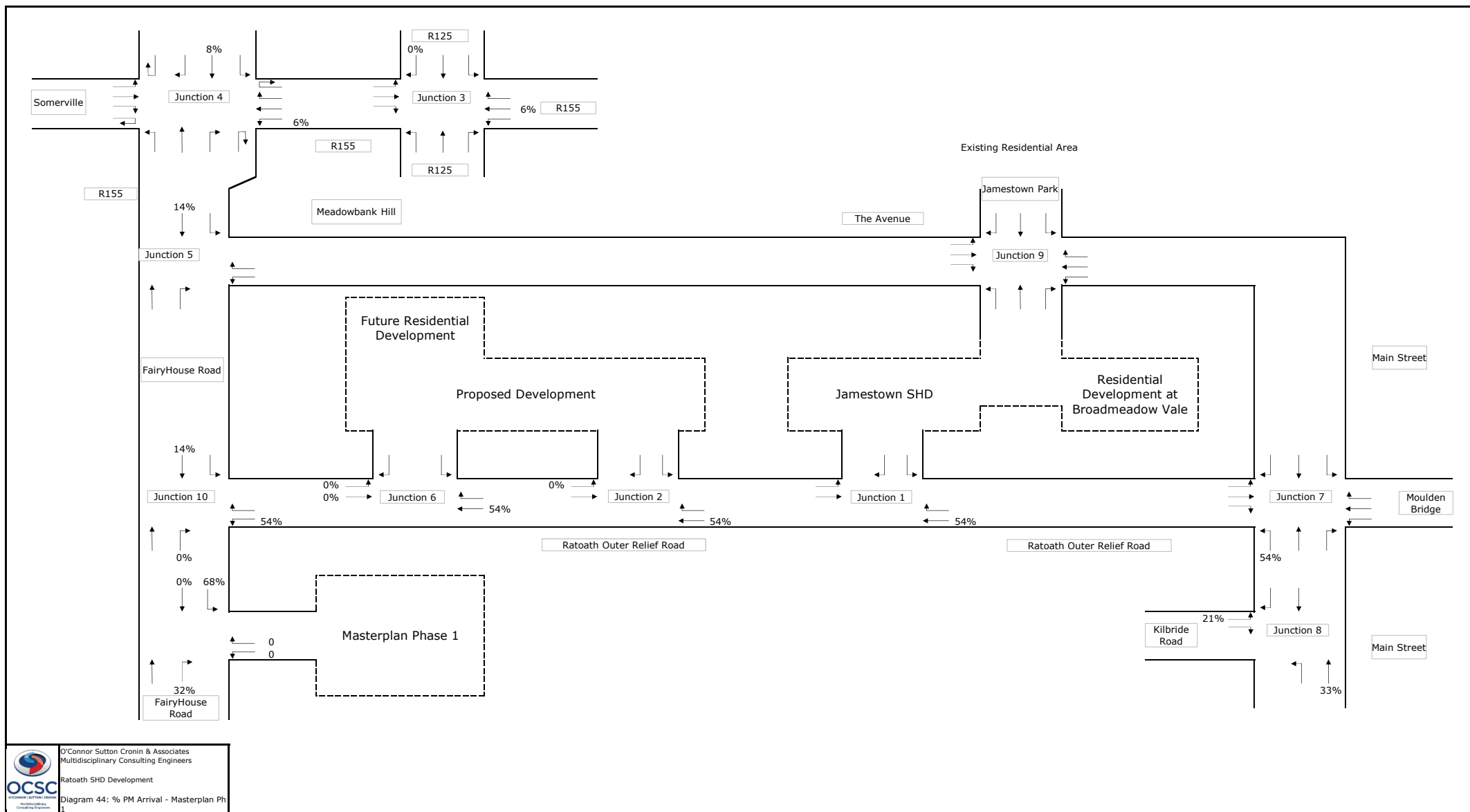


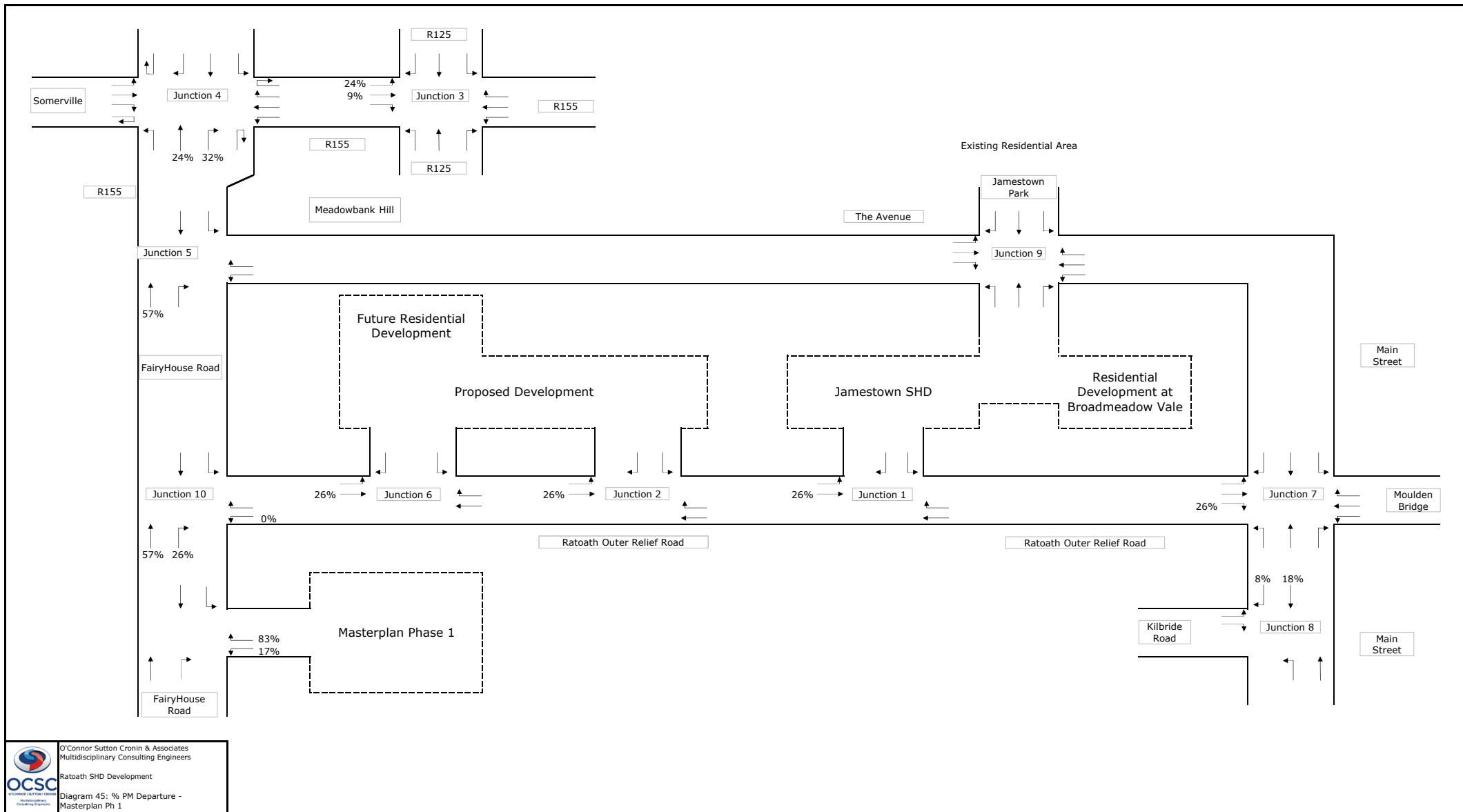


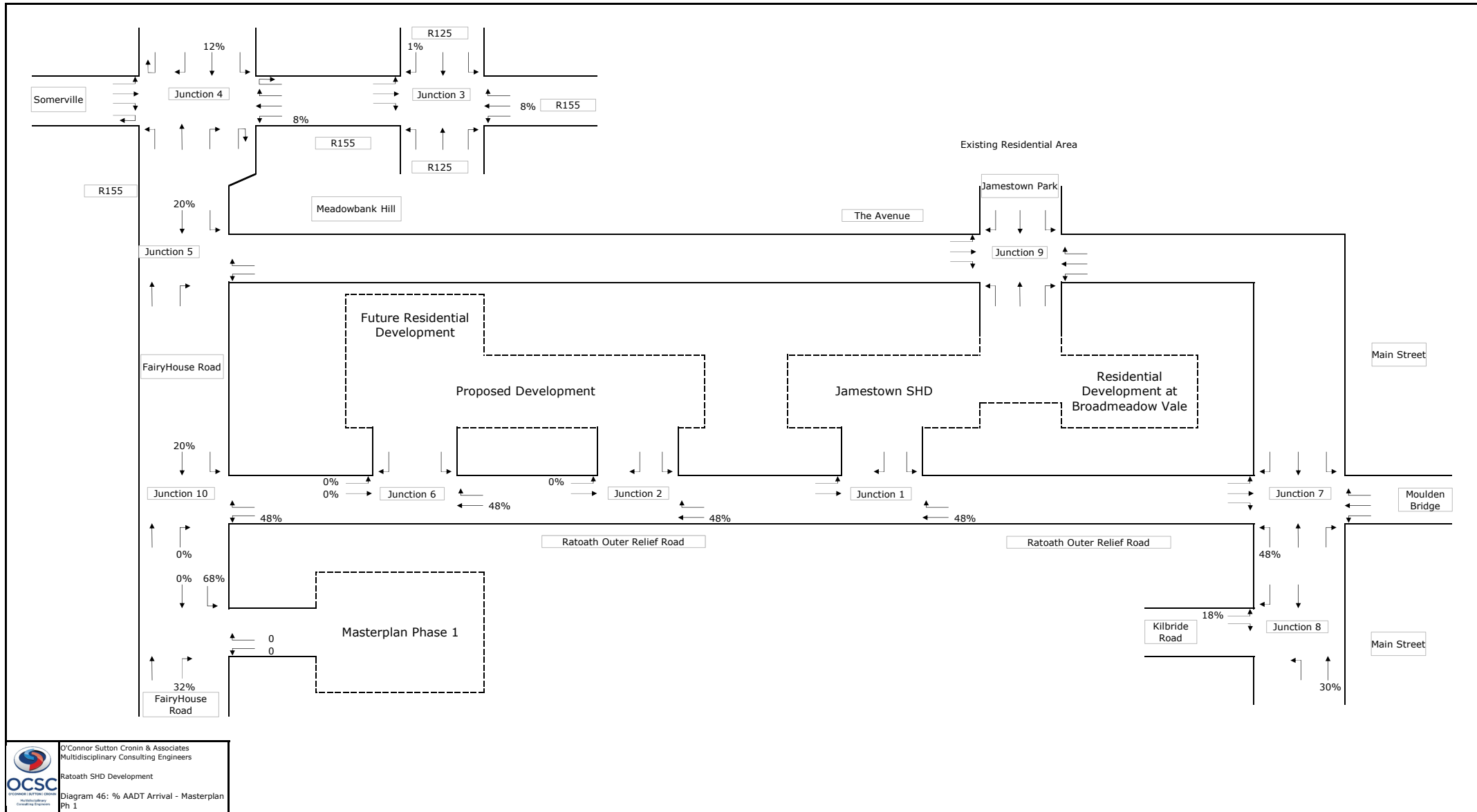


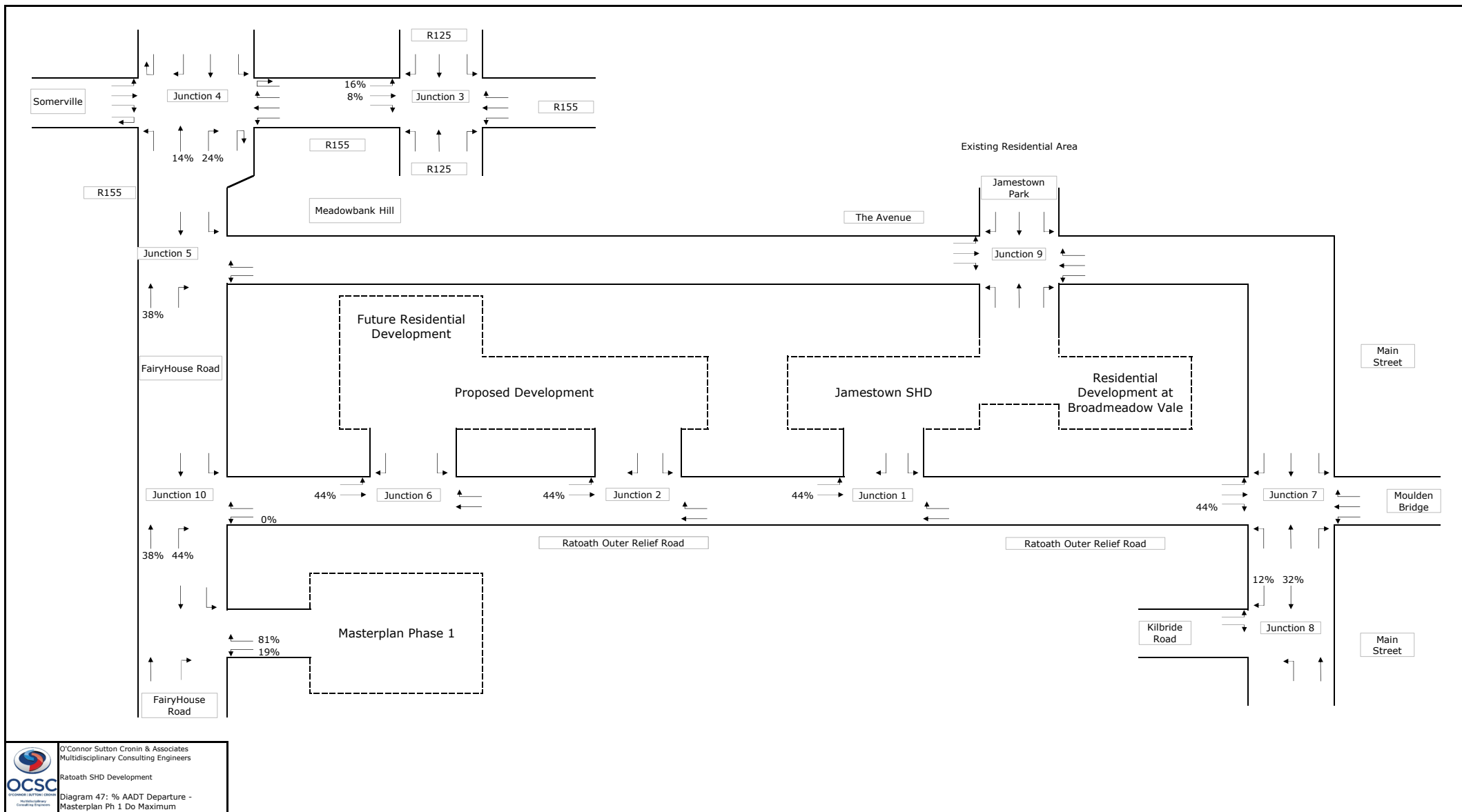


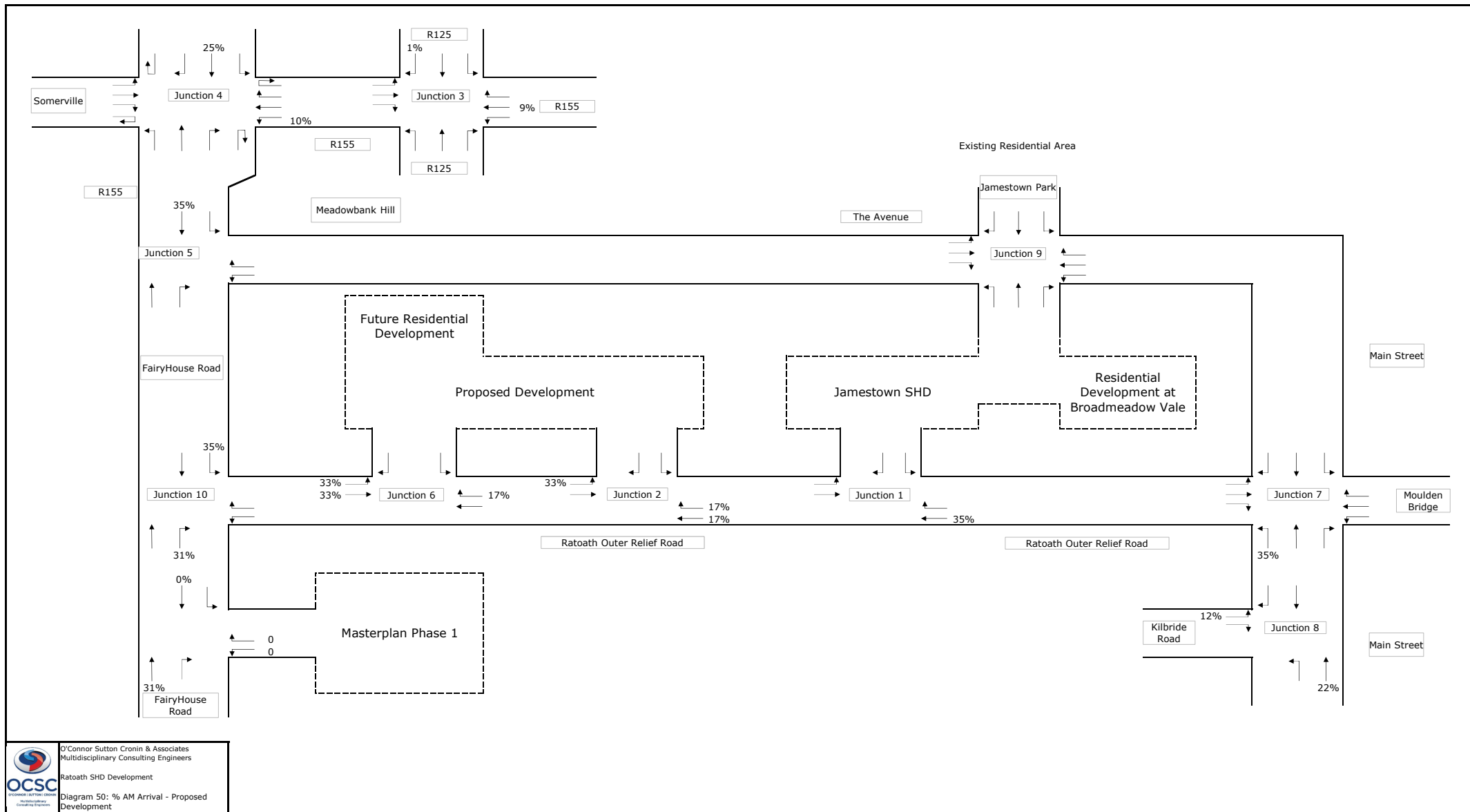


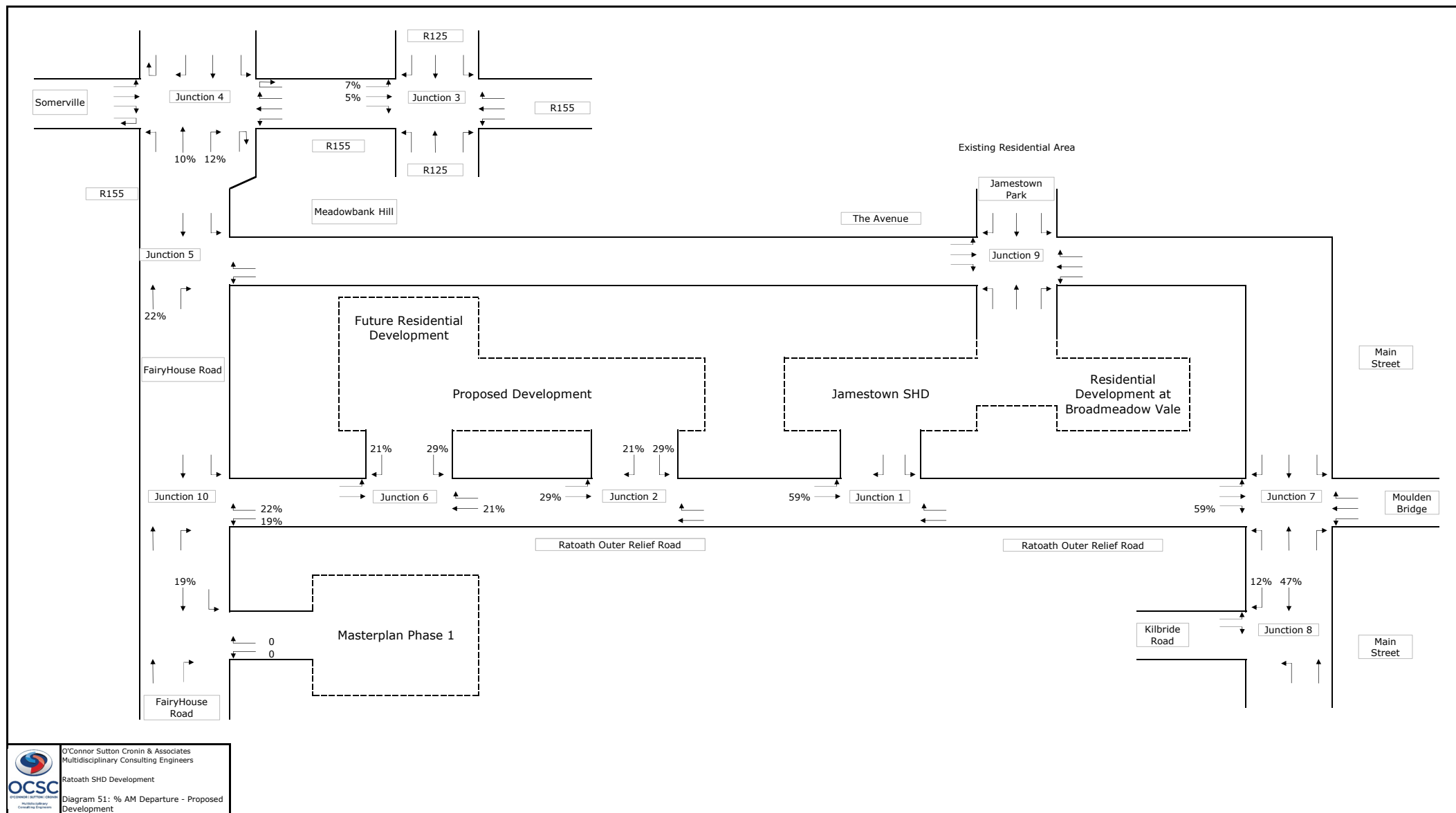








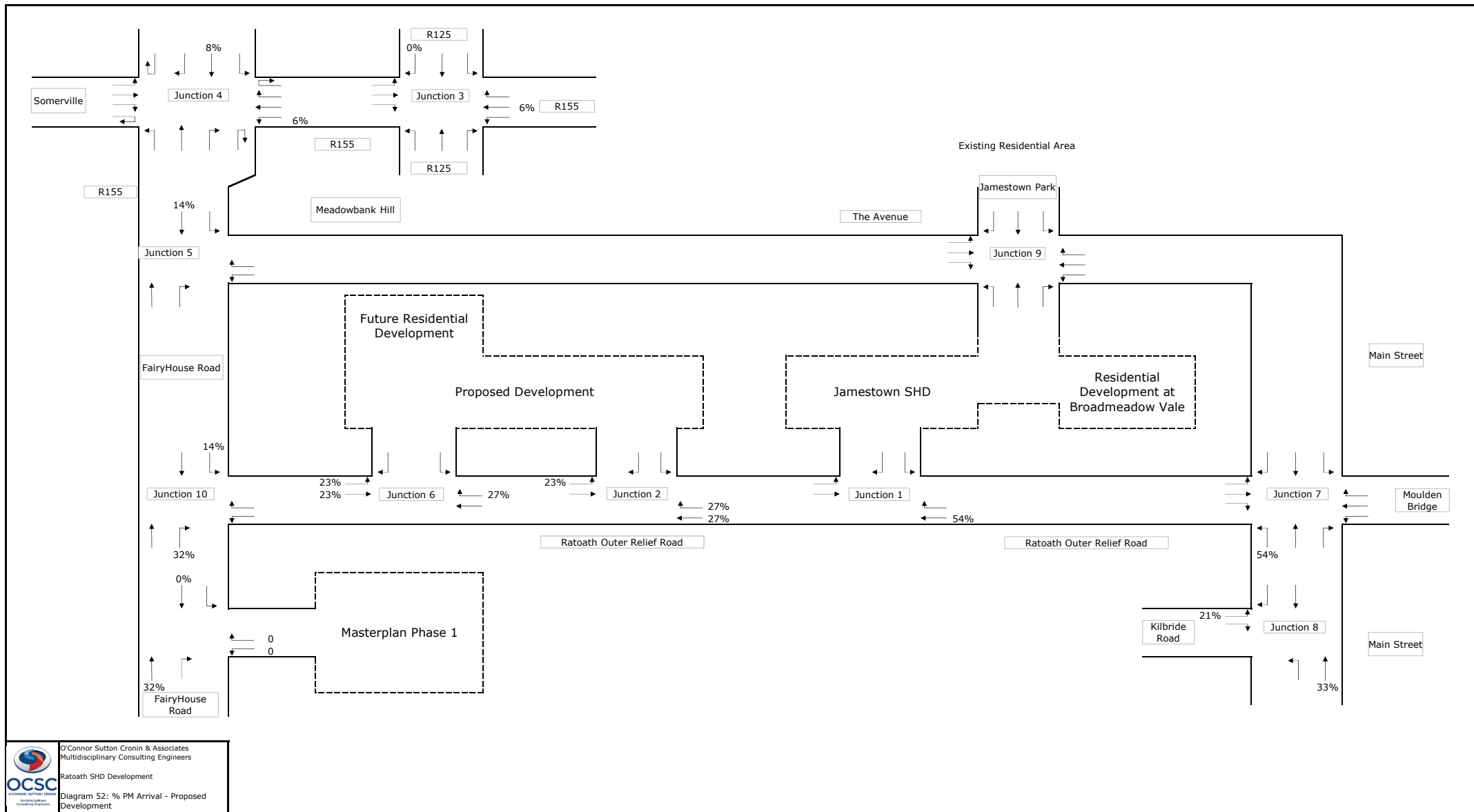


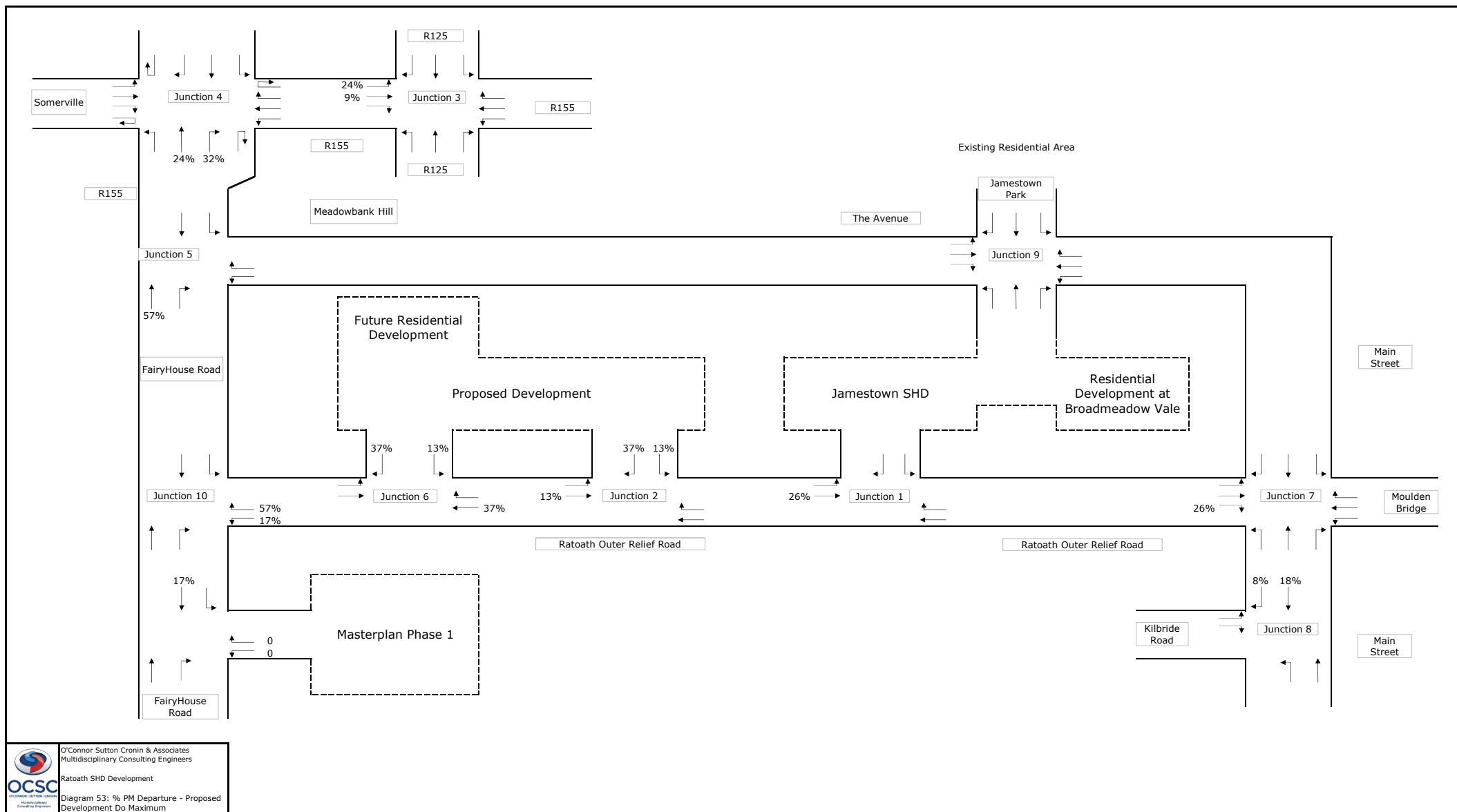


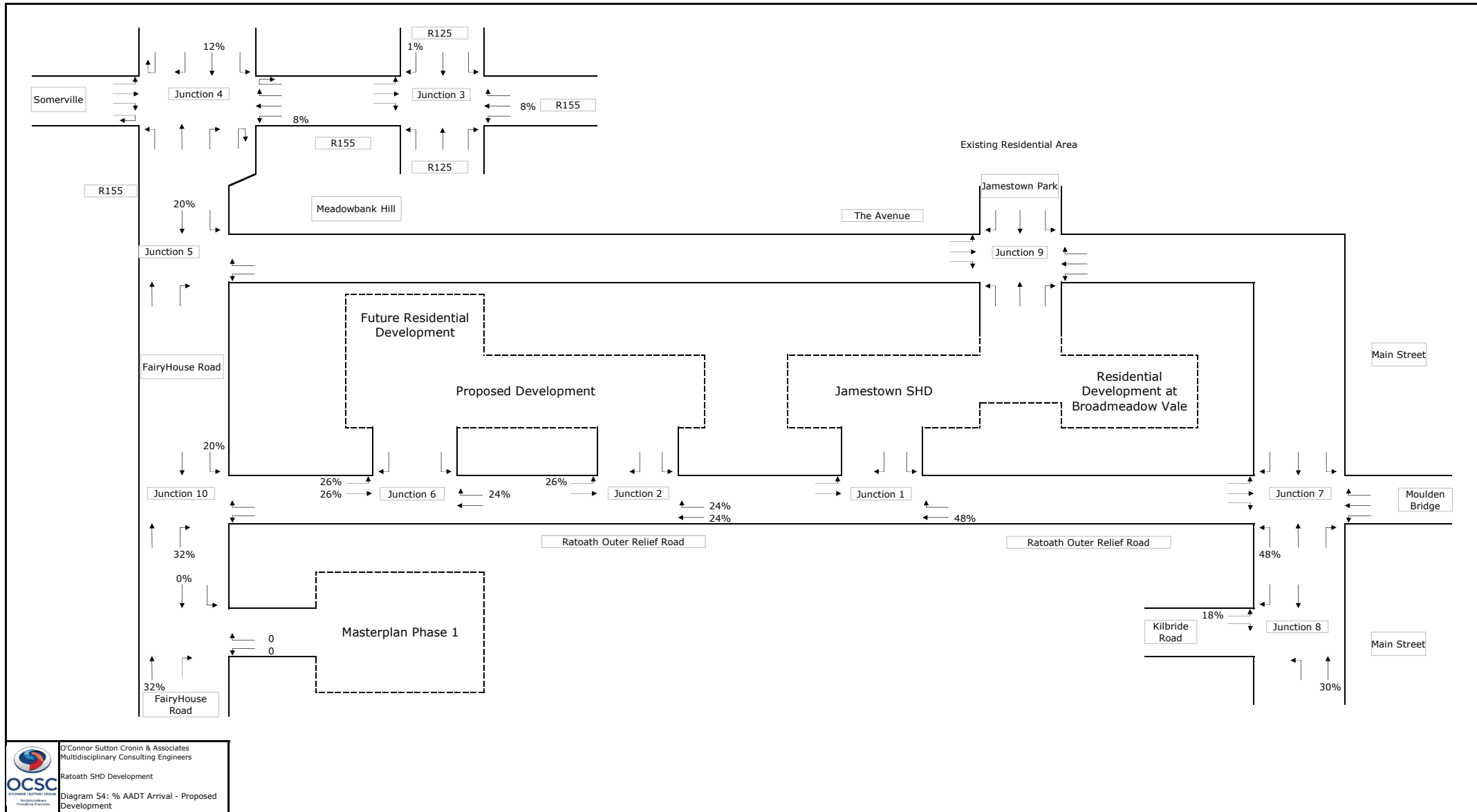
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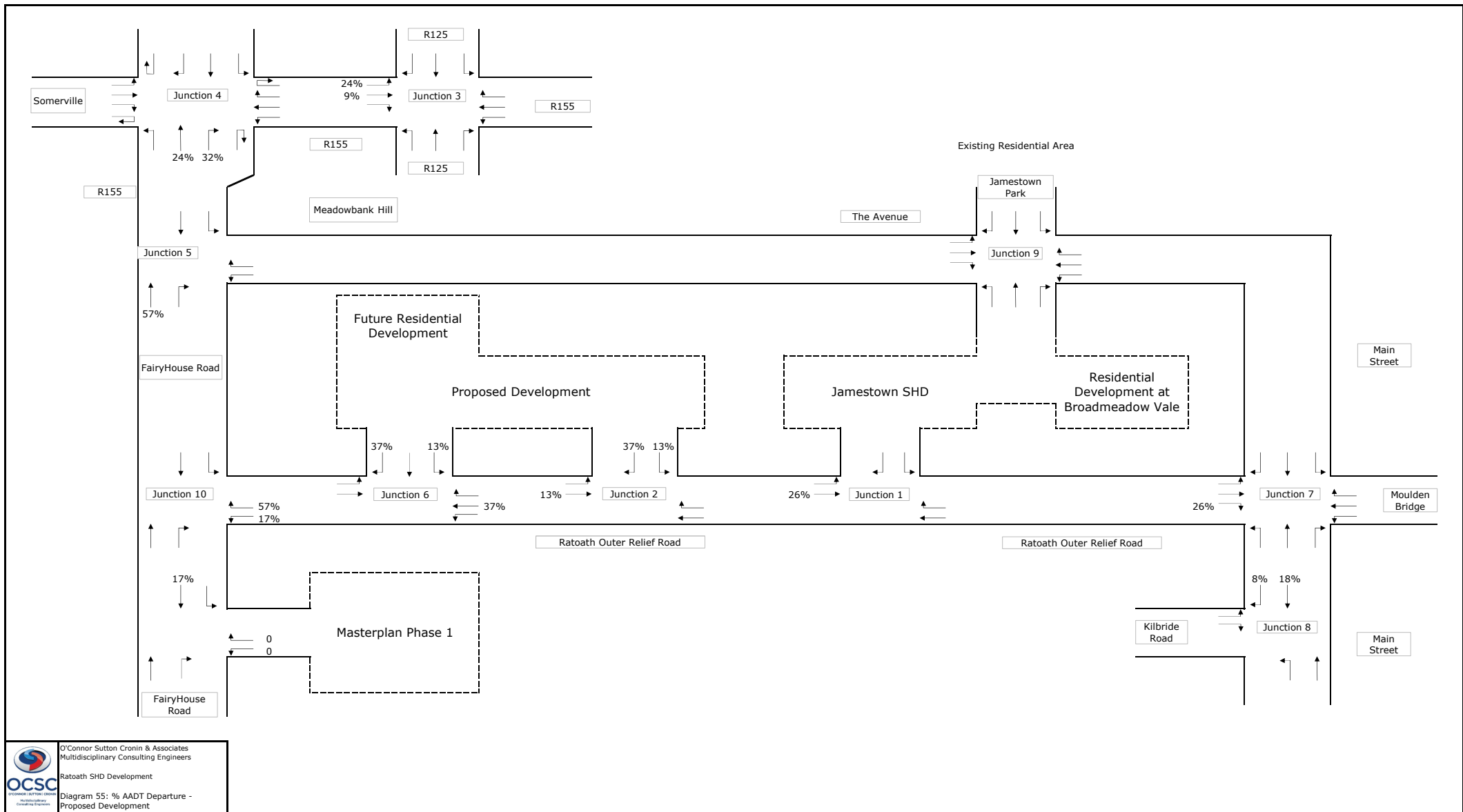
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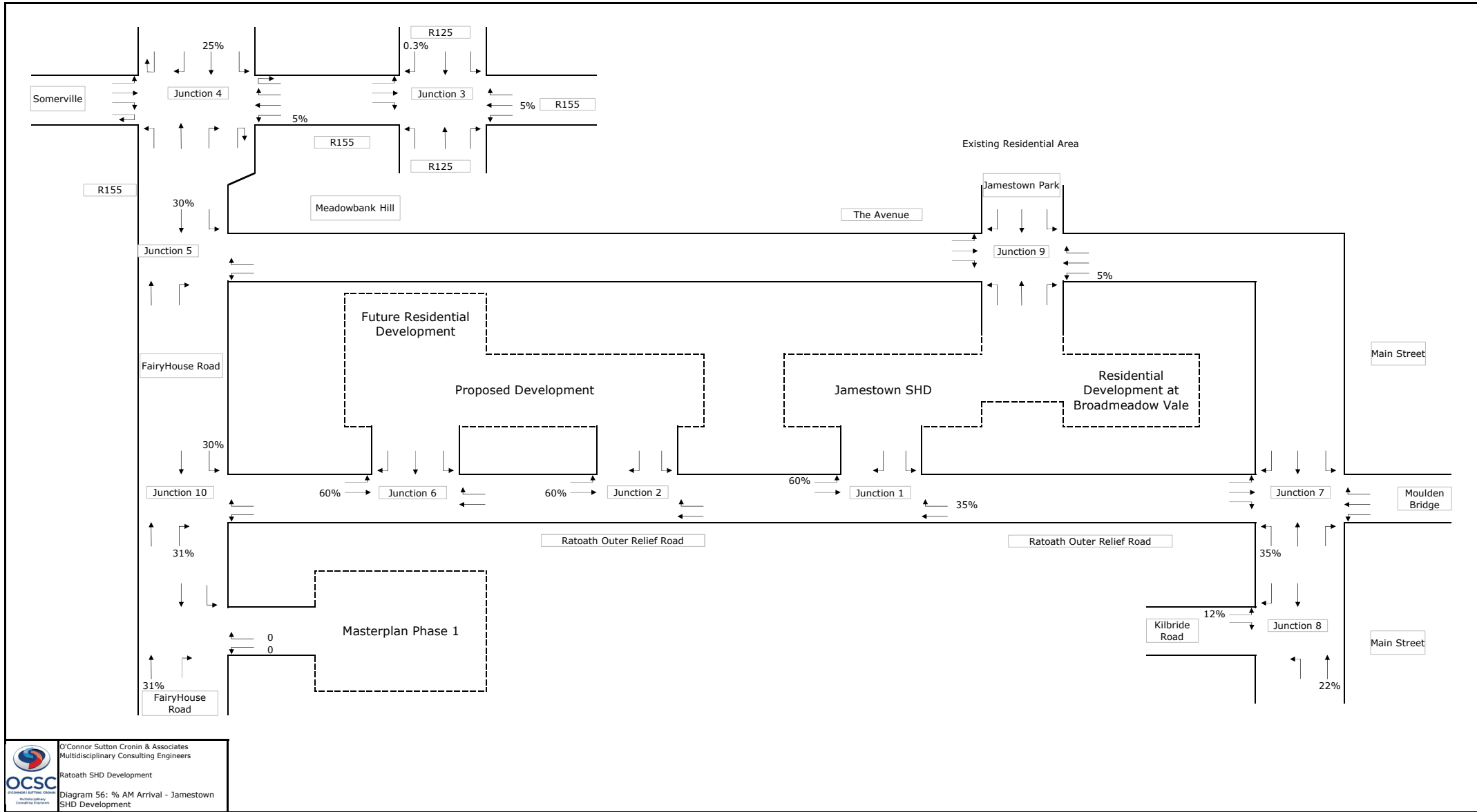
Diagram 51: % AM Departure - Proposed Development



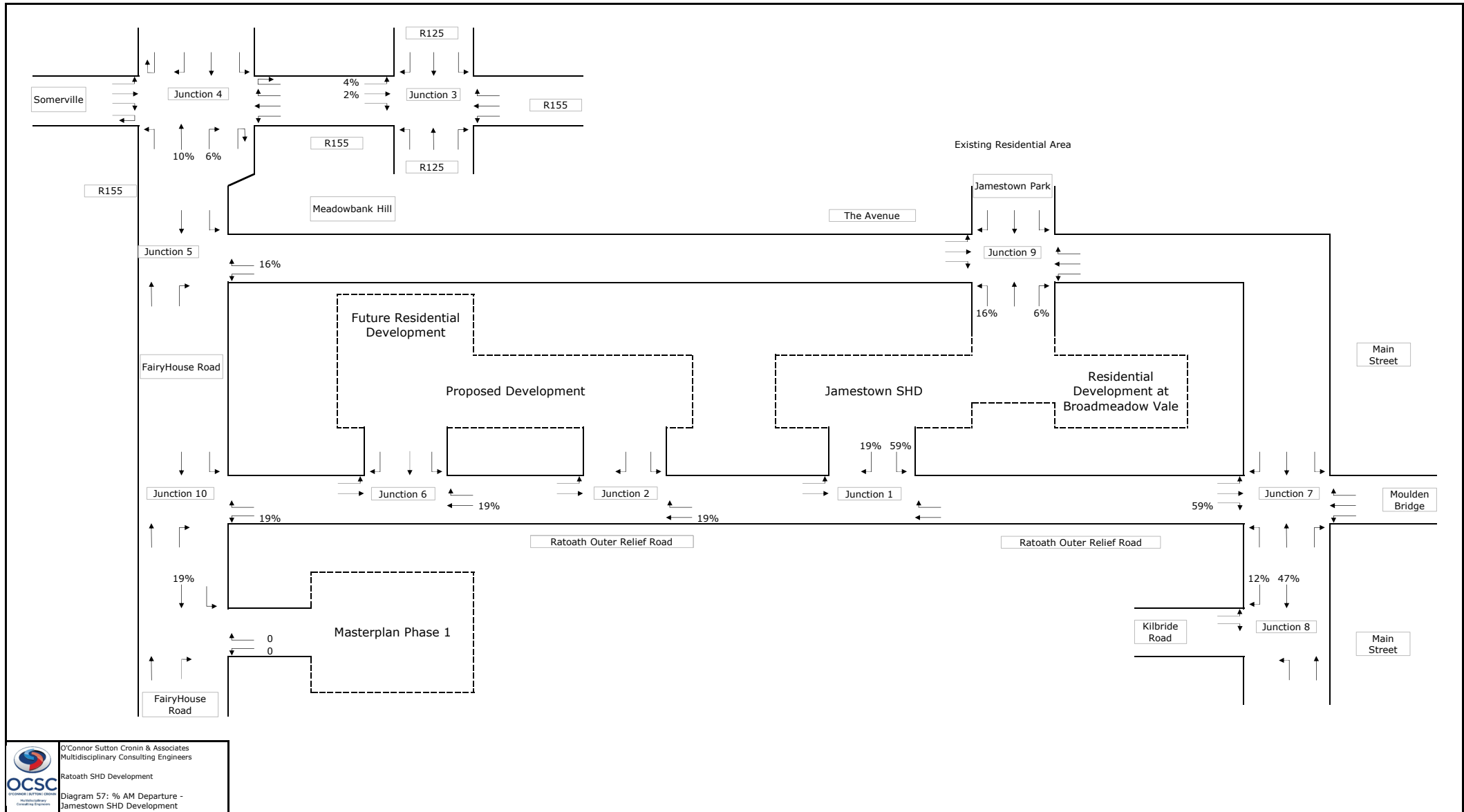


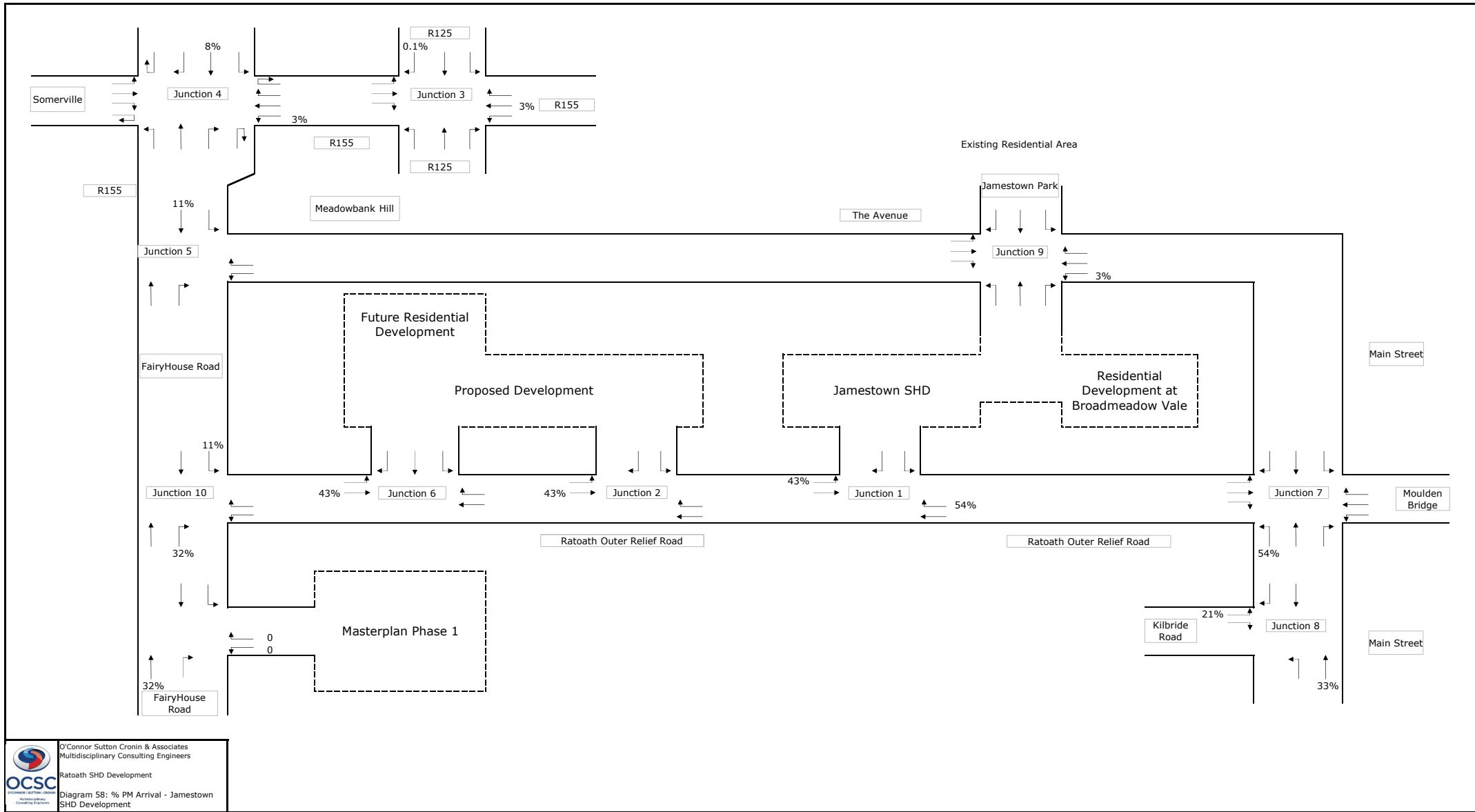


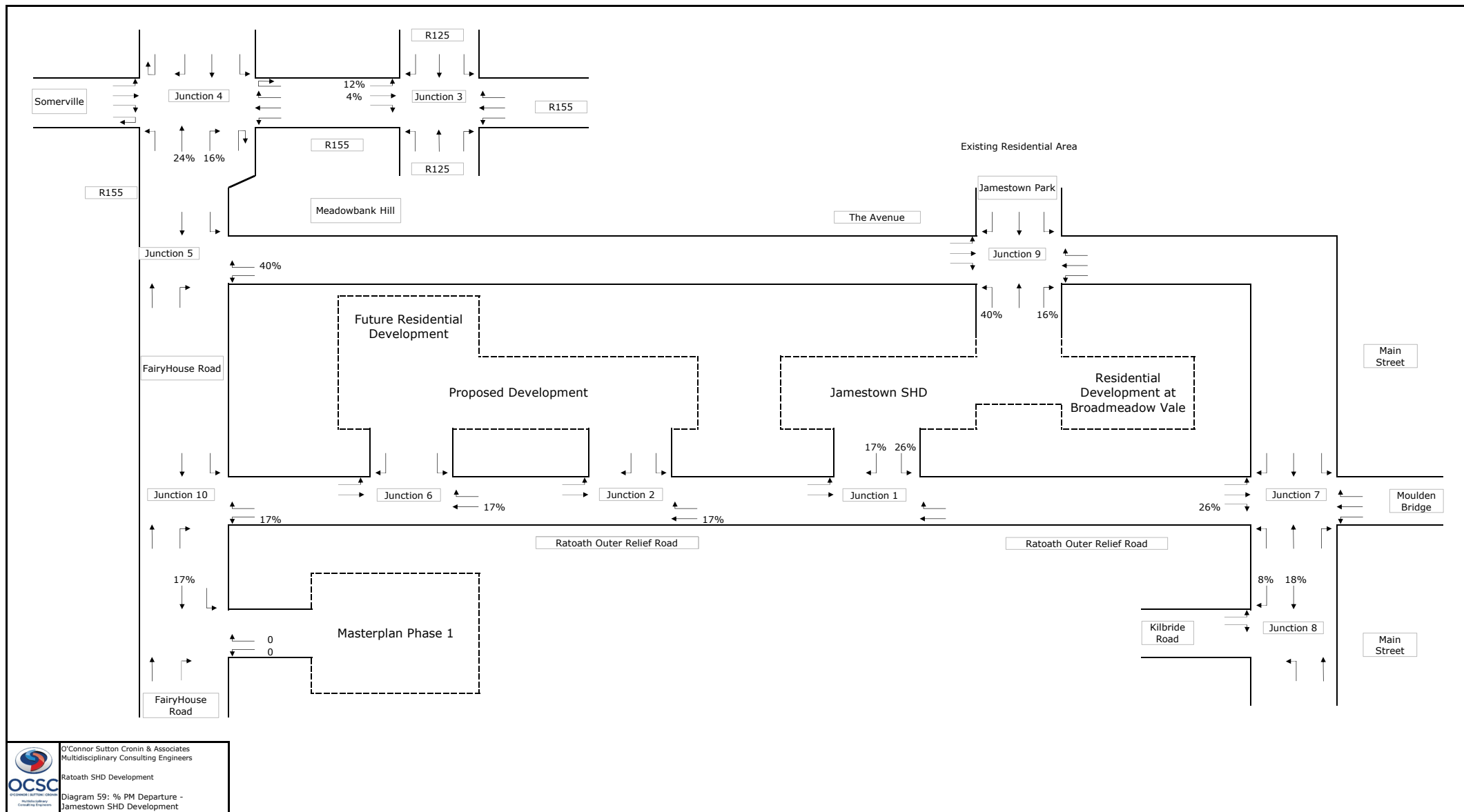


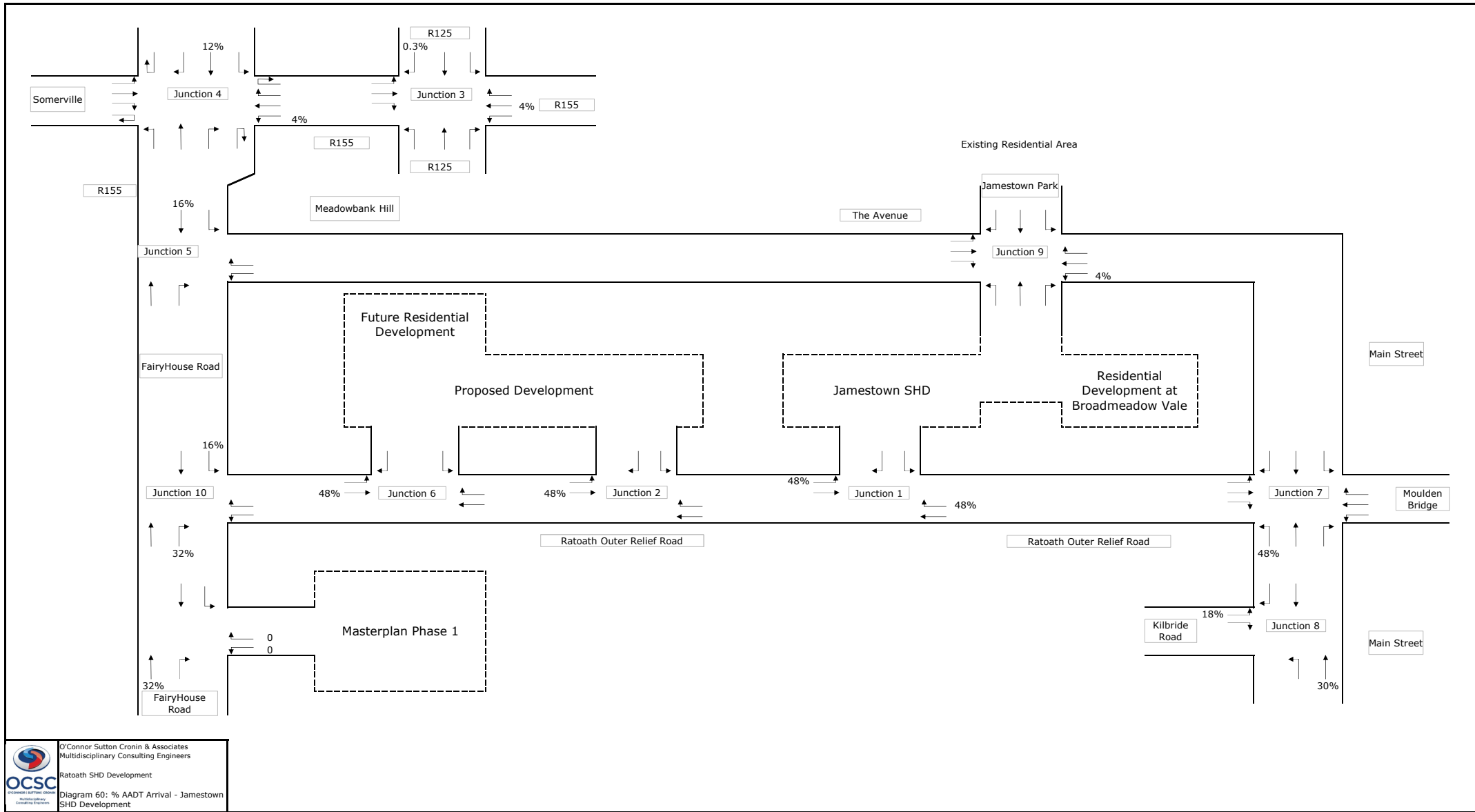


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Diagram 56: % AM Arrival - Jamestown
SHD Development

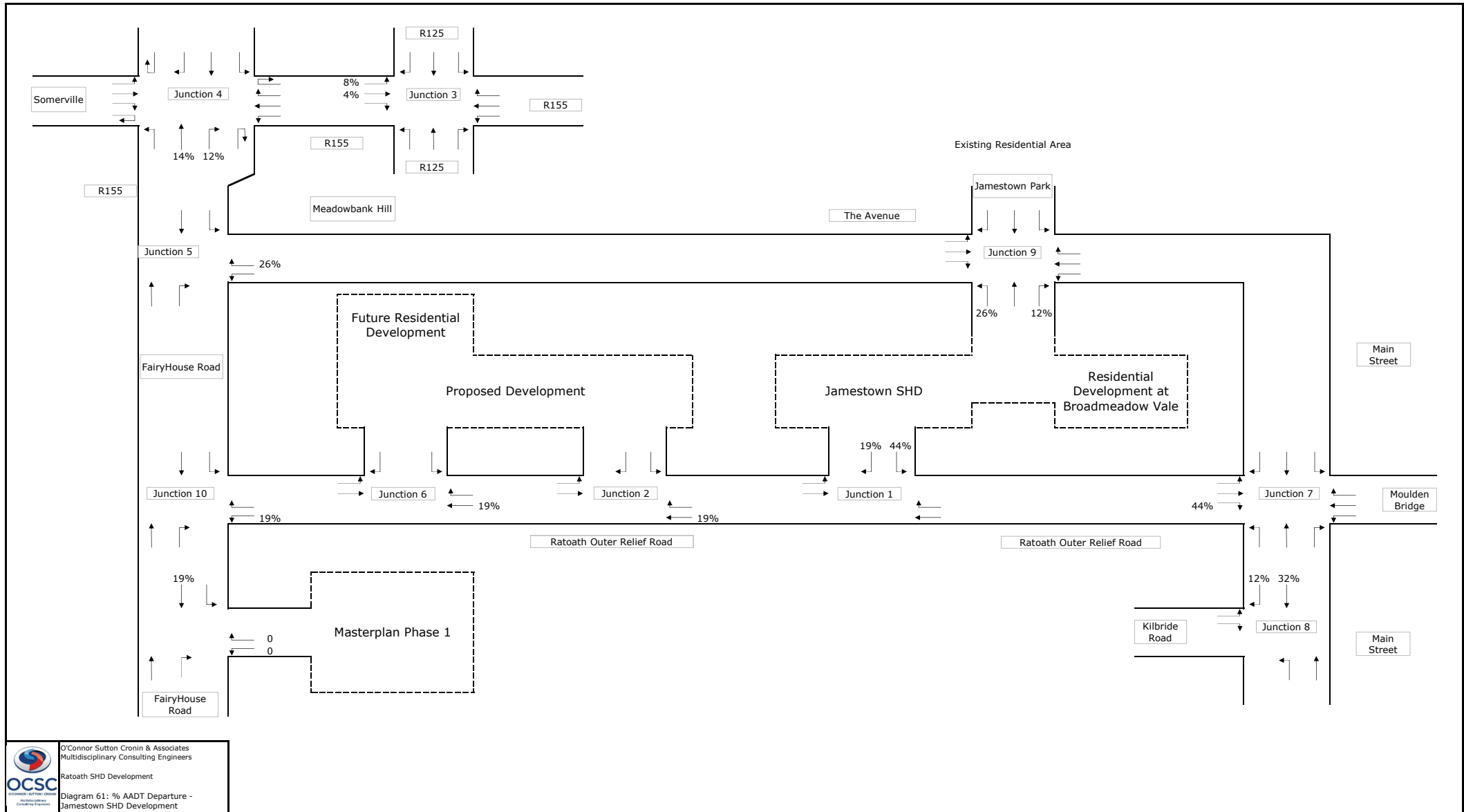


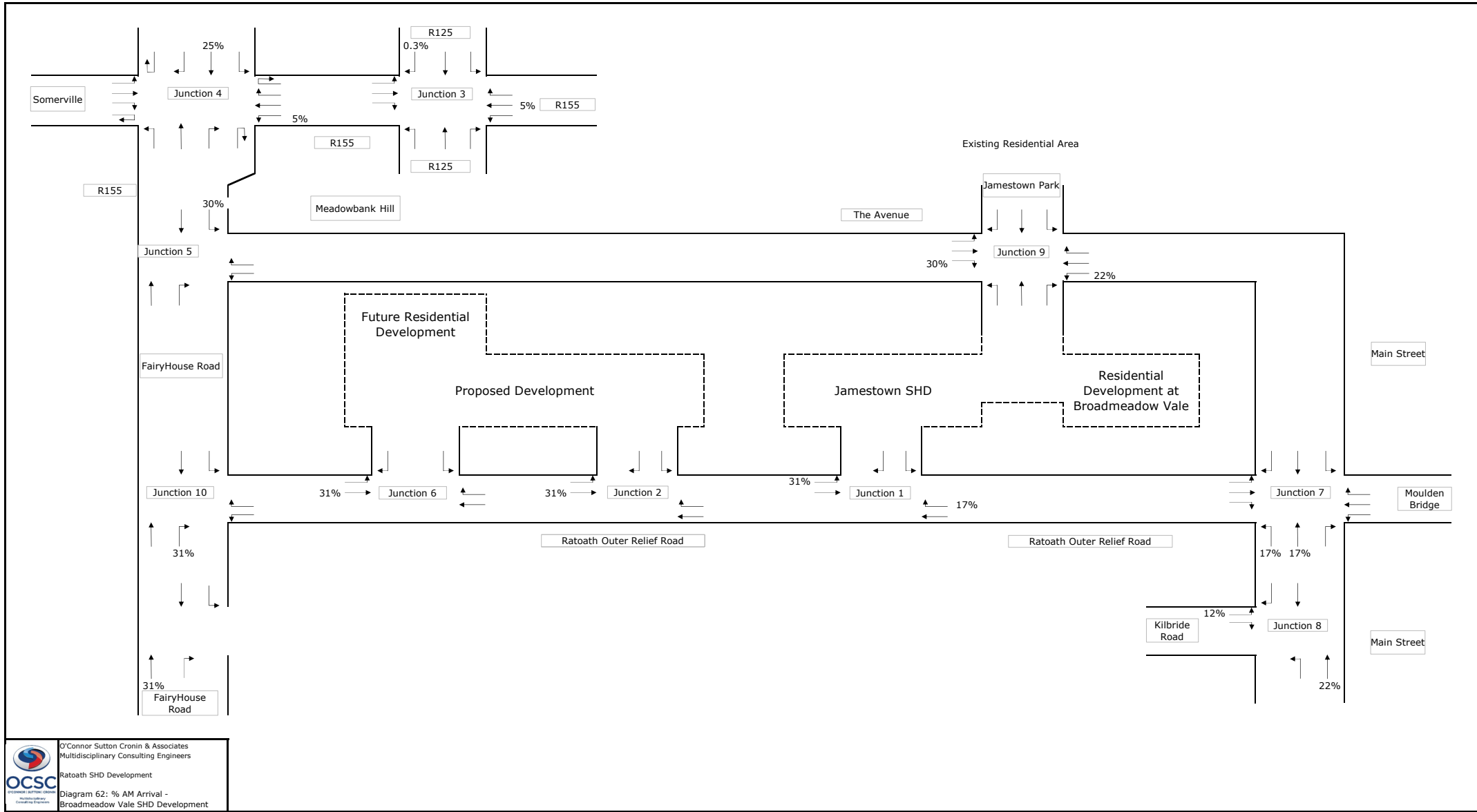


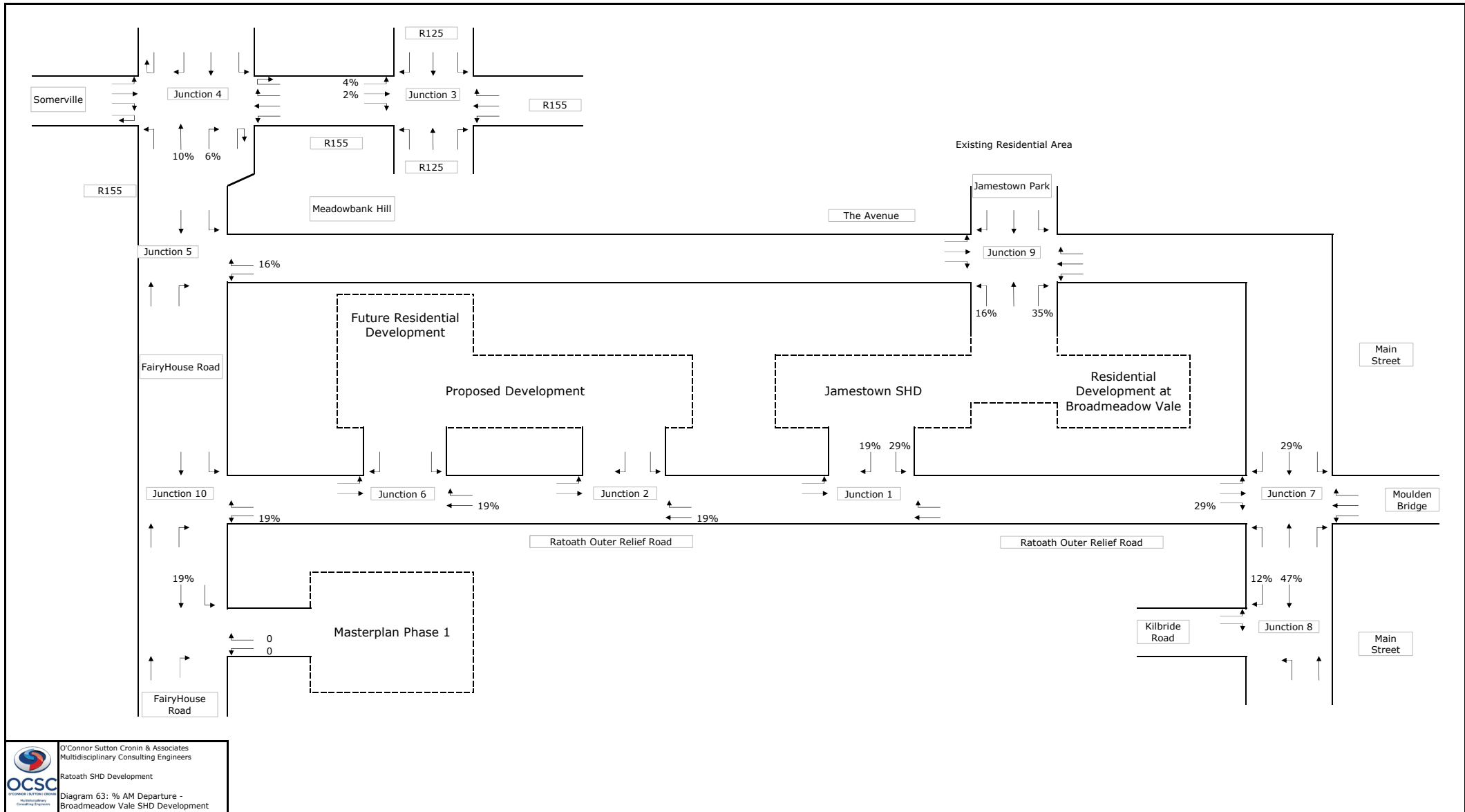




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Diagram 60: % AADT Arrival - Jamestown
SHD Development



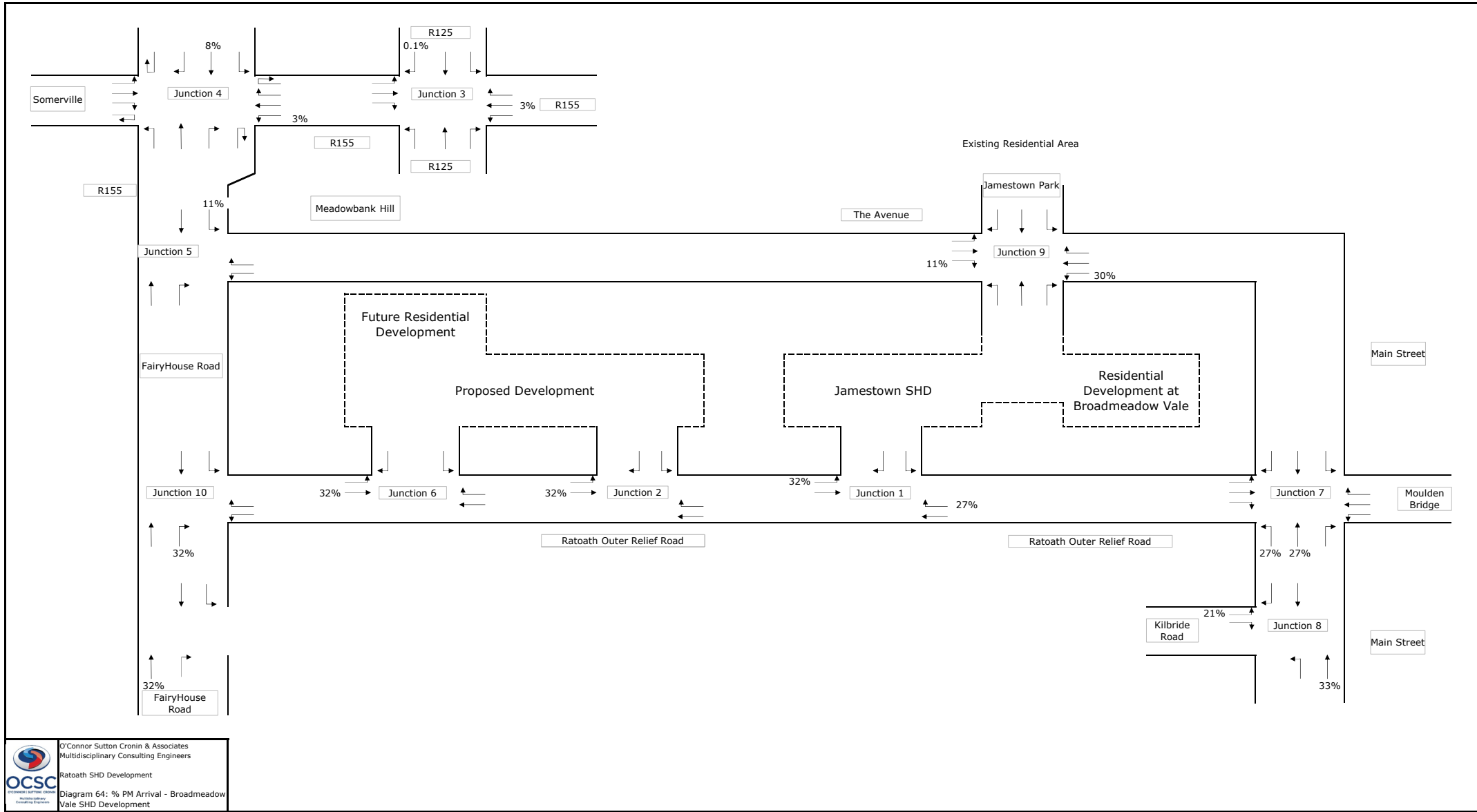


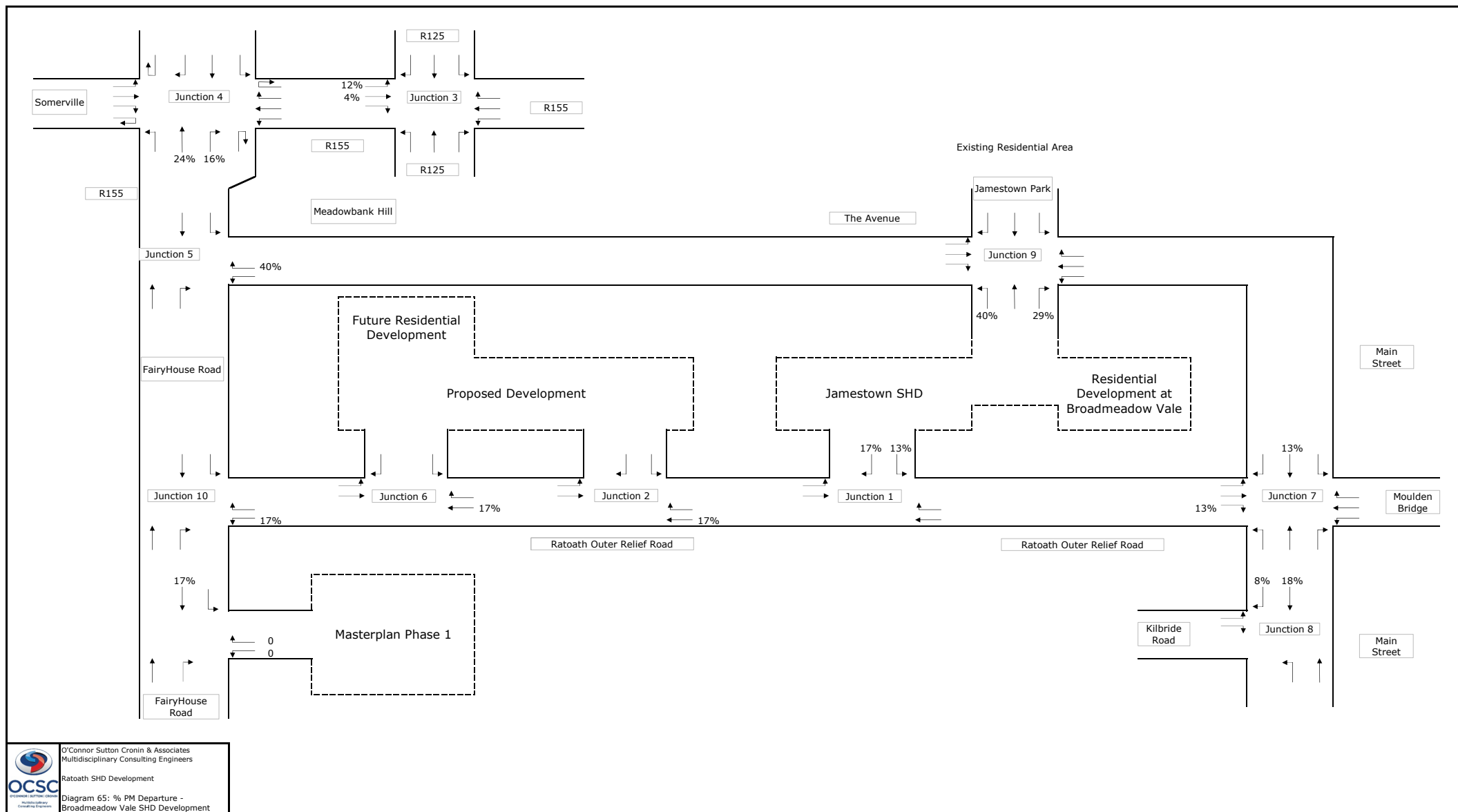


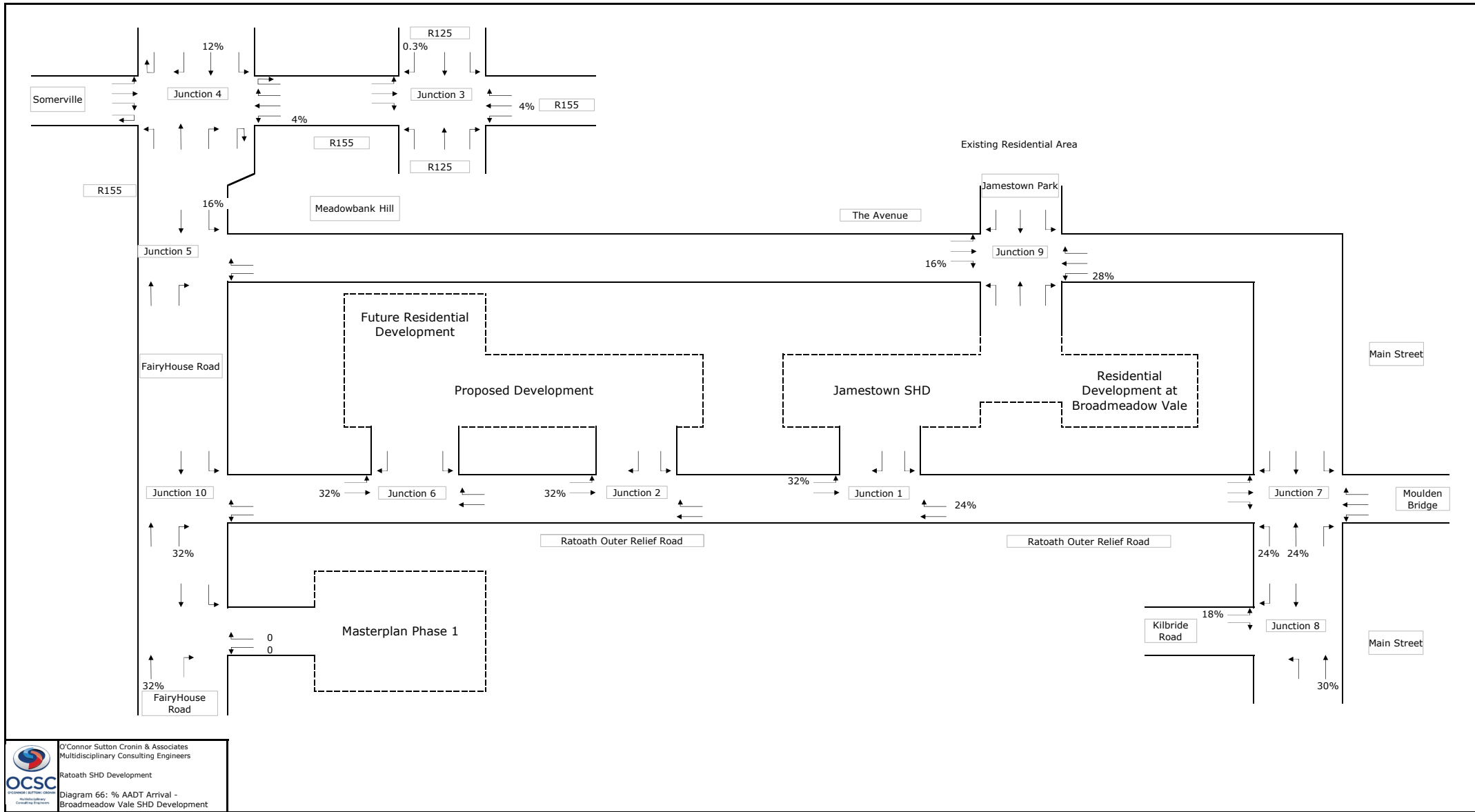
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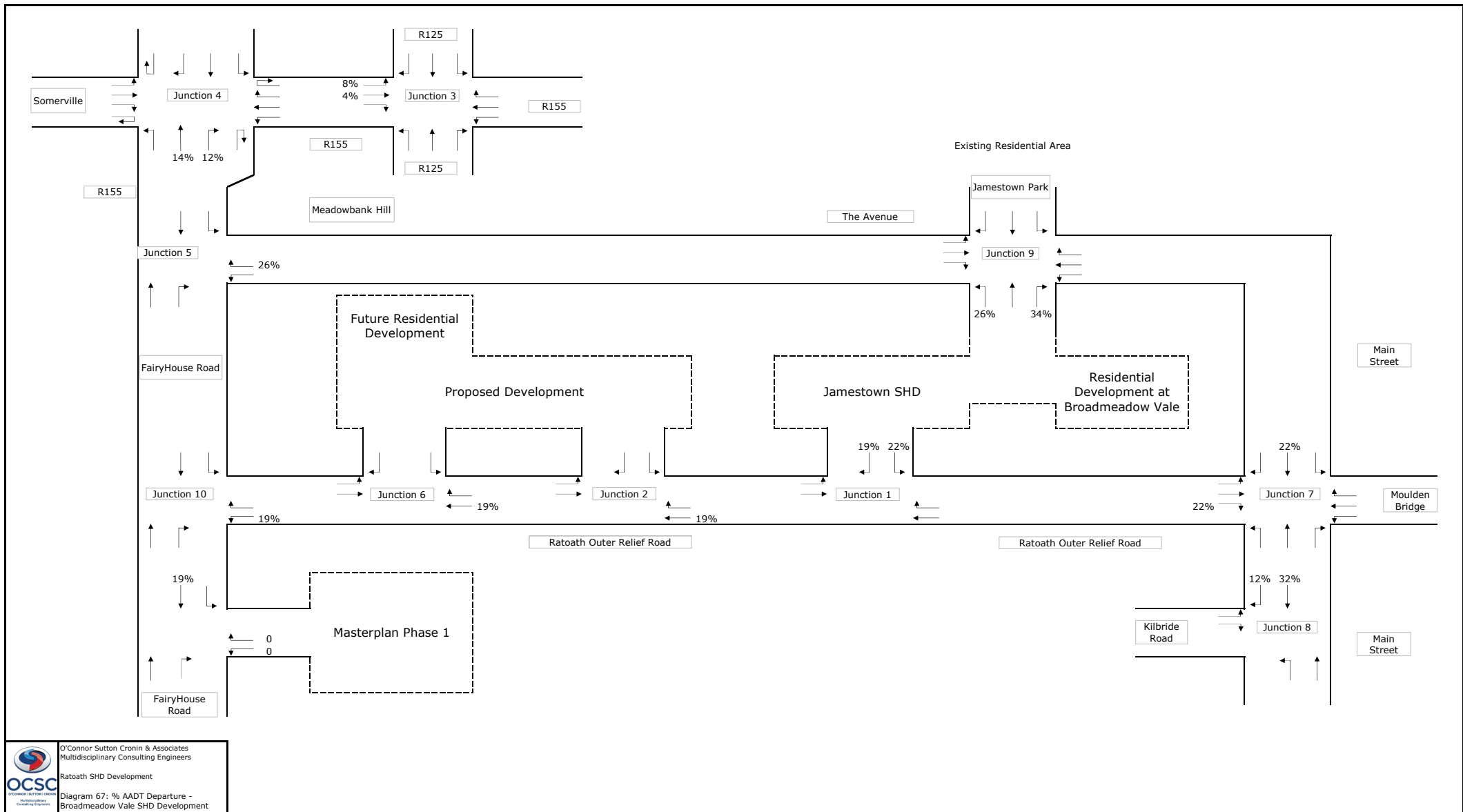
Diagram 63: % AM Departure -
Broadmeadow Vale SHD Development

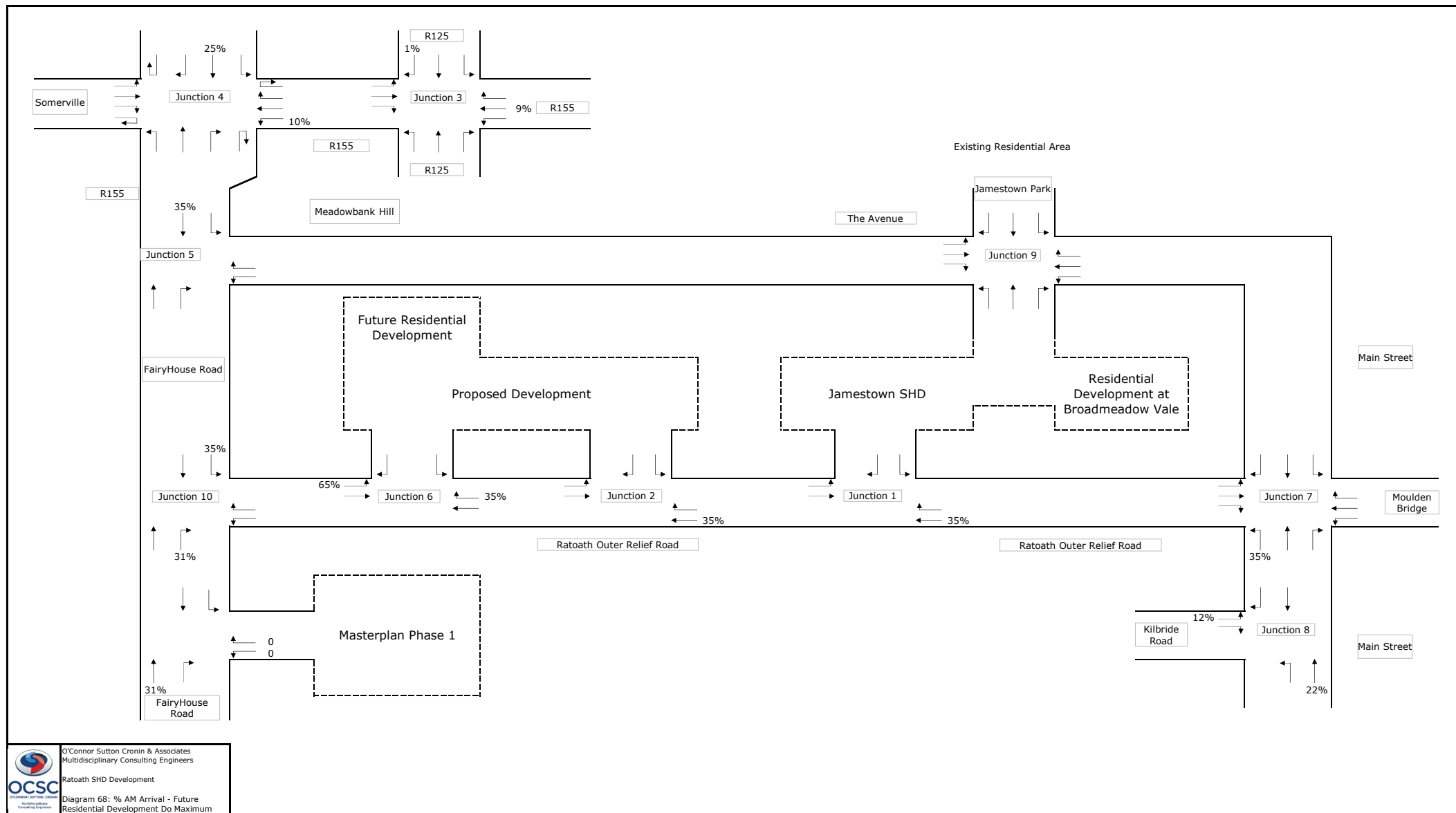


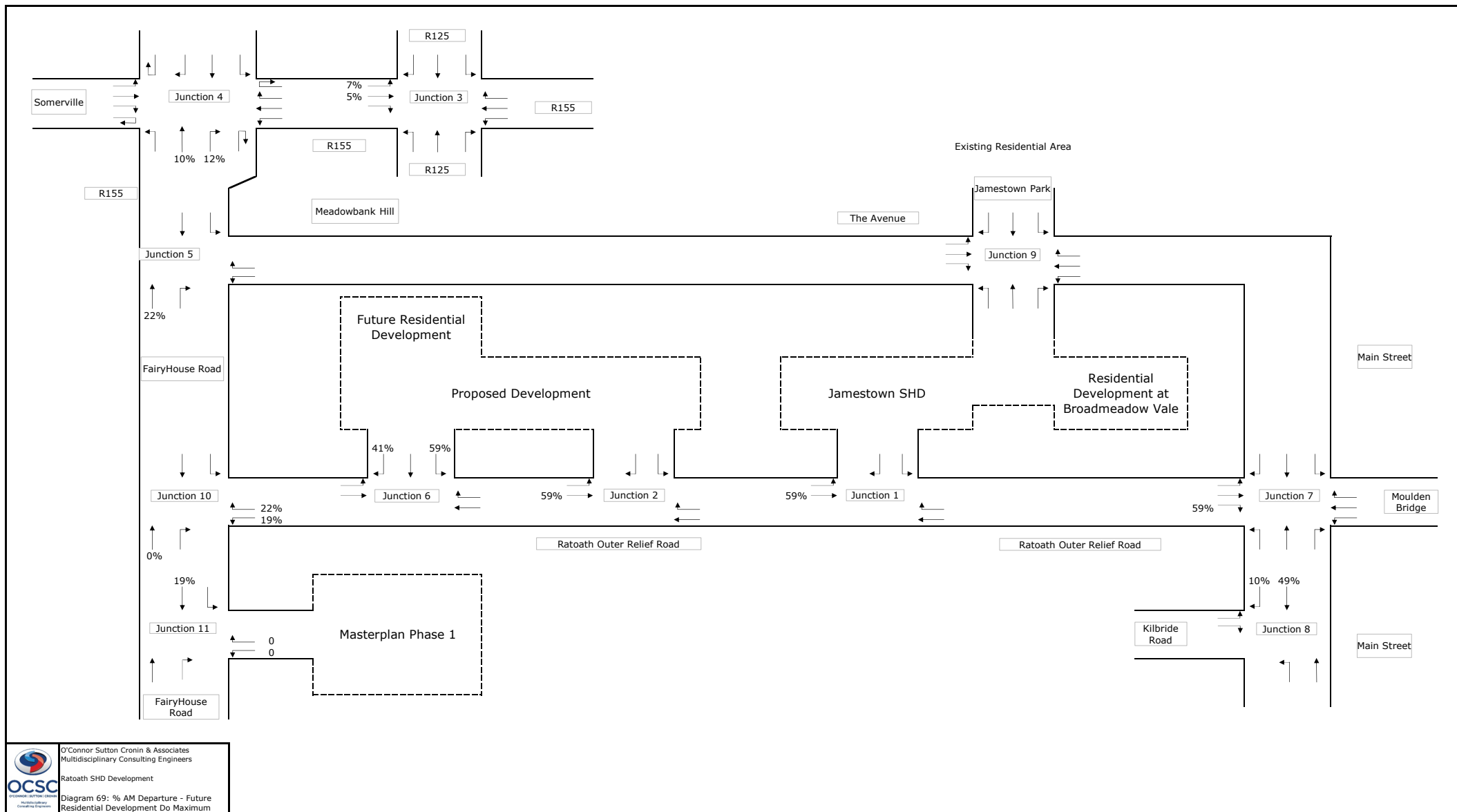


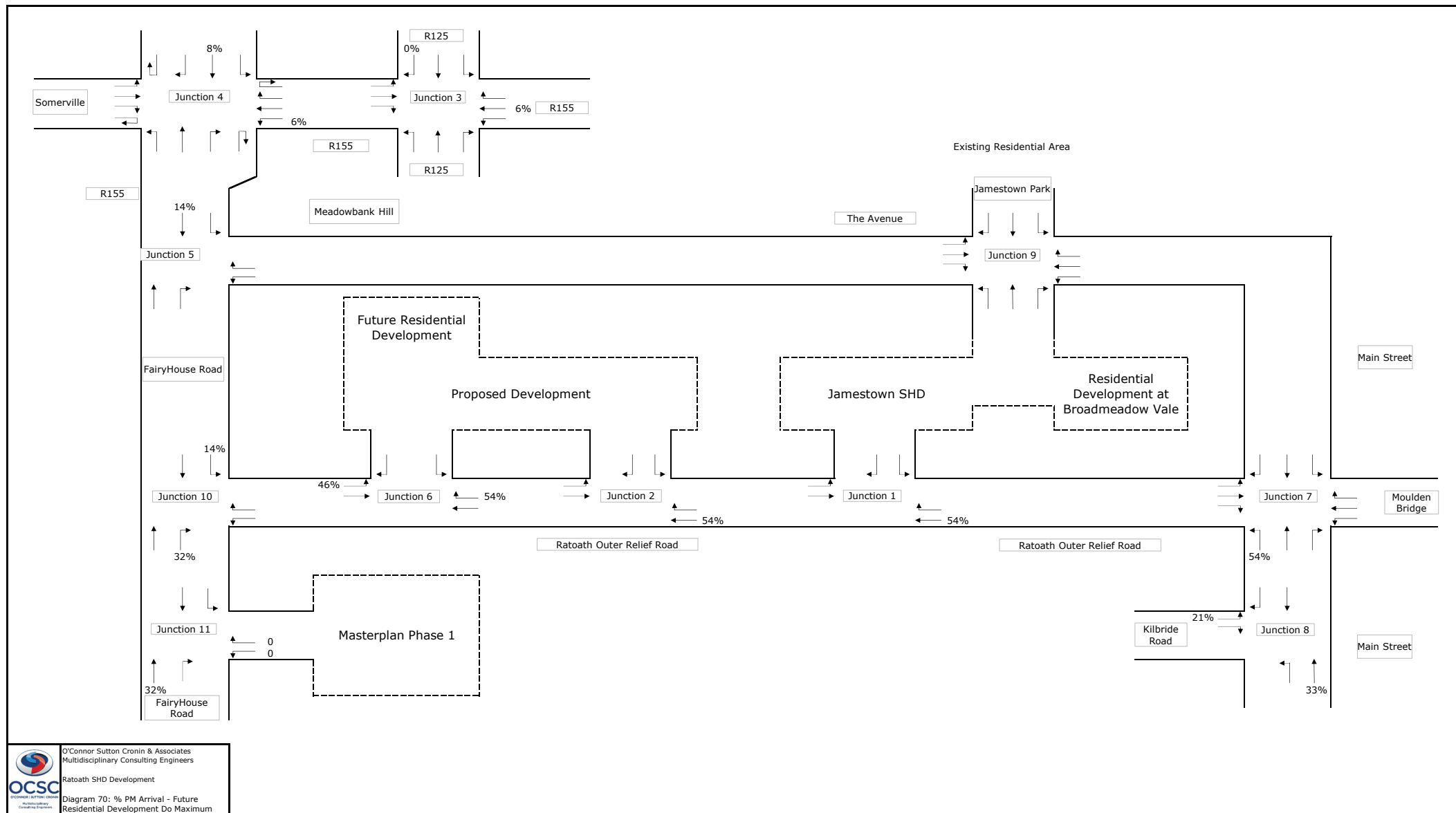


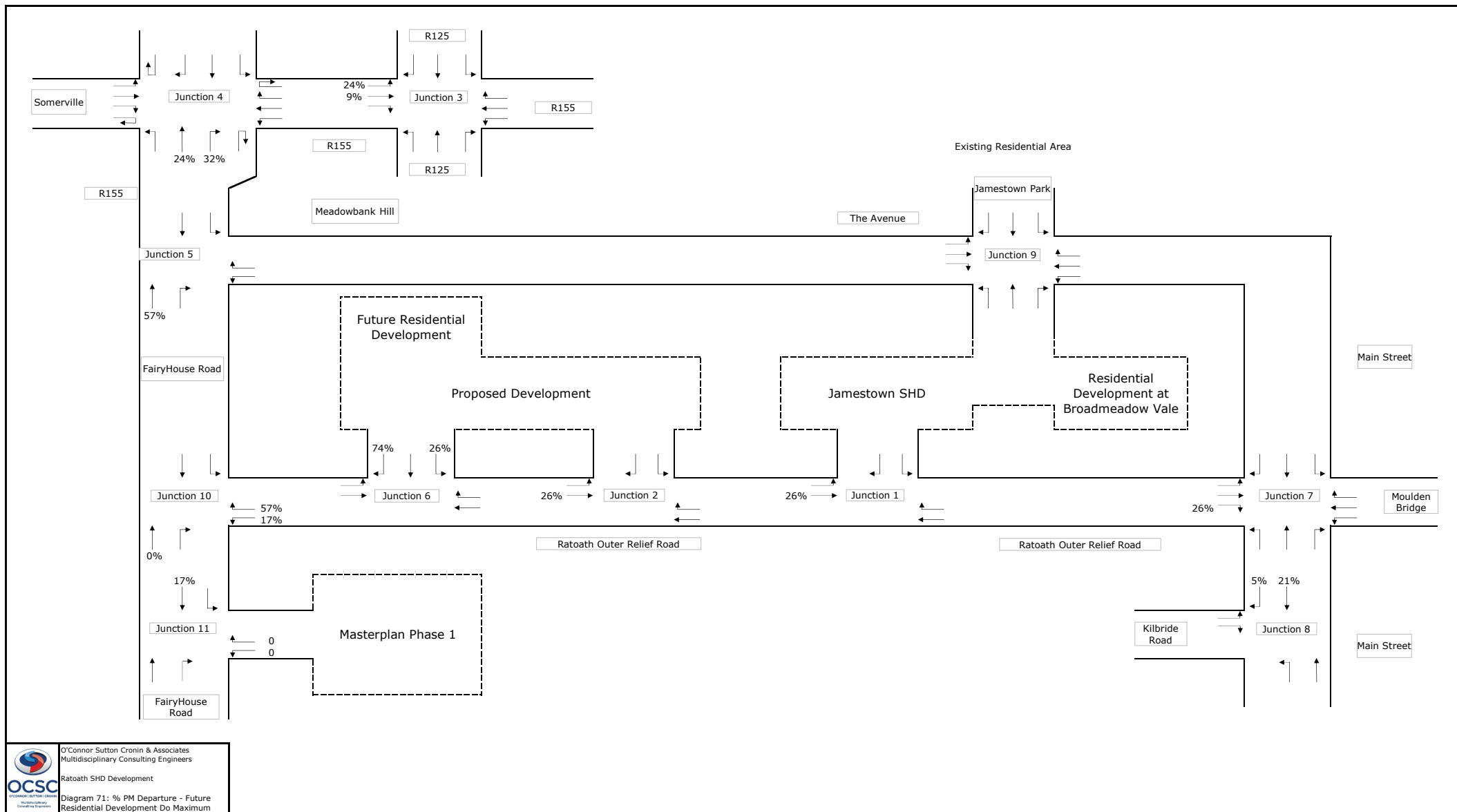
O'Connor Sutton Cronin & Associates
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Diagram 66: % AADT Arrival -
Broadmeadow Vale SHD Development

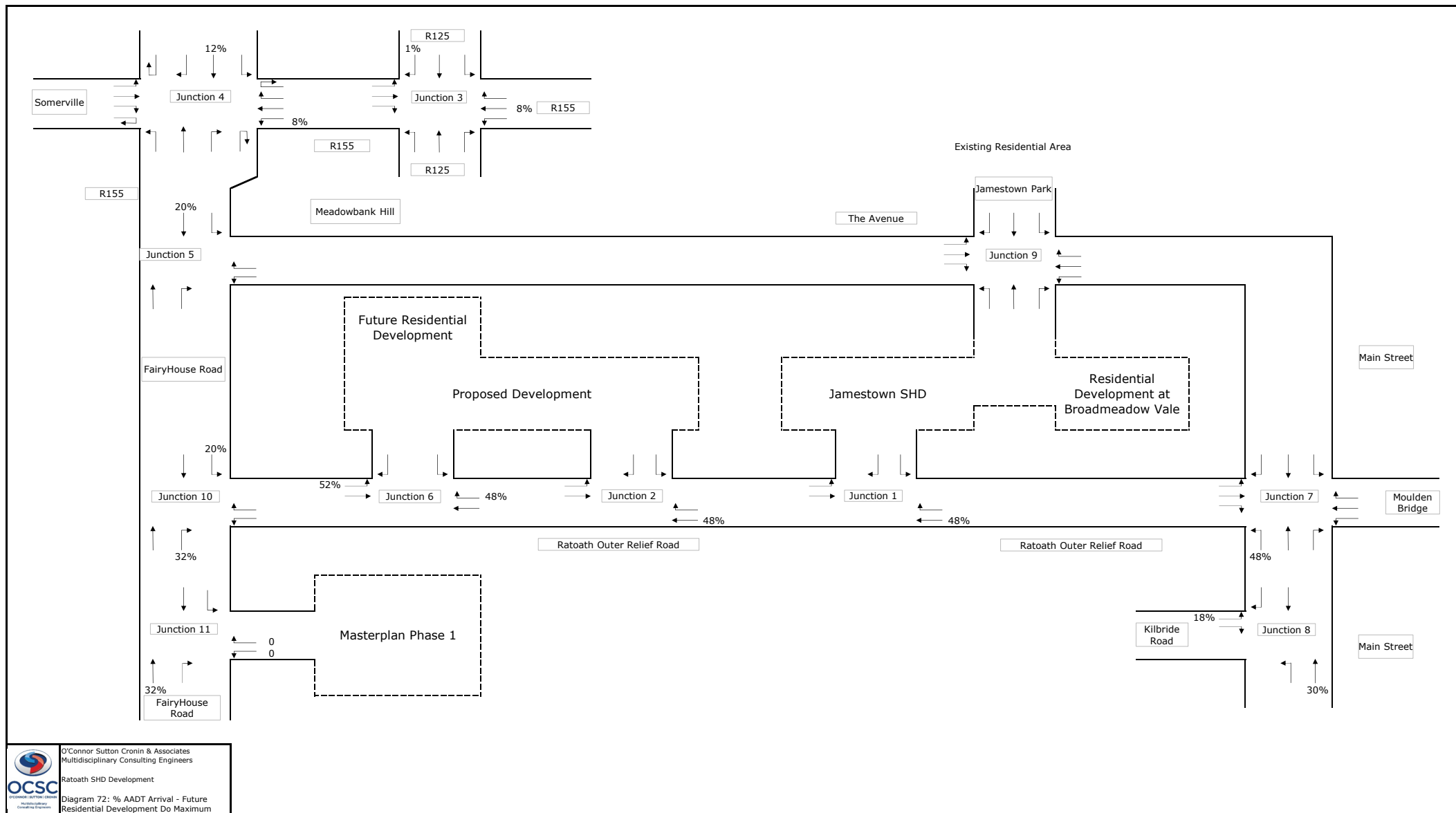


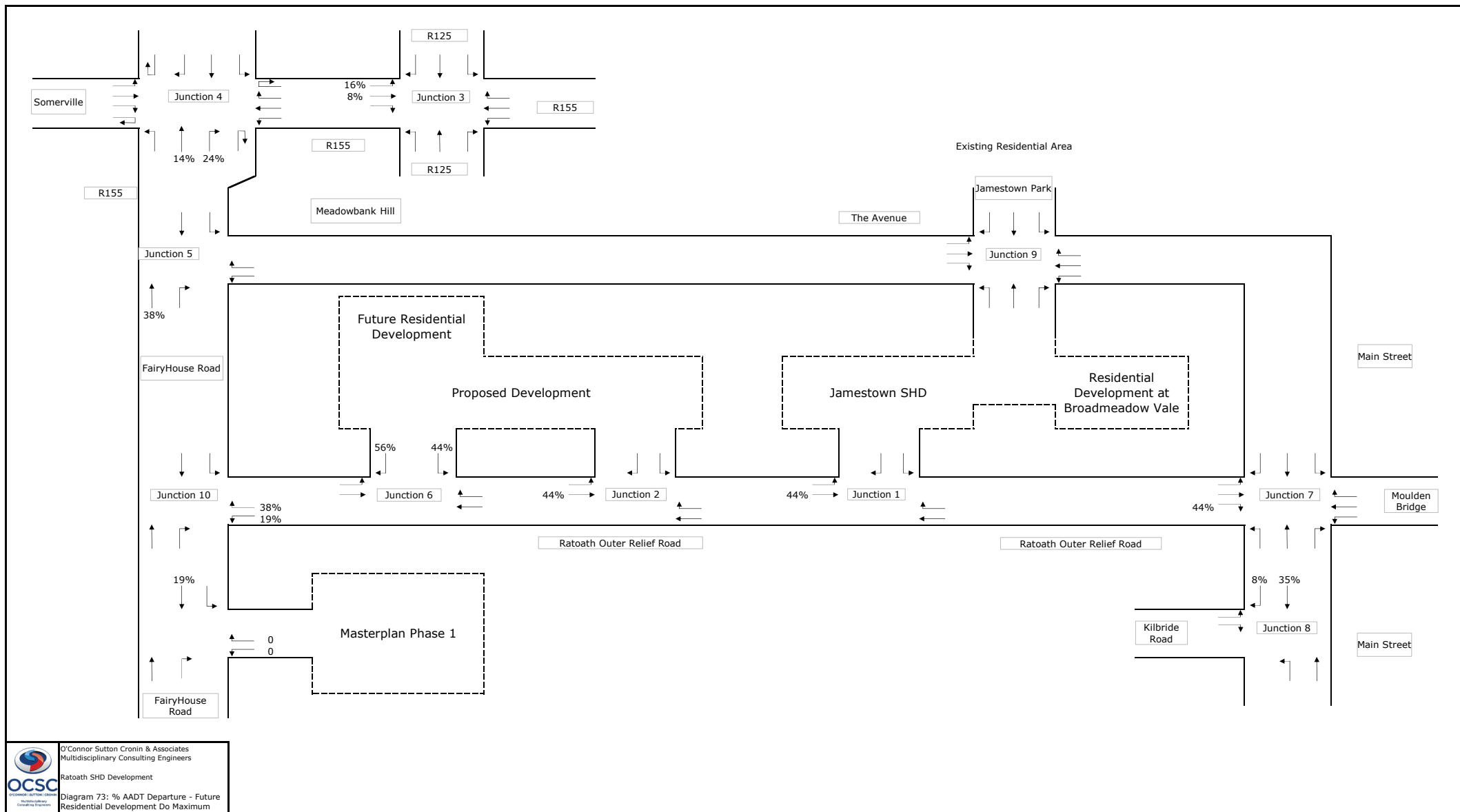












APPENDIX C: TRICS OUTPUT FILES

Calculation Reference: AUDIT-322901-210913-0948

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL

Category : A - HOUSES PRIVATELY OWNED

TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	BD BEDFORDSHIRE	1 days
	ES EAST SUSSEX	3 days
	HC HAMPSHIRE	2 days
	HF HERTFORDSHIRE	1 days
	KC KENT	3 days
	SC SURREY	3 days
	WS WEST SUSSEX	5 days
03	SOUTH WEST	
	SM SOMERSET	3 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
	NF NORFOLK	6 days
	SF SUFFOLK	2 days
05	EAST MIDLANDS	
	NR NORTHAMPTONSHIRE	2 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	2 days
	ST STAFFORDSHIRE	2 days
	WK WARWICKSHIRE	1 days
	WM WEST MIDLANDS	1 days
	WO WORCESTERSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NE NORTH EAST LINCOLNSHIRE	1 days
	NY NORTH YORKSHIRE	2 days
	SY SOUTH YORKSHIRE	2 days
	WY WEST YORKSHIRE	1 days
08	NORTH WEST	
	CH CHESHIRE	2 days
	LC LANCASHIRE	1 days
09	NORTH	
	TW TYNE & WEAR	1 days
10	WALES	
	PS POWYS	1 days
12	CONNAUGHT	
	CS SLIGO	2 days
	LT LEITRIM	1 days
	RO ROSCOMMON	2 days
14	LEINSTER	
	CC CARLOW	1 days
	WC WICKLOW	1 days
	WX WEXFORD	1 days
16	ULSTER (REPUBLIC OF IRELAND)	
	CV CAVAN	2 days
	DN DONEGAL	5 days
17	ULSTER (NORTHERN IRELAND)	
	AN ANTRIM	2 days
	DO DOWN	1 days
	TY TYRONE	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
Actual Range: 6 to 1882 (units:)
Range Selected by User: 4 to 4334 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/13 to 20/10/20

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	12 days
Tuesday	9 days
Wednesday	18 days
Thursday	18 days
Friday	11 days
Sunday	1 days

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

Selected survey types:

Manual count	67 days
Directional ATC Count	2 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	10
Edge of Town	40
Neighbourhood Centre (PPS6 Local Centre)	19

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	43
Village	17
Out of Town	1
No Sub Category	7

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

Secondary Filtering selection:

Use Class:

C3	69 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 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	6 days
1,001 to 5,000	23 days
5,001 to 10,000	15 days
10,001 to 15,000	13 days
15,001 to 20,000	6 days
20,001 to 25,000	3 days
25,001 to 50,000	3 days

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

Population within 5 miles:

5,000 or Less	4 days
5,001 to 25,000	15 days
25,001 to 50,000	12 days
50,001 to 75,000	6 days
75,001 to 100,000	13 days
100,001 to 125,000	1 days
125,001 to 250,000	14 days
250,001 to 500,000	3 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	15 days
1.1 to 1.5	43 days
1.6 to 2.0	11 days

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

Travel Plan:

Yes	15 days
No	54 days

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

PTAL Rating:

No PTAL Present	69 days
-----------------	---------

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

LIST OF SITES relevant to selection parameters

1	AN-03-A-08 BALLINDERRY ROAD LISBURN	HOUSES & FLATS	ANTRIM
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 204 <i>Survey date: TUESDAY 29/10/13</i>		<i>Survey Type: MANUAL</i>
2	AN-03-A-09 SLOEFIELD DRIVE CARRICKFERGUS	DETACHED & SEMI-DETACHED	ANTRIM
	Edge of Town No Sub Category Total No of Dwellings: 151 <i>Survey date: WEDNESDAY 12/10/16</i>		<i>Survey Type: MANUAL</i>
3	BD-03-A-03 CARNOUSTIE DRIVE BEDFORD GREAT DENHAM	DETACHED HOUSES	BEDFORDSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 30 <i>Survey date: THURSDAY 15/10/20</i>		<i>Survey Type: MANUAL</i>
4	CA-03-A-06 CRAFT'S WAY NEAR CAMBRIDGE BAR HILL	MIXED HOUSES	CAMBRIDGESHIRE
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 207 <i>Survey date: FRIDAY 22/06/18</i>		<i>Survey Type: MANUAL</i>
5	CC-03-A-01 R417 ANTHY ROAD CARLOW	DETACHED HOUSES	CARLOW
	Edge of Town Residential Zone Total No of Dwellings: 23 <i>Survey date: WEDNESDAY 25/05/16</i>		<i>Survey Type: MANUAL</i>
6	CH-03-A-09 GREYSTOKE ROAD MACCLESFIELD HURDSFIELD	TERRACED HOUSES	CHESHIRE
	Edge of Town Residential Zone Total No of Dwellings: 24 <i>Survey date: MONDAY 24/11/14</i>		<i>Survey Type: MANUAL</i>
7	CH-03-A-11 LONDON ROAD NORTHWICH LEFTWICH	TOWN HOUSES	CHESHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 24 <i>Survey date: THURSDAY 06/06/19</i>		<i>Survey Type: MANUAL</i>
8	CS-03-A-03 TOP ROAD STRANDHILL STRANDHILL	MIXED HOUSES	SLIGO
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 30 <i>Survey date: THURSDAY 27/10/16</i>		<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

9	CS-03-A-04 R292 STRANDHILL	DETACHED & SEMI -DETACHED	SLIGO
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 63 <i>Survey date: THURSDAY 27/10/16</i>		<i>Survey Type: MANUAL</i>
10	CV-03-A-02 R212 DUBLIN ROAD CAVAN KILLYNEBBER Edge of Town No Sub Category Total No of Dwellings: 80 <i>Survey date: MONDAY 22/05/17</i>	DETACHED & SEMI DETACHED	CAVAN
11	CV-03-A-03 R212 DUBLIN ROAD CAVAN PULLAMORE NEAR Edge of Town No Sub Category Total No of Dwellings: 37 <i>Survey date: MONDAY 22/05/17</i>	DETACHED HOUSES	CAVAN
12	DN-03-A-03 THE GRANGE LETTERKENNY GLENCAR IRISH Edge of Town Residential Zone Total No of Dwellings: 50 <i>Survey date: MONDAY 01/09/14</i>	DETACHED/SEMI -DETACHED	DONEGAL
13	DN-03-A-04 GORTLEE ROAD LETTERKENNY GORTLEE Edge of Town Residential Zone Total No of Dwellings: 83 <i>Survey date: FRIDAY 26/09/14</i>	SEMI -DETACHED	DONEGAL
14	DN-03-A-05 GORTLEE ROAD LETTERKENNY GORTLEE Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 146 <i>Survey date: WEDNESDAY 03/09/14</i>	DETACHED/SEMI -DETACHED	DONEGAL
15	DN-03-A-06 GLENFIN ROAD BALLYBOFEY Edge of Town Residential Zone Total No of Dwellings: 6 <i>Survey date: WEDNESDAY 10/10/18</i>	DETACHED HOUSING	DONEGAL
16	DN-03-A-08 CHURCH ROAD CARNDONAGH Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 36 <i>Survey date: WEDNESDAY 30/09/20</i>	SEMI DETACHED & DETACHED	DONEGAL

LIST OF SITES relevant to selection parameters (Cont.)

17	DO-03-A-03 OLD MILL HEIGHTS BELFAST DUNDONALD Edge of Town Residential Zone Total No of Dwellings: 79 Survey date: WEDNESDAY 23/10/13	DETACHED/SEMI DETACHED	DOWN	Survey Type: MANUAL
18	ES-03-A-03 SHEPHAM LANE POLEGATE Edge of Town Residential Zone Total No of Dwellings: 212 Survey date: MONDAY 11/07/16	MIXED HOUSES & FLATS	EAST SUSSEX	Survey Type: MANUAL
19	ES-03-A-04 NEW LYDD ROAD CAMBER Edge of Town Residential Zone Total No of Dwellings: 134 Survey date: FRIDAY 15/07/16	MIXED HOUSES & FLATS	EAST SUSSEX	Survey Type: MANUAL
20	ES-03-A-05 RATTLE ROAD NEAR EASTBOURNE STONE CROSS Edge of Town Residential Zone Total No of Dwellings: 99 Survey date: WEDNESDAY 05/06/19	MIXED HOUSES & FLATS	EAST SUSSEX	Survey Type: MANUAL
21	HC-03-A-22 BOW LAKE GARDENS NEAR EASTLEIGH BISHOPSTOKE Edge of Town Residential Zone Total No of Dwellings: 40 Survey date: WEDNESDAY 31/10/18	MIXED HOUSES	HAMPSHIRE	Survey Type: MANUAL
22	HC-03-A-23 CANADA WAY LIPHOOK Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 62 Survey date: TUESDAY 19/11/19	HOUSES & FLATS	HAMPSHIRE	Survey Type: MANUAL
23	HF-03-A-03 HARE STREET ROAD BUNTINGFORD Edge of Town Residential Zone Total No of Dwellings: 160 Survey date: MONDAY 08/07/19	MIXED HOUSES	HERTFORDSHIRE	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

24	KC-03-A-04 KILN BARN ROAD AYLESFORD DITTON Edge of Town Residential Zone Total No of Dwellings: 110 Survey date: FRIDAY 22/09/17	SEMI-DETACHED & TERRACED	KENT	Survey Type: MANUAL
25	KC-03-A-05 ROCHESTER ROAD NEAR CHATHAM BURHAM Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 8 Survey date: FRIDAY 22/09/17	DETACHED & SEMI-DETACHED	KENT	Survey Type: MANUAL
26	KC-03-A-08 MAIDSTONE ROAD CHARING Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 159 Survey date: TUESDAY 22/05/18	MIXED HOUSES	KENT	Survey Type: MANUAL
27	LC-03-A-31 GREENSIDE PRESTON COTTAM Edge of Town Residential Zone Total No of Dwellings: 32 Survey date: FRIDAY 17/11/17	DETACHED HOUSES	LANCASHIRE	Survey Type: MANUAL
28	LT-03-A-01 ARD NA SI CARRICK-ON-SHANNON ATTIRORY Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 90 Survey date: FRIDAY 24/04/15	SEMI-DETACHED & DETACHED	LEITRIM	Survey Type: MANUAL
29	NE-03-A-02 HANOVER WALK SCUNTHORPE Edge of Town No Sub Category Total No of Dwellings: 432 Survey date: MONDAY 12/05/14	SEMI DETACHED & DETACHED	NORTH EAST LINCOLNSHIRE	Survey Type: MANUAL
30	NF-03-A-04 NORTH WALSHAM ROAD NORTH WALSHAM Edge of Town Residential Zone Total No of Dwellings: 70 Survey date: WEDNESDAY 18/09/19	MIXED HOUSES	NORFOLK	Survey Type: MANUAL
31	NF-03-A-05 HEATH DRIVE HOLT Edge of Town Residential Zone Total No of Dwellings: 40 Survey date: THURSDAY 19/09/19	MIXED HOUSES	NORFOLK	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

32	NF-03-A-06	MIXED HOUSES	NORFOLK
	BEAUFORT WAY		
	GREAT YARMOUTH		
	BRADWELL		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	275	
	Survey date: MONDAY	23/09/19	Survey Type: MANUAL
33	NF-03-A-07	MIXED HOUSES & FLATS	NORFOLK
	SILFIELD ROAD		
	WYMONDHAM		
	Edge of Town		
	Out of Town		
	Total No of Dwellings:	297	
	Survey date: SUNDAY	22/09/19	Survey Type: DIRECTIONAL ATC COUNT
34	NF-03-A-10	MIXED HOUSES & FLATS	NORFOLK
	HUNSTANTON ROAD		
	HUNSTANTON		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	17	
	Survey date: WEDNESDAY	12/09/18	Survey Type: DIRECTIONAL ATC COUNT
35	NF-03-A-21	MIXED HOUSES & FLATS	NORFOLK
	SIR ALFRED MUNNINGS RD		
	NEAR NORWICH		
	COSTESSEY		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	1882	
	Survey date: TUESDAY	13/10/20	Survey Type: MANUAL
36	NR-03-A-02	DETACHED & SEMI-DETACHED	NORTHAMPTONSHIRE
	HARLESTONE ROAD		
	NEAR NORTHAMPTON		
	CHAPEL BRAMPTON		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	47	
	Survey date: TUESDAY	20/10/20	Survey Type: MANUAL
37	NR-03-A-03	MIXED HOUSES & FLATS	NORTHAMPTONSHIRE
	MAIN STREET		
	NEAR WELLINGBOROUGH		
	LITTLE HARROWDEN		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	44	
	Survey date: TUESDAY	20/10/20	Survey Type: MANUAL
38	NY-03-A-11	PRIVATE HOUSING	NORTH YORKSHIRE
	HORSEFAIR		
	BOROUGHBRIDGE		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	23	
	Survey date: WEDNESDAY	18/09/13	Survey Type: MANUAL
39	NY-03-A-13	TERRACED HOUSES	NORTH YORKSHIRE
	CATTERICK ROAD		
	CATTERICK GARRISON		
	OLD HOSPITAL COMPOUND		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	10	
	Survey date: WEDNESDAY	10/05/17	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

40	PS-03-A-02 GUNROG ROAD WELSHPOOL	DETACHED/SEMI-DETACHED	POWYS
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 28 <i>Survey date: MONDAY 11/05/15</i>		<i>Survey Type: MANUAL</i>
41	RO-03-A-03 N61 BOYLE GREATMEADOW Edge of Town No Sub Category Total No of Dwellings: 23 <i>Survey date: THURSDAY 25/09/14</i>	DETACHED HOUSES	ROSCOMMON
42	RO-03-A-04 EAGLE COURT ROSCOMMON ARDNANAGH Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 39 <i>Survey date: FRIDAY 26/09/14</i>	SEMI DET. & BUNGALOWS	ROSCOMMON
43	SC-03-A-04 HIGH ROAD BYFLEET	DETACHED & TERRACED	SURREY
	Edge of Town Residential Zone Total No of Dwellings: 71 <i>Survey date: THURSDAY 23/01/14</i>		<i>Survey Type: MANUAL</i>
44	SC-03-A-05 REIGATE ROAD HORLEY	MIXED HOUSES	SURREY
	Edge of Town Residential Zone Total No of Dwellings: 207 <i>Survey date: MONDAY 01/04/19</i>		<i>Survey Type: MANUAL</i>
45	SC-03-A-06 AMLETS LANE CRANLEIGH	MIXED HOUSES & FLATS	SURREY
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 116 <i>Survey date: THURSDAY 08/10/20</i>		<i>Survey Type: MANUAL</i>
46	SF-03-A-06 BURY ROAD KENTFORD	DETACHED & SEMI-DETACHED	SUFFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 38 <i>Survey date: FRIDAY 22/09/17</i>		<i>Survey Type: MANUAL</i>
47	SF-03-A-08 STANNINGFIELD ROAD NEAR BURY ST EDMUNDS GREAT WHELNETHAM Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 34 <i>Survey date: WEDNESDAY 16/09/20</i>	MIXED HOUSES	SUFFOLK

LIST OF SITES relevant to selection parameters (Cont.)

48	SH-03-A-05 SANDCROFT TELFORD SUTTON HILL Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: THURSDAY</i>	SEMI -DETACHED/TERRACED 54 24/10/13	SHROPSHIRE <i>Survey Type: MANUAL</i>
49	SH-03-A-06 ELLESMERE ROAD SHREWSBURY Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: THURSDAY</i>	BUNGALOWS 16 22/05/14	SHROPSHIRE <i>Survey Type: MANUAL</i>
50	SM-03-A-01 WEMBDON ROAD BRIDGWATER NORTHFIELD Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: THURSDAY</i>	DETACHED & SEMI 33 24/09/15	SOMERSET <i>Survey Type: MANUAL</i>
51	SM-03-A-02 HYDE LANE NEAR TAUNTON CREECH SAINT MICHAEL Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: <i>Survey date: TUESDAY</i>	MIXED HOUSES 42 25/09/18	SOMERSET <i>Survey Type: MANUAL</i>
52	SM-03-A-03 HYDE LANE NEAR TAUNTON CREECH ST MICHAEL Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: <i>Survey date: TUESDAY</i>	MIXED HOUSES 41 25/09/18	SOMERSET <i>Survey Type: MANUAL</i>
53	ST-03-A-07 BEACONSIDE STAFFORD MARSTON GATE Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: WEDNESDAY</i>	DETACHED & SEMI -DETACHED 248 22/11/17	STAFFORDSHIRE <i>Survey Type: MANUAL</i>
54	ST-03-A-08 SILKMORE CRESCENT STAFFORD MEADOWCROFT PARK Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: WEDNESDAY</i>	DETACHED HOUSES 26 22/11/17	STAFFORDSHIRE <i>Survey Type: MANUAL</i>
55	SY-03-A-02 MANOR ROAD NEAR SHEFFIELD WALES Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: <i>Survey date: THURSDAY</i>	DETACHED & BUNGALOWS 25 10/09/20	SOUTH YORKSHIRE <i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

56	SY-03-A-03 CHURCH LANE NEAR BARNSELEY WORSBROUGH Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 19 Survey date: WEDNESDAY 09/09/20	BUNGALOWS & DETACHED	SOUTH YORKSHIRE	Survey Type: MANUAL
57	TW-03-A-03 STATION ROAD NEAR NEWCASTLE BACKWORTH Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 33 Survey date: FRIDAY 13/11/15	MIXED HOUSES	TYNE & WEAR	Survey Type: MANUAL
58	TY-03-A-02 SANDHOLES ROAD COOKSTOWN DERRYLORAN Edge of Town Industrial Zone Total No of Dwellings: 101 Survey date: THURSDAY 14/03/19	SEMI DETACHED & BUNGALOWS	TYRONE	Survey Type: MANUAL
59	WC-03-A-01 STATION ROAD WICKLOW CORPORATION MURRAGH Edge of Town No Sub Category Total No of Dwellings: 50 Survey date: MONDAY 28/05/18	DETACHED HOUSES	WICKLOW	Survey Type: MANUAL
60	WK-03-A-04 DALEHOUSE LANE KENILWORTH Edge of Town Residential Zone Total No of Dwellings: 49 Survey date: FRIDAY 27/09/19	DETACHED HOUSES	WARWICKSHIRE	Survey Type: MANUAL
61	WM-03-A-04 OSBORNE ROAD COVENTRY EARLSDON Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total No of Dwellings: 39 Survey date: MONDAY 21/11/16	TERRACED HOUSES	WEST MIDLANDS	Survey Type: MANUAL
62	WO-03-A-07 RYE GRASS LANE REDDITCH Edge of Town Residential Zone Total No of Dwellings: 47 Survey date: THURSDAY 01/10/20	MIXED HOUSES & FLATS	WORCESTERSHIRE	Survey Type: MANUAL
63	WS-03-A-04 HILLS FARM LANE HORSHAM BROADBRIDGE HEATH Edge of Town Residential Zone Total No of Dwellings: 151 Survey date: THURSDAY 11/12/14	MIXED HOUSES	WEST SUSSEX	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

64	WS-03-A-07	BUNGALOWS	WEST SUSSEX
	EMMS LANE		
	NEAR HORSHAM		
	BROOKS GREEN		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	57	
	Survey date: THURSDAY	19/10/17	Survey Type: MANUAL
65	WS-03-A-08	MIXED HOUSES	WEST SUSSEX
	ROUNDSTONE LANE		
	ANGMERING		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	180	
	Survey date: THURSDAY	19/04/18	Survey Type: MANUAL
66	WS-03-A-10	MIXED HOUSES	WEST SUSSEX
	TODDINGTON LANE		
	LITTLEHAMPTON		
	WICK		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	79	
	Survey date: WEDNESDAY	07/11/18	Survey Type: MANUAL
67	WS-03-A-11	MIXED HOUSES	WEST SUSSEX
	ELLIS ROAD		
	WEST HORSHAM		
	S BROADBRIDGE HEATH		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	918	
	Survey date: TUESDAY	02/04/19	Survey Type: MANUAL
68	WX-03-A-01	SEMI-DETACHED	WEXFORD
	CLONARD ROAD		
	WEXFORD		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total No of Dwellings:	34	
	Survey date: THURSDAY	25/09/14	Survey Type: MANUAL
69	WY-03-A-01	MIXED HOUSING	WEST YORKSHIRE
	SPRING VALLEY CRESCENT		
	LEEDS		
	BRAMLEY		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total No of Dwellings:	46	
	Survey date: WEDNESDAY	21/09/16	Survey Type: MANUAL

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

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
BN-03-A-02	public transport
BN-03-A-03	public transport
CA-03-A-05	public transport
CH-03-A-10	public transport
DC-03-A-08	public transport
DH-03-A-01	public transport
DH-03-A-02	public transport
DH-03-A-03	public transport
DL-03-A-10	public transport
DS-03-A-02	public transport
DV-03-A-01	public transport
DV-03-A-02	public transport
DV-03-A-03	public transport
EX-03-A-02	public transport
FA-03-A-01	public transport

MANUALLY DESELECTED SITES (Cont.)

Site Ref	Reason for Deselection
FA-03-A-02	public transport
GM-03-A-11	public transport
HC-03-A-21	public transport
HG-03-A-01	public transport
HI-03-A-14	public transport
KC-03-A-03	public transport
KC-03-A-06	public transport
KC-03-A-07	public transport
LE-03-A-02	public transport
MS-03-A-03	public transport
NF-03-A-03	public transport
NF-03-A-09	public transport
NF-03-A-11	public transport
NF-03-A-12	public transport
NF-03-A-16	public transport
NF-03-A-17	public transport
NF-03-A-22	public transport
NY-03-A-08	public transport
NY-03-A-09	public transport
NY-03-A-10	public transport
SF-03-A-05	public transport
SF-03-A-07	public transport
SY-03-A-01	public transport
TW-03-A-02	public transport
VG-03-A-01	public transport
WA-03-A-04	public transport
WK-03-A-03	public transport
WL-03-A-02	public transport
WS-03-A-06	public transport
WS-03-A-09	public transport
WY-03-A-01	public transport

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	69	121	0.069	69	121	0.267	69	121	0.336
08:00 - 09:00	69	121	0.132	69	121	0.367	69	121	0.499
09:00 - 10:00	69	121	0.147	69	121	0.185	69	121	0.332
10:00 - 11:00	69	121	0.126	69	121	0.149	69	121	0.275
11:00 - 12:00	69	121	0.135	69	121	0.149	69	121	0.284
12:00 - 13:00	69	121	0.154	69	121	0.152	69	121	0.306
13:00 - 14:00	69	121	0.162	69	121	0.164	69	121	0.326
14:00 - 15:00	69	121	0.183	69	121	0.197	69	121	0.380
15:00 - 16:00	69	121	0.256	69	121	0.181	69	121	0.437
16:00 - 17:00	69	121	0.281	69	121	0.163	69	121	0.444
17:00 - 18:00	69	121	0.340	69	121	0.171	69	121	0.511
18:00 - 19:00	69	121	0.282	69	121	0.171	69	121	0.453
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.267			2.316			4.583

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

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

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Parameter summary

Trip rate parameter range selected:	6 - 1882 (units:)
Survey date range:	01/01/13 - 20/10/20
Number of weekdays (Monday-Friday):	73
Number of Saturdays:	1
Number of Sundays:	1
Surveys automatically removed from selection:	12
Surveys manually removed from selection:	46

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

APPENDIX D: MODEL CALIBRATION SUMMARY

	Link	AM Peak		PM Peak	
		Modelled Queue	Surveyed Queue	Modelled Queue	Surveyed Queue
Junction 3	R155 (S)	3.1	5.84	8	9.1
	R125 (E)	0.5	0.166	0.9	1.1
	R155 (N)	3.5	7.5	3.8	6.4
	R125 (W)	0.5	0	0	0.66

	Link	AM Peak		PM Peak	
		Modelled Queue	Surveyed Queue	Modelled Queue	Surveyed Queue
Junction 4	R155 (E)	2.28	13.5	0	6.25
	R155 (S)	0	0.82	0	7.82
	Somerville	4.21	1.166	0	0.75
	Unknown Road	0	13.6	0	3.82

	Link	AM Peak		PM Peak	
		Modelled Queue	Surveyed Queue	Modelled Queue	Surveyed Queue
Junction 5	R155 (N)	16.43	23	9.93	11
	R155 (S) - B1	9.14	12.9	16.39	15
	R155 (S) - B2	3.01	5	2.95	3.58
	Meadowbank Hill - A1	3.84	6.58	2.49	5
	Meadowbank Hill - A2	2.42	4.25	4.78	4.9

Junction 8	AM Peak				PM Peak	
	Link	Modelled Queue	Surveyed Queue	Modelled Queue	Surveyed Queue	
	R125 (W)	0	7.84	0	0.32	
	R125 (E)	-	-	-	-	
	Kilbride Road	0	1.84	0	10	

Junction 9	AM Peak				PM Peak	
	Link	Modelled Queue	Surveyed Queue	Modelled Queue	Surveyed Queue	
	Jamestown Park	0	1.75	0	1	
	The Avenue (E)	2.28	5.16	2.83	0.84	
	Unknown Road	0	3.9	0	1.58	
	The Avenue (W)	4.21	7.66	2.44	0.5	

APPENDIX E: MODEL OUTPUT FILES

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: (new file)
Path:
Report generation date: 21/04/2022 10:03:49

»J2 DM - 2024, AM
»J2 DM - 2024, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
J2 DM - 2024										
Stream B-C	D1	0.1	7.26	0.09	A	D2	0.0	8.20	0.02	A
Stream B-A		0.1	10.22	0.09	B		0.1	11.47	0.08	B
Stream C-AB		0.0	5.62	0.02	A		0.3	5.19	0.11	A

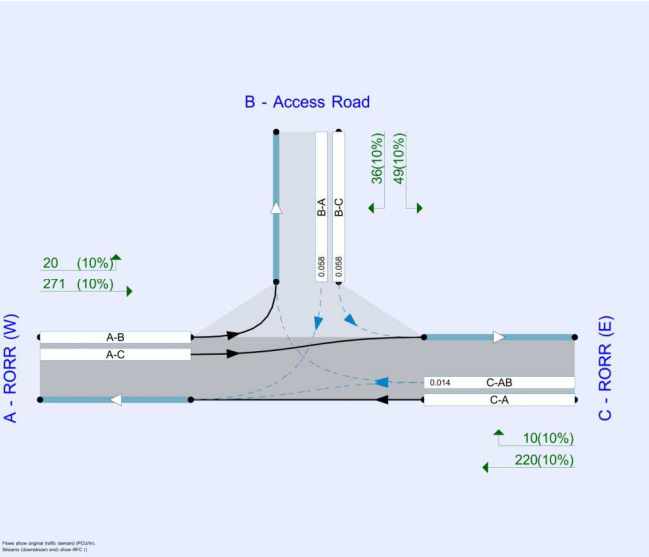
There are warnings associated with one or more model runs - see the "Data Errors and Warnings" tables for each Analysis or Demand Set.
Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description	
Title	
Location	
Site number	
Date	09/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC\joshua.lai
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	per hour	s	-Min	perMin



Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024	AM	ONE HOUR	00:00	01:30	15
D2	2024	PM	ONE HOUR	00:00	01:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	J2 DM	100.000

J2 DM - 2024, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Access Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	RORR (W)		Major
B	Access Road		Minor
C	RORR (E)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - RORR (E)	6.00			150.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Access Road	One lane plus flare	6.50	3.00	3.00	3.00	3.00	✓	1.00	100	100

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	547	6.100	0.262	0.158	0.360
B-C	697	6.107	0.270	-	-
C-B	661	6.256	0.256	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024	AM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - RORR (W)		✓	291	100.000
B - Access Road		✓	65	100.000
C - RORR (E)		✓	230	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - RORR (W)	B - Access Road	C - RORR (E)	
A - RORR (W)	0	20	271	
B - Access Road	36	0	49	
C - RORR (E)	220	10	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - RORR (W)	B - Access Road	C - RORR (E)	
A - RORR (W)	10	10	10	
B - Access Road	10	10	10	
C - RORR (E)	10	10	10	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.09	7.26	0.1	0.5	A
B-A	0.09	10.22	0.1	0.5	B
C-AB	0.02	5.62	0.0	0.5	A
C-A					
AB					
AC					

Main Results for each time segment

00:00 - 00:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	631	0.058	37	0.1	6.660	A
B-A	27	465	0.058	27	0.1	9.033	A
C-AB	10	715	0.014	10	0.0	5.617	A
C-A	163			163			
AB	15			15			
AC	204			204			

00:15 - 00:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	618	0.071	44	0.1	6.903	A
B-A	32	449	0.072	32	0.1	9.500	A
C-AB	12	726	0.017	12	0.0	5.545	A
C-A	194			194			
AB	18			18			
AC	244			244			

00:30 - 00:45							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	54	599	0.090	54	0.1	7.263	A
B-A	40	427	0.093	40	0.1	10.221	B
C-AB	16	743	0.022	16	0.0	5.448	A
C-A	237			237			
AB	22			22			
AC	298			298			

00:45 - 01:00							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	54	599	0.090	54	0.1	7.263	A
B-A	40	427	0.093	40	0.1	10.223	B
C-AB	16	743	0.022	16	0.0	5.448	A
C-A	237			237			
AB	22			22			
AC	298			298			

01:00 - 01:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	618	0.071	44	0.1	6.909	A
B-A	32	449	0.072	32	0.1	9.506	A
C-AB	12	726	0.017	12	0.0	5.548	A
C-A	194			194			
AB	18			18			
AC	244			244			

01:15 - 01:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	631	0.058	37	0.1	6.671	A
B-A	27	465	0.058	27	0.1	9.044	A
C-AB	10	715	0.014	10	0.0	5.617	A
C-A	163			163			
AB	15			15			
AC	204			204			

Queue Variation Results for each time segment

00:00 - 00:15									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

00:15 - 00:30									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.08	0.03	0.28	0.50	0.53			N/A	N/A
B-A	0.08	0.03	0.28	0.50	0.53			N/A	N/A
C-AB	0.02	0.02	0.28	0.50	0.52			N/A	N/A

00:30 - 00:45									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.11	0.03	0.29	0.51	0.54			N/A	N/A
B-A	0.11	0.03	0.29	0.51	0.54			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

00:45 - 01:00									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.11	0.03	0.28	0.50	0.52			N/A	N/A
B-A	0.11	0.03	0.28	0.50	0.52			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

01:00 - 01:15									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.09	0.00	0.00	0.09	0.09			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

01:15 - 01:30									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

J2 DM - 2024, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Access Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2024	PM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.09

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - RORR (W)		✓	375	100.000
B - Access Road		✓	39	100.000
C - RORR (E)		✓	486	100.000

Origin-Destination Data

Demand (PCU/hr)				
From	To			
		A - RORR (W)	B - Access Road	C - RORR (E)
	A - RORR (W)	0	35	340
	B - Access Road	29	0	10
	C - RORR (E)	446	40	0

Vehicle Mix

Heavy Vehicle Percentages				
From	To			
		A - RORR (W)	B - Access Road	C - RORR (E)
	A - RORR (W)	10	10	10
	B - Access Road	10	10	10
	C - RORR (E)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.02	8.20	0.0	0.5	A
B-A	0.08	11.47	0.1	0.5	B
C-AB	0.11	5.19	0.3	1.5	A
C-A					
AB					
AC					

Main Results for each time segment

00:00 - 00:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	527	0.014	7	0.0	7.620	A
B-A	22	442	0.049	22	0.1	9.415	A
C-AB	51	815	0.063	51	0.1	5.186	A
C-A	315			315			
AB	26			26			
AC	256			256			

00:15 - 00:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	513	0.018	9	0.0	7.852	A
B-A	26	415	0.063	26	0.1	10.184	B
C-AB	68	848	0.081	68	0.2	5.083	A
C-A	368			368			
AB	31			31			
AC	306			306			

00:30 - 00:45							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	494	0.022	11	0.0	8.197	A
B-A	32	377	0.085	32	0.1	11.456	B
C-AB	98	895	0.110	98	0.3	4.970	A
C-A	437			437			
AB	39			39			
AC	374			374			

00:45 - 01:00							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	494	0.022	11	0.0	8.199	A
B-A	32	377	0.085	32	0.1	11.465	B
C-AB	98	895	0.110	98	0.3	4.976	A
C-A	437			437			
AB	39			39			
AC	374			374			

01:00 - 01:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	513	0.018	9	0.0	7.856	A
B-A	26	415	0.063	26	0.1	10.196	B
C-AB	69	848	0.081	69	0.2	5.092	A
C-A	368			368			
A-B	31			31			
A-C	306			306			

01:15 - 01:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	527	0.014	9	0.0	7.626	A
B-A	22	442	0.049	22	0.1	9.431	A
C-AB	51	815	0.063	52	0.1	5.192	A
C-A	314			314			
A-B	26			26			
A-C	256			256			

Queue Variation Results for each time segment

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.08	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.28	0.50	0.52			N/A	N/A
B-A	0.07	0.03	0.28	0.50	0.53			N/A	N/A
C-AB	0.16	0.03	0.28	0.50	0.53			N/A	N/A

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.10	0.03	0.29	0.52	0.54			N/A	N/A
C-AB	0.26	0.03	0.30	0.54	1.47			N/A	N/A

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.10	0.03	0.28	0.50	0.52			N/A	N/A
C-AB	0.27	0.00	0.00	0.27	0.27			N/A	N/A

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

Junctions 9									
PICADY 9 - Priority Intersection Module									
Version: 9.5.1.7462									
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Filename: (new file)
Path:
Report generation date: 16/05/2022 18:54:07

»J2 DS - 2024, AM
»J2 DS - 2024, PM

Summary of junction performance

		AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS		Set ID	Queue (PCU)	Delay (s)	RFC	LOS
J2 DS - 2024											
Stream B-C	D1	0.1	7.18	0.09	A			0.0	8.18	0.02	A
Stream B-A		0.1	10.05	0.09	B	D2	0.1	11.32	0.08	B	
Stream C-AB		0.0	5.61	0.02	A		0.3	5.24	0.11	A	

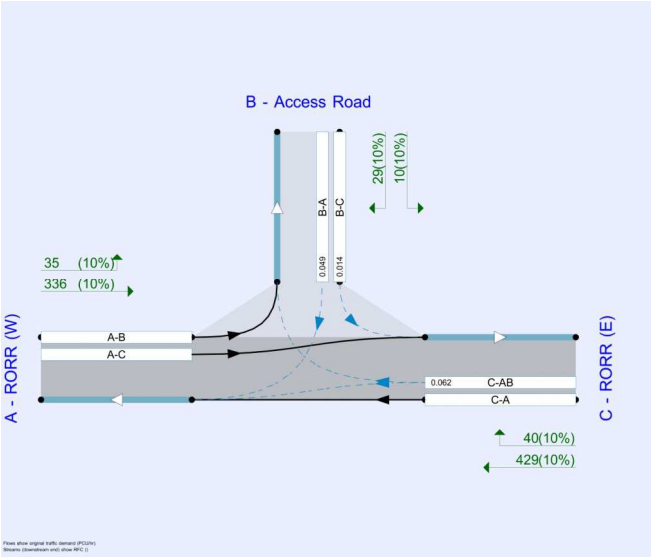
There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.
Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description	
Title	
Location	
Site number	
Date	09/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC0Joshua.Lai
Description	

Units

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



Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024	AM	ONE HOUR	00:00	01:30	15
D2	2024	PM	ONE HOUR	00:00	01:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	J2 DS	100.000

J2 DS - 2024, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Access Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	RORR (W)		Major
B	Access Road		Minor
C	RORR (E)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - RORR (E)	6.00			150.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Access Road	One lane plus flare	6.50	3.00	3.00	3.00	3.00	✓	1.00	100	100

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B (PCU/hr)	Slope for A-C (PCU/hr)	Slope for C-A (PCU/hr)	Slope for C-B (PCU/hr)
B-A	547	0.100	0.262	0.158	0.360
B-C	697	0.107	0.270	-	-
C-B	661	0.256	0.256	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (H:M)	Finish time (H:M)	Time segment length (min)
D1	2024	AM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - RORR (W)		✓	270	100.000
B - Access Road		✓	65	100.000
C - RORR (E)		✓	226	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To			
		A - RORR (W)	B - Access Road	C - RORR (E)	
	A - RORR (W)	0	20	250	
	B - Access Road	36	0	49	
	C - RORR (E)	216	10	0	

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - RORR (W)	B - Access Road	C - RORR (E)	
	A - RORR (W)	10	10	10	
	B - Access Road	10	10	10	
	C - RORR (E)	10	10	10	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.09	7.16	0.1	0.5	A
B-A	0.09	10.05	0.1	0.5	B
C-AB	0.02	5.61	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	635	0.058	37	0.1	6.612	A
B-A	27	469	0.058	27	0.1	8.942	A
C-AB	10	716	0.014	10	0.0	5.603	A
C-A	160			160			
A-B	15			15			
A-C	188			188			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	623	0.071	44	0.1	6.841	A
B-A	32	454	0.071	32	0.1	9.380	A
C-AB	12	728	0.017	12	0.0	5.530	A
C-A	191			191			
A-B	18			18			
A-C	225			225			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	54	605	0.089	54	0.1	7.179	A
B-A	40	433	0.091	40	0.1	10.051	B
C-AB	16	745	0.022	16	0.0	5.433	A
C-A	233			233			
A-B	22			22			
A-C	275			275			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	54	605	0.089	54	0.1	7.180	A
B-A	40	433	0.091	40	0.1	10.054	B
C-AB	16	745	0.022	16	0.0	5.433	A
C-A	233			233			
A-B	22			22			
A-C	275			275			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	623	0.071	44	0.1	6.845	A
B-A	32	455	0.071	32	0.1	9.384	A
C-AB	12	728	0.017	12	0.0	5.532	A
C-A	191			191			
A-B	18			18			
A-C	225			225			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	635	0.058	37	0.1	6.623	A
B-A	27	470	0.058	27	0.1	8.953	A
C-AB	10	716	0.014	10	0.0	5.605	A
C-A	160			160			
A-B	15			15			
A-C	188			188			

Queue Variation Results for each time segment

00:00 - 00:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

00:15 - 00:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.08	0.03	0.28	0.50	0.53			N/A	N/A
B-A	0.08	0.03	0.28	0.50	0.53			N/A	N/A
C-AB	0.02	0.02	0.28	0.50	0.52			N/A	N/A

00:30 - 00:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.11	0.03	0.29	0.51	0.54			N/A	N/A
B-A	0.11	0.03	0.29	0.51	0.54			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

00:45 - 01:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.11	0.03	0.28	0.50	0.52			N/A	N/A
B-A	0.11	0.03	0.28	0.50	0.52			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

01:00 - 01:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.08	0.00	0.00	0.08	0.08			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

01:15 - 01:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

J2 DS - 2024, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Access Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untlBed	T-Junction	Two-way		0.93	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2024	PM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - RORR (W)		✓	371	100.000
B - Access Road		✓	39	100.000
C - RORR (E)		✓	469	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
		A - RORR (W)	B - Access Road	C - RORR (E)
	A - RORR (W)	0	35	336
	B - Access Road	29	0	10
	C - RORR (E)	429	40	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - RORR (W)	B - Access Road	C - RORR (E)
	A - RORR (W)	10	10	10
	B - Access Road	10	10	10
	C - RORR (E)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.02	8.16	0.0	0.5	A
B-A	0.08	11.32	0.1	0.5	B
C-AB	0.11	5.24	0.3	1.5	A
C-A					
AB					
AC					

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	528	0.014	7	0.0	7.610	A
B-A	22	445	0.049	22	0.1	9.349	A
C-AB	50	807	0.062	50	0.1	5.234	A
C-A	303			303			
AB	26			26			
AC	253			253			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	514	0.017	9	0.0	7.838	A
B-A	26	418	0.062	26	0.1	10.692	B
C-AB	67	838	0.080	67	0.2	5.138	A
C-A	355			355			
AB	31			31			
AC	302			302			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	495	0.022	11	0.0	8.178	A
B-A	32	382	0.084	32	0.1	11.314	B
C-AB	95	683	0.108	95	0.3	5.028	A
C-A	421			421			
AB	39			39			
AC	370			370			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	495	0.022	11	0.0	8.180	A
B-A	32	382	0.084	32	0.1	11.323	B
C-AB	95	683	0.108	95	0.3	5.033	A
C-A	421			421			
AB	39			39			
AC	370			370			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	514	0.017	9	0.0	7.844	A
B-A	26	418	0.062	26	0.1	10.102	B
C-AB	67	838	0.080	67	0.2	5.143	A
C-A	355			355			
AB	31			31			
AC	302			302			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	528	0.014	9	0.0	7.618	A
B-A	22	445	0.049	22	0.1	9.367	A
C-AB	50	807	0.063	51	0.1	5.242	A
C-A	303			303			
AB	26			26			
AC	253			253			

Queue Variation Results for each time segment

00:00 - 00:15

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

00:15 - 00:30

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.28	0.50	0.52			N/A	N/A
B-A	0.07	0.03	0.28	0.50	0.53			N/A	N/A
C-AB	0.16	0.03	0.29	0.51	0.54			N/A	N/A

00:30 - 00:45

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.10	0.03	0.29	0.52	0.54			N/A	N/A
C-AB	0.26	0.03	0.30	0.54	1.45			N/A	N/A

00:45 - 01:00

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.10	0.03	0.28	0.50	0.52			N/A	N/A
C-AB	0.26	0.00	0.00	0.26	0.26			N/A	N/A

01:00 - 01:15

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: (new file)
Path:
Report generation date: 21/04/2022 10:07:53

»J3 DM - 2024, AM
»J3 DM - 2024, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS
J3 DM - 2024												
Stream B-C	D1	0.1	0.5	8.65	0.10	A	D2	0.5	2.2	15.76	0.33	C
Stream B-AD		0.7	3.1	12.61	0.38	B		1.6	6.8	24.59	0.60	C
Stream A-B-C-D		0.0	0.5	5.85	0.02	A		0.2	1.1	4.74	0.08	A
Stream D-A		0.0	0.5	10.47	0.03	B		0.0	0.5	9.66	0.04	A
Stream D-B-C		1.2	4.3	17.18	0.54	C		1.0	4.1	17.73	0.47	C
Stream C-ABD		0.0	0.5	7.62	0.02	A		0.0	0.5	9.08	0.01	A

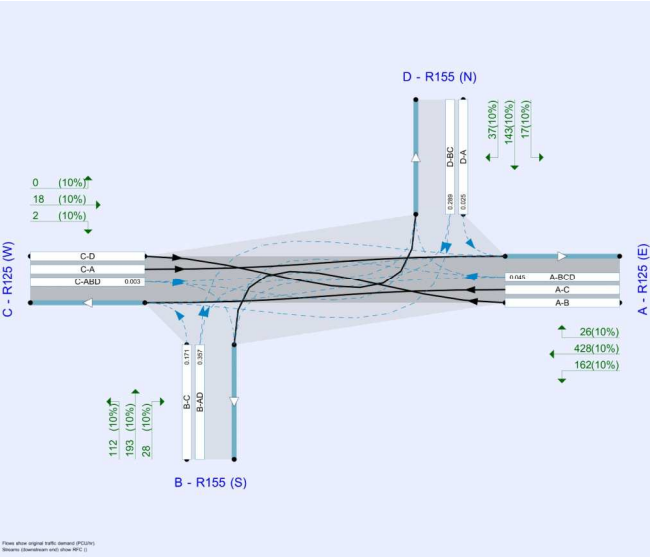
There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.
Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description	
Title	
Location	
Site number	
Date	07/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSOJoshua.tai
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	per/hour	s	-Min	per/Min



Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024	AM	ONE HOUR	00:00	01:30	15
D2	2024	PM	ONE HOUR	00:00	01:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	J3 DM	100.000

J3 DM - 2024, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way		9.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	R125 (E)		Major
B	R155 (S)		Minor
C	R125 (W)		Major
D	R155 (N)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - R125 (E)	7.00			70.0	✓	0.00
C - R125 (W)	6.00			100.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - R155 (S)	One lane plus flare	10.00	7.50	5.40	3.50	3.00	✓	2.00	100	50
D - R155 (N)	One lane plus flare	8.00	5.00	4.00	4.00	3.00	✓	1.00	15	60

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	615	-	-	0.228	0.228	0.228	-	0.228	-	-	-	-	-
B-AD	598	6.109	0.275	-	-	-	0.173	0.393	0.173	0.109	0.275	-	-
B-C	646	0.099	0.250	-	-	-	-	-	0.099	0.250	-	-	-
C-B	632	0.243	0.243	-	-	-	-	-	0.243	0.243	-	-	-
D-A	570	-	-	-	0.211	0.084	0.211	-	0.084	-	-	-	-
D-BC	571	0.158	0.158	0.359	0.251	0.099	0.251	-	0.099	-	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024	AM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R125 (E)		✓	222	100.000
B - R155 (S)		✓	222	100.000
C - R125 (W)		✓	32	100.000
D - R155 (N)		✓	253	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - R125 (E)	B - R155 (S)	C - R125 (W)	D - R155 (N)
From	A - R125 (E)	0	88	124	10
	B - R155 (S)	41	0	44	137
	C - R125 (W)	23	7	0	2
	D - R155 (N)	11	231	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - R125 (E)	B - R155 (S)	C - R125 (W)	D - R155 (N)
From	A - R125 (E)	10	10	10	10
	B - R155 (S)	10	10	10	10
	C - R125 (W)	10	10	10	10
	D - R155 (N)	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.10	8.65	0.1	0.5	A
B-AD	0.38	12.61	0.7	3.1	B
A-B-C-D	0.02	5.85	0.0	0.5	A
AB					
AC					
D-A	0.03	10.47	0.0	0.5	B
D-BC	0.54	17.18	1.2	4.3	C
C-ABD	0.02	7.62	0.0	0.5	A
C-D					
C-A					

Main Results for each time segment

00:00 - 00:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	557	0.059	33	0.1	7.546	A
B-AD	134	536	0.249	133	0.4	8.733	A
A&B&C&D	10	688	0.014	10	0.0	5.639	A
A-B	65			65			
A-C	92			92			
D-A	8	480	0.017	8	0.0	8.398	A
D-B&C	192	521	0.350	180	0.6	11.549	B
C-ABD	5	561	0.010	5	0.0	7.123	A
C-D	1			1			
C-A	17			17			

00:15 - 00:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	40	537	0.074	39	0.1	7.956	A
B-AD	160	526	0.304	160	0.5	10.786	B
A&B&C&D	12	703	0.018	12	0.0	5.736	A
A-B	78			78			
A-C	110			110			
D-A	10	447	0.022	10	0.0	9.048	A
D-B&C	218	510	0.426	217	0.8	13.437	B
C-ABD	7	547	0.012	7	0.0	7.323	A
C-D	2			2			
C-A	20			20			

00:30 - 00:45							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	45	507	0.098	45	0.1	8.634	A
B-AD	196	510	0.384	195	0.7	12.544	B
A&B&C&D	16	724	0.023	16	0.0	5.598	A
A-B	93			93			
A-C	133			133			
D-A	12	392	0.031	12	0.0	10.414	B
D-B&C	268	497	0.536	265	1.2	16.938	C
C-ABD	8	528	0.015	8	0.0	7.609	A
C-D	2			2			
C-A	25			25			

00:45 - 01:00							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	45	506	0.098	45	0.1	8.649	A
B-AD	196	510	0.384	196	0.7	12.614	B
A&B&C&D	16	723	0.023	16	0.0	5.601	A
A-B	95			95			
A-C	133			133			
D-A	12	390	0.031	12	0.0	10.469	B
D-B&C	268	497	0.537	266	1.2	17.180	C
C-ABD	8	528	0.015	8	0.0	7.615	A
C-D	2			2			
C-A	25			25			

01:00 - 01:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	40	536	0.074	40	0.1	7.976	A
B-AD	160	526	0.304	161	0.5	10.870	B
A&B&C&D	12	702	0.018	12	0.0	5.739	A
A-B	78			78			
A-C	109			109			
D-A	10	445	0.022	10	0.0	9.088	A
D-B&C	218	510	0.426	219	0.8	13.681	B
C-ABD	7	547	0.012	7	0.0	7.332	A
C-D	2			2			
C-A	20			20			

01:15 - 01:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	556	0.060	33	0.1	7.573	A
B-AD	134	536	0.249	134	0.4	9.835	A
A&B&C&D	10	688	0.014	10	0.0	5.645	A
A-B	65			65			
A-C	92			92			
D-A	8	477	0.017	8	0.0	8.445	A
D-B&C	192	520	0.350	193	0.6	11.782	B
C-ABD	5	560	0.010	5	0.0	7.137	A
C-D	1			1			
C-A	17			17			

Queue Variation Results for each time segment

00:00 - 00:15									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-AD	0.36	0.00	0.00	0.36	0.36			N/A	N/A
A&B&C&D	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-B&C	0.58	0.58	1.10	1.54	1.60			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

00:15 - 00:30									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.09	0.03	0.28	0.51	0.54			N/A	N/A
B-AD	0.47	0.00	0.00	0.47	0.47			N/A	N/A
A&B&C&D	0.02	0.02	0.28	0.50	0.52			N/A	N/A
D-A	0.02	0.02	0.28	0.50	0.53			N/A	N/A
D-B&C	0.80	0.31	1.05	1.53	1.59			N/A	N/A
C-ABD	0.01	0.01	0.28	0.50	0.52			N/A	N/A

00:30 - 00:45									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.12	0.03	0.29	0.51	0.54			N/A	N/A
B-AD	0.67	0.03	0.28	0.67	0.67			N/A	N/A
A&B&C&D	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-B&C	1.23	0.03	0.30	1.23	2.57			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

00:45 - 01:00									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.12	0.03	0.28	0.50	0.52			N/A	N/A
B-AD	0.68	0.03	0.32	1.37	3.09			N/A	N/A
A&B&C&D	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-B&C	1.25	0.03	0.31	1.25	4.30			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

01:00 - 01:15									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.09	0.00	0.00	0.09	0.09			N/A	N/A
B-AD	0.49	0.04	0.37	1.22	1.43			N/A	N/A
A&B&C&D	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-B&C	0.84	0.07	0.81	1.64	1.69			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

01:15 - 01:30									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-AD	0.37	0.03	0.28	0.51	0.54			N/A	N/A
A&B&C&D	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-B&C	0.60	0.05	0.49	1.49	1.63			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

J3 DM - 2024, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	united	Right-Left Stagger	Two-way		9.33	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2024	PM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R125 (E)		✓	616	100.000
B - R155 (S)		✓	333	100.000
C - R125 (W)		✓	20	100.000
D - R155 (N)		✓	197	100.000

Origin-Destination Data

Demand (PCU/hr)		To			
From	A - R125 (E)	A - R125 (E)	B - R155 (S)	C - R125 (W)	D - R155 (N)
	0	162	428	26	
	28	0	112	193	
	18	2	0	0	
	17	143	37	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - R125 (E)	B - R155 (S)	C - R125 (W)	D - R155 (N)
	10	10	10	10
	10	10	10	10
	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.33	15.76	0.5	2.2	C
B-AD	0.60	24.59	1.6	6.8	C
A&B&C&D	0.08	4.74	0.2	1.1	A
A-B					
A-C					
D-A	0.04	9.66	0.0	0.5	A
D-B-C	0.47	17.73	1.0	4.1	C
C-ABD	0.01	9.06	0.0	0.5	A
C-D					
C-A					

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	84	493	0.171	83	0.2	9.635	A
B-AD	166	466	0.357	164	0.6	13.016	B
A&B&C&D	40	876	0.045	39	0.1	4.731	A
A-B	116			116			
A-C	308			308			
D-A	13	504	0.025	13	0.0	8.065	A
D-B-C	136	469	0.289	134	0.4	11.764	B
C-ABD	2	500	0.003	2	0.0	7.947	A
C-D	0			0			
C-A	14			14			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	101	451	0.223	100	0.3	11.294	B
B-AD	199	441	0.451	198	0.9	16.177	C
A&B&C&D	55	929	0.059	55	0.1	4.528	A
A-B	137			137			
A-C	362			362			
D-A	15	477	0.032	15	0.0	8.567	A
D-B-C	162	449	0.361	161	0.6	13.732	B
C-ABD	2	474	0.004	2	0.0	8.387	A
C-D	0			0			
C-A	16			16			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	123	377	0.327	122	0.5	15.479	C
B-AD	243	404	0.602	241	1.6	23.817	C
A&B&C&D	82	1004	0.081	81	0.2	4.294	A
A-B	164			164			
A-C	433			433			
D-A	19	430	0.044	19	0.0	9.619	A
D-B-C	198	422	0.470	197	0.9	17.508	C
C-ABD	2	439	0.005	2	0.0	9.071	A
C-D	0			0			
C-A	20			20			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	123	374	0.329	123	0.5	15.763	C
B-AD	243	404	0.603	243	1.6	24.590	C
A&B&C&D	82	1003	0.081	82	0.2	4.300	A
A-B	164			164			
A-C	433			433			
D-A	19	428	0.044	19	0.0	9.665	A
D-B-C	198	421	0.470	198	1.0	17.734	C
C-ABD	2	438	0.005	2	0.0	9.079	A
C-D	0			0			
C-A	20			20			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	101	447	0.225	102	0.3	11.477	B
B-AD	199	440	0.451	201	0.9	16.747	C
A&B&C&D	55	929	0.059	55	0.1	4.536	A
A-B	137			137			
A-C	362			362			
D-A	15	475	0.032	15	0.0	8.610	A
D-B-C	162	446	0.361	163	0.6	13.949	B
C-ABD	2	473	0.004	2	0.0	8.399	A
C-D	0			0			
C-A	16			16			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	84	491	0.172	85	0.2	9.755	A
B-AD	166	466	0.357	168	0.6	13.343	B
A&B&C&D	40	876	0.046	40	0.1	4.740	A
A-B	116			116			
A-C	307			307			
D-A	13	502	0.026	13	0.0	8.103	A
D-B-C	136	468	0.289	136	0.5	11.958	B
C-ABD	2	499	0.003	2	0.0	7.959	A
C-D	0			0			
C-A	14			14			

Queue Variation Results for each time segment

00:00 - 00:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.22	0.00	0.00	0.22	0.32	N/A		N/A	N/A
B-AD	0.60	0.60	1.10	1.54	1.60			N/A	N/A
A&B&C&D	0.07	0.00	0.00	0.07	0.07			N/A	N/A
D-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-B-C	0.44	0.00	0.00	0.44	0.44			N/A	N/A
C-ABD	0.00	0.00	0.00	0.00	0.00			N/A	N/A

00:15 - 00:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.31	0.00	0.00	0.31	0.31			N/A	N/A
B-AD	0.88	0.21	1.02	1.54	1.61			N/A	N/A
A&B&C&D	0.10	0.03	0.28	0.50	0.53			N/A	N/A
D-A	0.04	0.03	0.28	0.50	0.53			N/A	N/A
D-B-C	0.61	0.61	1.10	1.54	1.60			N/A	N/A
C-ABD	0.00	0.00	0.28	0.50	0.52			N/A	N/A

00:30 - 00:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.52	0.03	0.28	0.52	0.54			N/A	N/A
B-AD	1.57	0.03	0.32	1.57	6.78			N/A	N/A
A&B&C&D	0.17	0.03	0.30	0.54	1.11			N/A	N/A
D-A	0.05	0.03	0.28	0.50	0.53			N/A	N/A
D-B-C	0.94	0.03	0.29	0.94	1.29			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

00:45 - 01:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.53	0.03	0.35	1.58	2.20			N/A	N/A
B-AD	1.62	0.03	0.32	1.62	6.83			N/A	N/A
A&B&C&D	0.17	0.00	0.00	0.17	0.17			N/A	N/A
D-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
D-B-C	0.96	0.03	0.32	1.33	4.08			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

01:00 - 01:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B-AD	0.93	0.06	0.66	1.80	2.42			N/A	N/A
A&B&C&D	0.11	0.00	0.00	0.11	0.11			N/A	N/A
D-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
D-B-C	0.64	0.06	0.66	1.46	1.56			N/A	N/A
C-ABD	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: (new file)
Path:
Report generation date: 20/04/2022 15:12:00

»J3 DS - 2024, PM
»J3 DS - 2024, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS
J3 DS - 2024												
Stream B-C	D1	0.9	4.1	27.03	0.45	D	D2	0.9	4.1	27.03	0.45	D
Stream B-AD		3.7	19.9	44.51	0.79	E		3.7	19.9	44.51	0.79	E
Stream A-B-C-D		0.2	1.2	4.80	0.08	A		0.2	1.2	4.80	0.08	A
Stream D-A		0.1	0.5	10.22	0.05	B		0.1	0.5	10.22	0.05	B
Stream D-B-C		1.0	4.4	19.30	0.49	C		1.0	4.4	19.30	0.49	C
Stream C-ABD		0.0	0.5	9.07	0.01	A		0.0	0.5	9.07	0.01	A

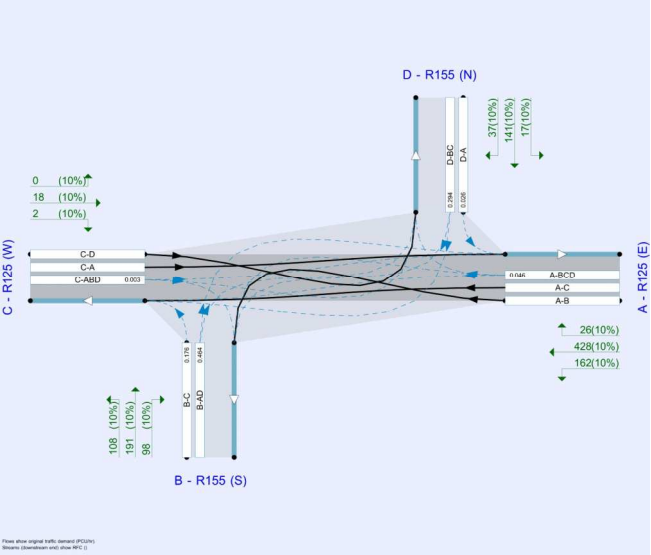
There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.
Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description	
Title	
Location	
Site number	
Date	07/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSOJoshua.tai
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	per/hour	s	-Min	per/Min



Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024	AM	ONE HOUR	00:00	01:30	15
D2	2024	PM	ONE HOUR	00:00	01:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	J3 DS	100.000

J3 DS - 2024, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way		16.06	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	R125 (E)		Major
B	R155 (S)		Minor
C	R125 (W)		Major
D	R155 (N)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - R125 (E)	7.00			70.0	✓	0.00
C - R125 (W)	6.00			100.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m	Width at 10m	Width at 15m	Width at 20m	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - R155 (S)	One line plus flare	10.00	7.50	5.40	3.50	3.00	✓	2.00	100	50
D - R155 (N)	One line plus flare	8.00	5.00	4.00	4.00	3.00	✓	1.00	15	80

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
A-D	615	-	-	0.229	0.229	0.229	-	0.229	-	-	-
B-AD	593	6.108	0.273	-	-	-	0.172	0.360	0.172	0.108	0.273
B-C	655	6.100	0.254	-	-	-	-	-	-	0.100	0.254
C-B	632	0.243	0.243	-	-	-	-	-	-	0.243	0.243
D-A	577	-	-	-	0.214	0.085	0.214	-	0.085	-	-
D-BC	569	0.158	0.158	0.358	0.250	0.099	0.250	-	0.099	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2024	PM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R125 (E)		✓	222	100.000
B - R155 (S)		✓	283	100.000
C - R125 (W)		✓	27	100.000
D - R155 (N)		✓	252	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - R125 (E)	B - R155 (S)	C - R125 (W)	D - R155 (N)
From	A - R125 (E)	0	88	124	10
	B - R155 (S)	74	0	74	136
	C - R125 (W)	23	2	0	2
	D - R155 (N)	11	230	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - R125 (E)	B - R155 (S)	C - R125 (W)	D - R155 (N)
From	A - R125 (E)	10	10	10	10
	B - R155 (S)	10	10	10	10
	C - R125 (W)	10	10	10	10
	D - R155 (N)	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.45	27.03	0.9	4.1	D
B-AD	0.79	44.51	3.7	19.9	E
A-B-C-D	0.08	4.80	0.2	1.2	A
A-B					
A-C					
D-A	0.05	10.22	0.1	0.5	B
D-B-C	0.49	19.30	1.0	4.4	C
C-ABD	0.01	9.07	0.0	0.5	A
C-D					
C-A					

Main Results for each time segment

00:00 - 00:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	87	461	0.178	80	0.2	10.376	B
B-AD	218	469	0.464	214	0.9	15.316	C
A&B&C&D	40	867	0.046	40	0.1	4.784	A
A-B	116			116			
A-C	307			307			
D-A	13	492	0.026	13	0.0	8.254	A
D-B&C	134	456	0.294	132	0.4	12.181	B
C-ABD	2	500	0.003	2	0.0	7.941	A
C-D	0			0			
C-A	14			14			

00:15 - 00:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	97	399	0.243	97	0.3	13.060	B
B-AD	260	443	0.586	258	1.5	21.077	C
A&B&C&D	55	919	0.060	55	0.1	4.587	A
A-B	137			137			
A-C	361			361			
D-A	15	463	0.033	15	0.0	8.846	A
D-B&C	160	433	0.370	159	0.6	14.433	B
C-ABD	2	474	0.004	2	0.0	8.380	A
C-D	0			0			
C-A	16			16			

00:30 - 00:45							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	119	275	0.428	117	0.8	24.415	C
B-AD	318	404	0.787	311	3.4	39.318	E
A&B&C&D	83	962	0.084	83	0.2	4.357	A
A-B	163			163			
A-C	432			432			
D-A	19	409	0.046	19	0.1	10.132	B
D-B&C	196	402	0.488	194	1.0	18.940	C
C-ABD	2	439	0.005	2	0.0	9.060	A
C-D	0			0			
C-A	20			20			

00:45 - 01:00							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	119	265	0.449	119	0.9	27.032	D
B-AD	318	403	0.789	317	3.7	44.307	E
A&B&C&D	84	991	0.084	84	0.2	4.364	A
A-B	163			163			
A-C	431			431			
D-A	19	406	0.046	19	0.1	10.217	B
D-B&C	196	401	0.489	196	1.0	19.305	C
C-ABD	2	439	0.005	2	0.0	9.071	A
C-D	0			0			
C-A	20			20			

01:00 - 01:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	97	388	0.250	99	0.4	13.784	B
B-AD	260	442	0.587	268	1.7	23.644	C
A&B&C&D	56	917	0.061	56	0.1	4.601	A
A-B	137			137			
A-C	361			361			
D-A	15	459	0.033	15	0.0	8.921	A
D-B&C	160	431	0.371	161	0.7	14.760	B
C-ABD	2	474	0.004	2	0.0	8.393	A
C-D	0			0			
C-A	16			16			

01:15 - 01:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	87	456	0.178	82	0.2	10.589	B
B-AD	218	469	0.464	220	1.0	16.117	C
A&B&C&D	40	866	0.047	41	0.1	4.767	A
A-B	116			116			
A-C	307			307			
D-A	13	490	0.026	13	0.0	8.305	A
D-B&C	134	454	0.295	135	0.5	12.418	B
C-ABD	2	499	0.003	2	0.0	7.994	A
C-D	0			0			
C-A	14			14			

Queue Variation Results for each time segment

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.23	0.00	0.00	0.23	0.23			N/A	N/A
B-AD	0.92	0.61	1.10	1.54	1.60			N/A	N/A
A&B&C&D	0.07	0.00	0.00	0.07	0.07			N/A	N/A
D-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-B&C	0.45	0.00	0.00	0.45	0.45			N/A	N/A
C-ABD	0.00	0.00	0.00	0.00	0.00			N/A	N/A

00:15 - 00:30									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.35	0.00	0.00	0.35	0.35			N/A	N/A
B-AD	1.48	0.12	1.24	2.69	3.42			N/A	N/A
A&B&C&D	0.11	0.03	0.28	0.50	0.53			N/A	N/A
D-A	0.04	0.03	0.28	0.50	0.53			N/A	N/A
D-B&C	0.63	0.61	1.10	1.54	1.60			N/A	N/A
C-ABD	0.00	0.00	0.28	0.50	0.52			N/A	N/A

00:30 - 00:45									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.79	0.03	0.29	0.79	1.24			N/A	N/A
B-AD	3.40	0.05	0.45	9.27	17.34			N/A	N/A
A&B&C&D	0.17	0.03	0.30	0.54	1.16			N/A	N/A
D-A	0.05	0.03	0.28	0.51	0.53			N/A	N/A
D-B&C	1.01	0.03	0.30	1.01	1.33			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

00:45 - 01:00									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.86	0.04	0.36	1.95	4.08			N/A	N/A
B-AD	3.70	0.04	0.37	7.64	19.89			N/A	N/A
A&B&C&D	0.18	0.00	0.00	0.18	0.18			N/A	N/A
D-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
D-B&C	1.03	0.03	0.32	1.40	4.39			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

01:00 - 01:15									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.37	0.03	0.30	0.54	1.02			N/A	N/A
B-AD	1.65	0.05	0.46	4.33	7.36			N/A	N/A
A&B&C&D	0.11	0.00	0.00	0.11	0.11			N/A	N/A
D-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
D-B&C	0.67	0.06	0.67	1.48	1.58			N/A	N/A
C-ABD	0.00	0.00	0.00	0.00	0.00			N/A	N/A

01:15 - 01:30									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.24	0.03	0.28	0.50	0.53			N/A	N/A
B-AD	0.98	0.04	0.37	2.20	4.75			N/A	N/A
A&B&C&D	0.08	0.00	0.00	0.08	0.08			N/A	N/A
D-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-B&C	0.47	0.04	0.40	1.32	1.49			N/A	N/A
C-ABD	0.00	0.00	0.00	0.00	0.00			N/A	N/A

J3 DS - 2024, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	united	Right-Left Stagger	Two-way		16.08	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2024	PM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R125 (E)		✓	616	100.000
B - R155 (S)		✓	397	100.000
C - R125 (W)		✓	20	100.000
D - R155 (N)		✓	195	100.000

Origin-Destination Data

Demand (PCU/hr)		To			
From	A - R125 (E)	A - R125 (E)	B - R155 (S)	C - R125 (W)	D - R155 (N)
	0	162	428	26	
	98	0	108	191	
	18	2	0	0	
	17	141	37	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - R125 (E)	B - R155 (S)	C - R125 (W)	D - R155 (N)
	10	10	10	10
	10	10	10	10
	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.45	27.03	0.9	4.1	D
B-AD	0.79	44.51	3.7	19.9	E
A&B&C&D	0.08	4.80	0.2	1.2	A
A-B					
A-C					
D-A	0.05	10.22	0.1	0.5	B
D-B-C	0.49	19.30	1.0	4.4	C
C-ABD	0.01	9.07	0.0	0.5	A
C-D					
C-A					

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	81	461	0.176	80	0.2	10.376	B
B-AD	218	469	0.464	214	0.9	15.316	C
A&B&C&D	40	867	0.046	40	0.1	4.784	A
A-B	116			116			
A-C	307			307			
D-A	13	492	0.026	13	0.0	8.254	A
D-B-C	134	456	0.294	132	0.4	12.181	B
C-ABD	2	500	0.003	2	0.0	7.941	A
C-D	0			0			
C-A	14			14			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	97	399	0.243	97	0.3	13.060	B
B-AD	280	443	0.588	269	1.5	21.077	C
A&B&C&D	55	919	0.060	55	0.1	4.587	A
A-B	137			137			
A-C	361			361			
D-A	15	463	0.033	15	0.0	8.846	A
D-B-C	160	433	0.370	159	0.6	14.433	B
C-ABD	2	474	0.004	2	0.0	8.380	A
C-D	0			0			
C-A	16			16			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	119	276	0.428	117	0.8	24.415	C
B-AD	318	404	0.787	311	3.4	39.318	E
A&B&C&D	83	992	0.084	83	0.2	4.357	A
A-B	163			163			
A-C	432			432			
D-A	19	409	0.046	19	0.1	10.132	B
D-B-C	196	402	0.488	194	1.0	18.940	C
C-ABD	2	439	0.005	2	0.0	9.060	A
C-D	0			0			
C-A	20			20			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	119	265	0.449	119	0.9	27.032	D
B-AD	318	403	0.789	317	3.7	44.507	E
A&B&C&D	84	991	0.084	84	0.2	4.364	A
A-B	163			163			
A-C	431			431			
D-A	19	406	0.046	19	0.1	10.217	B
D-B-C	196	401	0.489	196	1.0	19.305	C
C-ABD	2	439	0.005	2	0.0	9.071	A
C-D	0			0			
C-A	20			20			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	97	388	0.250	99	0.4	13.794	B
B-AD	280	442	0.587	268	1.7	23.644	C
A&B&C&D	55	917	0.061	56	0.1	4.601	A
A-B	137			137			
A-C	361			361			
D-A	15	459	0.033	15	0.0	8.921	A
D-B-C	160	431	0.371	161	0.7	14.760	B
C-ABD	2	474	0.004	2	0.0	8.383	A
C-D	0			0			
C-A	16			16			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	81	456	0.178	82	0.2	10.589	B
B-AD	218	469	0.464	220	1.0	16.117	C
A&B&C&D	40	866	0.047	41	0.1	4.797	A
A-B	116			116			
A-C	307			307			
D-A	13	490	0.026	13	0.0	8.305	A
D-B-C	134	454	0.295	135	0.5	12.418	B
C-ABD	2	499	0.003	2	0.0	7.954	A
C-D	0			0			
C-A	14			14			

Queue Variation Results for each time segment

00:00 - 00:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.23	0.00	0.00	0.23	0.23	N/A		N/A	N/A
B-AD	0.92	0.61	1.10	1.54	1.60			N/A	N/A
A&B&C&D	0.07	0.00	0.00	0.07	0.07			N/A	N/A
D-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-B-C	0.45	0.00	0.00	0.45	0.45			N/A	N/A
C-ABD	0.00	0.00	0.00	0.00	0.00			N/A	N/A

00:15 - 00:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.35	0.00	0.00	0.35	0.35			N/A	N/A
B-AD	1.48	0.12	1.24	2.69	3.42			N/A	N/A
A&B&C&D	0.11	0.03	0.28	0.50	0.53			N/A	N/A
D-A	0.04	0.03	0.28	0.50	0.53			N/A	N/A
D-B-C	0.63	0.61	1.10	1.54	1.60			N/A	N/A
C-ABD	0.00	0.00	0.28	0.50	0.52			N/A	N/A

00:30 - 00:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.79	0.03	0.29	0.79	1.24			N/A	N/A
B-AD	3.40	0.05	0.45	9.27	17.34			N/A	N/A
A&B&C&D	0.17	0.03	0.30	0.54	1.16			N/A	N/A
D-A	0.05	0.03	0.28	0.51	0.53			N/A	N/A
D-B-C	1.01	0.03	0.30	1.01	1.30			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

00:45 - 01:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.86	0.04	0.36	1.95	4.08			N/A	N/A
B-AD	3.70	0.04	0.37	7.64	19.89			N/A	N/A
A&B&C&D	0.18	0.00	0.00	0.18	0.18			N/A	N/A
D-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
D-B-C	1.03	0.03	0.32	1.40	4.39			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

01:00 - 01:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.37	0.03	0.30	0.54	1.02			N/A	N/A
B-AD	1.65	0.05	0.46	4.33	7.36			N/A	N/A
A&B&C&D	0.11	0.00	0.00	0.11	0.11			N/A	N/A
D-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
D-B-C	0.67	0.06	0.67	1.48	1.58			N/A	N/A
C-ABD	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Junctions 9

ARCADY 9 -Roundabout Module

Version: 9.5.1.7462
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Filename: (new file)
Path:
Report generation date: 21/04/2022 10:15:45

»J4 DM - 2024, AM
»J4 DM - 2024, PM

Summary of junction performance

	AM						PM					
	SetID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	SetID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS
J4 DM - 2024												
1 - R155 (E)	D1	1.0	3.7	10.83	0.49	B	D2	0.7	3.0	7.04	0.37	A
2 - R155 (S)		0.8	2.8	5.98	0.42	A		6.1	30.9	24.68	0.86	C
3 - Somerville		0.2	0.5	6.03	0.14	A		0.2	0.5	8.72	0.14	A
4 - Unknown Road		3.4	17.4	22.92	0.77	C		0.6	2.9	9.35	0.36	A

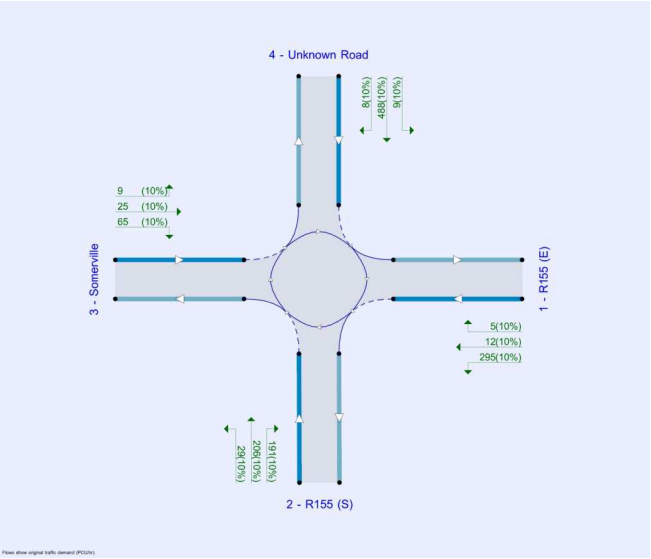
There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.
Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description	
Title	
Location	
Site number	
Date	07/09/2021
Version	
Status	(now file)
Identifier	
Client	
Jobnumber	
Enumerator	OCSC0Joshua.tai
Description	

Units

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



Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024	AM	ONE HOUR	00:00	01:30	15
D2	2024	PM	ONE HOUR	00:00	01:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	J4 DM	100.000

J4 DM - 2024, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	13.48	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	R155 (E)	
2	R155 (S)	
3	Somerville	
4	Unknown Road	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	F - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - R155 (E)	3.30	3.50	0.0	35.0	35.0	45.0	
2 - R155 (S)	3.00	4.00	11.4	16.0	30.0	25.0	
3 - Somerville	3.00	3.50	1.0	20.0	30.0	20.0	
4 - Unknown Road	3.00	3.00	0.0	20.0	30.0	40.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final Intercept (PCU/hr)
1 - R155 (E)	0.511	1028
2 - R155 (S)	0.547	1151
3 - Somerville	0.526	1001
4 - Unknown Road	0.479	877

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024	AM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - R155 (E)		✓	313	100.000
2 - R155 (S)		✓	430	100.000
3 - Somerville		✓	99	100.000
4 - Unknown Road		✓	505	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - R155 (E)	2 - R155 (S)	3 - Somerville	4 - Unknown Road
From	1 - R155 (E)	1	295	12	5
	2 - R155 (S)	191	4	29	206
	3 - Somerville	25	65	0	9
	4 - Unknown Road	9	488	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - R155 (E)	2 - R155 (S)	3 - Somerville	4 - Unknown Road
From	1 - R155 (E)	10	10	10	10
	2 - R155 (S)	10	10	10	10
	3 - Somerville	10	10	10	10
	4 - Unknown Road	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
1 - R155 (E)	0.49	10.83	1.0	3.7	B
2 - R155 (S)	0.42	5.98	0.8	2.8	A
3 - Somerville	0.14	6.03	0.2	0.5	A
4 - Unknown Road	0.77	22.92	3.4	17.4	C

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	236	421	813	0.200	234	0.4	6.823	A
2 - R155 (S)	324	19	1141	0.284	322	0.4	4.826	A
3 - Somerville	75	305	841	0.089	74	0.1	5.164	A
4 - Unknown Road	380	214	775	0.491	376	1.0	9.829	A

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	281	508	759	0.366	381	0.6	8.091	A
2 - R155 (S)	387	23	1139	0.339	386	0.6	5.256	A
3 - Somerville	89	365	809	0.110	89	0.1	5.501	A
4 - Unknown Road	454	257	755	0.602	452	1.6	12.975	B

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	345	615	713	0.483	343	1.0	10.653	B
2 - R155 (S)	473	28	1136	0.417	473	0.8	5.963	A
3 - Somerville	109	447	766	0.142	109	0.2	6.026	A
4 - Unknown Road	556	314	727	0.765	549	3.3	21.516	C

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	345	622	710	0.485	345	1.0	10.826	B
2 - R155 (S)	473	29	1136	0.417	473	0.8	5.977	A
3 - Somerville	109	448	765	0.142	109	0.2	6.032	A
4 - Unknown Road	556	315	727	0.765	555	3.4	22.918	C

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	281	515	765	0.368	283	0.6	8.243	A
2 - R155 (S)	387	24	1139	0.340	387	0.6	5.277	A
3 - Somerville	89	367	808	0.110	89	0.1	5.511	A
4 - Unknown Road	454	258	754	0.602	461	1.7	13.792	B

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	236	428	809	0.291	236	0.5	6.924	A
2 - R155 (S)	324	20	1141	0.284	324	0.4	4.852	A
3 - Somerville	75	307	840	0.089	75	0.1	5.177	A
4 - Unknown Road	380	216	774	0.491	383	1.1	10.182	B

Queue Variation Results for each time segment

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.44	0.00	0.00	0.44	0.44			N/A	N/A
2 - R155 (S)	0.43	0.00	0.00	0.43	0.43			N/A	N/A
3 - Somerville	0.11	0.00	0.00	0.11	0.11			N/A	N/A
4 - Unknown Road	1.04	0.61	1.10	1.54	1.60			N/A	N/A

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.63	0.61	1.10	1.54	1.60			N/A	N/A
2 - R155 (S)	0.56	0.56	1.10	1.54	1.60			N/A	N/A
3 - Somerville	0.14	0.00	0.00	0.14	0.14			N/A	N/A
4 - Unknown Road	1.61	0.09	1.19	3.22	4.36			N/A	N/A

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	1.01	0.03	0.29	1.21	1.01			N/A	N/A
2 - R155 (S)	0.78	0.03	0.28	0.78	0.78			N/A	N/A
3 - Somerville	0.18	0.03	0.28	0.51	0.54			N/A	N/A
4 - Unknown Road	3.26	0.04	0.37	6.56	17.44			N/A	N/A

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	1.02	0.03	0.31	1.02	3.70			N/A	N/A
2 - R155 (S)	0.78	0.03	0.31	0.78	2.82			N/A	N/A
3 - Somerville	0.18	0.03	0.28	0.50	0.52			N/A	N/A
4 - Unknown Road	3.41	0.03	0.32	3.41	14.16			N/A	N/A

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.65	0.08	0.81	1.48	1.57			N/A	N/A
2 - R155 (S)	0.57	0.57	1.10	1.54	1.60			N/A	N/A
3 - Somerville	0.14	0.00	0.00	0.14	0.14			N/A	N/A
4 - Unknown Road	1.72	0.05	0.52	4.43	7.07			N/A	N/A

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.46	0.04	0.38	1.25	1.45			N/A	N/A
2 - R155 (S)	0.44	0.00	0.00	0.44	0.44			N/A	N/A
3 - Somerville	0.11	0.00	0.00	0.11	0.11			N/A	N/A
4 - Unknown Road	1.08	0.04	0.40	2.69	4.95			N/A	N/A

J4 DM - 2024, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	17.93	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2024	PM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - R155 (E)		✓	306	100.000
2 - R155 (S)		✓	857	100.000
3 - Somerville		✓	66	100.000
4 - Unknown Road		✓	215	100.000

Origin-Destination Data

Demand (PCU/hr)

	From	To			
		1 - R155 (E)	2 - R155 (S)	3 - Somerville	4 - Unknown Road
	1 - R155 (E)	0	232	41	33
	2 - R155 (S)	360	3	69	425
	3 - Somerville	24	26	0	16
	4 - Unknown Road	16	185	14	0

Vehicle Mix

Heavy Vehicle Percentages

	From	To			
		1 - R155 (E)	2 - R155 (S)	3 - Somerville	4 - Unknown Road
	1 - R155 (E)	10	10	10	10
	2 - R155 (S)	10	10	10	10
	3 - Somerville	10	10	10	10
	4 - Unknown Road	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
1 - R155 (E)	0.37	7.04	0.7	3.0	A
2 - R155 (S)	0.86	24.68	6.1	30.9	C
3 - Somerville	0.14	8.72	0.2	0.5	A
4 - Unknown Road	0.38	9.35	0.6	2.9	A

Main Results for each time segment

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	230	170	941	0.245	229	0.4	5.553	A
2 - R155 (S)	646	66	1115	0.578	639	1.5	8.220	A
3 - Somerville	50	613	679	0.073	49	0.1	6.287	A
4 - Unknown Road	162	308	730	0.222	161	0.3	6.940	A

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	275	205	923	0.298	275	0.5	6.103	A
2 - R155 (S)	770	79	1108	0.695	767	2.4	11.465	B
3 - Somerville	59	735	615	0.097	59	0.1	7.126	A
4 - Unknown Road	193	370	700	0.276	193	0.4	7.795	A

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	337	250	900	0.374	336	0.7	7.018	A
2 - R155 (S)	944	97	1099	0.869	930	5.7	21.943	C
3 - Somerville	73	892	532	0.137	72	0.2	8.698	A
4 - Unknown Road	237	449	663	0.357	236	0.6	9.267	A

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	337	251	899	0.375	337	0.7	7.039	A
2 - R155 (S)	944	97	1098	0.869	942	6.1	24.683	C
3 - Somerville	73	902	527	0.138	73	0.2	8.724	A
4 - Unknown Road	237	454	660	0.359	237	0.6	9.351	A

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	275	206	922	0.299	276	0.5	6.130	A
2 - R155 (S)	770	79	1108	0.695	765	2.6	12.730	B
3 - Somerville	59	751	606	0.098	60	0.1	7.250	A
4 - Unknown Road	193	377	697	0.277	194	0.4	7.888	A

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	230	172	940	0.245	231	0.4	5.591	A
2 - R155 (S)	645	66	1115	0.579	649	1.5	8.582	A
3 - Somerville	50	622	674	0.074	50	0.1	6.348	A
4 - Unknown Road	162	313	728	0.222	162	0.3	7.011	A

Queue Variation Results for each time segment

00:00 - 00:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.35	0.00	0.00	0.35	0.35			N/A	N/A
2 - R155 (S)	1.48	0.62	1.28	1.76	1.98			N/A	N/A
3 - Somerville	0.09	0.00	0.00	0.09	0.09			N/A	N/A
4 - Unknown Road	0.31	0.00	0.00	0.31	0.31			N/A	N/A

00:15 - 00:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.46	0.00	0.00	0.46	0.46			N/A	N/A
2 - R155 (S)	2.41	0.07	1.10	6.12	9.00			N/A	N/A
3 - Somerville	0.12	0.00	0.00	0.12	0.12			N/A	N/A
4 - Unknown Road	0.41	0.00	0.00	0.41	0.41			N/A	N/A

00:30 - 00:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.65	0.03	0.28	0.65	0.65			N/A	N/A
2 - R155 (S)	5.73	0.04	0.44	15.13	30.92			N/A	N/A
3 - Somerville	0.17	0.03	0.28	0.51	0.54			N/A	N/A
4 - Unknown Road	0.60	0.03	0.28	0.60	0.60			N/A	N/A

00:45 - 01:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.65	0.03	0.32	1.32	2.96			N/A	N/A
2 - R155 (S)	6.14	0.04	0.35	8.06	30.89			N/A	N/A
3 - Somerville	0.17	0.03	0.28	0.50	0.52			N/A	N/A
4 - Unknown Road	0.61	0.03	0.33	1.48	2.86			N/A	N/A

01:00 - 01:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.47	0.00	0.00	0.47	0.47			N/A	N/A
2 - R155 (S)	2.61	0.05	0.48	7.19	12.38			N/A	N/A
3 - Somerville	0.12	0.00	0.00	0.12	0.12			N/A	N/A
4 - Unknown Road	0.43	0.00	0.00	0.43	0.43			N/A	N/A

01:15 - 01:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2 - R155 (S)	1.54	0.04	0.37	3.55	7.90			N/A	N/A
3 - Somerville	0.09	0.00	0.00	0.09	0.09			N/A	N/A
4 - Unknown Road	0.32	0.00	0.00	0.32	0.32			N/A	N/A

Junctions 9											
ARCADY 9 - Roundabout Module											
Version: 9.5.1.7462											
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Filename: (new file)
Path:
Report generation date: 16/05/2022 21:25:26

»J4 DS - 2024, AM
»J4 DS - 2024, PM

Summary of junction performance

	AM						PM					
	SetID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	SetID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS
J4 DS - 2024												
1 - R155 (E)	D1	1.0	3.7	10.68	0.48	B	D2	0.6	2.9	6.98	0.37	A
2 - R155 (S)		0.8	2.8	6.09	0.42	A		6.4	33.6	26.32	0.87	D
3 - Somerville		0.2	0.5	5.98	0.14	A		0.2	0.5	8.60	0.14	A
4 - Unknown Road		3.2	16.5	21.98	0.76	C		0.6	2.8	9.20	0.35	A

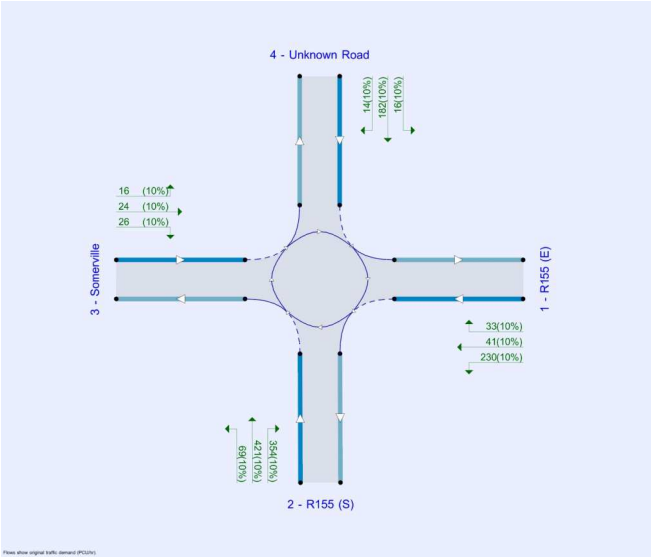
There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.
Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description	
Title	
Location	
Site number	
Date	07/09/2021
Version	
Status	(now file)
Identifier	
Client	
Jobnumber	
Enumerator	OCSO\oshua.tai
Description	

Units

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



Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024	AM	ONE HOUR	00:00	01:30	15
D2	2024	PM	ONE HOUR	00:00	01:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	J4 DS	100.000

J4 DS - 2024, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	united	Standard Roundabout		1, 2, 3, 4	13.14	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	R155 (E)	
2	R155 (S)	
3	Somerville	
4	Unknown Road	

Roundabout Geometry

Arm	V • Approach road half-width (m)	E • Entry width (m)	I • Effective flare length (m)	R • Entry radius (m)	D • Inscribed circle diameter (m)	PHI • Conflict (entry) angle (deg)	Exit only
1 - R155 (E)	3.50	3.50	0.0	35.0	35.0	45.0	
2 - R155 (S)	3.00	4.00	11.4	16.0	35.0	31.0	
3 - Somerville	3.00	3.50	1.0	20.0	35.0	20.0	
4 - Unknown Road	3.00	3.00	0.0	20.0	35.0	40.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final Intercept (PCU/hr)
1 - R155 (E)	0.511	1028
2 - R155 (S)	0.536	1128
3 - Somerville	0.526	1001
4 - Unknown Road	0.479	877

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024	AM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - R155 (E)		✓	311	100.000
2 - R155 (S)		✓	420	100.000
3 - Somerville		✓	99	100.000
4 - Unknown Road		✓	501	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - R155 (E)	2 - R155 (S)	3 - Somerville	4 - Unknown Road
From	1 - R155 (E)	1	293	12	5
	2 - R155 (S)	186	3	29	202
	3 - Somerville	25	65	0	9
	4 - Unknown Road	9	454	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - R155 (E)	2 - R155 (S)	3 - Somerville	4 - Unknown Road
From	1 - R155 (E)	10	10	10	10
	2 - R155 (S)	10	10	10	10
	3 - Somerville	10	10	10	10
	4 - Unknown Road	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
1 - R155 (E)	0.45	10.68	1.0	3.7	B
2 - R155 (S)	0.42	6.09	0.8	2.8	A
3 - Somerville	0.14	5.98	0.2	0.5	A
4 - Unknown Road	0.76	21.98	3.2	16.5	C

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	234	417	814	0.287	232	0.4	6.783	A
2 - R155 (S)	316	19	1117	0.283	314	0.4	4.923	A
3 - Somerville	75	297	845	0.088	74	0.1	5.137	A
4 - Unknown Road	377	210	777	0.485	373	1.0	9.713	A

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	280	501	772	0.362	279	0.6	8.024	A
2 - R155 (S)	378	23	1115	0.339	377	0.6	5.362	A
3 - Somerville	89	356	814	0.109	89	0.1	5.465	A
4 - Unknown Road	450	251	757	0.595	448	1.6	12.726	B

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	342	610	716	0.478	341	1.0	10.520	B
2 - R155 (S)	462	28	1112	0.416	462	0.8	6.077	A
3 - Somerville	109	436	772	0.141	109	0.2	5.974	A
4 - Unknown Road	552	308	730	0.756	545	3.1	20.750	C

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	342	616	713	0.480	342	1.0	10.680	B
2 - R155 (S)	462	29	1112	0.416	462	0.8	6.093	A
3 - Somerville	109	437	771	0.141	109	0.2	5.980	A
4 - Unknown Road	552	308	730	0.756	551	3.2	21.982	C

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	260	510	767	0.364	281	0.6	8.168	A
2 - R155 (S)	378	24	1115	0.339	378	0.6	5.384	A
3 - Somerville	89	358	813	0.109	89	0.1	5.475	A
4 - Unknown Road	450	252	757	0.595	457	1.7	13.462	B

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	234	424	811	0.289	235	0.5	6.884	A
2 - R155 (S)	316	20	1117	0.283	317	0.4	4.952	A
3 - Somerville	75	299	843	0.088	75	0.1	5.150	A
4 - Unknown Road	377	211	776	0.486	380	1.1	10.041	B

Queue Variation Results for each time segment

00:00 - 00:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.44	0.00	0.00	0.44	0.44			N/A	N/A
2 - R155 (S)	0.43	0.00	0.00	0.43	0.45			N/A	N/A
3 - Somerville	0.11	0.00	0.00	0.11	0.11			N/A	N/A
4 - Unknown Road	1.02	0.61	1.10	1.54	1.60			N/A	N/A

00:15 - 00:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.62	0.61	1.10	1.54	1.60			N/A	N/A
2 - R155 (S)	0.56	0.56	1.10	1.54	1.60			N/A	N/A
3 - Somerville	0.13	0.00	0.00	0.13	0.13			N/A	N/A
4 - Unknown Road	1.56	0.09	1.18	3.11	4.20			N/A	N/A

J4 DS - 2024, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	united	Standard Roundabout		1, 2, 3, 4	18.84	C

Junction Network Options

Driving side	Lighting
Left	Normalunknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2024	PM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - R155 (E)		✓	304	100.000
2 - R155 (S)			846	100.000
3 - Somerville		✓	66	100.000
4 - Unknown Road		✓	212	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
From		1 - R155 (E)	2 - R155 (S)	3 - Somerville	4 - Unknown Road
	1 - R155 (E)	0	230	41	33
	2 - R155 (S)	354	2	69	421
	3 - Somerville	24	26	0	16
	4 - Unknown Road	16	162	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - R155 (E)	2 - R155 (S)	3 - Somerville	4 - Unknown Road
	1 - R155 (E)	10	10	10	10
	2 - R155 (S)	10	10	10	10
	3 - Somerville	10	10	10	10
	4 - Unknown Road	10	10	10	10

7

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
1 - R155 (E)	0.37	6.98	0.6	2.9	A
2 - R155 (S)	0.87	26.32	6.4	33.6	D
3 - Somerville	0.14	8.60	0.2	0.5	A
4 - Unknown Road	0.35	9.20	0.6	2.8	A

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	229	167	942	0.243	227	0.4	5.532	A
2 - R155 (S)	637	66	1092	0.583	631	1.5	8.475	A
3 - Somerville	50	604	683	0.073	49	0.1	6.244	A
4 - Unknown Road	160	303	732	0.218	158	0.3	6.885	A

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	273	201	925	0.295	273	0.5	6.069	A
2 - R155 (S)	761	79	1065	0.701	757	2.5	11.905	B
3 - Somerville	59	725	620	0.096	59	0.1	7.059	A
4 - Unknown Road	191	363	704	0.271	190	0.4	7.707	A

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	335	246	902	0.371	334	0.6	6.963	A
2 - R155 (S)	931	97	1076	0.866	917	6.0	23.144	C
3 - Somerville	73	879	539	0.135	72	0.2	8.486	A
4 - Unknown Road	233	441	666	0.350	233	0.6	9.116	A

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	335	247	902	0.371	335	0.6	6.984	A
2 - R155 (S)	931	97	1076	0.866	930	6.4	26.316	D
3 - Somerville	73	890	533	0.136	73	0.2	8.602	A
4 - Unknown Road	233	446	664	0.352	233	0.6	9.199	A

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	273	202	924	0.296	274	0.5	6.086	A
2 - R155 (S)	761	79	1065	0.701	776	2.7	13.359	B
3 - Somerville	59	742	611	0.097	60	0.1	7.167	A
4 - Unknown Road	191	371	700	0.272	191	0.4	7.891	A

8

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	229	169	941	0.243	229	A	5.567	A
2 - R155 (S)	637	66	1092	0.583	641	1.6	8.871	A
3 - Somerville	50	614	678	0.073	50	0.1	6.302	A
4 - Unknown Road	160	308	730	0.219	160	0.3	6.952	A

Queue Variation Results for each time segment

00:00 - 00:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.35	0.00	0.00	0.35	0.35			N/A	N/A
2 - R155 (S)	1.50	0.63	1.32	1.82	2.01			N/A	N/A
3 - Somerville	0.09	0.00	0.00	0.09	0.09			N/A	N/A
4 - Unknown Road	0.30	0.00	0.00	0.30	0.30			N/A	N/A

00:15 - 00:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.46	0.00	0.00	0.46	0.46			N/A	N/A
2 - R155 (S)	2.47	0.07	1.13	6.27	9.24			N/A	N/A
3 - Somerville	0.12	0.00	0.00	0.12	0.12			N/A	N/A
4 - Unknown Road	0.40	0.00	0.00	0.40	0.40			N/A	N/A

00:30 - 00:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.64	0.03	0.26	0.64	0.64			N/A	N/A
2 - R155 (S)	5.98	0.05	0.46	16.25	31.98			N/A	N/A
3 - Somerville	0.17	0.03	0.28	0.51	0.54			N/A	N/A
4 - Unknown Road	0.58	0.03	0.28	0.58	0.58			N/A	N/A

00:45 - 01:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.65	0.03	0.32	1.34	2.94			N/A	N/A
2 - R155 (S)	6.45	0.04	0.36	10.80	33.56			N/A	N/A
3 - Somerville	0.17	0.03	0.28	0.50	0.52			N/A	N/A
4 - Unknown Road	0.59	0.03	0.33	1.49	2.76			N/A	N/A

01:00 - 01:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.47	0.00	0.00	0.47	0.47			N/A	N/A
2 - R155 (S)	2.69	0.05	0.48	7.40	12.86			N/A	N/A
3 - Somerville	0.12	0.00	0.00	0.12	0.12			N/A	N/A
4 - Unknown Road	0.42	0.00	0.00	0.42	0.42			N/A	N/A

01:15 - 01:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2 - R155 (S)	1.57	0.04	0.37	3.55	8.09			N/A	N/A
3 - Somerville	0.09	0.00	0.00	0.09	0.09			N/A	N/A
4 - Unknown Road	0.31	0.00	0.00	0.31	0.31			N/A	N/A

9

10

TRANSYT 15

Version: 15.5.2.7994
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Filename: (new file)
Path:
Report generation date: 21/04/2022 10:24:36

- «A1 - J5 DM : D1 - 2024 AM* :
»Summary
»Network Options
»Arms and Traffic Streams
»Signal Timings
»Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCR	Region
Driving side	Left
Date	07/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC\joshua.tai
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick fares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red- With- Amber	Display End-Of- Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand
	Ascending	Numerical		ID	Normal	Normal	✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Extended - Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Cimb (Fast)	15, 40, -1, 15, 40, 1, -1, -1, -15, -5, -1, 15, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

A1 - J5 DM
D1 - 2024 AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (E per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
1	21/04/2022 10:21:23	21/04/2022 10:21:23	08:00	90	169.17	10.74	79.32	5/1	0	0	5/1	3/1	5/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J5 DM		D1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2024 AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90			1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Poisson Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate call saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				15.00	✓	Sum of lanes	2055	✓	1800	✓		Normal	
2	1	1	(untitled)		15.00	✓	Sum of lanes	1915	✓	1800	✓		Normal	
3	1				40.00	✓	Sum of lanes	1915					Normal	
4	1			✓	85.71								Normal	
5	1				100.00	✓	Sum of lanes	1851			✓		Normal	
6	1				100.00								Normal	
7	1				25.00	✓	Sum of lanes	1915					Normal	
8	1				30.00	✓	Sum of lanes	1888	✓	1800	✓		Normal	
9	1				40.00	✓	Sum of lanes	1751	✓	1800	✓		Normal	
10	1				10.00	✓	Sum of lanes	1717	✓	1800		✓	Normal	
11	1			✓	88.91								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use R87	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
2	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
3	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
4	1	1	(untitled)											
5	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	33	14.23	✓	1851
6	1	1	(untitled)											
7	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	17.00		1888
9	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	16.04	✓	1751
10	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	7.81		1717
11	1	1	(untitled)											

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	
5	1	1	E	
8	1	1	D	
9	1	1	C	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
10	1	AllTraffic	✓	0	✓	7.61	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStream	5/1	100		0	0

Signal Timings

Network Default: 90s cycle time; 90 steps

Interstage Matrix for Controller Stream 1

	To			
	1	2	3	
From	1	0	6	6
	2	5	0	5
	3	5	5	0

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	B,E	78	38	50	1	7
	2	✓	2	A,B,C	44	60	16	1	6
	3	✓	3	C,D	65	73	8	1	7

Final Prediction Table

Traffic Stream Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated sat flow entering (PCU/hr)	Calculated sat flow total (s (PCU/hr)	Actual green (s (per cycle)	Wasted time total (s (per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	we m
1	1			1	A	119	2055	17	0.39	30	204	28.69	28.89	50.79	1.51	
2	1			1	B	340	1915	72	29.00	22	311	3.96	2.16	17.25	1.48	
3	1					459	1915	90	36.53	40	123	12.65	7.85	48.46	5.36	
4	1					737	Unrestricted	90	1.00	0	Unrestricted	10.29	0.00	0.00	0.00	
5	1			1	E	832 +	1851	50	0.00	79	13	33.80	21.80	82.38	17.67 +	
6	1					477	Unrestricted	90	24.00	0	Unrestricted	12.00	0.00	0.00	0.00	
7	1					317	1915	90	0.00	17	444	3.19	0.19	0.00	0.02	
8	1			1	D	137	1888	8	0.00	73	24	66.67	63.07	119.14	4.14	
9	1			1	C	180	1751	29	0.00	31	192	28.47	23.67	72.61	3.27	
10	1					119	835	90	72.00	14	532	1.60	0.40	2.31	1.46	
11	1					394	Unrestricted	90	13.00	0	Unrestricted	10.67	0.00	0.00	0.00	

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	274.77	19.90	13.81	10.74	152.57	16.60	0.00	169.17
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	274.77	19.90	13.81	10.74	152.57	16.60	0.00	169.17

- < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- + = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

<		>
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5

TRANSYT 15
Version: 15.5.2.7994 © Copyright TRL Limited, 2018
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Filename: (new file)

Path:

Report generation date: 21/04/2022 10:22:42

«A2 - J5 DM : D2 - 2024 PM* :

- »Summary
- »Network Options
- »Arms and Traffic Streams
- »Signal Timings
- »Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCR/Region	
Driving side	Left
Date	07/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC\joshua.tai
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick fibres	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

1

A2 - J5 DM D2 - 2024 PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
2	21/04/2022 10:22:40	21/04/2022 10:22:40	08:00	90	146.18	9.28	68.55	5/1	0	0	5/1	3/1	5/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J5 DM		D2	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2024 PM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00		10000.00	10000.00

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

2

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable GUT Profile accuracy
✓	✓	Extended - Offsets And Green Spills	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, -1, -15, -5, -1, 15, 1	50, 90, 5, 5, 0.5, 0.5, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

3

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				15.00	✓	Sum of lanes	2055	✓	1800	✓		Normal	
2	1				15.00	✓	Sum of lanes	1915	✓	1800	✓		Normal	
3	1				40.00	✓	Sum of lanes	1915					Normal	
4	1			✓	85.71								Normal	
5	1				100.00	✓	Sum of lanes	1866			✓		Normal	
6	1				100.00								Normal	
7	1				25.00	✓	Sum of lanes	1915					Normal	
8	1				30.00	✓	Sum of lanes	1888	✓	1800	✓		Normal	
9	1				40.00	✓	Sum of lanes	1751	✓	1800	✓		Normal	
10	1				10.00	✓	Sum of lanes	1717	✓	1800		✓	Normal	
11	1			✓	88.91								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RSR?	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
2	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
3	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
4	1	1	(untitled)											
5	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	25	14.23	✓	1866
6	1	1	(untitled)											
7	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	17.00	✓	1888
9	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	16.04	✓	1751
10	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	7.61	✓	1717
11	1	1	(untitled)											

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	
5	1	1	E	
8	1	1	D	
9	1	1	C	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
10	1	AllTraffic	✓	0	✓	7.61	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStream	S/1	100		0	0

Signal Timings

Network Default: 90s cycle time; 90 steps

Interstage Matrix for Controller Stream 1

From	To			
	1	2	3	
	1	0	8	6
2	5	0	5	
3	5	5	0	

Resultant Stages

Controller stream	Resultant stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	B,E	5	37	32	1	7
	2	✓	2	A,B,C	43	69	26	1	6
	3	✓	3	C,D	74	0	16	1	7

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES	
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	D woi mu
1	1			1	A	66	2055	27	0.25	11	739	19.96	18.16	69.27	1.46	
2	1			1	B	785	1915	64	0.00	57	59	5.20	3.40	9.27	1.82	
3	1					853 <	1915	90	21.88	59	53	10.98	6.18	40.96	9.66 +	
4	1					426	Unrestricted	90	13.00	0	Unrestricted	10.29	0.00	0.00	0.00	
5	1			1	E	469	1866	32	0.00	69	31	41.77	29.77	88.24	10.64	
6	1					1008	Unrestricted	90	0.00	0	Unrestricted	12.00	0.00	0.00	0.00	
7	1					298	1915	90	11.43	18	405	3.93	0.93	12.21	1.10	
8	1			1	D	223	1888	16	0.00	63	44	44.84	41.24	86.98	4.86	
9	1			1	C	75	1751	47	16.00	8	1021	15.22	10.42	46.85	1.45	
10	1					68	1226	90	62.00	6	1522	1.33	0.13	2.81	1.45	
11	1					186	Unrestricted	90	27.00	0	Unrestricted	10.67	0.00	0.00	0.00	

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	265.48	18.13	14.65	9.28	131.75	14.43	0.00	146.18
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	265.48	18.13	14.65	9.28	131.75	14.43	0.00	146.18

- < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

TRANSYT 15	
Version: 15.5.2.7994	
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Filename: (new file)

Path:

Report generation date: 16/05/2022 18:50:13

<A1 - J5 DS : D1 - 2024 AM* :

- »Summary
- »Network Options
- »Arms and Traffic Streams
- »Signal Timings
- »Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCRregion	
Driving side	Left
Date	07/09/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	OCSC(joshua.tai)
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick lanes	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-of-Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perhour	s	-hour	perhour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A1 - J5 DS
D1 - 2024 AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
1	16/05/2022 18:45:22	16/05/2022 19:45:22	08:00	90	167.51	10.64	78.94	5/1	0	0	5/1	3/1	5/

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J5 DS		D1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2024 AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (s)	Phase maximum broken penalty (s)	Intergreen broken penalty (s)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Extended - Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master/ controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1, -15, -5, -1, 15, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.80	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				15.00	✓	Sum of lanes	2055	✓	1800	✓		Normal	
2	1				15.00	✓	Sum of lanes	1915	✓	1800	✓		Normal	
3	1				40.00	✓	Sum of lanes	1915					Normal	
4	1			✓	85.71								Normal	
5	1				100.00	✓	Sum of lanes	1851			✓		Normal	
6	1				100.00								Normal	
7	1				25.00	✓	Sum of lanes	1915					Normal	
8	1				30.00	✓	Sum of lanes	1888	✓	1800	✓		Normal	
9	1				40.00	✓	Sum of lanes	1751	✓	1800	✓		Normal	
10	1				10.00	✓	Sum of lanes	1717	✓	1800		✓	Normal	
11	1			✓	88.91								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RRE?	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
2	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
3	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
4	1	1	(united)											
5	1	1	(united)		✓	N/A	N/A	0	3.00	✓	33	14.23	✓	1851
6	1	1	(united)											
7	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
8	1	1	(united)		✓	N/A	N/A	0	3.00	✓	100	17.00		1888
9	1	1	(united)		✓	N/A	N/A	0	3.00	✓	100	16.04	✓	1751
10	1	1	(united)		✓	N/A	N/A	0	3.00	✓	100	7.61		1717
11	1	1	(united)											

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	
5	1	1	E	
8	1	1	D	
9	1	1	C	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
10	1	AllTraffic	✓	0	✓	7.61	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStream	S/1	100		0	0

3

4

Signal Timings

Network Default: 90s cycle time; 90 steps

Interstage Matrix for Controller Stream 1

From	To			
	1	2	3	
	1	0	6	6
	2	5	0	5
3	5	5	0	

Resultant Stages

Controller stream	Relevant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	B,E	78	38	90	1	7
	2	✓	2	A,B,C	44	60	16	1	6
	3	✓	3	C,D	65	73	8	1	7

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU				QUEUES	
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	we	m
1	1			1	A	119	2055	17	0.39	30	204	28.71	28.91	50.79	1.51		
2	1			1	B	332	1915	72	29.00	21	321	3.96	2.16	17.61	1.48		
3	1					451	1915	90	36.43	40	127	12.56	7.78	47.70	5.27		
4	1					733	Unrestricted	90	1.00	0	Unrestricted	10.29	0.00	0.00	0.00		
5	1			1	E	828 <	1851	50	0.00	79	14	33.60	21.60	81.94	17.55 +		
6	1					469	Unrestricted	90	24.00	0	Unrestricted	12.00	0.00	0.00	0.00		
7	1					317	1915	90	0.00	17	444	3.19	0.19	0.00	0.02		
8	1			1	D	137	1888	8	0.00	73	24	66.67	63.07	119.14	4.14		
9	1			1	C	180	1751	29	0.00	31	192	26.47	23.67	72.81	3.27		
10	1					119	637	90	72.00	14	533	1.80	0.40	2.31	1.46		
11	1					394	Unrestricted	90	13.00	0	Unrestricted	10.67	0.00	0.00	0.00		

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	272.78	19.73	13.82	10.64	151.10	16.41	0.00	167.51
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	272.78	19.73	13.82	10.64	151.10	16.41	0.00	167.51

- <= adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick fibres	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber
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Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perhour	s	-hour	perhour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A2 - J5 DS

D2 - 2024 PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PRC
2	16/05/2022 18:48:48	16/05/2022 18:48:48	08:00	90	144.09	9.15	67.82	5/1	0	0	5/1	3/1	5/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J5 DS		D2	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2024 PM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓			Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Extended - Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, -1, -15, -5, -1, 15, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05			✓	1		Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.50	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				15.00	✓	Sum of lanes	2055	✓	1800	✓		Normal	
2	1				15.00	✓	Sum of lanes	1915	✓	1800	✓		Normal	
3	1				40.00	✓	Sum of lanes	1915					Normal	
4	1			✓	85.71								Normal	
5	1				100.00	✓	Sum of lanes	1866			✓		Normal	
6	1				100.00								Normal	
7	1				25.00	✓	Sum of lanes	1915					Normal	
8	1				30.00	✓	Sum of lanes	1888	✓	1800	✓		Normal	
9	1				40.00	✓	Sum of lanes	1751	✓	1800	✓		Normal	
10	1				10.00	✓	Sum of lanes	1717	✓	1800		✓	Normal	
11	1			✓	88.91								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RWS?	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
2	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
3	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
4	1	1	(united)											
5	1	1	(united)		✓	N/A	N/A	0	3.00	✓	25	14.23	✓	1866
6	1	1	(united)											
7	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
8	1	1	(united)		✓	N/A	N/A	0	3.00	✓	100	17.00		1888
9	1	1	(united)		✓	N/A	N/A	0	3.00	✓	100	16.04	✓	1751
10	1	1	(united)		✓	N/A	N/A	0	3.00	✓	100	7.61		1717
11	1	1	(united)											

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	
5	1	1	E	
8	1	1	D	
9	1	1	C	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
10	1	AllTraffic	✓	0	✓	7.61	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStream	5/1	100		0	0

Signal Timings

Network Default: 90s cycle time; 90 steps

Interstage Matrix for Controller Stream 1

	To
	1 2 3
From	1 0 6 6 6
	2 5 0 5 5
	3 5 5 0 0

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	B,E	5	37	32	1	7
	2	✓	2	A,B,C	43	69	26	1	6
	3	✓	3	C,D	74	0	16	1	7

Final Prediction Table

Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU		QUEUES		
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle)	Wasted time total (s (per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	D woi mu
1	1			1	A	66	2055	27	0.25	11	739	20.03	18.23	69.27	1.46	
2	1			1	B	776	1915	64	0.00	56	80	5.18	3.38	9.30	1.81	
3	1					844 <	1915	90	21.85	58	55	10.86	6.06	40.35	9.55 +	
4	1					421	Unrestricted	90	13.00	0	Unrestricted	10.29	0.00	0.00	0.00	
5	1			1	E	464	1866	32	0.00	68	33	41.50	29.50	87.70	10.37	
6	1					999	Unrestricted	90	0.00	0	Unrestricted	12.00	0.00	0.00	0.00	
7	1					298	1915	90	11.43	18	405	3.93	0.93	12.21	1.10	
8	1			1	D	223	1888	16	0.00	63	44	44.84	41.24	86.98	4.86	
9	1			1	C	75	1751	47	10.00	8	1021	15.22	10.42	46.85	1.45	
10	1					66	1231	90	62.00	6	1529	1.33	0.13	2.81	1.45	
11	1					186	Unrestricted	90	27.00	0	Unrestricted	10.67	0.00	0.00	0.00	

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	263.16	17.92	14.69	9.15	129.87	14.22	0.00	144.09
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	263.16	17.92	14.69	9.15	129.87	14.22	0.00	144.09

- <= adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

Junctions 9

PICADY 9 -Priority Intersection Module

Version: 9.5.1.7462
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Filename: (new file)
Path:
Report generation date: 21/04/2022 10:31:24

»J6 DM - 2024, AM
»J6 DM - 2024, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
J6 DM - 2024										
Stream B-C	D1	0.2	7.48	0.13	A	0.0	8.46	0.03	A	
Stream B-A		0.2	10.16	0.13	B	0.2	12.05	0.12	B	
Stream C-AB		0.0	5.82	0.03	A	0.4	5.63	0.15	A	

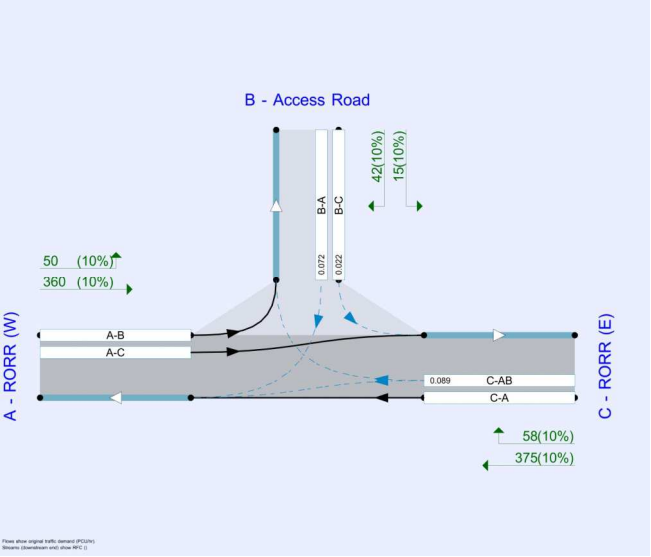
There are warnings associated with one or more model runs - see the "Data Errors and Warnings" tables for each Analysis or Demand Set.
Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description	
Title	
Location	
Site number	
Date	09/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC\joshua.lai
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	per hour	s	-Min	perMin



Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024	AM	ONE HOUR	00:00	01:30	15
D2	2024	PM	ONE HOUR	00:00	01:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	J6 DM	100.000

J6 DM - 2024, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Access Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-junction	Two-way		2.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	RORR (W)		Major
B	Access Road		Minor
C	RORR (E)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - RORR (E)	6.00			150.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Access Road	One lane plus flare	6.50	3.00	3.00	3.00	3.00	✓	1.00	100	100

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	546	0.099	0.251	0.158	0.359
B-C	697	0.107	0.270	-	-
C-B	661	0.256	0.256	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024	AM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - RORR (W)		✓	250	100.000
B - Access Road		✓	121	100.000
C - RORR (E)		✓	180	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - RORR (W)	B - Access Road	C - RORR (E)	
A - RORR (W)	0	29	221	
B - Access Road	51	0	70	
C - RORR (E)	165	15	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - RORR (W)	B - Access Road	C - RORR (E)	
A - RORR (W)	10	10	10	
B - Access Road	10	10	10	
C - RORR (E)	10	10	10	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.13	7.48	0.2	0.5	A
B-A	0.13	10.16	0.2	0.5	B
C-AB	0.03	5.82	0.0	0.5	A
C-A					
AB					
AC					

Main Results for each time segment

00:00 - 00:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	53	637	0.083	52	0.1	6.774	A
B-A	38	478	0.080	38	0.1	8.992	A
C-AB	14	695	0.020	14	0.0	5.815	A
C-A	122			122			
AB	22			22			
AC	166			166			

00:15 - 00:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	63	624	0.101	63	0.1	7.056	A
B-A	46	465	0.099	46	0.1	9.449	A
C-AB	17	702	0.024	17	0.0	5.782	A
C-A	145			145			
AB	26			26			
AC	199			199			

00:30 - 00:45							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	77	607	0.127	77	0.2	7.475	A
B-A	56	446	0.126	56	0.2	10.148	B
C-AB	22	712	0.031	22	0.0	5.736	A
C-A	176			176			
AB	32			32			
AC	243			243			

00:45 - 01:00							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	77	606	0.127	77	0.2	7.479	A
B-A	56	446	0.126	56	0.2	10.158	B
C-AB	22	712	0.031	22	0.0	5.739	A
C-A	176			176			
AB	32			32			
AC	243			243			

01:00 - 01:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	63	624	0.101	63	0.1	7.061	A
B-A	46	465	0.099	46	0.1	9.458	A
C-AB	17	702	0.024	17	0.0	5.783	A
C-A	145			145			
AB	26			26			
AC	199			199			

01:15 - 01:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	53	636	0.083	53	0.1	6.787	A
B-A	38	478	0.080	38	0.1	9.007	A
C-AB	14	695	0.020	14	0.0	5.816	A
C-A	122			122			
AB	22			22			
AC	166			166			

Queue Variation Results for each time segment

00:00 - 00:15									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.10	0.00	0.00	0.10	0.10			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

00:15 - 00:30									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.12	0.00	0.00	0.12	0.12			N/A	N/A
B-A	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.03	0.03	0.28	0.50	0.53			N/A	N/A

00:30 - 00:45									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.03	0.28	0.51	0.54			N/A	N/A
B-A	0.16	0.03	0.28	0.51	0.54			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

00:45 - 01:00									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.03	0.28	0.50	0.52			N/A	N/A
B-A	0.16	0.03	0.28	0.50	0.52			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

01:00 - 01:15									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.12	0.00	0.00	0.12	0.12			N/A	N/A
B-A	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

01:15 - 01:30									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.10	0.00	0.00	0.10	0.10			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

J6 DM - 2024, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Access Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2024	PM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.09

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - RORR (W)		✓	410	100.000
B - Access Road		✓	57	100.000
C - RORR (E)		✓	433	100.000

Origin-Destination Data

Demand (PCU/hr)				
From	To			
		A - RORR (W)	B - Access Road	C - RORR (E)
	A - RORR (W)	0	50	360
	B - Access Road	42	0	15
	C - RORR (E)	375	58	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - RORR (W)	B - Access Road	C - RORR (E)
	A - RORR (W)	10	10	10
	B - Access Road	10	10	10
	C - RORR (E)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.03	8.46	0.0	0.5	A
B-A	0.12	12.05	0.2	0.5	B
C-AB	0.15	5.63	0.4	1.3	A
C-A					
AB					
AC					

Main Results for each time segment

00:00 - 00:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	522	0.022	11	0.0	7.750	A
B-A	32	440	0.072	31	0.1	9.676	A
C-AB	69	773	0.089	68	0.2	5.617	A
C-A	257			257			
AB	38			38			
AC	271			271			

00:15 - 00:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	507	0.027	13	0.0	8.031	A
B-A	38	413	0.091	38	0.1	10.557	B
C-AB	91	798	0.114	90	0.2	5.604	A
C-A	299			299			
AB	45			45			
AC	324			324			

00:30 - 00:45							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	485	0.034	16	0.0	8.461	A
B-A	46	375	0.123	46	0.2	12.038	B
C-AB	127	833	0.153	127	0.4	5.612	A
C-A	350			350			
AB	55			55			
AC	396			396			

00:45 - 01:00							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	484	0.034	17	0.0	8.464	A
B-A	46	375	0.123	46	0.2	12.053	B
C-AB	127	834	0.153	127	0.4	5.616	A
C-A	349			349			
AB	55			55			
AC	396			396			

01:00 - 01:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	506	0.027	14	0.0	8.039	A
B-A	38	413	0.092	38	0.1	10.577	B
C-AB	91	798	0.114	91	0.2	5.613	A
C-A	298			298			
A-B	45			45			
A-C	324			324			

01:15 - 01:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	522	0.022	11	0.0	7.758	A
B-A	32	440	0.072	32	0.1	9.704	A
C-AB	69	773	0.089	69	0.2	5.633	A
C-A	257			257			
A-B	38			38			
A-C	271			271			

Queue Variation Results for each time segment

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.28	0.50	0.53			N/A	N/A
B-A	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.24	0.00	0.00	0.24	0.24			N/A	N/A

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.03	0.28	0.50	0.52			N/A	N/A
B-A	0.15	0.03	0.29	0.51	0.54			N/A	N/A
C-AB	0.36	0.03	0.29	0.53	1.29			N/A	N/A

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.15	0.03	0.28	0.50	0.52			N/A	N/A
C-AB	0.36	0.03	0.28	0.51	0.54			N/A	N/A

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.25	0.00	0.00	0.25	0.25			N/A	N/A

Junctions 9									
PICADY 9 - Priority Intersection Module									
Version: 9.5.1.7462									
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Filename: (new file)
Path:
Report generation date: 16/05/2022 18:56:37

»J6 DS - 2024, AM
»J6 DS - 2024, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
J6 DS - 2024										
Stream B-C	D1	0.1	7.06	0.09	A	D2	0.0	8.28	0.02	A
Stream B-A		0.1	9.64	0.09	A		0.1	11.23	0.08	B
Stream C-AB		0.0	5.76	0.02	A		0.2	5.44	0.10	A

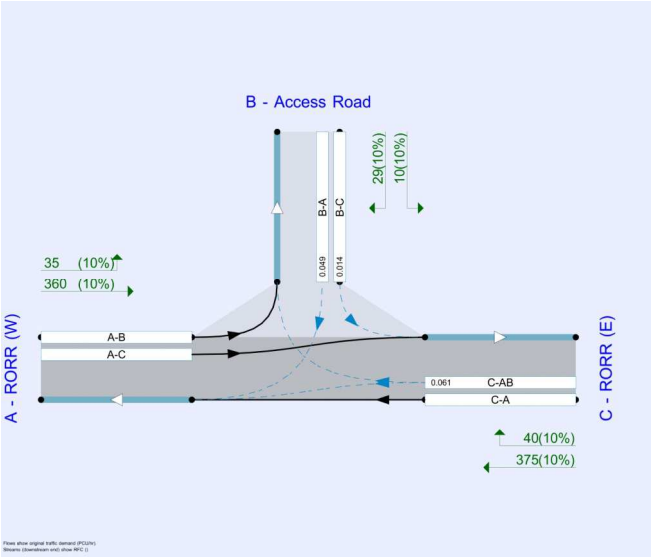
There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.
Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description	
Title	
Location	
Site number	
Date	09/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC0Joshua.Lai
Description	

Units

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



Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024	AM	ONE HOUR	00:00	01:30	15
D2	2024	PM	ONE HOUR	00:00	01:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	J6 DS	100.000

J6 DS - 2024, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Access Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.53	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	RORR (W)		Major
B	Access Road		Minor
C	RORR (E)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - RORR (E)	6.00			150.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Access Road	One lane plus flare	6.50	3.00	3.00	3.00	3.00	✓	1.00	100	100

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B (PCU/hr)	Slope for A-C (PCU/hr)	Slope for C-A (PCU/hr)	Slope for C-B (PCU/hr)
B-A	547	0.100	0.262	0.158	0.360
B-C	697	0.107	0.270	-	-
C-B	661	0.256	0.256	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (H:M)	Finish time (H:M)	Time segment length (min)
D1	2024	AM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - RORR (W)		✓	241	100.000
B - Access Road		✓	65	100.000
C - RORR (E)		✓	175	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - RORR (W)	B - Access Road	C - RORR (E)	
A - RORR (W)	0	20	221	
B - Access Road	36	0	49	
C - RORR (E)	165	10	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - RORR (W)	B - Access Road	C - RORR (E)	
A - RORR (W)	10	10	10	
B - Access Road	10	10	10	
C - RORR (E)	10	10	10	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.09	7.06	0.058	0.5	A
B-A	0.09	9.64	0.1	0.5	A
C-AB	0.02	5.76	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	641	0.058	37	0.1	6.546	A
B-A	27	481	0.056	27	0.1	8.716	A
C-AB	9	696	0.013	9	0.0	5.763	A
C-A	123			123			
A-B	15			15			
A-C	166			166			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	630	0.070	44	0.1	6.756	A
B-A	32	468	0.069	32	0.1	9.083	A
C-AB	11	704	0.016	11	0.0	5.718	A
C-A	146			146			
A-B	18			18			
A-C	199			199			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	54	614	0.088	54	0.1	7.063	A
B-A	40	450	0.088	40	0.1	9.637	A
C-AB	15	715	0.021	15	0.0	5.656	A
C-A	178			178			
A-B	22			22			
A-C	243			243			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	54	614	0.088	54	0.1	7.064	A
B-A	40	450	0.088	40	0.1	9.640	A
C-AB	15	715	0.021	15	0.0	5.657	A
C-A	178			178			
A-B	22			22			
A-C	243			243			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	630	0.070	44	0.1	6.762	A
B-A	32	468	0.069	32	0.1	9.086	A
C-AB	11	704	0.016	11	0.0	5.719	A
C-A	146			146			
A-B	18			18			
A-C	199			199			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	641	0.058	37	0.1	6.557	A
B-A	27	481	0.056	27	0.1	8.723	A
C-AB	9	696	0.013	9	0.0	5.763	A
C-A	123			123			
A-B	15			15			
A-C	166			166			

Queue Variation Results for each time segment

00:00 - 00:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

00:15 - 00:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.08	0.03	0.28	0.50	0.53			N/A	N/A
B-A	0.08	0.03	0.28	0.50	0.53			N/A	N/A
C-AB	0.02	0.02	0.28	0.50	0.52			N/A	N/A

00:30 - 00:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.11	0.03	0.29	0.51	0.54			N/A	N/A
B-A	0.10	0.03	0.29	0.51	0.54			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

00:45 - 01:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.11	0.03	0.28	0.50	0.52			N/A	N/A
B-A	0.11	0.03	0.28	0.50	0.52			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

01:00 - 01:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.08	0.00	0.00	0.08	0.08			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

01:15 - 01:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

J6 DS - 2024, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Access Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2024	PM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - RORR (W)		✓	395	100.000
B - Access Road		✓	39	100.000
C - RORR (E)		✓	415	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - RORR (W)	B - Access Road	C - RORR (E)	
A - RORR (W)	0	35	360	
B - Access Road	29	0	10	
C - RORR (E)	375	40	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - RORR (W)	B - Access Road	C - RORR (E)	
A - RORR (W)	10	10	10	
B - Access Road	10	10	10	
C - RORR (E)	10	10	10	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.02	8.26	0.0	0.5	A
B-A	0.08	11.23	0.1	0.5	B
C-AB	0.10	5.44	0.2	1.4	A
C-A					
AB					
AC					

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	524	0.014	7	0.0	7.670	A
B-A	22	447	0.049	22	0.1	9.305	A
C-AB	47	775	0.061	47	0.1	5.438	A
C-A	265			265			
AB	26			26			
AC	271			271			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	509	0.018	9	0.0	7.913	A
B-A	26	421	0.062	26	0.1	10.030	B
C-AB	62	800	0.078	62	0.2	5.367	A
C-A	311			311			
AB	31			31			
AC	324			324			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	489	0.023	11	0.0	8.278	A
B-A	32	385	0.083	32	0.1	11.220	B
C-AB	87	837	0.104	87	0.2	5.286	A
C-A	370			370			
AB	39			39			
AC	396			396			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	489	0.023	11	0.0	8.280	A
B-A	32	385	0.083	32	0.1	11.229	B
C-AB	87	837	0.105	87	0.2	5.293	A
C-A	369			369			
AB	39			39			
AC	396			396			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	509	0.018	9	0.0	7.919	A
B-A	26	421	0.062	26	0.1	10.041	B
C-AB	63	801	0.078	63	0.2	5.375	A
C-A	311			311			
AB	31			31			
AC	324			324			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	523	0.014	9	0.0	7.675	A
B-A	22	447	0.049	22	0.1	9.322	A
C-AB	48	775	0.061	48	0.1	5.444	A
C-A	265			265			
AB	26			26			
AC	271			271			

Queue Variation Results for each time segment

00:00 - 00:15

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

00:15 - 00:30

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.28	0.50	0.52			N/A	N/A
B-A	0.07	0.03	0.28	0.50	0.53			N/A	N/A
C-AB	0.16	0.03	0.30	0.53	0.90			N/A	N/A

00:30 - 00:45

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.10	0.03	0.29	0.52	0.54			N/A	N/A
C-AB	0.24	0.03	0.30	0.54	1.42			N/A	N/A

00:45 - 01:00

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.10	0.03	0.28	0.50	0.52			N/A	N/A
C-AB	0.25	0.00	0.00	0.25	0.25			N/A	N/A

01:00 - 01:15

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

TRANSYT 15

Version: 15.5.2.7994
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Filename: (new file)
Path:
Report generation date: 21/04/2022 10:42:05

- «A1 - J7 DM : D1 - 2024 AM* :
»Summary
»Network Options
»Arms and Traffic Streams
»Signal Timings
»Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCR	Region
Driving side	Left
Date	09/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC\joshua.tai
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A1 - J7 DM
D1 - 2024 AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
1	21/04/2022 10:39:26	21/04/2022 10:39:26	08:00	120	186.61	12.11	73.91	1/1	0	0	1/1	14/1	1/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J7 DM		D1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2024 AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
120		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Poisson Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.00	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use R6/7	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(united)		✓	N/A	N/A	0	3.25	✓	0	99999.00		2080
2	1	1	(united)		✓	N/A	N/A	0	3.25	✓	0	12.33	✓	1940
3	1	1	(united)		✓	N/A	N/A	0	3.25	✓	0	99999.00	✓	1940
4	1	1	(united)											
5	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	11.56	✓	1740
6	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	99999.00		2105
7	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	99999.00		2105
8	1	1	(united)		✓	N/A	N/A	0	3.50	✓	47	35.86	✓	1927
9	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
10	1	1	(united)											
11	1	1	(united)		✓	N/A	N/A	0	3.50	✓	66	57.05	✓	1931
12	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	99999.00		2105
13	1	1	(united)		✓	N/A	N/A	0	3.50	✓	71	11.96	✓	1894
14	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	74.39	✓	1926
15	1	1	(united)		✓	N/A	N/A	0	3.50	✓	2	14.51	✓	1981
16	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	11.20		2105
17	1	1	(united)											
18	1	1	(united)											
19	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	11.41		1980
20	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	10.86		1950
21	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	11.47		1861

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	
5	1	1	I	
6	1	1	H	
7	1	1	G	
12	1	1	E	
13	1	1	F	
15	1	1	D	
16	1	1	C	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Stop-wise Opposed Turn Mode	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
19	1	AllTraffic	✓	0	✓	11.41	
20	1	AllTraffic	✓	0	✓	10.86	
21	1	AllTraffic	✓	0	✓	11.47	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStream	2/1	100		0	0
		TrafficStream	13/1	100		0	0
		TrafficStream	15/1	100		0	0

Signal Timings

Network Default: 120s cycle time; 120 steps

Interstage Matrix for Controller Stream 1

	To			
	1	2	3	4
From	1	0	0	5
	2	0	0	5
	3	5	0	5
	4	5	5	0

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B,E,F	103	111	8	1	7
	2	✓	2	A,E	111	15	24	1	1
	3	✓	3	D,H,I	20	86	66	1	7
	4	✓	4	C,G	91	98	7	1	7

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU		QUEUES	
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (s)	Mean max queue (PCU)
1	1			1	A	355 <	2080	32	5.29	74	22	52.55	47.15	72.66	8.26 +
2	1			1	B	3	1940	8	8.00	2	4265	75.38	69.98	100.22	0.10
3	1					358	1940	120	31.83	25	258	52.72	4.72	30.02	3.92
4	1					219	Unrestricted	120	17.00	0	Unrestricted	48.00	0.00	0.00	0.00
5	1			1	I	207	1740	71	0.00	20	354	14.33	11.33	43.26	3.02
6	1			1	H	178	2105	66	0.00	15	494	11.75	9.95	24.65	1.46
7	1			1	G	2	2105	12	12.00	1	10162	46.86	45.06	89.22	0.06
8	1					387	1927	120	0.00	20	348	1.43	0.23	0.00	0.03
9	1					180	2055	120	27.85	11	691	4.51	3.31	23.20	1.51
10	1					1084	Unrestricted	120	12.00	0	Unrestricted	4.80	0.00	0.00	0.00
11	1					64	1931	120	0.00	3	2615	4.83	0.03	0.00	0.00
12	1			1	E	22	2105	32	31.14	4	2258	34.48	30.08	72.60	1.45
13	1			1	F	42	1894	6	6.00	31	199	60.94	58.54	97.35	1.52
14	1					714	1926	120	28.52	49	85	29.83	5.83	35.17	9.15
15	1			1	D	714 <	1961	66	0.00	65	39	23.56	17.59	39.07	9.30 +
16	1			1	C	0	2105	7	8.00	0	Unrestricted	0.00	0.00	0.00	0.00
17	1					209	Unrestricted	120	32.00	0	Unrestricted	24.00	0.00	0.00	0.00
18	1					20	Unrestricted	120	117.00	0	Unrestricted	6.00	0.00	0.00	0.00
19	1					22	1841	120	118.00	1	7431	1.27	0.07	5.44	1.45
20	1					355	1795	120	87.00	20	355	1.74	0.54	8.22	1.47
21	1					2	1000	120	119.00	0	44909	1.20	0.00	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	530.95	29.81	17.81	12.11	172.03	14.58	0.00	186.61
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	530.95	29.81	17.81	12.11	172.03	14.58	0.00	186.61

- < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

TRANSYT 15

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Filename: (new file)

Path:

Report generation date: 21/04/2022 10:42:40

«A2 - J7 DM : D2 - 2024 PM* :

- »Summary
- »Network Options
- »Arms and Traffic Streams
- »Signal Timings
- »Final Prediction Table

File summary

File title	(united)
Location	
Site number	
UTCRegion	
Driving side	Left
Date	09/09/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	OCSC(joshua.tai)
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perhour	s	<hour	perhour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set ID	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical			Normal	Normal	✓

A2 - J7 DM

D2 - 2024 PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (E per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC
2	21/04/2022 10:39:15	21/04/2022 10:39:16	08:00	120	177.71	11.37	71.87	8/1	0	0	1/1	8/1	8/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J7 DM		D2	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2024 PM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
120		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (s)	Phase maximum broken penalty (s)	Intergreen broken penalty (s)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weighings	Use link delay weighings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓			Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.80	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				45.00	✓	Sum of lanes	2080	✓	1800	✓		Normal	
2	1				45.00	✓	Sum of lanes	1940	✓	1800	✓		Normal	
3	1				400.00	✓	Sum of lanes	1940					Normal	
4	1				400.00								Normal	
5	1				25.00	✓	Sum of lanes	1740	✓	1800	✓		Normal	
6	1				15.00	✓	Sum of lanes	2105	✓	1800	✓		Normal	
7	1				15.00	✓	Sum of lanes	2105	✓	1800	✓		Normal	
8	1				10.00	✓	Sum of lanes	1921					Normal	
9	1				10.00	✓	Sum of lanes	2055					Normal	
10	1				40.00								Normal	
11	1				40.00	✓	Sum of lanes	1936					Normal	
12	1				20.00	✓	Sum of lanes	2105	✓	1800	✓		Normal	
13	1				20.00	✓	Sum of lanes	1836	✓	1800	✓		Normal	
14	1				200.00	✓	Sum of lanes	1926					Normal	
15	1				50.00	✓	Sum of lanes	1943	✓	1800	✓		Normal	
16	1				50.00	✓	Sum of lanes	2105	✓	1800	✓		Normal	
17	1				200.00								Normal	
18	1				50.00								Normal	
19	1				10.00	✓	Sum of lanes	1860	✓	1800		✓	Normal	
20	1				10.00	✓	Sum of lanes	1850	✓	1800		✓	Normal	
21	1				10.00	✓	Sum of lanes	1861	✓	1800		✓	Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RWS?	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(united)		✓	N/A	N/A	0	3.25	✓	0	99999.00		2080
2	1	1	(united)		✓	N/A	N/A	0	3.25	✓	0	12.33	✓	1940
3	1	1	(united)		✓	N/A	N/A	0	3.25	✓	0	99999.00	✓	1940
4	1	1	(united)											
5	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	11.58	✓	1740
6	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	99999.00		2105
7	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	99999.00		2105
8	1	1	(united)		✓	N/A	N/A	0	3.50	✓	55	35.88	✓	1821
9	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
10	1	1	(united)											
11	1	1	(united)		✓	N/A	N/A	0	3.50	✓	56	57.05	✓	1936
12	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	99999.00		2105
13	1	1	(united)		✓	N/A	N/A	0	3.50	✓	56	11.96	✓	1836
14	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	74.39	✓	1926
15	1	1	(united)		✓	N/A	N/A	0	3.50	✓	11	14.51	✓	1943
16	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	11.20		2105
17	1	1	(united)											
18	1	1	(united)											
19	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	11.41		1860
20	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	10.86		1850
21	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	11.47		1861

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	
5	1	1	I	
6	1	1	H	
7	1	1	G	
12	1	1	E	
13	1	1	F	
15	1	1	D	
16	1	1	C	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
19	1	AllTraffic	✓	0	✓	11.41	
20	1	AllTraffic	✓	0		10.86	
21	1	AllTraffic	✓	0	✓	11.47	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling traffic	Controlling traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1			TrafficStream	2/1	100	0	0
			TrafficStream	13/1	100	0	0
			TrafficStream	15/1	100	0	0

Signal Timings

Network Default: 120s cycle time; 120 steps

Interstage Matrix for Controller Stream 1

		To			
		1	2	3	4
From	1	0	0	5	5
	2	0	0	5	5
	3	5	5	0	5
	4	5	5	5	0

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B,E,F	102	110	8	1	7
	2	✓	2	A,E	110	9	19	1	1
	3	✓	3	D,H,I	14	85	71	1	7
	4	✓	4	C,G	90	97	7	1	7

Final Prediction Table

Traffic Stream Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU		QUEUES			
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	we m
1	1			1	A	292 <	2080	27	3.06	68	33	55.15	49.75	61.41	7.94 +	
2	1			1	B	27	1940	8	7.00	19	385	70.47	65.07	102.27	1.47	
3	1					319	1940	120	17.97	19	365	49.57	1.57	15.69	1.88	
4	1					527	Unrestricted	120	8.00	0	Unrestricted	48.00	0.00	0.00	0.00	
5	1			1	I	519 <	1740	76	0.00	46	94	12.60	9.60	28.29	4.55 +	
6	1			1	H	598	2105	71	0.00	47	90	6.34	4.54	8.33	1.66	
7	1			1	G	30	2105	12	11.14	13	577	43.50	41.70	92.95	1.46	
8	1					1147 <	1921	120	52.00	72	25	6.14	6.94	40.24	16.84 +	
9	1					628 <	2055	120	44.27	48	86	8.54	8.34	38.89	9.31 +	
10	1					342	Unrestricted	120	82.00	0	Unrestricted	4.80	0.00	0.00	0.00	
11	1					32	1936	120	120.00	2	5345	4.82	0.02	0.00	0.00	
12	1			1	E	14	2105	27	27.00	3	3058	36.16	35.75	76.76	0.36	
13	1			1	F	18	1836	8	7.00	13	589	56.34	53.84	94.19	1.46	
14	1					45	1926	120	120.00	2	3752	24.02	0.02	0.00	0.00	
15	1			1	D	45	1943	71	70.00	4	2232	15.91	9.91	49.05	1.45	
16	1			1	C	0	2105	7	8.00	0	Unrestricted	0.00	0.00	0.00	0.00	
17	1					612	Unrestricted	120	20.00	0	Unrestricted	24.00	0.00	0.00	0.00	
18	1					62	Unrestricted	120	102.00	0	Unrestricted	6.00	0.00	0.00	0.00	
19	1					14	1819	120	118.00	1	11591	1.88	0.68	67.27	1.45	
20	1					292	1819	120	92.00	16	461	1.50	0.30	1.55	1.46	
21	1					30	1717	120	118.00	2	5050	1.22	0.02	0.00	0.00	

TRANSYT 15	
Version: 15.5.2.7994	
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Filename: (new file)

Path:

Report generation date: 16/05/2022 21:31:44

<A1 - J7 DS : D1 - 2024 AM* :

- »Summary
- »Network Options
- »Arms and Traffic Streams
- »Signal Timings
- »Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCR	Region
Driving side	Left
Date	09/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC(joshua.tai)
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick lanes	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-of-Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	per hour	s	-hour	per hour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	548.61	29.66	16.50	11.37	161.49	16.22	0.00	177.71
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	548.61	29.66	16.50	11.37	161.49	16.22	0.00	177.71

- <= adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

A1 - J7 DS
D1 - 2024 AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
1	16/05/2022 21:31:38	16/05/2022 21:31:38	08:00	120	177.89	11.53	68.87	1/1	0	0	1/1	14/1	1/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J7 DS		D1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2024 AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
120		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU/hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.80	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use R/R&T	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(united)		✓	N/A	N/A	0	3.25	✓	0	99999.00		2080
2	1	1	(united)		✓	N/A	N/A	0	3.25	✓	0	12.33	✓	1940
3	1	1	(united)		✓	N/A	N/A	0	3.25	✓	0	99999.00	✓	1940
4	1	1	(united)											
5	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	11.58	✓	1740
6	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	99999.00		2105
7	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	99999.00		2105
8	1	1	(united)		✓	N/A	N/A	0	3.50	✓	47	35.88	✓	1927
9	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
10	1	1	(united)											
11	1	1	(united)		✓	N/A	N/A	0	3.50	✓	66	57.05	✓	1931
12	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	99999.00		2105
13	1	1	(united)		✓	N/A	N/A	0	3.50	✓	71	11.96	✓	1804
14	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	74.39	✓	1928
15	1	1	(united)		✓	N/A	N/A	0	3.50	✓	2	14.51	✓	1981
16	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	11.20		2105
17	1	1	(united)											
18	1	1	(united)											
19	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	11.41		1880
20	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	10.86		1850
21	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	11.47		1861

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	
5	1	1	I	
6	1	1	H	
7	1	1	G	
12	1	1	E	
13	1	1	F	
15	1	1	D	
16	1	1	C	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
19	1	AllTraffic	✓	0	✓	11.41	
20	1	AllTraffic	✓	0		10.86	
21	1	AllTraffic	✓	0	✓	11.47	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStream	2/1	100		0	0
		TrafficStream	13/1	100		0	0
		TrafficStream	15/1	100		0	0
		TrafficStream	15/1	100		0	0

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				45.00	✓	Sum of lanes	2080	✓	1800	✓		Normal	
2	1				45.00	✓	Sum of lanes	1940	✓	1800	✓		Normal	
3	1				400.00	✓	Sum of lanes	1940					Normal	
4	1				400.00								Normal	
5	1				25.00	✓	Sum of lanes	1740	✓	1800	✓		Normal	
6	1				15.00	✓	Sum of lanes	2105	✓	1800	✓		Normal	
7	1				15.00	✓	Sum of lanes	2105	✓	1800	✓		Normal	
8	1				10.00	✓	Sum of lanes	1927					Normal	
9	1				10.00	✓	Sum of lanes	2055					Normal	
10	1				40.00								Normal	
11	1				40.00	✓	Sum of lanes	1931					Normal	
12	1				20.00	✓	Sum of lanes	2105	✓	1800	✓		Normal	
13	1				20.00	✓	Sum of lanes	1804	✓	1800	✓		Normal	
14	1				200.00	✓	Sum of lanes	1928					Normal	
15	1				50.00	✓	Sum of lanes	1961	✓	1800	✓		Normal	
16	1				50.00	✓	Sum of lanes	2105	✓	1800	✓		Normal	
17	1				200.00								Normal	
18	1				50.00								Normal	
19	1				10.00	✓	Sum of lanes	1860	✓	1800		✓	Normal	
20	1				10.00	✓	Sum of lanes	1850	✓	1800		✓	Normal	
21	1				10.00	✓	Sum of lanes	1861	✓	1800		✓	Normal	

Signal Timings

Network Default: 120s cycle time; 120 steps

Interstage Matrix for Controller Stream 1

		To			
		1	2	3	4
From	1	0	0	5	5
	2	0	0	5	5
	3	5	5	5	0
	4	5	5	5	0

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B,E,F	103	111	8	1	7
	2	✓	2	A,E	111	15	24	1	1
	3	✓	3	D,H,I	20	86	66	1	7
	4	✓	4	C,G	91	98	7	1	7

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	SIGNALS		FLOWS		PERFORMANCE				PER PCU		QUEUES	
						Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (s)	Mean max queue (PCU)	we	m
1	1			1	A	334 <	2080	32	5.02	69	31	51.07	45.67	74.88	7.99 +		
2	1			1	B	3	1940	8	8.09	2	4265	72.16	68.76	100.22	0.10		
3	1					337	1940	120	26.54	22	304	51.24	3.24	24.62	3.03		
4	1					219	Unrestricted	120	17.00	0	Unrestricted	48.00	0.00	0.00	0.00		
5	1			1	I	207	1740	71	0.09	20	354	14.33	11.33	43.26	3.02		
6	1			1	H	178	2105	86	0.09	15	494	11.75	9.95	24.65	1.46		
7	1			1	G	2	2105	12	12.00	1	10162	46.86	45.06	89.22	0.06		
8	1					387	1927	120	0.09	20	348	1.43	0.23	0.00	0.03		
9	1					180	2055	120	27.85	11	691	4.51	3.31	23.20	1.51		
10	1					1083	Unrestricted	120	12.90	0	Unrestricted	4.80	0.00	0.00	0.00		
11	1					64	1931	120	0.09	3	2615	4.83	0.03	0.00	0.00		
12	1			1	E	22	2105	32	31.14	4	2258	34.46	32.08	72.60	1.45		
13	1			1	F	42	1804	8	6.00	31	190	60.94	58.54	97.30	1.52		
14	1					714	1928	120	28.52	49	85	29.83	5.83	36.17	9.15		
15	1			1	D	714 <	1961	66	0.00	66	38	23.59	17.59	39.07	9.30 +		
16	1			1	C	0	2105	7	8.00	0	Unrestricted	0.00	0.00	0.00	0.00		
17	1					209	Unrestricted	120	32.00	0	Unrestricted	24.00	0.00	0.00	0.00		
18	1					20	Unrestricted	120	117.00	0	Unrestricted	6.00	0.00	0.00	0.00		
19	1					22	1841	120	119.00	1	7431	1.27	0.07	5.44	1.45		
20	1					334	1795	120	87.00	19	384	1.74	0.54	8.71	1.47		
21	1					2	1000	120	119.00	0	44909	1.20	0.00	0.00	0.00		

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	520.55	28.88	16.02	11.53	163.72	14.17	0.00	177.89
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	520.55	28.88	16.02	11.53	163.72	14.17	0.00	177.89

- <= adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX



TRANSYT 15

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Filename: (new file)
Path:
Report generation date: 16/05/2022 18:44:48

- «A2 - J7 DS : D2 - 2024 PM* »:
- »Summary
 - »Network Options
 - »Arms and Traffic Streams
 - »Signal Timings
 - »Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCRregion	
Driving side	Left
Date	09/09/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	OCSC\oshua.tai
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A2 - J7 DS
D2 - 2024 PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Items with worst over PR
2	16/05/2022 18:44:45	16/05/2022 19:44:45	08:00	120	170.98	10.84	69.76	8/1	0	0	1/1	8/1	8/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J7 DS		D2	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2024 PM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
120		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.50	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				45.00	✓	Sum of lanes	2080	✓	1800	✓		Normal	
2	1				45.00	✓	Sum of lanes	1940	✓	1800	✓		Normal	
3	1				400.00	✓	Sum of lanes	1940					Normal	
4	1				400.00								Normal	
5	1				25.00	✓	Sum of lanes	1740	✓	1800	✓		Normal	
6	1				15.00	✓	Sum of lanes	2105	✓	1800	✓		Normal	
7	1				15.00	✓	Sum of lanes	2105	✓	1800	✓		Normal	
8	1				10.00	✓	Sum of lanes	1921					Normal	
9	1				10.00	✓	Sum of lanes	2055					Normal	
10	1				40.00								Normal	
11	1				40.00	✓	Sum of lanes	1936					Normal	
12	1				20.00	✓	Sum of lanes	2105	✓	1800	✓		Normal	
13	1				20.00	✓	Sum of lanes	1836	✓	1800	✓		Normal	
14	1				200.00	✓	Sum of lanes	1926					Normal	
15	1				50.00	✓	Sum of lanes	1943	✓	1800	✓		Normal	
16	1				50.00	✓	Sum of lanes	2105	✓	1800	✓		Normal	
17	1				200.00								Normal	
18	1				50.00								Normal	
19	1				10.00	✓	Sum of lanes	1860	✓	1800		✓	Normal	
20	1				10.00	✓	Sum of lanes	1850	✓	1800		✓	Normal	
21	1				10.00	✓	Sum of lanes	1861	✓	1800		✓	Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use R67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(united)		✓	N/A	N/A	0	3.25	✓	0	99999.00		2080
2	1	1	(united)		✓	N/A	N/A	0	3.25	✓	0	12.33	✓	1940
3	1	1	(united)		✓	N/A	N/A	0	3.25	✓	0	99999.00	✓	1940
4	1	1	(united)											
5	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	11.56	✓	1740
6	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	99999.00		2105
7	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	99999.00		2105
8	1	1	(united)		✓	N/A	N/A	0	3.50	✓	55	35.86	✓	1921
9	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
10	1	1	(united)											
11	1	1	(united)		✓	N/A	N/A	0	3.50	✓	56	57.05	✓	1936
12	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	99999.00		2105
13	1	1	(united)		✓	N/A	N/A	0	3.50	✓	56	11.96	✓	1836
14	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	74.39	✓	1926
15	1	1	(united)		✓	N/A	N/A	0	3.50	✓	11	14.51	✓	1943
16	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	11.20		2105
17	1	1	(united)											
18	1	1	(united)											
19	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	11.41		1860
20	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	10.86		1850
21	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	11.47		1861

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	
5	1	1	I	
6	1	1	H	
7	1	1	G	
12	1	1	E	
13	1	1	F	
15	1	1	D	
16	1	1	C	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Stop-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
19	1	AllTraffic	✓	0	✓	11.41	
20	1	AllTraffic	✓	0	✓	10.86	
21	1	AllTraffic	✓	0	✓	11.47	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStream	2/1	100		0	0
		TrafficStream	13/1	100		0	0
		TrafficStream	15/1	100		0	0

Signal Timings

Network Default: 120s cycle time; 120 steps

Interstage Matrix for Controller Stream 1

From	To				
	1	2	3	4	
	1	0	0	5	5
	2	0	0	5	5
	3	5	5	0	5
	4	5	5	0	5

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B,E,F	102	110	8	1	7
	2	✓	2	A,E	110	9	19	1	1
	3	✓	3	D,H,I	14	85	71	1	7
	4	✓	4	C,G	90	97	7	1	7

Final Prediction Table

Traffic Stream Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU		QUEUES			
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Weight
1	1			1	A	288 <	2080	27	3.06	67	35	54.90	49.50	62.17	7.90 +	
2	1			1	B	27	1940	8	7.00	19	385	69.44	64.04	102.19	1.47	
3	1					315	1940	120	16.93	19	376	49.35	1.35	14.40	1.77	
4	1					509	Unrestricted	120	8.00	0	Unrestricted	45.00	0.00	0.00	0.00	
5	1			1	I	501 <	1740	76	0.00	45	101	12.66	9.66	27.12	4.53 +	
6	1			1	H	598	2105	71	0.00	47	90	6.34	4.54	8.33	1.66	
7	1			1	G	26	2105	12	11.14	12	681	43.39	41.59	92.79	1.46	
8	1					1125 <	1921	120	53.00	70	29	7.30	6.10	36.75	15.17 +	
9	1					624 <	2055	120	44.46	48	87	9.93	8.73	41.88	9.84 +	
10	1					338	Unrestricted	120	62.90	0	Unrestricted	4.80	0.00	0.00	0.00	
11	1					32	1936	120	120.00	2	5345	4.82	0.02	0.00	6.00	
12	1			1	E	14	2105	27	27.00	3	3658	36.16	35.76	76.76	6.36	
13	1			1	F	18	1836	8	7.00	13	588	95.24	53.84	94.13	1.46	
14	1					45	1926	120	120.00	2	3752	24.02	0.02	0.00	0.00	
15	1			1	D	45	1943	71	70.90	4	2232	15.91	9.91	40.05	1.45	
16	1			1	C	0	2105	7	8.00	0	Unrestricted	0.00	0.00	0.00	0.00	
17	1					612	Unrestricted	120	20.00	0	Unrestricted	24.00	0.00	0.00	0.00	
18	1					58	Unrestricted	120	103.00	0	Unrestricted	6.00	0.00	0.00	0.00	
19	1					14	1819	120	118.00	1	11591	1.88	0.68	67.26	1.45	
20	1					288	1819	120	92.00	16	469	1.50	0.30	1.57	1.46	
21	1					26	1717	120	118.00	2	5843	1.22	0.02	0.00	0.00	

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: (new file)
Path:
Report generation date: 21/04/2022 10:47:46

»J8 DM - 2024, AM
»J8 DM - 2024, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS
J8 DM - 2024												
Stream B-C	D1	0.2	0.5	7.34	0.17	A	D2	6.1	32.7	54.04	0.87	F
Stream B-A		0.0	0.5	16.40	0.01	C		0.1	0.5	68.59	0.05	F
Stream C-AB		2.8	13.3	6.54	0.52	A		0.6	1.6	8.11	0.24	A

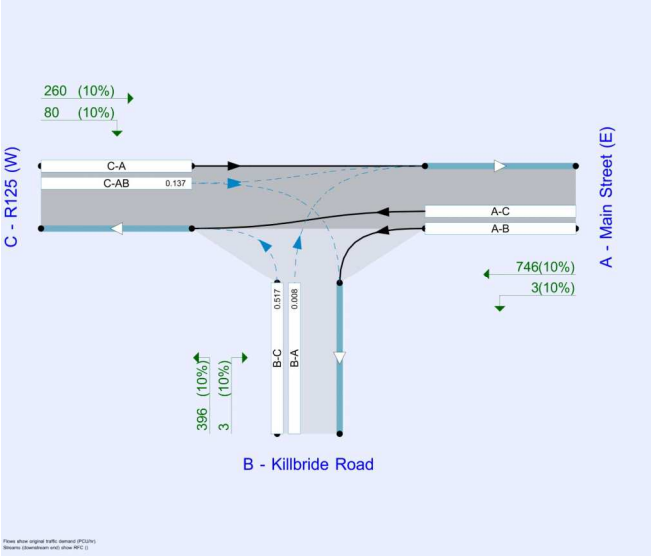
There are warnings associated with one or more model runs - see the "Data Errors and Warnings" tables for each Analysis or Demand Set.
Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description	
Title	
Location	
Site number	
Date	07/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC\joshua.lai
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	per hour	s	-Min	perMin



Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024	AM	ONE HOUR	00:00	01:30	15
D2	2024	PM	ONE HOUR	00:00	01:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	J8 DM	100.000

J8 DM - 2024, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Killbride Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Main Street (E)		Major
B	Killbride Road		Minor
C	R125 (W)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - R125 (W)	6.00			100.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Killbride Road	One lane plus flare	10.00	4.50	3.75	3.00	3.00	✓	1.00	80	90

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	524	0.095	0.241	0.152	0.344
B-C	737	0.113	0.286	-	-
C-B	632	0.245	0.245	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024	AM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Main Street (E)		✓	262	100.000
B - Killbride Road		✓	100	100.000
C - R125 (W)		✓	1074	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - Main Street (E)	B - Killbride Road	C - R125 (W)	
A - Main Street (E)	0	0	262	
B - Killbride Road	2	0	98	
C - R125 (W)	968	106	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - Main Street (E)	B - Killbride Road	C - R125 (W)	
A - Main Street (E)	10	10	10	
B - Killbride Road	10	10	10	
C - R125 (W)	10	10	10	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.17	7.34	0.2	0.5	A
B-A	0.01	16.40	0.0	0.5	C
C-AB	0.52	6.54	2.8	13.3	A
C-A					
AB					
AC					

Main Results for each time segment

00:00 - 00:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	74	676	0.109	73	0.1	6.565	A
B-A	2	334	0.006	1	0.0	11.909	B
C-AB	248	1074	0.231	245	0.7	4.781	A
C-A	560			560			
AB	0			0			
AC	212			212			

00:15 - 00:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	66	664	0.133	66	0.2	6.874	A
B-A	2	296	0.006	2	0.0	13.442	B
C-AB	380	1166	0.326	378	1.2	5.052	A
C-A	585			585			
AB	0			0			
AC	254			254			

00:30 - 00:45							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	108	647	0.167	108	0.2	7.341	A
B-A	2	245	0.009	2	0.0	16.324	C
C-AB	674	1295	0.520	668	2.7	6.375	A
C-A	509			509			
AB	0			0			
AC	310			310			

00:45 - 01:00							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	108	647	0.167	108	0.2	7.343	A
B-A	2	244	0.009	2	0.0	16.397	C
C-AB	681	1299	0.524	681	2.8	6.537	A
C-A	501			501			
AB	0			0			
AC	310			310			

01:00 - 01:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	86	664	0.133	86	0.2	6.882	A
B-A	2	295	0.006	2	0.0	13.513	B
C-AB	386	1171	0.329	392	1.3	5.159	A
C-A	580			580			
AB	0			0			
AC	254			254			

01:15 - 01:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	74	676	0.109	74	0.1	6.579	A
B-A	2	333	0.006	2	0.0	11.946	B
C-AB	252	1076	0.234	254	0.8	4.845	A
C-A	557			557			
AB	0			0			
AC	212			212			

Queue Variation Results for each time segment

00:00 - 00:15									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.13	0.00	0.00	0.13	0.13			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.72	0.61	1.10	1.54	1.60			N/A	N/A

00:15 - 00:30									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.17	0.00	0.00	0.17	0.17			N/A	N/A
B-A	0.01	0.01	0.28	0.50	0.52			N/A	N/A
C-AB	1.20	0.61	1.10	1.54	1.60			N/A	N/A

00:30 - 00:45									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.22	0.03	0.28	0.51	0.54			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	2.72	0.03	0.32	2.72	11.51			N/A	N/A

00:45 - 01:00									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.22	0.03	0.29	0.52	0.55			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	2.81	0.05	0.49	7.75	13.35			N/A	N/A

01:00 - 01:15									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.17	0.00	0.00	0.17	0.17			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	1.27	0.61	1.10	1.54	1.60			N/A	N/A

01:15 - 01:30									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.14	0.00	0.00	0.14	0.14			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.76	0.61	1.10	1.54	1.60			N/A	N/A

J8 DM - 2024, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Kilbride Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		15.23	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2024	PM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.99

Demand overview (Traffic)

		To			
From	Arm	Linked arm	Use O-O data	Average Demand (PCU/hr)	Scaling Factor (%)
	A - Main Street (E)		✓	749	100.000
	B - Kilbride Road		✓	399	100.000
	C - R125 (W)		✓	340	100.000

Origin-Destination Data

Demand (PCU/hr)		To			
From		A - Main Street (E)	B - Kilbride Road	C - R125 (W)	
	A - Main Street (E)	0	3	746	
	B - Kilbride Road	3	0	396	
	C - R125 (W)	260	80	0	

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		A - Main Street (E)	B - Kilbride Road	C - R125 (W)	
	A - Main Street (E)	10	10	10	
	B - Kilbride Road	10	10	10	
	C - R125 (W)	10	10	10	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.87	54.04	6.1	32.7	F
B-A	0.05	68.58	0.1	0.5	F
C-AB	0.24	8.11	0.6	1.8	A
C-A					
AB					
AC					

Main Results for each time segment

00:00 - 00:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	298	576	0.517	294	1.1	13.800	B
B-A	2	288	0.008	2	0.0	13.865	B
C-AB	87	636	0.137	86	0.2	7.197	A
C-A	169			169			
AB	2			2			
AC	562			562			

00:15 - 00:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	356	545	0.654	353	2.0	20.277	C
B-A	3	211	0.013	3	0.0	18.995	C
C-AB	114	640	0.178	113	0.4	7.522	A
C-A	192			192			
AB	3			3			
AC	671			671			

00:30 - 00:45							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	436	501	0.870	433	5.4	44.147	E
B-A	3	77	0.043	3	0.0	53.530	F
C-AB	159	648	0.245	158	0.8	8.086	A
C-A	216			216			
AB	3			3			
AC	821			821			

00:45 - 01:00							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	436	501	0.870	433	6.1	54.041	F
B-A	3	61	0.054	3	0.1	68.592	F
C-AB	159	649	0.245	159	0.8	8.113	A
C-A	215			215			
AB	3			3			
AC	821			821			

01:00 - 01:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	356	545	0.654	371	2.2	24.613	C
B-A	3	196	0.014	3	0.0	20.334	C
C-AB	114	641	0.178	115	0.4	7.553	A
C-A	192			192			
A-B	3			3			
A-C	671			671			

01:15 - 01:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	298	516	0.517	302	1.2	14.648	B
B-A	2	283	0.008	2	0.0	14.105	B
C-AB	87	636	0.137	88	0.3	7.237	A
C-A	169			169			
A-B	2			2			
A-C	562			562			

Queue Variation Results for each time segment

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.14	0.61	1.10	1.54	1.80			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.25	0.00	0.00	0.25	0.25			N/A	N/A

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.96	0.09	1.30	4.25	5.86			N/A	N/A
B-A	0.01	0.01	0.28	0.50	0.52			N/A	N/A
C-AB	0.35	0.00	0.00	0.35	0.35			N/A	N/A

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	5.37	0.06	1.05	15.32	24.83			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.57	0.03	0.29	0.57	0.57			N/A	N/A

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	6.08	0.05	0.45	16.36	32.67			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.57	0.05	0.45	1.49	1.65			N/A	N/A

01:00 - 01:15									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	2.21	0.04	0.44	5.96	10.63			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.37	0.00	0.00	0.37	0.37			N/A	N/A

Junctions 9											
PICADY 9 - Priority Intersection Module											
Version: 9.5.1.7462											
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Filename: (new file)
Path:
Report generation date: 16/05/2022 18:40:17

»J8 DS - 2024, AM
»J8 DS - 2024, PM

Summary of junction performance

J8 DS - 2024											
AM						PM					
Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS
Stream B-C	0.2	0.5	7.30	0.16	A	5.3	28.8	47.90	0.85	E	
Stream B-A	0.0	0.5	16.06	0.01	C	0.0	0.5	53.34	0.04	F	
Stream C-AB	2.5	11.5	6.21	0.50	A	0.6	1.6	8.06	0.24	A	

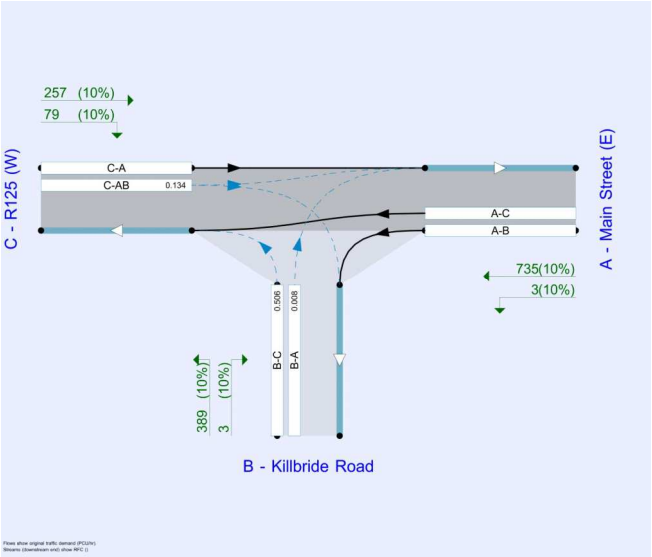
There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.
Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description	
Title	
Location	
Site number	
Date	07/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC0 Joshua.Lai
Description	

Units

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



Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2024	AM	ONE HOUR	00:00	01:30	15
D2	2024	PM	ONE HOUR	00:00	01:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	J8 DS	100.000

J8 DS - 2024, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Kilbride Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	united	T-Junction	Two-way		2.46	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Main Street (E)		Major
B	Kilbride Road		Minor
C	R125 (W)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - R125 (W)	6.00			100.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Kilbride Road	One lane plus flare	10.00	4.50	3.75	3.00	3.00	✓	1.00	80	90

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	524	0.093	0.241	0.152	0.344
B-C	737	0.113	0.286	-	-
C-B	632	0.245	0.245	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (H:M:mm)	Finish time (H:M:mm)	Time segment length (min)
D1	2024	AM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Main Street (E)		✓	279	100.000
B - Kilbride Road		✓	98	100.000
C - R125 (W)		✓	1954	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To			
		A - Main Street (E)	B - Kilbride Road	C - R125 (W)	
	A - Main Street (E)	0	0	279	
	B - Kilbride Road	2	0	98	
	C - R125 (W)	951	103	0	

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - Main Street (E)	B - Kilbride Road	C - R125 (W)	
	A - Main Street (E)	10	10	10	
	B - Kilbride Road	10	10	10	
	C - R125 (W)	10	10	10	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.16	7.30	0.2	0.5	A
B-A	0.01	16.06	0.0	0.5	C
C-AB	0.50	6.21	2.5	11.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	72	877	0.107	72	0.1	6.542	A
B-A	2	337	0.004	1	0.0	11.791	B
C-AB	236	1066	0.222	234	0.7	4.762	A
C-A	557			557			
A-B	0			0			
A-C	210			210			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	86	665	0.130	86	0.2	6.844	A
B-A	2	300	0.006	2	0.0	13.262	B
C-AB	360	1156	0.311	358	1.1	4.987	A
C-A	588			588			
A-B	0			0			
A-C	251			251			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	106	648	0.163	105	0.2	7.297	A
B-A	2	250	0.009	2	0.0	16.000	C
C-AB	631	1282	0.492	626	2.4	6.082	A
C-A	530			530			
A-B	0			0			
A-C	307			307			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	106	648	0.163	106	0.2	7.300	A
B-A	2	249	0.009	2	0.0	16.061	C
C-AB	637	1285	0.495	637	2.5	6.206	A
C-A	524			524			
A-B	0			0			
A-C	307			307			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	86	665	0.130	86	0.2	6.854	A
B-A	2	299	0.006	2	0.0	13.320	B
C-AB	364	1160	0.314	370	1.2	5.078	A
C-A	583			583			
A-B	0			0			
A-C	251			251			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	72	876	0.107	72	0.1	6.559	A
B-A	2	336	0.004	2	0.0	11.827	B
C-AB	239	1068	0.224	241	0.7	4.818	A
C-A	554			554			
A-B	0			0			
A-C	210			210			

Queue Variation Results for each time segment

00:00 - 00:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.13	0.00	0.00	0.13	0.13			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.68	0.61	1.10	1.54	1.60			N/A	N/A

00:15 - 00:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.00	0.00	0.16	0.16			N/A	N/A
B-A	0.01	0.01	0.28	0.50	0.52			N/A	N/A
C-AB	1.12	0.61	1.10	1.54	1.60			N/A	N/A

00:30 - 00:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.21	0.03	0.28	0.51	0.54			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	2.44	0.03	0.31	2.44	8.76			N/A	N/A

00:45 - 01:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.21	0.03	0.28	0.51	0.54			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	2.51	0.05	0.51	6.89	11.48			N/A	N/A

01:00 - 01:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.17	0.09	0.60	0.17	0.17			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	1.19	0.61	1.10	1.54	1.60			N/A	N/A

01:15 - 01:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.13	0.00	0.00	0.13	0.13			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.72	0.61	1.10	1.54	1.60			N/A	N/A

J8 DS - 2024, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Kilbride Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untlBed	T-Junction	Two-way		13.52	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2024	PM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Main Street (E)		✓	735	100.000
B - Kilbride Road		✓	392	100.000
C - R125 (W)		✓	336	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To			
		A - Main Street (E)	B - Kilbride Road	C - R125 (W)	
	A - Main Street (E)	0	3	735	
	B - Kilbride Road	3	0	369	
	C - R125 (W)	257	79	0	

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - Main Street (E)	B - Kilbride Road	C - R125 (W)	
	A - Main Street (E)	10	10	10	
	B - Kilbride Road	10	10	10	
	C - R125 (W)	10	10	10	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.85	47.90	5.3	29.8	E
B-A	0.04	53.34	0.0	0.5	F
C-AB	0.24	8.06	0.6	1.8	A
C-A					
AB					
AC					

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	293	579	0.505	288	1.1	13.454	B
B-A	2	293	0.008	2	0.0	13.614	B
C-AB	85	636	0.134	85	0.2	7.174	A
C-A	167			167			
AB	2			2			
AC	553			553			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	350	548	0.639	347	1.8	19.422	C
B-A	3	219	0.012	3	0.0	18.286	C
C-AB	112	640	0.174	111	0.3	7.489	A
C-A	191			191			
AB	3			3			
AC	661			661			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	428	504	0.849	416	4.8	40.421	E
B-A	3	91	0.036	3	0.0	45.153	E
C-AB	155	648	0.239	154	0.5	8.030	A
C-A	215			215			
AB	3			3			
AC	809			809			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	428	504	0.849	428	5.3	47.801	E
B-A	3	77	0.043	3	0.0	53.342	F
C-AB	155	649	0.240	155	0.6	8.056	A
C-A	215			215			
AB	3			3			
AC	809			809			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	350	547	0.639	363	2.1	22.750	C
B-A	3	207	0.013	3	0.0	19.430	C
C-AB	112	641	0.175	113	0.4	7.522	A
C-A	190			190			
AB	3			3			
AC	661			661			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	293	579	0.506	295	1.2	14.212	B
B-A	2	289	0.008	2	0.0	13.820	B
C-AB	86	636	0.135	86	0.3	7.211	A
C-A	167			167			
AB	2			2			
AC	553			553			

Queue Variation Results for each time segment

00:00 - 00:15

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.09	0.61	1.10	1.54	1.80				N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01				N/A	N/A
C-AB	0.24	0.00	0.00	0.24	0.24				N/A	N/A

00:15 - 00:30

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.84	0.09	1.28	3.93	5.32				N/A	N/A
B-A	0.01	0.01	0.28	0.50	0.52				N/A	N/A
C-AB	0.35	0.00	0.00	0.35	0.35				N/A	N/A

00:30 - 00:45

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	4.79	0.05	0.55	13.65	23.21				N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04				N/A	N/A
C-AB	0.55	0.03	0.29	0.55	0.55				N/A	N/A

00:45 - 01:00

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	5.32	0.04	0.41	13.08	28.77				N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05				N/A	N/A
C-AB	0.55	0.04	0.45	1.46	1.62				N/A	N/A

01:00 - 01:15

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	2.06	0.04	0.45	5.51	9.85				N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01				N/A	N/A
C-AB	0.36	0.00	0.00	0.36	0.36				N/A	N/A

01:15 - 01:30

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.16	0.04	0.35	2.33	5.96				N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01				N/A	N/A
C-AB	0.25	0.00	0.00	0.25	0.25				N/A	N/A

TRANSYT 15

Version: 15.5.2.7994
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Filename: (new file)
Path:
Report generation date: 21/04/2022 10:56:56

- «A1 - J9 DM : D1 - 2024 AM* :
»Summary
»Network Options
»Arms and Traffic Streams
»Signal Timings
»Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCR	Region
Driving side	Left
Date	07/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC0Joshua.tai
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red- With- Amber	Display End-Of- Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A1 - J9 DM
D1 - 2024 AM*

Summary

Data Errors and Warnings
No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (E per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
1	21/04/2022 10:54:35	21/04/2022 10:54:35	08:00	35	23.00	1.27	41.35	2/1	0	0	2/1	3/1	2/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J9 DM		D1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2024 AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
35		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (s)	Phase maximum broken penalty (s)	Intergreen broken penalty (s)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

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Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Is Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Extended - Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1, -15, -5, -1, 15, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.80	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	

Give Way Data							
Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
6	1	AllTraffic					
7	1	AllTraffic					
11	1	AllTraffic					
12	1	AllTraffic					
14	1	AllTraffic	✓	0	✓	6.00	
15	1	AllTraffic	✓	0	✓	7.21	

Give Way Data - All Movements - Conflicts									
Traffic Stream	Description	Controlling type	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStreamMovement	12/1	8/1	100	0.00		0	0
		TrafficStreamMovement	11/1	8/1	100	0.00		0	0
		TrafficStreamMovement	3/1	1/1	100	0.00		0	0
		TrafficStreamMovement	7/1	1/1	100	0.00		0	0
		TrafficStreamMovement	6/1	13/1	100	0.00		0	0
		TrafficStreamMovement	2/1	9/1	100	0.00		0	0
		TrafficStreamMovement	2/1	9/1	100	0.00		0	0
		TrafficStreamMovement	2/1	13/1	100	0.00		0	0
		TrafficStreamMovement	3/1	1/1	100	0.00		0	0
		TrafficStreamMovement	3/1	8/1	100	0.00		0	0

Signal Timings

Network Default: 35s cycle time; 35 steps

Interstage Matrix for Controller Stream 1

From	To	
	1	2
	1	0
2	0	0

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	2	✓	1	A,B	0	16	16	1	7
		✓	2	C	21	0	14	1	14

Final Prediction Table

Traffic Stream Results																
			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated sat flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	D well mu
1	1			1	A	271	1915	16	0.00	29	209	7.35	6.15	53.69	1.51	
2	1			1	B	379	1887	16	0.00	41	118	25.19	7.19	62.48	2.46	
3	1					365	1800	35	1.86	21	320	24.34	0.34	3.30	0.23	
4	1					271	Unrestricted	35	9.00	0	Unrestricted	18.00	0.00	0.00	0.00	
5	1					165	1915	35	0.00	9	945	3.69	0.69	0.00	0.00	
6	1					103	1700	35	0.00	6	1385	1.07	0.07	0.00	0.00	
7	1					62	1500	35	0.98	4	2017	1.07	0.07	1.05	0.01	
8	1					262	Unrestricted	35	0.00	0	Unrestricted	6.00	0.00	0.00	0.00	
9	1					394	Unrestricted	35	0.00	0	Unrestricted	24.00	0.00	0.00	0.00	
10	1					66	1915	35	0.00	3	2511	2.43	0.63	0.00	0.00	
11	1					22	1600	35	35.00	1	6445	1.22	0.02	0.00	0.00	
12	1					44	1516	35	35.00	3	3002	1.04	0.04	0.00	0.00	
13	1					48	Unrestricted	35	27.00	0	Unrestricted	4.80	0.00	0.00	0.00	
14	1					25	1258	35	35.00	2	4427	1.03	0.03	0.00	0.00	
15	1					109	1075	35	18.00	10	788	1.22	0.22	3.28	1.21	

Network Results								
	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	275.59	10.48	26.29	1.27	18.02	4.98	0.00	23.00
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	275.59	10.48	26.29	1.27	18.02	4.98	0.00	23.00

- < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

TRANSYT 15	
Version: 15.5.2.7994	
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Filename: (new file)

Path:

Report generation date: 21/04/2022 10:55:30

<A2 - J9 DM : D2 - 2024 PM* :

- »Summary
- »Network Options
- »Arms and Traffic Streams
- »Signal Timings
- »Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCR	Region
Driving side	Left
Date	07/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC(joshua.tai)
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick fares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-of-Green	Display Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	per hour	s	-hour	per hour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A2 - J9 DM D2 - 2024 PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
2	21/04/2022 10:53:59	21/04/2022 10:53:59	08:00	35	4.75	0.26	11.40	1/1	0	0	1/1	3/1	1/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J9 DM		D2	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2024 PM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
35		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (s)	Phase maximum broken penalty (s)	Intergreen broken penalty (s)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Extended - Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1, -15, -5, -1, 15, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.80	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				10.00	✓	Sum of lanes	1915	✓	1800	✓		Normal	
2	1				150.00	✓	Sum of lanes	1777			✓		Normal	
3	1				200.00	✓	Sum of lanes	1758					Normal	
4	1				150.00								Normal	
5	1				30.00	✓	Sum of lanes	1915					Normal	
6	1				5.00	✓	Sum of lanes	1732				✓	Normal	
7	1				5.00	✓	Sum of lanes	1532				✓	Normal	
8	1				50.00								Normal	
9	1				200.00								Normal	
10	1				20.00	✓	Sum of lanes	1915					Normal	
11	1				10.00	✓	Sum of lanes	1665				✓	Normal	
12	1				7.00	✓	Sum of lanes	1915	✓	1800		✓	Normal	
13	1				40.00								Normal	
14	1				7.00	✓	Sum of lanes	1604	✓	1800		✓	Normal	
15	1				7.00	✓	Sum of lanes	1660	✓	1800		✓	Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use R&R?	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
2	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	31	6.00	✓	1777
3	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	67	11.25	✓	1758
4	1	1	(unfilled)											
5	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	0	99996.00	✓	1915
6	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	100	8.05	✓	1732
7	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
8	1	1	(unfilled)											
9	1	1	(unfilled)											
10	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	0	99996.00	✓	1915
11	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	100	6.39		1665
12	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	0	6.00	✓	1915
13	1	1	(unfilled)											
14	1	1	(unfilled)		✓	N/A	N/A	0	2.50	✓	100	6.00		1604
15	1	1	(unfilled)		✓	N/A	N/A	0	2.50	✓	100	7.21		1660

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
6	1	AllTraffic					
7	1	AllTraffic					
11	1	AllTraffic					
12	1	AllTraffic					
14	1	AllTraffic	✓	0	✓	6.00	
15	1	AllTraffic	✓	0	✓	7.21	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStreamMovement	12/1	8/1	100	0.00		0	0
		TrafficStreamMovement	11/1	8/1	100	0.00		0	0
		TrafficStreamMovement	3/1	1/1	100	0.00		0	0
		TrafficStreamMovement	7/1	1/1	100	0.00		0	0
		TrafficStreamMovement	6/1	13/1	100	0.00		0	0
		TrafficStreamMovement	2/1	9/1	100	0.00		0	0
		TrafficStreamMovement	2/1	9/1	100	0.00		0	0
		TrafficStreamMovement	2/1	13/1	100	0.00		0	0
		TrafficStreamMovement	3/1	1/1	100	0.00		0	0
		TrafficStreamMovement	3/1	8/1	100	0.00		0	0

Signal Timings

Network Default: 35s cycle time; 35 steps

Interstage Matrix for Controller Stream 1

	To
	1 2
From	1 0 5
	2 0 0

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	30	11	16	1	7
	2	✓	2	C	16	30	14	1	14

Final Prediction Table

Traffic Stream Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated sat flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Dwell time (s)
1	1			1	A	106	1915	16	0.00	11	660	6.36	5.16	52.14	1.46	
2	1			1	B	70	1777	16	0.00	8	1010	23.07	5.07	48.57	0.35	
3	1					143	1758	35	0.00	8	1006	24.09	0.69	0.00	0.00	
4	1					106	Unrestricted	35	15.00	0	Unrestricted	18.00	0.00	0.00	0.00	
5	1					55	1915	35	35.00	3	3634	3.63	0.63	0.00	0.00	
6	1					12	1732	35	35.00	1	12890	1.91	0.61	0.00	0.00	
7	1					43	1500	35	35.00	3	3640	1.94	0.64	0.00	0.00	
8	1					73	Unrestricted	35	16.00	0	Unrestricted	6.00	0.00	0.00	0.00	
9	1					42	Unrestricted	35	28.00	0	Unrestricted	24.00	0.00	0.00	0.00	
10	1					16	1915	35	35.00	1	10672	2.41	0.61	0.00	0.00	
11	1					16	1600	35	35.00	1	8900	1.21	0.61	0.00	0.00	
12	1					0	1713	35	35.00	0	Unrestricted	0.00	0.00	0.00	0.00	
13	1					63	Unrestricted	35	18.00	0	Unrestricted	4.80	0.00	0.00	0.00	
14	1					41	1476	35	35.00	3	3141	1.03	0.63	0.00	0.00	
15	1					16	1422	35	34.00	1	7009	1.02	0.62	0.00	0.00	

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	73.45	2.71	27.08	0.26	3.63	1.12	0.00	4.75
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	73.45	2.71	27.08	0.26	3.63	1.12	0.00	4.75

- <= adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- += average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

TRANSYT 15

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Filename: (new file)
Path:
Report generation date: 20/04/2022 16:00:45

- «A1 - J9 DS : D1 - 2024 AM* :
»Summary
»Network Options
»Arms and Traffic Streams
»Signal Timings
»Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCR	Region
Driving side	Left
Date	07/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC\joshua.tai
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red- With- Amber	Display End-Of- Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A1 - J9 DS
D1 - 2024 AM*

Summary

Data Errors and Warnings
No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (E per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
1	20/04/2022 16:00:43	20/04/2022 16:00:44	08:00	35	58.02	3.27	65.26	2/1	0	0	2/1	3/1	2/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J9 DS		D1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2024 AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
35		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (s)	Phase maximum broken penalty (s)	Intergreen broken penalty (s)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Is Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Extended - Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, -1, -15, -5, -1, 15, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate call saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				10.00	✓	Sum of lanes	1915	✓	1800	✓		Normal	
2	1				150.00	✓	Sum of lanes	1896			✓		Normal	
3	1				200.00	✓	Sum of lanes	1837					Normal	
4	1				150.00								Normal	
5	1				30.00	✓	Sum of lanes	1915					Normal	
6	1				5.00	✓	Sum of lanes	1735				✓	Normal	
7	1				5.00	✓	Sum of lanes	1532				✓	Normal	
8	1				50.00								Normal	
9	1				200.00								Normal	
10	1				20.00	✓	Sum of lanes	1915					Normal	
11	1				10.00	✓	Sum of lanes	1693				✓	Normal	
12	1				7.00	✓	Sum of lanes	1532	✓	1800		✓	Normal	
13	1				40.00								Normal	
14	1				7.00	✓	Sum of lanes	1604	✓	1800		✓	Normal	
15	1				7.00	✓	Sum of lanes	1660	✓	1800		✓	Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RBS?	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
2	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	4	6.00	✓	1896
3	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	32	11.25	✓	1837
4	1	1	(untitled)											
5	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
6	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	99	8.05		1735
7	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
8	1	1	(untitled)											
9	1	1	(untitled)											
10	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
11	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	91	6.39		1693
12	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
13	1	1	(untitled)											
14	1	1	(untitled)		✓	N/A	N/A	0	2.50	✓	100	6.00		1604
15	1	1	(untitled)		✓	N/A	N/A	0	2.50	✓	100	7.21		1660

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	

Give Way Data							
Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
6	1	AllTraffic					
7	1	AllTraffic					
11	1	AllTraffic					
12	1	AllTraffic					
14	1	AllTraffic	✓	0	✓	6.00	
15	1	AllTraffic	✓	0	✓	7.21	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStreamMovement	12/1	8/1	100	0.00		0	0
		TrafficStreamMovement	11/1	8/1	100	0.00		0	0
		TrafficStreamMovement	3/1	1/1	100	0.00		0	0
		TrafficStreamMovement	7/1	1/1	100	0.00		0	0
		TrafficStreamMovement	6/1	13/1	100	0.00		0	0
		TrafficStreamMovement	2/1	9/1	100	0.00		0	0
		TrafficStreamMovement	2/1	9/1	100	0.00		0	0
		TrafficStreamMovement	2/1	13/1	100	0.00		0	0
		TrafficStreamMovement	3/1	1/1	100	0.00		0	0
		TrafficStreamMovement	3/1	8/1	100	0.00		0	0

Signal Timings

Network Default: 35s cycle time; 35 steps

Interstage Matrix for Controller Stream 1

From	To		
	1	2	
	1	0	5
2	0	0	

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	2	✓	1	A,B	0	16	16	1	7
		✓	2	C	21	0	14	1	14

Final Prediction Table

Traffic Stream Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	D wnt max queue
1	1			1	A	486	1915	16	0.00	52	72	7.62	6.42	36.60	1.73	
2	1			1	B	601	1896	16	0.00	65	38	28.43	10.43	78.58	4.95	
3	1					558	1837	35	11.44	45	99	27.46	3.46	40.42	2.67	
4	1					486	Unrestricted	35	6.00	0	Unrestricted	18.00	0.00	0.00	0.00	
5	1					192	1915	35	0.00	10	798	3.70	0.10	0.00	0.01	
6	1					105	1700	35	0.00	6	1357	1.07	0.07	0.00	0.00	
7	1					87	1500	35	9.67	8	1023	2.37	1.37	25.49	0.20	
8	1					289	Unrestricted	35	8.00	0	Unrestricted	6.00	0.00	0.00	0.00	
9	1					594	Unrestricted	35	0.00	0	Unrestricted	24.00	0.00	0.00	0.00	
10	1					67	1915	35	0.00	3	2472	2.43	0.03	0.00	0.00	
11	1					22	1600	35	33.98	2	4953	1.95	0.75	16.36	0.04	
12	1					45	1516	35	35.00	3	2933	1.04	0.04	0.00	0.00	
13	1					49	Unrestricted	35	26.00	0	Unrestricted	4.80	0.00	0.00	0.00	
14	1					26	1059	35	31.00	2	3564	1.04	0.04	0.00	0.00	
15	1					134	668	35	18.00	15	483	3.17	2.17	37.89	1.22	

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	424.44	17.45	24.32	3.27	46.44	11.57	0.00	58.02
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	424.44	17.45	24.32	3.27	46.44	11.57	0.00	58.02

- < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

TRANSYT 15	
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Filename: (new file)

Path:

Report generation date: 20/04/2022 15:53:21

<A2 - J9 DS : D2 - 2024 PM* :

- »Summary
- »Network Options
- »Arms and Traffic Streams
- »Signal Timings
- »Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCR	Region
Driving side	Left
Date	07/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC(joshua.tai)
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick lanes	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-of-Green	Display Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	per hour	s	-hour	per hour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A2 - J9 DS
D2 - 2024 PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
2	20/04/2022 15:53:16	20/04/2022 15:53:16	08:00	35	45.37	2.56	61.07	1/1	0	0	1/1	3/1	1/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J9 DS		D2	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2024 PM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
35		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (s)	Phase maximum broken penalty (s)	Intergreen broken penalty (s)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Extended - Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1, -15, -5, -1, 15, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.80	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				10.00	✓	Sum of lanes	1915	✓	1800	✓		Normal	
2	1				150.00	✓	Sum of lanes	1887			✓		Normal	
3	1				200.00	✓	Sum of lanes	1875					Normal	
4	1				150.00								Normal	
5	1				30.00	✓	Sum of lanes	1915					Normal	
6	1				5.00	✓	Sum of lanes	1732				✓	Normal	
7	1				5.00	✓	Sum of lanes	1532				✓	Normal	
8	1				50.00								Normal	
9	1				200.00								Normal	
10	1				20.00	✓	Sum of lanes	1915					Normal	
11	1				10.00	✓	Sum of lanes	1665				✓	Normal	
12	1				7.00	✓	Sum of lanes	1915	✓	1800		✓	Normal	
13	1				40.00								Normal	
14	1				7.00	✓	Sum of lanes	1604	✓	1800		✓	Normal	
15	1				7.00	✓	Sum of lanes	1660	✓	1800		✓	Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RRS?	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
2	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	6	6.00	✓	1887
3	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	16	11.25	✓	1875
4	1	1	(unfilled)											
5	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
6	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	100	8.05	✓	1732
7	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
8	1	1	(unfilled)											
9	1	1	(unfilled)											
10	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
11	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	100	6.39		1665
12	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	0	6.00	✓	1915
13	1	1	(unfilled)											
14	1	1	(unfilled)		✓	N/A	N/A	0	2.50	✓	100	6.00		1604
15	1	1	(unfilled)		✓	N/A	N/A	0	2.50	✓	100	7.21		1660

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
6	1	AllTraffic					
7	1	AllTraffic					
11	1	AllTraffic					
12	1	AllTraffic					
14	1	AllTraffic	✓	0	✓	6.00	
15	1	AllTraffic	✓	0	✓	7.21	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStreamMovement	12/1	8/1	100	0.00		0	0
		TrafficStreamMovement	11/1	8/1	100	0.00		0	0
		TrafficStreamMovement	3/1	1/1	100	0.00		0	0
		TrafficStreamMovement	7/1	1/1	100	0.00		0	0
		TrafficStreamMovement	6/1	13/1	100	0.00		0	0
		TrafficStreamMovement	2/1	9/1	100	0.00		0	0
		TrafficStreamMovement	2/1	9/1	100	0.00		0	0
		TrafficStreamMovement	2/1	13/1	100	0.00		0	0
		TrafficStreamMovement	3/1	1/1	100	0.00		0	0
		TrafficStreamMovement	3/1	8/1	100	0.00		0	0

Signal Timings

Network Default: 35s cycle time; 35 steps

Interstage Matrix for Controller Stream 1

	To
	1 2
From	1 0 5
	2 0 0

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	30	11	16	1	7
	2	✓	2	C	16	30	14	1	14

Final Prediction Table

Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES	
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	D well mu
1	1			1	A	588 <	1915	16	0.00	61	47	8.10	6.90	34.68	1.93 <	
2	1			1	B	347	1887	16	0.00	38	136	24.87	6.87	60.14	2.24	
3	1					594	1875	35	12.61	50	82	28.49	4.49	48.19	3.21	
4	1					568	Unrestricted	35	5.00	0	Unrestricted	18.00	0.00	0.00	0.00	
5	1					66	1915	35	0.00	3	2511	3.63	0.03	0.00	0.00	
6	1					12	1732	35	35.00	1	12890	1.01	0.01	0.00	0.00	
7	1					54	1500	35	33.67	5	1638	2.45	1.45	27.28	0.14	
8	1					118	Unrestricted	35	13.00	0	Unrestricted	6.00	0.00	0.00	0.00	
9	1					274	Unrestricted	35	5.00	0	Unrestricted	24.00	0.00	0.00	0.00	
10	1					16	1915	35	35.00	1	10672	2.41	0.01	0.00	0.00	
11	1					16	1600	35	33.99	1	6590	2.16	0.96	18.12	0.03	
12	1					0	1713	35	35.00	0	Unrestricted	0.00	0.00	0.00	0.00	
13	1					63	Unrestricted	35	19.00	0	Unrestricted	4.80	0.00	0.00	0.00	
14	1					41	1261	35	29.00	3	2668	1.08	0.08	2.84	1.21	
15	1					63	875	35	18.00	7	1149	3.24	2.24	45.32	1.21	

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	328.47	13.52	24.30	2.56	36.33	9.04	0.00	45.37
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	328.47	13.52	24.30	2.56	36.33	9.04	0.00	45.37

- <= adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- += average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

TRANSYT 15

Version: 15.5.2.7994
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Filename: (new file)
Path:
Report generation date: 21/04/2022 11:03:29

- «A1 - J10 DM : D1 - 2024 AM* »:
 »Summary
 »Network Options
 »Arms and Traffic Streams
 »Signal Timings
 »Final Prediction Table

File summary

File description	
File title	(untitled)
Location	
Site number	
UTCR	Region
Driving side	Left
Date	03/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC03oshua.tai
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick fares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red- With- Amber	Display End-Of- Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-In-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUT Profile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.50	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

A1 - J10 DM
D1 - 2024 AM*

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	Traffic Stream Data	Arm 8 - Traffic Stream 1	Traffic Stream 8/1 is not connected to any other Links or Traffic Streams
Info	Traffic Stream Data	Arm 12 - Traffic Stream 1	Traffic Stream 12/1 is not connected to any other Links or Traffic Streams
Info	Traffic Stream Flows	Arm 8 - Traffic Stream 1 - Flows (08:00-09:00)	Traffic Stream 8/1 has no paths passing through it, so will not be assigned any flows.
Info	Traffic Stream Flows	Arm 12 - Traffic Stream 1 - Flows (08:00-09:00)	Traffic Stream 12/1 has no paths passing through it, so will not be assigned any flows.

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
1	21/04/2022 11:01:19	21/04/2022 11:01:19	08:00	100	91.83	5.85	58.25	5/1	0	0	5/1	7/1	5/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J10 DM		D1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2024 AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				20.00	✓	Sum of lanes	2055	✓	1800	✓		Normal	
2	1				20.00	✓	Sum of lanes	1915	✓	1800	✓		Normal	
3	1				180.00	✓	Sum of lanes	1895					Normal	
4	1			✓	48.55								Normal	
5	1				200.00	✓	Sum of lanes	1532			✓		Normal	
6	1				200.00								Normal	
7	1				80.00	✓	Sum of lanes	1915					Normal	
8	1				7.00	✓	Sum of lanes	2055	✓	1800			Normal	
9	1				10.00	✓	Sum of lanes	2015	✓	1800	✓		Normal	
10	1			✓	51.69								Normal	
11	1				7.00	✓	Sum of lanes	1644	✓	1800		✓	Normal	
12	1			✓	6.40								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RBS?	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
2	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
3	1	1	(untitled)		✓	N/A	N/A	0	3.25	✓	63	40.23	✓	1895
4	1	1	(untitled)											
5	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
6	1	1	(untitled)											
7	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
9	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	8	6.00		2015
10	1	1	(untitled)											
11	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	6.00		1644
12	1	1	(untitled)											

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	
5	1	1	C	
9	1	1	D	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
11	1	All Traffic	✓	0	✓	6.00	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStreamMovement	8/1	4/1	100		0	0

Signal Timings

Network Default: 100s cycle time; 100 steps

Interstage Matrix for Controller Stream 1

		To			
		1	2	3	
From	1	0	0	5	
	2	0	0	5	
	3	5	5	0	

Resultant Stages

Controller stream	Resultant stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	8	15	7	1	1
	2	✓	2	A,B,D	15	65	50	1	7
	3	✓	3	C	70	3	33	1	7

Final Prediction Table

Traffic Stream Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU		QUEUES			
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Dwell time (s)
1	1			1	A	215	2055	57	1.02	18	390	12.81	10.41	44.35	2.65	
2	1			1	B	128	1915	57	0.00	12	681	12.06	9.66	44.07	1.57	
3	1					343	1895	100	0.00	18	397	21.81	0.21	0.00	0.02	
4	1					650	Unrestricted	100	10.00	0	Unrestricted	5.83	0.00	0.00	0.00	
5	1			1	C	293	1532	33	0.00	56	60	55.34	31.34	83.92	6.95	
6	1					250	Unrestricted	100	32.00	0	Unrestricted	24.00	0.00	0.00	0.00	
7	1					439	1915	100	41.86	39	128	21.05	11.45	51.69	6.59	
8	1					0	2055	100	100.00	0	Unrestricted	0.00	0.00	0.00	0.00	
9	1			1	D	439	2015	50	0.00	43	111	7.78	6.58	13.18	1.61	
10	1					175	Unrestricted	100	26.00	0	Unrestricted	6.20	0.00	0.00	0.00	
11	1					215 +	1184	100	42.00	18	396	2.87	1.87	13.20	1.23 +	
12	1					0	Unrestricted	100	100.00	0	Unrestricted	0.00	0.00	0.00	0.00	

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	258.82	14.48	17.87	5.85	83.02	8.81	0.00	91.83
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	258.82	14.48	17.87	5.85	83.02	8.81	0.00	91.83

- < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- + = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- = = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

TRL

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TRL

THE FUTURE OF TRANSPORT

Generated on 21/04/2022 11:03:22 using TRANSYT 15 (15.5.2.7994)

TRANSYT 15

Version: 15.5.2.7994
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Filename: (new file)

Path:

Report generation date: 21/04/2022 11:02:25

«A2 - J10 DM : D2 - 2024 PM* :

- »Summary
- »Network Options
- »Arms and Traffic Streams
- »Signal Timings
- »Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCR	Region
Driving side	Left
Date	03/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC03shua.tai
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick fibres	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A2 - J10 DM D2 - 2024 PM*

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	Traffic Stream Data	Arm 8 - Traffic Stream 1	Traffic Stream 8/1 is not connected to any other Links or Traffic Streams
Info	Traffic Stream Data	Arm 12 - Traffic Stream 1	Traffic Stream 12/1 is not connected to any other Links or Traffic Streams
Info	Traffic Stream Flows	Arm 8 - Traffic Stream 1 - Flows (08:00-09:00)	Traffic Stream 8/1 has no paths passing through it, so will not be assigned any flows.
Info	Traffic Stream Flows	Arm 12 - Traffic Stream 1 - Flows (08:00-09:00)	Traffic Stream 12/1 has no paths passing through it, so will not be assigned any flows.

Run Summary

Analysis set used	Run start time	Run finish time	Model/Eng start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Is it worse over PRC
2	21/04/2022 11:01:15	21/04/2022 11:01:15	08:00	100	153.38	9.79	67.81	3/1	0	0	5/1	3/1	3/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J10 DM		D2	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2024 PM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modeled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle/Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻²)	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻²)	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUT Profile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.80	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				20.00	✓	Sum of lanes	2055	✓	1800	✓		Normal	
2	1				20.00	✓	Sum of lanes	1915	✓	1800	✓		Normal	
3	1				160.00	✓	Sum of lanes	1907					Normal	
4	1			✓	48.55								Normal	
5	1				200.00	✓	Sum of lanes	1532			✓		Normal	
6	1				200.00								Normal	
7	1				80.00	✓	Sum of lanes	1915					Normal	
8	1				7.00	✓	Sum of lanes	2055	✓	1800			Normal	
9	1				10.00	✓	Sum of lanes	1856	✓	1800	✓		Normal	
10	1			✓	51.69								Normal	
11	1				7.00	✓	Sum of lanes	1644	✓	1800		✓	Normal	
12	1			✓	6.40								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RWS?	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1 (unfiltered)			✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
2	1	1 (unfiltered)			✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
3	1	1 (unfiltered)			✓	N/A	N/A	0	3.25	✓	46	40.23	✓	1907
4	1	1 (unfiltered)												
5	1	1 (unfiltered)			✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
6	1	1 (unfiltered)												
7	1	1 (unfiltered)			✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
8	1	1 (unfiltered)			✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
9	1	1 (unfiltered)			✓	N/A	N/A	0	3.00	✓	43	6.00		1856
10	1	1 (unfiltered)												
11	1	1 (unfiltered)			✓	N/A	N/A	0	3.00	✓	100	6.00		1644
12	1	1 (unfiltered)												

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	
5	1	1	C	
9	1	1	D	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
11	1	AllTraffic	✓	0	✓	6.00	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStreamMovement	9/1	4/1	100		0	0

Signal Timings

Network Default: 100s cycle time; 100 steps

Interstage Matrix for Controller Stream 1

	To			
	1	2	3	
From	1	0	0	5
	2	0	0	5
	3	5	5	0

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	19	26	7	1	1
	2	✓	2	A,B,D	26	63	37	1	7
	3	✓	3	C	68	14	46	1	7

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU				QUEUES	
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	D	W
1	1			1	A	374	2055	44	0.82	41	116	14.56	12.16	24.94	2.59		
2	1			1	B	443	1915	44	0.00	51	75	15.45	13.05	25.74	3.17		
3	1					817	1907	100	36.82	68	33	36.03	14.43	63.37	15.23		
4	1					452	Unrestricted	100	39.00	0	Unrestricted	5.83	0.00	0.00	0.00		
5	1			1	C	459	1532	46	0.00	64	41	48.41	24.41	77.61	10.12		
6	1					409	Unrestricted	100	40.00	0	Unrestricted	24.00	0.00	0.00	0.00		
7	1					82	1915	100	1.95	4	1961	9.85	0.05	0.53	0.05		
8	1					0	2055	100	100.00	0	Unrestricted	0.00	0.00	0.00	0.00		
9	1			1	D	82	1856	37	0.00	12	674	21.65	20.45	62.34	1.46		
10	1					497	Unrestricted	100	22.00	0	Unrestricted	6.20	0.00	0.00	0.00		
11	1					374 <	1536	100	55.00	24	279	1.81	0.61	8.08	1.25 +		
12	1					0	Unrestricted	100	100.00	0	Unrestricted	0.00	0.00	0.00	0.00		

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	394.63	22.96	17.19	9.79	138.98	14.40	0.00	153.38
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	394.63	22.96	17.19	9.79	138.98	14.40	0.00	153.38

- < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

TRANSYT 15	
Version: 15.5.2.7994	
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Filename: (new file)

Path:

Report generation date: 16/05/2022 18:36:02

<A1 - J10 DS : D1 - 2024 AM* :

- »Summary
- »Network Options
- »Arms and Traffic Streams
- »Signal Timings
- »Final Prediction Table

File summary

File description

File title	(unfiltered)
Location	
Site number	
UTCR	Region
Driving side	Left
Date	03/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC\oshua.tai
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick lanes	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-of-Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	per hour	s	-hour	per hour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A1 - J10 DS
D1 - 2024 AM*

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	Traffic Stream Data	Arm 8 - Traffic Stream 1	Traffic Stream 8/1 is not connected to any other Links or Traffic Streams
Info	Traffic Stream Data	Arm 12 - Traffic Stream 1	Traffic Stream 12/1 is not connected to any other Links or Traffic Streams
Info	Traffic Stream Flows	Arm 8 - Traffic Stream 1 - Flows (08.00-09.00)	Traffic Stream 8/1 has no paths passing through it, so will not be assigned any flows.
Info	Traffic Stream Flows	Arm 12 - Traffic Stream 1 - Flows (08.00-09.00)	Traffic Stream 12/1 has no paths passing through it, so will not be assigned any flows.

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst PRC
1	16/05/2022 18:34:02	16/05/2022 18:34:02	08:00	100	87.58	5.57	53.18	5/1	0	0	5/1	7/1	5/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J10 DS		D1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2024 AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced											
Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use Link stop weightings	Use Link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle in Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters		
Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types	
Name	PCU Factor
Normal	1.00

Bus parameters					
Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters					
Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters	
Dispersion type	Default

Optimisation options			
Enable optimisation	Auto redistribute	Optimisation level Offsets And Green Splits	Enable OUT Profile accuracy
✓	✓		✓

Advanced								
Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics		
Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.80	14.20

Arms and Traffic Streams

Arms			
Arm	Name	Description	Traffic node
(ALL)			

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				20.00	✓	Sum of lanes	2055	✓	1800	✓		Normal	
2	1				20.00	✓	Sum of lanes	1915	✓	1800	✓		Normal	
3	1				180.00	✓	Sum of lanes	1896					Normal	
4	1			✓	48.55								Normal	
5	1				200.00	✓	Sum of lanes	1532			✓		Normal	
6	1				200.00								Normal	
7	1				80.00	✓	Sum of lanes	1915					Normal	
8	1				7.00	✓	Sum of lanes	2055	✓	1800			Normal	
9	1				10.00	✓	Sum of lanes	2020	✓	1800	✓		Normal	
10	1			✓	51.69								Normal	
11	1				7.00	✓	Sum of lanes	1644	✓	1800		✓	Normal	
12	1			✓	6.40								Normal	

Arm	Traffic Stream	Lane	Name	Description	Use RSE?	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
2	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
3	1	1	(untitled)		✓	N/A	N/A	0	3.25	✓	62	40.23	✓	1896
4	1	1	(untitled)											
5	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
6	1	1	(untitled)											
7	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
9	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	7	6.00		2020
10	1	1	(untitled)											
11	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	6.00		1644
12	1	1	(untitled)											

Signals				
Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	
5	1	1	C	
9	1	1	D	

Give Way Data							
Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
11	1	AllTraffic	✓	0	✓	6.00	

Give Way Data - All Movements - Conflicts								
Traffic Stream	Description	Controlling type	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStreamMovement	B/1	A/1	100		0	0

3

4

Signal Timings

Network Default: 100s cycle time; 100 steps

Interstage Matrix for Controller Stream 1

From	To			
	1	2	3	
	1	0	0	5
	2	0	0	5
3	5	5	0	

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	8	15	7	1	1
	2	✓	2	A,B,D	15	65	50	1	7
	3	✓	3	C	70	3	33	1	7

Final Prediction Table

Traffic Stream Results																
			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Delay multiplier
1	1			1	A	211	2055	57	0.82	18	401	12.77	10.37	44.33	2.60	
2	1			1	B	128	1915	57	0.00	12	681	12.06	9.66	44.07	1.57	
3	1					339	1896	100	0.00	18	403	21.81	0.21	0.00	0.02	
4	1					642	Unrestricted	100	10.00	0	Unrestricted	5.83	0.00	0.00	0.00	
5	1			1	C	277	1532	33	0.00	53	69	54.49	30.49	62.43	6.46	
6	1					241	Unrestricted	100	33.00	0	Unrestricted	24.00	0.00	0.00	0.00	
7	1					434	1915	100	41.05	38	134	20.88	11.28	51.08	6.51	
8	1					0	2055	100	100.00	0	Unrestricted	0.00	0.00	0.00	0.00	
9	1			1	D	434	2020	50	0.00	42	114	7.79	6.59	13.29	1.60	
10	1					167	Unrestricted	100	22.00	0	Unrestricted	6.20	0.00	0.00	0.00	
11	1					211 <	1188	100	42.00	18	407	2.66	1.66	13.02	1.23 +	
12	1					0	Unrestricted	100	100.00	0	Unrestricted	0.00	0.00	0.00	0.00	

Network Results								
	Distance travelled (PCU-km/hr)	Time spent (PCU4r/hr)	Mean journey speed (kph)	Total delay (PCU4r/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	251.74	13.97	16.02	5.57	79.09	8.49	0.00	87.58
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	251.74	13.97	16.02	5.57	79.09	8.49	0.00	87.58

- <= adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

«A2 - J10 DS : D2 - 2024 PM* :
»Summary
»Network Options
»Arms and Traffic Streams
»Signal Timings
»Final Prediction Table

File summary

File description	
File title	(untitled)
Location	
Site number	
UTCR	Region
Driving side	Left
Date	03/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC Joshua Tai
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick lanes	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green

Units													
Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units		
£	kph	m	mpg	l/h	kg	PCU	PCU	per hour	s	4-hour	per hour		

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set ID	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical			Normal	Normal	✓

A2 - J10 DS D2 - 2024 PM*

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	Traffic Stream Data	Arm 8 - Traffic Stream 1	Traffic Stream 8/1 is not connected to any other Links or Traffic Streams
Info	Traffic Stream Data	Arm 12 - Traffic Stream 1	Traffic Stream 12/1 is not connected to any other Links or Traffic Streams
Info	Traffic Stream Flows	Arm 8 - Traffic Stream 1 - Flows (08:00-09:00)	Traffic Stream 8/1 has no paths passing through it, so will not be assigned any flows.
Info	Traffic Stream Flows	Arm 12 - Traffic Stream 1 - Flows (08:00-09:00)	Traffic Stream 12/1 has no paths passing through it, so will not be assigned any flows.

Run Summary

Analysis set used	Run start time	Run finish time	Model/Link start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Be wit wor over PR
2	16/05/2022 18:34:28	16/05/2022 18:34:28	08:00	100	148.82	9.49	66.97	3/1	0	0	5/1	3/1	3/

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J10 DS		D2	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2024 PM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modeled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-Serv	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	80	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ² -[2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ² -[2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.80	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				20.00	✓	Sum of lanes	2055	✓	1800	✓		Normal	
2	1				20.00	✓	Sum of lanes	1915	✓	1800	✓		Normal	
3	1				180.00	✓	Sum of lanes	1908					Normal	
4	1			✓	48.55								Normal	
5	1				200.00	✓	Sum of lanes	1532			✓		Normal	
6	1				200.00								Normal	
7	1				80.00	✓	Sum of lanes	1915					Normal	
8	1				7.00	✓	Sum of lanes	2055	✓	1800			Normal	
9	1				10.00	✓	Sum of lanes	1856	✓	1800	✓		Normal	
10	1			✓	51.69								Normal	
11	1				7.00	✓	Sum of lanes	1644	✓	1800	✓		Normal	
12	1			✓	6.40								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RBS?	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
2	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
3	1	1	(united)		✓	N/A	N/A	0	3.25	✓	45	40.23	✓	1908
4	1	1	(united)											
5	1	1	(united)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
6	1	1	(united)											
7	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
8	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
9	1	1	(united)		✓	N/A	N/A	0	3.00	✓	43	6.00		1856
10	1	1	(united)											
11	1	1	(united)		✓	N/A	N/A	0	3.00	✓	100	6.00		1644
12	1	1	(united)											

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	
5	1	1	C	
9	1	1	D	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
11	1	AllTraffic	✓	0	✓	6.00	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStreamMovement	8/1	4/1	100		0	0

Signal Timings

Network Default: 100s cycle time; 100 steps

Interstage Matrix for Controller Stream 1

		To			
From	1	1	2	3	
	2	1	0	0	5
	3	2	0	0	5

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	19	26	7	1	1
	2	✓	2	A,B,D	26	63	37	1	7
	3	✓	3	C,D	68	14	46	1	7

Final Prediction Table

Traffic Stream Results

		SIGNALS				FLOWS		PERFORMANCE				PER PCU		QUEUES		
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	D woi mu
1	1			1	A	364	2055	44	0.62	40	124	14.48	12.08	24.87	2.52	
2	1			1	B	443	1915	44	0.00	51	75	15.45	13.05	25.74	3.17	
3	1					807	1908	100	36.85	67	34	35.82	14.22	62.70	14.80	
4	1					449	Unrestricted	100	39.00	0	Unrestricted	5.83	0.00	0.00	0.00	
5	1			1	C	446	1532	46	0.00	62	45	47.85	23.85	76.37	9.67	
6	1					399	Unrestricted	100	41.00	0	Unrestricted	24.00	0.00	0.00	0.00	
7	1					82	1915	100	1.95	4	1961	9.85	0.05	0.53	0.05	
8	1					0	2055	100	100.00	0	Unrestricted	0.00	0.00	0.00	0.00	
9	1			1	D	82	1856	37	0.00	12	674	21.65	20.45	62.34	1.46	
10	1					487	Unrestricted	100	26.00	0	Unrestricted	6.20	0.00	0.00	0.00	
11	1					364 < 0	1536	100	55.00	24	280	1.55	0.55	6.49	1.24 +	
12	1					0	Unrestricted	100	100.00	0	Unrestricted	0.00	0.00	0.00	0.00	

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	387.30	22.42	17.28	9.49	134.79	14.04	0.00	148.82
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	387.30	22.42	17.28	9.49	134.79	14.04	0.00	148.82

- <= adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- += average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: (new file)
Path:
Report generation date: 16/04/2022 15:24:01

»J2 DM - 2039, AM
»J2 DM - 2039, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
J2 DM - 2039										
Stream B-C	D1	0.1	7.39	0.09	A	D2	0.0	8.38	0.02	A
Stream B-A		0.1	10.55	0.10	B		0.1	12.23	0.09	B
Stream C-AB		0.0	5.59	0.02	A		0.3	5.07	0.12	A

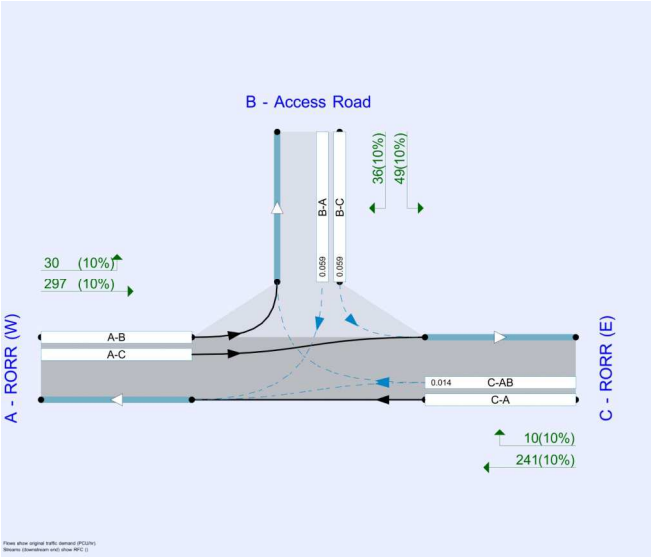
There are warnings associated with one or more model runs - see the "Data Errors and Warnings" tables for each Analysis or Demand Set.
Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description	
Title	
Location	
Site number	
Date	09/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC\joshua.lai
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	per hour	s	-Min	per Min



Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2039	AM	ONE HOUR	00:00	01:30	15
D2	2039	PM	ONE HOUR	00:00	01:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	J2 DM	100.000

J2 DM - 2039, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Access Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	RORR (W)		Major
B	Access Road		Minor
C	RORR (E)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - RORR (E)	6.00			150.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Access Road	One lane plus flare	6.50	3.00	3.00	3.00	3.00	✓	1.00	100	100

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	547	0.100	0.262	0.158	0.360
B-C	697	0.107	0.270	-	-
C-B	661	0.256	0.256	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2039	AM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - RORR (W)		✓	327	100.000
B - Access Road		✓	65	100.000
C - RORR (E)		✓	251	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - RORR (W)	B - Access Road	C - RORR (E)	
A - RORR (W)	0	30	297	
B - Access Road	36	0	49	
C - RORR (E)	241	10	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - RORR (W)	B - Access Road	C - RORR (E)	
A - RORR (W)	10	10	10	
B - Access Road	10	10	10	
C - RORR (E)	10	10	10	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.09	7.39	0.1	0.5	A
B-A	0.10	10.55	0.1	0.5	B
C-AB	0.02	5.59	0.0	0.5	A
C-A					
AB					
AC					

Main Results for each time segment

00:00 - 00:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	625	0.059	37	0.1	6.730	A
B-A	27	457	0.059	27	0.1	9.205	A
C-AB	10	719	0.014	10	0.0	5.585	A
C-A	179			179			
AB	23			23			
AC	224			224			

00:15 - 00:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	610	0.072	44	0.1	6.993	A
B-A	32	439	0.074	32	0.1	9.728	A
C-AB	13	732	0.017	13	0.0	5.507	A
C-A	213			213			
AB	27			27			
AC	267			267			

00:30 - 00:45							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	54	590	0.091	54	0.1	7.387	A
B-A	40	415	0.096	40	0.1	10.545	B
C-AB	17	750	0.023	17	0.0	5.401	A
C-A	259			259			
AB	33			33			
AC	327			327			

00:45 - 01:00							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	54	590	0.091	54	0.1	7.387	A
B-A	40	415	0.096	40	0.1	10.549	B
C-AB	17	750	0.023	17	0.0	5.403	A
C-A	259			259			
AB	33			33			
AC	327			327			

01:00 - 01:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	610	0.072	44	0.1	7.000	A
B-A	32	439	0.074	32	0.1	9.732	A
C-AB	13	732	0.018	13	0.0	5.508	A
C-A	213			213			
AB	27			27			
AC	267			267			

01:15 - 01:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	625	0.059	37	0.1	6.741	A
B-A	27	457	0.059	27	0.1	9.216	A
C-AB	10	719	0.014	10	0.0	5.585	A
C-A	179			179			
AB	23			23			
AC	224			224			

Queue Variation Results for each time segment

00:00 - 00:15									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

00:15 - 00:30									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.08	0.03	0.28	0.50	0.53			N/A	N/A
B-A	0.09	0.03	0.28	0.51	0.54			N/A	N/A
C-AB	0.02	0.02	0.28	0.50	0.52			N/A	N/A

00:30 - 00:45									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.11	0.03	0.29	0.51	0.54			N/A	N/A
B-A	0.11	0.03	0.29	0.51	0.54			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

00:45 - 01:00									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.11	0.03	0.28	0.50	0.52			N/A	N/A
B-A	0.12	0.03	0.28	0.50	0.52			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

01:00 - 01:15									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.09	0.00	0.00	0.09	0.09			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

01:15 - 01:30									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

J2 DM - 2039, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Access Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2039	PM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.09

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - RORR (W)		✓	414	100.000
B - Access Road		✓	39	100.000
C - RORR (E)		✓	541	100.000

Origin-Destination Data

Demand (PCU/hr)		To		
From		A - RORR (W)	B - Access Road	C - RORR (E)
	A - RORR (W)	0	35	379
	B - Access Road	29	0	10
	C - RORR (E)	501	40	0

Vehicle Mix

Heavy Vehicle Percentages		To		
From		A - RORR (W)	B - Access Road	C - RORR (E)
	A - RORR (W)	10	10	10
	B - Access Road	10	10	10
	C - RORR (E)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.02	8.38	0.0	0.5	A
B-A	0.09	12.23	0.1	0.5	B
C-AB	0.12	5.07	0.3	1.8	A
C-A					
AB					
AC					

Main Results for each time segment

00:00 - 00:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	520	0.014	7	0.0	7.722	A
B-A	22	427	0.051	22	0.1	9.789	A
C-AB	55	836	0.066	54	0.1	5.064	A
C-A	352			362			
AB	26			26			
AC	285			285			

00:15 - 00:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	505	0.018	9	0.0	7.984	A
B-A	26	397	0.066	26	0.1	10.667	B
C-AB	74	875	0.085	74	0.2	4.949	A
C-A	412			412			
AB	31			31			
AC	341			341			

00:30 - 00:45							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	484	0.023	11	0.0	8.377	A
B-A	32	356	0.090	32	0.1	12.227	B
C-AB	109	929	0.117	108	0.3	4.830	A
C-A	487			487			
AB	39			39			
AC	417			417			

00:45 - 01:00							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	483	0.023	11	0.0	8.381	A
B-A	32	356	0.090	32	0.1	12.234	B
C-AB	109	929	0.117	109	0.3	4.833	A
C-A	487			487			
AB	39			39			
AC	417			417			

01:00 - 01:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	505	0.018	9	0.0	7.991	A
B-A	26	397	0.066	26	0.1	10.682	B
C-AB	75	875	0.085	75	0.2	4.959	A
C-A	412			412			
A-B	31			31			
A-C	341			341			

01:15 - 01:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	520	0.014	9	0.0	7.731	A
B-A	22	427	0.051	22	0.1	9.778	A
C-AB	55	837	0.066	55	0.1	5.071	A
C-A	352			352			
A-B	26			26			
A-C	285			285			

Queue Variation Results for each time segment

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.08	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.28	0.50	0.52			N/A	N/A
B-A	0.08	0.03	0.28	0.50	0.53			N/A	N/A
C-AB	0.18	0.03	0.28	0.50	0.52			N/A	N/A

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.11	0.03	0.29	0.52	0.54			N/A	N/A
C-AB	0.30	0.03	0.30	0.55	1.56			N/A	N/A

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.11	0.03	0.28	0.50	0.52			N/A	N/A
C-AB	0.30	0.00	0.00	0.30	0.30			N/A	N/A

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

Junctions 9									
PICADY 9 - Priority Intersection Module									
Version: 9.5.1.7462									
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The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution									

Filename: (new file)
Path:
Report generation date: 16/05/2022 18:20:40

»J2 DS - 2039, AM
»J2 DS - 2039, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
J2 DS - 2039										
Stream B-C	D1	0.1	7.27	0.09	A	0.0	8.36	0.02	A	
Stream B-A		0.1	10.30	0.09	B	0.1	12.08	0.09	B	
Stream C-AB		0.0	5.56	0.02	A	0.3	5.12	0.12	A	

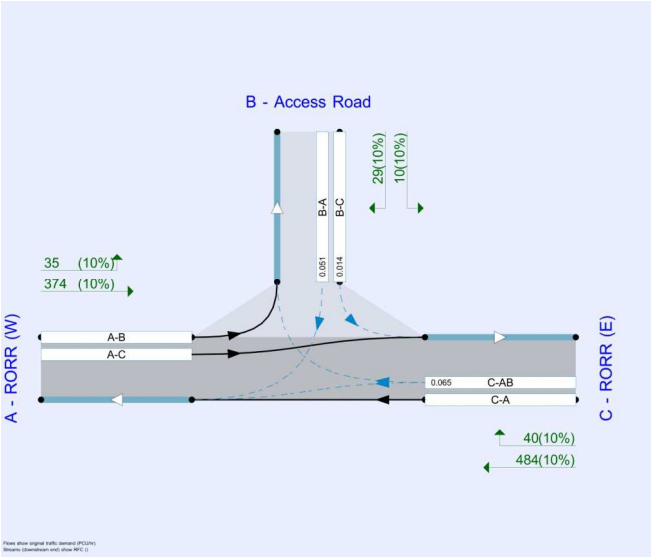
There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.
Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description	
Title	
Location	
Site number	
Date	09/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC0 Joshua.Lai
Description	

Units

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



Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2039	AM	ONE HOUR	00:00	01:30	15
D2	2039	PM	ONE HOUR	00:00	01:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	J2 DS	100.000

J2 DS - 2039, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Access Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.30	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	RORR (W)		Major
B	Access Road		Minor
C	RORR (E)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - RORR (E)	6.00			150.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Access Road	One lane plus flare	6.50	3.00	3.00	3.00	3.00	✓	1.00	100	100

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B (PCU/hr)	Slope for A-C (PCU/hr)	Slope for C-A (PCU/hr)	Slope for C-B (PCU/hr)
B-A	547	0.100	0.262	0.158	0.360
B-C	697	0.107	0.270	-	-
C-B	661	0.256	0.256	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (H:M)	Finish time (H:M)	Time segment length (min)
D1	2039	AM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - RORR (W)		✓	292	100.000
B - Access Road		✓	65	100.000
C - RORR (E)		✓	246	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To			
		A - RORR (W)	B - Access Road	C - RORR (E)	
	A - RORR (W)	0	20	272	
	B - Access Road	36	0	49	
	C - RORR (E)	236	10	0	

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - RORR (W)	B - Access Road	C - RORR (E)	
	A - RORR (W)	10	10	10	
	B - Access Road	10	10	10	
	C - RORR (E)	10	10	10	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.09	7.27	0.1	0.5	A
B-A	0.09	10.30	0.1	0.5	B
C-AB	0.02	5.56	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	631	0.058	37	0.1	6.663	A
B-A	27	463	0.059	27	0.1	9.077	A
C-AB	10	723	0.014	10	0.0	5.556	A
C-A	175			175			
A-B	15			15			
A-C	205			205			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	617	0.071	44	0.1	6.907	A
B-A	32	447	0.072	32	0.1	9.557	A
C-AB	13	736	0.017	13	0.0	5.475	A
C-A	208			208			
A-B	18			18			
A-C	245			245			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	54	599	0.090	54	0.1	7.268	A
B-A	40	424	0.094	40	0.1	10.302	B
C-AB	17	755	0.022	17	0.0	5.367	A
C-A	254			254			
A-B	22			22			
A-C	299			299			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	54	599	0.090	54	0.1	7.269	A
B-A	40	424	0.094	40	0.1	10.305	B
C-AB	17	755	0.022	17	0.0	5.367	A
C-A	254			254			
A-B	22			22			
A-C	299			299			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	617	0.071	44	0.1	6.910	A
B-A	32	447	0.072	32	0.1	9.563	A
C-AB	13	736	0.017	13	0.0	5.475	A
C-A	208			208			
A-B	18			18			
A-C	245			245			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	630	0.059	37	0.1	6.674	A
B-A	27	463	0.059	27	0.1	9.085	A
C-AB	10	723	0.014	10	0.0	5.557	A
C-A	175			175			
A-B	15			15			
A-C	205			205			

Queue Variation Results for each time segment

00:00 - 00:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

00:15 - 00:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.08	0.03	0.28	0.50	0.53			N/A	N/A
B-A	0.09	0.03	0.28	0.51	0.53			N/A	N/A
C-AB	0.02	0.02	0.28	0.50	0.52			N/A	N/A

00:30 - 00:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.11	0.03	0.29	0.51	0.54			N/A	N/A
B-A	0.11	0.03	0.29	0.51	0.54			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

00:45 - 01:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.11	0.03	0.28	0.50	0.52			N/A	N/A
B-A	0.11	0.03	0.28	0.50	0.52			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

01:00 - 01:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.09	0.00	0.00	0.09	0.09			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

01:15 - 01:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

J2 DS - 2039, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Access Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untlBed	T-Junction	Two-way		0.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2039	PM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - RORR (W)		✓	409	100.000
B - Access Road		✓	39	100.000
C - RORR (E)		✓	524	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - RORR (W)	B - Access Road	C - RORR (E)	
A - RORR (W)	0	35	374	
B - Access Road	29	0	10	
C - RORR (E)	484	40	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - RORR (W)	B - Access Road	C - RORR (E)	
A - RORR (W)	10	10	10	
B - Access Road	10	10	10	
C - RORR (E)	10	10	10	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.02	8.36	0.0	0.5	A
B-A	0.09	12.06	0.1	0.5	B
C-AB	0.12	5.12	0.3	1.5	A
C-A					
AB					
AC					

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	521	0.014	7	0.0	7.709	A
B-A	22	430	0.051	22	0.1	9.684	A
C-AB	54	829	0.065	53	0.1	5.109	A
C-A	341			341			
AB	26			26			
AC	282			282			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	506	0.018	9	0.0	7.966	A
B-A	26	401	0.065	26	0.1	10.563	B
C-AB	73	865	0.084	72	0.2	4.968	A
C-A	398			398			
AB	31			31			
AC	336			336			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	485	0.023	11	0.0	8.353	A
B-A	32	360	0.089	32	0.1	12.051	B
C-AB	106	917	0.115	105	0.3	4.680	A
C-A	471			471			
AB	39			39			
AC	412			412			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	485	0.023	11	0.0	8.356	A
B-A	32	360	0.089	32	0.1	12.062	B
C-AB	106	917	0.115	106	0.3	4.687	A
C-A	471			471			
AB	39			39			
AC	412			412			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	506	0.018	9	0.0	7.973	A
B-A	26	401	0.065	26	0.1	10.574	B
C-AB	73	865	0.084	73	0.2	5.008	A
C-A	398			398			
AB	31			31			
AC	336			336			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	521	0.014	9	0.0	7.718	A
B-A	22	430	0.051	22	0.1	9.701	A
C-AB	54	829	0.065	54	0.1	5.118	A
C-A	340			340			
AB	26			26			
AC	282			282			

Queue Variation Results for each time segment

00:00 - 00:15

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

00:15 - 00:30

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.28	0.50	0.52			N/A	N/A
B-A	0.08	0.03	0.28	0.50	0.53			N/A	N/A
C-AB	0.17	0.03	0.28	0.50	0.52			N/A	N/A

00:30 - 00:45

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.11	0.03	0.29	0.52	0.54			N/A	N/A
C-AB	0.29	0.03	0.30	0.54	1.54			N/A	N/A

00:45 - 01:00

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.11	0.03	0.28	0.50	0.52			N/A	N/A
C-AB	0.29	0.00	0.00	0.29	0.29			N/A	N/A

01:00 - 01:15

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: (new file)
Path:
Report generation date: 16/04/2022 15:32:30

»J3 DM - 2039, AM
»J3 DM - 2039, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS
J3 DM - 2039												
Stream B-C	D1	0.1	0.5	9.72	0.12	A	D2	1.0	5.2	29.12	0.50	D
Stream B-AD		1.0	3.9	15.71	0.49	C		3.4	16.2	45.91	0.77	E
Stream A-B-C-D		0.0	0.5	5.74	0.03	A		0.3	1.5	4.57	0.11	A
Stream D-A		0.1	0.5	13.86	0.06	B		0.1	0.5	11.86	0.06	B
Stream D-B-C		2.1	10.3	24.90	0.67	C		1.6	6.6	24.81	0.60	C
Stream C-ABD		0.0	0.5	7.89	0.02	A		0.0	0.5	9.73	0.01	A

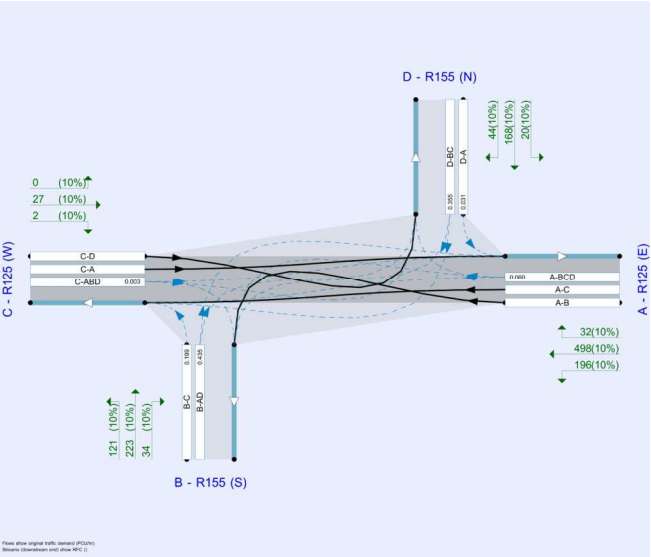
There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.
Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description	
Title	
Location	
Site number	
Date	07/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSOJoshua.tai
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	per/hour	s	-Min	per/Min



Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2039	AM	ONE HOUR	00:00	01:30	15
D2	2039	PM	ONE HOUR	00:00	01:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	J3 DM	100.000

J3 DM - 2039, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way		12.95	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	R125 (E)		Major
B	R155 (S)		Minor
C	R125 (W)		Major
D	R155 (N)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - R125 (E)	7.00			70.0	✓	0.00
C - R125 (W)	6.00			100.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - R155 (S)	One line plus flare	10.00	7.50	5.40	3.50	3.00	✓	2.00	100	50
D - R155 (N)	One line plus flare	8.00	5.00	4.00	4.00	3.00	✓	1.00	15	80

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
A-D	615	-	-	0.229	0.229	0.229	-	0.229	-	-	-
B-AD	598	6.109	0.275	-	-	-	0.173	0.384	0.173	0.109	0.275
B-C	644	0.099	0.250	-	-	-	-	-	0.099	0.250	-
C-B	632	0.243	0.245	-	-	-	-	-	0.243	0.245	-
D-A	569	-	-	-	0.211	0.083	0.211	-	0.083	-	-
D-BC	571	0.158	0.158	0.359	0.251	0.099	0.251	-	0.099	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2039	AM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R125 (E)		✓	271	100.000
B - R155 (S)		✓	266	100.000
C - R125 (W)		✓	47	100.000
D - R155 (N)		✓	304	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - R125 (E)	B - R155 (S)	C - R125 (W)	D - R155 (N)
From	A - R125 (E)	0	113	145	13
	B - R155 (S)	48	0	49	169
	C - R125 (W)	34	9	0	4
	D - R155 (N)	13	277	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - R125 (E)	B - R155 (S)	C - R125 (W)	D - R155 (N)
From	A - R125 (E)	10	10	10	10
	B - R155 (S)	10	10	10	10
	C - R125 (W)	10	10	10	10
	D - R155 (N)	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.12	9.72	0.1	0.5	A
B-AD	0.49	15.71	1.0	3.9	C
A-B-C-D	0.03	5.74	0.0	0.5	A
AB					
AC					
D-A	0.05	13.86	0.1	0.5	B
D-BC	0.67	24.90	2.1	10.3	C
C-ABD	0.02	7.89	0.0	0.5	A
C-D					
C-A					

Main Results for each time segment

00:00 - 00:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	535	0.069	37	0.1	7.941	A
B-AD	163	526	0.311	161	0.5	10.816	B
A&B&C&D	14	703	0.019	13	0.0	5.739	A
A-B	83			83			
A-C	107			107			
D-A	10	446	0.022	10	0.0	9.067	A
D-B&C	219	508	0.431	216	0.9	13.402	B
C-ABD	7	551	0.013	7	0.0	7.282	A
C-D	3			3			
C-A	25			25			

00:15 - 00:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	507	0.087	44	0.1	8.543	A
B-AD	195	511	0.382	184	0.7	12.474	B
A&B&C&D	17	721	0.024	17	0.0	5.623	A
A-B	99			99			
A-C	127			127			
D-A	12	396	0.030	12	0.0	10.307	B
D-B&C	262	496	0.528	260	1.2	16.697	C
C-ABD	9	535	0.016	9	0.0	7.526	A
C-D	4			4			
C-A	30			30			

00:30 - 00:45							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	54	463	0.117	54	0.1	9.875	A
B-AD	239	491	0.486	239	1.0	15.524	C
A&B&C&D	23	747	0.031	23	0.0	5.468	A
A-B	121			121			
A-C	155			155			
D-A	14	306	0.047	14	0.1	13.593	B
D-B&C	320	479	0.670	317	2.1	23.955	C
C-ABD	11	513	0.021	11	0.0	7.879	A
C-D	4			4			
C-A	37			37			

00:45 - 01:00							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	54	461	0.117	54	0.1	9.719	A
B-AD	239	491	0.487	239	1.0	15.708	C
A&B&C&D	23	747	0.031	23	0.0	5.470	A
A-B	121			121			
A-C	155			155			
D-A	14	300	0.048	14	0.1	13.855	B
D-B&C	320	476	0.670	320	2.1	24.903	C
C-ABD	11	512	0.021	11	0.0	7.885	A
C-D	4			4			
C-A	37			37			

01:00 - 01:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	506	0.087	44	0.1	8.586	A
B-AD	195	510	0.382	196	0.7	12.663	B
A&B&C&D	17	721	0.024	17	0.0	5.627	A
A-B	99			99			
A-C	127			127			
D-A	12	380	0.030	12	0.0	10.474	B
D-B&C	262	495	0.528	265	1.3	17.443	C
C-ABD	9	533	0.016	9	0.0	7.546	A
C-D	4			4			
C-A	30			30			

01:15 - 01:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	533	0.069	37	0.1	7.984	A
B-AD	163	525	0.311	164	0.5	10.996	B
A&B&C&D	14	703	0.019	14	0.0	5.744	A
A-B	83			83			
A-C	107			107			
D-A	19	442	0.022	10	0.0	9.168	A
D-B&C	219	508	0.431	221	0.9	13.876	B
C-ABD	7	550	0.013	7	0.0	7.299	A
C-D	3			3			
C-A	25			25			

Queue Variation Results for each time segment

00:00 - 00:15									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.08	0.00	0.00	0.08	0.08			N/A	N/A
B-AD	0.49	0.00	0.00	0.49	0.49			N/A	N/A
A&B&C&D	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-B&C	0.81	0.61	1.10	1.54	1.60			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

00:15 - 00:30									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.10	0.03	0.28	0.50	0.52			N/A	N/A
B-AD	0.66	0.61	1.10	1.54	1.60			N/A	N/A
A&B&C&D	0.03	0.03	0.28	0.50	0.53			N/A	N/A
D-A	0.03	0.03	0.28	0.50	0.53			N/A	N/A
D-B&C	1.19	0.17	1.14	1.78	2.08			N/A	N/A
C-ABD	0.02	0.02	0.28	0.50	0.53			N/A	N/A

00:30 - 00:45									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.14	0.03	0.29	0.51	0.54			N/A	N/A
B-AD	1.01	0.03	0.29	1.01	1.31			N/A	N/A
A&B&C&D	0.04	0.00	0.00	0.04	0.04			N/A	N/A
D-A	0.05	0.03	0.28	0.50	0.53			N/A	N/A
D-B&C	2.07	0.03	0.34	3.05	10.34			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

00:45 - 01:00									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.14	0.03	0.28	0.50	0.52			N/A	N/A
B-AD	1.03	0.03	0.31	1.07	3.94			N/A	N/A
A&B&C&D	0.04	0.00	0.00	0.04	0.04			N/A	N/A
D-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
D-B&C	2.15	0.03	0.32	2.15	8.58			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

01:00 - 01:15									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.11	0.00	0.00	0.11	0.11			N/A	N/A
B-AD	0.70	0.07	0.76	1.49	1.58			N/A	N/A
A&B&C&D	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-B&C	1.28	0.06	0.61	2.95	4.32			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

01:15 - 01:30									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.08	0.00	0.00	0.08	0.08			N/A	N/A
B-AD	0.51	0.04	0.43	1.36	1.51			N/A	N/A
A&B&C&D	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-B&C	0.86	0.04	0.44	1.96	3.13			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

J3 DM - 2039, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	united	Right-Left Stagger	Two-way		15.58	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2039	PM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R125 (E)		✓	726	100.000
B - R155 (S)		✓	378	100.000
C - R125 (W)		✓	29	100.000
D - R155 (N)		✓	232	100.000

Origin-Destination Data

Demand (PCU/hr)		To			
From		A - R125 (E)	B - R155 (S)	C - R125 (W)	D - R155 (N)
	A - R125 (E)	0	196	498	32
	B - R155 (S)	34	0	121	223
	C - R125 (W)	27	2	0	0
	D - R155 (N)	20	168	44	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - R125 (E)	B - R155 (S)	C - R125 (W)	D - R155 (N)
	10	10	10	10
	10	10	10	10
	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.50	25.12	1.0	5.2	D
B-AD	0.77	45.91	3.4	18.2	E
A&B&C&D	0.11	4.57	0.3	1.5	A
A-B					
A-C					
D-A	0.06	11.86	0.1	0.5	B
D-B-C	0.60	24.81	1.6	6.8	C
C-ABD	0.01	9.73	0.0	0.5	A
C-D					
C-A					

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	91	457	0.199	90	0.3	10.769	B
B-AD	193	445	0.435	190	0.8	15.376	C
A&B&C&D	55	924	0.060	55	0.1	4.556	A
A-B	139			139			
A-C	352			352			
D-A	15	480	0.031	15	0.0	8.504	A
D-B-C	160	450	0.355	157	0.6	13.442	B
C-ABD	2	480	0.003	2	0.0	8.277	A
C-D	0			0			
C-A	20			20			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	109	357	0.274	108	0.4	13.693	B
B-AD	231	414	0.558	229	1.3	21.171	C
A&B&C&D	79	987	0.080	78	0.2	4.360	A
A-B	162			162			
A-C	412			412			
D-A	18	440	0.041	18	0.0	9.379	A
D-B-C	191	426	0.448	189	0.9	16.675	C
C-ABD	2	450	0.004	2	0.0	8.831	A
C-D	0			0			
C-A	24			24			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	133	280	0.475	131	0.9	26.180	D
B-AD	283	367	0.771	276	3.1	40.496	E
A&B&C&D	122	1076	0.113	122	0.3	4.152	A
A-B	191			191			
A-C	486			486			
D-A	22	361	0.061	22	0.1	11.671	B
D-B-C	233	393	0.594	231	1.5	23.990	C
C-ABD	2	410	0.006	2	0.0	9.713	A
C-D	0			0			
C-A	30			30			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	133	268	0.497	133	1.0	29.116	D
B-AD	283	366	0.774	282	3.4	45.911	E
A&B&C&D	123	1076	0.114	123	0.3	4.161	A
A-B	191			191			
A-C	486			486			
D-A	22	356	0.062	22	0.1	11.860	B
D-B-C	233	392	0.595	233	1.6	24.812	C
C-ABD	2	409	0.006	2	0.0	9.730	A
C-D	0			0			
C-A	30			30			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	109	367	0.281	111	0.4	14.486	B
B-AD	231	413	0.560	229	1.5	23.631	C
A&B&C&D	79	986	0.080	79	0.2	4.374	A
A-B	162			162			
A-C	412			412			
D-A	18	435	0.041	18	0.0	9.509	A
D-B-C	191	424	0.449	193	0.9	17.299	C
C-ABD	2	449	0.004	2	0.0	8.852	A
C-D	0			0			
C-A	24			24			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	91	452	0.201	92	0.3	10.988	B
B-AD	193	444	0.436	196	0.9	16.111	C
A&B&C&D	56	923	0.060	56	0.1	4.568	A
A-B	139			139			
A-C	352			352			
D-A	15	477	0.032	15	0.0	8.578	A
D-B-C	160	449	0.356	161	0.6	13.813	B
C-ABD	2	479	0.003	2	0.0	8.294	A
C-D	0			0			
C-A	20			20			

Queue Variation Results for each time segment

00:00 - 00:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.27	0.00	0.00	0.27		N/A		N/A	N/A
B-AD	0.82	0.61	1.10	1.54	1.60			N/A	N/A
A&B&C&D	0.11	0.00	0.00	0.11	0.11			N/A	N/A
D-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
D-B-C	0.59	0.59	1.10	1.54	1.60			N/A	N/A
C-ABD	0.00	0.00	0.00	0.00	0.00			N/A	N/A

00:15 - 00:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B-AD	1.32	0.12	1.17	2.16	2.91			N/A	N/A
A&B&C&D	0.16	0.03	0.28	0.50	0.53			N/A	N/A
D-A	0.05	0.03	0.28	0.50	0.53			N/A	N/A
D-B-C	0.86	0.23	1.03	1.54	1.60			N/A	N/A
C-ABD	0.00	0.00	0.28	0.50	0.52			N/A	N/A

00:30 - 00:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.95	0.03	0.30	0.95	1.63			N/A	N/A
B-AD	3.11	0.04	0.44	8.38	15.91			N/A	N/A
A&B&C&D	0.28	0.03	0.30	0.55	1.53			N/A	N/A
D-A	0.07	0.03	0.28	0.51	0.54			N/A	N/A
D-B-C	1.51	0.03	0.32	1.64	6.43			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

00:45 - 01:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.04	0.04	0.36	2.20	5.15			N/A	N/A
B-AD	3.39	0.04	0.37	7.08	18.22			N/A	N/A
A&B&C&D	0.28	0.00	0.00	0.28	0.28			N/A	N/A
D-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
D-B-C	1.58	0.03	0.32	1.56	6.80			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

01:00 - 01:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.44	0.04	0.37	1.22	1.44			N/A	N/A
B-AD	1.47	0.05	0.46	3.81	6.34			N/A	N/A
A&B&C&D	0.17	0.00	0.00	0.17	0.17			N/A	N/A
D-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
D-B-C	0.93	0.06	0.68	1.76	2.31			N/A	N/A
C-ABD	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: (new file)
Path:
Report generation date: 16/05/2022 21:45:00

»J3 DS - 2039, AM
»J3 DS - 2039, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS
J3 DS - 2039												
Stream B-C	D1	0.1	0.5	9.24	0.10	A	D2	0.8	4.1	24.24	0.44	C
Stream B-AD		0.9	3.7	14.65	0.47	B		2.9	15.1	39.33	0.74	E
Stream A-B-C		0.0	0.5	5.74	0.03	A		0.3	1.5	4.57	0.11	A
Stream D-A		0.1	0.5	13.76	0.06	B		0.1	0.5	11.73	0.06	B
Stream D-B-C		2.1	10.2	24.71	0.67	C		1.5	6.4	24.45	0.59	C
Stream C-ABD		0.0	0.5	7.87	0.02	A		0.0	0.5	9.69	0.00	A

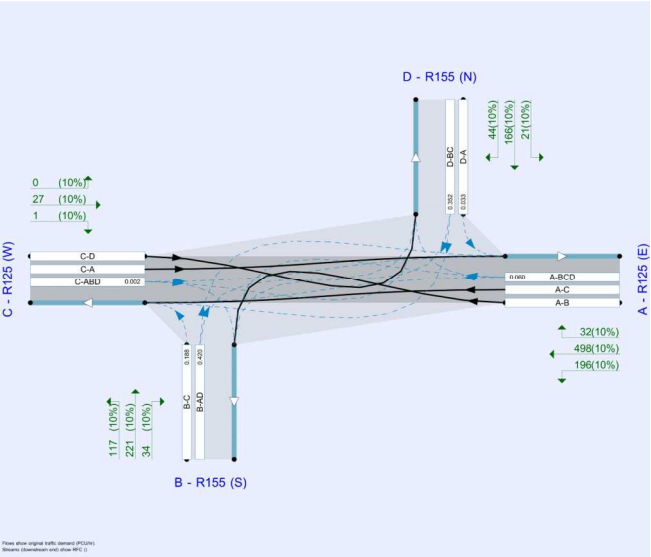
There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.
Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description	
Title	
Location	
Site number	
Date	07/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSOJoshua.tai
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	per/hour	s	-Min	per/Min



Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2039	AM	ONE HOUR	00:00	01:30	15
D2	2039	PM	ONE HOUR	00:00	01:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	J3 DS	100.000

J3 DS - 2039, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way		12.61	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	R125 (E)		Major
B	R155 (S)		Minor
C	R125 (W)		Major
D	R155 (N)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - R125 (E)	7.00			70.0	✓	0.00
C - R125 (W)	6.00			100.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - R155 (S)	One line plus flare	10.00	7.75	5.40	3.50	3.25	✓	2.00	120	60
D - R155 (N)	One line plus flare	8.00	5.00	4.00	4.00	3.00	✓	1.00	15	60

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
A-D	615	-	-	0.229	0.229	0.229	-	0.229	-	-	-
B-AD	615	6.112	0.283	-	-	-	0.178	0.405	0.178	0.112	0.283
B-C	654	6.100	0.253	-	-	-	-	-	0.100	0.253	-
C-B	632	6.243	0.245	-	-	-	-	-	0.245	0.245	-
D-A	569	-	-	-	0.211	0.083	0.211	-	0.083	-	-
D-BC	571	6.158	0.158	0.359	0.251	0.099	0.251	-	0.099	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2039	AM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R125 (E)		✓	271	100.000
B - R155 (S)		✓	256	100.000
C - R125 (W)		✓	46	100.000
D - R155 (N)		✓	303	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
From		A - R125 (E)	B - R155 (S)	C - R125 (W)	D - R155 (N)
	A - R125 (E)	0	113	145	13
	B - R155 (S)	49	0	42	165
	C - R125 (W)	34	8	0	4
	D - R155 (N)	13	276	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		A - R125 (E)	B - R155 (S)	C - R125 (W)	D - R155 (N)
	A - R125 (E)	10	10	10	10
	B - R155 (S)	10	10	10	10
	C - R125 (W)	10	10	10	10
	D - R155 (N)	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.10	9.24	0.1	0.5	A
B-AD	0.47	14.65	0.9	3.7	B
A-B-C-D	0.03	5.74	0.0	0.5	A
AB					
AC					
D-A	0.05	13.76	0.1	0.5	B
D-BC	0.67	24.71	2.1	10.2	C
C-ABD	0.02	7.87	0.0	0.5	A
C-D					
C-A					

Main Results for each time segment

00:00 - 00:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32	545	0.058	31	0.1	7.701	A
B-AD	161	541	0.298	159	0.5	10.321	B
A&B&C&D	14	704	0.019	13	0.0	5.735	A
A-B	83			83			
A-C	107			107			
D-A	10	447	0.022	10	0.0	9.052	A
D-B&C	218	508	0.429	215	0.8	13.365	B
C-ABD	6	551	0.012	6	0.0	7.289	A
C-D	3			3			
C-A	25			25			

00:15 - 00:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	38	519	0.073	38	0.1	8.233	A
B-AD	192	526	0.366	182	0.6	11.813	B
A&B&C&D	17	722	0.024	17	0.0	5.618	A
A-B	99			99			
A-C	127			127			
D-A	12	397	0.029	12	0.0	10.277	B
D-B&C	261	496	0.526	259	1.2	16.627	C
C-ABD	8	535	0.014	8	0.0	7.509	A
C-D	4			4			
C-A	30			30			

00:30 - 00:45							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	45	476	0.097	45	0.1	9.207	A
B-AD	236	506	0.468	234	0.9	14.510	B
A&B&C&D	23	748	0.031	23	0.0	5.463	A
A-B	121			121			
A-C	155			155			
D-A	14	307	0.047	14	0.1	13.505	B
D-B&C	319	479	0.667	316	2.1	23.791	C
C-ABD	10	514	0.019	10	0.0	7.856	A
C-D	4			4			
C-A	37			37			

00:45 - 01:00							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	46	475	0.097	46	0.1	9.240	A
B-AD	236	506	0.468	236	0.9	14.651	B
A&B&C&D	23	748	0.031	23	0.0	5.467	A
A-B	121			121			
A-C	155			155			
D-A	14	302	0.047	14	0.1	13.758	B
D-B&C	319	479	0.667	319	2.1	24.708	C
C-ABD	10	513	0.019	10	0.0	7.870	A
C-D	4			4			
C-A	37			37			

01:00 - 01:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	38	517	0.073	38	0.1	8.268	A
B-AD	192	526	0.366	194	0.6	11.967	B
A&B&C&D	17	722	0.024	17	0.0	5.622	A
A-B	99			99			
A-C	127			127			
D-A	12	381	0.030	12	0.0	10.439	B
D-B&C	261	496	0.526	264	1.3	17.356	C
C-ABD	8	534	0.014	8	0.0	7.531	A
C-D	4			4			
C-A	30			30			

01:15 - 01:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32	544	0.058	32	0.1	7.738	A
B-AD	161	541	0.298	162	0.5	10.477	B
A&B&C&D	14	703	0.019	14	0.0	5.742	A
A-B	83			83			
A-C	107			107			
D-A	10	443	0.022	10	0.0	9.150	A
D-B&C	218	508	0.430	220	0.9	13.829	B
C-ABD	6	550	0.012	6	0.0	7.289	A
C-D	3			3			
C-A	25			25			

Queue Variation Results for each time segment

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-AD	0.46	0.00	0.00	0.46	0.46			N/A	N/A
A&B&C&D	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-B&C	0.81	0.61	1.10	1.54	1.60			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

00:00 - 00:30									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.09	0.03	0.28	0.51	0.54			N/A	N/A
B-AD	0.62	0.61	1.10	1.54	1.60			N/A	N/A
A&B&C&D	0.03	0.03	0.28	0.50	0.53			N/A	N/A
D-A	0.03	0.03	0.28	0.50	0.53			N/A	N/A
D-B&C	1.18	0.17	1.14	1.76	2.06			N/A	N/A
C-ABD	0.02	0.02	0.28	0.50	0.53			N/A	N/A

00:30 - 00:45									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.12	0.03	0.29	0.51	0.54			N/A	N/A
B-AD	0.93	0.03	0.29	0.93	0.93			N/A	N/A
A&B&C&D	0.04	0.00	0.00	0.04	0.04			N/A	N/A
D-A	0.05	0.03	0.28	0.50	0.53			N/A	N/A
D-B&C	2.05	0.03	0.34	2.96	10.16			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

00:45 - 01:00									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.12	0.03	0.28	0.50	0.52			N/A	N/A
B-AD	0.95	0.03	0.31	1.10	3.74			N/A	N/A
A&B&C&D	0.04	0.00	0.00	0.04	0.04			N/A	N/A
D-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
D-B&C	2.12	0.03	0.32	2.12	8.44			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

01:00 - 01:15									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.09	0.00	0.00	0.09	0.09			N/A	N/A
B-AD	0.65	0.07	0.73	1.47	1.56			N/A	N/A
A&B&C&D	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-B&C	1.27	0.06	0.62	2.92	4.27			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

01:15 - 01:30									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-AD	0.47	0.04	0.40	1.30	1.48			N/A	N/A
A&B&C&D	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-B&C	0.85	0.04	0.44	1.95	3.10			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

J3 DS - 2039, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	united	Right-Left Stagger	Two-way		13.77	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2039	PM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R125 (E)		✓	726	100.000
B - R155 (S)		✓	372	100.000
C - R125 (W)		✓	28	100.000
D - R155 (N)		✓	231	100.000

Origin-Destination Data

Demand (PCU/hr)		To			
From	A - R125 (E)	A - R125 (E)	B - R155 (S)	C - R125 (W)	D - R155 (N)
	0	196	498	32	
	34	0	117	221	
	27	1	0	0	
	21	165	44	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - R125 (E)	B - R155 (S)	C - R125 (W)	D - R155 (N)
	10	10	10	10
	10	10	10	10
	10	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.44	24.24	0.8	4.1	C
B-AD	0.74	39.33	2.9	15.1	E
A&B&C&D	0.11	4.57	0.3	1.5	A
A-B					
A-C					
D-A	0.06	11.73	0.1	0.5	B
D-B&C	0.59	24.45	1.5	6.4	C
C-ABD	0.00	9.69	0.0	0.5	A
C-D					
C-A					

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	88	468	0.188	87	0.3	10.358	B
B-AD	192	457	0.420	189	0.8	14.585	B
A&B&C&D	55	924	0.060	55	0.1	4.555	A
A-B	139			139			
A-C	352			352			
D-A	16	482	0.033	16	0.0	8.484	A
D-B&C	158	450	0.352	156	0.6	13.380	B
C-ABD	0.79	480	0.002	0.78	0.0	8.257	A
C-D	0			0			
C-A	20			20			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	105	411	0.258	105	0.4	12.916	B
B-AD	229	427	0.537	227	1.2	19.710	C
A&B&C&D	78	987	0.080	78	0.2	4.358	A
A-B	162			162			
A-C	412			412			
D-A	19	443	0.043	19	0.0	9.341	A
D-B&C	189	426	0.443	188	0.8	16.552	C
C-ABD	0.95	451	0.002	0.95	0.0	8.804	A
C-D	0			0			
C-A	24			24			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	129	301	0.428	127	0.8	22.579	C
B-AD	281	380	0.739	275	2.7	35.732	E
A&B&C&D	122	1077	0.113	122	0.3	4.150	A
A-B	191			191			
A-C	486			486			
D-A	23	365	0.063	23	0.1	11.560	B
D-B&C	231	393	0.588	229	1.5	23.689	C
C-ABD	1	411	0.003	1	0.0	9.671	A
C-D	0			0			
C-A	30			30			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	129	292	0.442	129	0.8	24.243	C
B-AD	281	379	0.741	280	2.9	39.334	E
A&B&C&D	123	1076	0.114	122	0.3	4.156	A
A-B	191			191			
A-C	486			486			
D-A	23	361	0.064	23	0.1	11.735	B
D-B&C	231	392	0.589	231	1.5	24.452	C
C-ABD	1	410	0.003	1	0.0	9.688	A
C-D	0			0			
C-A	30			30			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	105	403	0.261	107	0.4	13.481	B
B-AD	229	426	0.539	225	1.3	21.460	C
A&B&C&D	79	987	0.080	79	0.2	4.371	A
A-B	162			162			
A-C	412			412			
D-A	19	438	0.043	19	0.1	9.459	A
D-B&C	199	425	0.445	191	0.9	17.138	C
C-ABD	0.95	450	0.002	0.95	0.0	8.824	A
C-D	0			0			
C-A	24			24			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	88	465	0.190	88	0.3	10.545	B
B-AD	192	457	0.420	194	0.8	15.188	C
A&B&C&D	56	924	0.060	56	0.1	4.566	A
A-B	139			139			
A-C	352			352			
D-A	16	479	0.033	16	0.0	8.555	A
D-B&C	158	449	0.352	159	0.6	13.735	B
C-ABD	0.79	479	0.002	0.79	0.0	8.274	A
C-D	0			0			
C-A	20			20			

Queue Variation Results for each time segment

00:00 - 00:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.25	0.00	0.00	0.25	0.25	N/A		N/A	N/A
B-AD	0.77	0.61	1.10	1.54	1.60			N/A	N/A
A&B&C&D	0.11	0.00	0.00	0.11	0.11			N/A	N/A
D-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
D-B&C	0.58	0.58	1.10	1.54	1.60			N/A	N/A
C-ABD	0.00	0.00	0.00	0.00	0.00			N/A	N/A

00:15 - 00:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.37	0.00	0.00	0.37	0.37			N/A	N/A
B-AD	1.22	0.13	1.13	1.96	2.41			N/A	N/A
A&B&C&D	0.16	0.03	0.28	0.50	0.53			N/A	N/A
D-A	0.05	0.03	0.28	0.50	0.53			N/A	N/A
D-B&C	0.85	0.23	1.03	1.53	1.60			N/A	N/A
C-ABD	0.00	0.00	0.28	0.50	0.52			N/A	N/A

00:30 - 00:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.79	0.03	0.29	0.79	1.03			N/A	N/A
B-AD	2.72	0.04	0.40	8.78	14.34			N/A	N/A
A&B&C&D	0.28	0.03	0.30	0.55	1.53			N/A	N/A
D-A	0.07	0.03	0.29	0.51	0.54			N/A	N/A
D-B&C	1.48	0.03	0.32	1.55	6.14			N/A	N/A
C-ABD	0.00	0.00	0.00	0.00	0.00			N/A	N/A

00:45 - 01:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.84	0.04	0.35	1.80	4.07			N/A	N/A
B-AD	2.91	0.04	0.35	5.01	15.10			N/A	N/A
A&B&C&D	0.28	0.00	0.00	0.28	0.28			N/A	N/A
D-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
D-B&C	1.53	0.03	0.32	1.63	8.44			N/A	N/A
C-ABD	0.00	0.00	0.00	0.00	0.00			N/A	N/A

01:00 - 01:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.40	0.03	0.31	0.75	1.20			N/A	N/A
B-AD	1.34	0.05	0.48	3.34	5.41			N/A	N/A
A&B&C&D	0.17	0.00	0.00	0.17	0.17			N/A	N/A
D-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
D-B&C	0.91	0.06	0.68	1.70	2.18			N/A	N/A
C-ABD	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	333	578	732	0.454	331	0.9	9.850	A
2 - R155 (S)	446	29	1112	0.401	445	0.7	5.930	A
3 - Somerville	104	420	780	0.134	104	0.2	5.856	A
4 - Unknown Road	522	297	735	0.710	518	2.5	17.864	C

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	407	694	673	0.605	404	1.6	14.588	B
2 - R155 (S)	546	35	1109	0.492	545	1.1	7.004	A
3 - Somerville	128	514	731	0.175	127	0.2	6.561	A
4 - Unknown Road	640	364	703	0.909	620	7.4	40.474	E

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	407	709	668	0.612	407	1.7	15.287	C
2 - R155 (S)	546	35	1109	0.493	546	1.1	7.036	A
3 - Somerville	128	515	730	0.175	128	0.2	6.573	A
4 - Unknown Road	640	364	703	0.910	635	8.6	51.820	F

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	333	605	719	0.463	336	1.0	10.412	B
2 - R155 (S)	446	29	1112	0.401	447	0.7	5.870	A
3 - Somerville	104	422	779	0.134	105	0.2	5.872	A
4 - Unknown Road	522	298	735	0.711	545	2.9	22.967	C

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	279	493	776	0.359	280	0.6	8.011	A
2 - R155 (S)	373	24	1115	0.335	374	0.6	5.355	A
3 - Somerville	87	353	815	0.107	87	0.1	5.443	A
4 - Unknown Road	437	250	758	0.577	443	1.5	12.771	B

Queue Variation Results for each time segment

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.60	0.60	1.10	1.54	1.80			N/A	N/A
2 - R155 (S)	0.55	0.00	0.00	0.55	0.55			N/A	N/A
3 - Somerville	0.13	0.00	0.00	0.13	0.13			N/A	N/A
4 - Unknown Road	1.45	0.62	1.29	1.77	1.99			N/A	N/A

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.90	0.13	0.98	1.22	1.22			N/A	N/A
2 - R155 (S)	0.73	0.16	0.99	1.52	1.58			N/A	N/A
3 - Somerville	0.17	0.00	0.00	0.17	0.17			N/A	N/A
4 - Unknown Road	2.53	0.08	1.36	6.15	8.73			N/A	N/A

J4 DM - 2039, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	55.80	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2039	PM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - R155 (E)		✓	356	100.000
2 - R155 (S)		✓	976	100.000
3 - Somerville		✓	78	100.000
4 - Unknown Road		✓	248	100.000

Origin-Destination Data

Demand (PCU/hr)		To			
From		1 - R155 (E)	2 - R155 (S)	3 - Somerville	4 - Unknown Road
1 - R155 (E)		0	269	48	39
2 - R155 (S)		406	3	82	485
3 - Somerville		28	31	0	19
4 - Unknown Road		20	211	17	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - R155 (E)	2 - R155 (S)	3 - Somerville	4 - Unknown Road
1 - R155 (E)		10	10	10	10
2 - R155 (S)		10	10	10	10
3 - Somerville		10	10	10	10
4 - Unknown Road		10	10	10	10

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	1.52	0.03	0.31	1.52	4.44			N/A	N/A
2 - R155 (S)	1.05	0.03	0.28	1.05	1.05			N/A	N/A
3 - Somerville	0.23	0.03	0.28	0.51	0.53			N/A	N/A
4 - Unknown Road	7.38	0.08	1.18	21.04	32.93			N/A	N/A

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	1.69	0.03	0.31	1.69	5.37			N/A	N/A
2 - R155 (S)	1.06	0.03	0.30	1.06	2.08			N/A	N/A
3 - Somerville	0.23	0.03	0.29	0.52	0.55			N/A	N/A
4 - Unknown Road	6.57	0.05	0.52	24.24	44.77			N/A	N/A

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.97	0.08	0.88	1.62	2.05			N/A	N/A
2 - R155 (S)	0.74	0.18	1.00	1.52	1.59			N/A	N/A
3 - Somerville	0.17	0.00	0.00	0.17	0.17			N/A	N/A
4 - Unknown Road	2.90	0.04	0.45	7.88	14.57			N/A	N/A

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.62	0.05	0.46	1.58	1.60			N/A	N/A
2 - R155 (S)	0.56	0.05	0.53	1.42	1.54			N/A	N/A
3 - Somerville	0.13	0.00	0.00	0.13	0.13			N/A	N/A
4 - Unknown Road	1.55	0.03	0.35	2.85	7.97			N/A	N/A

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
1 - R155 (E)	0.45	8.11	0.9	3.1	A
2 - R155 (S)	1.01	68.27	26.4	67.0	F
3 - Somerville	0.18	10.14	0.2	0.8	B
4 - Unknown Road	0.43	10.87	0.8	3.4	B

Main Results for each time segment

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	268	196	928	0.289	266	0.4	5.972	A
2 - R155 (S)	735	78	1086	0.677	726	2.2	10.752	B
3 - Somerville	59	694	636	0.092	58	0.1	6.850	A
4 - Unknown Road	187	348	711	0.263	185	0.4	7.515	A

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	320	235	908	0.353	319	0.6	6.726	A
2 - R155 (S)	877	93	1078	0.814	869	4.4	18.224	C
3 - Somerville	70	831	564	0.124	70	0.2	8.010	A
4 - Unknown Road	223	417	678	0.329	222	0.5	8.683	A

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	392	287	881	0.445	391	0.9	8.063	A
2 - R155 (S)	1075	114	1066	1.008	1018	18.4	53.276	F
3 - Somerville	86	976	488	0.176	86	0.2	9.839	A
4 - Unknown Road	273	492	642	0.425	272	0.8	10.568	B

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	392	288	880	0.445	392	0.9	8.107	A
2 - R155 (S)	1075	114	1066	1.008	1043	26.4	88.268	F
3 - Somerville	86	998	476	0.180	86	0.2	10.138	B
4 - Unknown Road	273	502	637	0.429	273	0.8	10.870	B

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	320	237	907	0.353	321	0.6	6.777	A
2 - R155 (S)	877	94	1077	0.814	861	5.6	45.144	E
3 - Somerville	70	915	520	0.135	70	0.2	8.817	A
4 - Unknown Road	223	456	659	0.338	224	0.6	9.118	A

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	269	198	928	0.289	269	0.5	6.025	A
2 - R155 (S)	735	78	1086	0.677	747	2.4	12.122	B
3 - Somerville	59	714	626	0.094	59	0.1	6.991	A
4 - Unknown Road	187	358	705	0.264	187	0.4	7.546	A

Queue Variation Results for each time segment

00:00 - 00:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.44	0.00	0.00	0.44	0.44			N/A	N/A
2 - R155 (S)	2.22	0.64	1.53	3.24	3.98			N/A	N/A
3 - Somerville	0.11	0.00	0.00	0.11	0.11			N/A	N/A
4 - Unknown Road	0.39	0.00	0.00	0.39	0.39			N/A	N/A

00:15 - 00:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.59	0.59	1.10	1.54	1.60			N/A	N/A
2 - R155 (S)	4.37	0.09	1.28	11.48	16.74			N/A	N/A
3 - Somerville	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4 - Unknown Road	0.53	0.00	0.00	0.53	0.53			N/A	N/A

00:30 - 00:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.87	0.03	0.28	0.87	0.87			N/A	N/A
2 - R155 (S)	18.41	0.73	11.68	42.94	56.69			N/A	N/A
3 - Somerville	0.23	0.03	0.26	0.51	0.54			N/A	N/A
4 - Unknown Road	0.80	0.03	0.28	0.80	0.80			N/A	N/A

00:45 - 01:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.88	0.03	0.31	0.88	3.06			N/A	N/A
2 - R155 (S)	26.44	0.62	15.55	64.61	86.97			N/A	N/A
3 - Somerville	0.24	0.03	0.29	0.53	0.80			N/A	N/A
4 - Unknown Road	0.81	0.03	0.31	1.23	3.43			N/A	N/A

01:00 - 01:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.61	0.08	0.62	1.46	1.57			N/A	N/A
2 - R155 (S)	5.57	0.05	0.51	15.79	28.42			N/A	N/A
3 - Somerville	0.17	0.00	0.00	0.17	0.17			N/A	N/A
4 - Unknown Road	0.57	0.06	0.63	1.45	1.55			N/A	N/A

01:15 - 01:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.45	0.03	0.33	1.02	1.34			N/A	N/A
2 - R155 (S)	2.39	0.03	0.34	3.35	11.82			N/A	N/A
3 - Somerville	0.11	0.00	0.00	0.11	0.11			N/A	N/A
4 - Unknown Road	0.40	0.03	0.30	0.54	1.04			N/A	N/A

Junctions 9
ARCADY 9 - Roundabout Module
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Filename: (new file)
Path:
Report generation date: 16/04/2022 18:22:28

»J4 DS - 2039, AM
»J4 DS - 2039, PM

Summary of junction performance

	AM						PM					
	SetID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	SetID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS
J4 DS - 2039												
1 - R155 (E)	D1	1.6	5.2	15.01	0.61	C	D2	0.9	3.0	8.10	0.45	A
2 - R155 (S)		1.2	1.9	7.44	0.52	A		57.2	117.9	165.16	1.08	F
3 - Somerville		0.2	0.9	6.78	0.18	A		0.2	1.0	10.44	0.18	B
4 - Unknown Road		10.0	49.2	60.48	0.93	F		0.9	3.5	11.55	0.44	B

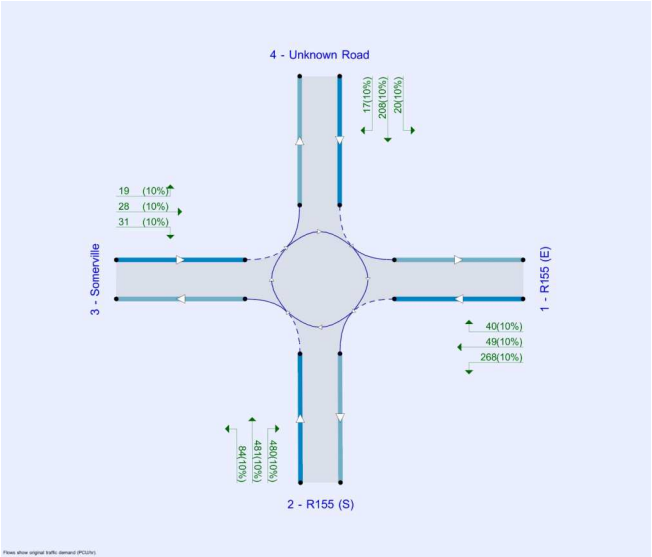
There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.
Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description	
Title	
Location	
Site number	
Date	07/09/2021
Version	
Status	(now file)
Identifier	
Client	
Job number	
Enumerator	OCSC03shua.tai
Description	

Units

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



Analysis Options				
Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓		0.85	36.00	20.00

Demand Set Summary					
ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)
D1	2039	AM	ONE HOUR	00:00	01:30
D2	2039	PM	ONE HOUR	00:00	01:30

Analysis Set Details		
ID	Name	Network flow scaling factor (%)
A1	J4 DS	100.000

J4 DS - 2039, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	united	Standard Roundabout		1, 2, 3, 4	28.46	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	R155 (E)	
2	R155 (S)	
3	Somerville	
4	Unknown Road	

Roundabout Geometry

Arm	V • Approach road half-width (m)	E • Entry width (m)	I' • Effective flare length (m)	R • Entry radius (m)	D • Inscribed circle diameter (m)	PHI • Conflict (entry) angle (deg)	Exit only
1 - R155 (E)	3.50	3.50	0.0	35.0	35.0	45.0	
2 - R155 (S)	3.00	4.00	11.4	16.0	35.0	31.0	
3 - Somerville	3.00	3.50	1.0	20.0	35.0	20.0	
4 - Unknown Road	3.00	3.00	0.0	20.0	35.0	40.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final Intercept (PCU/hr)
1 - R155 (E)	0.511	1028
2 - R155 (S)	0.536	1128
3 - Somerville	0.526	1001
4 - Unknown Road	0.479	877

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2039	AM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - R155 (E)		✓	367	100.000
2 - R155 (S)		✓	524	100.000
3 - Somerville		✓	118	100.000
4 - Unknown Road		✓	578	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
From		1 - R155 (E)	2 - R155 (S)	3 - Somerville	4 - Unknown Road
	1 - R155 (E)	1	345	15	6
	2 - R155 (S)	252	4	35	233
	3 - Somerville	31	77	0	10
	4 - Unknown Road	12	557	9	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - R155 (E)	2 - R155 (S)	3 - Somerville	4 - Unknown Road
	1 - R155 (E)	10	10	10	10
	2 - R155 (S)	10	10	10	10
	3 - Somerville	10	10	10	10
	4 - Unknown Road	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
1 - R155 (E)	0.61	15.01	1.6	5.2	C
2 - R155 (S)	0.52	7.44	1.2	1.9	A
3 - Somerville	0.18	6.78	0.2	0.9	A
4 - Unknown Road	0.93	60.48	10.0	49.2	F

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	276	481	782	0.353	274	0.6	7.760	A
2 - R155 (S)	394	23	1115	0.354	392	0.6	5.459	A
3 - Somerville	89	371	806	0.110	88	0.1	5.516	A
4 - Unknown Road	435	273	747	0.583	429	1.5	12.258	B

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	330	577	733	0.450	329	0.9	9.770	A
2 - R155 (S)	471	28	1113	0.423	470	0.8	6.156	A
3 - Somerville	106	445	767	0.138	106	0.2	5.989	A
4 - Unknown Road	520	328	721	0.721	515	2.7	18.818	C

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	404	690	675	0.598	401	1.6	14.313	B
2 - R155 (S)	577	34	1110	0.520	575	1.2	7.392	A
3 - Somerville	130	545	715	0.162	130	0.2	6.787	A
4 - Unknown Road	636	401	686	0.928	614	8.3	45.111	E

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	404	705	667	0.606	404	1.6	15.010	C
2 - R155 (S)	577	34	1109	0.520	577	1.2	7.436	A
3 - Somerville	130	546	714	0.162	130	0.2	6.781	A
4 - Unknown Road	636	402	685	0.929	630	10.0	60.481	F

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	330	609	717	0.460	333	1.0	10.385	B
2 - R155 (S)	471	28	1112	0.423	473	0.8	6.202	A
3 - Somerville	106	447	766	0.139	106	0.2	6.007	A
4 - Unknown Road	520	329	720	0.722	547	3.1	25.868	D

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	276	493	776	0.356	278	0.6	7.973	A
2 - R155 (S)	394	24	1115	0.354	395	0.6	5.510	A
3 - Somerville	89	374	804	0.110	89	0.1	5.540	A
4 - Unknown Road	435	275	746	0.584	441	1.6	13.244	B

Queue Variation Results for each time segment

00:00 - 00:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.59	0.59	1.10	1.54	1.60			N/A	N/A
2 - R155 (S)	0.60	0.60	1.10	1.54	1.60			N/A	N/A
3 - Somerville	0.14	0.00	0.00	0.14	0.14			N/A	N/A
4 - Unknown Road	1.49	0.63	1.35	1.85	2.03			N/A	N/A

00:15 - 00:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.88	0.13	0.98	1.57	1.64			N/A	N/A
2 - R155 (S)	0.80	0.16	0.99	1.52	1.59			N/A	N/A
3 - Somerville	0.18	0.00	0.00	0.18	0.18			N/A	N/A
4 - Unknown Road	2.66	0.08	1.40	6.47	9.26			N/A	N/A

J4 DS - 2039, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	united	Standard Roundabout		1, 2, 3, 4	103.95	F

Junction Network Options

Driving side	Lighting
Left	Normalunknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2039	PM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - R155 (E)		✓	357	100.000
2 - R155 (S)		✓	1048	100.000
3 - Somerville		✓	78	100.000
4 - Unknown Road		✓	245	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
From		1 - R155 (E)	2 - R155 (S)	3 - Somerville	4 - Unknown Road
	1 - R155 (E)	0	256	49	40
	2 - R155 (S)	460	3	84	481
	3 - Somerville	28	31	0	19
	4 - Unknown Road	20	208	17	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - R155 (E)	2 - R155 (S)	3 - Somerville	4 - Unknown Road
	1 - R155 (E)	10	10	10	10
	2 - R155 (S)	10	10	10	10
	3 - Somerville	10	10	10	10
	4 - Unknown Road	10	10	10	10

7

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
1 - R155 (E)	0.45	8.10	0.9	3.0	A
2 - R155 (S)	1.08	165.16	57.2	117.9	F
3 - Somerville	0.18	16.44	0.2	1.0	B
4 - Unknown Road	0.44	11.55	0.9	3.5	B

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	269	193	929	0.289	267	0.4	5.968	A
2 - R155 (S)	789	79	1085	0.727	778	2.8	12.474	B
3 - Somerville	59	745	609	0.096	58	0.1	7.183	A
4 - Unknown Road	184	403	685	0.269	183	0.4	7.866	A

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	321	232	909	0.353	320	0.6	6.720	A
2 - R155 (S)	942	95	1077	0.875	928	6.4	24.453	C
3 - Somerville	70	889	533	0.131	70	0.2	8.540	A
4 - Unknown Road	220	480	647	0.340	220	0.6	9.243	A

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	393	284	883	0.445	392	0.9	8.051	A
2 - R155 (S)	1154	116	1065	1.083	1044	33.7	82.879	F
3 - Somerville	86	1005	473	0.182	86	0.2	10.217	B
4 - Unknown Road	270	546	616	0.438	269	0.8	11.362	B

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	393	285	882	0.446	393	0.9	8.096	A
2 - R155 (S)	1154	117	1065	1.083	1060	57.2	165.164	F
3 - Somerville	86	1019	465	0.185	86	0.2	10.437	B
4 - Unknown Road	270	553	612	0.440	270	0.9	11.547	B

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	321	234	906	0.353	322	0.6	6.769	A
2 - R155 (S)	942	96	1076	0.875	1056	28.7	149.951	F
3 - Somerville	70	1007	471	0.149	70	0.2	9.880	A
4 - Unknown Road	220	540	619	0.356	221	0.6	9.979	A

8

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R155 (E)	269	196	927	0.290	269	A	6.025	A
2 - R155 (S)	789	80	1085	0.727	891	3.2	30.400	D
3 - Somerville	59	850	554	0.106	59	0.1	8.004	A
4 - Unknown Road	184	455	659	0.280	185	0.4	8.365	A

Queue Variation Results for each time segment

00:00 - 00:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.44	0.00	0.00	0.44	0.44			N/A	N/A
2 - R155 (S)	2.78	0.43	1.81	4.98	6.19			N/A	N/A
3 - Somerville	0.12	0.00	0.00	0.12	0.12			N/A	N/A
4 - Unknown Road	0.40	0.00	0.00	0.40	0.40			N/A	N/A

00:15 - 00:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.59	0.59	1.10	1.54	1.60			N/A	N/A
2 - R155 (S)	6.37	0.14	2.76	16.16	22.66			N/A	N/A
3 - Somerville	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - Unknown Road	0.56	0.56	1.10	1.54	1.60			N/A	N/A

00:30 - 00:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.87	0.03	0.28	0.87	0.87			N/A	N/A
2 - R155 (S)	33.74	7.32	28.80	61.80	73.71			N/A	N/A
3 - Somerville	0.24	0.03	0.28	0.51	0.54			N/A	N/A
4 - Unknown Road	0.84	0.03	0.29	0.84	0.84			N/A	N/A

00:45 - 01:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.88	0.03	0.31	0.88	3.05			N/A	N/A
2 - R155 (S)	57.23	15.76	50.78	99.91	117.92			N/A	N/A
3 - Somerville	0.25	0.03	0.30	0.54	1.04			N/A	N/A
4 - Unknown Road	0.85	0.03	0.31	1.14	3.49			N/A	N/A

01:00 - 01:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.61	0.08	0.83	1.49	1.57			N/A	N/A
2 - R155 (S)	28.74	5.00	23.88	54.45	66.15			N/A	N/A
3 - Somerville	0.19	0.00	0.00	0.19	0.19			N/A	N/A
4 - Unknown Road	0.62	0.06	0.80	1.48	1.57			N/A	N/A

01:15 - 01:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - R155 (E)	0.45	0.03	0.33	1.03	1.34			N/A	N/A
2 - R155 (S)	3.15	0.03	0.34	4.16	15.33			N/A	N/A
3 - Somerville	0.13	0.00	0.00	0.13	0.13			N/A	N/A
4 - Unknown Road	0.43	0.03	0.34	1.04	1.35			N/A	N/A

9

10

TRANSYT 15

Version: 15.5.2.7994
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Filename: (new file)
Path:
Report generation date: 16/04/2022 16:01:40

- «A1 - J5 DM : D1 - 2039 AM* :
»Summary
»Network Options
»Arms and Traffic Streams
»Signal Timings
»Final Prediction Table

File summary

File description

File title	(unfilled)
Location	
Site number	
UTCR	Region
Driving side	Left
Date	07/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC\joshua.tai
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick fares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red- With- Amber	Display End-Of- Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand
	Ascending	Numerical		ID	Normal	Normal	✓

A1 - J5 DM
D1 - 2039 AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (E per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
1	16/04/2022 15:59:56	16/04/2022 15:59:57	08:00	90	270.51	17.41	91.14	5/1	1	9	5/1	3/1	5/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J5 DM		D1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2039 AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (s)	Phase maximum broken penalty (s)	Intergreen broken penalty (s)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Poisson Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

TIRL

THE FUTURE
OF TRANSPORT

Generated on 16/04/2022 16:02:50 using TRANSYT 15 (15.5.2.7994)

TIRL

THE FUTURE
OF TRANSPORT

Generated on 16/04/2022 16:02:50 using TRANSYT 15 (15.5.2.7994)

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Extended - Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, -1, -15, -5, -1, 15, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	
5	1	1	E	
8	1	1	D	
9	1	1	C	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
10	1	AllTraffic	✓	0	✓	7.61	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStream	5/1	100		0	0

Signal Timings

Network Default: 90s cycle time; 90 steps

Interstage Matrix for Controller Stream 1

	To			
	1	2	3	
From	1	0	6	6
	2	5	0	5
	3	5	5	0

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	B,E	78	38	50	1	7
	2	✓	2	A,B,C	44	60	16	1	6
	3	✓	3	C,D	65	73	8	1	7

Final Prediction Table

Traffic Stream Results

		SIGNALS			FLOWS		PERFORMANCE				PER PCU		QUEUES			
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow total (s (PCU)/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	we m
1	1			1	A	146	2055	17	0.39	36	148	26.15	24.35	42.51	1.55	
2	1			1	B	393	1915	72	37.00	25	256	3.93	2.13	15.15	1.49	
3	1					539 <	1915	90	46.43	58	55	19.10	14.30	69.81	8.49 +	
4	1					852	Unrestricted	90	0.00	0	Unrestricted	10.29	0.00	0.00	0.00	
5	1			1	E	956 <	1851	50	0.00	91	-1	45.38	33.38	102.66	25.47 +	
6	1					552	Unrestricted	90	31.00	0	Unrestricted	12.00	0.00	0.00	0.00	
7	1					375	1915	90	0.00	20	360	3.23	0.23	0.00	0.02	
8	1			1	D	159 <	1888	8	0.00	84	7	86.44	82.84	136.94	5.65 +	
9	1			1	C	216	1751	29	0.00	37	143	29.43	24.63	73.11	3.95	
10	1					146	778	90	72.00	19	379	1.77	0.57	2.16	1.47	
11	1					486	Unrestricted	90	10.00	0	Unrestricted	10.87	0.00	0.00	0.00	

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	319.15	28.05	11.38	17.41	247.21	23.30	0.00	270.51
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	319.15	28.05	11.38	17.41	247.21	23.30	0.00	270.51

- < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- + = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

TRANSYT 15

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Filename: (new file)

Path:

Report generation date: 16/04/2022 16:03:01

«A2 - J5 DM : D2 - 2039 PM* :

- »Summary
- »Network Options
- »Arms and Traffic Streams
- »Signal Timings
- »Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCRregion	
Driving side	Left
Date	07/09/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	OCSC\joshua.tai
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick fibres	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A2 - J5 DM D2 - 2039 PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
2	16/04/2022 15:59:57	16/04/2022 15:59:57	08:00	90	204.36	12.99	78.78	5/1	0	0	5/1	3/1	5/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J5 DM		D2	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2039 PM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00		10000.00	10000.00
			2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable GUT Profile accuracy
✓	✓	Extended - Offsets And Green Spills	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, -1, -15, -5, -1, 15, 1	50, 90, 5, 5, 0.5, 0.5, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				15.00	✓	Sum of lanes	2055	✓	1800	✓		Normal	
2	1				15.00	✓	Sum of lanes	1915	✓	1800	✓		Normal	
3	1				40.00	✓	Sum of lanes	1915					Normal	
4	1			✓	85.71								Normal	
5	1				100.00	✓	Sum of lanes	1866			✓		Normal	
6	1				100.00								Normal	
7	1				25.00	✓	Sum of lanes	1915					Normal	
8	1				30.00	✓	Sum of lanes	1888	✓	1800	✓		Normal	
9	1				40.00	✓	Sum of lanes	1751	✓	1800	✓		Normal	
10	1				10.00	✓	Sum of lanes	1717	✓	1800			Normal	
11	1			✓	88.91								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RSR?	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
2	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
3	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
4	1	1	(untitled)											
5	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	25	14.23	✓	1866
6	1	1	(untitled)											
7	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	17.00		1888
9	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	16.04	✓	1751
10	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	7.61		1717
11	1	1	(untitled)											

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	
5	1	1	E	
8	1	1	D	
9	1	1	C	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
10	1	AllTraffic	✓	0	✓	7.61	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStream	S/1	100		0	0

Signal Timings

Network Default: 90s cycle time; 90 steps

Interstage Matrix for Controller Stream 1

From	To			
	1	2	3	
	1	0	6	6
2	5	0	5	
3	5	5	0	

Resultant Stages

Controller stream	Resultant stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	B,E	5	37	32	1	7
	2	✓	2	A,B,C	43	69	26	1	6
	3	✓	3	C,D	74	0	16	1	7

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES	
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	D woi mu
1	1			1	A	85	2055	27	0.39	13	567	19.07	17.27	68.35	1.46	
2	1			1	B	909	1915	64	0.00	66	37	5.78	3.98	9.12	2.08	
3	1					994 <	1915	90	26.01	73	23	13.96	9.16	58.29	13.96 +	
4	1					495	Unrestricted	90	26.00	0	Unrestricted	10.29	0.00	0.00	0.00	
5	1			1	E	539	1866	32	0.00	79	14	46.86	34.86	96.65	13.40	
6	1					1169	Unrestricted	90	0.00	0	Unrestricted	12.00	0.00	0.00	0.00	
7	1					353	1915	90	21.43	24	272	6.22	3.22	26.55	2.59	
8	1			1	D	260 <	1888	16	0.00	73	23	48.36	44.76	80.96	5.30 +	
9	1			1	C	93	1751	47	26.00	10	804	15.39	19.59	46.90	1.45	
10	1					85	1173	90	62.00	7	1142	1.38	0.18	2.62	1.45	
11	1					222	Unrestricted	90	25.00	0	Unrestricted	10.67	0.00	0.00	0.00	

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	308.83	23.28	13.27	12.99	184.41	19.95	0.00	204.36
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	308.83	23.28	13.27	12.99	184.41	19.95	0.00	204.36

- < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

TRANSYT 15	
Version: 15.5.2.7994	
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Filename: (new file)

Path:

Report generation date: 16/05/2022 18:16:20

<A1 - J5 DS : D1 - 2039 AM* :

- »Summary
- »Network Options
- »Arms and Traffic Streams
- »Signal Timings
- »Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCRregion	
Driving side	Left
Date	07/09/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	OCSC(joshua.tai)
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick lanes	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-of-Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perhour	s	-hour	perhour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A1 - J5 DS
D1 - 2039 AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
1	16/05/2022 18:15:58	16/05/2022 18:15:58	08:00	90	266.16	17.12	90.76	5/1	1	9	5/1	3/1	5/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J5 DS		D1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2039 AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (s)	Phase maximum broken penalty (s)	Intergreen broken penalty (s)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	60

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Extended - Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1, -15, -5, -1, 15, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.80	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				15.00	✓	Sum of lanes	2055	✓	1800	✓		Normal	
2	1				15.00	✓	Sum of lanes	1915	✓	1800	✓		Normal	
3	1				40.00	✓	Sum of lanes	1915					Normal	
4	1			✓	85.71								Normal	
5	1				100.00	✓	Sum of lanes	1849			✓		Normal	
6	1				100.00								Normal	
7	1				25.00	✓	Sum of lanes	1915					Normal	
8	1				30.00	✓	Sum of lanes	1888	✓	1800	✓		Normal	
9	1				40.00	✓	Sum of lanes	1751	✓	1800	✓		Normal	
10	1				10.00	✓	Sum of lanes	1717	✓	1800		✓	Normal	
11	1			✓	88.91								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RRE?	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
2	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
3	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
4	1	1	(united)											
5	1	1	(united)		✓	N/A	N/A	0	3.00	✓	34	14.23	✓	1849
6	1	1	(united)											
7	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
8	1	1	(united)		✓	N/A	N/A	0	3.00	✓	100	17.00		1888
9	1	1	(united)		✓	N/A	N/A	0	3.00	✓	100	16.04	✓	1751
10	1	1	(united)		✓	N/A	N/A	0	3.00	✓	100	7.61		1717
11	1	1	(united)											

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	
5	1	1	E	
8	1	1	D	
9	1	1	C	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
10	1	AllTraffic	✓	0	✓	7.61	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStream	S/1	100		0	0

3

4

Signal Timings

Network Default: 90s cycle time; 90 steps

Interstage Matrix for Controller Stream 1

	To
From	1 2 3
1	0 6 6
2	5 0 5
3	5 5 0

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	B,E	78	38	90	1	7
	2	✓	2	A,B,C	44	60	16	1	6
	3	✓	3	C,D	65	73	8	1	7

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU				QUEUES	
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	we	m
1	1			1	A	146	2055	17	0.39	36	148	26.18	24.38	42.51	1.55		
2	1			1	B	385	1915	72	37.00	25	263	3.94	2.14	15.44	1.49		
3	1					531 <	1915	90	46.36	57	57	18.91	14.11	69.02	8.35 +		
4	1					847	Unrestricted	90	0.00	0	Unrestricted	10.29	0.00	0.00	0.00		
5	1			1	E	951 <	1849	50	0.00	91	-1	44.72	32.72	101.70	25.16 +		
6	1					544	Unrestricted	90	31.00	0	Unrestricted	12.00	0.00	0.00	0.00		
7	1					375	1915	90	0.00	20	369	3.23	0.23	0.00	0.02		
8	1			1	D	159 <	1888	8	0.00	64	7	86.44	82.84	136.94	5.65 +		
9	1			1	C	216	1751	29	0.00	37	143	29.43	24.63	73.11	3.95		
10	1					146	779	90	72.00	19	389	1.77	0.57	2.15	1.47		
11	1					486	Unrestricted	90	10.00	0	Unrestricted	10.67	0.00	0.00	0.00		

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	316.98	27.69	11.45	17.12	243.16	23.00	0.00	266.16
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	316.98	27.69	11.45	17.12	243.16	23.00	0.00	266.16

- <= adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- + = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick lanes	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber
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Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perhour	s	-hour	perhour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A2 - J5 DS

D2 - 2039 PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PRC
2	16/05/2022 18:15:33	16/05/2022 18:15:33	08:00	90	200.15	12.72	78.28	5/1	0	0	5/1	3/1	5/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J5 DS		D2	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2039 PM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
90		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓			Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				15.00	✓	Sum of lanes	2055	✓	1800	✓		Normal	
2	1				15.00	✓	Sum of lanes	1915	✓	1800	✓		Normal	
3	1				40.00	✓	Sum of lanes	1915					Normal	
4	1			✓	85.71								Normal	
5	1				100.00	✓	Sum of lanes	1864			✓		Normal	
6	1				100.00								Normal	
7	1				25.00	✓	Sum of lanes	1915					Normal	
8	1				30.00	✓	Sum of lanes	1888	✓	1800	✓		Normal	
9	1				40.00	✓	Sum of lanes	1751	✓	1800	✓		Normal	
10	1				10.00	✓	Sum of lanes	1717	✓	1800		✓	Normal	
11	1			✓	88.91								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RWS?	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
2	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
3	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
4	1	1	(united)											
5	1	1	(united)		✓	N/A	N/A	0	3.00	✓	26	14.23	✓	1864
6	1	1	(united)											
7	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
8	1	1	(united)		✓	N/A	N/A	0	3.00	✓	100	17.00		1888
9	1	1	(united)		✓	N/A	N/A	0	3.00	✓	100	16.04	✓	1751
10	1	1	(united)		✓	N/A	N/A	0	3.00	✓	100	7.61		1717
11	1	1	(united)											

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	
5	1	1	E	
8	1	1	D	
9	1	1	C	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
10	1	AllTraffic	✓	0	✓	7.61	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStream	5/1	100		0	0

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Extended - Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, -1, -15, -5, -1, 15, 1	50, 60, 5, 5, 0.5, 0.5, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05			✓	1		Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Signal Timings

Network Default: 90s cycle time; 90 steps

Interstage Matrix for Controller Stream 1

	To
From	1 2 3 1 0 6 6 6 2 5 0 5 5 3 5 5 0 0

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	B,E	5	37	32	1	7
	2	✓	2	A,B,C	43	69	26	1	6
	3	✓	3	C,D	74	0	16	1	7

Final Prediction Table

Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU		QUEUES		
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	D woi mu
1	1			1	A	84	2055	27	0.39	13	575	19.16	17.38	68.92	1.46	
2	1			1	B	900	1915	64	0.00	65	38	5.72	3.62	9.10	2.05	
3	1					984 <	1915	90	25.16	71	26	13.51	8.71	35.70	13.45 +	
4	1					491	Unrestricted	90	26.00	0	Unrestricted	10.29	0.00	0.00	0.00	
5	1			1	E	535	1864	32	0.00	78	15	46.54	34.54	96.07	13.11	
6	1					1160	Unrestricted	90	0.00	0	Unrestricted	12.00	0.00	0.00	0.00	
7	1					353	1915	90	21.43	24	272	6.22	3.22	26.55	2.59	
8	1			1	D	260 <	1888	16	0.00	73	23	48.36	44.76	80.96	5.30 +	
9	1			1	C	93	1751	47	26.00	10	804	15.39	10.59	46.90	1.45	
10	1					84	1177	90	62.00	7	1161	1.38	0.18	2.85	1.45	
11	1					221	Unrestricted	90	25.00	0	Unrestricted	10.67	0.00	0.00	0.00	

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	306.54	22.94	13.36	12.72	180.69	19.46	0.00	200.15
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	306.54	22.94	13.36	12.72	180.69	19.46	0.00	200.15

- <= adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- + = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: (new file)
Path:
Report generation date: 16/04/2022 16:08:45

»J6 DM - 2039, AM
»J6 DM - 2039, PM

Summary of junction performance

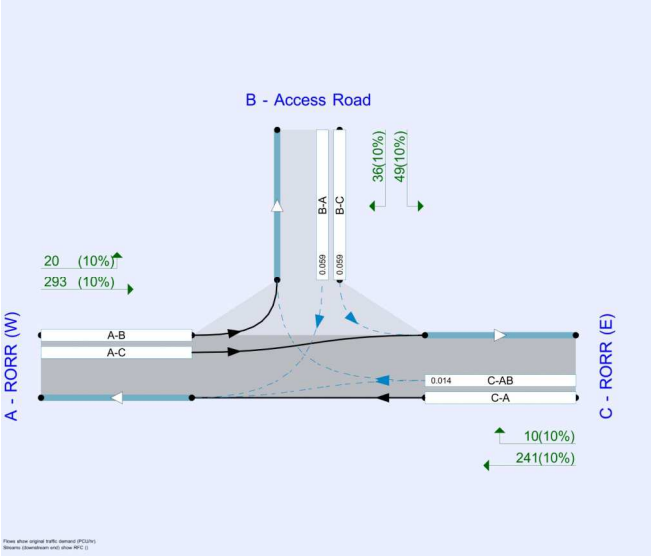
	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
J6 DM - 2039										
Stream B-C	D1	0.2	7.58	0.13	A	D2	0.1	7.35	0.09	A
Stream B-A		0.2	10.41	0.13	B		0.1	10.49	0.10	B
Stream C-AB		0.0	5.77	0.03	A		0.0	5.57	0.02	A

There are warnings associated with one or more model runs - see the "Data Errors and Warnings" tables for each Analysis or Demand Set.
Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description	
Title	
Location	
Site number	
Date	09/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC\joshua.lai
Description	

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	per hour	s	-Min	perMin



Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓		0.85	36.00	20.00

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2039	AM	ONE HOUR	00:00	01:30	15
D2	2039	PM	ONE HOUR	00:00	01:30	15

ID	Name	Network flow scaling factor (%)
A1	J6 DM	100.000

J6 DM - 2039, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Access Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-junction	Two-way		1.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	RORR (W)		Major
B	Access Road		Minor
C	RORR (E)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - RORR (E)	6.00			150.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Access Road	One lane plus flare	6.50	3.00	3.00	3.00	3.00	✓	1.00	100	100

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	546	0.099	0.251	0.158	0.359
B-C	697	0.107	0.270	-	-
C-B	661	0.256	0.256	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2039	AM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - RORR (W)		✓	272	100.000
B - Access Road		✓	121	100.000
C - RORR (E)		✓	200	100.000

Origin-Destination Data

Demand (PCU/hr)		To			
From		A - RORR (W)	B - Access Road	C - RORR (E)	
	A - RORR (W)	0	29	243	
	B - Access Road	51	0	70	
	C - RORR (E)	185	15	0	

Vehicle Mix

Heavy Vehicle Percentages		To			
From		A - RORR (W)	B - Access Road	C - RORR (E)	
	A - RORR (W)	10	10	10	
	B - Access Road	10	10	10	
	C - RORR (E)	10	10	10	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.13	7.58	0.2	0.5	A
B-A	0.13	10.41	0.2	0.5	B
C-AB	0.03	5.77	0.0	0.5	A
C-A					
AB					
AC					

Main Results for each time segment

00:00 - 00:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	53	632	0.083	52	0.1	6.827	A
B-A	38	471	0.081	38	0.1	9.127	A
C-AB	14	701	0.020	14	0.0	5.767	A
C-A	136			136			
AB	22			22			
AC	183			183			

00:15 - 00:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	63	619	0.102	63	0.1	7.126	A
B-A	46	457	0.100	46	0.1	9.629	A
C-AB	18	709	0.025	18	0.0	5.724	A
C-A	162			162			
AB	26			26			
AC	218			218			

00:30 - 00:45							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	77	600	0.129	77	0.2	7.573	A
B-A	56	436	0.129	56	0.2	10.407	B
C-AB	23	722	0.032	23	0.0	5.666	A
C-A	197			197			
AB	32			32			
AC	268			268			

00:45 - 01:00							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	77	600	0.129	77	0.2	7.577	A
B-A	56	436	0.129	56	0.2	10.414	B
C-AB	23	722	0.032	23	0.0	5.669	A
C-A	197			197			
AB	32			32			
AC	268			268			

01:00 - 01:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	63	618	0.102	63	0.1	7.134	A
B-A	46	457	0.100	46	0.1	9.638	A
C-AB	18	709	0.025	18	0.0	5.728	A
C-A	162			162			
AB	26			26			
AC	218			218			

01:15 - 01:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	53	632	0.083	53	0.1	6.843	A
B-A	38	472	0.081	38	0.1	9.145	A
C-AB	14	701	0.020	14	0.0	5.770	A
C-A	136			136			
AB	22			22			
AC	183			183			

Queue Variation Results for each time segment

00:00 - 00:15										
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker	
B-C	0.10	0.00	0.00	0.10	0.10			N/A	N/A	
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A	
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A	

00:15 - 00:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.12	0.00	0.00	0.12	0.12			N/A	N/A
B-A	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.03	0.03	0.28	0.50	0.53			N/A	N/A

00:30 - 00:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.03	0.28	0.51	0.54			N/A	N/A
B-A	0.16	0.03	0.28	0.51	0.54			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

00:45 - 01:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.03	0.28	0.50	0.52			N/A	N/A
B-A	0.16	0.03	0.28	0.50	0.52			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

01:00 - 01:15										
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker	
B-C	0.13	0.00	0.00	0.13	0.13			N/A	N/A	
B-A	0.12	0.00	0.00	0.12	0.12			N/A	N/A	
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A	

01:15 - 01:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.10	0.00	0.00	0.10	0.10			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

J6 DM - 2039, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Access Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2039	PM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.09

Demand overview (Traffic)

Arm		Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
From	A - RORR (W)		✓	313	100.000
	B - Access Road		✓	85	100.000
	C - RORR (E)		✓	251	100.000

Origin-Destination Data

Demand (PCU/hr)		To			
From		A - RORR (W)	B - Access Road	C - RORR (E)	
	A - RORR (W)	0	20	293	
	B - Access Road	36	0	49	
	C - RORR (E)	241	10	0	

Vehicle Mix

Heavy Vehicle Percentages

From		To			
From		A - RORR (W)	B - Access Road	C - RORR (E)	
	A - RORR (W)	10	10	10	
	B - Access Road	10	10	10	
	C - RORR (E)	10	10	10	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.09	7.35	0.1	0.5	A
B-A	0.10	10.48	0.1	0.5	B
C-AB	0.02	5.57	0.0	0.5	A
C-A					
AB					
AC					

Main Results for each time segment

00:00 - 00:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	626	0.059	37	0.1	6.711	A
B-A	27	458	0.059	27	0.1	9.173	A
C-AB	10	721	0.014	10	0.0	5.566	A
C-A	179			179			
AB	15			15			
AC	221			221			

00:15 - 00:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	612	0.072	44	0.1	6.969	A
B-A	32	441	0.073	32	0.1	9.685	A
C-AB	13	735	0.017	13	0.0	5.485	A
C-A	213			213			
AB	18			18			
AC	263			263			

00:30 - 00:45							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	54	592	0.091	54	0.1	7.354	A
B-A	40	417	0.095	40	0.1	10.483	B
C-AB	17	754	0.023	17	0.0	5.376	A
C-A	259			259			
AB	22			22			
AC	323			323			

00:45 - 01:00							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	54	592	0.091	54	0.1	7.355	A
B-A	40	417	0.095	40	0.1	10.487	B
C-AB	17	754	0.023	17	0.0	5.378	A
C-A	259			259			
AB	22			22			
AC	323			323			

01:00 - 01:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	612	0.072	44	0.1	6.976	A
B-A	32	441	0.073	32	0.1	9.689	A
C-AB	13	735	0.017	13	0.0	5.486	A
C-A	213			213			
A-B	18			18			
A-C	263			263			

01:15 - 01:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	606	0.059	37	0.1	6.720	A
B-A	27	458	0.059	27	0.1	9.194	A
C-AB	10	721	0.014	10	0.0	5.568	A
C-A	179			179			
A-B	15			15			
A-C	221			221			

Queue Variation Results for each time segment

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.08	0.03	0.28	0.50	0.53			N/A	N/A
B-A	0.09	0.03	0.28	0.51	0.54			N/A	N/A
C-AB	0.02	0.02	0.28	0.50	0.52			N/A	N/A

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.11	0.03	0.29	0.51	0.54			N/A	N/A
B-A	0.11	0.03	0.29	0.51	0.54			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.11	0.03	0.28	0.50	0.52			N/A	N/A
B-A	0.11	0.03	0.28	0.50	0.52			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.09	0.00	0.00	0.09	0.09			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

Junctions 9									
PICADY 9 - Priority Intersection Module									
Version: 9.5.1.7462									
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Filename: (new file)
Path:
Report generation date: 16/05/2022 18:25:41

»J6 DS - 2039, AM
»J6 DS - 2039, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
J6 DS - 2039										
Stream B-C	D1	0.1	7.15	0.09	A	D2	0.0	8.46	0.02	A
Stream B-A		0.1	9.87	0.09	A		0.1	11.97	0.09	B
Stream C-AB		0.0	5.72	0.02	A		0.3	5.31	0.11	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.
Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

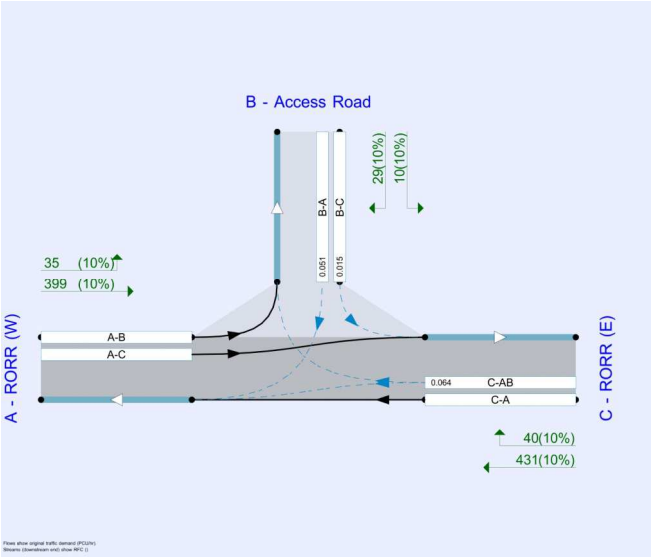
File summary

File Description	
Title	
Location	
Site number	
Date	09/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC0Joshua.Lai
Description	

Units

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

01:15 - 01:30								
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A



Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2039	AM	ONE HOUR	00:00	01:30	15
D2	2039	PM	ONE HOUR	00:00	01:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	J6 DS	100.000

J6 DS - 2039, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Access Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	RORR (W)		Major
B	Access Road		Minor
C	RORR (E)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - RORR (E)	6.00			150.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Access Road	One lane plus flare	6.50	3.00	3.00	3.00	3.00	✓	1.00	100	100

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B (PCU/hr)	Slope for A-C (PCU/hr)	Slope for C-A (PCU/hr)	Slope for C-B (PCU/hr)
B-A	547	0.100	0.262	0.158	0.360
B-C	697	0.107	0.270	-	-
C-B	661	0.256	0.256	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (H:M)	Finish time (H:M)	Time segment length (min)
D1	2039	AM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - RORR (W)		✓	263	100.000
B - Access Road		✓	65	100.000
C - RORR (E)		✓	195	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To			
		A - RORR (W)	B - Access Road	C - RORR (E)	
	A - RORR (W)	0	20	243	
	B - Access Road	36	0	49	
	C - RORR (E)	185	10	0	

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - RORR (W)	B - Access Road	C - RORR (E)	
	A - RORR (W)	10	10	10	
	B - Access Road	10	10	10	
	C - RORR (E)	10	10	10	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.09	7.15	0.1	0.5	A
B-A	0.09	9.67	0.1	0.5	A
C-AB	0.02	5.72	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	637	0.058	37	0.1	6.595	A
B-A	27	474	0.057	27	0.1	8.844	A
C-AB	9	702	0.013	9	0.0	5.715	A
C-A	137			137			
A-B	15			15			
A-C	183			183			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	625	0.071	44	0.1	6.820	A
B-A	32	460	0.070	32	0.1	9.249	A
C-AB	12	711	0.017	12	0.0	5.661	A
C-A	164			164			
A-B	18			18			
A-C	218			218			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	54	608	0.089	54	0.1	7.149	A
B-A	40	441	0.090	40	0.1	9.867	A
C-AB	15	724	0.021	15	0.0	5.587	A
C-A	199			199			
A-B	22			22			
A-C	268			268			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	54	608	0.089	54	0.1	7.150	A
B-A	40	441	0.090	40	0.1	9.870	A
C-AB	15	724	0.021	15	0.0	5.587	A
C-A	199			199			
A-B	22			22			
A-C	268			268			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	625	0.071	44	0.1	6.826	A
B-A	32	461	0.070	32	0.1	9.253	A
C-AB	12	711	0.017	12	0.0	5.664	A
C-A	164			164			
A-B	18			18			
A-C	218			218			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	637	0.058	37	0.1	6.606	A
B-A	27	475	0.057	27	0.1	8.850	A
C-AB	9	702	0.013	9	0.0	5.715	A
C-A	137			137			
A-B	15			15			
A-C	183			183			

Queue Variation Results for each time segment

00:00 - 00:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

00:15 - 00:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.08	0.03	0.28	0.50	0.53			N/A	N/A
B-A	0.08	0.03	0.28	0.50	0.53			N/A	N/A
C-AB	0.02	0.02	0.28	0.50	0.52			N/A	N/A

00:30 - 00:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.11	0.03	0.29	0.51	0.54			N/A	N/A
B-A	0.11	0.03	0.29	0.51	0.54			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

00:45 - 01:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.11	0.03	0.28	0.50	0.52			N/A	N/A
B-A	0.11	0.03	0.28	0.50	0.52			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

01:00 - 01:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.08	0.00	0.00	0.08	0.08			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

01:15 - 01:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

J6 DS - 2039, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Access Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untlBed	T-Junction	Two-way		0.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2039	PM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - RORR (W)		✓	434	100.000
B - Access Road		✓	39	100.000
C - RORR (E)		✓	471	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - RORR (W)	B - Access Road	C - RORR (E)	
A - RORR (W)	0	35	399	
B - Access Road	29	0	10	
C - RORR (E)	431	40	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - RORR (W)	B - Access Road	C - RORR (E)	
A - RORR (W)	10	10	10	
B - Access Road	10	10	10	
C - RORR (E)	10	10	10	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.02	8.46	0.0	0.5	A
B-A	0.09	11.97	0.1	0.5	B
C-AB	0.11	5.31	0.3	1.5	A
C-A					
AB					
AC					

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	517	0.015	7	0.0	7.773	A
B-A	22	432	0.051	22	0.1	9.644	A
C-AB	51	798	0.064	50	0.1	5.296	A
C-A	304			304			
AB	26			26			
AC	300			300			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	501	0.018	9	0.0	8.048	A
B-A	26	403	0.065	26	0.1	10.507	B
C-AB	68	828	0.082	68	0.2	6.211	A
C-A	356			356			
AB	31			31			
AC	359			359			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	479	0.023	11	0.0	8.462	A
B-A	32	363	0.088	32	0.1	11.962	B
C-AB	97	871	0.112	97	0.3	5.118	A
C-A	421			421			
AB	39			39			
AC	439			439			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	479	0.023	11	0.0	8.465	A
B-A	32	363	0.088	32	0.1	11.972	B
C-AB	97	871	0.112	97	0.3	5.123	A
C-A	421			421			
AB	39			39			
AC	439			439			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	501	0.018	9	0.0	8.053	A
B-A	26	403	0.065	26	0.1	10.520	B
C-AB	68	828	0.082	68	0.2	5.221	A
C-A	355			355			
AB	31			31			
AC	359			359			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	516	0.015	9	0.0	7.780	A
B-A	22	432	0.051	22	0.1	9.661	A
C-AB	51	798	0.064	51	0.1	5.307	A
C-A	304			304			
AB	26			26			
AC	300			300			

Queue Variation Results for each time segment

00:00 - 00:15

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

00:15 - 00:30

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.28	0.50	0.52			N/A	N/A
B-A	0.08	0.03	0.28	0.50	0.53			N/A	N/A
C-AB	0.17	0.03	0.28	0.50	0.52			N/A	N/A

00:30 - 00:45

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.10	0.03	0.29	0.52	0.54			N/A	N/A
C-AB	0.27	0.03	0.30	0.54	1.50			N/A	N/A

00:45 - 01:00

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.11	0.03	0.28	0.50	0.52			N/A	N/A
C-AB	0.27	0.00	0.00	0.27	0.27			N/A	N/A

01:00 - 01:15

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

01:15 - 01:30

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

TRANSYT 15

Version: 15.5.2.7994
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Filename: (new file)
Path:
Report generation date: 16/04/2022 16:12:43

- «A1 - J7 DM : D1 - 2039 AM* :
»Summary
»Network Options
»Arms and Traffic Streams
»Signal Timings
»Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCR	Region
Driving side	Left
Date	09/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC\joshua.tai
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A1 - J7 DM
D1 - 2039 AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
1	16/04/2022 16:11:28	16/04/2022 16:11:28	08:00	120	237.51	15.46	75.67	1/1	0	0	1/1	14/1	1/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J7 DM		D1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2039 AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
120		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Poisson Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.00	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use R&B?	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(united)		✓	N/A	N/A	0	3.25	✓	0	99999.00		2080
2	1	1	(united)		✓	N/A	N/A	0	3.25	✓	0	12.33	✓	1940
3	1	1	(united)		✓	N/A	N/A	0	3.25	✓	0	99999.00	✓	1940
4	1	1	(united)											
5	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	11.56	✓	1740
6	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	99999.00		2105
7	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	99999.00		2105
8	1	1	(united)		✓	N/A	N/A	0	3.50	✓	49	35.86	✓	1926
9	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
10	1	1	(united)											
11	1	1	(united)		✓	N/A	N/A	0	3.50	✓	66	57.05	✓	1931
12	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	99999.00		2105
13	1	1	(united)		✓	N/A	N/A	0	3.50	✓	73	11.96	✓	1800
14	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	74.39	✓	1926
15	1	1	(united)		✓	N/A	N/A	0	3.50	✓	2	14.51	✓	1981
16	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	11.20		2105
17	1	1	(united)											
18	1	1	(united)											
19	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	11.41		1980
20	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	10.86		1950
21	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	11.47		1861

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	
5	1	1	I	
6	1	1	H	
7	1	1	G	
12	1	1	E	
13	1	1	F	
15	1	1	D	
16	1	1	C	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Stop-wise Opposed Turn Mode?	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
19	1	AllTraffic	✓	0	✓	11.41	
20	1	AllTraffic	✓	0	✓	10.86	
21	1	AllTraffic	✓	0	✓	11.47	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1			TrafficStream	2/1	100	0	0
			TrafficStream	13/1	100	0	0
			TrafficStream	15/1	100	0	0
			TrafficStream	15/1	100	0	0

Signal Timings

Network Default: 120s cycle time; 120 steps

Interstage Matrix for Controller Stream 1

		To			
		1	2	3	4
From	1	0	0	5	5
	2	0	0	5	5
	3	5	5	0	5
	4	5	5	5	0

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B,E,F	103	111	8	1	7
	2	✓	2	A,E	111	15	24	1	1
	3	✓	3	D,H,I	20	86	66	1	7
	4	✓	4	C,G	91	98	7	1	7

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU		QUEUES	
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)
1	1			1	A	376 <	2080	32	5.77	80	13	55.78	50.38	73.17	8.74 +
2	1			1	B	3	1940	8	8.00	2	4265	77.92	100.22	0.10	
3	1					379	1940	120	36.32	28	221	54.37	6.37	35.40	4.79
4	1					239	Unrestricted	120	16.00	0	Unrestricted	48.00	0.00	0.00	0.00
5	1			1	I	226	1740	71	0.00	22	316	14.51	11.51	43.71	3.29
6	1			1	H	213	2105	66	0.00	18	397	10.71	8.91	20.69	1.47
7	1			1	G	2	2105	12	12.00	1	10162	45.48	43.68	89.22	0.06
8	1					441	1926	120	8.00	23	293	1.48	0.28	0.00	0.03
9	1					215 <	2055	120	32.73	14	526	5.94	4.74	28.15	2.16 +
10	1					1233	Unrestricted	120	12.00	0	Unrestricted	4.80	0.00	0.00	0.00
11	1					74	1931	120	0.00	4	2249	4.84	0.04	0.00	0.00
12	1			1	E	25	2105	32	31.14	4	1975	34.57	32.17	72.62	1.45
13	1			1	F	49	1800	6	5.00	36	148	62.70	80.30	100.32	1.54
14	1					838	1926	120	35.33	62	46	34.41	19.41	56.52	14.30
15	1			1	D	839 <	1961	66	0.00	77	19	24.66	18.69	35.46	9.92 +
16	1			1	C	0	2105	7	8.00	0	Unrestricted	0.00	0.00	0.00	0.00
17	1					238	Unrestricted	120	28.00	0	Unrestricted	24.00	0.00	0.00	0.00
18	1					22	Unrestricted	120	117.00	0	Unrestricted	6.00	0.00	0.00	0.00
19	1					25	1841	120	118.00	1	6527	1.26	0.06	4.79	1.45
20	1					376	1791	120	87.00	21	329	1.77	0.57	8.20	1.48
21	1					2	919	120	119.00	0	41296	1.20	0.00	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	595.68	35.31	16.87	15.46	219.49	18.02	0.00	237.51
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	595.68	35.31	16.87	15.46	219.49	18.02	0.00	237.51

- <= adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

TRANSYT 15

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Filename: (new file)

Path:

Report generation date: 16/04/2022 16:13:11

«A2 - J7 DM : D2 - 2039 PM* :

- »Summary
- »Network Options
- »Arms and Traffic Streams
- »Signal Timings
- »Final Prediction Table

File summary

File title	(united)
Location	
Site number	
UTCRegion	
Driving side	Left
Date	09/09/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	OCSC(joshua.tai)
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick fibres	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perhour	s	<hour	perhour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set ID	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical			Normal	Normal	✓

A2 - J7 DM

D2 - 2039 PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (E per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC
2	16/04/2022 16:12:14	16/04/2022 16:12:14	08:00	120	244.79	15.72	83.77	8/1	0	0	1/1	8/1	8/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J7 DM		D2	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2039 PM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
120		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (s)	Phase maximum broken penalty (s)	Intergreen broken penalty (s)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weighings	Use link delay weighings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓			Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.80	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				45.00	✓	Sum of lanes	2080	✓	1800	✓		Normal	
2	1				45.00	✓	Sum of lanes	1940	✓	1800	✓		Normal	
3	1				400.00	✓	Sum of lanes	1940					Normal	
4	1				400.00								Normal	
5	1				25.00	✓	Sum of lanes	1740	✓	1800	✓		Normal	
6	1				15.00	✓	Sum of lanes	2105	✓	1800	✓		Normal	
7	1				15.00	✓	Sum of lanes	2105	✓	1800	✓		Normal	
8	1				10.00	✓	Sum of lanes	1920					Normal	
9	1				10.00	✓	Sum of lanes	2055					Normal	
10	1				40.00								Normal	
11	1				40.00	✓	Sum of lanes	1936					Normal	
12	1				20.00	✓	Sum of lanes	2105	✓	1800	✓		Normal	
13	1				20.00	✓	Sum of lanes	1834	✓	1800	✓		Normal	
14	1				200.00	✓	Sum of lanes	1926					Normal	
15	1				50.00	✓	Sum of lanes	1943	✓	1800	✓		Normal	
16	1				50.00	✓	Sum of lanes	2105	✓	1800	✓		Normal	
17	1				200.00								Normal	
18	1				50.00								Normal	
19	1				10.00	✓	Sum of lanes	1860	✓	1800		✓	Normal	
20	1				10.00	✓	Sum of lanes	1850	✓	1800		✓	Normal	
21	1				10.00	✓	Sum of lanes	1861	✓	1800		✓	Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RWS?	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(united)		✓	N/A	N/A	0	3.25	✓	0	99999.00		2080
2	1	1	(united)		✓	N/A	N/A	0	3.25	✓	0	12.33	✓	1940
3	1	1	(united)		✓	N/A	N/A	0	3.25	✓	0	99999.00	✓	1940
4	1	1	(united)											
5	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	11.58	✓	1740
6	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	99999.00		2105
7	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	99999.00		2105
8	1	1	(united)		✓	N/A	N/A	0	3.50	✓	56	35.88	✓	1920
9	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
10	1	1	(united)											
11	1	1	(united)		✓	N/A	N/A	0	3.50	✓	57	57.05	✓	1936
12	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	99999.00		2105
13	1	1	(united)		✓	N/A	N/A	0	3.50	✓	57	11.96	✓	1834
14	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	74.39	✓	1926
15	1	1	(united)		✓	N/A	N/A	0	3.50	✓	11	14.51	✓	1943
16	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	11.20		2105
17	1	1	(united)											
18	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	11.41		1860
19	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	10.86		1850
20	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	11.47		1861
21	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	11.47		1861

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	
5	1	1	I	
6	1	1	H	
7	1	1	G	
12	1	1	E	
13	1	1	F	
15	1	1	D	
16	1	1	C	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
19	1	AllTraffic	✓	0	✓	11.41	
20	1	AllTraffic	✓	0		10.86	
21	1	AllTraffic	✓	0	✓	11.47	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling traffic type	Controlling traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1			TrafficStream	2/1	100	0	0
			TrafficStream	13/1	100	0	0
			TrafficStream	15/1	100	0	0

			SIGNALS		FLOWS		PERFORMANCE				PER CPU			QUEUES		
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated sat flow entering (PCU/hr)	Calculated sat flow total (PCU/hr)	Actual green time (per cycle)	Wasted time (per cycle)	Degree of saturation	Practical reserve capacity %	JourneyTime (s)	Mean Delay per Veh (s)	Mean Sat per Veh (s)	Mean max queue length	work
1	1			1	A	327	2080	27	3.77	78	16	60.15	54.75	78.15	8.56	0
2	1			1	B	33	1940	8	6.00	23	297	78.70	73.30	102.99	1.48	
3	1					360	1940	120	28.70	24	269	51.96	3.96	26.83	3.54	
4	1					582	Unrestricted	120	6.00	0	Unrestricted	48.00	0.00	0.00	0.00	
5	1			1	I	573	1740	76	0.00	51	75	12.44	9.44	24.17	4.62	+
6	1			1	H	696	2105	71	0.00	55	63	6.38	4.58	7.69	1.79	
7	1			1	G	30	2105	12	11.14	13	577	42.15	40.35	93.95	1.46	
8	1					1299	1520	120	57.00	84	7	13.67	12.47	59.17	27.73	+
9	1					726	2055	120	45.55	57	58	10.04	6.84	37.64	10.41	+
10	1					388	Unrestricted	120	79.00	0	Unrestricted	4.80	0.00	0.00	0.00	
11	1					37	1936	120	120.00	2	4608	4.82	0.02	0.00	0.00	
12	1			1	E	16	2105	27	27.00	3	2663	58.17	35.77	75.77	0.41	
13	1			1	F	21	1834	7.50	15.00	15	5976	56.76	54.36	84.45	1.46	
14	1					55	1926	120	120.00	3	3052	24.03	0.93	0.00	0.00	
15	1			1	D	55	1943	71	70.00	5	1838	15.99	9.99	49.06	1.45	
16	1			1	C	0	2105	7	8.00	0	Unrestricted	0.00	0.00	0.00	0.00	
17	1					712	Unrestricted	120	19.00	0	Unrestricted	24.00	0.00	0.00	0.00	
18	1					69	Unrestricted	120	102.00	0	Unrestricted	6.00	0.00	0.00	0.00	
19	1					16	1817	120	118.00	1	10120	1.98	0.78	77.51	0.41	
20	1					327	1814	120	92.00	18	399	1.56	0.36	3.06	1.47	
21	1					30	1707	120	118.00	2	5022	1.22	0.02	0.00	0.00	

	Distance travelled (PCU-km/hr)	Time spent (PCU-min/hr)	Mean journey speed (kph)	Total delay (PCU-hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	619.54	36.37	17.04	16.72	223.16	21.63	0.00	244.79
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	619.54	36.37	17.04	16.72	223.16	21.63	0.00	244.79

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TRANSYT 15
 Version: 15.5.2.7994
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Path:
Report generation date: 16/05/2022 18:10:21

- »Summary
- »Network Options
- »Arms and Traffic Streams
- »Signal Timings
- »Final Prediction Table

File title	(untitled)
Location	
Site number	
UTCRegion	
Driving side	Left
Date	09/09/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	OCSC\joshua.tai
Description	

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Ambor	Display End-Of-Green Amber
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Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perhour

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	<input checked="" type="checkbox"/>

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (E per hr)	Total network delay (min/hr)	Highest DOS (%)	Item with highest DOS	Number of overstated items	Percentage of overstated Items (%)	Item with worst signalled PRC	Item with worst unsigalled PRC	Item with worst over PRC
1	16/05/2022 18:10:20	16/05/2022 18:10:20	08:00	120	225.24	14.63	76.54	15/1	0	0	15/1	14/1	15/1

Name	Description	Demand set	Include in report	Locked
J7 DS		D1	✓	

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2039 AM				08:00	

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
120		60	1	60

Start displacement (s)	End displacement (s)
2	3

Phase minimum broken penalty (€)	Phase maximum broken penalty (€)	Intergreen broken penalty (€)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU/hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.80	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use R&R?	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(united)		✓	N/A	N/A	0	3.25	✓	0	99999.00		2080
2	1	1	(united)		✓	N/A	N/A	0	3.25	✓	0	12.33	✓	1940
3	1	1	(united)		✓	N/A	N/A	0	3.25	✓	0	99999.00	✓	1940
4	1	1	(united)											
5	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	11.58	✓	1740
6	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	99999.00		2105
7	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	99999.00		2105
8	1	1	(united)		✓	N/A	N/A	0	3.50	✓	49	35.88	✓	1928
9	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
10	1	1	(united)											
11	1	1	(united)		✓	N/A	N/A	0	3.50	✓	66	57.05	✓	1931
12	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	99999.00		2105
13	1	1	(united)		✓	N/A	N/A	0	3.50	✓	73	11.96	✓	1800
14	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	74.39	✓	1928
15	1	1	(united)		✓	N/A	N/A	0	3.50	✓	2	14.51	✓	1981
16	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	11.20		2105
17	1	1	(united)											
18	1	1	(united)											
19	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	11.41		1880
20	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	10.86		1850
21	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	11.47		1861

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	
5	1	1	I	
6	1	1	H	
7	1	1	G	
12	1	1	E	
13	1	1	F	
15	1	1	D	
16	1	1	C	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
19	1	AllTraffic	✓	0	✓	11.41	
20	1	AllTraffic	✓	0		10.86	
21	1	AllTraffic	✓	0	✓	11.47	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStream	2/1	100		0	0
		TrafficStream	13/1	100		0	0
		TrafficStream	15/1	100		0	0

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				45.00	✓	Sum of lanes	2080	✓	1800	✓		Normal	
2	1				45.00	✓	Sum of lanes	1940	✓	1800	✓		Normal	
3	1				400.00	✓	Sum of lanes	1940					Normal	
4	1				400.00								Normal	
5	1				25.00	✓	Sum of lanes	1740	✓	1800	✓		Normal	
6	1				15.00	✓	Sum of lanes	2105	✓	1800	✓		Normal	
7	1				15.00	✓	Sum of lanes	2105	✓	1800	✓		Normal	
8	1				10.00	✓	Sum of lanes	1928					Normal	
9	1				10.00	✓	Sum of lanes	2055					Normal	
10	1				40.00								Normal	
11	1				40.00	✓	Sum of lanes	1931					Normal	
12	1				20.00	✓	Sum of lanes	2105	✓	1800	✓		Normal	
13	1				20.00	✓	Sum of lanes	1800	✓	1800	✓		Normal	
14	1				200.00	✓	Sum of lanes	1928					Normal	
15	1				50.00	✓	Sum of lanes	1961	✓	1800	✓		Normal	
16	1				50.00	✓	Sum of lanes	2105	✓	1800	✓		Normal	
17	1				200.00								Normal	
18	1				50.00								Normal	
19	1				10.00	✓	Sum of lanes	1860	✓	1800		✓	Normal	
20	1				10.00	✓	Sum of lanes	1850	✓	1800		✓	Normal	
21	1				10.00	✓	Sum of lanes	1861	✓	1800		✓	Normal	

Signal Timings

Network Default: 120s cycle time; 120 steps

Interstage Matrix for Controller Stream 1

		To			
		1	2	3	4
From	1	0	0	5	5
	2	0	0	5	5
	3	5	5	0	5
	4	5	5	5	0

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B,E,F	103	111	8	1	7
	2	✓	2	A,E	111	15	24	1	1
	3	✓	3	D,H,I	20	86	66	1	7
	4	✓	4	C,G	91	98	7	1	7

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	SIGNALS		FLOWS		PERFORMANCE			PER PCU			QUEUES	
						Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	we	m
1	1			1	A	355 <	2080	32	5.42	74	21	52.86	47.46	73.53	8.29 +		
2	1			1	B	3	1940	8	8.00	2	4265	75.34	69.94	100.22	0.10		
3	1					358	1940	120	31.96	25	258	52.76	4.76	30.36	3.92		
4	1					234	Unrestricted	120	16.00	0	Unrestricted	48.00	0.00	0.00	0.00		
5	1			1	I	221	1740	71	0.00	21	325	14.46	11.46	43.68	3.22		
6	1			1	H	213	2105	86	0.00	18	397	10.71	8.91	20.69	1.47		
7	1			1	G	2	2105	12	12.00	1	10162	45.48	43.68	89.22	0.06		
8	1					436	1928	120	8.00	23	298	1.47	0.27	0.00	0.03		
9	1					215 <	2055	120	32.73	14	528	5.94	4.74	28.15	2.16 +		
10	1					1211	Unrestricted	120	12.00	0	Unrestricted	4.80	0.00	0.00	0.00		
11	1					73	1931	120	0.00	4	2281	4.84	0.04	0.00	0.00		
12	1			1	E	25	2105	32	31.14	4	1975	34.57	32.17	72.62	1.45		
13	1			1	F	48	1800	8	5.00	36	153	62.43	60.03	100.00	1.50		
14	1					838	1928	120	35.33	62	46	34.41	10.41	50.52	14.93		
15	1			1	D	838 <	1961	66	0.00	77	19	24.68	18.68	35.48	9.52 +		
16	1			1	C	0	2105	7	8.00	0	Unrestricted	0.00	0.00	0.00	0.00		
17	1					238	Unrestricted	120	28.00	0	Unrestricted	24.00	0.00	0.00	0.00		
18	1					22	Unrestricted	120	117.00	0	Unrestricted	6.00	0.00	0.00	0.00		
19	1					25	1841	120	118.00	1	6527	1.26	0.06	4.79	1.45		
20	1					355	1793	120	87.00	20	354	1.76	0.96	5.66	1.47		
21	1					2	919	120	119.00	0	41296	1.20	0.00	0.00	0.00		

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	583.01	34.06	17.12	14.63	207.75	17.49	0.00	225.24
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	583.01	34.06	17.12	14.63	207.75	17.49	0.00	225.24

- <= adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX



TRANSYT 15

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Filename: (new file)
Path:
Report generation date: 16/05/2022 18:11:34

«A2 - J7 DS : D2 - 2039 PM* :

- »Summary
- »Network Options
- »Arms and Traffic Streams
- »Signal Timings
- »Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCRregion	
Driving side	Left
Date	09/09/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	OCSC\oshua.tai
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A2 - J7 DS
D2 - 2039 PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Items with worst over PR
2	16/05/2022 18:07:59	16/05/2022 19:07:59	08:00	120	232.58	14.91	81.87	8/1	0	0	1/1	8/1	8/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J7 DS		D2	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2039 PM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
120		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Bus	PCU Factor	Dispersion type	Acceleration (ms ⁻² [2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Tram	PCU Factor	Dispersion type	Acceleration (ms ⁻² [2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.50	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				45.00	✓	Sum of lanes	2080	✓	1800	✓		Normal	
2	1				45.00	✓	Sum of lanes	1940	✓	1800	✓		Normal	
3	1				400.00	✓	Sum of lanes	1940					Normal	
4	1				400.00								Normal	
5	1				25.00	✓	Sum of lanes	1740	✓	1800	✓		Normal	
6	1				15.00	✓	Sum of lanes	2105	✓	1800	✓		Normal	
7	1				15.00	✓	Sum of lanes	2105	✓	1800	✓		Normal	
8	1				10.00	✓	Sum of lanes	1919					Normal	
9	1				10.00	✓	Sum of lanes	2055					Normal	
10	1				40.00								Normal	
11	1				40.00	✓	Sum of lanes	1936					Normal	
12	1				20.00	✓	Sum of lanes	2105	✓	1800	✓		Normal	
13	1				20.00	✓	Sum of lanes	1838	✓	1800	✓		Normal	
14	1				200.00	✓	Sum of lanes	1926					Normal	
15	1				50.00	✓	Sum of lanes	1943	✓	1800	✓		Normal	
16	1				50.00	✓	Sum of lanes	2105	✓	1800	✓		Normal	
17	1				200.00								Normal	
18	1				50.00								Normal	
19	1				10.00	✓	Sum of lanes	1860	✓	1800		✓	Normal	
20	1				10.00	✓	Sum of lanes	1850	✓	1800		✓	Normal	
21	1				10.00	✓	Sum of lanes	1861	✓	1800		✓	Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use R67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(united)		✓	N/A	N/A	0	3.25	✓	0	99999.00		2080
2	1	1	(united)		✓	N/A	N/A	0	3.25	✓	0	12.33	✓	1940
3	1	1	(united)		✓	N/A	N/A	0	3.25	✓	0	99999.00	✓	1940
4	1	1	(united)											
5	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	11.56	✓	1740
6	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	99999.00		2105
7	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	99999.00		2105
8	1	1	(united)		✓	N/A	N/A	0	3.50	✓	57	35.86	✓	1919
9	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
10	1	1	(united)											
11	1	1	(united)		✓	N/A	N/A	0	3.50	✓	56	57.05	✓	1936
12	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	99999.00		2105
13	1	1	(united)		✓	N/A	N/A	0	3.50	✓	55	11.96	✓	1838
14	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	74.39	✓	1926
15	1	1	(united)		✓	N/A	N/A	0	3.50	✓	11	14.51	✓	1943
16	1	1	(united)		✓	N/A	N/A	0	3.50	✓	0	11.20		2105
17	1	1	(united)											
18	1	1	(united)											
19	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	11.41		1860
20	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	10.86		1850
21	1	1	(united)		✓	N/A	N/A	0	3.50	✓	100	11.47		1861

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	
5	1	1	I	
6	1	1	H	
7	1	1	G	
12	1	1	E	
13	1	1	F	
15	1	1	D	
16	1	1	C	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Stop-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
19	1	AllTraffic	✓	0	✓	11.41	
20	1	AllTraffic	✓	0	✓	10.86	
21	1	AllTraffic	✓	0	✓	11.47	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStream	2/1	100		0	0
		TrafficStream	13/1	100		0	0
		TrafficStream	15/1	100		0	0

Signal Timings

Network Default: 120s cycle time; 120 steps

Interstage Matrix for Controller Stream 1

		To			
		1	2	3	4
From	1	0	0	5	5
	2	0	0	5	5
	3	5	5	0	5
	4	5	5	5	0

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B,E,F	102	110	8	1	7
	2	✓	2	A,E	110	9	19	1	1
	3	✓	3	D,H,I	14	85	71	1	7
	4	✓	4	C,G	90	97	7	1	7

Final Prediction Table

Traffic Stream Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU		QUEUES			
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	W m
1	1			1	A	322 +	2080	27	3.67	76	16	99.10	53.70	78.26	8.43 +	
2	1			1	B	32	1940	8	7.00	22	309	77.66	72.26	102.87	1.48	
3	1					354	1940	120	26.63	23	284	91.56	3.56	25.18	3.18	
4	1					564	Unrestricted	120	6.00	0	Unrestricted	45.00	0.00	0.00	0.00	
5	1			1	I	555 +	1740	76	0.00	50	81	12.48	9.48	24.82	4.59 +	
6	1			1	H	696	2105	71	0.00	55	63	6.38	4.58	7.69	1.79	
7	1			1	G	30	2105	12	11.14	13	577	42.48	40.68	93.95	1.46	
8	1					1281 +	1919	120	58.00	82	10	12.23	11.03	54.80	25.30 +	
9	1					726 +	2055	120	45.53	57	58	10.41	9.21	40.88	10.36 +	
10	1					982	Unrestricted	120	79.00	0	Unrestricted	4.80	0.00	0.00	0.00	
11	1					36	1936	120	120.00	2	4746	4.82	0.02	0.00	6.00	
12	1			1	E	16	2105	27	27.00	3	2663	36.17	35.77	76.77	6.41	
13	1			1	F	20	1836	8	7.00	15	920	95.58	54.16	94.33	1.46	
14	1					55	1926	120	120.00	3	3052	24.03	0.03	0.00	0.00	
15	1			1	D	55	1943	71	70.00	5	1808	15.99	9.99	40.06	1.45	
16	1			1	C	0	2105	7	8.00	0	Unrestricted	0.00	0.00	0.00	0.00	
17	1					712	Unrestricted	120	19.00	0	Unrestricted	24.00	0.00	0.00	0.00	
18	1					68	Unrestricted	120	102.00	0	Unrestricted	6.00	0.00	0.00	0.00	
19	1					16	1817	120	118.00	1	10122	1.98	0.78	77.16	1.45	
20	1					322	1816	120	92.00	18	408	1.54	0.34	2.55	1.47	
21	1					30	1707	120	118.00	2	5622	1.22	0.02	0.00	0.00	

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: (new file)
Path:
Report generation date: 16/04/2022 16:19:26

»J8 DM - 2039, AM
»J8 DM - 2039, PM

Summary of junction performance

	AM					PM						
	SetID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	SetID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS
J8 DM - 2039												
Stream B-C	D1	0.2	1.1	7.67	0.19	A	D2	24.2	62.3	172.57	1.06	F
Stream B-A		0.0	0.5	19.56	0.01	C		1.0	4.7	1319.80	1.05	F
Stream C-AB		6.9	34.1	11.52	0.74	B		0.8	2.4	8.66	0.30	A

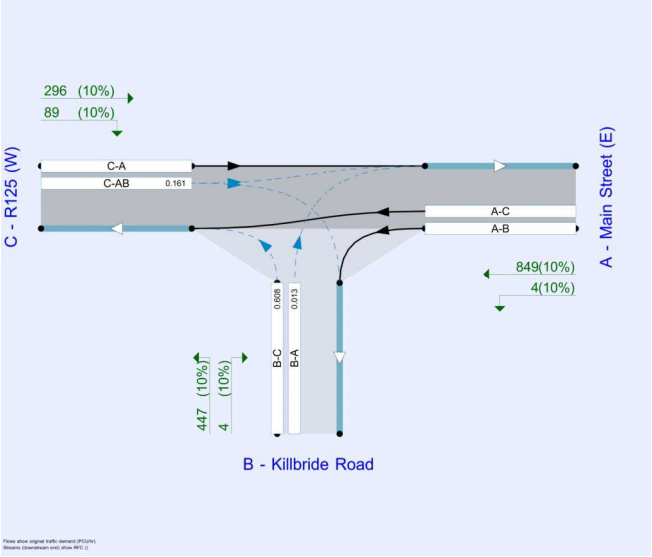
There are warnings associated with one or more model runs - see the "Data Errors and Warnings" tables for each Analysis or Demand Set.
Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description	
Title	
Location	
Site number	
Date	07/09/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	OCSC\joshua.lai
Description	

Units

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



Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2039	AM	ONE HOUR	00:00	01:30	15
D2	2039	PM	ONE HOUR	00:00	01:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	J8 DM	100.000

J8 DM - 2039, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Killbride Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Main Street (E)	Major	Major
B	Killbride Road	Minor	Minor
C	R125 (W)	Major	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - R125 (W)	6.00			100.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Killbride Road	One lane plus flare	10.00	4.50	3.75	3.00	3.00	✓	1.00	80	90

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	524	0.095	0.241	0.152	0.344
B-C	737	0.113	0.286	-	-
C-B	632	0.245	0.245	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2039	AM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Main Street (E)		✓	323	100.000
B - Killbride Road		✓	169	100.000
C - R125 (W)		✓	1217	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - Main Street (E)	B - Killbride Road	C - R125 (W)	
A - Main Street (E)	0	0	323	
B - Killbride Road	2	0	107	
C - R125 (W)	1103	114	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - Main Street (E)	B - Killbride Road	C - R125 (W)	
A - Main Street (E)	10	10	10	
B - Killbride Road	10	10	10	
C - R125 (W)	10	10	10	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.19	7.67	0.2	1.1	A
B-A	0.01	19.56	0.0	0.5	C
C-AB	0.74	11.52	6.9	34.1	B
C-A					
AB					
AC					

Main Results for each time segment

00:00 - 00:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	81	667	0.121	80	0.1	6.737	A
B-A	2	309	0.006	1	0.0	12.884	B
C-AB	317	1139	0.278	313	1.0	4.799	A
C-A	599			599			
AB	0			0			
AC	243			243			

00:15 - 00:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	96	653	0.147	96	0.2	7.104	A
B-A	2	266	0.007	2	0.0	14.979	B
C-AB	511	1245	0.411	508	1.8	5.406	A
C-A	583			583			
AB	0			0			
AC	290			290			

00:30 - 00:45							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	118	634	0.186	118	0.2	7.663	A
B-A	2	208	0.011	2	0.0	19.277	C
C-AB	1004	1306	0.719	996	6.2	9.914	A
C-A	336			336			
AB	0			0			
AC	356			356			

00:45 - 01:00							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	118	634	0.186	118	0.2	7.670	A
B-A	2	205	0.011	2	0.0	19.563	C
C-AB	1041	1407	0.740	1038	6.9	11.516	B
C-A	299			299			
AB	0			0			
AC	356			356			

01:00 - 01:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	96	653	0.147	96	0.2	7.113	A
B-A	2	262	0.007	2	0.0	15.218	C
C-AB	532	1260	0.422	562	2.0	5.822	A
C-A	562			562			
AB	0			0			
AC	290			290			

01:15 - 01:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	81	667	0.121	81	0.2	6.754	A
B-A	2	307	0.009	2	0.0	12.950	B
C-AB	323	1143	0.282	326	1.0	4.900	A
C-A	594			594			
AB	0			0			
AC	243			243			

Queue Variation Results for each time segment

00:00 - 00:15									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.15	0.00	0.00	0.15	0.15			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.98	0.61	1.10	1.54	1.60			N/A	N/A

00:15 - 00:30									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.19	0.00	0.00	0.19	0.19			N/A	N/A
B-A	0.01	0.01	0.28	0.50	0.52			N/A	N/A
C-AB	1.78	0.59	1.64	2.52	3.04			N/A	N/A

00:30 - 00:45									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.25	0.03	0.28	0.51	0.53			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	6.18	0.05	0.52	17.63	31.55			N/A	N/A

00:45 - 01:00									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.25	0.03	0.31	0.58	1.12			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	6.95	0.06	0.83	20.05	34.09			N/A	N/A

01:00 - 01:15									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.19	0.00	0.00	0.19	0.19			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	1.97	0.89	1.39	2.57	3.00			N/A	N/A

01:15 - 01:30									
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.15	0.00	0.00	0.15	0.15			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	1.02	0.11	1.00	1.57	1.97			N/A	N/A

J8 DM - 2039, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Kilbride Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		49.61	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2039	PM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.09

Demand overview (Traffic)

Arm		Linked arm	Use O-O data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Main Street (E)		✓		853	100.000
B - Kilbride Road		✓		451	100.000
C - R125 (W)		✓		385	100.000

Origin-Destination Data

Demand (PCU/hr)		To			
From		A - Main Street (E)	B - Kilbride Road	C - R125 (W)	
	A - Main Street (E)	0	4	848	
	B - Kilbride Road	4	0	447	
	C - R125 (W)	296	89	0	

Vehicle Mix

Heavy Vehicle Percentages		To			
From		A - Main Street (E)	B - Kilbride Road	C - R125 (W)	
	A - Main Street (E)	10	10	10	
	B - Kilbride Road	10	10	10	
	C - R125 (W)	10	10	10	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	1.08	172.57	24.2	62.3	F
B-A	1.05	1319.80	1.0	4.7	F
C-AB	0.30	8.66	0.8	2.4	A
C-A					
AB					
AC					

Main Results for each time segment

00:00 - 00:15							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	337	553	0.608	330	1.8	17.262	C
B-A	3	239	0.013	3	0.0	16.741	C
C-AB	103	639	0.161	102	0.3	7.369	A
C-A	187			187			
AB	3			3			
AC	639			639			

00:15 - 00:30							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	402	517	0.777	395	3.3	30.673	D
B-A	4	137	0.026	4	0.0	29.684	D
C-AB	137	645	0.212	136	0.5	7.796	A
C-A	209			209			
AB	4			4			
AC	763			763			

00:30 - 00:45							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	492	467	1.053	444	15.3	97.242	F
B-A	4	4	1.054	2	0.7	1319.797	F
C-AB	196	656	0.299	195	0.8	8.616	A
C-A	228			228			
AB	4			4			
AC	935			935			

00:45 - 01:00							
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	492	466	1.067	457	24.3	172.567	F
B-A	4	6	0.723	3	1.0	1190.401	F
C-AB	197	656	0.300	197	0.8	8.662	A
C-A	227			227			
AB	4			4			
AC	935			935			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	402	515	0.780	478	5.2	109.330	F
B-A	4	31	0.115	7	0.2	170.389	F
C-AB	137	646	0.213	139	0.5	7.851	A
C-A	209			209			
A-B	4			4			
A-C	763			763			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	337	553	0.608	369	1.8	20.643	C
B-A	3	226	0.013	4	0.0	17.891	C
C-AB	104	639	0.162	104	0.3	7.422	A
C-A	196			196			
A-B	3			3			
A-C	639			639			

Queue Variation Results for each time segment

00:00 - 00:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.62	0.57	1.49	2.16	2.76			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.31	0.00	0.00	0.31	0.31			N/A	N/A

00:15 - 00:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	3.34	0.10	1.25	8.14	11.43			N/A	N/A
B-A	0.03	0.03	0.28	0.50	0.53			N/A	N/A
C-AB	0.46	0.00	0.00	0.46	0.46			N/A	N/A

00:30 - 00:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	15.33	1.22	11.53	31.47	35.50			N/A	N/A
B-A	0.71	0.03	0.32	1.45	3.26			N/A	N/A
C-AB	0.78	0.03	0.29	0.78	1.01			N/A	N/A

00:45 - 01:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	24.16	2.30	16.54	49.77	62.34			N/A	N/A
B-A	0.95	0.03	0.34	1.63	4.70			N/A	N/A
C-AB	0.79	0.05	0.48	1.66	2.38			N/A	N/A

01:00 - 01:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	5.16	0.06	0.60	14.76	25.06			N/A	N/A
B-A	0.17	0.03	0.29	0.52	0.55			N/A	N/A
C-AB	0.48	0.00	0.00	0.48	0.48			N/A	N/A

Junctions 9
PICADY 9 - Priority Intersection Module
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Filename: (new file)
Path:
Report generation date: 16/05/2022 18:02:58

»J8 DS - 2039, AM
»J8 DS - 2039, PM

Summary of junction performance

		AM					PM				
SetID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS	SetID	Queue (PCU)	95% Queue (PCU)	Delay (s)	RFC	LOS
J8 DS - 2039											
Stream B-C	D1	0.2	1.1	7.64	0.18	A	20.4	58.5	150.42	1.03	F
Stream B-A		0.0	0.5	16.14	0.02	C	0.9	4.6	1287.07	1.03	F
Stream C-AB		5.8	29.0	9.92	0.70	A	0.8	2.2	8.60	0.29	A

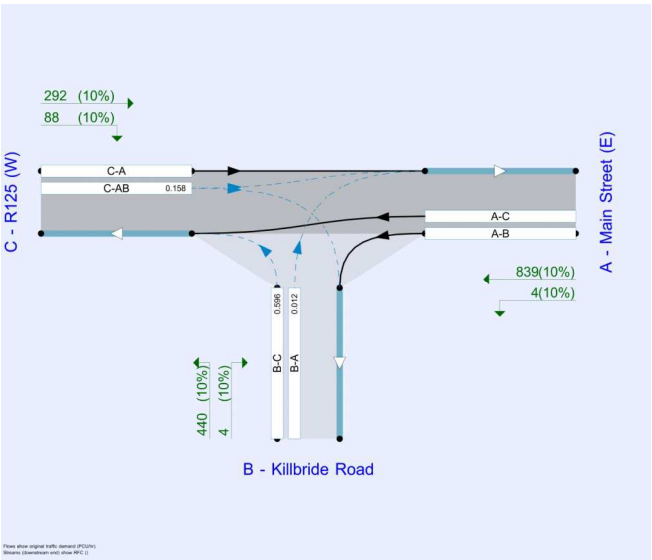
There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.
Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description	
Title	
Location	
Site number	
Date	07/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC0Joshua.Lai
Description	

Units

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



Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2039	AM	ONE HOUR	00:00	01:30	15
D2	2039	PM	ONE HOUR	00:00	01:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	J8 DS	100.000

J8 DS - 2039, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Kilbride Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Main Street (E)		Major
B	Kilbride Road		Minor
C	R125 (W)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - R125 (W)	6.00			100.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Kilbride Road	One lane plus flare	10.00	4.50	3.75	3.00	3.00	✓	1.00	80	90

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	525	0.096	0.242	0.152	0.345
B-C	737	0.113	0.285	-	-
C-B	632	0.245	0.245	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (H:M)	Finish time (H:M)	Time segment length (min)
D1	2039	AM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Main Street (E)		✓	320	100.000
B - Kilbride Road		✓	108	100.000
C - R125 (W)		✓	1198	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - Main Street (E)	B - Kilbride Road	C - R125 (W)	
A - Main Street (E)	0	0	320	
B - Kilbride Road	3	0	105	
C - R125 (W)	1086	112	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - Main Street (E)	B - Kilbride Road	C - R125 (W)	
A - Main Street (E)	10	10	10	
B - Kilbride Road	10	10	10	
C - R125 (W)	10	10	10	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	0.19	7.64	0.119	1.1	A
B-A	0.02	19.14	0.0	0.5	C
C-AB	0.70	9.92	5.8	29.0	A
C-A					
A-B					
A-C					

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	79	667	0.119	78	0.1	6.723	A
B-A	2	313	0.007	2	0.0	12.758	B
C-AB	305	1130	0.270	301	0.9	4.779	A
C-A	597			597			
A-B	0			0			
A-C	241			241			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	94	653	0.145	94	0.2	7.085	A
B-A	3	270	0.010	3	0.0	14.790	B
C-AB	488	1235	0.395	485	1.7	5.316	A
C-A	589			589			
A-B	0			0			
A-C	288			288			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	116	634	0.182	115	0.2	7.636	A
B-A	3	213	0.016	3	0.0	18.915	C
C-AB	944	1363	0.683	930	5.3	8.932	A
C-A	375			375			
A-B	0			0			
A-C	352			352			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	116	634	0.182	116	0.2	7.643	A
B-A	3	210	0.016	3	0.0	19.144	C
C-AB	972	1392	0.699	970	5.8	9.925	A
C-A	347			347			
A-B	0			0			
A-C	352			352			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	94	653	0.145	95	0.2	7.094	A
B-A	3	267	0.010	3	0.0	14.981	B
C-AB	504	1247	0.404	520	1.8	5.630	A
C-A	573			573			
A-B	0			0			
A-C	288			288			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	79	667	0.119	79	0.1	6.743	A
B-A	2	311	0.007	2	0.0	12.819	B
C-AB	310	1134	0.273	313	1.0	4.871	A
C-A	592			592			
A-B	0			0			
A-C	241			241			

Queue Variation Results for each time segment

00:00 - 00:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.15	0.00	0.00	0.15	0.15			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.82	0.61	1.10	1.54	1.60			N/A	N/A

00:15 - 00:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.18	0.00	0.00	0.18	0.18			N/A	N/A
B-A	0.01	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	1.67	0.63	1.57	2.11	2.51			N/A	N/A

00:30 - 00:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.24	0.03	0.28	0.51	0.53			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	5.30	0.05	0.45	14.35	28.20			N/A	N/A

00:45 - 01:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.24	0.03	0.30	0.55	1.06			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	5.79	0.05	0.53	16.55	29.03			N/A	N/A

01:00 - 01:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.19	0.00	0.00	0.19	0.19			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	1.83	0.68	1.29	2.12	2.38			N/A	N/A

01:15 - 01:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.15	0.00	0.00	0.15	0.15			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.98	0.14	1.02	1.65	1.67			N/A	N/A

J8 DS - 2039, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - Kilbride Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untlBed	T-Junction	Two-way		43.59	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2039	PM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Main Street (E)		✓	843	100.000
B - Kilbride Road		✓	444	100.000
C - R125 (W)		✓	380	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To			
		A - Main Street (E)	B - Kilbride Road	C - R125 (W)	
	A - Main Street (E)	0	4	839	
	B - Kilbride Road	4	0	440	
	C - R125 (W)	292	88	0	

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - Main Street (E)	B - Kilbride Road	C - R125 (W)	
	A - Main Street (E)	10	10	10	
	B - Kilbride Road	10	10	10	
	C - R125 (W)	10	10	10	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-C	1.03	150.42	20.4	58.5	F
B-A	1.03	1287.07	0.9	4.8	F
C-AB	0.29	8.60	0.8	2.2	A
C-A					
AB					
AC					

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	331	556	0.596	325	1.6	16.760	C
B-A	3	245	0.012	3	0.0	16.326	C
C-AB	101	638	0.158	100	0.3	7.352	A
C-A	185			185			
AB	3			3			
AC	632			632			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	396	520	0.761	389	3.1	28.966	D
B-A	4	147	0.025	4	0.0	27.688	D
C-AB	134	644	0.208	134	0.4	7.767	A
C-A	207			207			
AB	4			4			
AC	754			754			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	484	471	1.029	443	13.5	68.291	F
B-A	4	4	1.031	2	0.7	1287.073	F
C-AB	192	654	0.293	190	0.8	8.557	A
C-A	227			227			
AB	4			4			
AC	924			924			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	484	489	1.034	457	20.4	150.425	F
B-A	4	6	0.701	3	0.8	1148.174	F
C-AB	192	655	0.293	192	0.8	8.568	A
C-A	226			226			
AB	4			4			
AC	924			924			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	396	518	0.764	460	4.4	84.164	F
B-A	4	64	0.058	7	0.1	72.789	F
C-AB	135	645	0.209	136	0.5	7.818	A
C-A	207			207			
AB	4			4			
AC	754			754			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	331	555	0.596	342	1.7	19.364	C
B-A	3	234	0.013	3	0.0	17.173	C
C-AB	102	639	0.159	102	0.3	7.403	A
C-A	194			184			
AB	3			3			
AC	632			632			

Queue Variation Results for each time segment

00:00 - 00:15

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.55	0.59	1.44	2.04	2.25			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.31	0.00	0.00	0.31	0.31			N/A	N/A

00:15 - 00:30

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	3.10	0.10	1.65	7.51	10.57			N/A	N/A
B-A	0.03	0.03	0.28	0.50	0.53			N/A	N/A
C-AB	0.45	0.00	0.00	0.45	0.45			N/A	N/A

00:30 - 00:45

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	13.46	1.03	0.43	29.09	37.28			N/A	N/A
B-A	0.70	0.03	0.32	1.35	3.16			N/A	N/A
C-AB	0.76	0.03	0.29	0.76	0.94			N/A	N/A

00:45 - 01:00

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	20.39	1.32	14.13	45.29	58.49			N/A	N/A
B-A	0.93	0.03	0.33	1.53	4.56			N/A	N/A
C-AB	0.77	0.05	0.48	1.55	2.18			N/A	N/A

01:00 - 01:15

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	4.35	0.05	0.50	12.25	21.90			N/A	N/A
B-A	0.07	0.03	0.28	0.50	0.53			N/A	N/A
C-AB	0.47	0.00	0.00	0.47	0.47			N/A	N/A

01:15 - 01:30

Stream	Mean (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Q05 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.70	0.03	0.32	1.70	7.62			N/A	N/A
B-A	0.01	0.01	0.28	0.50	0.52			N/A	N/A
C-AB	0.32	0.00	0.00	0.32	0.32			N/A	N/A

TRANSYT 15

Version: 15.5.2.7994
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Filename: (new file)
Path:
Report generation date: 16/04/2022 16:22:14

- «A1 - J9 DM : D1 - 2039 AM* :
»Summary
»Network Options
»Arms and Traffic Streams
»Signal Timings
»Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCR	Region
Driving side	Left
Date	07/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC\joshua.tai
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red- With- Amber	Display End-Of- Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A1 - J9 DM
D1 - 2039 AM*

Summary

Data Errors and Warnings
No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (E per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
1	16/04/2022 16:22:13	16/04/2022 16:22:13	08:00	35	30.37	1.87	46.88	2/1	0	0	2/1	3/1	2/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J9 DM		D1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2039 AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
35		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (s)	Phase maximum broken penalty (s)	Intergreen broken penalty (s)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Poisson Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Is Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Extended - Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1, -15, -5, -1, 15, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.80	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate call saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				10.00	✓	Sum of lanes	1915	✓	1800	✓		Normal	
2	1				150.00	✓	Sum of lanes	1887			✓		Normal	
3	1				200.00	✓	Sum of lanes	1798					Normal	
4	1				150.00								Normal	
5	1				30.00	✓	Sum of lanes	1915					Normal	
6	1				5.00	✓	Sum of lanes	1735				✓	Normal	
7	1				5.00	✓	Sum of lanes	1532				✓	Normal	
8	1				50.00								Normal	
9	1				200.00								Normal	
10	1				20.00	✓	Sum of lanes	1915					Normal	
11	1				10.00	✓	Sum of lanes	1700				✓	Normal	
12	1				7.00	✓	Sum of lanes	1532	✓	1800		✓	Normal	
13	1				40.00								Normal	
14	1				7.00	✓	Sum of lanes	1604	✓	1800		✓	Normal	
15	1				7.00	✓	Sum of lanes	1660	✓	1800		✓	Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RBS?	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
2	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	6	6.00	✓	1887
3	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	49	11.25	✓	1798
4	1	1	(untitled)											
5	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
6	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	99	8.05		1735
7	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
8	1	1	(untitled)											
9	1	1	(untitled)											
10	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
11	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	89	6.39		1700
12	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
13	1	1	(untitled)											
14	1	1	(untitled)		✓	N/A	N/A	0	2.50	✓	100	6.00		1604
15	1	1	(untitled)		✓	N/A	N/A	0	2.50	✓	100	7.21		1660

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	

Give Way Data							
Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
6	1	AllTraffic					
7	1	AllTraffic					
11	1	AllTraffic					
12	1	AllTraffic					
14	1	AllTraffic	✓	0	✓	6.00	
15	1	AllTraffic	✓	0	✓	7.21	

Give Way Data - All Movements - Conflicts										
Traffic Stream	Description	Controlling type	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration	
1		TrafficStreamMovement	12/1	8/1	100	0.00		0	0	
		TrafficStreamMovement	11/1	8/1	100	0.00		0	0	
		TrafficStreamMovement	3/1	1/1	100	0.00		0	0	
		TrafficStreamMovement	7/1	1/1	100	0.00		0	0	
		TrafficStreamMovement	6/1	13/1	100	0.00		0	0	
		TrafficStreamMovement	2/1	9/1	100	0.00		0	0	
		TrafficStreamMovement	2/1	9/1	100			0	0	
		TrafficStreamMovement	2/1	13/1	100			0	0	
		TrafficStreamMovement	3/1	1/1	100			0	0	
		TrafficStreamMovement	3/1	8/1	100			0	0	

Signal Timings

Network Default: 35s cycle time; 35 steps

Interstage Matrix for Controller Stream 1

From	To	
	1	2
	1	0
2	0	0

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	2	✓	1	A,B	0	16	16	1	7
		✓	2	C	21	0	14	1	14

Final Prediction Table

Traffic Stream Results																
			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		D wel mu
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated sat flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	
1	1			1	A	316	1915	16	0.00	34	165	7.47	6.27	49.54	1.54	
2	1			1	B	448	1887	16	0.00	49	84	25.95	7.65	66.56	3.10	
3	1					433	1798	35	5.01	28	220	24.80	0.80	12.17	0.78	
4	1					316	Unrestricted	35	8.00	0	Unrestricted	18.00	0.00	0.00	0.00	
5	1					190	1915	35	0.00	10	807	3.70	0.10	0.00	0.01	
6	1					119	1700	35	0.00	7	1186	1.08	0.68	0.00	0.00	
7	1					71	1500	35	3.95	5	1587	1.25	0.25	7.62	0.06	
8	1					314	Unrestricted	35	2.00	0	Unrestricted	6.00	0.00	0.00	0.00	
9	1					463	Unrestricted	35	0.00	0	Unrestricted	24.00	0.00	0.00	0.00	
10	1					80	1915	35	0.00	4	2654	2.44	0.04	0.00	0.00	
11	1					27	1600	35	33.98	2	4780	1.30	0.10	3.61	0.01	
12	1					53	1516	35	35.00	3	2475	1.04	0.04	0.00	0.00	
13	1					58	Unrestricted	35	24.00	0	Unrestricted	4.80	0.00	0.00	0.00	
14	1					31	1202	35	33.00	3	3390	1.04	0.04	0.00	0.00	
15	1					130	< 962	35	18.00	13	580	1.61	0.61	17.51	1.22	+

Network Results								
	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	325.00	12.54	25.92	1.67	23.77	6.60	0.00	30.37
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	325.00	12.54	25.92	1.67	23.77	6.60	0.00	30.37

- < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

TRANSYT 15	
Version: 15.5.2.7994	
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Filename: (new file)

Path:

Report generation date: 16/04/2022 16:22:43

<A2 - J9 DM : D2 - 2039 PM* :

- »Summary
- »Network Options
- »Arms and Traffic Streams
- »Signal Timings
- »Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCR	Region
Driving side	Left
Date	07/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC(joshua.tai)
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick lanes	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-of-Green	Display Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	per hour	s	-hour	per hour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A2 - J9 DM D2 - 2039 PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
2	16/04/2022 16:22:13	16/04/2022 16:22:13	08:00	35	5.74	0.31	13.65	1/1	0	0	1/1	3/1	1/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J9 DM		D2	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2039 PM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
35		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (s)	Phase maximum broken penalty (s)	Intergreen broken penalty (s)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Extended - Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1, -15, -5, -1, 15, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.80	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				10.00	✓	Sum of lanes	1915	✓	1800	✓		Normal	
2	1				150.00	✓	Sum of lanes	1773			✓		Normal	
3	1				200.00	✓	Sum of lanes	1762					Normal	
4	1				150.00								Normal	
5	1				30.00	✓	Sum of lanes	1915					Normal	
6	1				5.00	✓	Sum of lanes	1732				✓	Normal	
7	1				5.00	✓	Sum of lanes	1532				✓	Normal	
8	1				50.00								Normal	
9	1				200.00								Normal	
10	1				20.00	✓	Sum of lanes	1915					Normal	
11	1				10.00	✓	Sum of lanes	1665				✓	Normal	
12	1				7.00	✓	Sum of lanes	1915	✓	1800		✓	Normal	
13	1				40.00								Normal	
14	1				7.00	✓	Sum of lanes	1604	✓	1800		✓	Normal	
15	1				7.00	✓	Sum of lanes	1660	✓	1800		✓	Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use R&R?	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
2	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	32	6.00	✓	1773
3	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	65	11.25	✓	1762
4	1	1	(unfilled)											
5	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	0	99996.00	✓	1915
6	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	100	8.05	✓	1732
7	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
8	1	1	(unfilled)											
9	1	1	(unfilled)											
10	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	0	99996.00	✓	1915
11	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	100	6.39	✓	1665
12	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	0	6.00	✓	1915
13	1	1	(unfilled)											
14	1	1	(unfilled)		✓	N/A	N/A	0	2.50	✓	100	6.00		1604
15	1	1	(unfilled)		✓	N/A	N/A	0	2.50	✓	100	7.21		1660

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
6	1	AllTraffic					
7	1	AllTraffic					
11	1	AllTraffic					
12	1	AllTraffic					
14	1	AllTraffic	✓	0	✓	6.00	
15	1	AllTraffic	✓	0	✓	7.21	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStreamMovement	12/1	8/1	100	0.00		0	0
		TrafficStreamMovement	11/1	8/1	100	0.00		0	0
		TrafficStreamMovement	3/1	1/1	100	0.00		0	0
		TrafficStreamMovement	7/1	1/1	100	0.00		0	0
		TrafficStreamMovement	6/1	13/1	100	0.00		0	0
		TrafficStreamMovement	2/1	9/1	100	0.00		0	0
		TrafficStreamMovement	2/1	9/1	100	0.00		0	0
		TrafficStreamMovement	2/1	13/1	100	0.00		0	0
		TrafficStreamMovement	3/1	1/1	100	0.00		0	0
		TrafficStreamMovement	3/1	8/1	100	0.00		0	0

Signal Timings

Network Default: 35s cycle time; 35 steps

Interstage Matrix for Controller Stream 1

	To
	1 2
From	1 0 5
	2 0 0

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	30	11	16	1	7
	2	✓	2	C	16	30	14	1	14

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	SIGNALS		FLOWS		PERFORMANCE			PER PCU			D	w	e	l	m	u
						Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)						
1	1			1	A	127	1915	16	0.00	14	559	6.50	5.30	52.30	1.46						
2	1			1	B	62	1773	16	0.00	10	845	23.11	5.11	48.68	0.42						
3	1					173	1762	35	0.00	10	817	24.11	0.11	0.00	0.01						
4	1					127	Unrestricted	35	14.00	0	Unrestricted	18.00	0.00	0.00	0.00						
5	1					59	1915	35	35.00	3	2821	3.63	0.03	0.00	0.00						
6	1					12	1732	35	35.00	1	12890	1.01	0.01	0.00	0.00						
7	1					47	1500	35	35.00	3	2772	1.04	0.04	0.00	0.00						
8	1					84	Unrestricted	35	0.00	0	Unrestricted	6.00	0.00	0.00	0.00						
9	1					47	Unrestricted	35	24.00	0	Unrestricted	24.00	0.00	0.00	0.00						
10	1					19	1915	35	35.00	1	8971	2.41	0.01	0.00	0.00						
11	1					19	1600	35	35.00	1	7479	1.21	0.01	0.00	0.00						
12	1					0	1713	35	35.00	0	Unrestricted	0.00	0.00	0.00	0.00						
13	1					75	Unrestricted	35	17.00	0	Unrestricted	4.80	0.00	0.00	0.00						
14	1					49	1472	35	35.00	3	2603	1.04	0.04	0.00	0.00						
15	1					21	1400	35	34.00	1	5901	1.02	0.02	0.00	0.00						

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	86.95	3.22	27.01	0.31	4.41	1.33	0.00	5.74
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	86.95	3.22	27.01	0.31	4.41	1.33	0.00	5.74

- <= adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- += average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

TRANSYT 15

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Filename: (new file)
Path:
Report generation date: 16/04/2022 17:49:53

- «A1 - J9 DS : D1 - 2039 AM* :
»Summary
»Network Options
»Arms and Traffic Streams
»Signal Timings
»Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCR	Region
Driving side	Left
Date	07/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC\joshua.tai
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A1 - J9 DS
D1 - 2039 AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (E per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
1	16/04/2022 17:45:12	16/04/2022 17:45:12	08:00	35	89.42	5.16	76.83	2/1	0	0	2/1	3/1	2/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J9 DS		D1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2039 AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
35		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (s)	Phase maximum broken penalty (s)	Intergreen broken penalty (s)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Is Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Extended - Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1, -15, -5, -1, 15, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.80	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate call saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				10.00	✓	Sum of lanes	1915	✓	1800	✓		Normal	
2	1				150.00	✓	Sum of lanes	1896			✓		Normal	
3	1				200.00	✓	Sum of lanes	1837					Normal	
4	1				150.00								Normal	
5	1				30.00	✓	Sum of lanes	1915					Normal	
6	1				5.00	✓	Sum of lanes	1735				✓	Normal	
7	1				5.00	✓	Sum of lanes	1532				✓	Normal	
8	1				50.00								Normal	
9	1				200.00								Normal	
10	1				20.00	✓	Sum of lanes	1915					Normal	
11	1				10.00	✓	Sum of lanes	1700				✓	Normal	
12	1				7.00	✓	Sum of lanes	1532	✓	1800		✓	Normal	
13	1				40.00								Normal	
14	1				7.00	✓	Sum of lanes	1604	✓	1800		✓	Normal	
15	1				7.00	✓	Sum of lanes	1660	✓	1800		✓	Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RBS?	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
2	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	4	6.00	✓	1896
3	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	32	11.25	✓	1837
4	1	1	(untitled)											
5	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
6	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	99	8.05		1735
7	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
8	1	1	(untitled)											
9	1	1	(untitled)											
10	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
11	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	89	6.39		1700
12	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
13	1	1	(untitled)											
14	1	1	(untitled)		✓	N/A	N/A	0	2.50	✓	100	6.00		1604
15	1	1	(untitled)		✓	N/A	N/A	0	2.50	✓	100	7.21		1660

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	

Give Way Data							
Am	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
6	1	AllTraffic					
7	1	AllTraffic					
11	1	AllTraffic					
12	1	AllTraffic					
14	1	AllTraffic	✓	0	✓	6.00	
15	1	AllTraffic	✓	0	✓	7.21	

Give Way Data - All Movements - Conflicts									
Traffic Stream	Description	Controlling type	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStreamMovement	12/1	8/1	100	0.00		0	0
		TrafficStreamMovement	11/1	8/1	100	0.00		0	0
		TrafficStreamMovement	3/1	1/1	100	0.00		0	0
		TrafficStreamMovement	7/1	1/1	100	0.00		0	0
		TrafficStreamMovement	6/1	13/1	100	0.00		0	0
		TrafficStreamMovement	2/1	9/1	100	0.00		0	0
		TrafficStreamMovement	2/1	9/1	100			0	0
		TrafficStreamMovement	2/1	13/1	100			0	0
		TrafficStreamMovement	3/1	1/1	100			0	0
		TrafficStreamMovement	3/1	8/1	100			0	0

Signal Timings

Network Default: 35s cycle time; 35 steps

Interstage Matrix for Controller Stream 1

From	To	
	1	2
	1	0
2	0	0

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	2	✓	1	A,B	0	16	16	1	7
		✓	2	C	21	0	14	1	14

Final Prediction Table

Traffic Stream Results													
Am	Traffic Stream	Name	Traffic node	Controller stream	Phase	SIGNALS		FLOWS		PERFORMANCE			
						Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)
1	1			1	A	560 <	1915	16	0.00	60	49	8.03	6.83
2	1			1	B	726	1896	16	0.00	79	14	32.62	14.62
3	1					648	1837	35	12.76	56	62	29.17	5.17
4	1					560	Unrestricted	35	5.00	0	Unrestricted	18.00	0.00
5	1					215	1915	35	0.00	11	702	3.72	0.12
6	1					119	1700	35	0.00	7	1186	1.08	0.08
7	1					96	1500	35	11.84	10	838	2.84	1.84
8	1					330	Unrestricted	35	9.00	0	Unrestricted	6.00	0.00
9	1					719	Unrestricted	35	0.00	0	Unrestricted	24.00	0.00
10	1					78	1915	35	0.00	4	2110	2.44	0.04
11	1					27	1600	35	33.98	2	3865	2.27	1.07
12	1					51	1516	35	35.00	3	2576	1.04	0.04
13	1					58	Unrestricted	35	26.00	0	Unrestricted	4.80	0.00
14	1					31	968	35	29.00	3	2712	1.16	0.16
15	1					150 <	801	35	18.00	19	380	4.56	3.56

Network Results								
	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	501.70	21.92	22.89	5.16	73.29	16.13	0.00	89.42
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	501.70	21.92	22.89	5.16	73.29	16.13	0.00	89.42

- < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

TRANSYT 15	
Version: 15.5.2.7994	
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Filename: (new file)

Path:

Report generation date: 16/04/2022 17:50:55

<A2 - J9 DS : D2 - 2039 PM* :

- »Summary
- »Network Options
- »Arms and Traffic Streams
- »Signal Timings
- »Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCR	Region
Driving side	Left
Date	07/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC(joshua.tai)
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick fares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	per hour	s	-hour	per hour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A2 - J9 DS D2 - 2039 PM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst PR
2	16/04/2022 17:45:51	16/04/2022 17:46:51	08:00	35	59.99	3.43	60.02	1/1	0	0	1/1	3/1	1/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J9 DS		D2	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2039 PM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
35		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (s)	Phase maximum broken penalty (s)	Intergreen broken penalty (s)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Extended - Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1, -15, -5, -1, 15, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.80	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				10.00	✓	Sum of lanes	1915	✓	1800	✓		Normal	
2	1				150.00	✓	Sum of lanes	1882			✓		Normal	
3	1				200.00	✓	Sum of lanes	1875					Normal	
4	1				150.00								Normal	
5	1				30.00	✓	Sum of lanes	1915					Normal	
6	1				5.00	✓	Sum of lanes	1732				✓	Normal	
7	1				5.00	✓	Sum of lanes	1532				✓	Normal	
8	1				50.00								Normal	
9	1				200.00								Normal	
10	1				20.00	✓	Sum of lanes	1915					Normal	
11	1				10.00	✓	Sum of lanes	1665				✓	Normal	
12	1				7.00	✓	Sum of lanes	1915	✓	1800		✓	Normal	
13	1				40.00								Normal	
14	1				7.00	✓	Sum of lanes	1604	✓	1800		✓	Normal	
15	1				7.00	✓	Sum of lanes	1660	✓	1800		✓	Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use R&R?	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
2	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	7	6.00	✓	1882
3	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	16	11.25	✓	1875
4	1	1	(unfilled)											
5	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
6	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	100	8.05	✓	1732
7	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
8	1	1	(unfilled)											
9	1	1	(unfilled)											
10	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
11	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	100	6.39	✓	1665
12	1	1	(unfilled)		✓	N/A	N/A	0	3.00	✓	0	6.00	✓	1915
13	1	1	(unfilled)											
14	1	1	(unfilled)		✓	N/A	N/A	0	2.50	✓	100	6.00		1604
15	1	1	(unfilled)		✓	N/A	N/A	0	2.50	✓	100	7.21		1660

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
6	1	AllTraffic					
7	1	AllTraffic					
11	1	AllTraffic					
12	1	AllTraffic					
14	1	AllTraffic	✓	0	✓	6.00	
15	1	AllTraffic	✓	0	✓	7.21	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStreamMovement	12/1	8/1	100	0.00		0	0
		TrafficStreamMovement	11/1	8/1	100	0.00		0	0
		TrafficStreamMovement	3/1	1/1	100	0.00		0	0
		TrafficStreamMovement	7/1	1/1	100	0.00		0	0
		TrafficStreamMovement	6/1	13/1	100	0.00		0	0
		TrafficStreamMovement	2/1	9/1	100	0.00		0	0
		TrafficStreamMovement	2/1	9/1	100	0.00		0	0
		TrafficStreamMovement	2/1	13/1	100	0.00		0	0
		TrafficStreamMovement	3/1	1/1	100	0.00		0	0
		TrafficStreamMovement	3/1	8/1	100	0.00		0	0

Signal Timings

Network Default: 35s cycle time; 35 steps

Interstage Matrix for Controller Stream 1

	To
	1 2
From	1 0 5
	2 0 0

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	30	11	16	1	7
	2	✓	2	C	16	30	14	1	14

Final Prediction Table

Traffic Stream Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	0
1	1			1	A	642 <	1915	16	0.00	69	30	9.03	7.83	35.05	2.21 +	
2	1			1	B	388	1862	16	0.00	42	112	25.29	7.29	62.84	2.53	
3	1					677	1875	35	13.67	59	52	30.15	6.15	58.32	4.38	
4	1					642	Unrestricted	35	4.00	0	Unrestricted	18.00	0.00	0.00	0.00	
5	1					69	1915	35	0.00	4	2398	3.64	0.04	0.00	0.00	
6	1					12	1732	35	35.00	1	12890	1.01	0.01	0.00	0.00	
7	1					57	1500	35	33.69	6	1478	2.80	1.80	30.61	0.16	
8	1					127	Unrestricted	35	13.00	0	Unrestricted	6.00	0.00	0.00	0.00	
9	1					309	Unrestricted	35	4.00	0	Unrestricted	24.00	0.00	0.00	0.00	
10	1					19	1915	35	35.00	1	8971	2.41	0.01	0.00	0.00	
11	1					19	1600	35	33.98	2	5317	2.45	1.25	22.45	0.05	
12	1					0	1713	35	35.00	0	Unrestricted	0.00	0.00	0.00	0.00	
13	1					75	Unrestricted	35	18.00	0	Unrestricted	4.80	0.00	0.00	0.00	
14	1					49	1215	35	27.00	4	2132	1.09	0.09	2.57	1.21	
15	1					65	816	35	18.00	8	1030	4.19	3.19	46.88	1.21	

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	371.25	15.82	23.47	3.43	48.74	11.25	0.00	59.99
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	371.25	15.82	23.47	3.43	48.74	11.25	0.00	59.99

- < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

TRANSYT 15

Version: 15.5.2.7994
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Filename: (new file)
Path:
Report generation date: 16/04/2022 17:21:20

- «A1 - J10 DM : D1 - 2039 AM* »:
- »Summary
 - »Network Options
 - »Arms and Traffic Streams
 - »Signal Timings
 - »Final Prediction Table

File summary

File description	
File title	(untitled)
Location	
Site number	
UTCR	Region
Driving side	Left
Date	03/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC030shua.tai
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick fares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻²)	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻²)	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUT Profile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.50	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

A1 - J10 DM
D1 - 2039 AM*

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	Traffic Stream Data	Arm 8 - Traffic Stream 1	Traffic Stream 8/1 is not connected to any other Links or Traffic Streams
Info	Traffic Stream Data	Arm 12 - Traffic Stream 1	Traffic Stream 12/1 is not connected to any other Links or Traffic Streams
Info	Traffic Stream Flows	Arm 8 - Traffic Stream 1 - Flows (08:00-09:00)	Traffic Stream 8/1 has no paths passing through it, so will not be assigned any flows.
Info	Traffic Stream Flows	Arm 12 - Traffic Stream 1 - Flows (08:00-09:00)	Traffic Stream 12/1 has no paths passing through it, so will not be assigned any flows.

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
1	16/04/2022 17:19:23	16/04/2022 17:19:23	08:00	100	127.52	8.18	80.09	5/1	0	0	5/1	7/1	5/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J10 DM		D1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2039 AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				20.00	✓	Sum of lanes	2055	✓	1800	✓		Normal	
2	1				20.00	✓	Sum of lanes	1915	✓	1800	✓		Normal	
3	1				180.00	✓	Sum of lanes	1897					Normal	
4	1			✓	48.55								Normal	
5	1				200.00	✓	Sum of lanes	1532			✓		Normal	
6	1				200.00								Normal	
7	1				80.00	✓	Sum of lanes	1915					Normal	
8	1				7.00	✓	Sum of lanes	2055	✓	1800			Normal	
9	1				10.00	✓	Sum of lanes	2020	✓	1800	✓		Normal	
10	1			✓	51.69								Normal	
11	1				7.00	✓	Sum of lanes	1644	✓	1800		✓	Normal	
12	1			✓	6.40								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RBS?	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
2	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
3	1	1	(untitled)		✓	N/A	N/A	0	3.25	✓	61	40.23	✓	1897
4	1	1	(untitled)											
5	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
6	1	1	(untitled)											
7	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
9	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	7	6.00		2020
10	1	1	(untitled)											
11	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	6.00		1644
12	1	1	(untitled)											

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	
5	1	1	C	
9	1	1	D	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
11	1	All Traffic	✓	0	✓	6.00	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStreamMovement	8/1	4/1	100		0	0

Signal Timings

Network Default: 100s cycle time; 100 steps

Interstage Matrix for Controller Stream 1

		To			
		1	2	3	
From	1	0	0	5	
	2	0	0	5	
	3	5	5	0	

Resultant Stages

Controller stream	Resultant stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	8	24	16	1	1
	2	✓	2	A,B,D	24	65	41	1	7
	3	✓	3	C	70	3	33	1	7

Final Prediction Table

Traffic Stream Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU		QUEUES			
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Dwell time (s)
1	1			1	A	237	2055	57	1.94	21	337	12.98	10.58	44.69	2.89	
2	1			1	B	153	1915	57	0.00	14	553	12.24	9.84	43.80	1.86	
3	1					390	1897	100	3.37	21	323	21.91	0.31	2.32	0.46	
4	1					736	Unrestricted	100	17.00	0	Unrestricted	5.83	0.00	0.00	0.00	
5	1			1	C	313	1532	33	0.00	60	50	56.52	32.52	85.75	7.58	
6	1					272	Unrestricted	100	31.00	0	Unrestricted	24.00	0.00	0.00	0.00	
7	1					505	1915	100	52.36	55	63	29.56	19.96	70.16	10.30	
8	1					0	2055	100	100.00	0	Unrestricted	0.00	0.00	0.00	0.00	
9	1			1	D	505 +	2020	41	0.00	60	51	9.89	8.69	13.41	1.86 +	
10	1					200	Unrestricted	100	18.00	0	Unrestricted	6.20	0.00	0.00	0.00	
11	1					237 +	1153	100	42.00	21	338	3.84	2.84	19.61	1.23 +	
12	1					0	Unrestricted	100	100.00	0	Unrestricted	0.00	0.00	0.00	0.00	

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	288.18	17.80	16.19	8.18	116.19	11.33	0.00	127.52
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	288.18	17.80	16.19	8.18	116.19	11.33	0.00	127.52

- <= adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

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Filename: (new file)

Path:

Report generation date: 16/04/2022 17:41:55

«A2 - J10 DM : D2 - 2039 PM* :

- »Summary
- »Network Options
- »Arms and Traffic Streams
- »Signal Timings
- »Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCR	Region
Driving side	Left
Date	03/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC03shua.tai
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick fibres	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Ambor	Display End-Of-Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A2 - J10 DM D2 - 2039 PM*

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	Traffic Stream Data	Arm 8 - Traffic Stream 1	Traffic Stream 8/1 is not connected to any other Links or Traffic Streams
Info	Traffic Stream Data	Arm 12 - Traffic Stream 1	Traffic Stream 12/1 is not connected to any other Links or Traffic Streams
Info	Traffic Stream Flows	Arm 8 - Traffic Stream 1 - Flows (08:00-09:00)	Traffic Stream 8/1 has no paths passing through it, so will not be assigned any flows.
Info	Traffic Stream Flows	Arm 12 - Traffic Stream 1 - Flows (08:00-09:00)	Traffic Stream 12/1 has no paths passing through it, so will not be assigned any flows.

Run Summary

Analysis set used	Run start time	Run finish time	Model/Eng start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Is it worse over PRC
2	16/04/2022 17:39:37	16/04/2022 17:39:37	08:00	100	198.66	12.74	79.35	3/1	0	0	5/1	3/1	3/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J10 DM		D2	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2039 PM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modeled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-Specific Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻²)	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻²)	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUT Profile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.80	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				20.00	✓	Sum of lanes	2055	✓	1800	✓		Normal	
2	1				20.00	✓	Sum of lanes	1915	✓	1800	✓		Normal	
3	1				160.00	✓	Sum of lanes	1908					Normal	
4	1			✓	48.55								Normal	
5	1				200.00	✓	Sum of lanes	1532			✓		Normal	
6	1				200.00								Normal	
7	1				80.00	✓	Sum of lanes	1915					Normal	
8	1				7.00	✓	Sum of lanes	2055	✓	1800			Normal	
9	1				10.00	✓	Sum of lanes	1877	✓	1800	✓		Normal	
10	1			✓	51.69								Normal	
11	1				7.00	✓	Sum of lanes	1644	✓	1800		✓	Normal	
12	1			✓	6.40								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RWS?	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
2	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
3	1	1	(united)		✓	N/A	N/A	0	3.25	✓	45	40.23	✓	1908
4	1	1	(united)											
5	1	1	(united)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
6	1	1	(united)											
7	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
8	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
9	1	1	(united)		✓	N/A	N/A	0	3.00	✓	38	6.00		1877
10	1	1	(united)											
11	1	1	(united)		✓	N/A	N/A	0	3.00	✓	100	6.00		1644
12	1	1	(united)											

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	
5	1	1	C	
9	1	1	D	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
11	1	AllTraffic	✓	0	✓	6.00	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStreamMovement	9/1	4/1	100		0	0

Signal Timings

Network Default: 100s cycle time; 100 steps

Interstage Matrix for Controller Stream 1

	To			
	1	2	3	
From	1	0	0	5
	2	0	0	5
	3	5	5	0

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	19	26	7	1	1
	2	✓	2	A,B,D	26	63	37	1	7
	3	✓	3	C	68	14	46	1	7

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU		QUEUES	
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)
1	1			1	A	413	2055	44	0.82	45	98	13.85	11.45	22.47	2.58
2	1			1	B	501	1915	44	0.00	58	55	15.16	12.78	23.69	3.30
3	1					914	1908	100	39.63	79	13	41.85	20.25	77.08	20.54
4	1					518	Unrestricted	100	34.00	0	Unrestricted	5.83	0.00	0.00	0.00
5	1			1	C	514	1532	46	0.00	71	26	51.28	27.28	83.27	12.16
6	1					448	Unrestricted	100	38.00	0	Unrestricted	24.00	0.00	0.00	0.00
7	1					93	1915	100	8.95	5	1587	10.02	0.42	7.11	0.23
8	1					0	2055	100	100.00	0	Unrestricted	0.00	0.00	0.00	0.00
9	1			1	D	93	1877	37	0.09	13	590	21.46	20.26	56.47	1.46
10	1					555	Unrestricted	100	16.00	0	Unrestricted	6.20	0.00	0.00	0.00
11	1					413 <	1529	100	55.00	27	233	1.85	8.65	8.11	1.26 +
12	1					0	Unrestricted	100	100.00	0	Unrestricted	0.00	0.00	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	440.30	27.43	16.05	12.74	180.85	17.52	0.00	198.66
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	440.30	27.43	16.05	12.74	180.85	17.52	0.00	198.66

- < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

TRANSYT 15	
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Filename: (new file)

Path:

Report generation date: 16/05/2022 17:56:34

<A1 - J10 DS : D1 - 2039 AM* :

- »Summary
- »Network Options
- »Arms and Traffic Streams
- »Signal Timings
- »Final Prediction Table

File summary

File description

File title	(united)
Location	
Site number	
UTCR	Region
Driving side	Left
Date	03/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC(joshua.tai)
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick lanes	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	per hour	s	-hour	per hour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A1 - J10 DS
D1 - 2039 AM*

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	Traffic Stream Data	Arm 8 - Traffic Stream 1	Traffic Stream 8/1 is not connected to any other Links or Traffic Streams
Info	Traffic Stream Data	Arm 12 - Traffic Stream 1	Traffic Stream 12/1 is not connected to any other Links or Traffic Streams
Info	Traffic Stream Flows	Arm 8 - Traffic Stream 1 - Flows (08:00-09:00)	Traffic Stream 8/1 has no paths passing through it, so will not be assigned any flows.
Info	Traffic Stream Flows	Arm 12 - Traffic Stream 1 - Flows (08:00-09:00)	Traffic Stream 12/1 has no paths passing through it, so will not be assigned any flows.

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst PRC
1	16/05/2022 17:56:28	16/05/2022 17:56:29	08:00	100	105.02	6.88	57.21	5/1	0	0	5/1	7/1	5/1

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J10 DS		D1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2039 AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use Link stop weightings	Use Link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle in Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ⁻² [-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level Offsets And Green Splits	Enable OUT Profile accuracy
✓	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.80	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				20.00	✓	Sum of lanes	2055	✓	1800	✓		Normal	
2	1				20.00	✓	Sum of lanes	1915	✓	1800	✓		Normal	
3	1				180.00	✓	Sum of lanes	1898					Normal	
4	1			✓	48.55								Normal	
5	1				200.00	✓	Sum of lanes	1532			✓		Normal	
6	1				200.00								Normal	
7	1				80.00	✓	Sum of lanes	1915					Normal	
8	1				7.00	✓	Sum of lanes	2055	✓	1800			Normal	
9	1				10.00	✓	Sum of lanes	2025	✓	1800	✓		Normal	
10	1			✓	51.69								Normal	
11	1				7.00	✓	Sum of lanes	1644	✓	1800		✓	Normal	
12	1			✓	6.40								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RSE?	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
2	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
3	1	1	(untitled)		✓	N/A	N/A	0	3.25	✓	60	40.23	✓	1898
4	1	1	(untitled)											
5	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
6	1	1	(untitled)											
7	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
9	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	6	6.00		2025
10	1	1	(untitled)											
11	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	6.00		1644
12	1	1	(untitled)											

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	
5	1	1	C	
9	1	1	D	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
11	1	AllTraffic	✓	0	✓	6.00	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStreamMovement	B/1	A/1	100		0	0

3

4

Signal Timings

Network Default: 100s cycle time; 100 steps

Interstage Matrix for Controller Stream 1

		To	
	1	2	3
From	1	0	0
	2	0	0
	3	5	0

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	8	15	7	1	1
	2	✓	2	A,B,D	15	65	50	1	7
	3	✓	3	C	70	3	33	1	7

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU		QUEUES	
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)
1	1			1	A	233	2055	67	7.23	22	303	13.16	10.76	47.72	2.88
2	1			1	B	153	1915	67	0.00	14	553	12.25	9.85	44.20	1.88
3	1					386	1898	100	3.22	21	328	21.88	0.28	1.33	0.46
4	1					729	Unrestricted	100	8.00	0	Unrestricted	5.83	0.00	0.00	0.00
5	1			1	C	298	1532	33	0.00	57	57	55.62	31.62	84.21	7.08
6	1					263	Unrestricted	100	32.00	0	Unrestricted	24.00	0.00	0.00	0.00
7	1					500	1915	100	43.09	46	96	22.69	13.09	56.41	8.25
8	1					0	2055	100	100.00	0	Unrestricted	0.00	0.00	0.00	0.00
9	1			1	D	500	2025	50	0.00	48	86	7.53	6.33	12.06	1.68
10	1					192	Unrestricted	100	20.00	0	Unrestricted	6.20	0.00	0.00	0.00
11	1					233 <	1122	100	42.90	21	333	4.42	3.42	18.41	1.23 +
12	1					0	Unrestricted	100	100.00	0	Unrestricted	0.00	0.00	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU4r/hr)	Mean journey speed (kph)	Total delay (PCU4r/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index
Normal traffic	281.35	16.07	17.51	6.68	94.90	10.13	0.00	105.02
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	281.35	16.07	17.51	6.68	94.90	10.13	0.00	105.02

- <= adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

«A2 - J10 DS : D2 - 2039 PM » :
»Summary
»Network Options
»Arms and Traffic Streams
»Signal Timings
»Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCR	Region
Driving side	Left
Date	03/09/2021
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	OCSC(joshua.tai)
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick lanes	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Ambor	Display End-Of-Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	per hour	s	4-hour	per hour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set ID	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical			Normal	Normal	✓

A2 - J10 DS D2 - 2039 PM*

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	Traffic Stream Data	Arm 8 - Traffic Stream 1	Traffic Stream 8/1 is not connected to any other Links or Traffic Streams
Info	Traffic Stream Data	Arm 12 - Traffic Stream 1	Traffic Stream 12/1 is not connected to any other Links or Traffic Streams
Info	Traffic Stream Flows	Arm 8 - Traffic Stream 1 - Flows (08:00-09:00)	Traffic Stream 8/1 has no paths passing through it, so will not be assigned any flows.
Info	Traffic Stream Flows	Arm 12 - Traffic Stream 1 - Flows (08:00-09:00)	Traffic Stream 12/1 has no paths passing through it, so will not be assigned any flows.

Run Summary

Analysis set used	Run start time	Run finish time	Model/ling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Be wit wor over PR
2	16/05/2022 17:53:51	16/05/2022 17:53:52	08:00	100	191.90	12.29	78.51	3/1	0	0	5/1	3/1	3/

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
J10 DS		D2	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
2039 PM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modeled time period (min)
100		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

2

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle/Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	80	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ² -[2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms ² -[2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.80	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

3

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				20.00	✓	Sum of lanes	2055	✓	1800	✓		Normal	
2	1				20.00	✓	Sum of lanes	1915	✓	1800	✓		Normal	
3	1				180.00	✓	Sum of lanes	1908					Normal	
4	1			✓	48.55								Normal	
5	1				200.00	✓	Sum of lanes	1532			✓		Normal	
6	1				200.00								Normal	
7	1				80.00	✓	Sum of lanes	1915					Normal	
8	1				7.00	✓	Sum of lanes	2055	✓	1800			Normal	
9	1				10.00	✓	Sum of lanes	1894	✓	1800	✓		Normal	
10	1			✓	51.69								Normal	
11	1				7.00	✓	Sum of lanes	1644	✓	1800	✓		Normal	
12	1			✓	6.40								Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RBS?	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
2	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
3	1	1	(united)		✓	N/A	N/A	0	3.25	✓	45	40.23	✓	1908
4	1	1	(united)											
5	1	1	(united)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
6	1	1	(united)											
7	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
8	1	1	(united)		✓	N/A	N/A	0	3.00	✓	0	99999.00		2055
9	1	1	(united)		✓	N/A	N/A	0	3.00	✓	34	6.00		1894
10	1	1	(united)											
11	1	1	(united)		✓	N/A	N/A	0	3.00	✓	100	6.00		1644
12	1	1	(united)											

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
1	1	1	A	
2	1	1	B	
5	1	1	C	
9	1	1	D	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
11	1	AllTraffic	✓	0	✓	6.00	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStreamMovement	8/1	4/1	100		0	0

4

Signal Timings

Network Default: 100s cycle time; 100 steps

Interstage Matrix for Controller Stream 1

	To			
From		1	2	3
	1	0	0	5
	2	0	0	5
	3	5	5	0

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B	19	26	7	1	1
	2	✓	2	A,B,D	26	63	37	1	7
	3	✓	3	C	68	14	46	1	7

Final Prediction Table

Traffic Stream Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU		QUEUES			
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated sat flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Dwell time (s)
1	1			1	A	403	2055	44	0.62	44	103	13.76	11.36	22.40	2.51	
2	1			1	B	501	1915	44	0.00	58	55	15.16	12.78	23.69	3.30	
3	1					904	1908	100	39.65	79	15	41.44	19.84	76.16	20.24	
4	1					515	Unrestricted	100	34.00	0	Unrestricted	5.83	0.00	0.00	0.00	
5	1			1	C	501	1532	46	0.00	70	29	50.51	26.51	81.81	11.64	
6	1					433	Unrestricted	100	38.00	0	Unrestricted	24.00	0.00	0.00	0.00	
7	1					88	1915	100	5.94	5	1742	9.80	0.20	4.03	0.15	
8	1					0	2055	100	100.00	0	Unrestricted	0.00	0.00	0.00	0.00	
9	1			1	D	88	1894	37	0.00	12	636	21.56	20.36	59.57	1.46	
10	1					545	Unrestricted	100	22.00	0	Unrestricted	6.20	0.00	0.00	0.00	
11	1					403 < 0	1531	100	55.00	26	242	1.82	0.82	6.80	1.25 +	
12	1					0	Unrestricted	100	100.00	0	Unrestricted	0.00	0.00	0.00	0.00	

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	431.52	26.70	16.16	12.29	174.57	17.34	0.00	191.90
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	431.52	26.70	16.16	12.29	174.57	17.34	0.00	191.90

- <= adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

5