HIGHWAYS ASSESSMENT FOR SELBY DISTRICT

PART A

BASE LINE POSITION

1.0 INTRODUCTION

1.1 Pell Frischmann Consultants has been commissioned by Selby District Council to undertake a Highways Assessment for Selby District. The Assessment is intended to inform the Council in the preparation of its Local Plan, specifically in the allocation of suitable sites for housing development, by identifying any parts of the existing highway network that may require improvement in order to accommodate the traffic from levels and location of housing proposed.

1.2 The Highways Assessment is being undertaken in four parts as follows:

- Part A – Highway survey to establish baseline (on the main traffic routes in the District);
- Part B – Scenario-based growth predictions to establish on the District's distributor network;
- Part C – Applying Part B with cross-boundary study results to establish impact on the Strategic Road Network and neighbouring Authority areas; and
- Part D – Individual site studies and recommendations

1.3 This Working Note relates to Part A of the study and presents the results of that work. Once all parts of the study are complete, a full report will be prepared which will cover the findings of all four parts including Part A.

2.0 TRAFFIC DATA COLLECTION

2.1 The brief for the Highways Assessment for Selby District identifies that the main traffic routes in the District are considered to be the A19, A63, A162, A1041/A645/A614 between Selby and the M62, A163 to Market Weighton, and the B1222 (between Escrick and the A63 Old Great North Road to the west of Sherburn in Elmet). These roads are identified as they form the key routes that lead to the strategic road network comprising the A1(M), M62 and A64(T).

2.2 In order to establish the baseline for these main traffic routes it is necessary to obtain up-to-date information on traffic flows and therefore fully classified multi-modal turning movement surveys were carried out at the following key junctions, the locations of which are shown on **Figure 2.1**:

1. A19 / B1222 (south of Escrick) – priority cross-road junction
2. A19 / A163 Market Weighton Road (north of Barlby) – priority T junction
3. A19 / A63 Hull Road (at Barlby/Osgodby) - roundabout
4. A63 / A1041 (on the Selby Bypass, south of the Three Lakes Retail Park) – roundabout
5. A63 / A19 Doncaster Road (on the Selby Bypass, south of Brayton) – roundabout
6. A19 / A645 (at Eggborough) - roundabout

7. A19 / M62 J34 (not including M62 mainline flows) – grade-separated roundabout
8. A64 / A162 (south of Tadcaster) – priority T junctions
9. A162 / B1222 (east of Sherburn in Elmet) - roundabout
10. A162 / A63 Main Street (west of Monk Fryston) - roundabout
11. A1041 / A645 (south of Camblesforth) - roundabout
12. B1222 / B1223 (in Cawood) – traffic signal control
13. B1222 / Low Street (Sherburn in Elmet town centre) – traffic signal control

2.3 The traffic surveys were carried out on Thursday 9th October 2014 between the hours of 0700 and 1000 and 1500 and 1900. From the data it has been ascertained that the AM and PM network peak hours are 0800 to 0900 and 1700 to 1800 respectively. The 2014 AM and PM peak hour flows at each of the identified junctions are shown on the network diagrams contained at **Appendix A**.

2.4 Traffic data was also collected on the same date at three junctions within Selby but this data is specifically for use within Part D of the Study and is therefore not presented in this Working Paper.

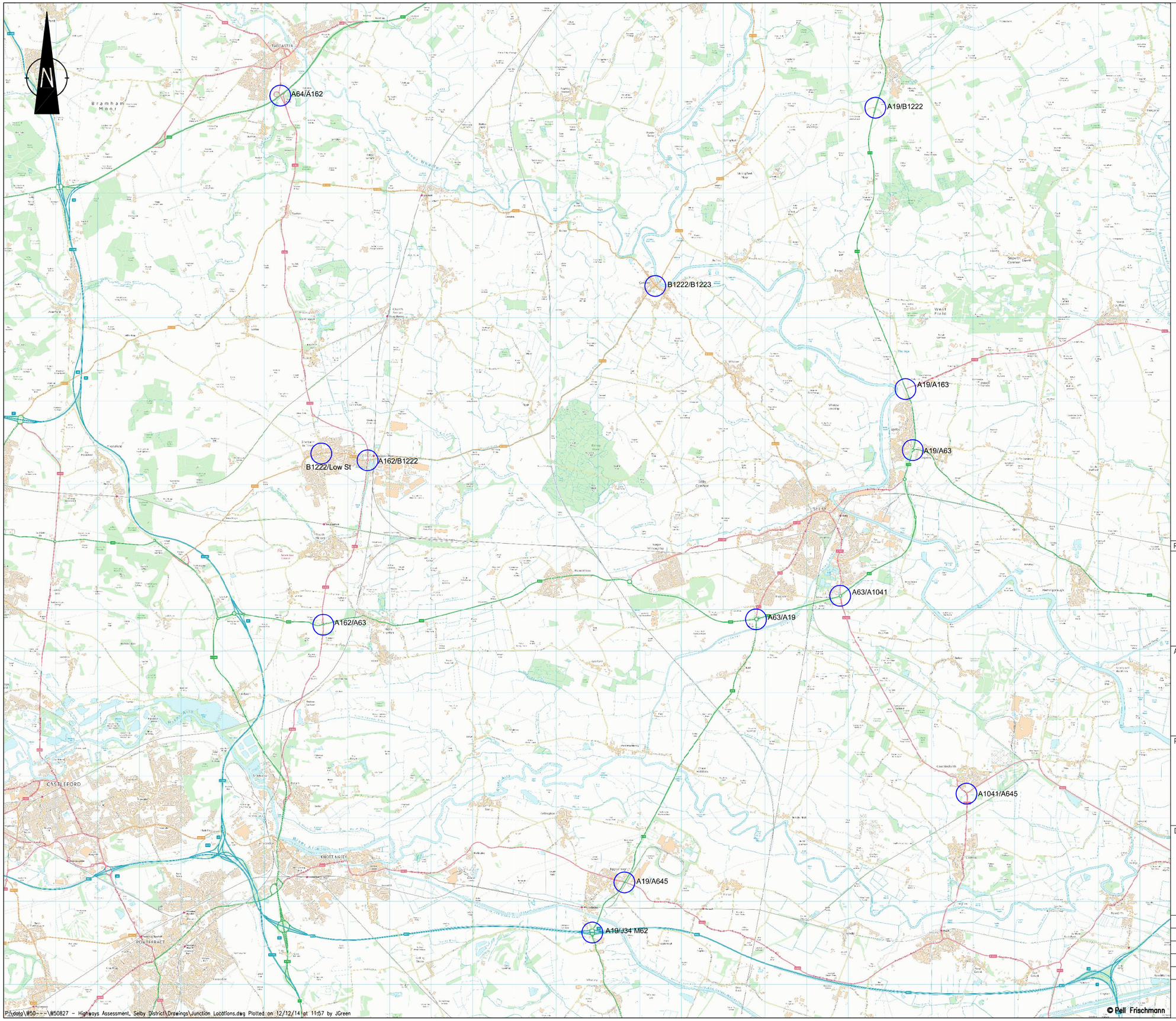
2.5 The Department for Transport's Transport Analysis Guidance (TAG) 'TAG Unit M1.2 – Data Sources and Surveys', January 2014, states that surveys should be carried out during a 'neutral', or representative, month avoiding main and local holiday periods, local school holiday and half terms, and other abnormal traffic periods. The guidance also identifies that surveys should be carried out on Monday to Thursday. October is identified as neutral month and the North Yorkshire schools autumn half term ended on Friday 24th October 2014, therefore it is considered that the surveys were carried out on an appropriate day / date for the purposes of this Highways Assessment.

3.0 BASE-LINE ASSESSMENT OF JUNCTIONS ON KEY ROUTES

3.1 The reason for considering the key junctions on these main routes is that a junction will invariably reach capacity before the links that lead into it reach their capacity. Junction operation is therefore a key indicator of the capability of any particular route within the study area to cope with the traffic that it is currently carrying as well as the additional traffic that is predicted on the route as a result of anticipated development.

3.2 The junctions identified in Section 2.0 above are a mixture of priority T junctions, roundabouts and traffic signal controlled cross-road junctions (Junction 1 is a priority cross-road junction as there is a minor gated access into Escrick Park Estate opposite the B1222 minor arm). The capacity of the priority junctions and roundabouts has been assessed for the 2014 AM and PM peak hour baseline using Junctions 8 software using the PICADY 8 module for priority junctions and the ARCADY 8 module for roundabouts. LINSIG software has been used to assess the capacity of traffic signal controlled junctions.

3.3 The full output from each of the junction assessment is contained in **Appendix B** (PICADY), **Appendix C** (ARCADY) and **Appendix D** (LINSIG) with the critical results given in the tables below.



KEY

Junction Locations

REV	DESCRIPTION	DRN	CHK	APP	DATE

Pell Frischmann

GEORGE HOUSE, GEORGE STREET, WAKEFIELD WF1 1LY

Telephone +44 (0)1924 368 145
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Architect/Client/Contractor

SELBY DISTRICT COUNCIL
Moving forward with purpose

Project

Highways Assessment, Selby District

Drawing Title

Locations of Junctions being Assessed

	Name	Date	Scale	Not to Scale
Drawn	JG	DEC 2014		
Designed	EG	DEC 2014	File No.	TBC
Checked	EG	DEC 2014	Drawing Status	Draft
Approved	EG	DEC 2014		

Drawing No.: Figure 2.1

Revision: -

P:\data\W50---\W50827 - Highways Assessment, Selby District\Drawings\Junction Locations.dwg Plotted on 12/12/14 at 11:57 by JGreen

Junction 1: A19 / B1222 (south of Escrick) – priority cross-road junction

Movement	AM		PM	
	RFC	Queue	RFC	Queue
B-ADC Right turn, left turn and straight ahead from Escrick Park Estate	0.00	0.00	0.07	0.08
A-D Right turn from A19 (N) into B1222	0.11	0.13	0.09	0.10
D-AB Left turn and straight ahead from B1222	0.14	0.18	0.13	0.16
D-BC Straight ahead and right turn from B1222	0.04	0.04	0.12	0.13
C-B Right turn from A19 (S) into Escrick Park Estate	0.00	0.00	0.00	0.00

Junction 2: A19 / A163 Market Weighton Road (north of Barlby) – priority T junction

Movement	AM		PM	
	RFC	Queue	RFC	Queue
B-C Left turn from A163 into A19 (S)	0.50	1.04	0.52	1.07
B-A Right turn from A163 into A19 (N)	0.32	0.49	0.40	0.76
C-B Right turn from A19 (S) into A163	0.33	0.55	0.50	1.05

Junction 3: A19 / A63 Hull Road (at Barlby/Osgodby) – roundabout

Arm	AM		PM	
	RFC	Queue	RFC	Queue
A – A19 (N)	0.47	0.94	0.57	1.37
B – A63 Hull Road	0.46	0.89	0.32	0.47
C – A19 (S)	0.47	0.94	0.59	1.47
D – Highfield View	0.14	0.17	0.12	0.13

Junction 4: A63 / A1041 (on the Selby Bypass, south of the Three Lakes Retail Park) – roundabout

Arm	AM		PM	
	RFC	Queue	RFC	Queue
A – A1041(N) Bawtry Rd	0.27	0.39	0.57	1.32
B – A63 (E)	0.37	0.64	0.43	0.79
C – A1041 (S)	0.47	0.92	0.44	0.80
D – A63 (W)	0.47	0.94	0.41	0.70

Junction 5: A63 / A19 Doncaster Road (on the Selby Bypass, south of Brayton) – roundabout

Arm	AM		PM	
	RFC	Queue	RFC	Queue
A – A19 (N) Doncaster Rd	0.30	0.44	0.25	0.33
B – A63 (E)	0.27	0.39	0.31	0.47
C – A19 (S)	0.37	0.63	0.42	0.75
D – A63 (W)	0.22	0.29	0.24	0.33

Junction 6: A19 / A645 (at Eggborough) - roundabout

Arm	AM		PM	
	RFC	Queue	RFC	Queue
A – A19 (N)	0.37	0.65	0.42	0.75
B – A645 (E)	0.40	0.76	0.47	0.90
C – A19 (S)	0.54	1.30	0.60	1.56
D – A645 (W)	0.23	0.33	0.22	0.29

Junction 7: A19 / M62 J34 (not including M62 mainline flows) – grade-separated roundabout

Arm	AM		PM	
	RFC	Queue	RFC	Queue
A – A19 (N)	0.27	0.41	0.29	0.43
B - M62 J34 (E)	0.18	0.25	0.18	0.24
C – A19 (S)	0.38	0.64	0.33	0.51
D – M62 J34 (W)	0.30	0.50	0.44	0.80
E – Selby Rd	0.12	0.15	0.10	0.11

Junction 8a: A64 / A162 (south of Tadcaster) – priority T junctions

Movement	AM		PM	
	RFC	Queue	RFC	Queue
B-AC Left turn from A64 W/B Off Slip south on to A162	0.25	0.35	0.45	0.83

Junction 8b: A64 / A162 (south of Tadcaster) – priority T junctions

Movement	AM		PM	
	RFC	Queue	RFC	Queue
B-AC Right turn from A64 W/B off slip north on to A162	0.21	0.30	0.12	0.15

Junction 8c: A64 / A162 (south of Tadcaster) – priority T junctions

Movement	AM		PM	
	RFC	Queue	RFC	Queue
C-B Right turn on to A64 E/B on slip across A162	0.09	0.10	0.10	0.12
B-A Right turn on to A64 E/B on slip across left turn from A162	0.14	0.16	0.18	0.21

Junction 9: A162 / B1222 (east of Sherburn in Elmet) - roundabout

Arm	AM		PM	
	RFC	Queue	RFC	Queue
A – A162 (N)	0.18	0.24	0.20	0.26
B – B1222 (E)	0.28	0.46	0.47	0.93
C – A162 (S)	0.38	0.72	0.27	0.40
D – B1222 (W)	0.27	0.37	0.18	0.22

Junction 10: A162 / A63 Main Street (west of Monk Fryston) - roundabout

Arm	AM		PM	
	RFC	Queue	RFC	Queue
A – A162 (N)	0.52	1.27	0.75	3.06
B – A63 (E)	0.52	1.12	0.36	0.57
C – A162 (S)	0.40	0.70	0.31	0.45
D – A63 (W)	0.54	1.42	0.70	2.45

Junction 11: A1041 / A645 (south of Camblesforth) – roundabout

Arm	AM		PM	
	RFC	Queue	RFC	Queue
A – A1041 (N)	0.43	0.81	0.54	1.22
B - A645	0.43	0.77	0.36	0.56
C – A1401 (S)	0.54	1.21	0.48	0.92

Junction 12: B1222 / B1223 (in Cawood) – traffic signal control

Arm	AM		PM	
	DoS	Queue	DoS	Queue
A – High St	19.6	1.4	33.3	2.3
B – B1223 (E)	23.1	1.1	25.1	1.3
C – Market Place	8.5	0.6	20.5	1.3
D – B1223 (W)	36.9	2.3	22.5	1.3

Junction 13: B1222 / Low Street (Sherburn in Elmet town centre) – traffic signal control

Arm	AM		PM	
	DoS	Queue	DoS	Queue
A – Finkle Hill	55.0	5.7	70.7	12.4
B – Moor Ln (left)	16.8	1.6	33.7	3.1
B – Moor Ln (ahead, right)	61.4	7.7	71.9	8.5
C – Low St	63.0	9.9	65.4	8.8
D - Kirkgate	61.1	7.2	72.7	12.5

3.4 For priority roundabouts and junctions modelled in ARCADY and PICADY, the Ratio of Flow to Capacity (RFC) is commonly used as an indicator of the likely performance of each arm of a junction. An RFC value of 0.85 or less demonstrates that the arm is operating within its reserve capacity with minimal queuing and delay. An RFC value between 0.85 and 1.0 shows that the arm is nearing its theoretical capacity with queues beginning to form and delays occurring. An RFC value greater than 1.0 indicates that the arm is operating over capacity and queues and delays will increase.

3.5 For signalised junctions modelled in LINSIG, the Degree of Saturation (DoS) is the ratio of demand to capacity on each approach. A DoS greater than 90% is commonly accepted as the threshold above which the approach to the junction is reaching capacity and queues will start to form with subsequent delays occurring. The Practical Reserve Capacity (PRC) is a measure of spare capacity

left in the junction; a value of 0% indicates that junction is operating at capacity, with a negative value indication that the junction is over capacity.

3.6 With reference to the results in the tables above, it can be seen that all the junctions under consideration in this baseline assessment are operating with spare capacity and minimal queuing and delay.

4.0 COMMITTED DEVELOPMENT

4.1 The brief also identifies that Part A of the study should include a consideration of extant unimplemented planning commitments. Prior to commencement of the study the Council provided a list of planning applications to be considered and a copy of this is list is contained at **Appendix E**.

4.2 The details of each planning application has been considered to ascertain whether the traffic generation is likely to be material and the applications that have been taken into account in terms of actual generated traffic on the main traffic routes are as follows:

- CO/2002/1185: Staynor Hall, Selby (Phase 3 only)
- 2011/0563/FUL: Southlands House, South Milford (115 dwellings)
- 2012/0852/FUL: Leeds Road, Thorpe Willoughby (149 dwellings)
- 2012/0399/EIA: Low Street, Sherburn in Elmet (100 dwellings)
- 2012/0400/EIA: Low Street, Sherburn in Elmet (498 dwellings)
- 2012/0468/EIA: Land off Carousel Walk, Sheburn in Elmet (120 dwellings)
- 2012/0541/EIA: Olympia Mill, Barlby Road, Selby
- 2013/0467/OUT: Lennerton Lane, Sherburn in Elmet (1,250,000 sq ft B2/B8)
- 2013/0031/OUT: Station Road, Carlton (75 dwellings)

4.3 Planning application 2009/0805/REM (Land at Holme Lane, Coupland Road, Selby) for 301 dwellings has not been included at the present time as it has not been possible to ascertain how much of this development remains to be completed and what traffic generation was originally assumed at the time of the determination of the planning application.

4.4 The AM and PM peak hour flows resulting from the identified committed development are shown on the network diagrams contained at **Appendix A**.

5.0 ASSESSMENT OF IMPACT OF COMMITTED DEVELOPMENT

5.1 In order to assess the impact of the identified committed development, the 2014 AM and PM peak hour flows as surveyed have been added to those resulting from the identified committed development. The total traffic flows used in this assessment are shown on the network diagrams also contained at **Appendix A**.

5.2 As for the baseline assessments considered in Section 3.0, the capacity of the priority junctions and roundabouts has been assessed for the 2014 AM and PM peak hour baseline using Junctions 8 software using the PICADY 8 module for the priority junctions and the ARCADY 8 module for the roundabouts. LINSIG software has been used to assess the capacity of the traffic signal controlled junctions. Values highlighted in **red** show over-capacity for a junction movement or arm, and values highlighted in **blue** show that a movement or arm is at or over practical reserve capacity (not yet over-capacity).

5.3 The full output from each of the junction assessment is contained in **Appendix B** (PICADY), **Appendix C** (ARCADY) and **Appendix D** (LINSIG) with the critical results given in the tables below.

Junction 1: A19 / B1222 (south of Escrick) – priority cross-road junction

Movement	AM		PM	
	RFC	Queue	RFC	Queue
B-ADC Right turn, left turn and straight ahead from Escrick Park Estate	0.00	0.00	0.20	0.25
A-D Right turn from A19 (N) into B1222	0.14	0.16	0.10	0.11
D-AB Left turn and straight ahead from B1222	0.18	0.22	0.16	0.19
D-BC Straight ahead and right turn from B1222	0.08	0.08	0.28	0.38
C-B Right turn from A19 (S) into Escrick Park Estate	0.00	0.00	0.00	0.00

Junction 2: A19 / A163 Market Weighton Road (north of Barlby) – priority T junction

Movement	AM		PM	
	RFC	Queue	RFC	Queue
B-C Left turn from A163 into A19 (S)	**2.28**	79.36	***	141.97
B-A Right turn from A163 into A19 (N)	**2.16**	11.22	***	12.98
C-B Right turn from A19 (S) into A163	0.51	1.07	0.81	3.83

Junction 3: A19 / A63 Hull Road (at Barlby/Osgodby) – roundabout

Arm	AM		PM	
	RFC	Queue	RFC	Queue
A – A19 (N)	0.59	1.45	0.84	5.32
B – A63 Hull Road	0.57	1.33	0.49	0.97
C – A19 (S)	0.76	3.21	0.78	3.47
D – Highfield View	0.20	0.26	0.17	0.20

Junction 4: A63 / A1041 (on the Selby Bypass, south of the Three Lakes Retail Park) – roundabout

Arm	AM		PM	
	RFC	Queue	RFC	Queue
A – A1041(N) Bawtry Rd	0.72	2.63	0.73	2.75
B – A63 (E)	0.62	1.72	**0.88**	7.39
C – A1041 (S)	0.71	2.49	0.63	1.75
D – A63 (W)	0.71	2.66	0.68	2.31

Junction 5: A63 / A19 Doncaster Road (on the Selby Bypass, south of Brayton) – roundabout

Arm	AM		PM	
	RFC	Queue	RFC	Queue
A – A19 (N) Doncaster Rd	0.37	0.59	0.32	0.47
B – A63 (E)	0.37	0.61	0.47	0.93
C – A19 (S)	0.47	0.91	0.57	1.37
D – A63 (W)	0.31	0.46	0.37	0.59

Junction 6: A19 / A645 (at Eggborough) - roundabout

Arm	AM		PM	
	RFC	Queue	RFC	Queue
A – A19 (N)	0.45	0.92	0.54	1.30
B – A645 (E)	0.44	0.90	0.53	1.25
C – A19 (S)	0.63	1.91	0.73	2.93
D – A645 (W)	0.25	0.38	0.25	0.36

Junction 7: A19 / M62 J34 (not including M62 mainline flows) – grade-separated roundabout

Arm	AM		PM	
	RFC	Queue	RFC	Queue
A – A19 (N)	0.30	0.49	0.34	0.58
B - M62 J34 (E)	0.21	0.30	0.21	0.30
C – A19 (S)	0.42	0.77	0.38	0.66
D – M62 J34 (W)	0.35	0.61	0.50	1.16
E – Selby Rd	0.13	0.17	0.12	0.14

Junction 8a: A64 / A162 (south of Tadcaster) – priority T junctions

Movement	AM		PM	
	RFC	Queue	RFC	Queue
B-AC Left turn from A64 W/B Off Slip south on to A162	0.29	0.43	0.54	1.17

Junction 8b: A64 / A162 (south of Tadcaster) – priority T junctions

Movement	AM		PM	
	RFC	Queue	RFC	Queue
B-AC Right turn from A64 W/B off slip north on to A162	0.22	0.31	0.13	0.16

Junction 8c: A64 / A162 (south of Tadcaster) – priority T junctions

Movement	AM		PM	
	RFC	Queue	RFC	Queue
C-B Right turn on to A64 E/B on slip across A162	0.09	0.10	0.10	0.12
B-A Right turn on to A64 E/B on slip across left turn from A162	0.14	0.16	0.18	0.21

Junction 9: A162 / B1222 (east of Sherburn in Elmet) – roundabout

Arm	AM		PM	
	RFC	Queue	RFC	Queue
A – A162 (N)	0.24	0.34	0.25	0.34
B – B1222 (E)	0.34	0.61	0.61	1.63
C – A162 (S)	0.46	0.98	0.35	0.58
D – B1222 (W)	0.46	0.87	0.26	0.36

Junction 10: A162 / A63 Main Street (west of Monk Fryston) - roundabout

Arm	AM		PM	
	RFC	Queue	RFC	Queue
A – A162 (N)	0.79	4.27	**1.06**	34.57
B – A63 (E)	0.74	2.91	0.54	1.21
C – A162 (S)	0.61	1.59	0.46	0.85
D – A63 (W)	0.69	2.65	**0.96**	15.18

Junction 11: A1041 / A645 (south of Camblesforth) - roundabout

Arm	AM		PM	
	RFC	Queue	RFC	Queue
A – A1041 (N)	0.58	1.46	0.70	2.37
B - A645	0.60	1.50	0.45	0.81
C – A1401 (S)	0.70	2.40	0.68	2.14

Junction 12: B1222 / B1223 (in Cawood) – traffic signal control

Arm	AM		PM	
	DoS	Queue	DoS	Queue
A – High St	19.6	1.4	33.3	2.3
B – B1223 (E)	23.1	1.1	25.1	1.3
C – Market Place	8.5	0.6	20.5	1.3
D – B1223 (W)	36.9	2.3	22.5	1.3

Junction 13: B1222 / Low Street (Sherburn in Elmet town centre) – traffic signal control

Arm	AM		PM	
	DoS	Queue	DoS	Queue
A – Finkle Hill	65.5	6.8	81.8	16.1
B – Moor Ln (left)	19.4	1.8	33.8	3.2
B – Moor Ln (ahead, right)	75.7	9.6	83.9	11.5
C – Low St	73.8	13.3	83.7	12.6
D - Kirkgate	75.2	9.4	87.4	16.5

5.4 With the addition of traffic from the identified committed development, two junctions are shown to be over-capacity on one or more arm / traffic movement, and one junction is at or above its practical reserve capacity:

Over-capacity

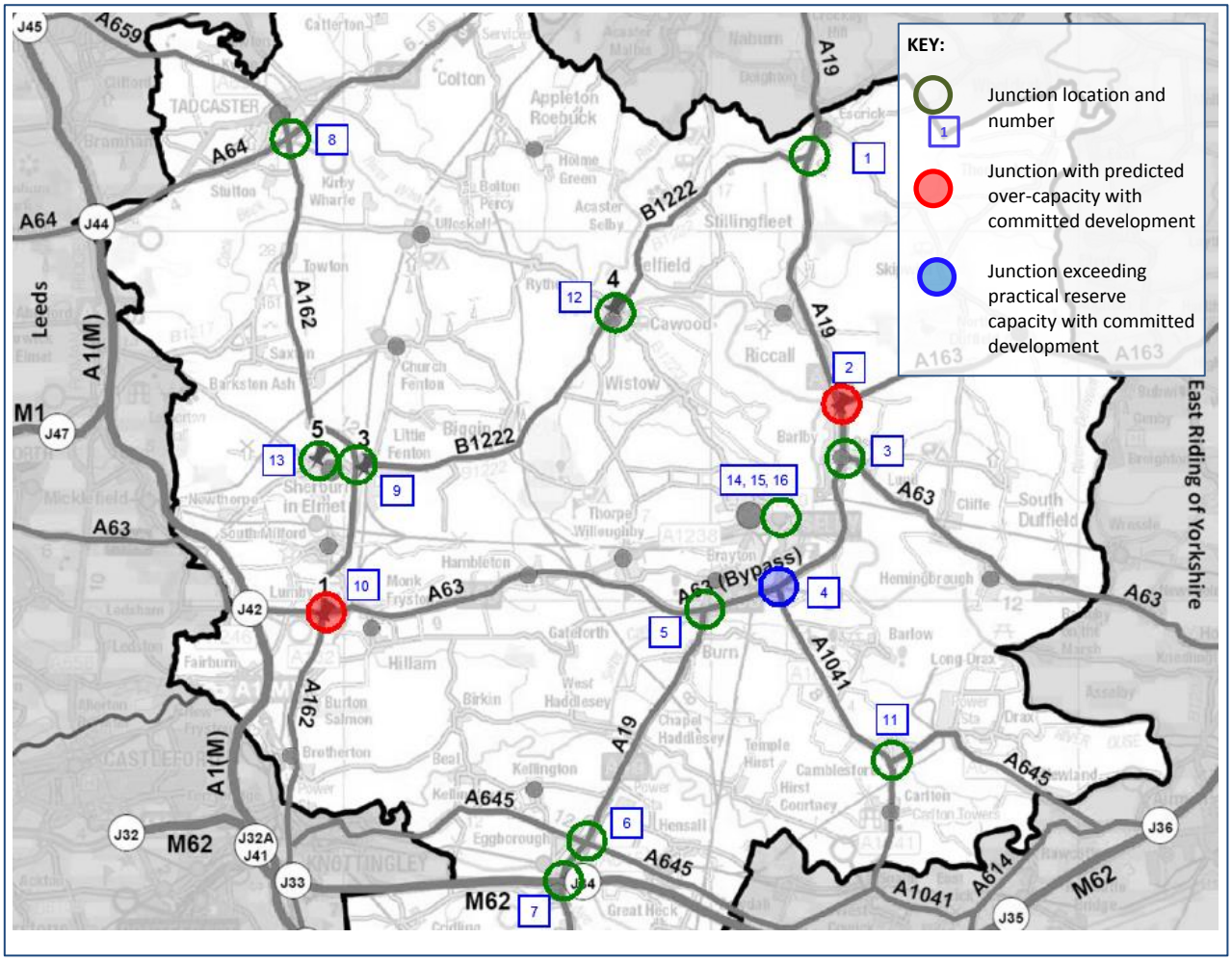
- Junction 2 (A19 and A163 Market Weighton Road priority T-junction)
- Junction 10 (A162 / A63 Main Street roundabout)

At or above practical reserve capacity (not yet over-capacity)

- Junction 4 (A63/A1041 roundabout)

5.5 Most of the over-capacity or above practical reserve capacity occurs in the PM period. The locations of these junctions can be seen in Figure 2.2.

Figure 2.2 – Location of junctions, with (near) over-capacity junctions highlighted



6.0 SUMMARY AND CONCLUSIONS

6.1 Pell Frischmann Consultants has been commissioned by Selby District Council to undertake a Highways Assessment for Selby District. The Assessment is intended to inform the Council in the preparation of its Local Plan, specifically the allocation of suitable sites for housing development, by identifying any parts of the existing highway network that may require improvement in order to accommodate the levels and location of housing proposed.

6.2 This Working Note relates to Part A of the study and presents the results of that work. Part A is concerned with carrying out surveys and assessment work to establish the baseline position while also taking into account committed development.

6.3 In order to establish the baseline for the main traffic routes it is necessary to obtain up-to-date information on traffic flows and therefore fully classified multi-modal turning movement surveys were carried out on Thursday 9th October 2014 between the hours of 0700 and 1000 and 1500 and 1900. From the data it has been ascertained that the AM and PM network peak hours are 0800 to 0900 and 1700 to 1800 respectively.

6.4 Using industry standard software the peak hour operation of the key junctions on the main traffic routes has been assessed. This assessment has shown that for the baseline situation, all junctions are operating within their practical reserve capacity with minimal queues and delays. When the traffic likely to be generated by unimplemented committed development is taken into account, the following junctions are shown to be **over-capacity**.

- Junction 2 (A19 and A163 Market Weighton Road priority T-junction)
- Junction 10 (A162 / A63 Main Street roundabout)

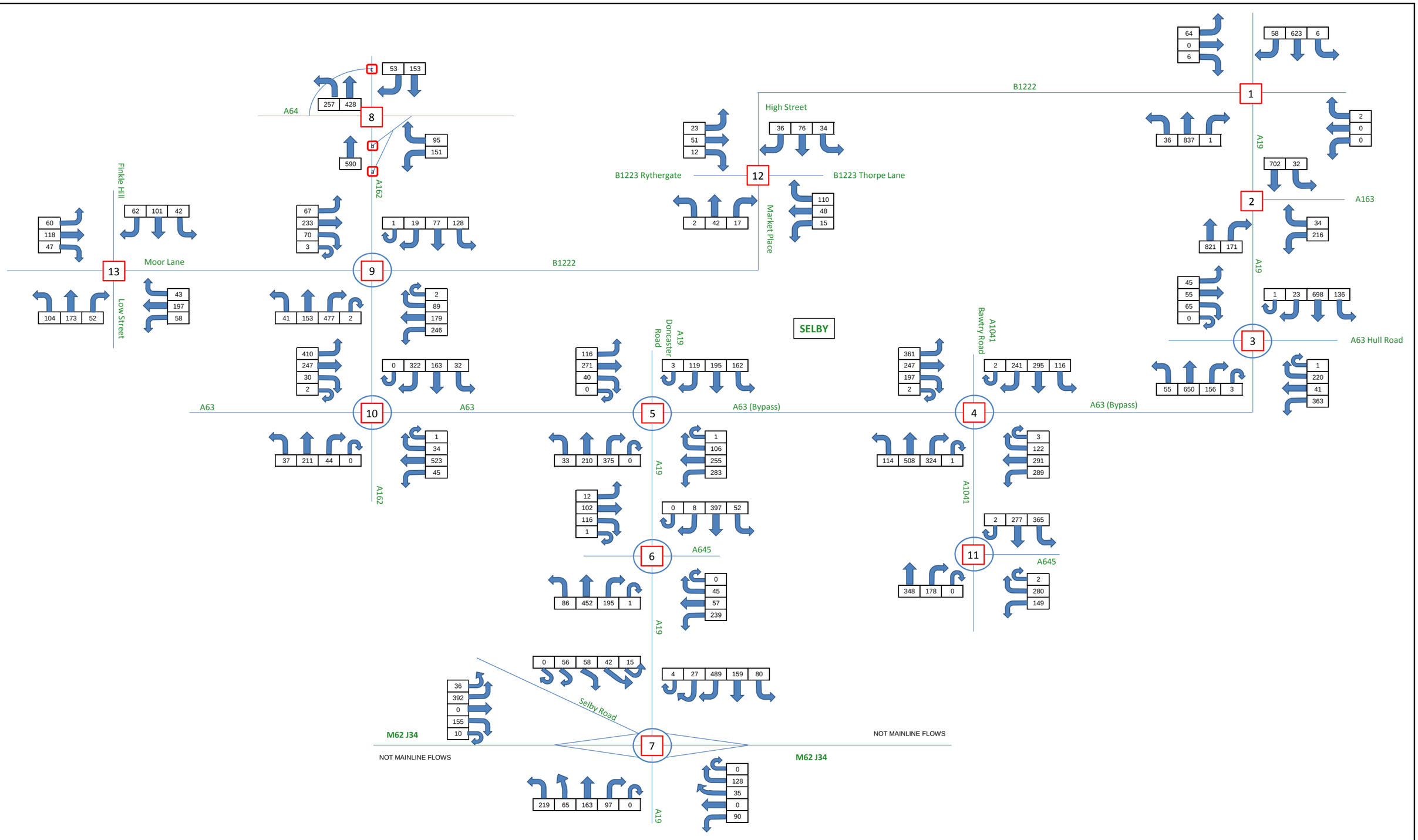
6.5 One other junction is **at or above their practical reserve capacity** (not yet over-capacity).

- Junction 4 (A63/A1041 roundabout)

6.6 In conclusion, a baseline position has now been established from which Parts B and C of the study will follow.

APPENDIX A

NETWORK DIAGRAMS



Base 2014 - Weekday AM

Pell Frischmann

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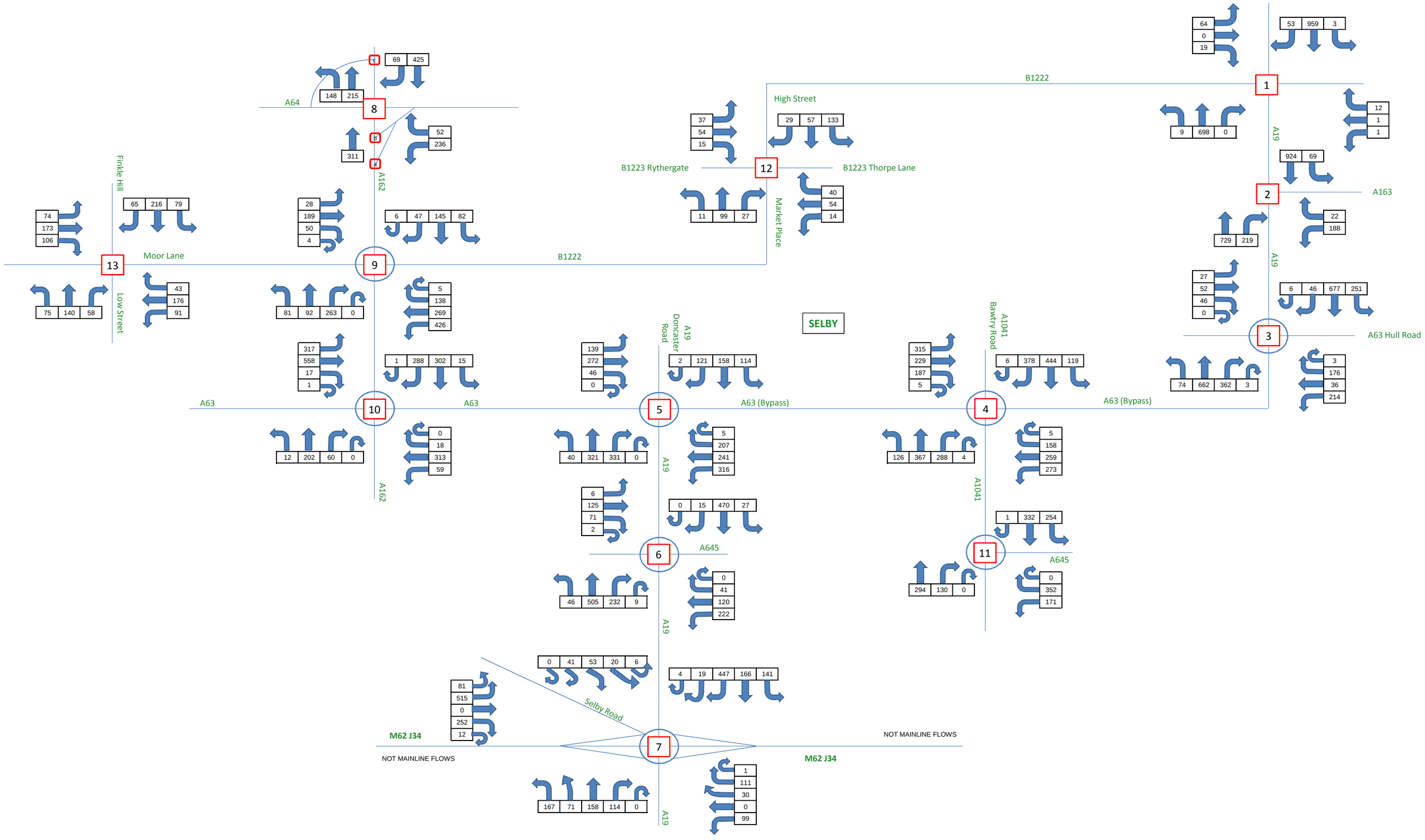

Base 2014 - Weekday PM

Pell Frischmann

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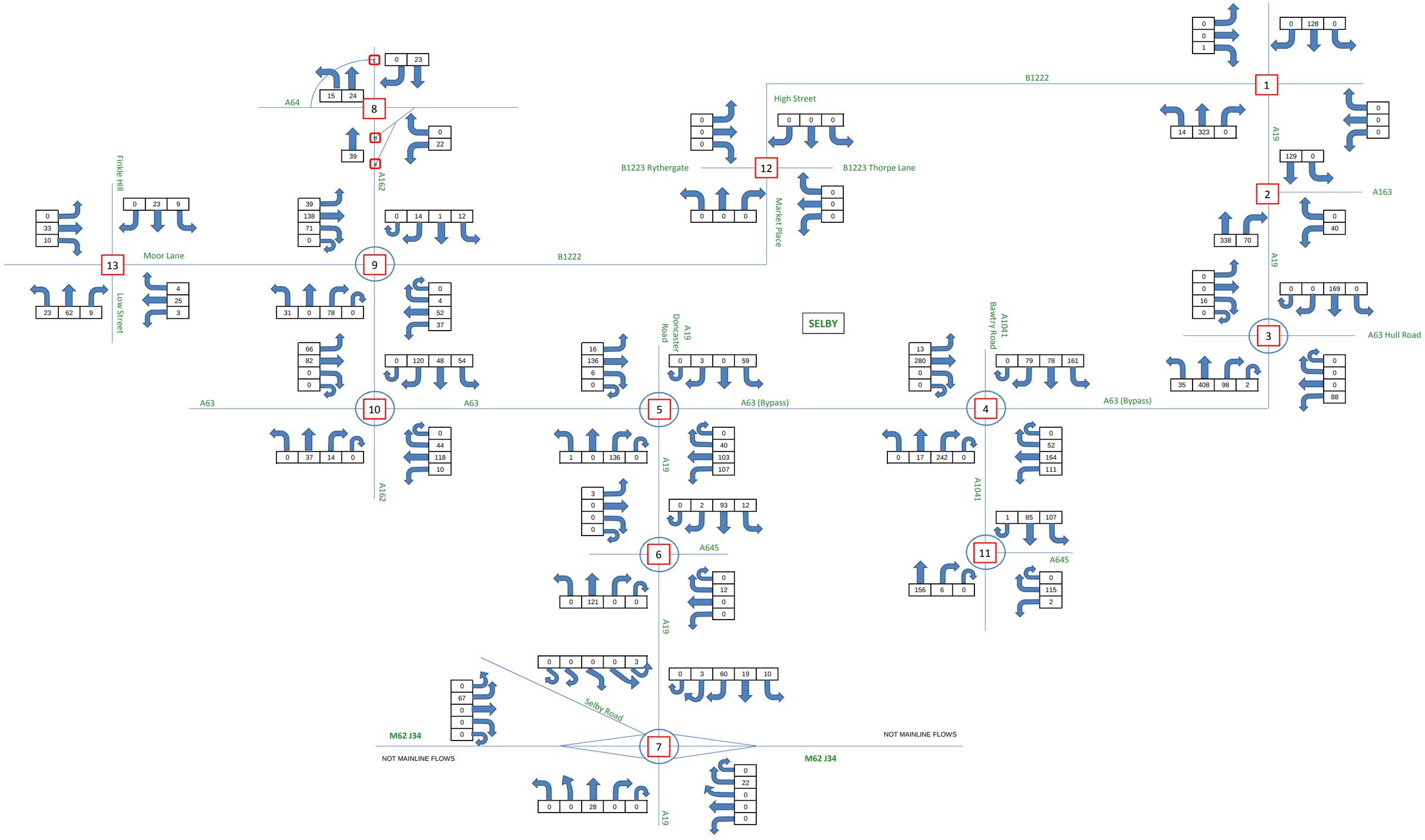
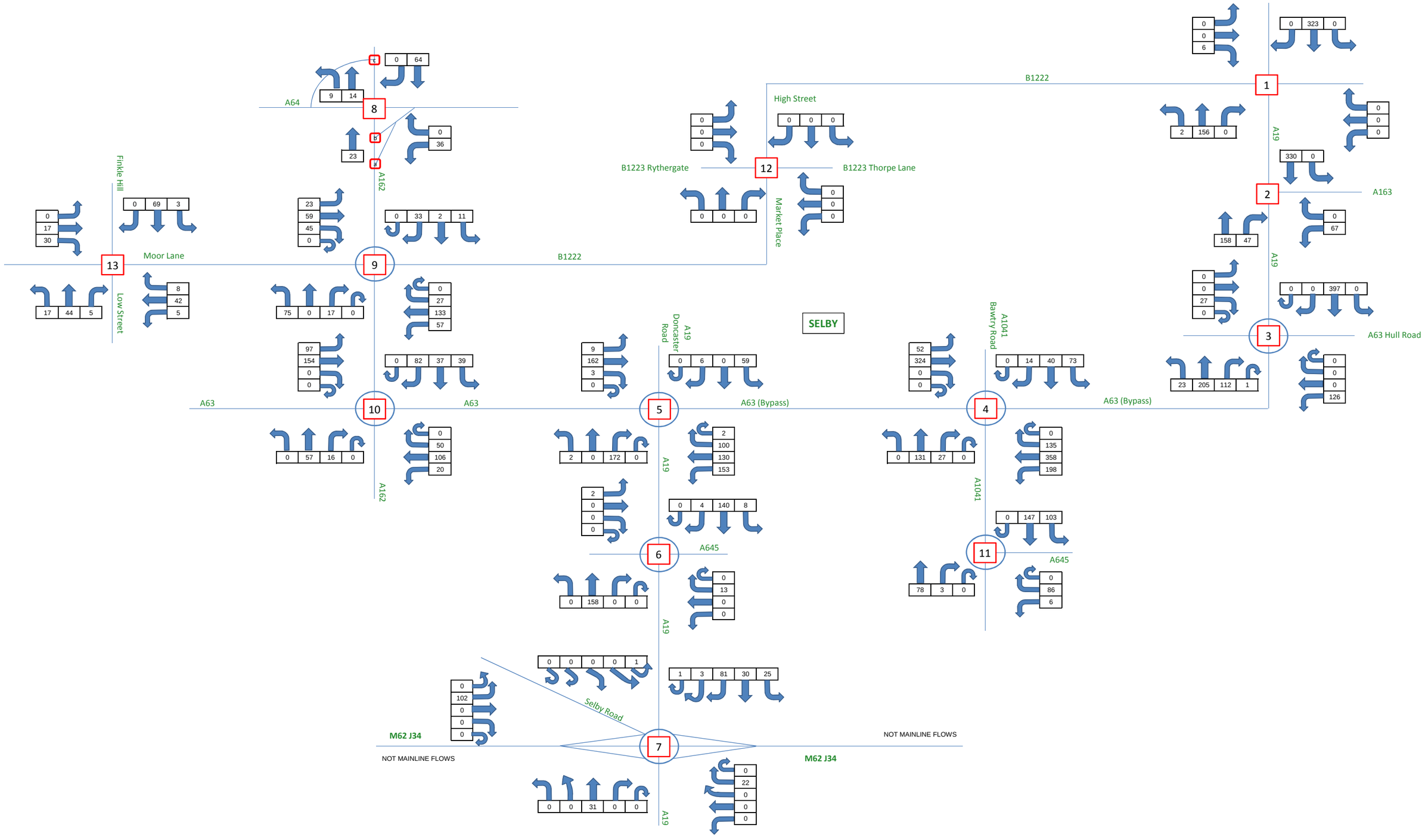


Committed Development - AM

Pell Frischmann

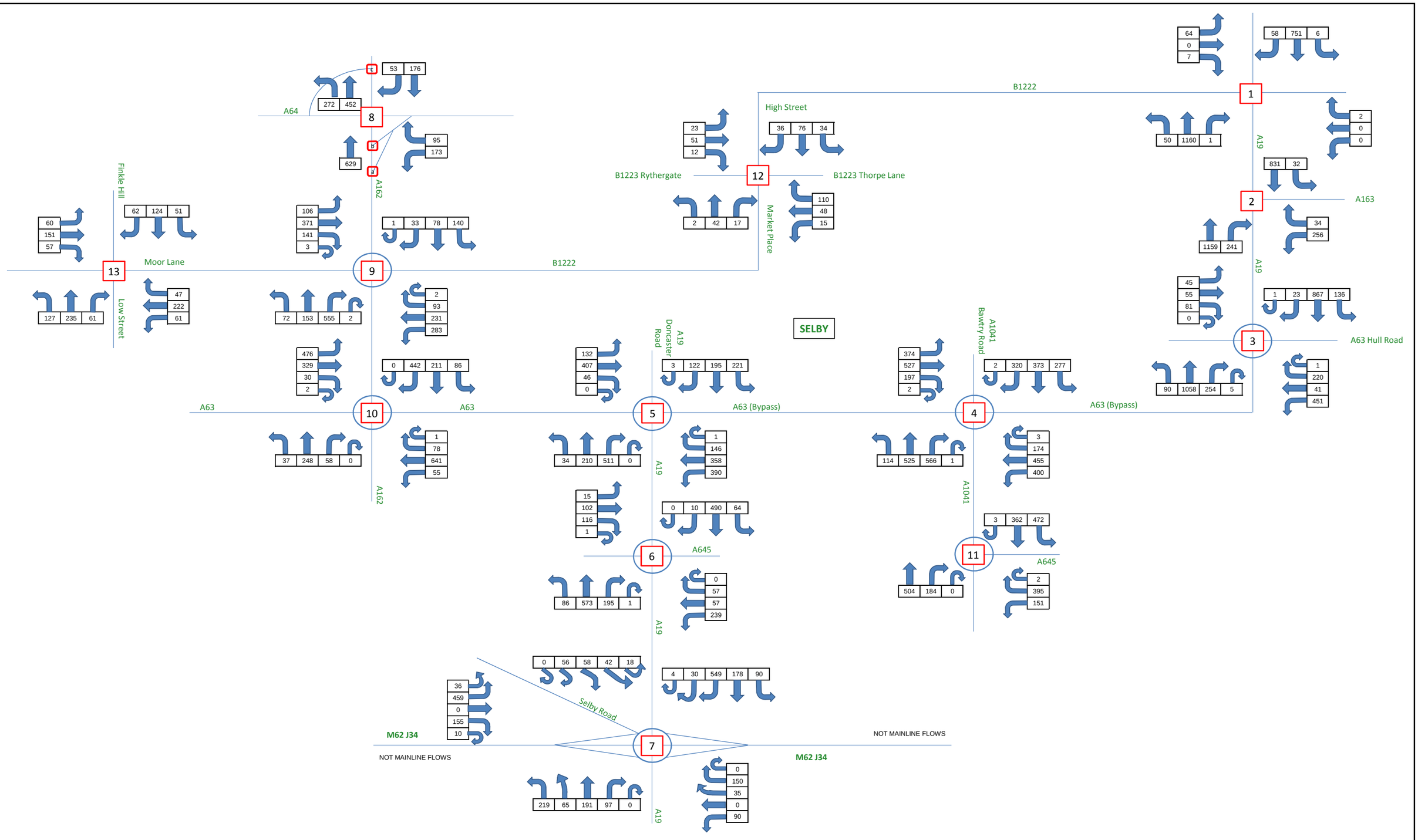
P:\data\W50---\W50827 - Highways Assessment, Selby District\calcs\network diagram



Committed Development - PM

Pell Frischmann

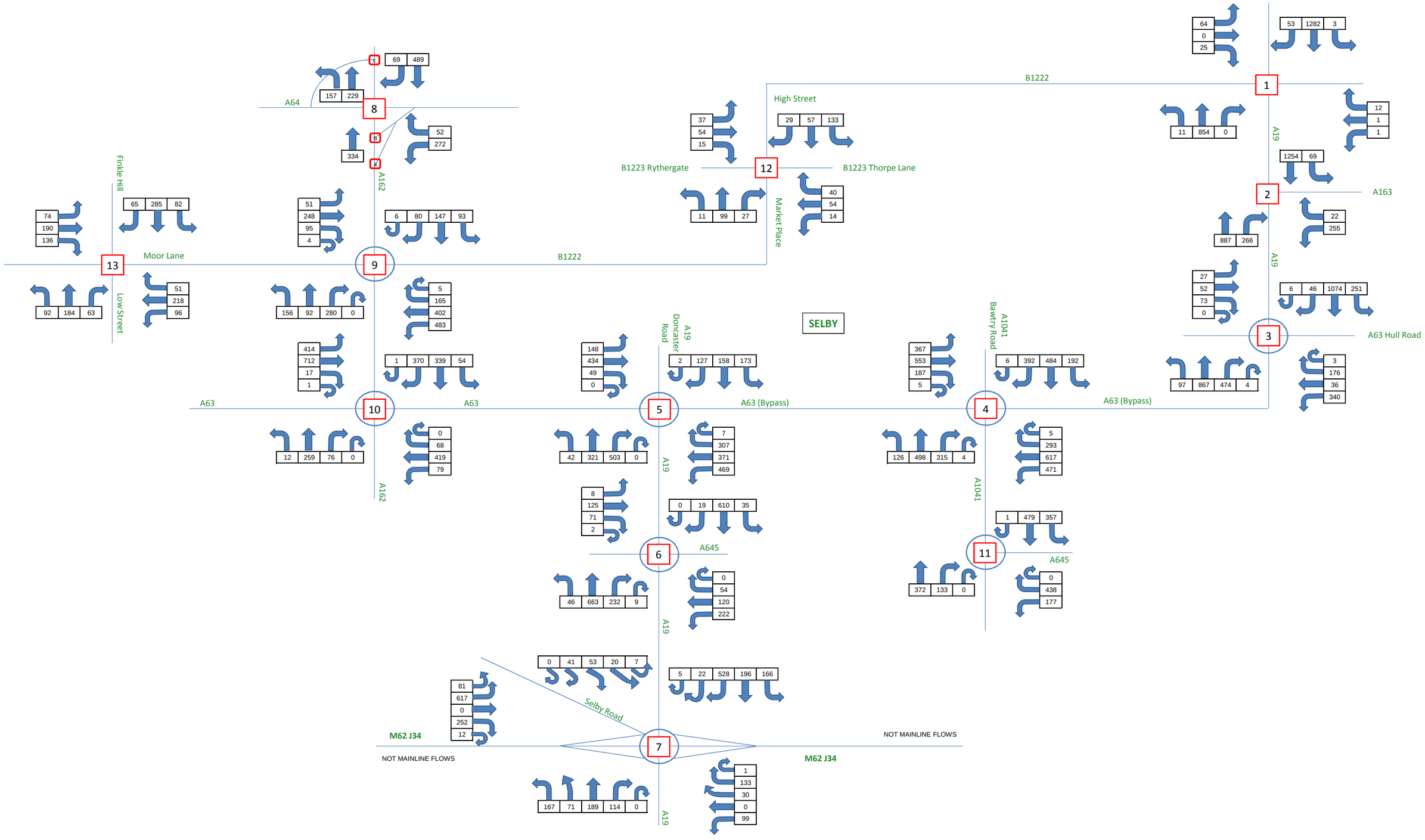
P:\data\W50---\W50827 - Highways Assessment, Selby District\calcs\network diagram



S1 - Weekday Base + Committed Dev - AM

Pell Frischmann

P:\data\W50---\W50827 - Highways Assessment, Selby District\calcs\network diagram



S1 - Weekday Base + Committed Dev - PM

Pell Frischmann

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APPENDIX B

PICADY OUTPUT

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: CTC Junc 1 four-arm.arc8
Path: P:\data\W50---\W50827 - Highways Assessment, Selby District\Junction Analysis\Junction 1
Report generation date: 11/12/2014 16:21:35

File summary

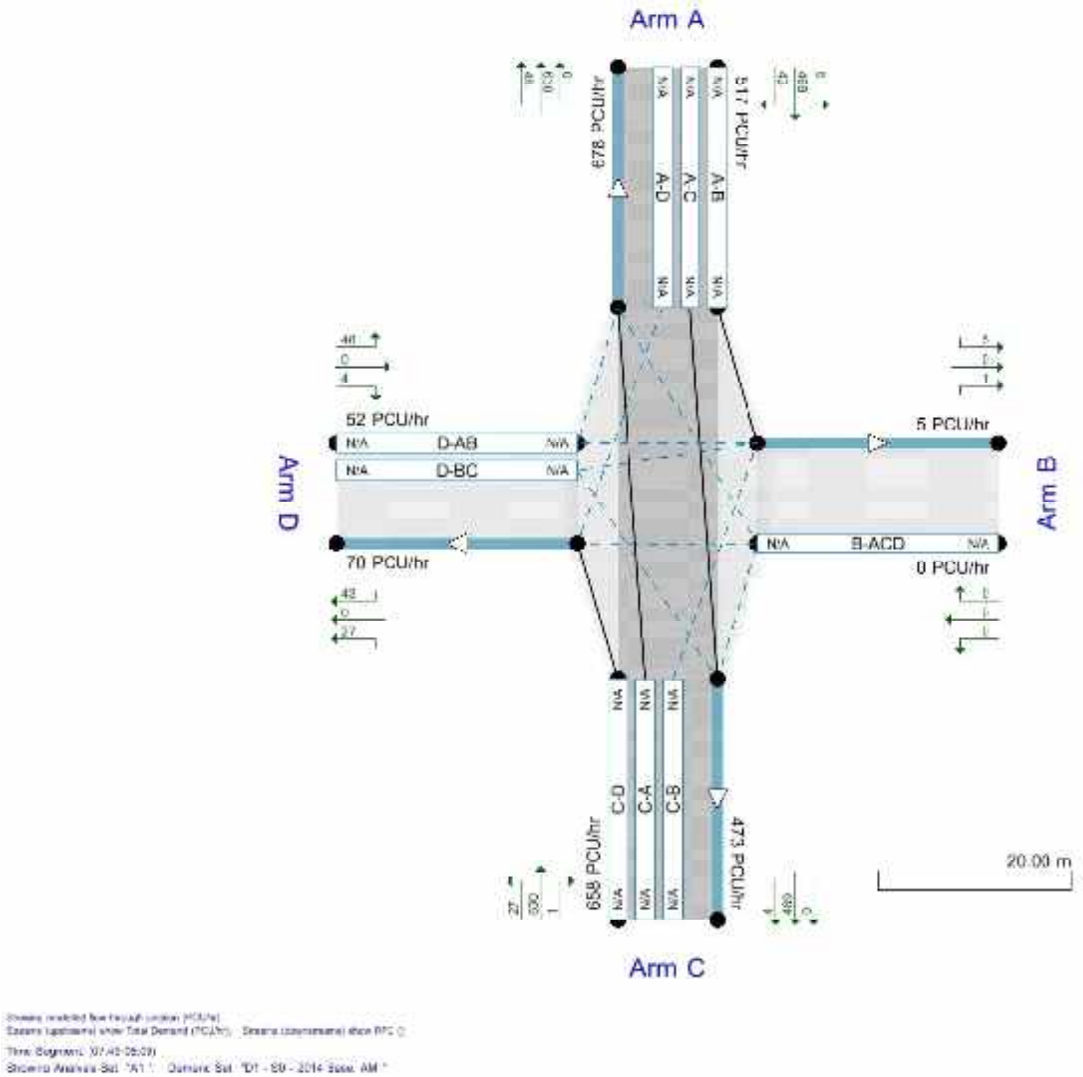
Title	(untitled)
Location	A19 / A163
Site Number	2
Date	17/11/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	njtaylor
Description	

Analysis Options

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

Units

Distance 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



The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - S0 - 2014 Base, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
S0 - 2014 Base, AM	S0 - 2014 Base	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	8.81	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A19 (north)		Major
B	B	Access to Escrick Park Estate		Minor
C	C	A19 (south)		Major
D	D	B1222		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	8.16		0.00	✓	3.94	250.00		
C	8.16		0.00	✓	3.94	120.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.30										200	250
D	One lane plus flare				10.00	6.85	4.66	4.08	3.73		2.00	43	34

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	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
1	A-D	854.850	-	-	-	-	-	-	0.300	0.429	0.300	-	-	-
1	B-A	697.637	0.115	0.291	0.291	-	-	-	0.183	0.416	-	0.291	0.291	0.145
1	B-C	804.787	0.112	0.283	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	697.637	0.115	0.291	0.291	-	-	-	0.183	0.416	0.183	-	-	-
1	B-D, offside lane	697.637	0.115	0.291	0.291	-	-	-	0.183	0.416	0.183	-	-	-
1	C-B	765.309	0.269	0.269	0.384	-	-	-	-	-	-	-	-	-
1	D-A	736.706	-	-	-	-	-	-	0.259	-	0.102	-	-	-
1	D-B, nearside lane	580.215	0.152	0.152	0.346	-	-	-	0.242	0.242	0.096	-	-	-
1	D-B, offside lane	478.564	0.126	0.126	0.285	-	-	-	0.200	0.200	0.079	-	-	-
1	D-C	478.564	-	0.126	0.285	0.100	0.200	0.200	0.200	0.200	0.079	-	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	687.00	100.000
B	ONE HOUR	✓	2.00	100.000
C	ONE HOUR	✓	874.00	100.000
D	ONE HOUR	✓	70.00	100.000

Turning Proportions

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

		To			
		A	B	C	D
From	A	0.000	6.000	623.000	58.000
	B	2.000	0.000	0.000	0.000
	C	837.000	1.000	0.000	36.000
	D	64.000	0.000	6.000	0.000

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

		To			
		A	B	C	D
From	A	0.00	0.01	0.91	0.08
	B	1.00	0.00	0.00	0.00
	C	0.96	0.00	0.00	0.04
	D	0.91	0.00	0.09	0.00

Vehicle Mix

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

		To			
		A	B	C	D
From	A	1.000	1.000	1.067	1.018
	B	1.000	1.000	1.000	1.000
	C	1.055	1.000	1.000	1.059
	D	1.067	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		A	B	C	D
From	A	0.0	0.0	6.7	1.8
	B	0.0	0.0	0.0	0.0
	C	5.5	0.0	0.0	5.9
	D	6.7	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.00	0.00	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.11	7.30	0.13	A
D-AB	0.14	9.16	0.18	A
D-BC	0.04	19.99	0.04	C
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.00	6.50	0.00	A

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	467.07	0.000	0.00	0.000	A
A-B	4.52	4.52	0.00	-	-	-	-	-
A-C	469.03	469.03	0.00	-	-	-	-	-
A-D	43.67	43.38	0.00	657.30	0.066	0.07	5.966	A
D-AB	48.18	47.79	0.00	568.66	0.085	0.10	7.370	A
D-BC	4.52	4.45	0.00	279.12	0.016	0.02	13.103	B
C-D	27.10	27.10	0.00	-	-	-	-	-
C-A	630.14	630.14	0.00	-	-	-	-	-
C-B	0.75	0.75	0.00	621.33	0.001	0.00	5.800	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	414.94	0.000	0.00	0.000	A
A-B	5.39	5.39	0.00	-	-	-	-	-
A-C	560.06	560.06	0.00	-	-	-	-	-
A-D	52.14	52.06	0.00	618.95	0.084	0.09	6.464	A
D-AB	57.53	57.42	0.00	535.72	0.107	0.13	8.029	A
D-BC	5.39	5.37	0.00	240.33	0.022	0.02	15.319	C
C-D	32.36	32.36	0.00	-	-	-	-	-
C-A	752.45	752.45	0.00	-	-	-	-	-
C-B	0.90	0.90	0.00	593.27	0.002	0.00	6.076	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	340.94	0.000	0.00	0.000	A
A-B	6.61	6.61	0.00	-	-	-	-	-
A-C	685.94	685.94	0.00	-	-	-	-	-
A-D	63.86	63.72	0.00	565.93	0.113	0.13	7.295	A
D-AB	70.47	70.26	0.00	489.87	0.144	0.18	9.151	A
D-BC	6.61	6.55	0.00	186.73	0.035	0.04	19.972	C
C-D	39.64	39.64	0.00	-	-	-	-	-
C-A	921.55	921.55	0.00	-	-	-	-	-
C-B	1.10	1.10	0.00	554.60	0.002	0.00	6.503	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	340.87	0.000	0.00	0.000	A
A-B	6.61	6.61	0.00	-	-	-	-	-
A-C	685.94	685.94	0.00	-	-	-	-	-
A-D	63.86	63.86	0.00	565.93	0.113	0.13	7.298	A
D-AB	70.47	70.46	0.00	489.82	0.144	0.18	9.159	A
D-BC	6.61	6.60	0.00	186.71	0.035	0.04	19.988	C
C-D	39.64	39.64	0.00	-	-	-	-	-
C-A	921.55	921.55	0.00	-	-	-	-	-
C-B	1.10	1.10	0.00	554.55	0.002	0.00	6.503	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	414.84	0.000	0.00	0.000	A
A-B	5.39	5.39	0.00	-	-	-	-	-
A-C	560.06	560.06	0.00	-	-	-	-	-
A-D	52.14	52.28	0.00	618.95	0.084	0.09	6.470	A
D-AB	57.53	57.73	0.00	535.65	0.107	0.13	8.040	A
D-BC	5.39	5.45	0.00	240.29	0.022	0.02	15.334	C
C-D	32.36	32.36	0.00	-	-	-	-	-
C-A	752.45	752.45	0.00	-	-	-	-	-
C-B	0.90	0.90	0.00	593.19	0.002	0.00	6.079	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	466.92	0.000	0.00	0.000	A
A-B	4.52	4.52	0.00	-	-	-	-	-
A-C	469.03	469.03	0.00	-	-	-	-	-
A-D	43.67	43.75	0.00	657.29	0.066	0.07	5.975	A
D-AB	48.18	48.30	0.00	568.58	0.085	0.10	7.383	A
D-BC	4.52	4.54	0.00	279.05	0.016	0.02	13.117	B
C-D	27.10	27.10	0.00	-	-	-	-	-
C-A	630.14	630.14	0.00	-	-	-	-	-
C-B	0.75	0.75	0.00	621.18	0.001	0.00	5.804	A

(Default Analysis Set) - S0 - 2014 Base, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
S0 - 2014 Base, PM	S0 - 2014 Base	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	10.38	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A19 (north)		Major
B	B	Access to Escrick Park Estate		Minor
C	C	A19 (south)		Major
D	D	B1222		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	8.16		0.00	✓	3.94	250.00		
C	8.16		0.00	✓	3.94	120.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.30										200	250
D	One lane plus flare				10.00	6.85	4.66	4.08	3.73		2.00	43	34

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	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
1	A-D	854.850	-	-	-	-	-	-	0.300	0.429	0.300	-	-	-
1	B-A	697.637	0.115	0.291	0.291	-	-	-	0.183	0.416	-	0.291	0.291	0.145
1	B-C	804.787	0.112	0.283	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	697.637	0.115	0.291	0.291	-	-	-	0.183	0.416	0.183	-	-	-
1	B-D, offside lane	697.637	0.115	0.291	0.291	-	-	-	0.183	0.416	0.183	-	-	-
1	C-B	765.309	0.269	0.269	0.384	-	-	-	-	-	-	-	-	-
1	D-A	744.264	-	-	-	-	-	-	0.261	-	0.103	-	-	-
1	D-B, nearside lane	586.167	0.154	0.154	0.349	-	-	-	0.244	0.244	0.097	-	-	-
1	D-B, offside lane	489.883	0.129	0.129	0.292	-	-	-	0.204	0.204	0.081	-	-	-
1	D-C	489.883	-	0.129	0.292	0.102	0.204	0.204	0.204	0.204	0.081	-	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	1015.00	100.000
B	ONE HOUR	✓	14.00	100.000
C	ONE HOUR	✓	707.00	100.000
D	ONE HOUR	✓	83.00	100.000

Turning Proportions

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

		To			
		A	B	C	D
From	A	0.000	3.000	959.000	53.000
	B	12.000	0.000	1.000	1.000
	C	698.000	0.000	0.000	9.000
	D	64.000	0.000	19.000	0.000

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

		To			
		A	B	C	D
From	A	0.00	0.00	0.94	0.05
	B	0.86	0.00	0.07	0.07
	C	0.99	0.00	0.00	0.01
	D	0.77	0.00	0.23	0.00

Vehicle Mix

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

		To			
		A	B	C	D
From	A	1.000	1.000	1.023	1.000
	B	1.091	1.000	1.000	1.000
	C	1.033	1.000	1.000	1.000
	D	1.016	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		A	B	C	D
From	A	0.0	0.0	2.3	0.0
	B	9.1	0.0	0.0	0.0
	C	3.3	0.0	0.0	0.0
	D	1.6	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.07	19.03	0.08	C
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.09	6.39	0.10	A
D-AB	0.13	8.03	0.16	A
D-BC	0.12	23.01	0.13	C
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.00	0.00	0.00	A

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	10.54	10.42	0.00	375.00	0.028	0.03	10.631	B
A-B	2.26	2.26	0.00	-	-	-	-	-
A-C	721.99	721.99	0.00	-	-	-	-	-
A-D	39.90	39.66	0.00	695.12	0.057	0.06	5.491	A
D-AB	48.18	47.83	0.00	598.42	0.081	0.09	6.638	A
D-BC	14.30	14.09	0.00	276.26	0.052	0.05	13.720	B
C-D	6.78	6.78	0.00	-	-	-	-	-
C-A	525.49	525.49	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	555.42	0.000	0.00	0.000	A

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	12.59	12.53	0.00	309.91	0.041	0.04	13.038	B
A-B	2.70	2.70	0.00	-	-	-	-	-
A-C	862.12	862.12	0.00	-	-	-	-	-
A-D	47.65	47.58	0.00	664.12	0.072	0.08	5.839	A
D-AB	57.53	57.43	0.00	568.71	0.101	0.11	7.151	A
D-BC	17.08	16.99	0.00	234.75	0.073	0.08	16.525	C
C-D	8.09	8.09	0.00	-	-	-	-	-
C-A	627.49	627.49	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	514.59	0.000	0.00	0.000	A

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	15.41	15.27	0.00	219.22	0.070	0.08	18.996	C
A-B	3.30	3.30	0.00	-	-	-	-	-
A-C	1055.88	1055.88	0.00	-	-	-	-	-
A-D	58.35	58.25	0.00	621.25	0.094	0.10	6.394	A
D-AB	70.47	70.30	0.00	526.02	0.134	0.16	8.023	A
D-BC	20.92	20.71	0.00	177.36	0.118	0.13	22.953	C
C-D	9.91	9.91	0.00	-	-	-	-	-
C-A	768.51	768.51	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	458.24	0.000	0.00	0.000	A

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	15.41	15.41	0.00	219.11	0.070	0.08	19.033	C
A-B	3.30	3.30	0.00	-	-	-	-	-
A-C	1055.88	1055.88	0.00	-	-	-	-	-
A-D	58.35	58.35	0.00	621.25	0.094	0.10	6.394	A
D-AB	70.47	70.46	0.00	525.76	0.134	0.16	8.033	A
D-BC	20.92	20.91	0.00	177.36	0.118	0.13	23.009	C
C-D	9.91	9.91	0.00	-	-	-	-	-
C-A	768.51	768.51	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	458.20	0.000	0.00	0.000	A

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	12.59	12.72	0.00	309.74	0.041	0.05	13.058	B
A-B	2.70	2.70	0.00	-	-	-	-	-
A-C	862.12	862.12	0.00	-	-	-	-	-
A-D	47.65	47.75	0.00	664.12	0.072	0.08	5.840	A
D-AB	57.53	57.70	0.00	568.33	0.101	0.12	7.164	A
D-BC	17.08	17.29	0.00	234.76	0.073	0.08	16.570	C
C-D	8.09	8.09	0.00	-	-	-	-	-
C-A	627.49	627.49	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	514.53	0.000	0.00	0.000	A

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	10.54	10.60	0.00	374.75	0.028	0.03	10.650	B
A-B	2.26	2.26	0.00	-	-	-	-	-
A-C	721.99	721.99	0.00	-	-	-	-	-
A-D	39.90	39.97	0.00	695.12	0.057	0.06	5.497	A
D-AB	48.18	48.29	0.00	598.06	0.081	0.09	6.655	A
D-BC	14.30	14.40	0.00	276.25	0.052	0.06	13.752	B
C-D	6.78	6.78	0.00	-	-	-	-	-
C-A	525.49	525.49	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	555.30	0.000	0.00	0.000	A

(Default Analysis Set) - S1 - 2014 Base + Committed, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
S1 - 2014 Base + Committed, AM	S1 - 2014 Base + Committed	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	11.94	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A19 (north)		Major
B	B	Access to Escrick Park Estate		Minor
C	C	A19 (south)		Major
D	D	B1222		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	8.16		0.00	✓	3.94	250.00		
C	8.16		0.00	✓	3.94	120.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.30										200	250
D	One lane plus flare				10.00	6.85	4.66	4.08	3.73		2.00	43	34

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	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
1	A-D	854.850	-	-	-	-	-	-	0.300	0.429	0.300	-	-	-
1	B-A	697.637	0.115	0.291	0.291	-	-	-	0.183	0.416	-	0.291	0.291	0.145
1	B-C	804.787	0.112	0.283	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	697.637	0.115	0.291	0.291	-	-	-	0.183	0.416	0.183	-	-	-
1	B-D, offside lane	697.637	0.115	0.291	0.291	-	-	-	0.183	0.416	0.183	-	-	-
1	C-B	765.309	0.269	0.269	0.384	-	-	-	-	-	-	-	-	-
1	D-A	735.931	-	-	-	-	-	-	0.258	-	0.102	-	-	-
1	D-B, nearside lane	579.604	0.152	0.152	0.345	-	-	-	0.242	0.242	0.096	-	-	-
1	D-B, offside lane	479.582	0.126	0.126	0.286	-	-	-	0.200	0.200	0.079	-	-	-
1	D-C	479.582	-	0.126	0.286	0.100	0.200	0.200	0.200	0.200	0.079	-	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	815.00	100.000
B	ONE HOUR	✓	2.00	100.000
C	ONE HOUR	✓	1211.00	100.000
D	ONE HOUR	✓	71.00	100.000

Turning Proportions

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

		To			
		A	B	C	D
From	A	0.000	6.000	751.000	58.000
	B	2.000	0.000	0.000	0.000
	C	1160.000	1.000	0.000	50.000
	D	64.000	0.000	7.000	0.000

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

		To			
		A	B	C	D
From	A	0.00	0.01	0.92	0.07
	B	1.00	0.00	0.00	0.00
	C	0.96	0.00	0.00	0.04
	D	0.90	0.00	0.10	0.00

Vehicle Mix

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

		To			
		A	B	C	D
From	A	1.000	1.000	1.023	1.000
	B	1.091	1.000	1.000	1.000
	C	1.033	1.000	1.000	1.000
	D	1.016	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		A	B	C	D
From	A	0.0	0.0	2.3	0.0
	B	9.1	0.0	0.0	0.0
	C	3.3	0.0	0.0	0.0
	D	1.6	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.00	0.00	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.14	9.21	0.16	A
D-AB	0.18	11.38	0.22	B
D-BC	0.08	40.31	0.08	E
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.00	6.98	0.00	A

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	395.27	0.000	0.00	0.000	A
A-B	4.52	4.52	0.00	-	-	-	-	-
A-C	565.39	565.39	0.00	-	-	-	-	-
A-D	43.67	43.34	0.00	581.16	0.075	0.08	6.689	A
D-AB	48.18	47.76	0.00	503.41	0.096	0.11	8.020	A
D-BC	5.27	5.17	0.00	218.11	0.024	0.02	16.898	C
C-D	37.64	37.64	0.00	-	-	-	-	-
C-A	873.31	873.31	0.00	-	-	-	-	-
C-B	0.75	0.75	0.00	595.44	0.001	0.00	6.052	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	326.56	0.000	0.00	0.000	A
A-B	5.39	5.39	0.00	-	-	-	-	-
A-C	675.13	675.13	0.00	-	-	-	-	-
A-D	52.14	52.03	0.00	528.04	0.099	0.11	7.560	A
D-AB	57.53	57.38	0.00	457.49	0.126	0.14	9.141	A
D-BC	6.29	6.24	0.00	167.27	0.038	0.04	22.347	C
C-D	44.95	44.95	0.00	-	-	-	-	-
C-A	1042.82	1042.82	0.00	-	-	-	-	-
C-B	0.90	0.90	0.00	562.35	0.002	0.00	6.411	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	227.08	0.000	0.00	0.000	A
A-B	6.61	6.61	0.00	-	-	-	-	-
A-C	826.87	826.87	0.00	-	-	-	-	-
A-D	63.86	63.65	0.00	454.59	0.140	0.16	9.204	A
D-AB	70.47	70.17	0.00	392.19	0.180	0.22	11.348	B
D-BC	7.71	7.53	0.00	97.02	0.079	0.08	40.133	E
C-D	55.05	55.05	0.00	-	-	-	-	-
C-A	1277.18	1277.18	0.00	-	-	-	-	-
C-B	1.10	1.10	0.00	516.72	0.002	0.00	6.981	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	226.97	0.000	0.00	0.000	A
A-B	6.61	6.61	0.00	-	-	-	-	-
A-C	826.87	826.87	0.00	-	-	-	-	-
A-D	63.86	63.86	0.00	454.59	0.140	0.16	9.213	A
D-AB	70.47	70.46	0.00	391.95	0.180	0.22	11.376	B
D-BC	7.71	7.70	0.00	96.99	0.079	0.08	40.309	E
C-D	55.05	55.05	0.00	-	-	-	-	-
C-A	1277.18	1277.18	0.00	-	-	-	-	-
C-B	1.10	1.10	0.00	516.63	0.002	0.00	6.982	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	326.41	0.000	0.00	0.000	A
A-B	5.39	5.39	0.00	-	-	-	-	-
A-C	675.13	675.13	0.00	-	-	-	-	-
A-D	52.14	52.35	0.00	528.03	0.099	0.11	7.573	A
D-AB	57.53	57.83	0.00	457.23	0.126	0.15	9.164	A
D-BC	6.29	6.47	0.00	167.25	0.038	0.04	22.416	C
C-D	44.95	44.95	0.00	-	-	-	-	-
C-A	1042.82	1042.82	0.00	-	-	-	-	-
C-B	0.90	0.90	0.00	562.22	0.002	0.00	6.415	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	395.08	0.000	0.00	0.000	A
A-B	4.52	4.52	0.00	-	-	-	-	-
A-C	565.39	565.39	0.00	-	-	-	-	-
A-D	43.67	43.78	0.00	581.16	0.075	0.08	6.702	A
D-AB	48.18	48.34	0.00	503.25	0.096	0.11	8.044	A
D-BC	5.27	5.33	0.00	218.04	0.024	0.03	16.930	C
C-D	37.64	37.64	0.00	-	-	-	-	-
C-A	873.31	873.31	0.00	-	-	-	-	-
C-B	0.75	0.75	0.00	595.27	0.001	0.00	6.057	A

(Default Analysis Set) - S1 - 2014 Base + Committed, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
S1 - 2014 Base + Committed, PM	S1 - 2014 Base + Committed	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	20.07	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A19 (north)		Major
B	B	Access to Escrick Park Estate		Minor
C	C	A19 (south)		Major
D	D	B1222		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	8.16		0.00	✓	3.94	250.00		
C	8.16		0.00	✓	3.94	120.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.30										200	250
D	One lane plus flare				10.00	6.85	4.66	4.08	3.73		2.00	43	34

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	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
1	A-D	854.850	-	-	-	-	-	-	0.300	0.429	0.300	-	-	-
1	B-A	697.637	0.115	0.291	0.291	-	-	-	0.183	0.416	-	0.291	0.291	0.145
1	B-C	804.787	0.112	0.283	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	697.637	0.115	0.291	0.291	-	-	-	0.183	0.416	0.183	-	-	-
1	B-D, offside lane	697.637	0.115	0.291	0.291	-	-	-	0.183	0.416	0.183	-	-	-
1	C-B	765.309	0.269	0.269	0.384	-	-	-	-	-	-	-	-	-
1	D-A	737.449	-	-	-	-	-	-	0.259	-	0.102	-	-	-
1	D-B, nearside lane	580.800	0.152	0.152	0.346	-	-	-	0.242	0.242	0.096	-	-	-
1	D-B, offside lane	495.250	0.130	0.130	0.295	-	-	-	0.207	0.207	0.082	-	-	-
1	D-C	495.250	-	0.130	0.295	0.103	0.207	0.207	0.207	0.207	0.082	-	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	1338.00	100.000
B	ONE HOUR	✓	14.00	100.000
C	ONE HOUR	✓	865.00	100.000
D	ONE HOUR	✓	89.00	100.000

Turning Proportions

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

		To			
		A	B	C	D
From	A	0.000	3.000	1282.000	53.000
	B	12.000	0.000	1.000	1.000
	C	854.000	0.000	0.000	11.000
	D	64.000	0.000	25.000	0.000

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

		To			
		A	B	C	D
From	A	0.00	0.00	0.96	0.04
	B	0.86	0.00	0.07	0.07
	C	0.99	0.00	0.00	0.01
	D	0.72	0.00	0.28	0.00

Vehicle Mix

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

		To			
		A	B	C	D
From	A	1.000	1.000	1.023	1.000
	B	1.091	1.000	1.000	1.000
	C	1.033	1.000	1.000	1.000
	D	1.016	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		A	B	C	D
From	A	0.0	0.0	2.3	0.0
	B	9.1	0.0	0.0	0.0
	C	3.3	0.0	0.0	0.0
	D	1.6	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.20	61.55	0.25	F
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.10	7.05	0.11	A
D-AB	0.16	9.58	0.19	A
D-BC	0.28	51.28	0.38	F
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.00	0.00	0.00	A

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	10.54	10.38	0.00	281.41	0.037	0.04	14.296	B
A-B	2.26	2.26	0.00	-	-	-	-	-
A-C	965.16	965.16	0.00	-	-	-	-	-
A-D	39.90	39.65	0.00	659.43	0.061	0.06	5.805	A
D-AB	48.18	47.80	0.00	558.12	0.086	0.10	7.163	A
D-BC	18.82	18.46	0.00	223.30	0.084	0.09	17.545	C
C-D	8.28	8.28	0.00	-	-	-	-	-
C-A	642.94	642.94	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	490.09	0.000	0.00	0.000	A

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	12.59	12.46	0.00	197.13	0.064	0.07	20.981	C
A-B	2.70	2.70	0.00	-	-	-	-	-
A-C	1152.49	1152.49	0.00	-	-	-	-	-
A-D	47.65	47.57	0.00	621.50	0.077	0.08	6.272	A
D-AB	57.53	57.41	0.00	519.23	0.111	0.13	7.918	A
D-BC	22.47	22.25	0.00	170.53	0.132	0.15	24.201	C
C-D	9.89	9.89	0.00	-	-	-	-	-
C-A	767.73	767.73	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	436.58	0.000	0.00	0.000	A

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	15.41	14.73	0.00	78.50	0.196	0.24	60.203	F
A-B	3.30	3.30	0.00	-	-	-	-	-
A-C	1411.51	1411.51	0.00	-	-	-	-	-
A-D	58.35	58.23	0.00	569.05	0.103	0.11	7.045	A
D-AB	70.47	70.23	0.00	454.53	0.155	0.18	9.511	A
D-BC	27.53	26.65	0.00	97.45	0.282	0.37	50.261	F
C-D	12.11	12.11	0.00	-	-	-	-	-
C-A	940.27	940.27	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	362.69	0.000	0.00	0.000	A

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	15.41	15.37	0.00	78.27	0.197	0.25	61.546	F
A-B	3.30	3.30	0.00	-	-	-	-	-
A-C	1411.51	1411.51	0.00	-	-	-	-	-
A-D	58.35	58.35	0.00	569.05	0.103	0.11	7.048	A
D-AB	70.47	70.46	0.00	452.32	0.156	0.19	9.577	A
D-BC	27.53	27.48	0.00	97.54	0.282	0.38	51.281	F
C-D	12.11	12.11	0.00	-	-	-	-	-
C-A	940.27	940.27	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	362.64	0.000	0.00	0.000	A

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	12.59	13.30	0.00	196.81	0.064	0.08	21.202	C
A-B	2.70	2.70	0.00	-	-	-	-	-
A-C	1152.49	1152.49	0.00	-	-	-	-	-
A-D	47.65	47.77	0.00	621.50	0.077	0.08	6.277	A
D-AB	57.53	57.76	0.00	516.81	0.111	0.13	7.971	A
D-BC	22.47	23.37	0.00	170.96	0.131	0.16	24.528	C
C-D	9.89	9.89	0.00	-	-	-	-	-
C-A	767.73	767.73	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	436.50	0.000	0.00	0.000	A

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	10.54	10.67	0.00	281.09	0.038	0.04	14.346	B
A-B	2.26	2.26	0.00	-	-	-	-	-
A-C	965.16	965.16	0.00	-	-	-	-	-
A-D	39.90	39.98	0.00	659.43	0.061	0.06	5.811	A
D-AB	48.18	48.31	0.00	556.90	0.087	0.10	7.192	A
D-BC	18.82	19.07	0.00	223.56	0.084	0.09	17.627	C
C-D	8.28	8.28	0.00	-	-	-	-	-
C-A	642.94	642.94	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	489.96	0.000	0.00	0.000	A

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: CTC Junc 2.arc8
Path: P:\data\W50---\W50827 - Highways Assessment, Selby District\Junction Analysis\Junction 2
Report generation date: 11/12/2014 16:47:40

» (Default Analysis Set) - S0 - 2014 Base, AM
» (Default Analysis Set) - S0 - 2014 Base, PM
» (Default Analysis Set) - S1 - 2014 Base + Committed, AM
» (Default Analysis Set) - S1 - 2014 Base + Committed, PM

File summary

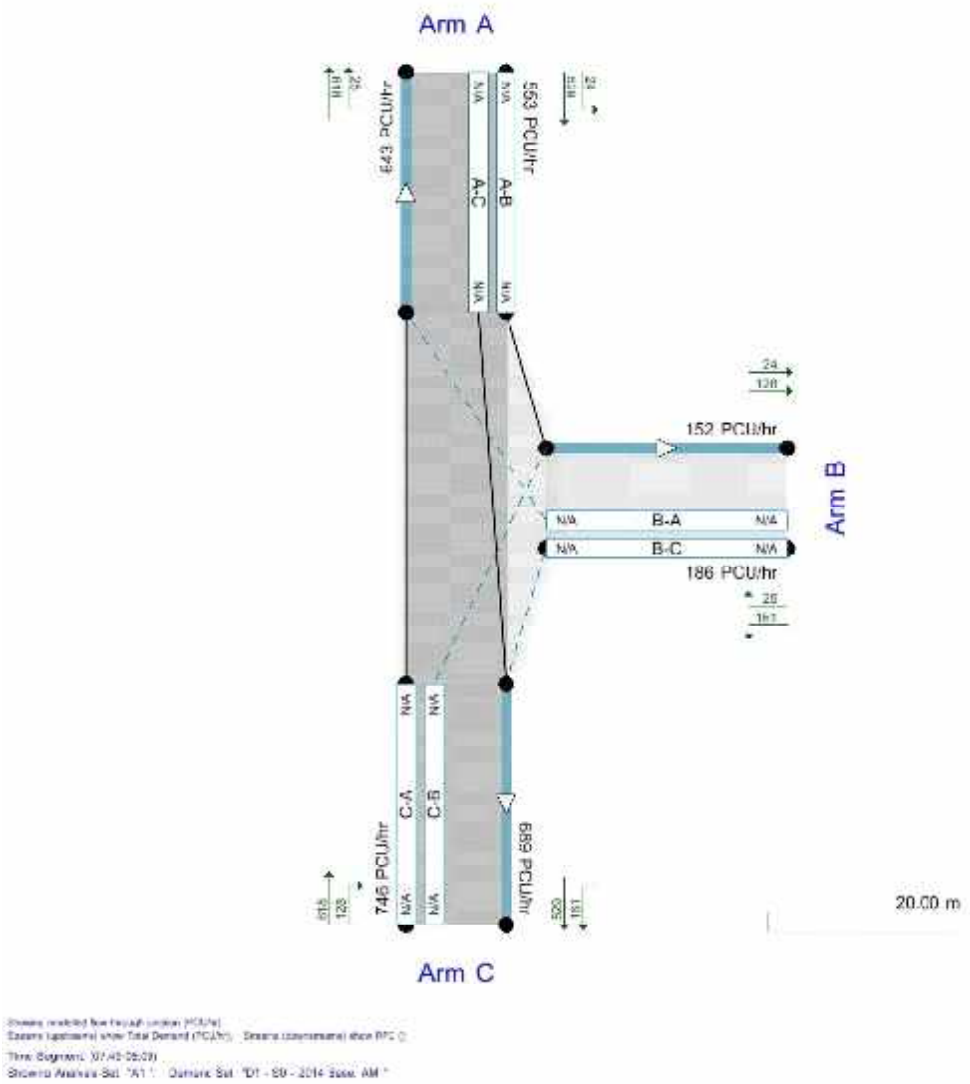
Title	(untitled)
Location	A19 / A163
Site Number	2
Date	17/11/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	njtaylor
Description	

Analysis Options

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

Units

Distance 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



The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - S0 - 2014 Base, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
S0 - 2014 Base, AM	S0 - 2014 Base	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	16.45	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.30		0.00	✓	3.51	250.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	9.04	6.65	6.01	5.65		6.00	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	453.629	0.082	0.206	0.130	0.294
1	B-C	747.391	0.113	0.286	-	-
1	C-B	821.214	0.314	0.314	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	734.00	100.000
B	ONE HOUR	✓	250.00	100.000
C	ONE HOUR	✓	992.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	32.000	702.000
	B	34.000	0.000	216.000
	C	821.000	171.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.04	0.96
	B	0.14	0.00	0.86
	C	0.83	0.17	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.067	1.045
	B	1.097	1.000	1.069
	C	1.049	1.118	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	6.7	4.5
	B	9.7	0.0	6.9
	C	4.9	11.8	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.50	15.95	1.04	C
B-A	0.32	48.98	0.49	E
C-A	-	-	-	-
C-B	0.33	10.61	0.55	B
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	162.62	160.96	0.00	576.71	0.282	0.41	9.214	A
B-A	25.60	25.05	0.00	224.67	0.114	0.14	19.730	C
C-A	618.09	618.09	0.00	-	-	-	-	-
C-B	128.74	127.64	0.00	647.68	0.199	0.27	7.723	A
A-B	24.09	24.09	0.00	-	-	-	-	-
A-C	528.50	528.50	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	194.18	193.47	0.00	539.35	0.360	0.59	11.103	B
B-A	30.57	30.25	0.00	179.90	0.170	0.22	26.331	D
C-A	738.06	738.06	0.00	-	-	-	-	-
C-B	153.73	153.35	0.00	614.00	0.250	0.37	8.730	A
A-B	28.77	28.77	0.00	-	-	-	-	-
A-C	631.08	631.08	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	237.82	236.12	0.00	480.12	0.495	1.02	15.661	C
B-A	37.43	36.41	0.00	118.13	0.317	0.47	47.742	E
C-A	903.94	903.94	0.00	-	-	-	-	-
C-B	188.27	187.57	0.00	567.43	0.332	0.55	10.575	B
A-B	35.23	35.23	0.00	-	-	-	-	-
A-C	772.92	772.92	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	237.82	237.74	0.00	478.80	0.497	1.04	15.950	C
B-A	37.43	37.37	0.00	117.93	0.317	0.49	48.982	E
C-A	903.94	903.94	0.00	-	-	-	-	-
C-B	188.27	188.26	0.00	567.43	0.332	0.55	10.614	B
A-B	35.23	35.23	0.00	-	-	-	-	-
A-C	772.92	772.92	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	194.18	195.86	0.00	538.01	0.361	0.62	11.303	B
B-A	30.57	31.60	0.00	179.65	0.170	0.23	26.846	D
C-A	738.06	738.06	0.00	-	-	-	-	-
C-B	153.73	154.41	0.00	614.00	0.250	0.38	8.770	A
A-B	28.77	28.77	0.00	-	-	-	-	-
A-C	631.08	631.08	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	162.62	163.37	0.00	575.94	0.282	0.43	9.346	A
B-A	25.60	25.95	0.00	224.29	0.114	0.14	19.947	C
C-A	618.09	618.09	0.00	-	-	-	-	-
C-B	128.74	129.13	0.00	647.68	0.199	0.28	7.768	A
A-B	24.09	24.09	0.00	-	-	-	-	-
A-C	528.50	528.50	0.00	-	-	-	-	-

(Default Analysis Set) - S0 - 2014 Base, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
S0 - 2014 Base, PM	S0 - 2014 Base	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	22.86	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.30		0.00	✓	3.51	250.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	9.04	6.65	6.01	5.65		6.00	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	452.496	0.081	0.206	0.129	0.294
1	B-C	748.870	0.113	0.286	-	-
1	C-B	821.214	0.314	0.314	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	993.00	100.000
B	ONE HOUR	✓	210.00	100.000
C	ONE HOUR	✓	948.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	69.000	924.000
	B	22.000	0.000	188.000
	C	729.000	219.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.07	0.93
	B	0.10	0.00	0.90
	C	0.77	0.23	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.045	1.024
	B	1.294	1.000	1.022
	C	1.022	1.053	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	4.5	2.4
	B	29.4	0.0	2.2
	C	2.2	5.3	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.52	19.09	1.07	C
B-A	0.40	123.34	0.76	F
C-A	-	-	-	-
C-B	0.50	15.99	1.05	C
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	141.54	140.07	0.00	531.66	0.266	0.37	9.362	A
B-A	16.56	16.07	0.00	185.83	0.089	0.12	27.366	D
C-A	548.83	548.83	0.00	-	-	-	-	-
C-B	164.87	163.25	0.00	586.45	0.281	0.41	8.924	A
A-B	51.95	51.95	0.00	-	-	-	-	-
A-C	695.64	695.64	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	169.01	168.32	0.00	484.86	0.349	0.54	11.597	B
B-A	19.78	19.41	0.00	133.58	0.148	0.21	40.669	E
C-A	655.36	655.36	0.00	-	-	-	-	-
C-B	196.88	196.13	0.00	540.88	0.364	0.59	10.971	B
A-B	62.03	62.03	0.00	-	-	-	-	-
A-C	830.66	830.66	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	206.99	205.00	0.00	403.25	0.513	1.04	18.373	C
B-A	24.22	22.29	0.00	61.69	0.393	0.70	113.662	F
C-A	802.64	802.64	0.00	-	-	-	-	-
C-B	241.12	239.34	0.00	477.88	0.505	1.04	15.771	C
A-B	75.97	75.97	0.00	-	-	-	-	-
A-C	1017.34	1017.34	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	206.99	206.84	0.00	399.21	0.519	1.07	19.093	C
B-A	24.22	23.96	0.00	61.15	0.396	0.76	123.342	F
C-A	802.64	802.64	0.00	-	-	-	-	-
C-B	241.12	241.06	0.00	477.88	0.505	1.05	15.993	C
A-B	75.97	75.97	0.00	-	-	-	-	-
A-C	1017.34	1017.34	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	169.01	171.05	0.00	482.26	0.350	0.56	11.896	B
B-A	19.78	21.88	0.00	132.84	0.149	0.24	42.659	E
C-A	655.36	655.36	0.00	-	-	-	-	-
C-B	196.88	198.64	0.00	540.88	0.364	0.61	11.133	B
A-B	62.03	62.03	0.00	-	-	-	-	-
A-C	830.66	830.66	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	141.54	142.28	0.00	530.92	0.267	0.38	9.486	A
B-A	16.56	16.99	0.00	185.11	0.089	0.13	27.777	D
C-A	548.83	548.83	0.00	-	-	-	-	-
C-B	164.87	165.66	0.00	586.45	0.281	0.42	9.027	A
A-B	51.95	51.95	0.00	-	-	-	-	-
A-C	695.64	695.64	0.00	-	-	-	-	-

(Default Analysis Set) - S1 - 2014 Base + Committed, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
S1 - 2014 Base + Committed, AM	S1 - 2014 Base + Committed	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	995.85	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.30		0.00	✓	3.51	250.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	9.04	6.65	6.01	5.65		6.00	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	452.615	0.081	0.206	0.129	0.294
1	B-C	748.715	0.113	0.286	-	-
1	C-B	821.214	0.314	0.314	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	863.00	100.000
B	ONE HOUR	✓	290.00	100.000
C	ONE HOUR	✓	1400.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	32.000	831.000
	B	34.000	0.000	256.000
	C	1159.000	241.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.04	0.96
	B	0.12	0.00	0.88
	C	0.83	0.17	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.045	1.024
	B	1.294	1.000	1.022
	C	1.022	1.053	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	4.5	2.4
	B	29.4	0.0	2.2
	C	2.2	5.3	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	2.28	1771.20	79.36	F
B-A	2.16	2112.51	11.22	F
C-A	-	-	-	-
C-B	0.51	14.71	1.07	B
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	192.73	190.52	0.00	543.58	0.355	0.55	10.358	B
B-A	25.60	24.63	0.00	155.78	0.164	0.24	35.280	E
C-A	872.56	872.56	0.00	-	-	-	-	-
C-B	181.44	179.71	0.00	617.19	0.294	0.43	8.632	A
A-B	24.09	24.09	0.00	-	-	-	-	-
A-C	625.62	625.62	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	230.14	228.80	0.00	488.53	0.471	0.89	14.090	B
B-A	30.57	29.40	0.00	97.59	0.313	0.54	67.208	F
C-A	1041.92	1041.92	0.00	-	-	-	-	-
C-B	216.65	215.90	0.00	577.58	0.375	0.62	10.459	B
A-B	28.77	28.77	0.00	-	-	-	-	-
A-C	747.05	747.05	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	281.86	126.24	0.00	128.41	2.195	39.79	608.564	F
B-A	37.43	15.30	0.00	17.81	2.102	6.07	918.680	F
C-A	1276.08	1276.08	0.00	-	-	-	-	-
C-B	265.35	263.62	0.00	522.83	0.508	1.05	14.525	B
A-B	35.23	35.23	0.00	-	-	-	-	-
A-C	914.95	914.95	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	281.86	123.60	0.00	123.67	2.279	79.36	1771.199	F
B-A	37.43	16.83	0.00	17.30	2.163	11.22	2112.510	F
C-A	1276.08	1276.08	0.00	-	-	-	-	-
C-B	265.35	265.28	0.00	522.83	0.508	1.07	14.710	B
A-B	35.23	35.23	0.00	-	-	-	-	-
A-C	914.95	914.95	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	230.14	417.05	0.00	422.42	0.545	32.63	472.488	F
B-A	30.57	52.18	0.00	58.20	0.525	5.82	510.576	F
C-A	1041.92	1041.92	0.00	-	-	-	-	-
C-B	216.65	218.35	0.00	577.58	0.375	0.64	10.603	B
A-B	28.77	28.77	0.00	-	-	-	-	-
A-C	747.05	747.05	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	192.73	320.77	0.00	521.53	0.370	0.62	36.220	E
B-A	25.60	47.76	0.00	153.46	0.167	0.27	52.419	F
C-A	872.56	872.56	0.00	-	-	-	-	-
C-B	181.44	182.23	0.00	617.19	0.294	0.44	8.731	A
A-B	24.09	24.09	0.00	-	-	-	-	-
A-C	625.62	625.62	0.00	-	-	-	-	-

(Default Analysis Set) - S1 - 2014 Base + Committed, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
S1 - 2014 Base + Committed, PM	S1 - 2014 Base + Committed	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	933.20	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.30		0.00	✓	3.51	250.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	9.04	6.65	6.01	5.65		6.00	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	452.496	0.081	0.206	0.129	0.294
1	B-C	748.870	0.113	0.286	-	-
1	C-B	821.214	0.314	0.314	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	1323.00	100.000
B	ONE HOUR	✓	277.00	100.000
C	ONE HOUR	✓	1153.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	69.000	1254.000
	B	22.000	0.000	255.000
	C	887.000	266.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.05	0.95
	B	0.08	0.00	0.92
	C	0.77	0.23	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.045	1.024
	B	1.294	1.000	1.022
	C	1.022	1.053	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	4.5	2.4
	B	29.4	0.0	2.2
	C	2.2	5.3	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	9999999999.00	1799.09	141.97	F
B-A	9999999999.00	1571.04	12.98	F
C-A	-	-	-	-
C-B	0.81	50.37	3.83	F
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	191.98	189.07	0.00	454.68	0.422	0.73	13.709	B
B-A	16.56	15.69	0.00	108.90	0.152	0.22	49.565	E
C-A	667.78	667.78	0.00	-	-	-	-	-
C-B	200.26	197.58	0.00	508.43	0.394	0.67	12.095	B
A-B	51.95	51.95	0.00	-	-	-	-	-
A-C	944.08	944.08	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	229.24	225.78	0.00	366.21	0.626	1.59	25.585	D
B-A	19.78	17.17	0.00	41.10	0.481	0.87	180.920	F
C-A	797.39	797.39	0.00	-	-	-	-	-
C-B	239.13	237.17	0.00	447.72	0.534	1.16	17.833	C
A-B	62.03	62.03	0.00	-	-	-	-	-
A-C	1127.32	1127.32	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	280.76	0.00	0.00	0.00	9999999999.000	71.78	1799.093	F
B-A	24.22	0.00	0.00	0.00	9999999999.000	6.92	-683.129	?
C-A	976.61	976.61	0.00	-	-	-	-	-
C-B	292.87	283.54	0.00	363.78	0.805	3.49	43.065	E
A-B	75.97	75.97	0.00	-	-	-	-	-
A-C	1380.68	1380.68	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	280.76	0.00	0.00	0.00	9999999999.000	141.97	-259.135	?
B-A	24.22	0.00	0.00	0.00	9999999999.000	12.98	-644.812	?
C-A	976.61	976.61	0.00	-	-	-	-	-
C-B	292.87	291.51	0.00	363.78	0.805	3.83	50.365	F
A-B	75.97	75.97	0.00	-	-	-	-	-
A-C	1380.68	1380.68	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	229.24	300.13	0.00	302.29	0.758	124.25	1424.091	F
B-A	19.78	24.72	0.00	27.19	0.727	11.74	1571.045	F
C-A	797.39	797.39	0.00	-	-	-	-	-
C-B	239.13	249.42	0.00	447.72	0.534	1.26	20.011	C
A-B	62.03	62.03	0.00	-	-	-	-	-
A-C	1127.32	1127.32	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	191.98	399.34	0.00	402.62	0.477	72.41	889.301	F
B-A	16.56	33.44	0.00	37.13	0.446	7.52	1067.710	F
C-A	667.78	667.78	0.00	-	-	-	-	-
C-B	200.26	202.50	0.00	508.43	0.394	0.70	12.478	B
A-B	51.95	51.95	0.00	-	-	-	-	-
A-C	944.08	944.08	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: CTC Junc 8a.arc8
Path: P:\data\W50---\W50827 - Highways Assessment, Selby District\Junction Analysis\Junction 8a
Report generation date: 11/12/2014 17:28:00

File summary

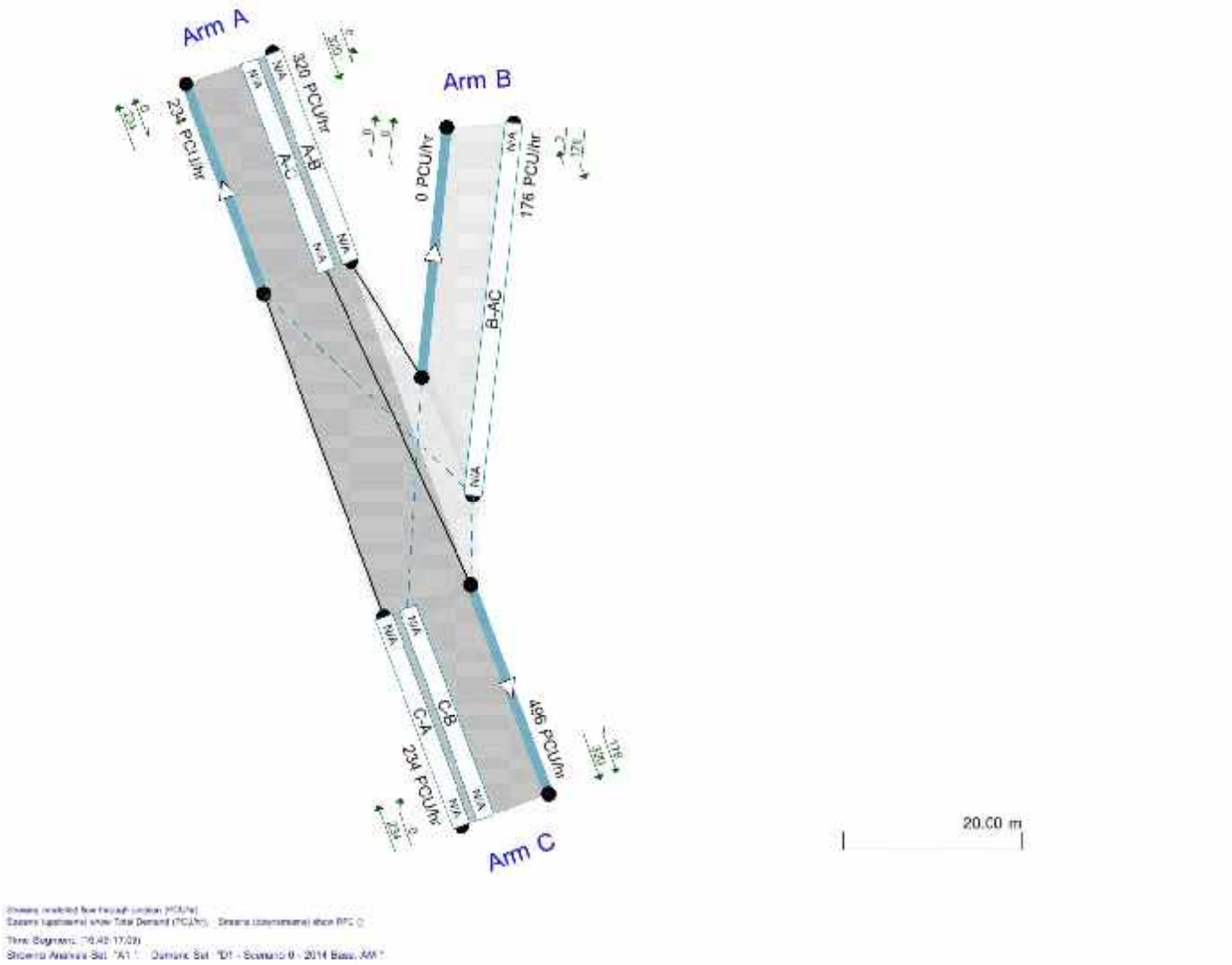
Title	(untitled)
Location	
Site Number	
Date	19/11/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JGreen
Description	

Analysis Options

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

Units

Distance 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



The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - Scenario 0 - 2014 Base, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base, AM	Scenario 0 - 2014 Base	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	7.61	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A162 (N)		Major
B	B	A64 (Off Slip)		Minor
C	C	A162 (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.45		0.00		2.20	0.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	4.11										200	10

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	607.035	0.108	0.274	0.172	0.391
1	B-C	700.270	0.105	0.266	-	-
1	C-B	573.963	0.218	0.218	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	153.00	100.000
B	ONE HOUR	✓	151.00	100.000
C	ONE HOUR	✓	590.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	0.000	153.000
	B	0.000	0.000	151.000
	C	590.000	0.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.00	0.00	1.00
	C	1.00	0.00	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.063
	B	1.000	1.000	1.034
	C	1.048	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	6.3
	B	0.0	0.0	3.4
	C	4.8	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.25	7.61	0.35	A
C-A	-	-	-	-
C-B	0.00	0.00	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	113.68	112.84	0.00	669.63	0.170	0.21	6.676	A
C-A	444.18	444.18	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	548.85	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	115.19	115.19	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	135.75	135.53	0.00	663.68	0.205	0.26	7.044	A
C-A	530.40	530.40	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	543.97	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	137.54	137.54	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	166.25	165.92	0.00	655.46	0.254	0.35	7.599	A
C-A	649.60	649.60	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	537.23	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	168.46	168.46	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	166.25	166.25	0.00	655.46	0.254	0.35	7.608	A
C-A	649.60	649.60	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	537.23	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	168.46	168.46	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	135.75	136.07	0.00	663.68	0.205	0.27	7.058	A
C-A	530.40	530.40	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	543.97	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	137.54	137.54	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	113.68	113.90	0.00	669.63	0.170	0.21	6.700	A
C-A	444.18	444.18	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	548.85	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	115.19	115.19	0.00	-	-	-	-	-

(Default Analysis Set) - Scenario 0 - 2014 Base, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base, PM	Scenario 0 - 2014 Base	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	11.64	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A162 (N)		Major
B	B	A64 (Off Slip)		Minor
C	C	A162 (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.45		0.00		2.20	0.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	4.11										200	10

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	607.035	0.108	0.274	0.172	0.391
1	B-C	700.270	0.105	0.266	-	-
1	C-B	573.963	0.218	0.218	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR		425.00	100.000
B	ONE HOUR		236.00	100.000
C	ONE HOUR		311.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	0.000	425.000
	B	0.000	0.000	236.000
	C	311.000	0.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.00	0.00	1.00
	C	1.00	0.00	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.007
	B	1.000	1.000	1.022
	C	1.027	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.7
	B	0.0	0.0	2.2
	C	2.7	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.45	11.64	0.83	B
C-A	-	-	-	-
C-B	0.00	0.00	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	177.67	176.03	0.00	615.16	0.289	0.41	8.348	A
C-A	234.14	234.14	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	504.20	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	319.96	319.96	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	212.16	211.59	0.00	598.64	0.354	0.55	9.491	A
C-A	279.58	279.58	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	490.66	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	382.07	382.07	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	259.84	258.76	0.00	575.79	0.451	0.82	11.564	B
C-A	342.42	342.42	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	471.94	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	467.93	467.93	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	259.84	259.80	0.00	575.79	0.451	0.83	11.639	B
C-A	342.42	342.42	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	471.94	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	467.93	467.93	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	212.16	213.20	0.00	598.64	0.354	0.57	9.571	A
C-A	279.58	279.58	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	490.66	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	382.07	382.07	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	177.67	178.27	0.00	615.16	0.289	0.42	8.432	A
C-A	234.14	234.14	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	504.20	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	319.96	319.96	0.00	-	-	-	-	-

(Default Analysis Set) - Scenario 0 - 2014 Base + Committed, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base + Committed, AM	Scenario 0 - 2014 Base + Committed	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	8.12	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A162 (N)		Major
B	B	A64 (Off Slip)		Minor
C	C	A162 (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.45		0.00		2.20	0.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	4.11										200	10

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	607.035	0.108	0.274	0.172	0.391
1	B-C	700.270	0.105	0.266	-	-
1	C-B	573.963	0.218	0.218	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	176.00	100.000
B	ONE HOUR	✓	173.00	100.000
C	ONE HOUR	✓	629.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	0.000	176.000
	B	0.000	0.000	173.000
	C	629.000	0.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.00	0.00	1.00
	C	1.00	0.00	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.063
	B	1.000	1.000	1.034
	C	1.048	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	6.3
	B	0.0	0.0	3.4
	C	4.8	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.29	8.12	0.43	A
C-A	-	-	-	-
C-B	0.00	0.00	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	130.24	129.25	0.00	665.02	0.196	0.25	6.935	A
C-A	473.54	473.54	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	545.07	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	132.50	132.50	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	155.52	155.25	0.00	658.18	0.236	0.32	7.398	A
C-A	565.46	565.46	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	539.47	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	158.22	158.22	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	190.48	190.04	0.00	648.72	0.294	0.42	8.108	A
C-A	692.54	692.54	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	531.71	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	193.78	193.78	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	190.48	190.47	0.00	648.72	0.294	0.43	8.122	A
C-A	692.54	692.54	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	531.71	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	193.78	193.78	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	155.52	155.94	0.00	658.18	0.236	0.32	7.416	A
C-A	565.46	565.46	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	539.47	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	158.22	158.22	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	130.24	130.52	0.00	665.02	0.196	0.25	6.969	A
C-A	473.54	473.54	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	545.07	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	132.50	132.50	0.00	-	-	-	-	-

(Default Analysis Set) - Scenario 0 - 2014 Base + Committed, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base + Committed, PM	Scenario 0 - 2014 Base + Committed	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	14.27	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A162 (N)		Major
B	B	A64 (Off Slip)		Minor
C	C	A162 (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.45		0.00		2.20	0.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	4.11										200	10

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	607.035	0.108	0.274	0.172	0.391
1	B-C	700.270	0.105	0.266	-	-
1	C-B	573.963	0.218	0.218	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	489.00	100.000
B	ONE HOUR	✓	272.00	100.000
C	ONE HOUR	✓	334.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	0.000	489.000
	B	0.000	0.000	272.000
	C	334.000	0.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.00	0.00	1.00
	C	1.00	0.00	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.007
	B	1.000	1.000	1.022
	C	1.027	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.7
	B	0.0	0.0	2.2
	C	2.7	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.54	14.27	1.17	B
C-A	-	-	-	-
C-B	0.00	0.00	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	204.78	202.70	0.00	602.34	0.340	0.52	9.159	A
C-A	251.45	251.45	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	493.70	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	368.14	368.14	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	244.52	243.70	0.00	583.33	0.419	0.72	10.805	B
C-A	300.26	300.26	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	478.12	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	439.60	439.60	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	299.48	297.77	0.00	557.05	0.538	1.15	14.093	B
C-A	367.74	367.74	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	456.58	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	538.40	538.40	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	299.48	299.41	0.00	557.05	0.538	1.17	14.269	B
C-A	367.74	367.74	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	456.58	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	538.40	538.40	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	244.52	246.19	0.00	583.33	0.419	0.75	10.967	B
C-A	300.26	300.26	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	478.12	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	439.60	439.60	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	204.78	205.65	0.00	602.34	0.340	0.53	9.294	A
C-A	251.45	251.45	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	493.70	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	368.14	368.14	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: CTC Junc 8b.arc8
Path: P:\data\W50---\W50827 - Highways Assessment, Selby District\Junction Analysis\Junction 8b
Report generation date: 11/12/2014 17:33:13

File summary

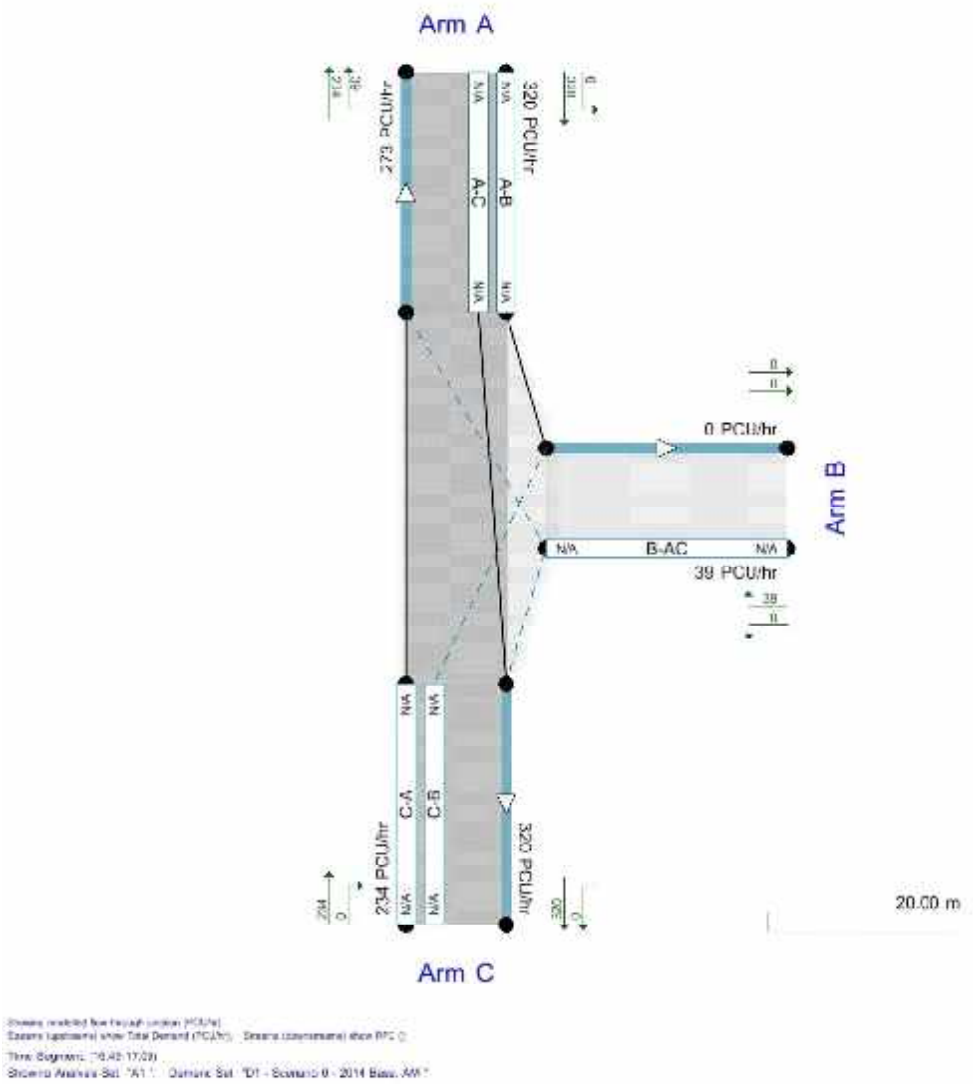
Title	(untitled)
Location	
Site Number	
Date	19/11/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JGreen
Description	

Analysis Options

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

Units

Distance 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



The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - Scenario 0 - 2014 Base, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base, AM	Scenario 0 - 2014 Base	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	10.36	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A162 (N)		Major
B	B	A64 (Off Slip)		Minor
C	C	A162 (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.55		0.00		2.20	0.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	5.00										200	25

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	665.540	0.118	0.299	0.188	0.427
1	B-C	767.760	0.115	0.290	-	-
1	C-B	573.963	0.217	0.217	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	153.00	100.000
B	ONE HOUR	✓	95.00	100.000
C	ONE HOUR	✓	590.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	0.000	153.000
	B	95.000	0.000	0.000
	C	590.000	0.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	1.00	0.00	0.00
	C	1.00	0.00	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.063
	B	1.118	1.000	1.000
	C	1.048	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	6.3
	B	11.8	0.0	0.0
	C	4.8	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.21	10.36	0.30	B
C-A	-	-	-	-
C-B	0.00	0.00	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	71.52	70.86	0.00	547.52	0.131	0.17	8.432	A
C-A	444.18	444.18	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	548.96	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	115.19	115.19	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	85.40	85.21	0.00	524.61	0.163	0.21	9.156	A
C-A	530.40	530.40	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	544.11	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	137.54	137.54	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	104.60	104.27	0.00	492.94	0.212	0.30	10.347	B
C-A	649.60	649.60	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	537.40	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	168.46	168.46	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	104.60	104.59	0.00	492.94	0.212	0.30	10.363	B
C-A	649.60	649.60	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	537.40	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	168.46	168.46	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	85.40	85.72	0.00	524.61	0.163	0.22	9.176	A
C-A	530.40	530.40	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	544.11	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	137.54	137.54	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	71.52	71.72	0.00	547.52	0.131	0.17	8.462	A
C-A	444.18	444.18	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	548.96	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	115.19	115.19	0.00	-	-	-	-	-

(Default Analysis Set) - Scenario 0 - 2014 Base, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base, PM	Scenario 0 - 2014 Base	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	9.27	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A162 (N)		Major
B	B	A64 (Off Slip)		Minor
C	C	A162 (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.55		0.00		2.20	0.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	5.00										200	25

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	665.540	0.118	0.299	0.188	0.427
1	B-C	767.760	0.115	0.290	-	-
1	C-B	573.963	0.217	0.217	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	425.00	100.000
B	ONE HOUR	✓	52.00	100.000
C	ONE HOUR	✓	311.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	0.000	425.000
	B	52.000	0.000	0.000
	C	311.000	0.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	1.00	0.00	0.00
	C	1.00	0.00	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.007
	B	1.040	1.000	1.000
	C	1.027	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.7
	B	4.0	0.0	0.0
	C	2.7	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.12	9.27	0.15	A
C-A	-	-	-	-
C-B	0.00	0.00	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	39.15	38.82	0.00	525.80	0.074	0.08	7.684	A
C-A	234.14	234.14	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	504.51	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	319.96	319.96	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	46.75	46.65	0.00	498.68	0.094	0.11	8.280	A
C-A	279.58	279.58	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	491.03	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	382.07	382.07	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	57.25	57.10	0.00	461.17	0.124	0.15	9.258	A
C-A	342.42	342.42	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	472.39	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	467.93	467.93	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	57.25	57.25	0.00	461.17	0.124	0.15	9.268	A
C-A	342.42	342.42	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	472.39	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	467.93	467.93	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	46.75	46.90	0.00	498.68	0.094	0.11	8.291	A
C-A	279.58	279.58	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	491.03	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	382.07	382.07	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	39.15	39.24	0.00	525.80	0.074	0.08	7.696	A
C-A	234.14	234.14	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	504.51	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	319.96	319.96	0.00	-	-	-	-	-

(Default Analysis Set) - Scenario 0 - 2014 Base + Committed, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base + Committed, AM	Scenario 0 - 2014 Base + Committed	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	10.80	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A162 (N)		Major
B	B	A64 (Off Slip)		Minor
C	C	A162 (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.55		0.00		2.20	0.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	5.00										200	25

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	665.540	0.118	0.299	0.188	0.427
1	B-C	767.760	0.115	0.290	-	-
1	C-B	573.963	0.217	0.217	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	176.00	100.000
B	ONE HOUR	✓	95.00	100.000
C	ONE HOUR	✓	629.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	0.000	176.000
	B	95.000	0.000	0.000
	C	629.000	0.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	1.00	0.00	0.00
	C	1.00	0.00	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.063
	B	1.118	1.000	1.000
	C	1.048	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	6.3
	B	11.8	0.0	0.0
	C	4.8	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.22	10.80	0.31	B
C-A	-	-	-	-
C-B	0.00	0.00	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	71.52	70.84	0.00	536.82	0.133	0.17	8.625	A
C-A	473.54	473.54	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	545.20	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	132.50	132.50	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	85.40	85.20	0.00	511.83	0.167	0.22	9.428	A
C-A	565.46	565.46	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	539.62	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	158.22	158.22	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	104.60	104.24	0.00	477.29	0.219	0.31	10.779	B
C-A	692.54	692.54	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	531.90	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	193.78	193.78	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	104.60	104.59	0.00	477.29	0.219	0.31	10.798	B
C-A	692.54	692.54	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	531.90	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	193.78	193.78	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	85.40	85.74	0.00	511.83	0.167	0.23	9.454	A
C-A	565.46	565.46	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	539.62	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	158.22	158.22	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	71.52	71.73	0.00	536.82	0.133	0.17	8.657	A
C-A	473.54	473.54	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	545.20	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	132.50	132.50	0.00	-	-	-	-	-

(Default Analysis Set) - Scenario 0 - 2014 Base + Committed, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base + Committed, PM	Scenario 0 - 2014 Base + Committed	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	9.90	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A162 (N)		Major
B	B	A64 (Off Slip)		Minor
C	C	A162 (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.55		0.00		2.20	0.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	5.00										200	25

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	665.540	0.118	0.299	0.188	0.427
1	B-C	767.760	0.115	0.290	-	-
1	C-B	573.963	0.217	0.217	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	489.00	100.000
B	ONE HOUR	✓	52.00	100.000
C	ONE HOUR	✓	334.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	0.000	489.000
	B	52.000	0.000	0.000
	C	334.000	0.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	1.00	0.00	0.00
	C	1.00	0.00	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.000	1.007
	B	1.040	1.000	1.000
	C	1.027	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.7
	B	4.0	0.0	0.0
	C	2.7	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.13	9.90	0.16	A
C-A	-	-	-	-
C-B	0.00	0.00	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	39.15	38.80	0.00	508.13	0.077	0.09	7.972	A
C-A	251.45	251.45	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	494.05	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	368.14	368.14	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	46.75	46.64	0.00	477.58	0.098	0.11	8.686	A
C-A	300.26	300.26	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	478.54	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	439.60	439.60	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	57.25	57.08	0.00	435.34	0.132	0.16	9.894	A
C-A	367.74	367.74	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	457.10	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	538.40	538.40	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	57.25	57.25	0.00	435.34	0.132	0.16	9.902	A
C-A	367.74	367.74	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	457.10	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	538.40	538.40	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	46.75	46.92	0.00	477.58	0.098	0.11	8.696	A
C-A	300.26	300.26	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	478.54	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	439.60	439.60	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	39.15	39.25	0.00	508.13	0.077	0.09	7.986	A
C-A	251.45	251.45	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	494.05	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	368.14	368.14	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: CTC Junc 8c.arc8
Path: P:\data\W50---\W50827 - Highways Assessment, Selby District\Junction Analysis\Junction 8c
Report generation date: 12/12/2014 09:24:58

File summary

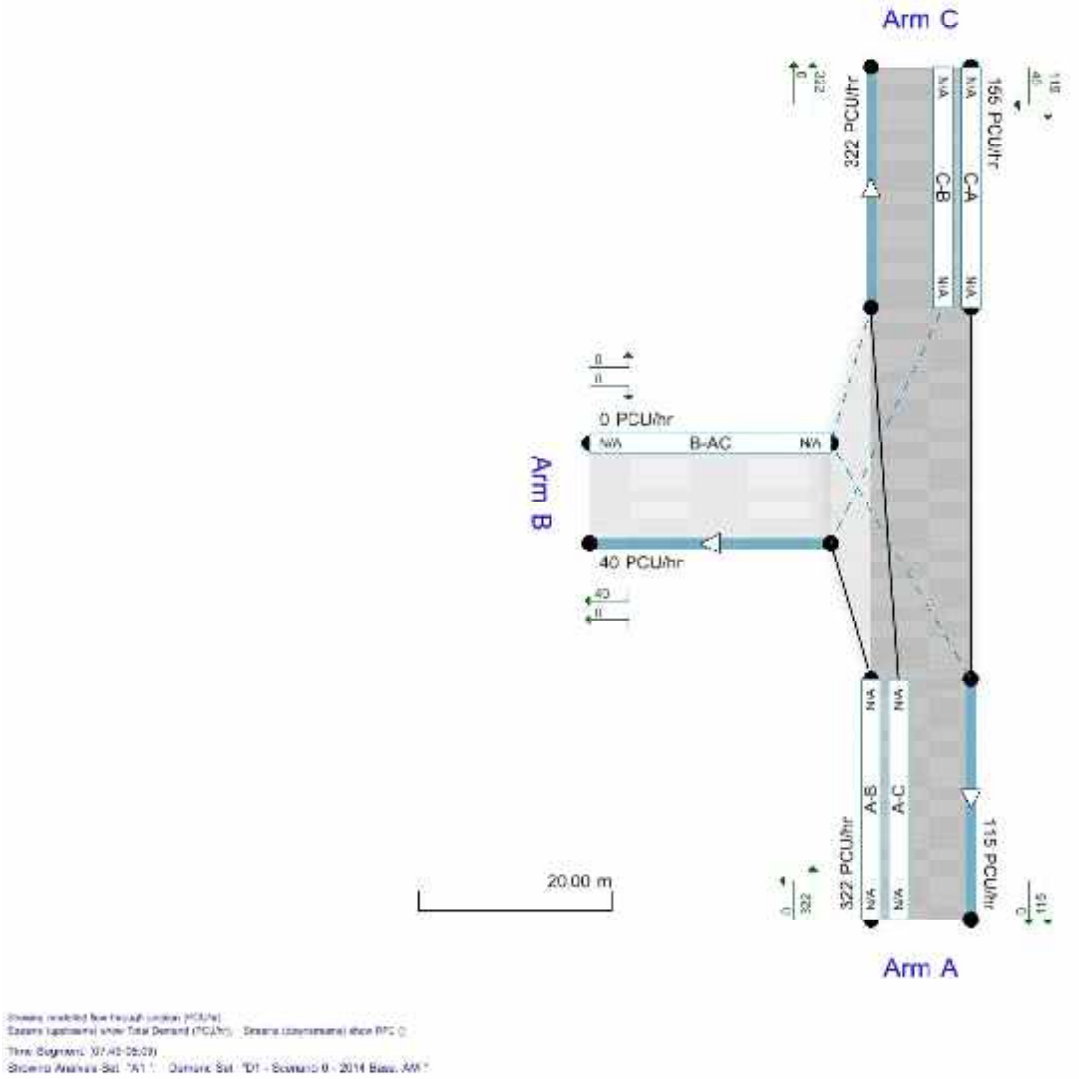
Title	(untitled)
Location	
Site Number	
Date	19/11/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JGreen
Description	

Analysis Options

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

Units

Distance 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



The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - Scenario 0 - 2014 Base, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base, AM	Scenario 0 - 2014 Base	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	6.16	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A162 (S)		Major
B	B	A64 (On Slip)		Minor
C	C	A162 (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	9.30		0.00	✓	4.70	100.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	5.00										0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	573.534	0.089	0.226	0.142	0.323
1	B-C	748.870	0.098	0.248	-	-
1	C-B	803.798	0.267	0.267	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	428.00	100.000
B	ONE HOUR	✓	0.00	100.000
C	ONE HOUR	✓	206.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	0.000	428.000
	B	0.000	0.000	0.000
	C	153.000	53.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	0.74	0.26	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.032	1.044
	B	1.000	1.000	1.000
	C	1.063	1.060	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	3.2	4.4
	B	0.0	0.0	0.0
	C	6.3	6.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.00	A
C-A	-	-	-	-
C-B	0.09	6.16	0.10	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.00	553.01	0.000	0.00	0.000	A
C-A	115.19	115.19	0.00	-	-	-	-	-
C-B	39.90	39.65	0.00	717.85	0.056	0.06	5.625	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	322.22	322.22	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.00	533.95	0.000	0.00	0.000	A
C-A	137.54	137.54	0.00	-	-	-	-	-
C-B	47.65	47.59	0.00	701.17	0.068	0.08	5.838	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	384.76	384.76	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.00	507.48	0.000	0.00	0.000	A
C-A	168.46	168.46	0.00	-	-	-	-	-
C-B	58.35	58.26	0.00	678.11	0.086	0.10	6.156	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	471.24	471.24	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.00	507.46	0.000	0.00	0.000	A
C-A	168.46	168.46	0.00	-	-	-	-	-
C-B	58.35	58.35	0.00	678.11	0.086	0.10	6.156	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	471.24	471.24	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.00	533.91	0.000	0.00	0.000	A
C-A	137.54	137.54	0.00	-	-	-	-	-
C-B	47.65	47.73	0.00	701.17	0.068	0.08	5.840	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	384.76	384.76	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.00	552.94	0.000	0.00	0.000	A
C-A	115.19	115.19	0.00	-	-	-	-	-
C-B	39.90	39.96	0.00	717.85	0.056	0.06	5.629	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	322.22	322.22	0.00	-	-	-	-	-

(Default Analysis Set) - Scenario 0 - 2014 Base, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base, PM	Scenario 0 - 2014 Base	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	5.50	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A162 (S)		Major
B	B	A64 (On Slip)		Minor
C	C	A162 (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	9.30		0.00	✓	4.70	100.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	5.00										0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	573.534	0.089	0.226	0.142	0.323
1	B-C	748.870	0.098	0.248	-	-
1	C-B	803.798	0.267	0.267	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	215.00	100.000
B	ONE HOUR	✓	0.00	100.000
C	ONE HOUR	✓	494.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	0.000	215.000
	B	0.000	0.000	0.000
	C	425.000	69.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	0.86	0.14	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.021	1.029
	B	1.000	1.000	1.000
	C	1.007	1.015	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	2.1	2.9
	B	0.0	0.0	0.0
	C	0.7	1.5	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.00	A
C-A	-	-	-	-
C-B	0.10	5.50	0.12	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.00	568.50	0.000	0.00	0.000	A
C-A	319.96	319.96	0.00	-	-	-	-	-
C-B	51.95	51.65	0.00	760.63	0.068	0.07	5.151	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	161.86	161.86	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.00	552.03	0.000	0.00	0.000	A
C-A	382.07	382.07	0.00	-	-	-	-	-
C-B	62.03	61.96	0.00	752.25	0.082	0.09	5.293	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	193.28	193.28	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.00	528.90	0.000	0.00	0.000	A
C-A	467.93	467.93	0.00	-	-	-	-	-
C-B	75.97	75.87	0.00	740.66	0.103	0.12	5.496	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	236.72	236.72	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.00	528.88	0.000	0.00	0.000	A
C-A	467.93	467.93	0.00	-	-	-	-	-
C-B	75.97	75.97	0.00	740.66	0.103	0.12	5.496	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	236.72	236.72	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.00	551.99	0.000	0.00	0.000	A
C-A	382.07	382.07	0.00	-	-	-	-	-
C-B	62.03	62.12	0.00	752.25	0.082	0.09	5.294	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	193.28	193.28	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.00	568.41	0.000	0.00	0.000	A
C-A	319.96	319.96	0.00	-	-	-	-	-
C-B	51.95	52.01	0.00	760.63	0.068	0.07	5.156	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	161.86	161.86	0.00	-	-	-	-	-

(Default Analysis Set) - Scenario 1 - 2014 Base + Committed, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1 - 2014 Base + Committed, AM	Scenario 1 - 2014 Base + Committed	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	6.23	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A162 (S)		Major
B	B	A64 (On Slip)		Minor
C	C	A162 (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	9.30		0.00	✓	4.70	100.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	5.00										0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	573.534	0.089	0.226	0.142	0.323
1	B-C	748.870	0.098	0.248	-	-
1	C-B	803.798	0.267	0.267	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	452.00	100.000
B	ONE HOUR	✓	0.00	100.000
C	ONE HOUR	✓	229.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	0.000	452.000
	B	0.000	0.000	0.000
	C	176.000	53.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	0.77	0.23	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.032	1.044
	B	1.000	1.000	1.000
	C	1.063	1.060	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	3.2	4.4
	B	0.0	0.0	0.0
	C	6.3	6.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.00	A
C-A	-	-	-	-
C-B	0.09	6.23	0.10	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.00	546.96	0.000	0.00	0.000	A
C-A	132.50	132.50	0.00	-	-	-	-	-
C-B	39.90	39.65	0.00	713.04	0.056	0.06	5.666	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	340.29	340.29	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.00	526.68	0.000	0.00	0.000	A
C-A	158.22	158.22	0.00	-	-	-	-	-
C-B	47.65	47.59	0.00	695.42	0.069	0.08	5.890	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	406.34	406.34	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.00	498.49	0.000	0.00	0.000	A
C-A	193.78	193.78	0.00	-	-	-	-	-
C-B	58.35	58.26	0.00	671.06	0.087	0.10	6.227	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	497.66	497.66	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.00	498.47	0.000	0.00	0.000	A
C-A	193.78	193.78	0.00	-	-	-	-	-
C-B	58.35	58.35	0.00	671.06	0.087	0.10	6.227	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	497.66	497.66	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.00	526.64	0.000	0.00	0.000	A
C-A	158.22	158.22	0.00	-	-	-	-	-
C-B	47.65	47.73	0.00	695.42	0.069	0.08	5.894	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	406.34	406.34	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.00	546.89	0.000	0.00	0.000	A
C-A	132.50	132.50	0.00	-	-	-	-	-
C-B	39.90	39.96	0.00	713.04	0.056	0.06	5.671	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	340.29	340.29	0.00	-	-	-	-	-

(Default Analysis Set) - Scenario 1 - 2014 Base + Committed, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1 - 2014 Base + Committed, PM	Scenario 1 - 2014 Base + Committed	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	5.53	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A162 (S)		Major
B	B	A64 (On Slip)		Minor
C	C	A162 (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	9.30		0.00	✓	4.70	100.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	5.00										0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	573.534	0.089	0.226	0.142	0.323
1	B-C	748.870	0.098	0.248	-	-
1	C-B	803.798	0.267	0.267	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	229.00	100.000
B	ONE HOUR	✓	0.00	100.000
C	ONE HOUR	✓	558.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	0.000	229.000
	B	0.000	0.000	0.000
	C	489.000	69.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	0.88	0.12	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.021	1.029
	B	1.000	1.000	1.000
	C	1.007	1.015	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	2.1	2.9
	B	0.0	0.0	0.0
	C	0.7	1.5	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.00	A
C-A	-	-	-	-
C-B	0.10	5.53	0.12	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.00	561.00	0.000	0.00	0.000	A
C-A	368.14	368.14	0.00	-	-	-	-	-
C-B	51.95	51.65	0.00	757.81	0.069	0.07	5.172	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	172.40	172.40	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.00	542.90	0.000	0.00	0.000	A
C-A	439.60	439.60	0.00	-	-	-	-	-
C-B	62.03	61.96	0.00	748.89	0.083	0.09	5.319	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	205.87	205.87	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.00	517.42	0.000	0.00	0.000	A
C-A	538.40	538.40	0.00	-	-	-	-	-
C-B	75.97	75.87	0.00	736.55	0.103	0.12	5.530	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	252.13	252.13	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.00	517.39	0.000	0.00	0.000	A
C-A	538.40	538.40	0.00	-	-	-	-	-
C-B	75.97	75.97	0.00	736.55	0.103	0.12	5.530	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	252.13	252.13	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.00	542.86	0.000	0.00	0.000	A
C-A	439.60	439.60	0.00	-	-	-	-	-
C-B	62.03	62.13	0.00	748.89	0.083	0.09	5.322	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	205.87	205.87	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.00	0.00	0.00	560.91	0.000	0.00	0.000	A
C-A	368.14	368.14	0.00	-	-	-	-	-
C-B	51.95	52.01	0.00	757.81	0.069	0.08	5.179	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	172.40	172.40	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: CTC Junc 8c (2).arc8
Path: P:\data\W50---\W50827 - Highways Assessment, Selby District\Junction Analysis\Junction 8c
Report generation date: 12/12/2014 09:46:17

File summary

Title	(untitled)
Location	
Site Number	
Date	12/12/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JGreen
Description	

Analysis Options

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

Units

Distance 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

(Default Analysis Set) - Scenario 0 - 2014 Base, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base, AM	Scenario 0 - 2014 Base	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	10.11	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	E Bound On Slip (right turn)		Minor
C	C	E Bound On Slip (left turn)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.00		0.00		2.20	200.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	2.20										35	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	449.723	0.078	0.198	0.125	0.283
1	B-C	573.963	0.084	0.213	-	-
1	C-B	689.785	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 Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	0.00	100.000
B	ONE HOUR	✓	53.00	100.000
C	ONE HOUR	✓	257.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	53.000	0.000	0.000
	C	257.000	0.000	0.000

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

		To		
		A	B	C
From	A	0.33	0.33	0.33
	B	1.00	0.00	0.00
	C	1.00	0.00	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.14	10.11	0.16	B
C-A	-	-	-	-
C-B	0.00	0.00	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	39.90	39.49	0.00	425.62	0.094	0.10	9.314	A
C-A	193.48	193.48	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	689.79	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	47.65	47.55	0.00	420.94	0.113	0.13	9.639	A
C-A	231.04	231.04	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	689.79	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	58.35	58.21	0.00	414.47	0.141	0.16	10.100	B
C-A	282.96	282.96	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	689.79	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	58.35	58.35	0.00	414.47	0.141	0.16	10.108	B
C-A	282.96	282.96	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	689.79	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	47.65	47.78	0.00	420.94	0.113	0.13	9.652	A
C-A	231.04	231.04	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	689.79	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	39.90	40.00	0.00	425.62	0.094	0.10	9.337	A
C-A	193.48	193.48	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	689.79	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

(Default Analysis Set) - Scenario 0 - 2014 Base, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base, PM	Scenario 0 - 2014 Base	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	10.18	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	E Bound On Slip (right turn)		Minor
C	C	E Bound On Slip (left turn)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.00		0.00		2.20	200.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	2.20										35	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	449.723	0.078	0.198	0.125	0.283
1	B-C	573.963	0.084	0.213	-	-
1	C-B	689.785	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 Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	0.00	100.000
B	ONE HOUR	✓	69.00	100.000
C	ONE HOUR	✓	148.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	69.000	0.000	0.000
	C	148.000	0.000	0.000

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

		To		
		A	B	C
From	A	0.33	0.33	0.33
	B	1.00	0.00	0.00
	C	1.00	0.00	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.18	10.18	0.21	B
C-A	-	-	-	-
C-B	0.00	0.00	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	51.95	51.41	0.00	435.84	0.119	0.13	9.350	A
C-A	111.42	111.42	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	689.79	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	62.03	61.90	0.00	433.15	0.143	0.17	9.694	A
C-A	133.05	133.05	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	689.79	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	75.97	75.78	0.00	429.42	0.177	0.21	10.174	B
C-A	162.95	162.95	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	689.79	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	75.97	75.97	0.00	429.42	0.177	0.21	10.184	B
C-A	162.95	162.95	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	689.79	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	62.03	62.21	0.00	433.15	0.143	0.17	9.711	A
C-A	133.05	133.05	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	689.79	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	51.95	52.08	0.00	435.84	0.119	0.14	9.385	A
C-A	111.42	111.42	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	689.79	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

(Default Analysis Set) - Scenario 0 - 2014 Base + Committed, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base + Committed, AM	Scenario 0 - 2014 Base + Committed	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	10.17	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	E Bound On Slip (right turn)		Minor
C	C	E Bound On Slip (left turn)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.00		0.00		2.20	200.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	2.20										35	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	449.723	0.078	0.198	0.125	0.283
1	B-C	573.963	0.084	0.213	-	-
1	C-B	689.785	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 Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	0.00	100.000
B	ONE HOUR	✓	53.00	100.000
C	ONE HOUR	✓	272.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	53.000	0.000	0.000
	C	272.000	0.000	0.000

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

		To		
		A	B	C
From	A	0.33	0.33	0.33
	B	1.00	0.00	0.00
	C	1.00	0.00	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.14	10.17	0.16	B
C-A	-	-	-	-
C-B	0.00	0.00	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	39.90	39.49	0.00	424.21	0.094	0.10	9.348	A
C-A	204.78	204.78	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	689.79	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	47.65	47.55	0.00	419.26	0.114	0.13	9.683	A
C-A	244.52	244.52	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	689.79	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	58.35	58.21	0.00	412.41	0.141	0.16	10.159	B
C-A	299.48	299.48	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	689.79	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	58.35	58.35	0.00	412.41	0.141	0.16	10.167	B
C-A	299.48	299.48	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	689.79	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	47.65	47.78	0.00	419.26	0.114	0.13	9.694	A
C-A	244.52	244.52	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	689.79	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	39.90	40.00	0.00	424.21	0.094	0.10	9.373	A
C-A	204.78	204.78	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	689.79	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

(Default Analysis Set) - Scenario 0 - 2014 Base + Committed, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base + Committed, PM	Scenario 0 - 2014 Base + Committed	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	10.22	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	E Bound On Slip (right turn)		Minor
C	C	E Bound On Slip (left turn)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.00		0.00		2.20	200.00		

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	2.20										35	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	449.723	0.078	0.198	0.125	0.283
1	B-C	573.963	0.084	0.213	-	-
1	C-B	689.785	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 Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	0.00	100.000
B	ONE HOUR	✓	69.00	100.000
C	ONE HOUR	✓	157.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	69.000	0.000	0.000
	C	157.000	0.000	0.000

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

		To		
		A	B	C
From	A	0.33	0.33	0.33
	B	1.00	0.00	0.00
	C	1.00	0.00	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.18	10.22	0.21	B
C-A	-	-	-	-
C-B	0.00	0.00	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	51.95	51.41	0.00	435.00	0.119	0.13	9.372	A
C-A	118.20	118.20	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	689.79	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	62.03	61.90	0.00	432.14	0.144	0.17	9.720	A
C-A	141.14	141.14	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	689.79	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	75.97	75.78	0.00	428.19	0.177	0.21	10.210	B
C-A	172.86	172.86	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	689.79	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	75.97	75.96	0.00	428.19	0.177	0.21	10.220	B
C-A	172.86	172.86	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	689.79	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	62.03	62.21	0.00	432.14	0.144	0.17	9.737	A
C-A	141.14	141.14	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	689.79	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	51.95	52.08	0.00	435.00	0.119	0.14	9.404	A
C-A	118.20	118.20	0.00	-	-	-	-	-
C-B	0.00	0.00	0.00	689.79	0.000	0.00	0.000	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	0.00	0.00	0.00	-	-	-	-	-

APPENDIX C

ARCADY OUTPUT

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: CTC Junc 3.arc8
Path: P:\data\W50---\W50827 - Highways Assessment, Selby District\Junction Analysis
Report generation date: 25/11/2014 10:27:45

File summary

Title	(untitled)
Location	
Site Number	
Date	18/11/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JGreen
Description	

Analysis Options

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

Units

Distance 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

(Default Analysis Set) - Scenario 0, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0, AM	Scenario 0	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			3.84	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.77	10.10	32.50	20.00	70.00	49.00	
2	3.81	7.47	42.10	19.00	70.00	38.00	
3	4.26	9.57	36.40	21.00	70.00	52.00	
4	4.86	6.99	18.30	23.50	70.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.564	2170.662
2		(calculated)	(calculated)	0.539	1960.708
3		(calculated)	(calculated)	0.568	2210.953
4		(calculated)	(calculated)	0.519	1855.849

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	858.00	100.000
2	ONE HOUR	✓	625.00	100.000
3	ONE HOUR	✓	864.00	100.000
4	ONE HOUR	✓	165.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	1.000	136.000	698.000	23.000
	2	220.000	1.000	363.000	41.000
	3	650.000	156.000	3.000	55.000
	4	45.000	55.000	65.000	0.000

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

		To			
		1	2	3	4
From	1	0.00	0.16	0.81	0.03
	2	0.35	0.00	0.58	0.07
	3	0.75	0.18	0.00	0.06
	4	0.27	0.33	0.39	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.097	1.042	1.045
	2	1.048	1.000	1.055	1.000
	3	1.066	1.122	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	9.7	4.2	4.5
	2	4.8	0.0	5.5	0.0
	3	6.6	12.2	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.47	3.59	0.94	A
2	0.46	4.70	0.89	A
3	0.47	3.57	0.94	A
4	0.14	3.32	0.17	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	645.95	644.03	210.17	0.00	2052.15	0.315	0.48	2.682	A
2	470.53	468.85	592.98	0.00	1640.89	0.287	0.42	3.217	A
3	650.46	648.54	214.56	0.00	2089.02	0.311	0.48	2.673	A
4	124.22	123.85	773.79	0.00	1453.94	0.085	0.09	2.706	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	771.32	770.68	251.52	0.00	2028.84	0.380	0.64	3.003	A
2	561.86	561.24	709.61	0.00	1577.99	0.356	0.58	3.711	A
3	776.72	776.08	256.83	0.00	2065.00	0.376	0.64	2.989	A
4	148.33	148.22	926.03	0.00	1374.86	0.108	0.12	2.934	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	944.68	943.50	307.93	0.00	1997.02	0.473	0.94	3.586	A
2	688.14	686.89	868.74	0.00	1492.16	0.461	0.89	4.673	A
3	951.28	950.11	314.33	0.00	2032.32	0.468	0.94	3.559	A
4	181.67	181.48	1133.61	0.00	1267.04	0.143	0.17	3.316	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	944.68	944.66	308.28	0.00	1996.83	0.473	0.94	3.593	A
2	688.14	688.12	869.79	0.00	1491.59	0.461	0.89	4.698	A
3	951.28	951.27	314.88	0.00	2032.01	0.468	0.94	3.566	A
4	181.67	181.67	1135.13	0.00	1266.25	0.143	0.17	3.318	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	771.32	772.49	252.06	0.00	2028.53	0.380	0.65	3.015	A
2	561.86	563.10	711.25	0.00	1577.10	0.356	0.58	3.729	A
3	776.72	777.88	257.66	0.00	2064.53	0.376	0.65	3.000	A
4	148.33	148.51	928.37	0.00	1373.64	0.108	0.12	2.938	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	645.95	646.60	211.00	0.00	2051.68	0.315	0.48	2.694	A
2	470.53	471.17	595.35	0.00	1639.61	0.287	0.42	3.231	A
3	650.46	651.12	215.60	0.00	2088.43	0.311	0.49	2.685	A
4	124.22	124.33	777.03	0.00	1452.25	0.086	0.09	2.712	A

(Default Analysis Set) - Scenario 0, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0, PM	Scenario 0	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			4.30	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.77	10.10	32.50	20.00	70.00	49.00	
2	3.81	7.47	42.10	19.00	70.00	38.00	
3	4.26	9.57	36.40	21.00	70.00	52.00	
4	4.86	6.99	18.30	23.50	70.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.564	2170.662
2		(calculated)	(calculated)	0.539	1960.708
3		(calculated)	(calculated)	0.568	2210.953
4		(calculated)	(calculated)	0.519	1855.849

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	980.00	100.000
2	ONE HOUR	✓	429.00	100.000
3	ONE HOUR	✓	1101.00	100.000
4	ONE HOUR	✓	125.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	6.000	251.000	677.000	46.000
	2	176.000	3.000	214.000	36.000
	3	662.000	362.000	3.000	74.000
	4	27.000	52.000	46.000	0.000

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

		To			
		1	2	3	4
From	1	0.01	0.26	0.69	0.05
	2	0.41	0.01	0.50	0.08
	3	0.60	0.33	0.00	0.07
	4	0.22	0.42	0.37	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.041	1.020	1.000
	2	1.029	1.000	1.019	1.000
	3	1.022	1.008	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	4.1	2.0	0.0
	2	2.9	0.0	1.9	0.0
	3	2.2	0.8	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.57	4.59	1.37	A
2	0.32	3.58	0.47	A
3	0.59	4.40	1.47	A
4	0.12	3.51	0.13	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	737.80	735.36	349.72	0.00	1973.46	0.374	0.61	2.973	A
2	322.97	321.98	583.79	0.00	1645.84	0.196	0.25	2.776	A
3	828.89	826.25	200.38	0.00	2097.08	0.395	0.66	2.871	A
4	94.11	93.82	909.56	0.00	1383.41	0.068	0.07	2.791	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	881.00	880.03	418.51	0.00	1934.67	0.455	0.85	3.492	A
2	385.66	385.35	698.65	0.00	1583.90	0.243	0.33	3.067	A
3	989.78	988.74	239.82	0.00	2074.67	0.477	0.92	3.364	A
4	112.37	112.28	1088.46	0.00	1290.49	0.087	0.10	3.055	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1079.00	1076.96	512.23	0.00	1881.83	0.573	1.36	4.568	A
2	472.34	471.78	855.01	0.00	1499.57	0.315	0.47	3.575	A
3	1212.22	1210.05	293.58	0.00	2044.11	0.593	1.46	4.373	A
4	137.63	137.47	1332.17	0.00	1163.91	0.118	0.13	3.506	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1079.00	1078.97	513.06	0.00	1881.36	0.574	1.37	4.594	A
2	472.34	472.33	856.57	0.00	1498.73	0.315	0.47	3.581	A
3	1212.22	1212.19	293.97	0.00	2043.89	0.593	1.47	4.396	A
4	137.63	137.63	1334.40	0.00	1162.75	0.118	0.13	3.510	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	881.00	883.02	419.76	0.00	1933.97	0.456	0.86	3.517	A
2	385.66	386.21	700.97	0.00	1582.65	0.244	0.33	3.073	A
3	989.78	991.93	240.41	0.00	2074.33	0.477	0.93	3.387	A
4	112.37	112.52	1091.81	0.00	1288.75	0.087	0.10	3.060	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	737.80	738.79	351.25	0.00	1972.60	0.374	0.62	2.992	A
2	322.97	323.29	586.49	0.00	1644.39	0.196	0.25	2.785	A
3	828.89	829.95	201.22	0.00	2096.60	0.395	0.67	2.888	A
4	94.11	94.20	913.59	0.00	1381.32	0.068	0.07	2.796	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: CTC Junc 3.arc8
Path: P:\data\W50---\W50827 - Highways Assessment, Selby District\Junction Analysis\Junction 3
Report generation date: 11/12/2014 16:52:56

File summary

Title	(untitled)
Location	
Site Number	
Date	18/11/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JGreen
Description	

Analysis Options

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

Units

Distance 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

(Default Analysis Set) - Scenario 0 - 2014 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base, AM	Scenario 0 - 2014 Base	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			3.84	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.77	10.10	32.50	20.00	70.00	49.00	
2	3.81	7.47	42.10	19.00	70.00	38.00	
3	4.26	9.57	36.40	21.00	70.00	52.00	
4	4.86	6.99	18.30	23.50	70.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.564	2170.662
2		(calculated)	(calculated)	0.539	1960.708
3		(calculated)	(calculated)	0.568	2210.953
4		(calculated)	(calculated)	0.519	1855.849

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	858.00	100.000
2	ONE HOUR	✓	625.00	100.000
3	ONE HOUR	✓	864.00	100.000
4	ONE HOUR	✓	165.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	1.000	136.000	698.000	23.000
	2	220.000	1.000	363.000	41.000
	3	650.000	156.000	3.000	55.000
	4	45.000	55.000	65.000	0.000

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

		To			
		1	2	3	4
From	1	0.00	0.16	0.81	0.03
	2	0.35	0.00	0.58	0.07
	3	0.75	0.18	0.00	0.06
	4	0.27	0.33	0.39	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.097	1.042	1.045
	2	1.048	1.000	1.055	1.000
	3	1.066	1.122	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	9.7	4.2	4.5
	2	4.8	0.0	5.5	0.0
	3	6.6	12.2	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.47	3.59	0.94	A
2	0.46	4.70	0.89	A
3	0.47	3.57	0.94	A
4	0.14	3.32	0.17	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	645.95	644.03	210.17	0.00	2052.15	0.315	0.48	2.682	A
2	470.53	468.85	592.98	0.00	1640.89	0.287	0.42	3.217	A
3	650.46	648.54	214.56	0.00	2089.02	0.311	0.48	2.673	A
4	124.22	123.85	773.79	0.00	1453.94	0.085	0.09	2.706	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	771.32	770.68	251.52	0.00	2028.84	0.380	0.64	3.003	A
2	561.86	561.24	709.61	0.00	1577.99	0.356	0.58	3.711	A
3	776.72	776.08	256.83	0.00	2065.00	0.376	0.64	2.989	A
4	148.33	148.22	926.03	0.00	1374.86	0.108	0.12	2.934	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	944.68	943.50	307.93	0.00	1997.02	0.473	0.94	3.586	A
2	688.14	686.89	868.74	0.00	1492.16	0.461	0.89	4.673	A
3	951.28	950.11	314.33	0.00	2032.32	0.468	0.94	3.559	A
4	181.67	181.48	1133.61	0.00	1267.04	0.143	0.17	3.316	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	944.68	944.66	308.28	0.00	1996.83	0.473	0.94	3.593	A
2	688.14	688.12	869.79	0.00	1491.59	0.461	0.89	4.698	A
3	951.28	951.27	314.88	0.00	2032.01	0.468	0.94	3.566	A
4	181.67	181.67	1135.13	0.00	1266.25	0.143	0.17	3.318	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	771.32	772.49	252.06	0.00	2028.53	0.380	0.65	3.015	A
2	561.86	563.10	711.25	0.00	1577.10	0.356	0.58	3.729	A
3	776.72	777.88	257.66	0.00	2064.53	0.376	0.65	3.000	A
4	148.33	148.51	928.37	0.00	1373.64	0.108	0.12	2.938	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	645.95	646.60	211.00	0.00	2051.68	0.315	0.48	2.694	A
2	470.53	471.17	595.35	0.00	1639.61	0.287	0.42	3.231	A
3	650.46	651.12	215.60	0.00	2088.43	0.311	0.49	2.685	A
4	124.22	124.33	777.03	0.00	1452.25	0.086	0.09	2.712	A

(Default Analysis Set) - Scenario 0 - 2014 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base, PM	Scenario 0 - 2014 Base	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			4.30	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.77	10.10	32.50	20.00	70.00	49.00	
2	3.81	7.47	42.10	19.00	70.00	38.00	
3	4.26	9.57	36.40	21.00	70.00	52.00	
4	4.86	6.99	18.30	23.50	70.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.564	2170.662
2		(calculated)	(calculated)	0.539	1960.708
3		(calculated)	(calculated)	0.568	2210.953
4		(calculated)	(calculated)	0.519	1855.849

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	980.00	100.000
2	ONE HOUR	✓	429.00	100.000
3	ONE HOUR	✓	1101.00	100.000
4	ONE HOUR	✓	125.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	6.000	251.000	677.000	46.000
	2	176.000	3.000	214.000	36.000
	3	662.000	362.000	3.000	74.000
	4	27.000	52.000	46.000	0.000

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

		To			
		1	2	3	4
From	1	0.01	0.26	0.69	0.05
	2	0.41	0.01	0.50	0.08
	3	0.60	0.33	0.00	0.07
	4	0.22	0.42	0.37	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.041	1.020	1.000
	2	1.029	1.000	1.019	1.000
	3	1.022	1.008	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	4.1	2.0	0.0
	2	2.9	0.0	1.9	0.0
	3	2.2	0.8	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.57	4.59	1.37	A
2	0.32	3.58	0.47	A
3	0.59	4.40	1.47	A
4	0.12	3.51	0.13	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	737.80	735.36	349.72	0.00	1973.46	0.374	0.61	2.973	A
2	322.97	321.98	583.79	0.00	1645.84	0.196	0.25	2.776	A
3	828.89	826.25	200.38	0.00	2097.08	0.395	0.66	2.871	A
4	94.11	93.82	909.56	0.00	1383.41	0.068	0.07	2.791	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	881.00	880.03	418.51	0.00	1934.67	0.455	0.85	3.492	A
2	385.66	385.35	698.65	0.00	1583.90	0.243	0.33	3.067	A
3	989.78	988.74	239.82	0.00	2074.67	0.477	0.92	3.364	A
4	112.37	112.28	1088.46	0.00	1290.49	0.087	0.10	3.055	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1079.00	1076.96	512.23	0.00	1881.83	0.573	1.36	4.568	A
2	472.34	471.78	855.01	0.00	1499.57	0.315	0.47	3.575	A
3	1212.22	1210.05	293.58	0.00	2044.11	0.593	1.46	4.373	A
4	137.63	137.47	1332.17	0.00	1163.91	0.118	0.13	3.506	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1079.00	1078.97	513.06	0.00	1881.36	0.574	1.37	4.594	A
2	472.34	472.33	856.57	0.00	1498.73	0.315	0.47	3.581	A
3	1212.22	1212.19	293.97	0.00	2043.89	0.593	1.47	4.396	A
4	137.63	137.63	1334.40	0.00	1162.75	0.118	0.13	3.510	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	881.00	883.02	419.76	0.00	1933.97	0.456	0.86	3.517	A
2	385.66	386.21	700.97	0.00	1582.65	0.244	0.33	3.073	A
3	989.78	991.93	240.41	0.00	2074.33	0.477	0.93	3.387	A
4	112.37	112.52	1091.81	0.00	1288.75	0.087	0.10	3.060	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	737.80	738.79	351.25	0.00	1972.60	0.374	0.62	2.992	A
2	322.97	323.29	586.49	0.00	1644.39	0.196	0.25	2.785	A
3	828.89	829.95	201.22	0.00	2096.60	0.395	0.67	2.888	A
4	94.11	94.20	913.59	0.00	1381.32	0.068	0.07	2.796	A

(Default Analysis Set) - Scenario 1 - 2014 Base + Committed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1 - 2014 Base + Committed, AM	Scenario 1 - 2014 Base + Committed	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			6.21	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.77	10.10	32.50	20.00	70.00	49.00	
2	3.81	7.47	42.10	19.00	70.00	38.00	
3	4.26	9.57	36.40	21.00	70.00	52.00	
4	4.86	6.99	18.30	23.50	70.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.564	2170.662
2		(calculated)	(calculated)	0.539	1960.708
3		(calculated)	(calculated)	0.568	2210.953
4		(calculated)	(calculated)	0.519	1855.849

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	1027.00	100.000
2	ONE HOUR	✓	713.00	100.000
3	ONE HOUR	✓	1407.00	100.000
4	ONE HOUR	✓	181.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	1.000	136.000	867.000	23.000
	2	220.000	1.000	451.000	41.000
	3	1058.000	254.000	5.000	90.000
	4	45.000	55.000	81.000	0.000

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

		To			
		1	2	3	4
From	1	0.00	0.13	0.84	0.02
	2	0.31	0.00	0.63	0.06
	3	0.75	0.18	0.00	0.06
	4	0.25	0.30	0.45	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.041	1.020	1.000
	2	1.029	1.000	1.019	1.000
	3	1.022	1.008	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	4.1	2.0	0.0
	2	2.9	0.0	1.9	0.0
	3	2.2	0.8	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.59	4.63	1.45	A
2	0.57	6.17	1.33	A
3	0.76	7.58	3.21	A
4	0.20	4.63	0.26	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	773.18	770.62	297.00	0.00	2003.19	0.386	0.64	2.979	A
2	536.78	534.67	733.09	0.00	1565.32	0.343	0.53	3.558	A
3	1059.26	1055.11	214.48	0.00	2089.07	0.507	1.04	3.529	A
4	136.27	135.78	1154.09	0.00	1256.40	0.108	0.12	3.210	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	923.25	922.23	355.45	0.00	1970.23	0.469	0.89	3.508	A
2	640.97	640.02	877.33	0.00	1487.53	0.431	0.77	4.332	A
3	1264.86	1262.66	256.74	0.00	2065.05	0.613	1.59	4.554	A
4	162.72	162.54	1381.18	0.00	1138.45	0.143	0.17	3.688	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1130.75	1128.58	434.58	0.00	1925.61	0.587	1.44	4.606	A
2	785.03	782.80	1073.64	0.00	1381.65	0.568	1.32	6.113	A
3	1549.14	1542.87	314.02	0.00	2032.50	0.762	3.16	7.390	A
4	199.28	198.93	1687.91	0.00	979.13	0.204	0.25	4.612	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1130.75	1130.71	435.96	0.00	1924.83	0.587	1.45	4.634	A
2	785.03	784.98	1075.66	0.00	1380.56	0.569	1.33	6.170	A
3	1549.14	1548.92	314.87	0.00	2032.01	0.762	3.21	7.576	A
4	199.28	199.28	1694.26	0.00	975.84	0.204	0.26	4.635	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	923.25	925.40	357.42	0.00	1969.12	0.469	0.91	3.535	A
2	640.97	643.19	880.35	0.00	1485.90	0.431	0.78	4.374	A
3	1264.86	1271.18	257.97	0.00	2064.35	0.613	1.63	4.655	A
4	162.72	163.06	1390.13	0.00	1133.80	0.144	0.17	3.711	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	773.18	774.23	298.69	0.00	2002.24	0.386	0.65	2.998	A
2	536.78	537.76	736.54	0.00	1563.46	0.343	0.54	3.585	A
3	1059.26	1061.56	215.70	0.00	2088.37	0.507	1.06	3.578	A
4	136.27	136.45	1161.10	0.00	1252.76	0.109	0.12	3.224	A

(Default Analysis Set) - Scenario 1 - 2014 Base + Committed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1 - 2014 Base + Committed, PM	Scenario 1 - 2014 Base + Committed	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			9.48	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.77	10.10	32.50	20.00	70.00	49.00	
2	3.81	7.47	42.10	19.00	70.00	38.00	
3	4.26	9.57	36.40	21.00	70.00	52.00	
4	4.86	6.99	18.30	23.50	70.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.564	2170.662
2		(calculated)	(calculated)	0.539	1960.708
3		(calculated)	(calculated)	0.568	2210.953
4		(calculated)	(calculated)	0.519	1855.849

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	1377.00	100.000
2	ONE HOUR	✓	555.00	100.000
3	ONE HOUR	✓	1442.00	100.000
4	ONE HOUR	✓	152.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	6.000	251.000	1074.000	46.000
	2	176.000	3.000	340.000	36.000
	3	867.000	474.000	4.000	97.000
	4	27.000	52.000	73.000	0.000

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

		To			
		1	2	3	4
From	1	0.00	0.18	0.78	0.03
	2	0.32	0.01	0.61	0.06
	3	0.60	0.33	0.00	0.07
	4	0.18	0.34	0.48	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.041	1.020	1.000
	2	1.029	1.000	1.019	1.000
	3	1.022	1.008	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	4.1	2.0	0.0
	2	2.9	0.0	1.9	0.0
	3	2.2	0.8	0.0	0.0
	4	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.84	13.08	5.32	B
2	0.49	5.78	0.97	A
3	0.78	8.00	3.47	A
4	0.17	4.42	0.20	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1036.68	1031.89	454.46	0.00	1914.40	0.542	1.20	4.151	A
2	417.83	416.23	901.57	0.00	1474.46	0.283	0.40	3.468	A
3	1085.61	1081.29	200.21	0.00	2097.18	0.518	1.08	3.585	A
4	114.43	114.04	1147.29	0.00	1259.93	0.091	0.10	3.142	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1237.89	1234.74	543.88	0.00	1863.98	0.664	1.99	5.824	A
2	498.93	498.24	1078.82	0.00	1378.86	0.362	0.57	4.169	A
3	1296.33	1293.98	239.64	0.00	2074.77	0.625	1.67	4.669	A
4	136.64	136.50	1373.01	0.00	1142.69	0.120	0.14	3.577	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1516.11	1503.62	664.69	0.00	1795.86	0.844	5.11	12.114	B
2	611.07	609.52	1314.17	0.00	1251.93	0.488	0.96	5.706	A
3	1587.67	1580.74	292.90	0.00	2044.50	0.777	3.40	7.770	A
4	167.36	167.08	1677.54	0.00	984.52	0.170	0.20	4.403	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1516.11	1515.23	667.13	0.00	1794.48	0.845	5.32	13.083	B
2	611.07	611.02	1323.81	0.00	1246.72	0.490	0.97	5.780	A
3	1587.67	1587.41	293.92	0.00	2043.92	0.777	3.47	7.997	A
4	167.36	167.35	1684.30	0.00	981.01	0.171	0.20	4.424	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1237.89	1250.92	547.33	0.00	1862.03	0.665	2.07	6.151	A
2	498.93	500.48	1092.27	0.00	1371.60	0.364	0.59	4.227	A
3	1296.33	1303.33	241.12	0.00	2073.93	0.625	1.72	4.787	A
4	136.64	136.92	1382.52	0.00	1137.75	0.120	0.14	3.599	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1036.68	1040.06	457.17	0.00	1912.87	0.542	1.22	4.236	A
2	417.83	418.56	908.52	0.00	1470.70	0.284	0.41	3.494	A
3	1085.61	1088.08	201.42	0.00	2096.49	0.518	1.10	3.634	A
4	114.43	114.58	1154.41	0.00	1256.24	0.091	0.10	3.152	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: CTC Junc 4.arc8
Path: P:\data\W50---\W50827 - Highways Assessment, Selby District\Junction Analysis
Report generation date: 25/11/2014 10:50:37

File summary

Title	(untitled)
Location	
Site Number	
Date	11/11/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JGreen
Description	

Analysis Options

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

Units

Distance 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

(Default Analysis Set) - Scenario 0, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0, AM	Scenario 0	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			3.28	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.67	8.92	53.00	18.00	80.00	50.00	
2	4.13	9.98	48.90	30.50	80.00	50.00	
3	5.85	8.88	66.00	29.00	80.00	45.00	
4	4.12	9.81	70.70	31.00	80.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.537	2257.218
2		(calculated)	(calculated)	0.563	2400.065
3		(calculated)	(calculated)	0.578	2478.162
4		(calculated)	(calculated)	0.586	2528.460

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	437.00	100.000
2	ONE HOUR	✓	705.00	100.000
3	ONE HOUR	✓	947.00	100.000
4	ONE HOUR	✓	807.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	2.000	116.000	295.000	24.000
	2	122.000	3.000	289.000	291.000
	3	508.000	324.000	1.000	114.000
	4	361.000	247.000	197.000	2.000

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

		To			
		1	2	3	4
From	1	0.00	0.27	0.68	0.05
	2	0.17	0.00	0.41	0.41
	3	0.54	0.34	0.00	0.12
	4	0.45	0.31	0.24	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.094	1.050	1.021
	2	1.008	1.000	1.074	1.124
	3	1.010	1.045	1.000	1.046
	4	1.040	1.188	1.053	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	9.4	5.0	2.1
	2	0.8	0.0	7.4	12.4
	3	1.0	4.5	0.0	4.6
	4	4.0	18.8	5.3	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.27	2.89	0.39	A
2	0.37	2.99	0.64	A
3	0.47	3.20	0.92	A
4	0.47	3.82	0.94	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	329.00	328.14	581.10	0.00	1944.94	0.169	0.22	2.357	A
2	530.76	529.37	391.17	0.00	2179.71	0.244	0.35	2.356	A
3	712.95	711.10	333.39	0.00	2285.36	0.312	0.46	2.344	A
4	607.55	605.80	720.86	0.00	2105.92	0.289	0.44	2.601	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	392.85	392.60	695.22	0.00	1883.61	0.209	0.28	2.557	A
2	633.78	633.35	468.02	0.00	2136.42	0.297	0.45	2.589	A
3	851.33	850.70	398.88	0.00	2247.50	0.379	0.62	2.642	A
4	725.48	724.82	862.38	0.00	2022.97	0.359	0.60	3.006	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	481.15	480.72	851.04	0.00	1799.88	0.267	0.38	2.891	A
2	776.22	775.47	572.99	0.00	2077.28	0.374	0.64	2.988	A
3	1042.67	1041.47	488.38	0.00	2195.74	0.475	0.92	3.197	A
4	888.52	887.19	1055.79	0.00	1909.60	0.465	0.94	3.813	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	481.15	481.14	852.18	0.00	1799.27	0.267	0.39	2.892	A
2	776.22	776.21	573.62	0.00	2076.92	0.374	0.64	2.991	A
3	1042.67	1042.65	488.85	0.00	2195.47	0.475	0.92	3.203	A
4	888.52	888.51	1056.97	0.00	1908.91	0.465	0.94	3.825	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	392.85	393.28	696.95	0.00	1882.68	0.209	0.28	2.562	A
2	633.78	634.52	469.01	0.00	2135.86	0.297	0.46	2.595	A
3	851.33	852.52	399.61	0.00	2247.07	0.379	0.63	2.652	A
4	725.48	726.80	864.20	0.00	2021.90	0.359	0.61	3.019	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	329.00	329.25	583.30	0.00	1943.76	0.169	0.22	2.364	A
2	530.76	531.20	392.59	0.00	2178.91	0.244	0.35	2.362	A
3	712.95	713.60	334.54	0.00	2284.70	0.312	0.47	2.353	A
4	607.55	608.22	723.39	0.00	2104.44	0.289	0.44	2.610	A

(Default Analysis Set) - Scenario 0, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0, PM	Scenario 0	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			3.75	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.67	8.92	53.00	18.00	80.00	50.00	
2	4.13	9.98	48.90	30.50	80.00	50.00	
3	5.85	8.88	66.00	29.00	80.00	45.00	
4	4.12	9.81	70.70	31.00	80.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.537	2257.218
2		(calculated)	(calculated)	0.563	2400.065
3		(calculated)	(calculated)	0.578	2478.162
4		(calculated)	(calculated)	0.586	2528.460

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	947.00	100.000
2	ONE HOUR	✓	695.00	100.000
3	ONE HOUR	✓	785.00	100.000
4	ONE HOUR	✓	736.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	6.000	119.000	444.000	378.000
	2	158.000	5.000	273.000	259.000
	3	367.000	288.000	4.000	126.000
	4	315.000	229.000	187.000	5.000

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

		To			
		1	2	3	4
From	1	0.01	0.13	0.47	0.40
	2	0.23	0.01	0.39	0.37
	3	0.47	0.37	0.01	0.16
	4	0.43	0.31	0.25	0.01

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.000	1.005	1.005
	2	1.006	1.000	1.022	1.088
	3	1.011	1.032	1.000	1.041
	4	1.006	1.065	1.027	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.5	0.5
	2	0.6	0.0	2.2	8.8
	3	1.1	3.2	0.0	4.1
	4	0.6	6.5	2.7	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.57	4.58	1.32	A
2	0.43	3.75	0.79	A
3	0.44	3.36	0.80	A
4	0.41	3.13	0.70	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	712.95	710.68	539.15	0.00	1967.49	0.362	0.57	2.872	A
2	523.23	521.73	768.56	0.00	1967.11	0.266	0.38	2.592	A
3	590.99	589.42	608.72	0.00	2126.15	0.278	0.39	2.395	A
4	554.10	552.69	621.68	0.00	2164.06	0.256	0.35	2.297	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	851.33	850.40	644.98	0.00	1910.61	0.446	0.80	3.407	A
2	624.79	624.23	919.61	0.00	1882.02	0.332	0.52	2.979	A
3	705.70	705.14	728.35	0.00	2056.96	0.343	0.53	2.723	A
4	661.65	661.17	743.75	0.00	2092.50	0.316	0.47	2.588	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1042.67	1040.63	789.61	0.00	1832.89	0.569	1.31	4.551	A
2	765.21	764.11	1125.43	0.00	1766.08	0.433	0.79	3.739	A
3	864.30	863.23	891.43	0.00	1962.66	0.440	0.80	3.347	A
4	810.35	809.45	910.47	0.00	1994.78	0.406	0.70	3.124	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1042.67	1042.63	790.52	0.00	1832.40	0.569	1.32	4.577	A
2	765.21	765.20	1127.41	0.00	1764.96	0.434	0.79	3.749	A
3	864.30	864.29	892.91	0.00	1961.80	0.441	0.80	3.355	A
4	810.35	810.34	911.63	0.00	1994.10	0.406	0.70	3.128	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	851.33	853.35	646.38	0.00	1909.86	0.446	0.81	3.427	A
2	624.79	625.88	922.56	0.00	1880.36	0.332	0.52	2.991	A
3	705.70	706.76	730.56	0.00	2055.69	0.343	0.54	2.732	A
4	661.65	662.55	745.52	0.00	2091.47	0.316	0.48	2.593	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	712.95	713.91	541.04	0.00	1966.47	0.363	0.57	2.888	A
2	523.23	523.80	771.89	0.00	1965.24	0.266	0.38	2.603	A
3	590.99	591.56	611.30	0.00	2124.65	0.278	0.40	2.403	A
4	554.10	554.59	623.98	0.00	2162.71	0.256	0.36	2.305	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: CTC Junc 4.arc8
Path: P:\data\W50---\W50827 - Highways Assessment, Selby District\Junction Analysis\Junction 4
Report generation date: 11/12/2014 17:40:22

File summary

Title	(untitled)
Location	
Site Number	
Date	11/11/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JGreen
Description	

Analysis Options

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

Units

Distance 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

(Default Analysis Set) - Scenario 0 - 2014 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base, AM	Scenario 0 - 2014 Base	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			3.59	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

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	4.67	8.92	53.00	18.00	80.00	50.00	
2	4.13	9.98	48.90	30.50	80.00	50.00	
3	5.85	8.88	66.00	29.00	80.00	45.00	
4	4.12	9.81	70.70	31.00	80.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.537	2257.218
2		(calculated)	(calculated)	0.563	2400.065
3		(calculated)	(calculated)	0.578	2478.162
4		(calculated)	(calculated)	0.586	2528.460

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	654.00	100.000
2	ONE HOUR	✓	705.00	100.000
3	ONE HOUR	✓	947.00	100.000
4	ONE HOUR	✓	807.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	2.000	116.000	295.000	241.000
	2	122.000	3.000	289.000	291.000
	3	508.000	324.000	1.000	114.000
	4	361.000	247.000	197.000	2.000

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

		To			
		1	2	3	4
From	1	0.00	0.18	0.45	0.37
	2	0.17	0.00	0.41	0.41
	3	0.54	0.34	0.00	0.12
	4	0.45	0.31	0.24	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.094	1.050	1.021
	2	1.008	1.000	1.074	1.124
	3	1.010	1.045	1.000	1.046
	4	1.040	1.188	1.053	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	9.4	5.0	2.1
	2	0.8	0.0	7.4	12.4
	3	1.0	4.5	0.0	4.6
	4	4.0	18.8	5.3	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.40	3.49	0.70	A
2	0.40	3.34	0.72	A
3	0.51	3.64	1.05	A
4	0.47	3.82	0.94	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	492.37	490.95	581.06	0.00	1944.96	0.253	0.35	2.588	A
2	530.76	529.29	554.01	0.00	2087.98	0.254	0.37	2.495	A
3	712.95	710.98	496.24	0.00	2191.19	0.325	0.49	2.492	A
4	607.55	605.80	720.74	0.00	2105.99	0.288	0.44	2.600	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	587.93	587.46	695.19	0.00	1883.63	0.312	0.47	2.906	A
2	633.78	633.29	662.89	0.00	2026.64	0.313	0.49	2.794	A
3	851.33	850.60	593.76	0.00	2134.80	0.399	0.68	2.874	A
4	725.48	724.82	862.28	0.00	2023.02	0.359	0.60	3.005	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	720.07	719.18	850.94	0.00	1799.93	0.400	0.69	3.481	A
2	776.22	775.32	811.50	0.00	1942.92	0.400	0.72	3.334	A
3	1042.67	1041.19	726.91	0.00	2057.80	0.507	1.05	3.629	A
4	888.52	887.19	1055.52	0.00	1909.76	0.465	0.94	3.813	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	720.07	720.06	852.17	0.00	1799.27	0.400	0.70	3.489	A
2	776.22	776.21	812.54	0.00	1942.34	0.400	0.72	3.337	A
3	1042.67	1042.65	727.77	0.00	2057.30	0.507	1.05	3.639	A
4	888.52	888.51	1056.96	0.00	1908.91	0.465	0.94	3.825	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	587.93	588.81	697.05	0.00	1882.63	0.312	0.48	2.912	A
2	633.78	634.67	664.49	0.00	2025.74	0.313	0.49	2.801	A
3	851.33	852.80	595.08	0.00	2134.03	0.399	0.68	2.885	A
4	725.48	726.80	864.47	0.00	2021.74	0.359	0.61	3.017	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	492.37	492.85	583.34	0.00	1943.74	0.253	0.36	2.598	A
2	530.76	531.26	556.17	0.00	2086.76	0.254	0.37	2.504	A
3	712.95	713.70	498.11	0.00	2190.11	0.326	0.50	2.504	A
4	607.55	608.22	723.49	0.00	2104.38	0.289	0.44	2.610	A

(Default Analysis Set) - Scenario 0 - 2014 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base, PM	Scenario 0 - 2014 Base	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			3.75	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.67	8.92	53.00	18.00	80.00	50.00	
2	4.13	9.98	48.90	30.50	80.00	50.00	
3	5.85	8.88	66.00	29.00	80.00	45.00	
4	4.12	9.81	70.70	31.00	80.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.537	2257.218
2		(calculated)	(calculated)	0.563	2400.065
3		(calculated)	(calculated)	0.578	2478.162
4		(calculated)	(calculated)	0.586	2528.460

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	947.00	100.000
2	ONE HOUR	✓	695.00	100.000
3	ONE HOUR	✓	785.00	100.000
4	ONE HOUR	✓	736.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	6.000	119.000	444.000	378.000
	2	158.000	5.000	273.000	259.000
	3	367.000	288.000	4.000	126.000
	4	315.000	229.000	187.000	5.000

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

		To			
		1	2	3	4
From	1	0.01	0.13	0.47	0.40
	2	0.23	0.01	0.39	0.37
	3	0.47	0.37	0.01	0.16
	4	0.43	0.31	0.25	0.01

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.000	1.005	1.005
	2	1.006	1.000	1.022	1.088
	3	1.011	1.032	1.000	1.041
	4	1.006	1.065	1.027	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.5	0.5
	2	0.6	0.0	2.2	8.8
	3	1.1	3.2	0.0	4.1
	4	0.6	6.5	2.7	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.57	4.58	1.32	A
2	0.43	3.75	0.79	A
3	0.44	3.36	0.80	A
4	0.41	3.13	0.70	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	712.95	710.68	539.15	0.00	1967.49	0.362	0.57	2.872	A
2	523.23	521.73	768.56	0.00	1967.11	0.266	0.38	2.592	A
3	590.99	589.42	608.72	0.00	2126.15	0.278	0.39	2.395	A
4	554.10	552.69	621.68	0.00	2164.06	0.256	0.35	2.297	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	851.33	850.40	644.98	0.00	1910.61	0.446	0.80	3.407	A
2	624.79	624.23	919.61	0.00	1882.02	0.332	0.52	2.979	A
3	705.70	705.14	728.35	0.00	2056.96	0.343	0.53	2.723	A
4	661.65	661.17	743.75	0.00	2092.50	0.316	0.47	2.588	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1042.67	1040.63	789.61	0.00	1832.89	0.569	1.31	4.551	A
2	765.21	764.11	1125.43	0.00	1766.08	0.433	0.79	3.739	A
3	864.30	863.23	891.43	0.00	1962.66	0.440	0.80	3.347	A
4	810.35	809.45	910.47	0.00	1994.78	0.406	0.70	3.124	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1042.67	1042.63	790.52	0.00	1832.40	0.569	1.32	4.577	A
2	765.21	765.20	1127.41	0.00	1764.96	0.434	0.79	3.749	A
3	864.30	864.29	892.91	0.00	1961.80	0.441	0.80	3.355	A
4	810.35	810.34	911.63	0.00	1994.10	0.406	0.70	3.128	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	851.33	853.35	646.38	0.00	1909.86	0.446	0.81	3.427	A
2	624.79	625.88	922.56	0.00	1880.36	0.332	0.52	2.991	A
3	705.70	706.76	730.56	0.00	2055.69	0.343	0.54	2.732	A
4	661.65	662.55	745.52	0.00	2091.47	0.316	0.48	2.593	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	712.95	713.91	541.04	0.00	1966.47	0.363	0.57	2.888	A
2	523.23	523.80	771.89	0.00	1965.24	0.266	0.38	2.603	A
3	590.99	591.56	611.30	0.00	2124.65	0.278	0.40	2.403	A
4	554.10	554.59	623.98	0.00	2162.71	0.256	0.36	2.305	A

(Default Analysis Set) - Scenario 1 - 2014 Base + Committed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1 - 2014 Base + Committed, AM	Scenario 1 - 2014 Base + Committed	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			7.30	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.67	8.92	53.00	18.00	80.00	50.00	
2	4.13	9.98	48.90	30.50	80.00	50.00	
3	5.85	8.88	66.00	29.00	80.00	45.00	
4	4.12	9.81	70.70	31.00	80.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.537	2257.218
2		(calculated)	(calculated)	0.563	2400.065
3		(calculated)	(calculated)	0.578	2478.162
4		(calculated)	(calculated)	0.586	2528.460

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	972.00	100.000
2	ONE HOUR	✓	1032.00	100.000
3	ONE HOUR	✓	1206.00	100.000
4	ONE HOUR	✓	1100.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	2.000	277.000	373.000	320.000
	2	174.000	3.000	400.000	455.000
	3	525.000	566.000	1.000	114.000
	4	374.000	527.000	197.000	2.000

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

		To			
		1	2	3	4
From	1	0.00	0.28	0.38	0.33
	2	0.17	0.00	0.39	0.44
	3	0.44	0.47	0.00	0.09
	4	0.34	0.48	0.18	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.094	1.050	1.021
	2	1.008	1.000	1.074	1.124
	3	1.010	1.045	1.000	1.046
	4	1.040	1.188	1.053	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	9.4	5.0	2.1
	2	0.8	0.0	7.4	12.4
	3	1.0	4.5	0.0	4.6
	4	4.0	18.8	5.3	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.72	8.99	2.63	A
2	0.62	5.50	1.72	A
3	0.71	6.84	2.49	A
4	0.71	8.02	2.66	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	731.77	728.72	972.07	0.00	1734.84	0.422	0.76	3.754	A
2	776.94	774.26	671.04	0.00	2022.05	0.384	0.67	3.118	A
3	907.94	904.72	717.07	0.00	2063.49	0.440	0.80	3.189	A
4	828.14	824.94	953.50	0.00	1969.56	0.420	0.80	3.476	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	873.81	872.06	1163.09	0.00	1632.18	0.535	1.20	4.972	A
2	927.75	926.53	803.01	0.00	1947.70	0.476	0.98	3.812	A
3	1084.17	1082.46	858.10	0.00	1981.93	0.547	1.23	4.113	A
4	988.88	987.09	1140.84	0.00	1859.74	0.532	1.25	4.564	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1070.19	1064.69	1421.02	0.00	1493.58	0.717	2.57	8.721	A
2	1136.25	1133.35	980.49	0.00	1847.72	0.615	1.70	5.436	A
3	1327.83	1322.95	1048.97	0.00	1871.56	0.709	2.45	6.695	A
4	1211.12	1205.67	1394.46	0.00	1711.08	0.708	2.61	7.813	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1070.19	1069.97	1426.73	0.00	1490.51	0.718	2.63	8.995	A
2	1136.25	1136.18	985.22	0.00	1845.06	0.616	1.72	5.500	A
3	1327.83	1327.68	1052.46	0.00	1869.54	0.710	2.49	6.835	A
4	1211.12	1210.93	1399.25	0.00	1708.28	0.709	2.66	8.015	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	873.81	879.39	1171.04	0.00	1627.91	0.537	1.23	5.098	A
2	927.75	930.64	809.58	0.00	1944.00	0.477	1.00	3.858	A
3	1084.17	1089.09	863.06	0.00	1979.06	0.548	1.26	4.188	A
4	988.88	994.39	1147.56	0.00	1855.80	0.533	1.28	4.661	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	731.77	733.61	977.77	0.00	1731.78	0.423	0.78	3.803	A
2	776.94	778.21	675.45	0.00	2019.56	0.385	0.68	3.145	A
3	907.94	909.72	721.11	0.00	2061.15	0.441	0.82	3.223	A
4	828.14	830.00	958.70	0.00	1966.51	0.421	0.81	3.516	A

(Default Analysis Set) - Scenario 1 - 2014 Base + Committed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1 - 2014 Base + Committed, PM	Scenario 1 - 2014 Base + Committed	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			10.62	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.67	8.92	53.00	18.00	80.00	50.00	
2	4.13	9.98	48.90	30.50	80.00	50.00	
3	5.85	8.88	66.00	29.00	80.00	45.00	
4	4.12	9.81	70.70	31.00	80.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.537	2257.218
2		(calculated)	(calculated)	0.563	2400.065
3		(calculated)	(calculated)	0.578	2478.162
4		(calculated)	(calculated)	0.586	2528.460

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	1074.00	100.000
2	ONE HOUR	✓	1386.00	100.000
3	ONE HOUR	✓	943.00	100.000
4	ONE HOUR	✓	1112.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	6.000	192.000	484.000	392.000
	2	293.000	5.000	471.000	617.000
	3	498.000	315.000	4.000	126.000
	4	367.000	553.000	187.000	5.000

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

		To			
		1	2	3	4
From	1	0.01	0.18	0.45	0.36
	2	0.21	0.00	0.34	0.45
	3	0.53	0.33	0.00	0.13
	4	0.33	0.50	0.17	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.094	1.050	1.021
	2	1.008	1.000	1.074	1.124
	3	1.010	1.045	1.000	1.046
	4	1.040	1.188	1.053	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	9.4	5.0	2.1
	2	0.8	0.0	7.4	12.4
	3	1.0	4.5	0.0	4.6
	4	4.0	18.8	5.3	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.73	8.50	2.75	A
2	0.88	18.31	7.39	C
3	0.63	6.14	1.75	A
4	0.68	6.88	2.31	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	808.56	805.26	801.90	0.00	1826.29	0.443	0.83	3.677	A
2	1043.45	1038.50	808.32	0.00	1944.71	0.537	1.24	4.268	A
3	709.94	707.52	987.75	0.00	1906.95	0.372	0.61	3.073	A
4	837.17	834.09	840.77	0.00	2035.64	0.411	0.77	3.320	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	965.50	963.66	959.51	0.00	1741.59	0.554	1.29	4.830	A
2	1245.99	1242.28	967.30	0.00	1855.15	0.672	2.16	6.307	A
3	847.74	846.51	1181.72	0.00	1794.79	0.472	0.91	3.891	A
4	999.67	998.06	1005.89	0.00	1938.85	0.516	1.17	4.244	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1182.50	1176.86	1172.87	0.00	1626.93	0.727	2.69	8.267	A
2	1526.01	1507.15	1181.50	0.00	1734.49	0.880	6.88	15.939	C
3	1038.26	1035.03	1436.58	0.00	1647.40	0.630	1.72	6.002	A
4	1224.33	1219.92	1227.36	0.00	1809.03	0.677	2.27	6.737	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1182.50	1182.29	1176.84	0.00	1624.79	0.728	2.75	8.503	A
2	1526.01	1523.97	1186.70	0.00	1731.56	0.881	7.39	18.313	C
3	1038.26	1038.13	1449.72	0.00	1639.80	0.633	1.75	6.138	A
4	1224.33	1224.19	1233.69	0.00	1805.32	0.678	2.31	6.877	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	965.50	971.20	965.16	0.00	1738.55	0.555	1.32	4.944	A
2	1245.99	1266.45	974.56	0.00	1851.06	0.673	2.27	6.874	A
3	847.74	850.99	1200.50	0.00	1783.92	0.475	0.94	3.974	A
4	999.67	1004.11	1015.01	0.00	1933.50	0.517	1.20	4.324	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	808.56	810.50	806.37	0.00	1823.88	0.443	0.84	3.723	A
2	1043.45	1047.47	813.46	0.00	1941.82	0.537	1.27	4.368	A
3	709.94	711.23	995.64	0.00	1902.39	0.373	0.61	3.106	A
4	837.17	838.84	845.94	0.00	2032.60	0.412	0.78	3.356	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: CTC Junc 5.arc8
Path: P:\data\W50---\W50827 - Highways Assessment, Selby District\Junction Analysis
Report generation date: 25/11/2014 12:50:32

File summary

Title	(untitled)
Location	
Site Number	
Date	14/11/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JGreen
Description	

Analysis Options

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

Units

Distance 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

(Default Analysis Set) - Scenario 0, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0, AM	Scenario 0	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			2.64	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.74	7.64	100.00	30.00	104.00	41.00	
2	5.66	10.75	86.00	29.00	104.00	44.00	
3	4.86	7.07	150.00	31.00	104.00	33.00	
4	4.70	9.97	68.00	31.00	104.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.505	2136.047
2		(calculated)	(calculated)	0.610	2911.062
3		(calculated)	(calculated)	0.509	2126.722
4		(calculated)	(calculated)	0.568	2609.785

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	479.00	100.000
2	ONE HOUR	✓	645.00	100.000
3	ONE HOUR	✓	618.00	100.000
4	ONE HOUR	✓	427.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	3.000	162.000	195.000	119.000
	2	106.000	1.000	283.000	255.000
	3	210.000	375.000	0.000	33.000
	4	116.000	271.000	40.000	0.000

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

		To			
		1	2	3	4
From	1	0.01	0.34	0.41	0.25
	2	0.16	0.00	0.44	0.40
	3	0.34	0.61	0.00	0.05
	4	0.27	0.63	0.09	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.025	1.043	1.026
	2	1.010	1.000	1.119	1.041
	3	1.040	1.140	1.000	1.031
	4	1.009	1.050	1.143	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	2.5	4.3	2.6
	2	1.0	0.0	11.9	4.1
	3	4.0	14.0	0.0	3.1
	4	0.9	5.0	14.3	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.30	3.03	0.44	A
2	0.27	1.96	0.39	A
3	0.37	3.36	0.63	A
4	0.22	2.21	0.29	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	360.62	359.64	515.88	0.00	1875.77	0.192	0.24	2.450	A
2	485.59	484.67	268.06	0.00	2747.50	0.177	0.23	1.699	A
3	465.26	463.88	363.62	0.00	1941.52	0.240	0.34	2.672	A
4	321.47	320.79	521.77	0.00	2313.48	0.139	0.17	1.890	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	430.61	430.32	617.21	0.00	1824.65	0.236	0.32	2.665	A
2	579.84	579.60	320.73	0.00	2715.36	0.214	0.29	1.799	A
3	555.57	555.15	434.90	0.00	1905.22	0.292	0.45	2.927	A
4	383.86	383.68	624.35	0.00	2255.22	0.170	0.21	2.012	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	527.39	526.89	755.74	0.00	1754.75	0.301	0.44	3.024	A
2	710.16	709.77	392.71	0.00	2671.44	0.266	0.39	1.960	A
3	680.43	679.70	532.55	0.00	1855.48	0.367	0.63	3.360	A
4	470.14	469.84	764.45	0.00	2175.66	0.216	0.29	2.208	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	527.39	527.38	756.40	0.00	1754.42	0.301	0.44	3.028	A
2	710.16	710.16	393.06	0.00	2671.22	0.266	0.39	1.960	A
3	680.43	680.42	532.89	0.00	1855.31	0.367	0.63	3.363	A
4	470.14	470.13	765.20	0.00	2175.23	0.216	0.29	2.208	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	430.61	431.10	618.25	0.00	1824.12	0.236	0.32	2.668	A
2	579.84	580.22	321.29	0.00	2715.02	0.214	0.29	1.800	A
3	555.57	556.29	435.44	0.00	1904.94	0.292	0.45	2.931	A
4	383.86	384.16	625.54	0.00	2254.55	0.170	0.22	2.014	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	360.62	360.91	517.60	0.00	1874.90	0.192	0.25	2.454	A
2	485.59	485.83	268.98	0.00	2746.94	0.177	0.23	1.700	A
3	465.26	465.69	364.59	0.00	1941.03	0.240	0.35	2.679	A
4	321.47	321.65	523.68	0.00	2312.39	0.139	0.17	1.894	A

(Default Analysis Set) - Scenario 0, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0, PM	Scenario 0	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			2.66	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.74	7.64	100.00	30.00	104.00	41.00	
2	5.66	10.75	86.00	29.00	104.00	44.00	
3	4.86	7.07	150.00	31.00	104.00	33.00	
4	4.70	9.97	68.00	31.00	104.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.505	2136.047
2		(calculated)	(calculated)	0.610	2911.062
3		(calculated)	(calculated)	0.509	2126.722
4		(calculated)	(calculated)	0.568	2609.785

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	395.00	100.000
2	ONE HOUR	✓	769.00	100.000
3	ONE HOUR	✓	692.00	100.000
4	ONE HOUR	✓	457.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	2.000	114.000	158.000	121.000
	2	207.000	5.000	316.000	241.000
	3	321.000	331.000	0.000	40.000
	4	139.000	272.000	46.000	0.000

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

		To			
		1	2	3	4
From	1	0.01	0.29	0.40	0.31
	2	0.27	0.01	0.41	0.31
	3	0.46	0.48	0.00	0.06
	4	0.30	0.60	0.10	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.000	1.006	1.008
	2	1.005	1.000	1.064	1.030
	3	1.003	1.047	1.000	1.143
	4	1.000	1.019	1.095	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.6	0.8
	2	0.5	0.0	6.4	3.0
	3	0.3	4.7	0.0	14.3
	4	0.0	1.9	9.5	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.25	2.70	0.33	A
2	0.31	2.02	0.47	A
3	0.42	3.56	0.75	A
4	0.24	2.35	0.33	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	297.38	296.63	491.11	0.00	1888.27	0.157	0.19	2.271	A
2	578.94	577.85	245.58	0.00	2761.22	0.210	0.27	1.708	A
3	520.97	519.43	432.76	0.00	1906.31	0.273	0.39	2.674	A
4	344.05	343.32	650.21	0.00	2240.54	0.154	0.18	1.936	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	355.10	354.89	587.54	0.00	1839.62	0.193	0.24	2.436	A
2	691.32	691.01	293.80	0.00	2731.79	0.253	0.35	1.827	A
3	622.09	621.58	517.57	0.00	1863.11	0.334	0.51	2.987	A
4	410.83	410.62	777.95	0.00	2168.00	0.190	0.24	2.089	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	434.90	434.56	719.37	0.00	1773.10	0.245	0.33	2.702	A
2	846.68	846.19	359.75	0.00	2691.55	0.315	0.47	2.022	A
3	761.91	760.97	633.79	0.00	1803.92	0.422	0.75	3.555	A
4	503.17	502.81	952.46	0.00	2068.89	0.243	0.33	2.345	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	434.90	434.90	720.06	0.00	1772.75	0.245	0.33	2.703	A
2	846.68	846.68	360.03	0.00	2691.38	0.315	0.47	2.022	A
3	761.91	761.90	634.19	0.00	1803.72	0.422	0.75	3.561	A
4	503.17	503.16	953.47	0.00	2068.32	0.243	0.33	2.346	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	355.10	355.44	588.62	0.00	1839.07	0.193	0.24	2.440	A
2	691.32	691.81	294.24	0.00	2731.52	0.253	0.35	1.831	A
3	622.09	623.02	518.21	0.00	1862.79	0.334	0.52	2.995	A
4	410.83	411.19	779.53	0.00	2167.10	0.190	0.24	2.093	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	297.38	297.59	492.77	0.00	1887.43	0.158	0.19	2.275	A
2	578.94	579.25	246.35	0.00	2760.74	0.210	0.28	1.712	A
3	520.97	521.49	433.89	0.00	1905.73	0.273	0.39	2.681	A
4	344.05	344.27	652.55	0.00	2239.21	0.154	0.19	1.939	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: CTC Junc 5.arc8
Path: P:\data\W50---\W50827 - Highways Assessment, Selby District\Junction Analysis\Junction 5
Report generation date: 12/12/2014 08:50:26

File summary

Title	(untitled)
Location	
Site Number	
Date	14/11/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JGreen
Description	

Analysis Options

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

Units

Distance 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

(Default Analysis Set) - Scenario 0 - 2014 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base, AM	Scenario 0 - 2014 Base	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			2.64	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.74	7.64	100.00	30.00	104.00	41.00	
2	5.66	10.75	86.00	29.00	104.00	44.00	
3	4.86	7.07	150.00	31.00	104.00	33.00	
4	4.70	9.97	68.00	31.00	104.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.505	2136.047
2		(calculated)	(calculated)	0.610	2911.062
3		(calculated)	(calculated)	0.509	2126.722
4		(calculated)	(calculated)	0.568	2609.785

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	479.00	100.000
2	ONE HOUR	✓	645.00	100.000
3	ONE HOUR	✓	618.00	100.000
4	ONE HOUR	✓	427.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	3.000	162.000	195.000	119.000
	2	106.000	1.000	283.000	255.000
	3	210.000	375.000	0.000	33.000
	4	116.000	271.000	40.000	0.000

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

		To			
		1	2	3	4
From	1	0.01	0.34	0.41	0.25
	2	0.16	0.00	0.44	0.40
	3	0.34	0.61	0.00	0.05
	4	0.27	0.63	0.09	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.025	1.043	1.026
	2	1.010	1.000	1.119	1.041
	3	1.040	1.140	1.000	1.031
	4	1.009	1.050	1.143	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	2.5	4.3	2.6
	2	1.0	0.0	11.9	4.1
	3	4.0	14.0	0.0	3.1
	4	0.9	5.0	14.3	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.30	3.03	0.44	A
2	0.27	1.96	0.39	A
3	0.37	3.36	0.63	A
4	0.22	2.21	0.29	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	360.62	359.64	515.88	0.00	1875.77	0.192	0.24	2.450	A
2	485.59	484.67	268.06	0.00	2747.50	0.177	0.23	1.699	A
3	465.26	463.88	363.62	0.00	1941.52	0.240	0.34	2.672	A
4	321.47	320.79	521.77	0.00	2313.48	0.139	0.17	1.890	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	430.61	430.32	617.21	0.00	1824.65	0.236	0.32	2.665	A
2	579.84	579.60	320.73	0.00	2715.36	0.214	0.29	1.799	A
3	555.57	555.15	434.90	0.00	1905.22	0.292	0.45	2.927	A
4	383.86	383.68	624.35	0.00	2255.22	0.170	0.21	2.012	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	527.39	526.89	755.74	0.00	1754.75	0.301	0.44	3.024	A
2	710.16	709.77	392.71	0.00	2671.44	0.266	0.39	1.960	A
3	680.43	679.70	532.55	0.00	1855.48	0.367	0.63	3.360	A
4	470.14	469.84	764.45	0.00	2175.66	0.216	0.29	2.208	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	527.39	527.38	756.40	0.00	1754.42	0.301	0.44	3.028	A
2	710.16	710.16	393.06	0.00	2671.22	0.266	0.39	1.960	A
3	680.43	680.42	532.89	0.00	1855.31	0.367	0.63	3.363	A
4	470.14	470.13	765.20	0.00	2175.23	0.216	0.29	2.208	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	430.61	431.10	618.25	0.00	1824.12	0.236	0.32	2.668	A
2	579.84	580.22	321.29	0.00	2715.02	0.214	0.29	1.800	A
3	555.57	556.29	435.44	0.00	1904.94	0.292	0.45	2.931	A
4	383.86	384.16	625.54	0.00	2254.55	0.170	0.22	2.014	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	360.62	360.91	517.60	0.00	1874.90	0.192	0.25	2.454	A
2	485.59	485.83	268.98	0.00	2746.94	0.177	0.23	1.700	A
3	465.26	465.69	364.59	0.00	1941.03	0.240	0.35	2.679	A
4	321.47	321.65	523.68	0.00	2312.39	0.139	0.17	1.894	A

(Default Analysis Set) - Scenario 0 - 2014 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base, PM	Scenario 0 - 2014 Base	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			2.66	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.74	7.64	100.00	30.00	104.00	41.00	
2	5.66	10.75	86.00	29.00	104.00	44.00	
3	4.86	7.07	150.00	31.00	104.00	33.00	
4	4.70	9.97	68.00	31.00	104.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.505	2136.047
2		(calculated)	(calculated)	0.610	2911.062
3		(calculated)	(calculated)	0.509	2126.722
4		(calculated)	(calculated)	0.568	2609.785

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	395.00	100.000
2	ONE HOUR	✓	769.00	100.000
3	ONE HOUR	✓	692.00	100.000
4	ONE HOUR	✓	457.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	2.000	114.000	158.000	121.000
	2	207.000	5.000	316.000	241.000
	3	321.000	331.000	0.000	40.000
	4	139.000	272.000	46.000	0.000

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

		To			
		1	2	3	4
From	1	0.01	0.29	0.40	0.31
	2	0.27	0.01	0.41	0.31
	3	0.46	0.48	0.00	0.06
	4	0.30	0.60	0.10	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.000	1.006	1.008
	2	1.005	1.000	1.064	1.030
	3	1.003	1.047	1.000	1.143
	4	1.000	1.019	1.095	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.6	0.8
	2	0.5	0.0	6.4	3.0
	3	0.3	4.7	0.0	14.3
	4	0.0	1.9	9.5	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.25	2.70	0.33	A
2	0.31	2.02	0.47	A
3	0.42	3.56	0.75	A
4	0.24	2.35	0.33	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	297.38	296.63	491.11	0.00	1888.27	0.157	0.19	2.271	A
2	578.94	577.85	245.58	0.00	2761.22	0.210	0.27	1.708	A
3	520.97	519.43	432.76	0.00	1906.31	0.273	0.39	2.674	A
4	344.05	343.32	650.21	0.00	2240.54	0.154	0.18	1.936	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	355.10	354.89	587.54	0.00	1839.62	0.193	0.24	2.436	A
2	691.32	691.01	293.80	0.00	2731.79	0.253	0.35	1.827	A
3	622.09	621.58	517.57	0.00	1863.11	0.334	0.51	2.987	A
4	410.83	410.62	777.95	0.00	2168.00	0.190	0.24	2.089	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	434.90	434.56	719.37	0.00	1773.10	0.245	0.33	2.702	A
2	846.68	846.19	359.75	0.00	2691.55	0.315	0.47	2.022	A
3	761.91	760.97	633.79	0.00	1803.92	0.422	0.75	3.555	A
4	503.17	502.81	952.46	0.00	2068.89	0.243	0.33	2.345	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	434.90	434.90	720.06	0.00	1772.75	0.245	0.33	2.703	A
2	846.68	846.68	360.03	0.00	2691.38	0.315	0.47	2.022	A
3	761.91	761.90	634.19	0.00	1803.72	0.422	0.75	3.561	A
4	503.17	503.16	953.47	0.00	2068.32	0.243	0.33	2.346	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	355.10	355.44	588.62	0.00	1839.07	0.193	0.24	2.440	A
2	691.32	691.81	294.24	0.00	2731.52	0.253	0.35	1.831	A
3	622.09	623.02	518.21	0.00	1862.79	0.334	0.52	2.995	A
4	410.83	411.19	779.53	0.00	2167.10	0.190	0.24	2.093	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	297.38	297.59	492.77	0.00	1887.43	0.158	0.19	2.275	A
2	578.94	579.25	246.35	0.00	2760.74	0.210	0.28	1.712	A
3	520.97	521.49	433.89	0.00	1905.73	0.273	0.39	2.681	A
4	344.05	344.27	652.55	0.00	2239.21	0.154	0.19	1.939	A

(Default Analysis Set) - Scenario 1 - 2014 Base + Committed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1 - 2014 Base + Committed, AM	Scenario 1 - 2014 Base + Committed	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			3.04	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.74	7.64	100.00	30.00	104.00	41.00	
2	5.66	10.75	86.00	29.00	104.00	44.00	
3	4.86	7.07	150.00	31.00	104.00	33.00	
4	4.70	9.97	68.00	31.00	104.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.505	2136.047
2		(calculated)	(calculated)	0.610	2911.062
3		(calculated)	(calculated)	0.509	2126.722
4		(calculated)	(calculated)	0.568	2609.785

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	541.00	100.000
2	ONE HOUR	✓	895.00	100.000
3	ONE HOUR	✓	755.00	100.000
4	ONE HOUR	✓	585.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	3.000	221.000	195.000	122.000
	2	146.000	1.000	390.000	358.000
	3	210.000	511.000	0.000	34.000
	4	132.000	407.000	46.000	0.000

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

		To			
		1	2	3	4
From	1	0.01	0.41	0.36	0.23
	2	0.16	0.00	0.44	0.40
	3	0.28	0.68	0.00	0.05
	4	0.23	0.70	0.08	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.000	1.006	1.008
	2	1.005	1.000	1.064	1.030
	3	1.003	1.047	1.000	1.143
	4	1.000	1.019	1.095	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.6	0.8
	2	0.5	0.0	6.4	3.0
	3	0.3	4.7	0.0	14.3
	4	0.0	1.9	9.5	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.37	3.60	0.59	A
2	0.37	2.23	0.61	A
3	0.47	3.97	0.91	A
4	0.31	2.58	0.46	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	407.29	406.10	724.52	0.00	1770.50	0.230	0.30	2.646	A
2	673.80	672.45	274.76	0.00	2743.41	0.246	0.34	1.808	A
3	568.40	566.62	473.26	0.00	1885.68	0.301	0.45	2.830	A
4	440.42	439.42	653.80	0.00	2238.50	0.197	0.25	2.040	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	486.35	485.94	866.85	0.00	1698.70	0.286	0.40	2.980	A
2	804.59	804.19	328.76	0.00	2710.46	0.297	0.44	1.964	A
3	678.73	678.10	566.04	0.00	1838.43	0.369	0.60	3.219	A
4	525.90	525.60	782.34	0.00	2165.50	0.243	0.33	2.239	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	595.65	594.89	1061.25	0.00	1600.62	0.372	0.59	3.592	A
2	985.41	984.73	402.48	0.00	2665.48	0.370	0.61	2.226	A
3	831.27	830.05	693.08	0.00	1773.72	0.469	0.91	3.956	A
4	644.10	643.56	957.71	0.00	2065.91	0.312	0.46	2.582	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	595.65	595.64	1062.47	0.00	1600.00	0.372	0.59	3.597	A
2	985.41	985.41	402.97	0.00	2665.18	0.370	0.61	2.229	A
3	831.27	831.26	693.64	0.00	1773.44	0.469	0.91	3.966	A
4	644.10	644.09	958.97	0.00	2065.19	0.312	0.46	2.583	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	486.35	487.10	868.74	0.00	1697.74	0.286	0.40	2.986	A
2	804.59	805.26	329.51	0.00	2710.00	0.297	0.44	1.968	A
3	678.73	679.93	566.91	0.00	1837.98	0.369	0.61	3.230	A
4	525.90	526.43	784.28	0.00	2164.40	0.243	0.33	2.242	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	407.29	407.71	727.18	0.00	1769.16	0.230	0.30	2.657	A
2	673.80	674.21	275.81	0.00	2742.77	0.246	0.34	1.809	A
3	568.40	569.05	474.62	0.00	1884.99	0.302	0.45	2.841	A
4	440.42	440.73	656.42	0.00	2237.01	0.197	0.25	2.044	A

(Default Analysis Set) - Scenario 1 - 2014 Base + Committed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1 - 2014 Base + Committed, PM	Scenario 1 - 2014 Base + Committed	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			3.54	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.74	7.64	100.00	30.00	104.00	41.00	
2	5.66	10.75	86.00	29.00	104.00	44.00	
3	4.86	7.07	150.00	31.00	104.00	33.00	
4	4.70	9.97	68.00	31.00	104.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.505	2136.047
2		(calculated)	(calculated)	0.610	2911.062
3		(calculated)	(calculated)	0.509	2126.722
4		(calculated)	(calculated)	0.568	2609.785

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	460.00	100.000
2	ONE HOUR	✓	1154.00	100.000
3	ONE HOUR	✓	866.00	100.000
4	ONE HOUR	✓	631.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	2.000	173.000	158.000	127.000
	2	307.000	7.000	469.000	371.000
	3	321.000	503.000	0.000	42.000
	4	148.000	434.000	49.000	0.000

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

		To			
		1	2	3	4
From	1	0.00	0.38	0.34	0.28
	2	0.27	0.01	0.41	0.32
	3	0.37	0.58	0.00	0.05
	4	0.23	0.69	0.08	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.000	1.006	1.008
	2	1.005	1.000	1.064	1.030
	3	1.003	1.047	1.000	1.143
	4	1.000	1.019	1.095	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.6	0.8
	2	0.5	0.0	6.4	3.0
	3	0.3	4.7	0.0	14.3
	4	0.0	1.9	9.5	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.32	3.35	0.47	A
2	0.47	2.64	0.93	A
3	0.57	5.19	1.37	A
4	0.37	3.05	0.59	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	346.31	345.33	745.33	0.00	1760.00	0.197	0.25	2.554	A
2	868.79	866.89	252.26	0.00	2757.14	0.315	0.48	1.972	A
3	651.97	649.66	611.42	0.00	1815.31	0.359	0.58	3.187	A
4	475.05	473.88	855.54	0.00	2123.93	0.224	0.29	2.224	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	413.53	413.21	891.81	0.00	1686.10	0.245	0.33	2.840	A
2	1037.42	1036.79	301.83	0.00	2726.89	0.380	0.63	2.208	A
3	778.52	777.55	731.30	0.00	1754.25	0.444	0.82	3.809	A
4	567.26	566.85	1023.74	0.00	2028.41	0.280	0.39	2.512	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	506.47	505.89	1091.47	0.00	1585.37	0.319	0.47	3.347	A
2	1270.58	1269.41	369.52	0.00	2685.59	0.473	0.93	2.632	A
3	953.48	951.33	895.38	0.00	1670.69	0.571	1.36	5.161	A
4	694.74	693.98	1252.80	0.00	1898.33	0.366	0.59	3.047	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	506.47	506.46	1093.29	0.00	1584.45	0.320	0.47	3.352	A
2	1270.58	1270.57	369.94	0.00	2685.33	0.473	0.93	2.636	A
3	953.48	953.45	896.22	0.00	1670.26	0.571	1.37	5.194	A
4	694.74	694.74	1255.12	0.00	1897.01	0.366	0.59	3.053	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	413.53	414.10	894.52	0.00	1684.74	0.245	0.33	2.845	A
2	1037.42	1038.58	302.47	0.00	2726.50	0.381	0.64	2.213	A
3	778.52	780.65	732.62	0.00	1753.59	0.444	0.83	3.837	A
4	567.26	568.01	1027.19	0.00	2026.45	0.280	0.40	2.520	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	346.31	346.64	748.48	0.00	1758.42	0.197	0.25	2.562	A
2	868.79	869.43	253.19	0.00	2756.57	0.315	0.48	1.977	A
3	651.97	652.97	613.29	0.00	1814.36	0.359	0.58	3.208	A
4	475.05	475.46	859.37	0.00	2121.75	0.224	0.30	2.232	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: CTC Junc 6.arc8
Path: P:\data\W50---\W50827 - Highways Assessment, Selby District\Junction Analysis
Report generation date: 25/11/2014 14:44:07

File summary

Title	(untitled)
Location	
Site Number	
Date	17/11/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JGreen
Description	

Analysis Options

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

Units

Distance 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

(Default Analysis Set) - Scenario 0, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0, AM	Scenario 0	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			5.66	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

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	4.17	5.87	50.00	20.00	38.00	43.00	
2	2.98	5.93	6.90	30.00	38.00	42.00	
3	3.65	5.74	34.60	21.00	38.00	43.00	
4	4.29	5.43	28.60	25.60	38.00	39.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.622	1650.113
2		(calculated)	(calculated)	0.548	1247.947
3		(calculated)	(calculated)	0.606	1566.623
4		(calculated)	(calculated)	0.615	1573.234

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	457.00	100.000
2	ONE HOUR	✓	341.00	100.000
3	ONE HOUR	✓	734.00	100.000
4	ONE HOUR	✓	231.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	0.000	52.000	397.000	8.000
	2	45.000	0.000	239.000	57.000
	3	452.000	195.000	1.000	86.000
	4	12.000	102.000	116.000	1.000

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

		To			
		1	2	3	4
From	1	0.00	0.11	0.87	0.02
	2	0.13	0.00	0.70	0.17
	3	0.62	0.27	0.00	0.12
	4	0.05	0.44	0.50	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.268	1.097	1.143
	2	1.154	1.000	1.155	1.018
	3	1.111	1.161	1.000	1.000
	4	1.333	1.097	1.115	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	26.8	9.7	14.3
	2	15.4	0.0	15.5	1.8
	3	11.1	16.1	0.0	0.0
	4	33.3	9.7	11.5	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.37	4.65	0.65	A
2	0.40	7.30	0.76	A
3	0.54	5.83	1.30	A
4	0.23	4.72	0.33	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	344.05	342.68	311.08	0.00	1456.47	0.236	0.34	3.598	A
2	256.72	255.24	392.16	0.00	1033.18	0.248	0.37	5.217	A
3	552.59	550.07	83.10	0.00	1516.23	0.364	0.63	4.122	A
4	173.91	173.19	519.30	0.00	1254.12	0.139	0.18	3.714	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	410.83	410.40	372.62	0.00	1418.17	0.290	0.45	3.981	A
2	306.55	306.03	469.67	0.00	990.73	0.309	0.50	5.938	A
3	659.85	658.95	99.62	0.00	1506.21	0.438	0.86	4.707	A
4	207.66	207.44	622.13	0.00	1190.93	0.174	0.23	4.083	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	503.17	502.39	456.09	0.00	1366.21	0.368	0.64	4.642	A
2	375.45	374.45	574.95	0.00	933.07	0.402	0.75	7.265	A
3	808.15	806.41	121.90	0.00	1492.70	0.541	1.29	5.802	A
4	254.34	253.95	761.34	0.00	1105.38	0.230	0.33	4.715	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	503.17	503.16	456.91	0.00	1365.70	0.368	0.65	4.652	A
2	375.45	375.43	575.82	0.00	932.59	0.403	0.76	7.297	A
3	808.15	808.11	122.21	0.00	1492.52	0.541	1.30	5.833	A
4	254.34	254.33	762.97	0.00	1104.38	0.230	0.33	4.725	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	410.83	411.59	373.89	0.00	1417.37	0.290	0.46	3.994	A
2	306.55	307.53	471.03	0.00	989.98	0.310	0.51	5.968	A
3	659.85	661.56	100.09	0.00	1505.93	0.438	0.87	4.737	A
4	207.66	208.05	624.63	0.00	1189.39	0.175	0.24	4.094	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	344.05	344.50	312.90	0.00	1455.34	0.236	0.35	3.616	A
2	256.72	257.26	394.25	0.00	1032.03	0.249	0.38	5.251	A
3	552.59	553.52	83.74	0.00	1515.84	0.365	0.64	4.154	A
4	173.91	174.13	522.62	0.00	1252.08	0.139	0.18	3.729	A

(Default Analysis Set) - Scenario 0, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0, PM	Scenario 0	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			6.11	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.17	5.87	50.00	20.00	38.00	43.00	
2	2.98	5.93	6.90	30.00	38.00	42.00	
3	3.65	5.74	34.60	21.00	38.00	43.00	
4	4.29	5.43	28.60	25.60	38.00	39.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.622	1650.113
2		(calculated)	(calculated)	0.548	1247.947
3		(calculated)	(calculated)	0.606	1566.623
4		(calculated)	(calculated)	0.615	1573.234

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	512.00	100.000
2	ONE HOUR	✓	383.00	100.000
3	ONE HOUR	✓	792.00	100.000
4	ONE HOUR	✓	204.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	0.000	27.000	470.000	15.000
	2	41.000	0.000	222.000	120.000
	3	505.000	232.000	9.000	46.000
	4	6.000	125.000	71.000	2.000

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

		To			
		1	2	3	4
From	1	0.00	0.05	0.92	0.03
	2	0.11	0.00	0.58	0.31
	3	0.64	0.29	0.01	0.06
	4	0.03	0.61	0.35	0.01

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.125	1.049	1.071
	2	1.079	1.000	1.057	1.017
	3	1.041	1.055	1.000	1.000
	4	1.200	1.008	1.109	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	12.5	4.9	7.1
	2	7.9	0.0	5.7	1.7
	3	4.1	5.5	0.0	0.0
	4	20.0	0.8	10.9	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.42	4.83	0.75	A
2	0.47	7.77	0.90	A
3	0.60	6.51	1.56	A
4	0.22	4.61	0.29	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	385.46	383.94	329.07	0.00	1445.28	0.267	0.38	3.568	A
2	288.34	286.70	425.18	0.00	1015.10	0.284	0.41	5.160	A
3	596.26	593.49	133.26	0.00	1485.81	0.401	0.69	4.192	A
4	153.58	152.98	589.71	0.00	1210.85	0.127	0.15	3.557	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	460.28	459.76	394.13	0.00	1404.78	0.328	0.51	4.011	A
2	344.31	343.67	509.15	0.00	969.11	0.355	0.57	6.016	A
3	711.99	710.89	159.73	0.00	1469.76	0.484	0.97	4.936	A
4	183.39	183.20	706.39	0.00	1139.15	0.161	0.20	3.938	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	563.72	562.77	482.31	0.00	1349.89	0.418	0.75	4.811	A
2	421.69	420.39	623.23	0.00	906.63	0.465	0.90	7.726	A
3	872.01	869.68	195.40	0.00	1448.13	0.602	1.55	6.460	A
4	224.61	224.26	864.18	0.00	1042.19	0.216	0.29	4.601	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	563.72	563.71	483.33	0.00	1349.26	0.418	0.75	4.827	A
2	421.69	421.66	624.26	0.00	906.06	0.465	0.90	7.775	A
3	872.01	871.95	195.97	0.00	1447.79	0.602	1.56	6.514	A
4	224.61	224.60	866.45	0.00	1040.79	0.216	0.29	4.613	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	460.28	461.22	395.68	0.00	1403.81	0.328	0.52	4.026	A
2	344.31	345.59	510.76	0.00	968.22	0.356	0.58	6.061	A
3	711.99	714.29	160.59	0.00	1469.24	0.485	0.99	4.985	A
4	183.39	183.73	709.80	0.00	1137.06	0.161	0.20	3.952	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	385.46	385.99	331.04	0.00	1444.05	0.267	0.39	3.587	A
2	288.34	289.00	427.45	0.00	1013.85	0.284	0.42	5.201	A
3	596.26	597.40	134.30	0.00	1485.18	0.401	0.70	4.230	A
4	153.58	153.78	593.64	0.00	1208.44	0.127	0.15	3.573	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: CTC Junc 5.arc8
Path: P:\data\W50---\W50827 - Highways Assessment, Selby District\Junction Analysis\Junction 5
Report generation date: 12/12/2014 08:50:26

File summary

Title	(untitled)
Location	
Site Number	
Date	14/11/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JGreen
Description	

Analysis Options

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

Units

Distance 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

(Default Analysis Set) - Scenario 0 - 2014 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base, AM	Scenario 0 - 2014 Base	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			2.64	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.74	7.64	100.00	30.00	104.00	41.00	
2	5.66	10.75	86.00	29.00	104.00	44.00	
3	4.86	7.07	150.00	31.00	104.00	33.00	
4	4.70	9.97	68.00	31.00	104.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.505	2136.047
2		(calculated)	(calculated)	0.610	2911.062
3		(calculated)	(calculated)	0.509	2126.722
4		(calculated)	(calculated)	0.568	2609.785

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	479.00	100.000
2	ONE HOUR	✓	645.00	100.000
3	ONE HOUR	✓	618.00	100.000
4	ONE HOUR	✓	427.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	3.000	162.000	195.000	119.000
	2	106.000	1.000	283.000	255.000
	3	210.000	375.000	0.000	33.000
	4	116.000	271.000	40.000	0.000

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

		To			
		1	2	3	4
From	1	0.01	0.34	0.41	0.25
	2	0.16	0.00	0.44	0.40
	3	0.34	0.61	0.00	0.05
	4	0.27	0.63	0.09	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.025	1.043	1.026
	2	1.010	1.000	1.119	1.041
	3	1.040	1.140	1.000	1.031
	4	1.009	1.050	1.143	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	2.5	4.3	2.6
	2	1.0	0.0	11.9	4.1
	3	4.0	14.0	0.0	3.1
	4	0.9	5.0	14.3	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.30	3.03	0.44	A
2	0.27	1.96	0.39	A
3	0.37	3.36	0.63	A
4	0.22	2.21	0.29	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	360.62	359.64	515.88	0.00	1875.77	0.192	0.24	2.450	A
2	485.59	484.67	268.06	0.00	2747.50	0.177	0.23	1.699	A
3	465.26	463.88	363.62	0.00	1941.52	0.240	0.34	2.672	A
4	321.47	320.79	521.77	0.00	2313.48	0.139	0.17	1.890	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	430.61	430.32	617.21	0.00	1824.65	0.236	0.32	2.665	A
2	579.84	579.60	320.73	0.00	2715.36	0.214	0.29	1.799	A
3	555.57	555.15	434.90	0.00	1905.22	0.292	0.45	2.927	A
4	383.86	383.68	624.35	0.00	2255.22	0.170	0.21	2.012	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	527.39	526.89	755.74	0.00	1754.75	0.301	0.44	3.024	A
2	710.16	709.77	392.71	0.00	2671.44	0.266	0.39	1.960	A
3	680.43	679.70	532.55	0.00	1855.48	0.367	0.63	3.360	A
4	470.14	469.84	764.45	0.00	2175.66	0.216	0.29	2.208	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	527.39	527.38	756.40	0.00	1754.42	0.301	0.44	3.028	A
2	710.16	710.16	393.06	0.00	2671.22	0.266	0.39	1.960	A
3	680.43	680.42	532.89	0.00	1855.31	0.367	0.63	3.363	A
4	470.14	470.13	765.20	0.00	2175.23	0.216	0.29	2.208	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	430.61	431.10	618.25	0.00	1824.12	0.236	0.32	2.668	A
2	579.84	580.22	321.29	0.00	2715.02	0.214	0.29	1.800	A
3	555.57	556.29	435.44	0.00	1904.94	0.292	0.45	2.931	A
4	383.86	384.16	625.54	0.00	2254.55	0.170	0.22	2.014	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	360.62	360.91	517.60	0.00	1874.90	0.192	0.25	2.454	A
2	485.59	485.83	268.98	0.00	2746.94	0.177	0.23	1.700	A
3	465.26	465.69	364.59	0.00	1941.03	0.240	0.35	2.679	A
4	321.47	321.65	523.68	0.00	2312.39	0.139	0.17	1.894	A

(Default Analysis Set) - Scenario 0 - 2014 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base, PM	Scenario 0 - 2014 Base	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			2.66	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.74	7.64	100.00	30.00	104.00	41.00	
2	5.66	10.75	86.00	29.00	104.00	44.00	
3	4.86	7.07	150.00	31.00	104.00	33.00	
4	4.70	9.97	68.00	31.00	104.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.505	2136.047
2		(calculated)	(calculated)	0.610	2911.062
3		(calculated)	(calculated)	0.509	2126.722
4		(calculated)	(calculated)	0.568	2609.785

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	395.00	100.000
2	ONE HOUR	✓	769.00	100.000
3	ONE HOUR	✓	692.00	100.000
4	ONE HOUR	✓	457.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	2.000	114.000	158.000	121.000
	2	207.000	5.000	316.000	241.000
	3	321.000	331.000	0.000	40.000
	4	139.000	272.000	46.000	0.000

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

		To			
		1	2	3	4
From	1	0.01	0.29	0.40	0.31
	2	0.27	0.01	0.41	0.31
	3	0.46	0.48	0.00	0.06
	4	0.30	0.60	0.10	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.000	1.006	1.008
	2	1.005	1.000	1.064	1.030
	3	1.003	1.047	1.000	1.143
	4	1.000	1.019	1.095	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.6	0.8
	2	0.5	0.0	6.4	3.0
	3	0.3	4.7	0.0	14.3
	4	0.0	1.9	9.5	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.25	2.70	0.33	A
2	0.31	2.02	0.47	A
3	0.42	3.56	0.75	A
4	0.24	2.35	0.33	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	297.38	296.63	491.11	0.00	1888.27	0.157	0.19	2.271	A
2	578.94	577.85	245.58	0.00	2761.22	0.210	0.27	1.708	A
3	520.97	519.43	432.76	0.00	1906.31	0.273	0.39	2.674	A
4	344.05	343.32	650.21	0.00	2240.54	0.154	0.18	1.936	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	355.10	354.89	587.54	0.00	1839.62	0.193	0.24	2.436	A
2	691.32	691.01	293.80	0.00	2731.79	0.253	0.35	1.827	A
3	622.09	621.58	517.57	0.00	1863.11	0.334	0.51	2.987	A
4	410.83	410.62	777.95	0.00	2168.00	0.190	0.24	2.089	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	434.90	434.56	719.37	0.00	1773.10	0.245	0.33	2.702	A
2	846.68	846.19	359.75	0.00	2691.55	0.315	0.47	2.022	A
3	761.91	760.97	633.79	0.00	1803.92	0.422	0.75	3.555	A
4	503.17	502.81	952.46	0.00	2068.89	0.243	0.33	2.345	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	434.90	434.90	720.06	0.00	1772.75	0.245	0.33	2.703	A
2	846.68	846.68	360.03	0.00	2691.38	0.315	0.47	2.022	A
3	761.91	761.90	634.19	0.00	1803.72	0.422	0.75	3.561	A
4	503.17	503.16	953.47	0.00	2068.32	0.243	0.33	2.346	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	355.10	355.44	588.62	0.00	1839.07	0.193	0.24	2.440	A
2	691.32	691.81	294.24	0.00	2731.52	0.253	0.35	1.831	A
3	622.09	623.02	518.21	0.00	1862.79	0.334	0.52	2.995	A
4	410.83	411.19	779.53	0.00	2167.10	0.190	0.24	2.093	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	297.38	297.59	492.77	0.00	1887.43	0.158	0.19	2.275	A
2	578.94	579.25	246.35	0.00	2760.74	0.210	0.28	1.712	A
3	520.97	521.49	433.89	0.00	1905.73	0.273	0.39	2.681	A
4	344.05	344.27	652.55	0.00	2239.21	0.154	0.19	1.939	A

(Default Analysis Set) - Scenario 1 - 2014 Base + Committed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1 - 2014 Base + Committed, AM	Scenario 1 - 2014 Base + Committed	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			3.04	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.74	7.64	100.00	30.00	104.00	41.00	
2	5.66	10.75	86.00	29.00	104.00	44.00	
3	4.86	7.07	150.00	31.00	104.00	33.00	
4	4.70	9.97	68.00	31.00	104.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.505	2136.047
2		(calculated)	(calculated)	0.610	2911.062
3		(calculated)	(calculated)	0.509	2126.722
4		(calculated)	(calculated)	0.568	2609.785

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	541.00	100.000
2	ONE HOUR	✓	895.00	100.000
3	ONE HOUR	✓	755.00	100.000
4	ONE HOUR	✓	585.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	3.000	221.000	195.000	122.000
	2	146.000	1.000	390.000	358.000
	3	210.000	511.000	0.000	34.000
	4	132.000	407.000	46.000	0.000

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

		To			
		1	2	3	4
From	1	0.01	0.41	0.36	0.23
	2	0.16	0.00	0.44	0.40
	3	0.28	0.68	0.00	0.05
	4	0.23	0.70	0.08	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.000	1.006	1.008
	2	1.005	1.000	1.064	1.030
	3	1.003	1.047	1.000	1.143
	4	1.000	1.019	1.095	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.6	0.8
	2	0.5	0.0	6.4	3.0
	3	0.3	4.7	0.0	14.3
	4	0.0	1.9	9.5	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.37	3.60	0.59	A
2	0.37	2.23	0.61	A
3	0.47	3.97	0.91	A
4	0.31	2.58	0.46	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	407.29	406.10	724.52	0.00	1770.50	0.230	0.30	2.646	A
2	673.80	672.45	274.76	0.00	2743.41	0.246	0.34	1.808	A
3	568.40	566.62	473.26	0.00	1885.68	0.301	0.45	2.830	A
4	440.42	439.42	653.80	0.00	2238.50	0.197	0.25	2.040	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	486.35	485.94	866.85	0.00	1698.70	0.286	0.40	2.980	A
2	804.59	804.19	328.76	0.00	2710.46	0.297	0.44	1.964	A
3	678.73	678.10	566.04	0.00	1838.43	0.369	0.60	3.219	A
4	525.90	525.60	782.34	0.00	2165.50	0.243	0.33	2.239	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	595.65	594.89	1061.25	0.00	1600.62	0.372	0.59	3.592	A
2	985.41	984.73	402.48	0.00	2665.48	0.370	0.61	2.226	A
3	831.27	830.05	693.08	0.00	1773.72	0.469	0.91	3.956	A
4	644.10	643.56	957.71	0.00	2065.91	0.312	0.46	2.582	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	595.65	595.64	1062.47	0.00	1600.00	0.372	0.59	3.597	A
2	985.41	985.41	402.97	0.00	2665.18	0.370	0.61	2.229	A
3	831.27	831.26	693.64	0.00	1773.44	0.469	0.91	3.966	A
4	644.10	644.09	958.97	0.00	2065.19	0.312	0.46	2.583	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	486.35	487.10	868.74	0.00	1697.74	0.286	0.40	2.986	A
2	804.59	805.26	329.51	0.00	2710.00	0.297	0.44	1.968	A
3	678.73	679.93	566.91	0.00	1837.98	0.369	0.61	3.230	A
4	525.90	526.43	784.28	0.00	2164.40	0.243	0.33	2.242	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	407.29	407.71	727.18	0.00	1769.16	0.230	0.30	2.657	A
2	673.80	674.21	275.81	0.00	2742.77	0.246	0.34	1.809	A
3	568.40	569.05	474.62	0.00	1884.99	0.302	0.45	2.841	A
4	440.42	440.73	656.42	0.00	2237.01	0.197	0.25	2.044	A

(Default Analysis Set) - Scenario 1 - 2014 Base + Committed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 1 - 2014 Base + Committed, PM	Scenario 1 - 2014 Base + Committed	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			3.54	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.74	7.64	100.00	30.00	104.00	41.00	
2	5.66	10.75	86.00	29.00	104.00	44.00	
3	4.86	7.07	150.00	31.00	104.00	33.00	
4	4.70	9.97	68.00	31.00	104.00	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.505	2136.047
2		(calculated)	(calculated)	0.610	2911.062
3		(calculated)	(calculated)	0.509	2126.722
4		(calculated)	(calculated)	0.568	2609.785

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	460.00	100.000
2	ONE HOUR	✓	1154.00	100.000
3	ONE HOUR	✓	866.00	100.000
4	ONE HOUR	✓	631.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	2.000	173.000	158.000	127.000
	2	307.000	7.000	469.000	371.000
	3	321.000	503.000	0.000	42.000
	4	148.000	434.000	49.000	0.000

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

		To			
		1	2	3	4
From	1	0.00	0.38	0.34	0.28
	2	0.27	0.01	0.41	0.32
	3	0.37	0.58	0.00	0.05
	4	0.23	0.69	0.08	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.000	1.006	1.008
	2	1.005	1.000	1.064	1.030
	3	1.003	1.047	1.000	1.143
	4	1.000	1.019	1.095	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	0.0	0.6	0.8
	2	0.5	0.0	6.4	3.0
	3	0.3	4.7	0.0	14.3
	4	0.0	1.9	9.5	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.32	3.35	0.47	A
2	0.47	2.64	0.93	A
3	0.57	5.19	1.37	A
4	0.37	3.05	0.59	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	346.31	345.33	745.33	0.00	1760.00	0.197	0.25	2.554	A
2	868.79	866.89	252.26	0.00	2757.14	0.315	0.48	1.972	A
3	651.97	649.66	611.42	0.00	1815.31	0.359	0.58	3.187	A
4	475.05	473.88	855.54	0.00	2123.93	0.224	0.29	2.224	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	413.53	413.21	891.81	0.00	1686.10	0.245	0.33	2.840	A
2	1037.42	1036.79	301.83	0.00	2726.89	0.380	0.63	2.208	A
3	778.52	777.55	731.30	0.00	1754.25	0.444	0.82	3.809	A
4	567.26	566.85	1023.74	0.00	2028.41	0.280	0.39	2.512	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	506.47	505.89	1091.47	0.00	1585.37	0.319	0.47	3.347	A
2	1270.58	1269.41	369.52	0.00	2685.59	0.473	0.93	2.632	A
3	953.48	951.33	895.38	0.00	1670.69	0.571	1.36	5.161	A
4	694.74	693.98	1252.80	0.00	1898.33	0.366	0.59	3.047	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	506.47	506.46	1093.29	0.00	1584.45	0.320	0.47	3.352	A
2	1270.58	1270.57	369.94	0.00	2685.33	0.473	0.93	2.636	A
3	953.48	953.45	896.22	0.00	1670.26	0.571	1.37	5.194	A
4	694.74	694.74	1255.12	0.00	1897.01	0.366	0.59	3.053	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	413.53	414.10	894.52	0.00	1684.74	0.245	0.33	2.845	A
2	1037.42	1038.58	302.47	0.00	2726.50	0.381	0.64	2.213	A
3	778.52	780.65	732.62	0.00	1753.59	0.444	0.83	3.837	A
4	567.26	568.01	1027.19	0.00	2026.45	0.280	0.40	2.520	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	346.31	346.64	748.48	0.00	1758.42	0.197	0.25	2.562	A
2	868.79	869.43	253.19	0.00	2756.57	0.315	0.48	1.977	A
3	651.97	652.97	613.29	0.00	1814.36	0.359	0.58	3.208	A
4	475.05	475.46	859.37	0.00	2121.75	0.224	0.30	2.232	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: CTC Junc 7.arc8
Path: P:\data\W50---\W50827 - Highways Assessment, Selby District\Junction Analysis\Junction 7
Report generation date: 12/12/2014 10:50:35

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	Scenario 0 - 2014 Base							
Arm 1	0.41	1.79	0.27	A	0.43	1.79	0.29	A
Arm 2	0.25	3.20	0.18	A	0.24	3.25	0.18	A
Arm 3	0.64	3.85	0.38	A	0.51	3.27	0.33	A
Arm 4	0.50	2.74	0.30	A	0.80	3.07	0.44	A
Arm 5	0.15	2.81	0.12	A	0.11	3.12	0.10	A
	Scenario 0 - 2014 Base + Committed							
Arm 1	0.49	1.87	0.30	A	0.58	2.06	0.34	A
Arm 2	0.30	3.56	0.21	A	0.30	3.77	0.21	A
Arm 3	0.77	4.40	0.42	A	0.66	3.96	0.38	A
Arm 4	0.61	3.03	0.35	A	1.16	3.97	0.50	A
Arm 5	0.17	3.12	0.13	A	0.14	3.79	0.12	A

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

"D1 - Scenario 0 - 2014 Base, AM " model duration: 07:45 - 09:15
"D2 - Scenario 0 - 2014 Base, PM" model duration: 16:45 - 18:15
"D3 - Scenario 0 - 2014 Base + Committed, AM" model duration: 07:45 - 09:15
"D4 - Scenario 0 - 2014 Base + Committed, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.4.487 at 12/12/2014 10:50:33

File summary

Title	(untitled)
Location	
Site Number	
Date	17/11/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JGreen
Description	

Analysis Options

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

Units

Distance 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

Scenario 0 - 2014 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base, AM	Scenario 0 - 2014 Base	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	untitled	Roundabout	1,2,3,4,5	✓	✓	2.74	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A19 (North)	
2	2	M62 (East)	
3	3	A19 (South)	
4	4	M62 (West)	
5	5	Selby Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00
5	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.83	10.54	60.00	28.00	125.00	33.00	
2	6.48	6.48	0.00	60.00	114.00	23.00	
3	3.84	5.64	80.00	66.00	114.00	12.00	
4	6.22	6.78	12.00	59.00	125.00	21.00	
5	3.69	9.48	25.50	22.00	125.00	47.00	

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
1	0.00	0.00
2	0.00	112.00
3	0.00	115.00
4	0.00	108.00
5	0.00	113.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	1.282	3671.869
2		(calculated)	(calculated)	1.093	2702.521
3		(calculated)	(calculated)	1.039	2453.669
4		(calculated)	(calculated)	1.120	2797.819
5		(calculated)	(calculated)	1.024	2642.745

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	759.00	100.000
2	ONE HOUR	✓	253.00	100.000
3	ONE HOUR	✓	544.00	100.000
4	ONE HOUR	✓	593.00	100.000
5	ONE HOUR	✓	171.00	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	4.000	80.000	159.000	489.000	27.000
	2	128.000	0.000	90.000	0.000	35.000
	3	163.000	97.000	0.000	219.000	65.000
	4	392.000	0.000	155.000	10.000	36.000
	5	15.000	42.000	58.000	56.000	0.000

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

		To				
		1	2	3	4	5
From	1	0.01	0.11	0.21	0.64	0.04
	2	0.51	0.00	0.36	0.00	0.14
	3	0.30	0.18	0.00	0.40	0.12
	4	0.66	0.00	0.26	0.02	0.06
	5	0.09	0.25	0.34	0.33	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.231	1.060	1.119	1.125
	2	1.208	1.000	1.047	1.000	1.094
	3	1.019	1.155	1.000	1.058	1.102
	4	1.177	1.000	1.054	1.429	1.200
	5	1.154	1.167	1.055	1.037	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	23.1	6.0	11.9	12.5
	2	20.8	0.0	4.7	0.0	9.4
	3	1.9	15.5	0.0	5.8	10.2
	4	17.7	0.0	5.4	42.9	20.0
	5	15.4	16.7	5.5	3.7	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.27	1.79	0.41	A
2	0.18	3.20	0.25	A
3	0.38	3.85	0.64	A
4	0.30	2.74	0.50	A
5	0.12	2.81	0.15	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	571.41	570.47	313.90	0.00	3269.31	0.175	0.24	1.488	A
2	190.47	189.97	719.88	0.00	1915.71	0.099	0.12	2.357	A
3	409.55	408.36	562.80	0.00	1868.89	0.219	0.30	2.627	A
4	446.44	445.38	389.66	0.00	2361.42	0.189	0.27	2.153	A
5	128.74	128.43	712.63	0.00	1912.88	0.067	0.08	2.183	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	682.33	682.06	375.51	0.00	3190.30	0.214	0.30	1.601	A
2	227.44	227.27	860.82	0.00	1761.67	0.129	0.17	2.650	A
3	489.04	488.60	673.00	0.00	1754.38	0.279	0.41	3.034	A
4	533.09	532.76	466.18	0.00	2275.71	0.234	0.35	2.368	A
5	153.73	153.63	852.52	0.00	1769.60	0.087	0.10	2.411	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	835.67	835.23	459.74	0.00	3082.27	0.271	0.41	1.787	A
2	278.56	278.24	1054.10	0.00	1550.42	0.180	0.25	3.197	A
3	598.96	598.05	824.09	0.00	1597.39	0.375	0.64	3.840	A
4	652.91	652.32	570.67	0.00	2158.69	0.302	0.50	2.741	A
5	188.27	188.10	1043.73	0.00	1573.77	0.120	0.15	2.812	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	835.67	835.67	460.22	0.00	3081.66	0.271	0.41	1.788	A
2	278.56	278.56	1054.77	0.00	1549.69	0.180	0.25	3.199	A
3	598.96	598.95	824.66	0.00	1596.80	0.375	0.64	3.848	A
4	652.91	652.90	571.42	0.00	2157.85	0.303	0.50	2.742	A
5	188.27	188.27	1044.86	0.00	1572.61	0.120	0.15	2.814	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	682.33	682.77	376.25	0.00	3189.35	0.214	0.30	1.602	A
2	227.44	227.76	861.89	0.00	1760.50	0.129	0.17	2.655	A
3	489.04	489.94	673.91	0.00	1753.44	0.279	0.41	3.043	A
4	533.09	533.67	467.33	0.00	2274.43	0.234	0.35	2.373	A
5	153.73	153.90	854.26	0.00	1767.82	0.087	0.10	2.414	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	571.41	571.68	314.96	0.00	3267.95	0.175	0.24	1.489	A
2	190.47	190.64	721.63	0.00	1913.80	0.100	0.13	2.360	A
3	409.55	410.01	564.22	0.00	1867.41	0.219	0.30	2.637	A
4	446.44	446.78	391.12	0.00	2359.78	0.189	0.27	2.158	A
5	128.74	128.84	715.08	0.00	1910.37	0.067	0.08	2.187	A

Scenario 0 - 2014 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base, PM	Scenario 0 - 2014 Base	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	untitled	Roundabout	1,2,3,4,5	✓	✓	2.73	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A19 (North)	
2	2	M62 (East)	
3	3	A19 (South)	
4	4	M62 (West)	
5	5	Selby Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00
5	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.83	10.54	60.00	28.00	125.00	33.00	
2	6.48	6.48	0.00	60.00	114.00	23.00	
3	3.84	5.64	80.00	66.00	114.00	12.00	
4	6.22	6.78	12.00	59.00	125.00	21.00	
5	3.69	9.48	25.50	22.00	125.00	47.00	

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
1	0.00	0.00
2	0.00	112.00
3	0.00	115.00
4	0.00	108.00
5	0.00	113.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	1.282	3671.869
2		(calculated)	(calculated)	1.093	2702.521
3		(calculated)	(calculated)	1.039	2453.669
4		(calculated)	(calculated)	1.120	2797.819
5		(calculated)	(calculated)	1.024	2642.745

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	777.00	100.000
2	ONE HOUR	✓	241.00	100.000
3	ONE HOUR	✓	510.00	100.000
4	ONE HOUR	✓	860.00	100.000
5	ONE HOUR	✓	120.00	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	4.000	141.000	166.000	447.000	19.000
	2	111.000	1.000	99.000	0.000	30.000
	3	158.000	114.000	0.000	167.000	71.000
	4	515.000	0.000	252.000	12.000	81.000
	5	6.000	20.000	53.000	41.000	0.000

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

		To				
		1	2	3	4	5
From	1	0.01	0.18	0.21	0.58	0.02
	2	0.46	0.00	0.41	0.00	0.12
	3	0.31	0.22	0.00	0.33	0.14
	4	0.60	0.00	0.29	0.01	0.09
	5	0.05	0.17	0.44	0.34	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.085	1.031	1.054	1.188
	2	1.181	1.000	1.065	1.000	1.111
	3	1.006	1.018	1.000	1.050	1.044
	4	1.032	1.000	1.068	1.000	1.052
	5	1.200	1.111	1.019	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	8.5	3.1	5.4	18.8
	2	18.1	0.0	6.5	0.0	11.1
	3	0.6	1.8	0.0	5.0	4.4
	4	3.2	0.0	6.8	0.0	5.2
	5	20.0	11.1	1.9	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.29	1.79	0.43	A
2	0.18	3.25	0.24	A
3	0.33	3.27	0.51	A
4	0.44	3.07	0.80	A
5	0.10	3.12	0.11	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	584.97	584.02	370.23	0.00	3197.07	0.183	0.24	1.456	A
2	181.44	180.96	746.91	0.00	1886.18	0.096	0.12	2.367	A
3	383.95	382.94	499.70	0.00	1934.46	0.198	0.25	2.384	A
4	647.45	645.89	381.46	0.00	2370.60	0.273	0.39	2.176	A
5	90.34	90.12	876.40	0.00	1745.15	0.052	0.06	2.249	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	698.51	698.23	442.87	0.00	3103.91	0.225	0.31	1.581	A
2	216.65	216.49	893.12	0.00	1726.36	0.126	0.16	2.673	A
3	458.48	458.13	597.52	0.00	1832.81	0.250	0.34	2.692	A
4	773.12	772.56	456.34	0.00	2286.74	0.338	0.53	2.481	A
5	107.88	107.80	1048.34	0.00	1569.05	0.069	0.08	2.547	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	855.49	855.02	542.18	0.00	2976.56	0.287	0.43	1.793	A
2	265.35	265.03	1093.57	0.00	1507.28	0.176	0.24	3.249	A
3	561.52	560.86	731.64	0.00	1693.45	0.332	0.51	3.266	A
4	946.88	945.79	558.67	0.00	2172.13	0.436	0.80	3.061	A
5	132.12	131.97	1283.41	0.00	1328.29	0.099	0.11	3.112	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	855.49	855.49	542.80	0.00	2975.76	0.287	0.43	1.793	A
2	265.35	265.34	1094.41	0.00	1506.37	0.176	0.24	3.251	A
3	561.52	561.51	732.17	0.00	1692.90	0.332	0.51	3.270	A
4	946.88	946.87	559.31	0.00	2171.41	0.436	0.80	3.067	A
5	132.12	132.12	1284.88	0.00	1326.79	0.100	0.11	3.116	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	698.51	698.98	443.82	0.00	3102.70	0.225	0.31	1.585	A
2	216.65	216.96	894.42	0.00	1724.95	0.126	0.16	2.676	A
3	458.48	459.14	598.36	0.00	1831.94	0.250	0.34	2.698	A
4	773.12	774.20	457.32	0.00	2285.64	0.338	0.54	2.489	A
5	107.88	108.03	1050.58	0.00	1566.75	0.069	0.08	2.552	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	584.97	585.25	371.49	0.00	3195.46	0.183	0.24	1.457	A
2	181.44	181.60	748.80	0.00	1884.10	0.096	0.12	2.372	A
3	383.95	384.31	500.95	0.00	1933.15	0.199	0.26	2.391	A
4	647.45	648.02	382.80	0.00	2369.10	0.273	0.39	2.183	A
5	90.34	90.42	879.36	0.00	1742.11	0.052	0.06	2.254	A

Scenario 0 - 2014 Base + Committed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base + Committed, AM	Scenario 0 - 2014 Base + Committed	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	untitled	Roundabout	1,2,3,4,5	✓	✓	3.02	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A19 (North)	
2	2	M62 (East)	
3	3	A19 (South)	
4	4	M62 (West)	
5	5	Selby Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00
5	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.83	10.54	60.00	28.00	125.00	33.00	
2	6.48	6.48	0.00	60.00	114.00	23.00	
3	3.84	5.64	80.00	66.00	114.00	12.00	
4	6.22	6.78	12.00	59.00	125.00	21.00	
5	3.69	9.48	25.50	22.00	125.00	47.00	

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
1	0.00	0.00
2	0.00	112.00
3	0.00	115.00
4	0.00	108.00
5	0.00	113.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	1.282	3671.869
2		(calculated)	(calculated)	1.093	2702.521
3		(calculated)	(calculated)	1.039	2453.669
4		(calculated)	(calculated)	1.120	2797.819
5		(calculated)	(calculated)	1.024	2642.745

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	851.00	100.000
2	ONE HOUR	✓	275.00	100.000
3	ONE HOUR	✓	572.00	100.000
4	ONE HOUR	✓	660.00	100.000
5	ONE HOUR	✓	174.00	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	4.000	90.000	178.000	549.000	30.000
	2	150.000	0.000	90.000	0.000	35.000
	3	191.000	97.000	0.000	219.000	65.000
	4	459.000	0.000	155.000	10.000	36.000
	5	18.000	42.000	58.000	56.000	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.11	0.21	0.65	0.04
	2	0.55	0.00	0.33	0.00	0.13
	3	0.33	0.17	0.00	0.38	0.11
	4	0.70	0.00	0.23	0.02	0.05
	5	0.10	0.24	0.33	0.32	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.231	1.060	1.119	1.125
	2	1.208	1.000	1.047	1.000	1.094
	3	1.019	1.155	1.000	1.058	1.102
	4	1.177	1.000	1.054	1.429	1.200
	5	1.154	1.167	1.055	1.037	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	23.1	6.0	11.9	12.5
	2	20.8	0.0	4.7	0.0	9.4
	3	1.9	15.5	0.0	5.8	10.2
	4	17.7	0.0	5.4	42.9	20.0
	5	15.4	16.7	5.5	3.7	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.30	1.87	0.49	A
2	0.21	3.56	0.30	A
3	0.42	4.40	0.77	A
4	0.35	3.03	0.61	A
5	0.13	3.12	0.17	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	640.68	639.59	313.85	0.00	3269.37	0.196	0.27	1.528	A
2	207.03	206.46	781.46	0.00	1848.40	0.112	0.14	2.490	A
3	430.63	429.30	626.62	0.00	1802.57	0.239	0.33	2.788	A
4	496.88	495.63	429.38	0.00	2316.93	0.214	0.31	2.272	A
5	131.00	130.66	800.37	0.00	1823.01	0.072	0.08	2.305	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	765.03	764.71	375.47	0.00	3190.35	0.240	0.35	1.656	A
2	247.22	247.01	934.47	0.00	1681.17	0.147	0.20	2.850	A
3	514.22	513.67	749.35	0.00	1675.05	0.307	0.47	3.297	A
4	593.33	592.91	513.73	0.00	2222.47	0.267	0.42	2.540	A
5	156.42	156.31	957.53	0.00	1662.05	0.094	0.11	2.590	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	936.97	936.43	459.65	0.00	3082.40	0.304	0.49	1.872	A
2	302.78	302.37	1144.25	0.00	1451.89	0.209	0.30	3.557	A
3	629.78	628.61	917.53	0.00	1500.31	0.420	0.76	4.391	A
4	726.67	725.91	628.76	0.00	2093.63	0.347	0.61	3.024	A
5	191.58	191.37	1172.15	0.00	1442.24	0.133	0.17	3.118	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	936.97	936.97	460.22	0.00	3081.66	0.304	0.49	1.872	A
2	302.78	302.78	1145.06	0.00	1451.01	0.209	0.30	3.560	A
3	629.78	629.77	918.25	0.00	1499.56	0.420	0.77	4.405	A
4	726.67	726.67	629.77	0.00	2092.50	0.347	0.61	3.029	A
5	191.58	191.58	1173.67	0.00	1440.68	0.133	0.17	3.122	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	765.03	765.57	376.35	0.00	3189.22	0.240	0.35	1.657	A
2	247.22	247.63	935.74	0.00	1679.78	0.147	0.20	2.855	A
3	514.22	515.39	750.47	0.00	1673.89	0.307	0.47	3.310	A
4	593.33	594.08	515.24	0.00	2220.78	0.267	0.42	2.545	A
5	156.42	156.63	959.84	0.00	1659.68	0.094	0.11	2.597	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	640.68	641.00	315.00	0.00	3267.91	0.196	0.27	1.531	A
2	207.03	207.25	783.44	0.00	1846.25	0.112	0.14	2.496	A
3	430.63	431.19	628.28	0.00	1800.84	0.239	0.34	2.798	A
4	496.88	497.30	431.13	0.00	2314.97	0.215	0.32	2.277	A
5	131.00	131.11	803.34	0.00	1819.98	0.072	0.08	2.309	A

Scenario 0 - 2014 Base + Committed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base + Committed, PM	Scenario 0 - 2014 Base + Committed	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	untitled	Roundabout	1,2,3,4,5	✓	✓	3.32	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A19 (North)	
2	2	M62 (East)	
3	3	A19 (South)	
4	4	M62 (West)	
5	5	Selby Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00
5	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	4.83	10.54	60.00	28.00	125.00	33.00	
2	6.48	6.48	0.00	60.00	114.00	23.00	
3	3.84	5.64	80.00	66.00	114.00	12.00	
4	6.22	6.78	12.00	59.00	125.00	21.00	
5	3.69	9.48	25.50	22.00	125.00	47.00	

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
1	0.00	0.00
2	0.00	112.00
3	0.00	115.00
4	0.00	108.00
5	0.00	113.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	1.282	3671.869
2		(calculated)	(calculated)	1.093	2702.521
3		(calculated)	(calculated)	1.039	2453.669
4		(calculated)	(calculated)	1.120	2797.819
5		(calculated)	(calculated)	1.024	2642.745

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	917.00	100.000
2	ONE HOUR	✓	263.00	100.000
3	ONE HOUR	✓	544.00	100.000
4	ONE HOUR	✓	962.00	100.000
5	ONE HOUR	✓	121.00	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	5.000	166.000	196.000	528.000	22.000
	2	133.000	1.000	99.000	0.000	30.000
	3	189.000	114.000	0.000	167.000	74.000
	4	617.000	0.000	252.000	12.000	81.000
	5	7.000	20.000	53.000	41.000	0.000

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

		To				
		1	2	3	4	5
From	1	0.01	0.18	0.21	0.58	0.02
	2	0.51	0.00	0.38	0.00	0.11
	3	0.35	0.21	0.00	0.31	0.14
	4	0.64	0.00	0.26	0.01	0.08
	5	0.06	0.17	0.44	0.34	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.231	1.060	1.119	1.125
	2	1.208	1.000	1.047	1.000	1.094
	3	1.019	1.155	1.000	1.058	1.102
	4	1.177	1.000	1.054	1.429	1.200
	5	1.154	1.167	1.055	1.037	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	23.1	6.0	11.9	12.5
	2	20.8	0.0	4.7	0.0	9.4
	3	1.9	15.5	0.0	5.8	10.2
	4	17.7	0.0	5.4	42.9	20.0
	5	15.4	16.7	5.5	3.7	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.34	2.06	0.58	A
2	0.21	3.77	0.30	A
3	0.38	3.96	0.66	A
4	0.50	3.97	1.16	A
5	0.12	3.79	0.14	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	690.37	689.13	370.09	0.00	3197.25	0.216	0.31	1.612	A
2	198.00	197.44	833.14	0.00	1791.93	0.111	0.14	2.548	A
3	409.55	408.34	579.99	0.00	1851.02	0.221	0.30	2.663	A
4	724.24	722.17	426.40	0.00	2320.27	0.312	0.52	2.579	A
5	91.10	90.84	993.16	0.00	1625.56	0.056	0.06	2.512	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	824.36	823.98	442.78	0.00	3104.03	0.266	0.41	1.773	A
2	236.43	236.22	996.35	0.00	1613.54	0.147	0.19	2.949	A
3	489.04	488.58	693.60	0.00	1732.98	0.282	0.42	3.091	A
4	864.82	863.99	510.16	0.00	2226.47	0.388	0.72	3.027	A
5	108.78	108.68	1188.23	0.00	1425.78	0.076	0.09	2.926	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1009.64	1008.96	541.94	0.00	2976.87	0.339	0.57	2.055	A
2	289.57	289.14	1219.84	0.00	1369.27	0.211	0.30	3.758	A
3	598.96	598.01	849.22	0.00	1571.28	0.381	0.65	3.949	A
4	1059.18	1057.45	624.44	0.00	2098.47	0.505	1.16	3.958	A
5	133.22	133.02	1454.31	0.00	1153.25	0.116	0.14	3.778	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1009.64	1009.63	542.79	0.00	2975.77	0.339	0.58	2.056	A
2	289.57	289.56	1221.02	0.00	1367.98	0.212	0.30	3.765	A
3	598.96	598.94	849.98	0.00	1570.49	0.381	0.66	3.958	A
4	1059.18	1059.16	625.37	0.00	2097.43	0.505	1.16	3.974	A
5	133.22	133.22	1456.62	0.00	1150.89	0.116	0.14	3.787	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	824.36	825.04	444.06	0.00	3102.39	0.266	0.41	1.778	A
2	236.43	236.86	998.15	0.00	1611.57	0.147	0.19	2.955	A
3	489.04	489.98	694.78	0.00	1731.75	0.282	0.42	3.098	A
4	864.82	866.54	511.56	0.00	2224.90	0.389	0.73	3.041	A
5	108.78	108.98	1191.67	0.00	1422.25	0.076	0.09	2.938	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	690.37	690.75	371.58	0.00	3195.34	0.216	0.31	1.616	A
2	198.00	198.22	835.54	0.00	1789.30	0.111	0.14	2.552	A
3	409.55	410.02	581.62	0.00	1849.33	0.221	0.31	2.674	A
4	724.24	725.08	428.09	0.00	2318.37	0.312	0.52	2.592	A
5	91.10	91.20	997.17	0.00	1621.46	0.056	0.06	2.519	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: CTC Junc 9.arc8
Path: P:\data\W50---\W50827 - Highways Assessment, Selby District\Junction Analysis\Junction 9
Report generation date: 04/12/2014 10:52:21

File summary

Title	(untitled)
Location	
Site Number	
Date	11/11/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JGreen
Description	

Analysis Options

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

Units

Distance 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

(Default Analysis Set) - Scenario 0, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0, AM	Scenario 0	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			3.29	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.66	7.95	17.07	32.00	56.00	26.00	
2	4.18	7.80	25.45	59.00	56.00	21.00	
3	4.74	7.94	14.50	31.00	56.00	12.00	
4	3.79	8.60	23.86	41.00	56.00	33.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.622	1888.382
2		(calculated)	(calculated)	0.677	2148.707
3		(calculated)	(calculated)	0.684	2164.480
4		(calculated)	(calculated)	0.649	2064.068

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	225.00	100.000
2	ONE HOUR	✓	516.00	100.000
3	ONE HOUR	✓	673.00	100.000
4	ONE HOUR	✓	373.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	1.000	128.000	77.000	19.000
	2	89.000	2.000	246.000	179.000
	3	153.000	477.000	2.000	41.000
	4	67.000	233.000	70.000	3.000

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

		To			
		1	2	3	4
From	1	0.00	0.57	0.34	0.08
	2	0.17	0.00	0.48	0.35
	3	0.23	0.71	0.00	0.06
	4	0.18	0.62	0.19	0.01

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.085	1.069	1.118
	2	1.271	1.000	1.281	1.023
	3	1.013	1.245	1.000	1.051
	4	1.000	1.036	1.045	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	8.5	6.9	11.8
	2	27.1	0.0	28.1	2.3
	3	1.3	24.5	0.0	5.1
	4	0.0	3.6	4.5	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.18	3.53	0.24	A
2	0.28	2.91	0.46	A
3	0.38	3.50	0.72	A
4	0.27	3.26	0.37	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	169.39	168.85	590.71	0.00	1521.10	0.111	0.14	2.878	A
2	388.47	387.38	129.10	0.00	2061.28	0.188	0.27	2.526	A
3	506.67	505.10	219.96	0.00	2013.92	0.252	0.39	2.789	A
4	280.81	280.01	543.40	0.00	1711.61	0.164	0.20	2.590	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	202.27	202.11	706.95	0.00	1448.83	0.140	0.17	3.123	A
2	463.87	463.59	154.51	0.00	2044.08	0.227	0.34	2.677	A
3	605.01	604.54	263.23	0.00	1984.30	0.305	0.51	3.053	A
4	335.32	335.07	650.36	0.00	1642.24	0.204	0.26	2.838	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	247.73	247.46	865.56	0.00	1350.21	0.183	0.24	3.531	A
2	568.13	567.67	189.17	0.00	2020.60	0.281	0.46	2.912	A
3	740.99	740.16	322.33	0.00	1943.85	0.381	0.72	3.498	A
4	410.68	410.25	796.29	0.00	1547.59	0.265	0.37	3.262	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	247.73	247.73	866.49	0.00	1349.63	0.184	0.24	3.533	A
2	568.13	568.12	189.37	0.00	2020.46	0.281	0.46	2.912	A
3	740.99	740.98	322.60	0.00	1943.67	0.381	0.72	3.501	A
4	410.68	410.68	797.13	0.00	1547.04	0.265	0.37	3.264	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	202.27	202.54	708.42	0.00	1447.91	0.140	0.18	3.129	A
2	463.87	464.32	154.82	0.00	2043.86	0.227	0.35	2.681	A
3	605.01	605.82	263.66	0.00	1984.01	0.305	0.52	3.059	A
4	335.32	335.74	651.70	0.00	1641.37	0.204	0.27	2.842	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	169.39	169.55	593.04	0.00	1519.65	0.111	0.14	2.884	A
2	388.47	388.76	129.61	0.00	2060.94	0.188	0.27	2.532	A
3	506.67	507.15	220.75	0.00	2013.38	0.252	0.40	2.799	A
4	280.81	281.06	545.57	0.00	1710.21	0.164	0.20	2.598	A

(Default Analysis Set) - Scenario 0, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0, PM	Scenario 0	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			3.24	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	(untitled)	
2	2	(untitled)	
3	3	(untitled)	
4	4	(untitled)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.66	7.95	17.07	32.00	56.00	26.00	
2	4.18	7.80	25.45	59.00	56.00	21.00	
3	4.74	7.94	14.50	31.00	56.00	12.00	
4	3.79	8.60	23.86	41.00	56.00	33.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.622	1888.382
2		(calculated)	(calculated)	0.677	2148.707
3		(calculated)	(calculated)	0.684	2164.480
4		(calculated)	(calculated)	0.649	2064.068

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	280.00	100.000
2	ONE HOUR	✓	838.00	100.000
3	ONE HOUR	✓	436.00	100.000
4	ONE HOUR	✓	271.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	6.000	82.000	145.000	47.000
	2	138.000	5.000	426.000	269.000
	3	92.000	263.000	0.000	81.000
	4	28.000	189.000	50.000	4.000

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

		To			
		1	2	3	4
From	1	0.02	0.29	0.52	0.17
	2	0.16	0.01	0.51	0.32
	3	0.21	0.60	0.00	0.19
	4	0.10	0.70	0.18	0.01

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.051	1.036	1.000
	2	1.030	1.000	1.084	1.015
	3	1.022	1.174	1.000	1.000
	4	1.037	1.022	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	5.1	3.6	0.0
	2	3.0	0.0	8.4	1.5
	3	2.2	17.4	0.0	0.0
	4	3.7	2.2	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.20	3.02	0.26	A
2	0.47	3.64	0.93	A
3	0.27	2.98	0.40	A
4	0.18	2.61	0.22	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	210.80	210.20	383.69	0.00	1649.82	0.128	0.15	2.582	A
2	630.89	628.99	189.19	0.00	2020.59	0.312	0.48	2.716	A
3	328.24	327.34	352.03	0.00	1923.52	0.171	0.23	2.488	A
4	204.02	203.51	378.36	0.00	1818.66	0.112	0.13	2.271	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	251.71	251.55	459.10	0.00	1602.93	0.157	0.19	2.752	A
2	753.34	752.71	226.40	0.00	1995.39	0.378	0.63	3.044	A
3	391.96	391.70	421.28	0.00	1876.13	0.209	0.29	2.676	A
4	243.62	243.49	452.76	0.00	1770.40	0.138	0.16	2.402	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	308.29	308.02	562.17	0.00	1538.85	0.200	0.26	3.022	A
2	922.66	921.48	277.23	0.00	1960.97	0.471	0.93	3.638	A
3	480.04	479.62	515.75	0.00	1811.46	0.265	0.40	2.983	A
4	298.38	298.16	554.36	0.00	1704.50	0.175	0.22	2.608	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	308.29	308.28	562.62	0.00	1538.57	0.200	0.26	3.022	A
2	922.66	922.64	277.46	0.00	1960.81	0.471	0.93	3.645	A
3	480.04	480.04	516.37	0.00	1811.03	0.265	0.40	2.984	A
4	298.38	298.37	554.91	0.00	1704.15	0.175	0.22	2.609	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	251.71	251.97	459.83	0.00	1602.48	0.157	0.19	2.754	A
2	753.34	754.50	226.77	0.00	1995.14	0.378	0.64	3.055	A
3	391.96	392.37	422.24	0.00	1875.46	0.209	0.29	2.681	A
4	243.62	243.83	453.63	0.00	1769.84	0.138	0.16	2.403	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	210.80	210.96	384.99	0.00	1649.01	0.128	0.15	2.588	A
2	630.89	631.54	189.86	0.00	2020.13	0.312	0.48	2.728	A
3	328.24	328.50	353.44	0.00	1922.56	0.171	0.23	2.492	A
4	204.02	204.16	379.76	0.00	1817.75	0.112	0.13	2.273	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: CTC Junc 9.arc8
Path: P:\data\W50---\W50827 - Highways Assessment, Selby District\Junction Analysis\Junction 9
Report generation date: 11/12/2014 17:51:15

File summary

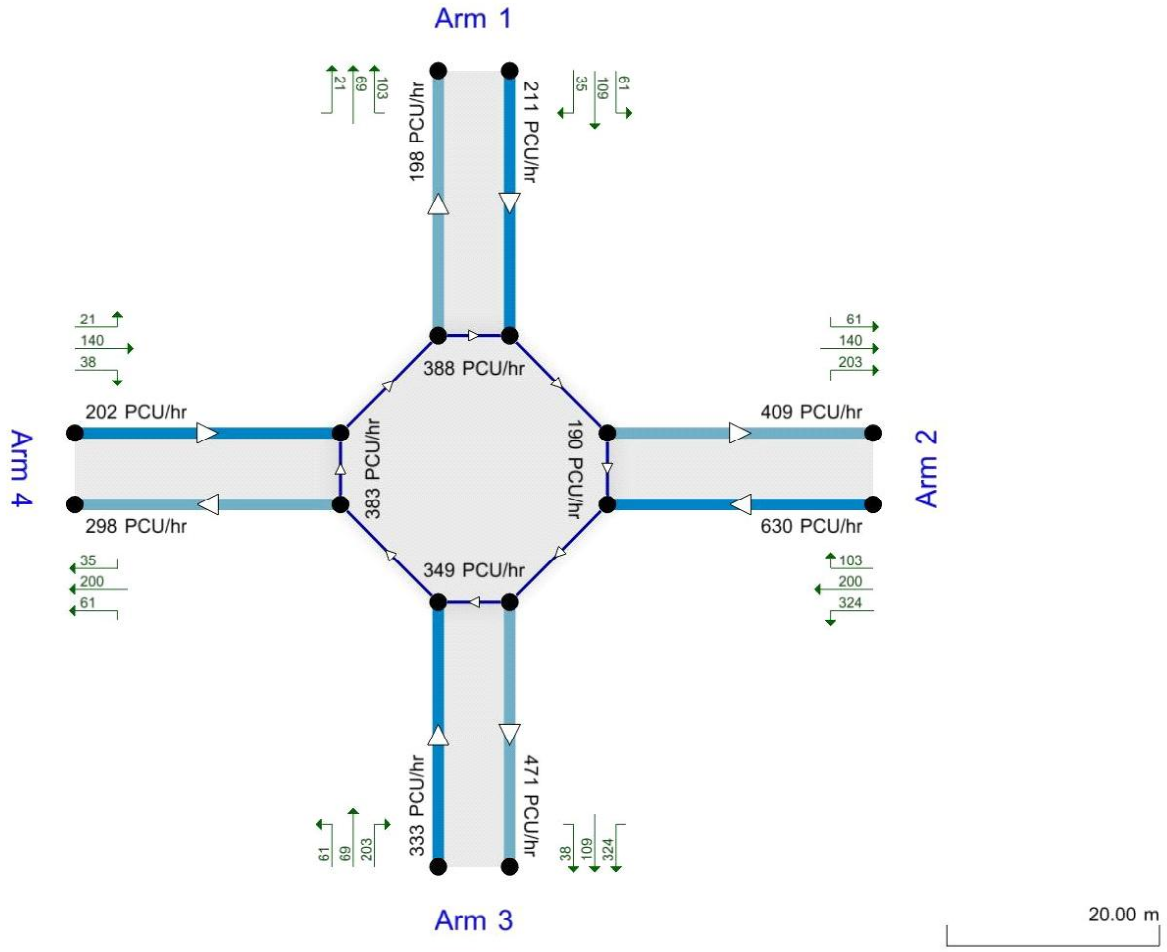
Title	(untitled)
Location	
Site Number	
Date	11/11/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JGreen
Description	

Analysis Options

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

Units

Distance 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



Showing modelled flow through junction (PCU/hr).
Time Segment: (07:45-08:00)
Showing Analysis Set "A1 "; Demand Set "D1 - Scenario 0 - 2014 Base, AM "

The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - Scenario 0 - 2014 Base, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base, AM	Scenario 0 - 2014 Base	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			3.29	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A162 (north)	
2	2	B1222 (east)	
3	3	A162 (south)	
4	4	B1222 (west)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.66	7.95	17.07	32.00	56.00	26.00	
2	4.18	7.80	25.45	59.00	56.00	21.00	
3	4.74	7.94	14.50	31.00	56.00	12.00	
4	3.79	8.60	23.86	41.00	56.00	33.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.622	1888.382
2		(calculated)	(calculated)	0.677	2148.707
3		(calculated)	(calculated)	0.684	2164.480
4		(calculated)	(calculated)	0.649	2064.068

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	225.00	100.000
2	ONE HOUR	✓	516.00	100.000
3	ONE HOUR	✓	673.00	100.000
4	ONE HOUR	✓	373.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	1.000	128.000	77.000	19.000
	2	89.000	2.000	246.000	179.000
	3	153.000	477.000	2.000	41.000
	4	67.000	233.000	70.000	3.000

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

		To			
		1	2	3	4
From	1	0.00	0.57	0.34	0.08
	2	0.17	0.00	0.48	0.35
	3	0.23	0.71	0.00	0.06
	4	0.18	0.62	0.19	0.01

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.085	1.069	1.118
	2	1.271	1.000	1.281	1.023
	3	1.013	1.245	1.000	1.051
	4	1.000	1.036	1.045	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	8.5	6.9	11.8
	2	27.1	0.0	28.1	2.3
	3	1.3	24.5	0.0	5.1
	4	0.0	3.6	4.5	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.18	3.53	0.24	A
2	0.28	2.91	0.46	A
3	0.38	3.50	0.72	A
4	0.27	3.26	0.37	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	169.39	168.85	590.71	0.00	1521.10	0.111	0.14	2.878	A
2	388.47	387.38	129.10	0.00	2061.28	0.188	0.27	2.526	A
3	506.67	505.10	219.96	0.00	2013.92	0.252	0.39	2.789	A
4	280.81	280.01	543.40	0.00	1711.61	0.164	0.20	2.590	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	202.27	202.11	706.95	0.00	1448.83	0.140	0.17	3.123	A
2	463.87	463.59	154.51	0.00	2044.08	0.227	0.34	2.677	A
3	605.01	604.54	263.23	0.00	1984.30	0.305	0.51	3.053	A
4	335.32	335.07	650.36	0.00	1642.24	0.204	0.26	2.838	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	247.73	247.46	865.56	0.00	1350.21	0.183	0.24	3.531	A
2	568.13	567.67	189.17	0.00	2020.60	0.281	0.46	2.912	A
3	740.99	740.16	322.33	0.00	1943.85	0.381	0.72	3.498	A
4	410.68	410.25	796.29	0.00	1547.59	0.265	0.37	3.262	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	247.73	247.73	866.49	0.00	1349.63	0.184	0.24	3.533	A
2	568.13	568.12	189.37	0.00	2020.46	0.281	0.46	2.912	A
3	740.99	740.98	322.60	0.00	1943.67	0.381	0.72	3.501	A
4	410.68	410.68	797.13	0.00	1547.04	0.265	0.37	3.264	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	202.27	202.54	708.42	0.00	1447.91	0.140	0.18	3.129	A
2	463.87	464.32	154.82	0.00	2043.86	0.227	0.35	2.681	A
3	605.01	605.82	263.66	0.00	1984.01	0.305	0.52	3.059	A
4	335.32	335.74	651.70	0.00	1641.37	0.204	0.27	2.842	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	169.39	169.55	593.04	0.00	1519.65	0.111	0.14	2.884	A
2	388.47	388.76	129.61	0.00	2060.94	0.188	0.27	2.532	A
3	506.67	507.15	220.75	0.00	2013.38	0.252	0.40	2.799	A
4	280.81	281.06	545.57	0.00	1710.21	0.164	0.20	2.598	A

(Default Analysis Set) - Scenario 0 - 2014 Base, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base, PM	Scenario 0 - 2014 Base	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			3.24	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A162 (north)	
2	2	B1222 (east)	
3	3	A162 (south)	
4	4	B1222 (west)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.66	7.95	17.07	32.00	56.00	26.00	
2	4.18	7.80	25.45	59.00	56.00	21.00	
3	4.74	7.94	14.50	31.00	56.00	12.00	
4	3.79	8.60	23.86	41.00	56.00	33.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.622	1888.382
2		(calculated)	(calculated)	0.677	2148.707
3		(calculated)	(calculated)	0.684	2164.480
4		(calculated)	(calculated)	0.649	2064.068

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	280.00	100.000
2	ONE HOUR	✓	838.00	100.000
3	ONE HOUR	✓	436.00	100.000
4	ONE HOUR	✓	271.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	6.000	82.000	145.000	47.000
	2	138.000	5.000	426.000	269.000
	3	92.000	263.000	0.000	81.000
	4	28.000	189.000	50.000	4.000

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

		To			
		1	2	3	4
From	1	0.02	0.29	0.52	0.17
	2	0.16	0.01	0.51	0.32
	3	0.21	0.60	0.00	0.19
	4	0.10	0.70	0.18	0.01

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.051	1.036	1.000
	2	1.030	1.000	1.084	1.015
	3	1.022	1.174	1.000	1.000
	4	1.037	1.022	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	5.1	3.6	0.0
	2	3.0	0.0	8.4	1.5
	3	2.2	17.4	0.0	0.0
	4	3.7	2.2	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.20	3.02	0.26	A
2	0.47	3.64	0.93	A
3	0.27	2.98	0.40	A
4	0.18	2.61	0.22	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	210.80	210.20	383.69	0.00	1649.82	0.128	0.15	2.582	A
2	630.89	628.99	189.19	0.00	2020.59	0.312	0.48	2.716	A
3	328.24	327.34	352.03	0.00	1923.52	0.171	0.23	2.488	A
4	204.02	203.51	378.36	0.00	1818.66	0.112	0.13	2.271	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	251.71	251.55	459.10	0.00	1602.93	0.157	0.19	2.752	A
2	753.34	752.71	226.40	0.00	1995.39	0.378	0.63	3.044	A
3	391.96	391.70	421.28	0.00	1876.13	0.209	0.29	2.676	A
4	243.62	243.49	452.76	0.00	1770.40	0.138	0.16	2.402	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	308.29	308.02	562.17	0.00	1538.85	0.200	0.26	3.022	A
2	922.66	921.48	277.23	0.00	1960.97	0.471	0.93	3.638	A
3	480.04	479.62	515.75	0.00	1811.46	0.265	0.40	2.983	A
4	298.38	298.16	554.36	0.00	1704.50	0.175	0.22	2.608	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	308.29	308.28	562.62	0.00	1538.57	0.200	0.26	3.022	A
2	922.66	922.64	277.46	0.00	1960.81	0.471	0.93	3.645	A
3	480.04	480.04	516.37	0.00	1811.03	0.265	0.40	2.984	A
4	298.38	298.37	554.91	0.00	1704.15	0.175	0.22	2.609	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	251.71	251.97	459.83	0.00	1602.48	0.157	0.19	2.754	A
2	753.34	754.50	226.77	0.00	1995.14	0.378	0.64	3.055	A
3	391.96	392.37	422.24	0.00	1875.46	0.209	0.29	2.681	A
4	243.62	243.83	453.63	0.00	1769.84	0.138	0.16	2.403	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	210.80	210.96	384.99	0.00	1649.01	0.128	0.15	2.588	A
2	630.89	631.54	189.86	0.00	2020.13	0.312	0.48	2.728	A
3	328.24	328.50	353.44	0.00	1922.56	0.171	0.23	2.492	A
4	204.02	204.16	379.76	0.00	1817.75	0.112	0.13	2.273	A

(Default Analysis Set) - Scenario 0 - 2014 Base + Committed, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base + Committed, AM	Scenario 0 - 2014 Base + Committed	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			4.05	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A162 (north)	
2	2	B1222 (east)	
3	3	A162 (south)	
4	4	B1222 (west)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.66	7.95	17.07	32.00	56.00	26.00	
2	4.18	7.80	25.45	59.00	56.00	21.00	
3	4.74	7.94	14.50	31.00	56.00	12.00	
4	3.79	8.60	23.86	41.00	56.00	33.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.622	1888.382
2		(calculated)	(calculated)	0.677	2148.707
3		(calculated)	(calculated)	0.684	2164.480
4		(calculated)	(calculated)	0.649	2064.068

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	252.00	100.000
2	ONE HOUR	✓	609.00	100.000
3	ONE HOUR	✓	782.00	100.000
4	ONE HOUR	✓	621.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	1.000	140.000	78.000	33.000
	2	93.000	2.000	283.000	231.000
	3	153.000	555.000	2.000	72.000
	4	106.000	371.000	141.000	3.000

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

		To			
		1	2	3	4
From	1	0.00	0.56	0.31	0.13
	2	0.15	0.00	0.46	0.38
	3	0.20	0.71	0.00	0.09
	4	0.17	0.60	0.23	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.085	1.069	1.118
	2	1.271	1.000	1.281	1.023
	3	1.013	1.245	1.000	1.051
	4	1.000	1.036	1.045	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	8.5	6.9	11.8
	2	27.1	0.0	28.1	2.3
	3	1.3	24.5	0.0	5.1
	4	0.0	3.6	4.5	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.24	4.45	0.34	A
2	0.34	3.27	0.61	A
3	0.46	4.10	0.98	A
4	0.46	4.61	0.87	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	189.72	189.03	805.83	0.00	1387.35	0.137	0.17	3.254	A
2	458.49	457.12	193.56	0.00	2017.63	0.227	0.34	2.689	A
3	588.73	586.75	272.45	0.00	1977.99	0.298	0.49	3.028	A
4	467.52	465.93	604.79	0.00	1671.80	0.280	0.40	3.075	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	226.54	226.31	964.52	0.00	1288.68	0.176	0.23	3.672	A
2	547.48	547.08	231.69	0.00	1991.81	0.275	0.44	2.907	A
3	703.00	702.33	326.08	0.00	1941.28	0.362	0.66	3.403	A
4	558.27	557.65	723.91	0.00	1594.53	0.350	0.55	3.579	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	277.46	277.01	1180.57	0.00	1154.35	0.240	0.34	4.445	A
2	670.52	669.86	283.57	0.00	1956.67	0.343	0.61	3.262	A
3	861.00	859.76	399.25	0.00	1891.20	0.455	0.97	4.085	A
4	683.73	682.47	886.19	0.00	1489.28	0.459	0.87	4.595	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	277.46	277.45	1182.47	0.00	1153.17	0.241	0.34	4.455	A
2	670.52	670.51	284.06	0.00	1956.34	0.343	0.61	3.266	A
3	861.00	860.98	399.67	0.00	1890.92	0.455	0.98	4.095	A
4	683.73	683.72	887.41	0.00	1488.49	0.459	0.87	4.613	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	226.54	226.98	967.41	0.00	1286.88	0.176	0.23	3.684	A
2	547.48	548.13	232.42	0.00	1991.31	0.275	0.44	2.913	A
3	703.00	704.23	326.74	0.00	1940.83	0.362	0.67	3.414	A
4	558.27	559.52	725.79	0.00	1593.31	0.350	0.56	3.598	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	189.72	189.96	809.57	0.00	1385.02	0.137	0.17	3.264	A
2	458.49	458.89	194.49	0.00	2017.00	0.227	0.34	2.696	A
3	588.73	589.41	273.53	0.00	1977.25	0.298	0.50	3.042	A
4	467.52	468.15	607.48	0.00	1670.05	0.280	0.40	3.092	A

(Default Analysis Set) - Scenario 0 - 2014 Base + Committed, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base + Committed, PM	Scenario 0 - 2014 Base + Committed	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			4.15	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A162 (north)	
2	2	B1222 (east)	
3	3	A162 (south)	
4	4	B1222 (west)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

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	3.66	7.95	17.07	32.00	56.00	26.00	
2	4.18	7.80	25.45	59.00	56.00	21.00	
3	4.74	7.94	14.50	31.00	56.00	12.00	
4	3.79	8.60	23.86	41.00	56.00	33.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.622	1888.382
2		(calculated)	(calculated)	0.677	2148.707
3		(calculated)	(calculated)	0.684	2164.480
4		(calculated)	(calculated)	0.649	2064.068

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	326.00	100.000
2	ONE HOUR	✓	1055.00	100.000
3	ONE HOUR	✓	528.00	100.000
4	ONE HOUR	✓	398.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	6.000	93.000	147.000	80.000
	2	165.000	5.000	483.000	402.000
	3	92.000	280.000	0.000	156.000
	4	51.000	248.000	95.000	4.000

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

		To			
		1	2	3	4
From	1	0.02	0.29	0.45	0.25
	2	0.16	0.00	0.46	0.38
	3	0.17	0.53	0.00	0.30
	4	0.13	0.62	0.24	0.01

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.051	1.036	1.000
	2	1.030	1.000	1.084	1.015
	3	1.022	1.174	1.000	1.000
	4	1.037	1.022	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	5.1	3.6	0.0
	2	3.0	0.0	8.4	1.5
	3	2.2	17.4	0.0	0.0
	4	3.7	2.2	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.25	3.38	0.34	A
2	0.61	5.10	1.63	A
3	0.35	3.62	0.58	A
4	0.26	2.97	0.36	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	245.43	244.68	474.44	0.00	1593.39	0.154	0.19	2.749	A
2	794.26	791.47	249.21	0.00	1979.94	0.401	0.70	3.168	A
3	397.51	396.30	496.67	0.00	1824.52	0.218	0.30	2.744	A
4	299.64	298.82	411.25	0.00	1797.33	0.167	0.20	2.445	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	293.07	292.85	567.74	0.00	1535.39	0.191	0.24	2.985	A
2	948.42	947.26	298.25	0.00	1946.74	0.487	0.99	3.771	A
3	474.66	474.27	594.44	0.00	1757.60	0.270	0.40	3.057	A
4	357.79	357.56	492.17	0.00	1744.84	0.205	0.26	2.642	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	358.93	358.56	695.11	0.00	1456.19	0.246	0.34	3.379	A
2	1161.58	1159.04	365.17	0.00	1901.41	0.611	1.62	5.064	A
3	581.34	580.62	727.40	0.00	1666.59	0.349	0.58	3.611	A
4	438.21	437.81	602.44	0.00	1673.32	0.262	0.36	2.967	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	358.93	358.93	695.84	0.00	1455.74	0.247	0.34	3.381	A
2	1161.58	1161.53	365.54	0.00	1901.17	0.611	1.63	5.099	A
3	581.34	581.33	728.85	0.00	1665.60	0.349	0.58	3.617	A
4	438.21	438.20	603.35	0.00	1672.73	0.262	0.36	2.968	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	293.07	293.44	568.88	0.00	1534.68	0.191	0.24	2.991	A
2	948.42	950.94	298.82	0.00	1946.35	0.487	1.00	3.801	A
3	474.66	475.37	596.59	0.00	1756.13	0.270	0.41	3.066	A
4	357.79	358.18	493.55	0.00	1743.95	0.205	0.26	2.647	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	245.43	245.65	476.23	0.00	1592.28	0.154	0.19	2.754	A
2	794.26	795.45	250.17	0.00	1979.30	0.401	0.71	3.191	A
3	397.51	397.91	499.09	0.00	1822.86	0.218	0.31	2.755	A
4	299.64	299.87	413.04	0.00	1796.17	0.167	0.20	2.451	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: CTC Junc 10.arc8
Path: P:\data\W50---\W50827 - Highways Assessment, Selby District\Junction Analysis\Junction 10
Report generation date: 04/12/2014 15:09:48

File summary

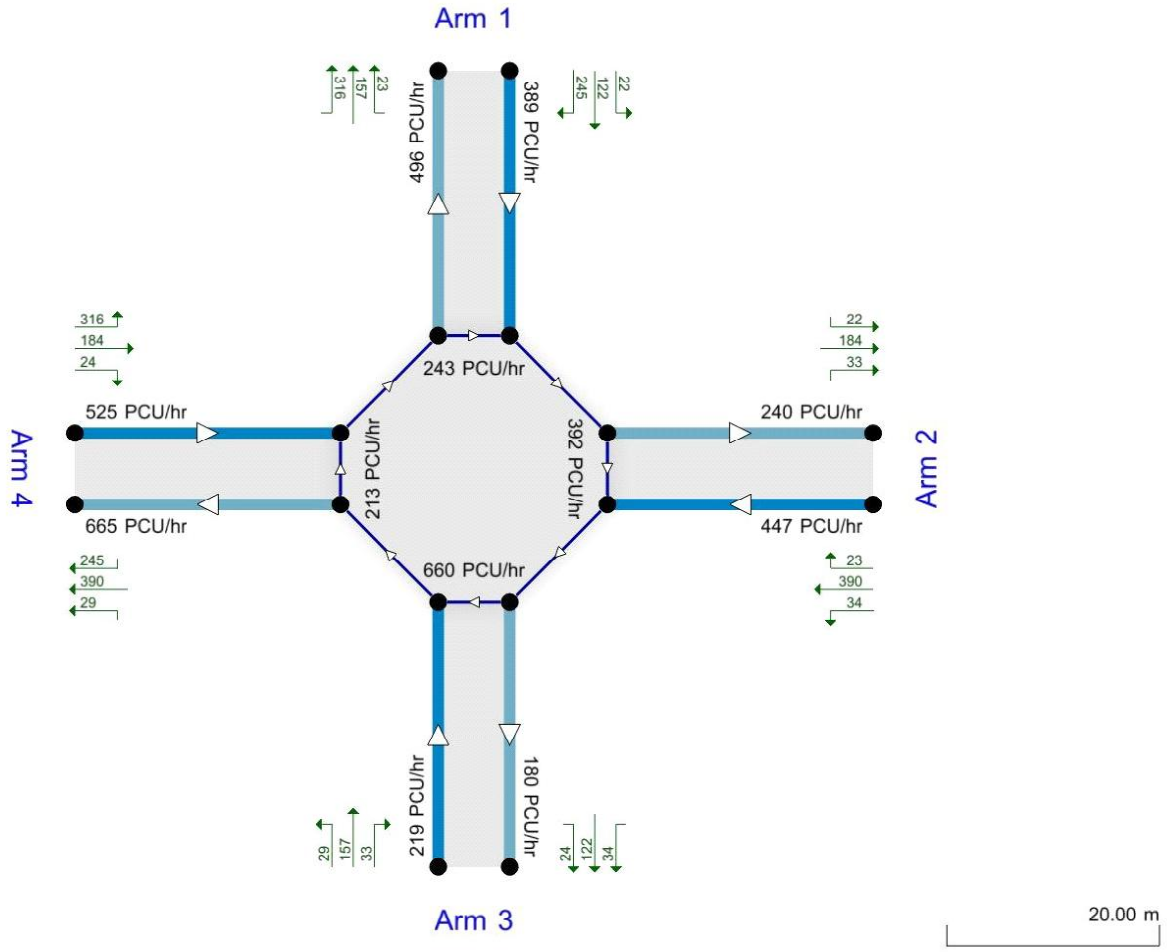
Title	(untitled)
Location	
Site Number	
Date	17/11/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JGreen
Description	

Analysis Options

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

Units

Distance 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



Showing modelled flow through junction (PCU/hr).
Time Segment: (07:45-08:00)
Showing Analysis Set "A1 "; Demand Set "D1 - Scenario 0, AM "

The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - Scenario 0, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0, AM	Scenario 0	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			7.08	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A162 (north)	
2	2	A63 Main Street (east)	
3	3	A162 (south)	
4	4	A63 (west)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.04	5.06	11.00	26.00	38.00	38.00	
2	4.28	6.57	5.72	66.00	38.00	34.00	
3	3.25	4.72	22.00	22.00	38.00	27.00	
4	4.05	6.68	8.00	37.00	38.00	41.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.558	1285.109
2		(calculated)	(calculated)	0.639	1633.363
3		(calculated)	(calculated)	0.585	1371.780
4		(calculated)	(calculated)	0.619	1590.131

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	517.00	100.000
2	ONE HOUR	✓	603.00	100.000
3	ONE HOUR	✓	292.00	100.000
4	ONE HOUR	✓	689.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	0.000	32.000	163.000	322.000
	2	34.000	1.000	45.000	523.000
	3	211.000	44.000	0.000	37.000
	4	410.000	247.000	30.000	2.000

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

		To			
		1	2	3	4
From	1	0.00	0.06	0.32	0.62
	2	0.06	0.00	0.07	0.87
	3	0.72	0.15	0.00	0.13
	4	0.60	0.36	0.04	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.391	1.012	1.243
	2	1.360	1.000	1.000	1.019
	3	1.039	1.023	1.000	1.194
	4	1.302	1.069	1.069	2.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	39.1	1.2	24.3
	2	36.0	0.0	0.0	1.9
	3	3.9	2.3	0.0	19.4
	4	30.2	6.9	6.9	100.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.52	8.12	1.27	A
2	0.52	6.13	1.12	A
3	0.40	7.86	0.70	A
4	0.54	6.80	1.42	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	389.22	386.86	242.67	0.00	1149.74	0.339	0.59	5.489	A
2	453.97	451.97	386.88	0.00	1386.15	0.328	0.50	3.970	A
3	219.83	218.63	660.69	0.00	985.42	0.223	0.30	4.948	A
4	518.72	516.08	217.16	0.00	1455.63	0.356	0.66	4.578	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	464.77	463.88	290.79	0.00	1122.90	0.414	0.81	6.363	A
2	542.08	541.29	463.89	0.00	1336.94	0.405	0.70	4.664	A
3	262.50	262.01	791.61	0.00	908.86	0.289	0.42	5.865	A
4	619.40	618.40	260.23	0.00	1428.95	0.433	0.91	5.315	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	569.23	567.44	355.75	0.00	1086.66	0.524	1.26	8.061	A
2	663.92	662.25	567.46	0.00	1270.76	0.522	1.11	6.088	A
3	321.50	320.43	968.44	0.00	805.44	0.399	0.69	7.805	A
4	758.60	756.59	318.27	0.00	1393.00	0.545	1.41	6.756	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	569.23	569.18	356.71	0.00	1086.13	0.524	1.27	8.123	A
2	663.92	663.88	569.18	0.00	1269.66	0.523	1.12	6.133	A
3	321.50	321.47	971.04	0.00	803.93	0.400	0.70	7.863	A
4	758.60	758.55	319.27	0.00	1392.38	0.545	1.42	6.805	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	464.77	466.52	292.23	0.00	1122.09	0.414	0.83	6.425	A
2	542.08	543.73	466.51	0.00	1335.26	0.406	0.71	4.705	A
3	262.50	263.56	795.52	0.00	906.57	0.290	0.43	5.911	A
4	619.40	621.38	261.72	0.00	1428.03	0.434	0.93	5.362	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	389.22	390.15	244.42	0.00	1148.76	0.339	0.60	5.542	A
2	453.97	454.79	390.14	0.00	1384.06	0.328	0.51	4.003	A
3	219.83	220.34	665.35	0.00	982.69	0.224	0.31	4.979	A
4	518.72	519.75	218.82	0.00	1454.60	0.357	0.67	4.620	A

(Default Analysis Set) - Scenario 0, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0, PM	Scenario 0	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			10.08	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A162 (north)	
2	2	A63 Main Street (east)	
3	3	A162 (south)	
4	4	A63 (west)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

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	3.04	5.06	11.00	26.00	38.00	38.00	
2	4.28	6.57	5.72	66.00	38.00	34.00	
3	3.25	4.72	22.00	22.00	38.00	27.00	
4	4.05	6.68	8.00	37.00	38.00	41.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.558	1285.109
2		(calculated)	(calculated)	0.639	1633.363
3		(calculated)	(calculated)	0.585	1371.780
4		(calculated)	(calculated)	0.619	1590.131

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	606.00	100.000
2	ONE HOUR	✓	390.00	100.000
3	ONE HOUR	✓	274.00	100.000
4	ONE HOUR	✓	893.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	1.000	15.000	302.000	288.000
	2	18.000	0.000	59.000	313.000
	3	202.000	60.000	0.000	12.000
	4	317.000	558.000	17.000	1.000

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

		To			
		1	2	3	4
From	1	0.00	0.02	0.50	0.48
	2	0.05	0.00	0.15	0.80
	3	0.74	0.22	0.00	0.04
	4	0.35	0.62	0.02	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.154	1.007	1.171
	2	1.200	1.000	1.000	1.033
	3	1.010	1.000	1.000	1.000
	4	1.144	1.009	1.009	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	15.4	0.7	17.1
	2	20.0	0.0	0.0	3.3
	3	1.0	0.0	0.0	0.0
	4	14.4	0.9	0.9	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.75	17.03	3.06	C
2	0.36	4.80	0.57	A
3	0.31	5.41	0.45	A
4	0.70	9.12	2.45	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	456.23	452.77	476.31	0.00	1019.41	0.448	0.86	6.837	A
2	293.61	292.46	455.04	0.00	1342.59	0.219	0.29	3.543	A
3	206.28	205.36	464.89	0.00	1099.92	0.188	0.23	4.049	A
4	672.30	668.74	210.61	0.00	1459.69	0.461	0.89	4.773	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	544.78	542.78	570.57	0.00	966.83	0.563	1.37	9.146	A
2	350.60	350.21	545.49	0.00	1284.80	0.273	0.39	3.983	A
3	246.32	246.01	556.98	0.00	1046.07	0.235	0.31	4.533	A
4	802.79	801.07	252.30	0.00	1433.87	0.560	1.32	5.973	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	667.22	660.87	697.31	0.00	896.13	0.745	2.95	16.138	C
2	429.40	428.68	664.24	0.00	1208.91	0.355	0.57	4.769	A
3	301.68	301.12	680.09	0.00	974.07	0.310	0.45	5.384	A
4	983.21	978.84	308.81	0.00	1398.86	0.703	2.41	8.933	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	667.22	666.78	700.15	0.00	894.55	0.746	3.06	17.025	C
2	429.40	429.38	670.10	0.00	1205.17	0.356	0.57	4.800	A
3	301.68	301.67	683.51	0.00	972.07	0.310	0.45	5.408	A
4	983.21	983.05	309.37	0.00	1398.51	0.703	2.45	9.115	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	544.78	551.28	574.69	0.00	964.53	0.565	1.44	9.573	A
2	350.60	351.31	553.90	0.00	1279.42	0.274	0.39	4.015	A
3	246.32	246.87	561.97	0.00	1043.14	0.236	0.31	4.557	A
4	802.79	807.15	253.18	0.00	1433.32	0.560	1.36	6.097	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	456.23	458.41	480.05	0.00	1017.32	0.448	0.89	6.998	A
2	293.61	294.02	460.65	0.00	1339.01	0.219	0.29	3.564	A
3	206.28	206.60	468.91	0.00	1097.57	0.188	0.23	4.073	A
4	672.30	674.10	211.88	0.00	1458.90	0.461	0.91	4.841	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: CTC Junc 10.arc8
Path: P:\data\W50---\W50827 - Highways Assessment, Selby District\Junction Analysis\Junction 10
Report generation date: 11/12/2014 17:55:51

File summary

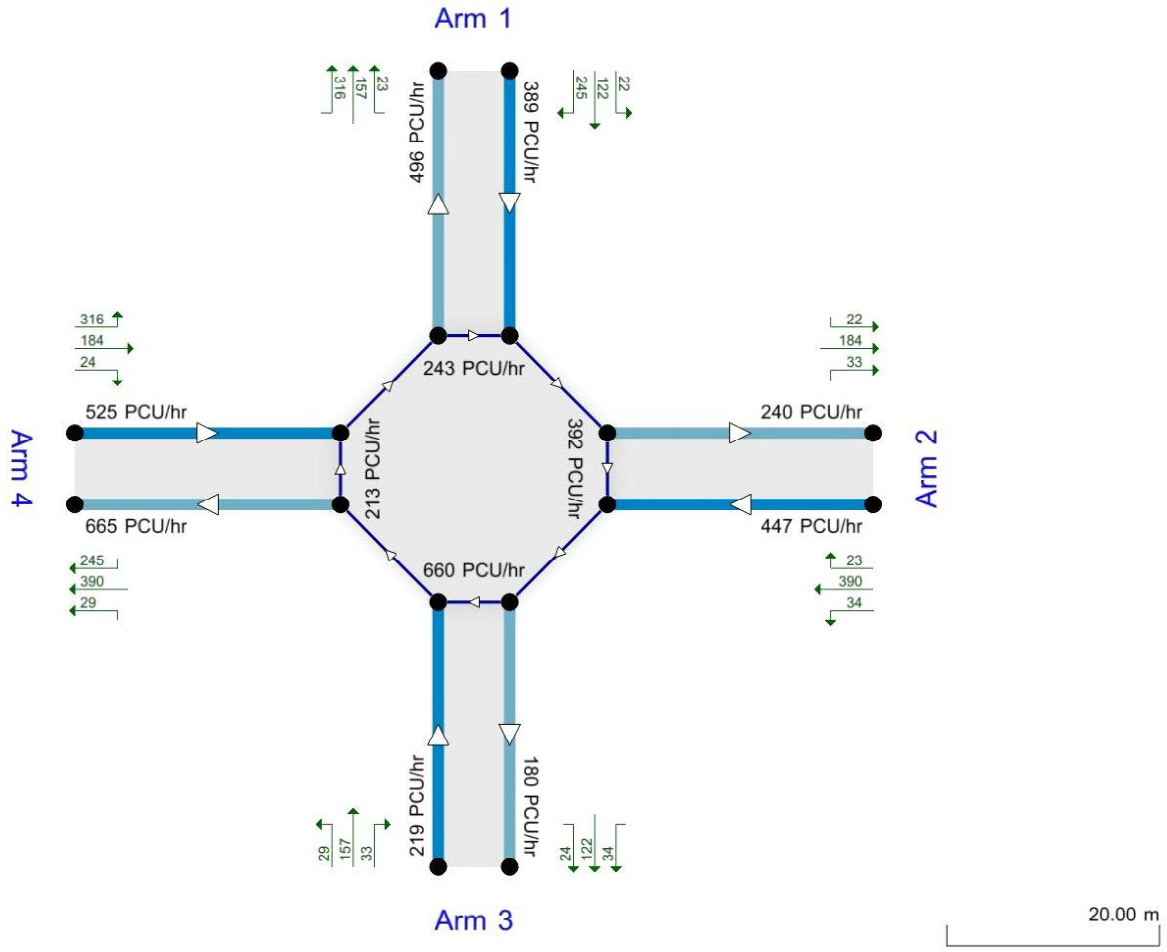
Title	(untitled)
Location	
Site Number	
Date	17/11/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JGreen
Description	

Analysis Options

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

Units

Distance 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



Showing modelled flow through junction (PCU/hr).
Time Segment: (16:45-17:00)
Showing Analysis Set "A1 "; Demand Set "D1 - Scenario 0 - 2014 Base, AM "

The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - Scenario 0 - 2014 Base, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base, AM	Scenario 0 - 2014 Base	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			7.08	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A162 (north)	
2	2	A63 Main Street (east)	
3	3	A162 (south)	
4	4	A63 (west)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

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	3.04	5.06	11.00	26.00	38.00	38.00	
2	4.28	6.57	5.72	66.00	38.00	34.00	
3	3.25	4.72	22.00	22.00	38.00	27.00	
4	4.05	6.68	8.00	37.00	38.00	41.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.558	1285.109
2		(calculated)	(calculated)	0.639	1633.363
3		(calculated)	(calculated)	0.585	1371.780
4		(calculated)	(calculated)	0.619	1590.131

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	517.00	100.000
2	ONE HOUR	✓	603.00	100.000
3	ONE HOUR	✓	292.00	100.000
4	ONE HOUR	✓	689.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	0.000	32.000	163.000	322.000
	2	34.000	1.000	45.000	523.000
	3	211.000	44.000	0.000	37.000
	4	410.000	247.000	30.000	2.000

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

		To			
		1	2	3	4
From	1	0.00	0.06	0.32	0.62
	2	0.06	0.00	0.07	0.87
	3	0.72	0.15	0.00	0.13
	4	0.60	0.36	0.04	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.391	1.012	1.243
	2	1.360	1.000	1.000	1.019
	3	1.039	1.023	1.000	1.194
	4	1.302	1.069	1.069	2.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	39.1	1.2	24.3
	2	36.0	0.0	0.0	1.9
	3	3.9	2.3	0.0	19.4
	4	30.2	6.9	6.9	100.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.52	8.12	1.27	A
2	0.52	6.13	1.12	A
3	0.40	7.86	0.70	A
4	0.54	6.80	1.42	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	389.22	386.86	242.67	0.00	1149.74	0.339	0.59	5.489	A
2	453.97	451.97	386.88	0.00	1386.15	0.328	0.50	3.970	A
3	219.83	218.63	660.69	0.00	985.42	0.223	0.30	4.948	A
4	518.72	516.08	217.16	0.00	1455.63	0.356	0.66	4.578	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	464.77	463.88	290.79	0.00	1122.90	0.414	0.81	6.363	A
2	542.08	541.29	463.89	0.00	1336.94	0.405	0.70	4.664	A
3	262.50	262.01	791.61	0.00	908.86	0.289	0.42	5.865	A
4	619.40	618.40	260.23	0.00	1428.95	0.433	0.91	5.315	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	569.23	567.44	355.75	0.00	1086.66	0.524	1.26	8.061	A
2	663.92	662.25	567.46	0.00	1270.76	0.522	1.11	6.088	A
3	321.50	320.43	968.44	0.00	805.44	0.399	0.69	7.805	A
4	758.60	756.59	318.27	0.00	1393.00	0.545	1.41	6.756	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	569.23	569.18	356.71	0.00	1086.13	0.524	1.27	8.123	A
2	663.92	663.88	569.18	0.00	1269.66	0.523	1.12	6.133	A
3	321.50	321.47	971.04	0.00	803.93	0.400	0.70	7.863	A
4	758.60	758.55	319.27	0.00	1392.38	0.545	1.42	6.805	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	464.77	466.52	292.23	0.00	1122.09	0.414	0.83	6.425	A
2	542.08	543.73	466.51	0.00	1335.26	0.406	0.71	4.705	A
3	262.50	263.56	795.52	0.00	906.57	0.290	0.43	5.911	A
4	619.40	621.38	261.72	0.00	1428.03	0.434	0.93	5.362	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	389.22	390.15	244.42	0.00	1148.76	0.339	0.60	5.542	A
2	453.97	454.79	390.14	0.00	1384.06	0.328	0.51	4.003	A
3	219.83	220.34	665.35	0.00	982.69	0.224	0.31	4.979	A
4	518.72	519.75	218.82	0.00	1454.60	0.357	0.67	4.620	A

(Default Analysis Set) - Scenario 0 - 2014 Base, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base, PM	Scenario 0 - 2014 Base	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			10.08	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A162 (north)	
2	2	A63 Main Street (east)	
3	3	A162 (south)	
4	4	A63 (west)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

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	3.04	5.06	11.00	26.00	38.00	38.00	
2	4.28	6.57	5.72	66.00	38.00	34.00	
3	3.25	4.72	22.00	22.00	38.00	27.00	
4	4.05	6.68	8.00	37.00	38.00	41.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.558	1285.109
2		(calculated)	(calculated)	0.639	1633.363
3		(calculated)	(calculated)	0.585	1371.780
4		(calculated)	(calculated)	0.619	1590.131

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	606.00	100.000
2	ONE HOUR	✓	390.00	100.000
3	ONE HOUR	✓	274.00	100.000
4	ONE HOUR	✓	893.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	1.000	15.000	302.000	288.000
	2	18.000	0.000	59.000	313.000
	3	202.000	60.000	0.000	12.000
	4	317.000	558.000	17.000	1.000

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

		To			
		1	2	3	4
From	1	0.00	0.02	0.50	0.48
	2	0.05	0.00	0.15	0.80
	3	0.74	0.22	0.00	0.04
	4	0.35	0.62	0.02	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.154	1.007	1.171
	2	1.200	1.000	1.000	1.033
	3	1.010	1.000	1.000	1.000
	4	1.144	1.009	1.009	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	15.4	0.7	17.1
	2	20.0	0.0	0.0	3.3
	3	1.0	0.0	0.0	0.0
	4	14.4	0.9	0.9	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.75	17.03	3.06	C
2	0.36	4.80	0.57	A
3	0.31	5.41	0.45	A
4	0.70	9.12	2.45	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	456.23	452.77	476.31	0.00	1019.41	0.448	0.86	6.837	A
2	293.61	292.46	455.04	0.00	1342.59	0.219	0.29	3.543	A
3	206.28	205.36	464.89	0.00	1099.92	0.188	0.23	4.049	A
4	672.30	668.74	210.61	0.00	1459.69	0.461	0.89	4.773	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	544.78	542.78	570.57	0.00	966.83	0.563	1.37	9.146	A
2	350.60	350.21	545.49	0.00	1284.80	0.273	0.39	3.983	A
3	246.32	246.01	556.98	0.00	1046.07	0.235	0.31	4.533	A
4	802.79	801.07	252.30	0.00	1433.87	0.560	1.32	5.973	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	667.22	660.87	697.31	0.00	896.13	0.745	2.95	16.138	C
2	429.40	428.68	664.24	0.00	1208.91	0.355	0.57	4.769	A
3	301.68	301.12	680.09	0.00	974.07	0.310	0.45	5.384	A
4	983.21	978.84	308.81	0.00	1398.86	0.703	2.41	8.933	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	667.22	666.78	700.15	0.00	894.55	0.746	3.06	17.025	C
2	429.40	429.38	670.10	0.00	1205.17	0.356	0.57	4.800	A
3	301.68	301.67	683.51	0.00	972.07	0.310	0.45	5.408	A
4	983.21	983.05	309.37	0.00	1398.51	0.703	2.45	9.115	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	544.78	551.28	574.69	0.00	964.53	0.565	1.44	9.573	A
2	350.60	351.31	553.90	0.00	1279.42	0.274	0.39	4.015	A
3	246.32	246.87	561.97	0.00	1043.14	0.236	0.31	4.557	A
4	802.79	807.15	253.18	0.00	1433.32	0.560	1.36	6.097	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	456.23	458.41	480.05	0.00	1017.32	0.448	0.89	6.998	A
2	293.61	294.02	460.65	0.00	1339.01	0.219	0.29	3.564	A
3	206.28	206.60	468.91	0.00	1097.57	0.188	0.23	4.073	A
4	672.30	674.10	211.88	0.00	1458.90	0.461	0.91	4.841	A

(Default Analysis Set) - Scenario 0 - 2014 Base + Committed, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base + Committed, AM	Scenario 0 - 2014 Base + Committed	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			14.25	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A162 (north)	
2	2	A63 Main Street (east)	
3	3	A162 (south)	
4	4	A63 (west)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.04	5.06	11.00	26.00	38.00	38.00	
2	4.28	6.57	5.72	66.00	38.00	34.00	
3	3.25	4.72	22.00	22.00	38.00	27.00	
4	4.05	6.68	8.00	37.00	38.00	41.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.558	1285.109
2		(calculated)	(calculated)	0.639	1633.363
3		(calculated)	(calculated)	0.585	1371.780
4		(calculated)	(calculated)	0.619	1590.131

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	738.69	100.000
2	ONE HOUR	✓	776.21	100.000
3	ONE HOUR	✓	343.33	100.000
4	ONE HOUR	✓	836.82	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	0.000	85.694	211.000	442.000
	2	78.417	1.297	55.169	641.324
	3	248.000	58.329	0.000	37.000
	4	476.000	328.824	30.000	2.000

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

		To			
		1	2	3	4
From	1	0.00	0.12	0.29	0.60
	2	0.10	0.00	0.07	0.83
	3	0.72	0.17	0.00	0.11
	4	0.57	0.39	0.04	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.391	1.012	1.243
	2	1.360	1.000	1.000	1.019
	3	1.039	1.023	1.000	1.194
	4	1.302	1.069	1.069	2.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	39.1	1.2	24.3
	2	36.0	0.0	0.0	1.9
	3	3.9	2.3	0.0	19.4
	4	30.2	6.9	6.9	100.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.79	19.64	4.27	C
2	0.74	12.59	2.91	B
3	0.61	15.45	1.59	C
4	0.69	10.55	2.65	B

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	556.13	551.46	314.59	0.00	1109.62	0.501	1.17	7.554	A
2	584.37	581.03	511.43	0.00	1306.56	0.447	0.84	5.156	A
3	258.48	256.69	871.19	0.00	862.31	0.300	0.45	6.230	A
4	630.00	626.20	288.70	0.00	1411.32	0.446	0.95	5.438	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	664.07	661.31	377.00	0.00	1074.81	0.618	1.86	10.209	B
2	697.79	695.87	613.29	0.00	1241.47	0.562	1.32	6.863	A
3	308.65	307.60	1043.90	0.00	761.32	0.405	0.71	8.319	A
4	752.29	750.43	345.92	0.00	1375.88	0.547	1.41	6.838	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	813.32	804.41	460.31	0.00	1028.33	0.791	4.08	18.278	C
2	854.62	848.63	746.15	0.00	1156.57	0.739	2.81	11.977	B
3	378.01	374.73	1271.83	0.00	628.03	0.602	1.53	14.747	B
4	921.36	916.62	421.49	0.00	1329.07	0.693	2.60	10.282	B

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	813.32	812.55	462.79	0.00	1026.95	0.792	4.27	19.643	C
2	854.62	854.22	753.51	0.00	1151.87	0.742	2.91	12.586	B
3	378.01	377.78	1281.90	0.00	622.14	0.608	1.59	15.451	C
4	921.36	921.14	424.79	0.00	1327.03	0.694	2.65	10.553	B

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	664.07	673.27	380.60	0.00	1072.80	0.619	1.97	10.871	B
2	697.79	703.93	624.11	0.00	1234.56	0.565	1.38	7.164	A
3	308.65	312.02	1058.56	0.00	752.75	0.410	0.74	8.649	A
4	752.29	757.03	350.69	0.00	1372.93	0.548	1.47	7.019	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	556.13	559.19	317.59	0.00	1107.95	0.502	1.21	7.788	A
2	584.37	586.46	518.48	0.00	1302.05	0.449	0.86	5.268	A
3	258.48	259.61	880.88	0.00	856.65	0.302	0.46	6.350	A
4	630.00	631.98	291.86	0.00	1409.36	0.447	0.97	5.533	A

(Default Analysis Set) - Scenario 0 - 2014 Base + Committed, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base + Committed, PM	Scenario 0 - 2014 Base + Committed	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3,4			58.76	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A162 (north)	
2	2	A63 Main Street (east)	
3	3	A162 (south)	
4	4	A63 (west)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00
4	0.00	99999.00

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	3.04	5.06	11.00	26.00	38.00	38.00	
2	4.28	6.57	5.72	66.00	38.00	34.00	
3	3.25	4.72	22.00	22.00	38.00	27.00	
4	4.05	6.68	8.00	37.00	38.00	41.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.558	1285.109
2		(calculated)	(calculated)	0.639	1633.363
3		(calculated)	(calculated)	0.585	1371.780
4		(calculated)	(calculated)	0.619	1590.131

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	763.36	100.000
2	ONE HOUR	✓	565.58	100.000
3	ONE HOUR	✓	347.43	100.000
4	ONE HOUR	✓	1143.87	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	0.000	54.357	339.000	370.000
	2	68.381	0.000	78.637	418.565
	3	259.000	76.427	0.000	12.000
	4	414.000	711.868	17.000	1.000

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

		To			
		1	2	3	4
From	1	0.00	0.07	0.44	0.48
	2	0.12	0.00	0.14	0.74
	3	0.75	0.22	0.00	0.03
	4	0.36	0.62	0.01	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.154	1.007	1.171
	2	1.200	1.000	1.000	1.033
	3	1.010	1.023	1.000	1.000
	4	1.144	1.009	1.009	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.0	15.4	0.7	17.1
	2	20.0	0.0	0.0	3.3
	3	1.0	2.3	0.0	0.0
	4	14.4	0.9	0.9	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.06	139.30	34.57	F
2	0.54	7.07	1.21	A
3	0.46	8.05	0.85	A
4	0.96	45.97	15.18	E

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	574.70	568.18	602.51	0.00	949.01	0.606	1.63	10.149	B
2	425.80	423.75	541.17	0.00	1287.55	0.331	0.51	4.348	A
3	261.56	260.13	640.98	0.00	996.94	0.262	0.36	4.938	A
4	861.16	854.59	302.38	0.00	1402.85	0.614	1.64	6.842	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	686.24	678.78	721.07	0.00	882.87	0.777	3.49	18.584	C
2	508.45	507.54	646.53	0.00	1220.23	0.417	0.74	5.276	A
3	312.33	311.71	766.87	0.00	923.32	0.338	0.51	5.953	A
4	1028.31	1022.62	362.31	0.00	1365.73	0.753	3.07	10.878	B

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	840.47	772.07	863.80	0.00	803.26	1.046	20.59	72.032	F
2	622.72	620.93	736.33	0.00	1162.85	0.536	1.19	6.925	A
3	382.52	381.24	909.89	0.00	839.68	0.456	0.83	7.929	A
4	1259.42	1222.33	443.14	0.00	1315.66	0.957	12.34	32.265	D

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	840.47	784.57	880.48	0.00	793.95	1.059	34.57	139.297	F
2	622.72	622.63	748.35	0.00	1155.17	0.539	1.21	7.067	A
3	382.52	382.47	917.43	0.00	835.27	0.458	0.85	8.048	A
4	1259.42	1248.05	444.54	0.00	1314.80	0.958	15.18	45.972	E

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	686.24	803.63	755.18	0.00	863.85	0.794	5.22	81.265	F
2	508.45	509.91	763.33	0.00	1145.60	0.444	0.84	5.935	A
3	312.33	313.49	829.47	0.00	886.71	0.352	0.56	6.373	A
4	1028.31	1075.46	364.31	0.00	1364.49	0.754	3.40	15.060	C

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	574.70	588.59	611.49	0.00	944.00	0.609	1.75	11.457	B
2	425.80	427.07	560.34	0.00	1275.31	0.334	0.53	4.444	A
3	261.56	262.32	653.74	0.00	989.48	0.264	0.37	5.019	A
4	861.16	867.90	304.89	0.00	1401.29	0.615	1.71	7.200	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: CTC Junc 11.arc8
Path: P:\data\W50---\W50827 - Highways Assessment, Selby District\Junction Analysis\Junction 11
Report generation date: 04/12/2014 15:00:36

File summary

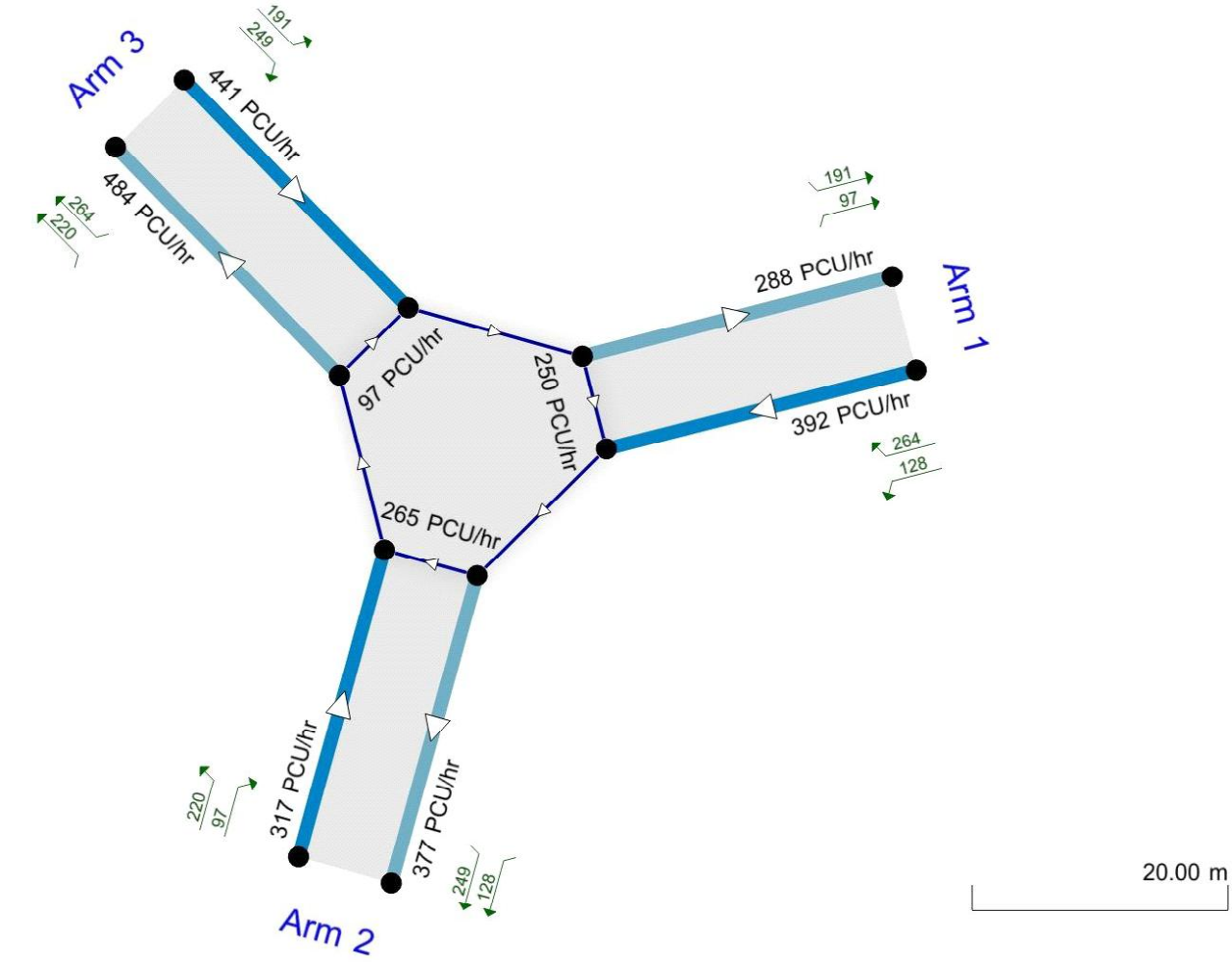
Title	(untitled)
Location	
Site Number	
Date	17/11/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JGreen
Description	

Analysis Options

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

Units

Distance 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



The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - Scenario 0, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0, AM	Scenario 0	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3			5.74	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A645 (east)	
2	2	A1041 Station Road (south)	
3	3	A1041 (north)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

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	3.68	4.53	1.90	27.50	30.00	22.00	
2	5.09	5.31	9.50	15.50	30.00	37.00	
3	3.48	5.06	39.00	20.00	30.00	37.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.583	1271.136
2		(calculated)	(calculated)	0.614	1542.585
3		(calculated)	(calculated)	0.598	1442.332

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	431.00	100.000
2	ONE HOUR	✓	526.00	100.000
3	ONE HOUR	✓	644.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	2.000	149.000	280.000
	2	178.000	0.000	348.000
	3	365.000	277.000	2.000

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

		To		
		1	2	3
From	1	0.00	0.35	0.65
	2	0.34	0.00	0.66
	3	0.57	0.43	0.00

Vehicle Mix

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

		To		
		1	2	3
From	1	2.000	1.057	1.061
	2	1.060	1.000	1.018
	3	1.086	1.022	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	100.0	5.7	6.1
	2	6.0	0.0	1.8
	3	8.6	2.2	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.43	6.19	0.81	A
2	0.43	4.81	0.77	A
3	0.54	6.19	1.21	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	324.48	322.82	209.04	0.00	1149.29	0.282	0.41	4.616	A
2	396.00	394.40	212.72	0.00	1412.03	0.280	0.40	3.650	A
3	484.84	482.52	134.96	0.00	1361.67	0.356	0.58	4.318	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	387.46	386.91	250.45	0.00	1125.15	0.344	0.55	5.175	A
2	472.86	472.34	254.95	0.00	1386.11	0.341	0.53	4.063	A
3	578.94	578.10	161.64	0.00	1345.73	0.430	0.79	4.953	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	474.54	473.53	306.47	0.00	1092.50	0.434	0.81	6.166	A
2	579.14	578.19	312.02	0.00	1351.08	0.429	0.77	4.800	A
3	709.06	707.41	197.86	0.00	1324.08	0.536	1.20	6.156	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	474.54	474.52	307.17	0.00	1092.09	0.435	0.81	6.189	A
2	579.14	579.12	312.68	0.00	1350.68	0.429	0.77	4.814	A
3	709.06	709.02	198.18	0.00	1323.89	0.536	1.21	6.189	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	387.46	388.45	251.52	0.00	1124.53	0.345	0.56	5.202	A
2	472.86	473.79	255.96	0.00	1385.49	0.341	0.54	4.078	A
3	578.94	580.56	162.14	0.00	1345.43	0.430	0.81	4.986	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	324.48	325.05	210.42	0.00	1148.49	0.283	0.42	4.645	A
2	396.00	396.53	214.18	0.00	1411.13	0.281	0.40	3.665	A
3	484.84	485.70	135.70	0.00	1361.23	0.356	0.59	4.352	A

(Default Analysis Set) - Scenario 0, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0, PM	Scenario 0	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3			5.80	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A645 (east)	
2	2	A1041 Station Road (south)	
3	3	A1041 (north)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.68	4.53	1.90	27.50	30.00	22.00	
2	5.09	5.31	9.50	15.50	30.00	37.00	
3	3.48	5.06	39.00	20.00	30.00	37.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.583	1271.136
2		(calculated)	(calculated)	0.614	1542.585
3		(calculated)	(calculated)	0.598	1442.332

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	523.00	100.000
2	ONE HOUR	✓	424.00	100.000
3	ONE HOUR	✓	587.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	171.000	352.000
	2	130.000	0.000	294.000
	3	254.000	332.000	1.000

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

		To		
		1	2	3
From	1	0.00	0.33	0.67
	2	0.31	0.00	0.69
	3	0.43	0.57	0.00

Vehicle Mix

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

		To		
		1	2	3
From	1	1.000	1.024	1.029
	2	1.008	1.000	1.010
	3	1.041	1.006	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	2.4	2.9
	2	0.8	0.0	1.0
	3	4.1	0.6	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.54	7.68	1.22	A
2	0.36	4.34	0.56	A
3	0.48	5.17	0.92	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	393.74	391.55	249.62	0.00	1125.64	0.350	0.55	5.023	A
2	319.21	318.00	264.28	0.00	1380.38	0.231	0.30	3.418	A
3	441.92	440.02	97.50	0.00	1384.06	0.319	0.48	3.885	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	470.17	469.31	299.00	0.00	1096.85	0.429	0.76	5.884	A
2	381.17	380.79	316.76	0.00	1348.17	0.283	0.40	3.753	A
3	527.70	527.07	116.75	0.00	1372.56	0.384	0.63	4.344	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	575.83	574.06	365.99	0.00	1057.81	0.544	1.21	7.618	A
2	466.83	466.18	387.46	0.00	1304.78	0.358	0.56	4.326	A
3	646.30	645.16	142.93	0.00	1356.91	0.476	0.92	5.154	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	575.83	575.79	366.63	0.00	1057.44	0.545	1.22	7.678	A
2	466.83	466.82	388.63	0.00	1304.06	0.358	0.56	4.339	A
3	646.30	646.28	143.13	0.00	1356.79	0.476	0.92	5.171	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	470.17	471.91	300.00	0.00	1096.27	0.429	0.78	5.939	A
2	381.17	381.81	318.52	0.00	1347.10	0.283	0.40	3.768	A
3	527.70	528.82	117.06	0.00	1372.37	0.385	0.64	4.363	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	393.74	394.63	251.06	0.00	1124.80	0.350	0.56	5.073	A
2	319.21	319.59	266.36	0.00	1379.11	0.231	0.31	3.430	A
3	441.92	442.57	97.99	0.00	1383.77	0.319	0.48	3.907	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
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Filename: CTC Junc 11.arc8
Path: P:\data\W50---\W50827 - Highways Assessment, Selby District\Junction Analysis\Junction 11
Report generation date: 11/12/2014 18:00:10

File summary

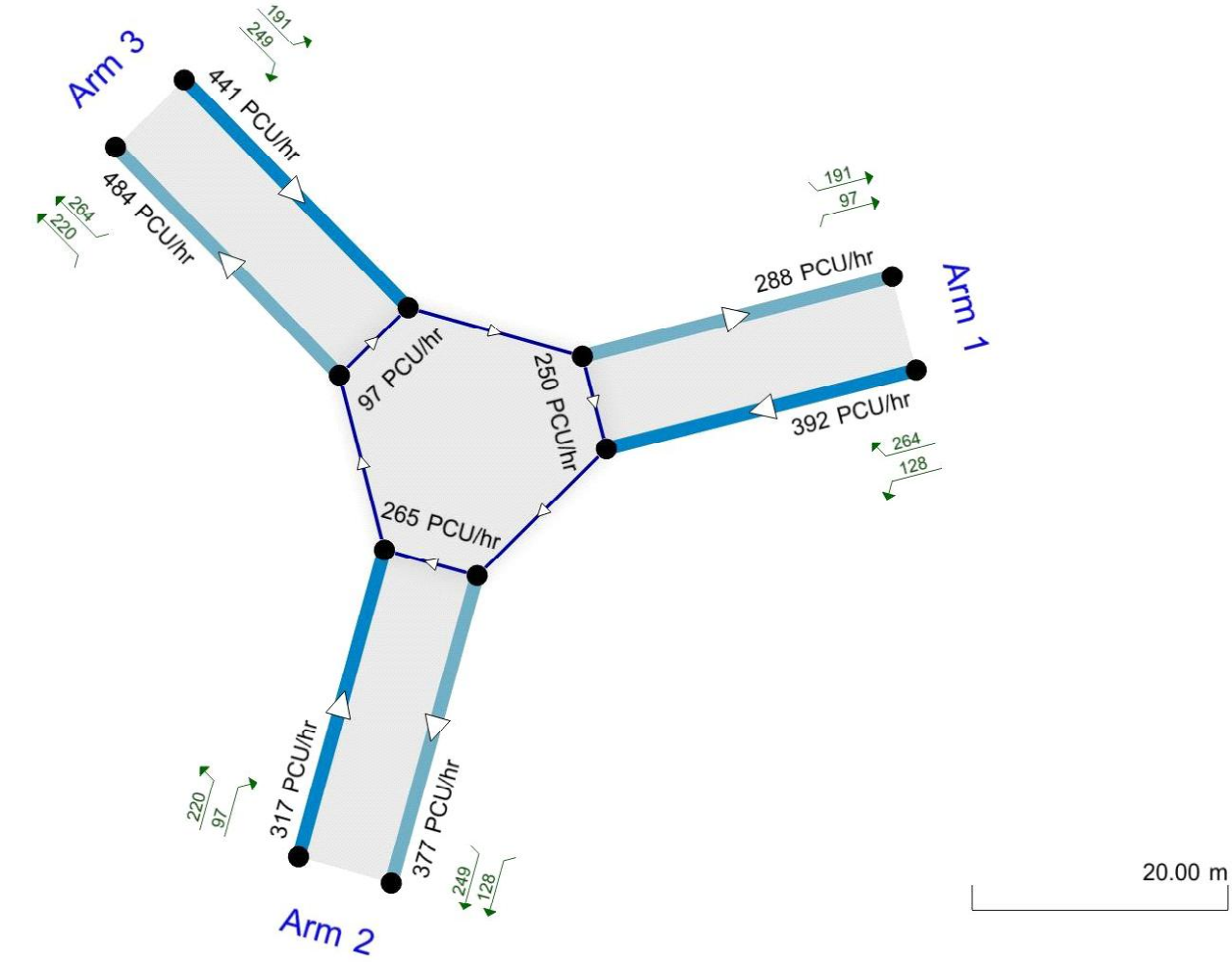
Title	(untitled)
Location	
Site Number	
Date	17/11/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JGreen
Description	

Analysis Options

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

Units

Distance 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



The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - Scenario 0 - 2014 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base, AM	Scenario 0 - 2014 Base	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3			5.74	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A645 (east)	
2	2	A1041 Station Road (south)	
3	3	A1041 (north)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

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	3.68	4.53	1.90	27.50	30.00	22.00	
2	5.09	5.31	9.50	15.50	30.00	37.00	
3	3.48	5.06	39.00	20.00	30.00	37.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.583	1271.136
2		(calculated)	(calculated)	0.614	1542.585
3		(calculated)	(calculated)	0.598	1442.332

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	431.00	100.000
2	ONE HOUR	✓	526.00	100.000
3	ONE HOUR	✓	644.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	2.000	149.000	280.000
	2	178.000	0.000	348.000
	3	365.000	277.000	2.000

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

		To		
		1	2	3
From	1	0.00	0.35	0.65
	2	0.34	0.00	0.66
	3	0.57	0.43	0.00

Vehicle Mix

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

		To		
		1	2	3
From	1	2.000	1.057	1.061
	2	1.060	1.000	1.018
	3	1.086	1.022	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	100.0	5.7	6.1
	2	6.0	0.0	1.8
	3	8.6	2.2	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.43	6.19	0.81	A
2	0.43	4.81	0.77	A
3	0.54	6.19	1.21	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	324.48	322.82	209.04	0.00	1149.29	0.282	0.41	4.616	A
2	396.00	394.40	212.72	0.00	1412.03	0.280	0.40	3.650	A
3	484.84	482.52	134.96	0.00	1361.67	0.356	0.58	4.318	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	387.46	386.91	250.45	0.00	1125.15	0.344	0.55	5.175	A
2	472.86	472.34	254.95	0.00	1386.11	0.341	0.53	4.063	A
3	578.94	578.10	161.64	0.00	1345.73	0.430	0.79	4.953	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	474.54	473.53	306.47	0.00	1092.50	0.434	0.81	6.166	A
2	579.14	578.19	312.02	0.00	1351.08	0.429	0.77	4.800	A
3	709.06	707.41	197.86	0.00	1324.08	0.536	1.20	6.156	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	474.54	474.52	307.17	0.00	1092.09	0.435	0.81	6.189	A
2	579.14	579.12	312.68	0.00	1350.68	0.429	0.77	4.814	A
3	709.06	709.02	198.18	0.00	1323.89	0.536	1.21	6.189	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	387.46	388.45	251.52	0.00	1124.53	0.345	0.56	5.202	A
2	472.86	473.79	255.96	0.00	1385.49	0.341	0.54	4.078	A
3	578.94	580.56	162.14	0.00	1345.43	0.430	0.81	4.986	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	324.48	325.05	210.42	0.00	1148.49	0.283	0.42	4.645	A
2	396.00	396.53	214.18	0.00	1411.13	0.281	0.40	3.665	A
3	484.84	485.70	135.70	0.00	1361.23	0.356	0.59	4.352	A

(Default Analysis Set) - Scenario 0 - 2014 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base, PM	Scenario 0 - 2014 Base	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3			5.80	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A645 (east)	
2	2	A1041 Station Road (south)	
3	3	A1041 (north)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.68	4.53	1.90	27.50	30.00	22.00	
2	5.09	5.31	9.50	15.50	30.00	37.00	
3	3.48	5.06	39.00	20.00	30.00	37.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.583	1271.136
2		(calculated)	(calculated)	0.614	1542.585
3		(calculated)	(calculated)	0.598	1442.332

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	523.00	100.000
2	ONE HOUR	✓	424.00	100.000
3	ONE HOUR	✓	587.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	171.000	352.000
	2	130.000	0.000	294.000
	3	254.000	332.000	1.000

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

		To		
		1	2	3
From	1	0.00	0.33	0.67
	2	0.31	0.00	0.69
	3	0.43	0.57	0.00

Vehicle Mix

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

		To		
		1	2	3
From	1	1.000	1.024	1.029
	2	1.008	1.000	1.010
	3	1.041	1.006	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	2.4	2.9
	2	0.8	0.0	1.0
	3	4.1	0.6	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.54	7.68	1.22	A
2	0.36	4.34	0.56	A
3	0.48	5.17	0.92	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	393.74	391.55	249.62	0.00	1125.64	0.350	0.55	5.023	A
2	319.21	318.00	264.28	0.00	1380.38	0.231	0.30	3.418	A
3	441.92	440.02	97.50	0.00	1384.06	0.319	0.48	3.885	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	470.17	469.31	299.00	0.00	1096.85	0.429	0.76	5.884	A
2	381.17	380.79	316.76	0.00	1348.17	0.283	0.40	3.753	A
3	527.70	527.07	116.75	0.00	1372.56	0.384	0.63	4.344	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	575.83	574.06	365.99	0.00	1057.81	0.544	1.21	7.618	A
2	466.83	466.18	387.46	0.00	1304.78	0.358	0.56	4.326	A
3	646.30	645.16	142.93	0.00	1356.91	0.476	0.92	5.154	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	575.83	575.79	366.63	0.00	1057.44	0.545	1.22	7.678	A
2	466.83	466.82	388.63	0.00	1304.06	0.358	0.56	4.339	A
3	646.30	646.28	143.13	0.00	1356.79	0.476	0.92	5.171	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	470.17	471.91	300.00	0.00	1096.27	0.429	0.78	5.939	A
2	381.17	381.81	318.52	0.00	1347.10	0.283	0.40	3.768	A
3	527.70	528.82	117.06	0.00	1372.37	0.385	0.64	4.363	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	393.74	394.63	251.06	0.00	1124.80	0.350	0.56	5.073	A
2	319.21	319.59	266.36	0.00	1379.11	0.231	0.31	3.430	A
3	441.92	442.57	97.99	0.00	1383.77	0.319	0.48	3.907	A

(Default Analysis Set) - Scenario 0 - 2014 Base + Committed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base + Committed, AM	Scenario 0 - 2014 Base + Committed	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3			8.57	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A645 (east)	
2	2	A1041 Station Road (south)	
3	3	A1041 (north)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

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	3.68	4.53	1.90	27.50	30.00	22.00	
2	5.09	5.31	9.50	15.50	30.00	37.00	
3	3.48	5.06	39.00	20.00	30.00	37.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.583	1271.136
2		(calculated)	(calculated)	0.614	1542.585
3		(calculated)	(calculated)	0.598	1442.332

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	548.11	100.000
2	ONE HOUR	✓	688.07	100.000
3	ONE HOUR	✓	837.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	2.000	151.000	395.111
	2	184.000	0.000	504.067
	3	472.120	362.293	2.587

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

		To		
		1	2	3
From	1	0.00	0.28	0.72
	2	0.27	0.00	0.73
	3	0.56	0.43	0.00

Vehicle Mix

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

		To		
		1	2	3
From	1	2.000	1.057	1.061
	2	1.060	1.000	1.018
	3	1.086	1.022	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	100.0	5.7	6.1
	2	6.0	0.0	1.8
	3	8.6	2.2	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.58	8.81	1.46	A
2	0.60	7.19	1.50	A
3	0.70	9.54	2.40	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	412.65	410.16	273.12	0.00	1111.94	0.371	0.62	5.428	A
2	518.01	515.50	299.10	0.00	1359.01	0.381	0.63	4.378	A
3	630.14	626.52	139.35	0.00	1359.05	0.464	0.90	5.171	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	492.74	491.71	327.28	0.00	1080.37	0.456	0.88	6.480	A
2	618.56	617.50	358.57	0.00	1322.52	0.468	0.89	5.246	A
3	752.45	750.75	166.92	0.00	1342.57	0.560	1.33	6.412	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	603.48	601.23	399.93	0.00	1038.02	0.581	1.44	8.704	A
2	757.58	755.22	438.43	0.00	1273.50	0.595	1.48	7.114	A
3	921.55	917.41	204.15	0.00	1320.32	0.698	2.36	9.346	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	603.48	603.41	401.67	0.00	1037.01	0.582	1.46	8.810	A
2	757.58	757.51	440.02	0.00	1272.52	0.595	1.50	7.189	A
3	921.55	921.40	204.77	0.00	1319.95	0.698	2.40	9.538	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	492.74	494.97	329.82	0.00	1078.89	0.457	0.90	6.572	A
2	618.56	620.89	360.94	0.00	1321.06	0.468	0.92	5.309	A
3	752.45	756.58	167.84	0.00	1342.02	0.561	1.37	6.546	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	412.65	413.73	275.48	0.00	1110.56	0.372	0.63	5.495	A
2	518.01	519.12	301.70	0.00	1357.42	0.382	0.64	4.425	A
3	630.14	631.92	140.33	0.00	1358.47	0.464	0.92	5.252	A

(Default Analysis Set) - Scenario 0 - 2014 Base + Committed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Scenario 0 - 2014 Base + Committed, PM	Scenario 0 - 2014 Base + Committed	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3			9.03	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A645 (east)	
2	2	A1041 Station Road (south)	
3	3	A1041 (north)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

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	3.68	4.53	1.90	27.50	30.00	22.00	
2	5.09	5.31	9.50	15.50	30.00	37.00	
3	3.48	5.06	39.00	20.00	30.00	37.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.583	1271.136
2		(calculated)	(calculated)	0.614	1542.585
3		(calculated)	(calculated)	0.598	1442.332

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	614.96	100.000
2	ONE HOUR	✓	504.80	100.000
3	ONE HOUR	✓	837.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	177.000	437.960
	2	133.000	0.000	371.796
	3	356.985	478.610	1.405

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

		To		
		1	2	3
From	1	0.00	0.29	0.71
	2	0.26	0.00	0.74
	3	0.43	0.57	0.00

Vehicle Mix

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

		To		
		1	2	3
From	1	1.000	1.024	1.029
	2	1.008	1.000	1.010
	3	1.041	1.006	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	2.4	2.9
	2	0.8	0.0	1.0
	3	4.1	0.6	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.70	12.90	2.37	B
2	0.45	5.27	0.81	A
3	0.68	8.47	2.14	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	462.97	459.83	359.44	0.00	1061.63	0.436	0.79	6.115	A
2	380.04	378.45	328.53	0.00	1340.95	0.283	0.40	3.769	A
3	630.14	626.75	99.71	0.00	1382.74	0.456	0.85	4.839	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	552.84	551.20	430.66	0.00	1020.11	0.542	1.19	7.860	A
2	453.80	453.24	393.81	0.00	1300.88	0.349	0.54	4.284	A
3	752.45	750.93	119.42	0.00	1370.96	0.549	1.22	5.911	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	677.08	672.59	526.47	0.00	964.27	0.702	2.32	12.490	B
2	555.79	554.73	480.54	0.00	1247.65	0.445	0.80	5.237	A
3	921.55	918.01	146.16	0.00	1354.98	0.680	2.11	8.339	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	677.08	676.86	528.44	0.00	963.12	0.703	2.37	12.896	B
2	555.79	555.77	483.59	0.00	1245.78	0.446	0.81	5.266	A
3	921.55	921.44	146.43	0.00	1354.82	0.680	2.14	8.471	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	552.84	557.36	433.54	0.00	1018.43	0.543	1.24	8.100	A
2	453.80	454.85	398.21	0.00	1298.18	0.350	0.55	4.315	A
3	752.45	755.97	119.84	0.00	1370.71	0.549	1.26	6.009	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	462.97	464.72	362.29	0.00	1059.96	0.437	0.81	6.234	A
2	380.04	380.61	332.02	0.00	1338.81	0.284	0.40	3.796	A
3	630.14	631.72	100.28	0.00	1382.40	0.456	0.86	4.906	A

APPENDIX D

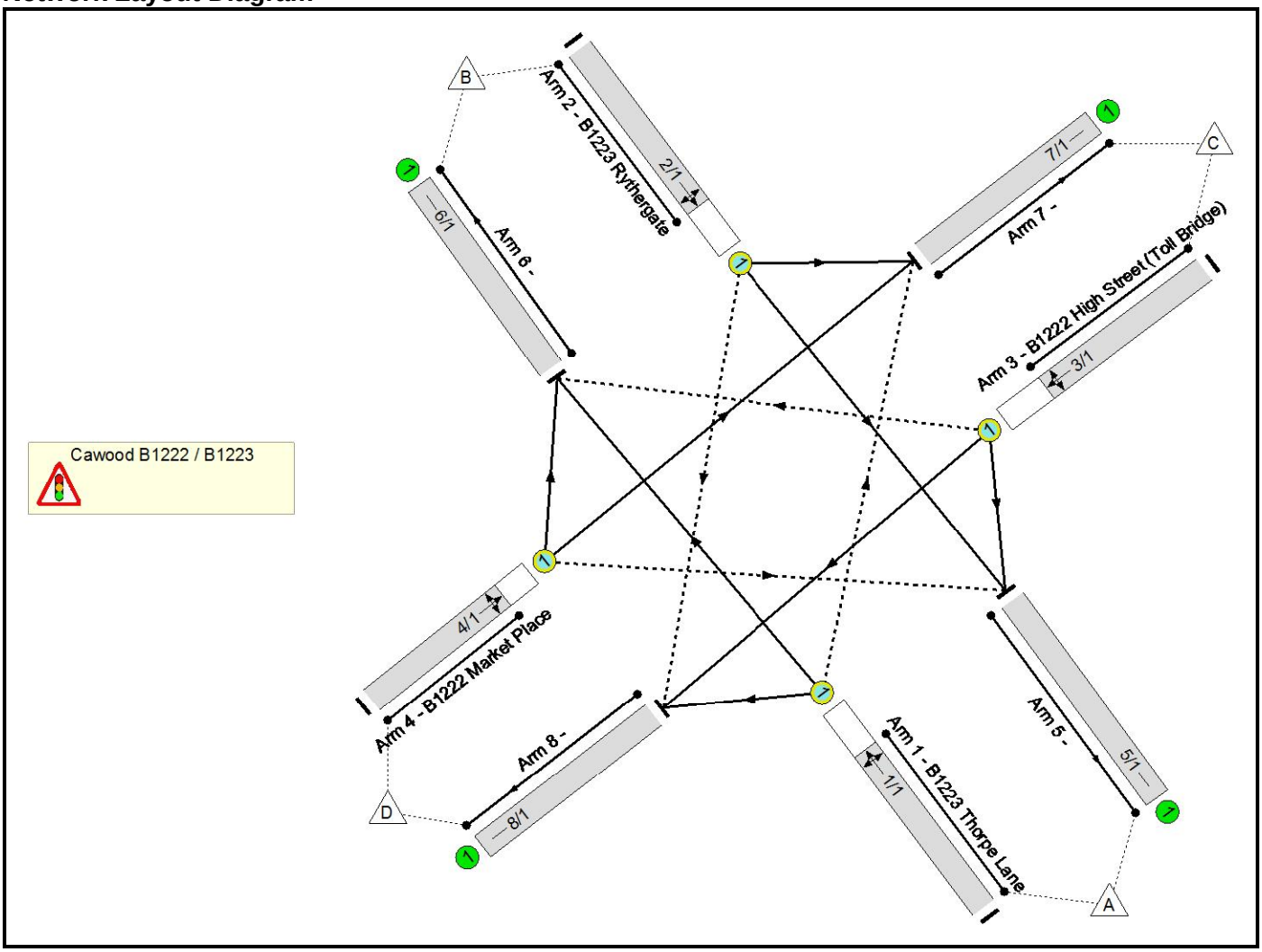
LINSIG OUTPUT

Full Input Data And Results

User and Project Details

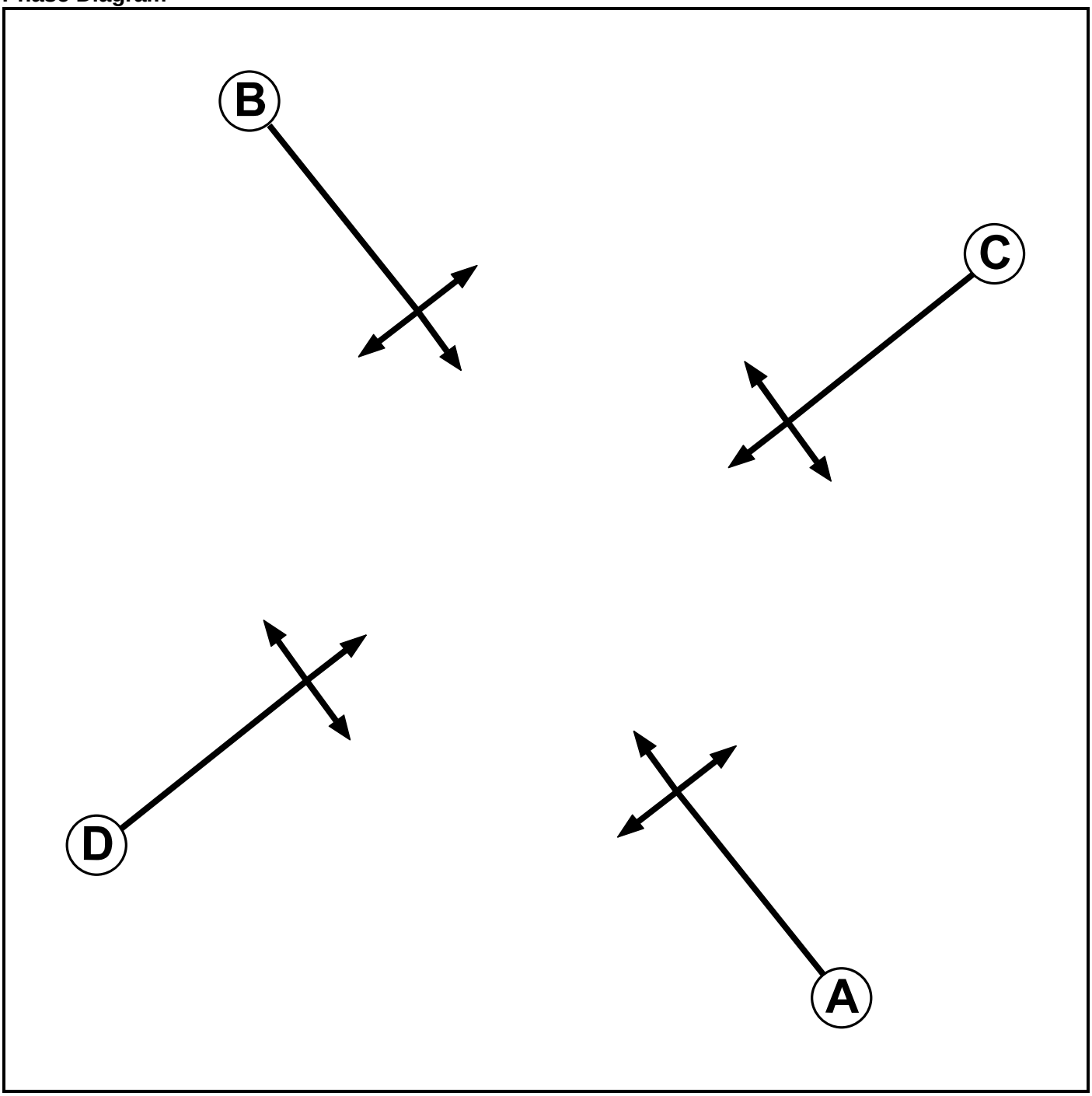
Project:	**Highways Assessment, Selby District**
Title:	Highways Assessment, Selby District
Location:	Cawood Signals
File name:	Cawood signals.lsg3x
Author:	A Lechmere
Company:	Pell Frischmann
Address:	George House, George Street, Wakefield, WF1 1LY
Notes:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7

Full Input Data And Results

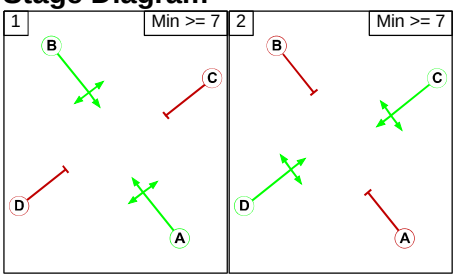
Phase Intergreens Matrix

	Starting Phase				
Terminating Phase		A	B	C	D
	A		-	7	7
	B	-		7	7
	C	7	7		-
	D	7	7	-	

Phases in Stage

Stage No.	Phases in Stage
1	A B
2	C D

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

	To Stage		
		1	2
From Stage	1		7
	2	7	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Cawood B1222 / B1223											
Lane	**Movement**	**Max Flow when Giving Way (PCU/Hr)**	**Min Flow when Giving Way (PCU/Hr)**	**Opposing Lane**	**Opp. Lane Coeff.**	**Opp. Mvmnts.**	**Right Turn Storage (PCU)**	**Non-Blocking Storage (PCU)**	**RTF**	**Right Turn Move up (s)**	**Max Turns in Intergreen (PCU)**
1/1 (B1223 Thorpe Lane)	7/1 (Right)	1439	0	2/1	1.09	All	3.00	-	0.50	3	2.00
2/1 (B1223 Rythergate)	8/1 (Right)	1439	0	1/1	1.09	All	3.00	-	0.50	3	2.00
3/1 (B1222 High Street (Toll Bridge))	6/1 (Right)	1439	0	4/1	1.09	All	3.00	-	0.50	3	2.00
4/1 (B1222 Market Place)	5/1 (Right)	1439	0	3/1	1.09	All	2.00	-	0.50	2	2.00

Full Input Data And Results

Lane Input Data

Junction: Cawood B1222 / B1223												
Lane	**Lane Type**	**Phases**	**Start Disp.**	**End Disp.**	**Physical Length (PCU)**	**Sat Flow Type**	**Def User Saturation Flow (PCU/Hr)**	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Turns**	**Turning Radius (m)**
1/1 (B1223 Thorpe Lane)	O	A	2	3	60.0	Geom	-	3.35	0.00	Y	Arm 6 Ahead	Inf
											Arm 7 Right	6.50
											Arm 8 Left	3.50
2/1 (B1223 Rythergate)	O	B	2	3	60.0	Geom	-	2.55	0.00	Y	Arm 5 Ahead	Inf
											Arm 7 Left	2.50
											Arm 8 Right	6.30
3/1 (B1222 High Street (Toll Bridge))	O	C	2	3	60.0	Geom	-	2.51	0.00	Y	Arm 5 Left	3.40
											Arm 6 Right	6.60
											Arm 8 Ahead	Inf
4/1 (B1222 Market Place)	O	D	2	3	60.0	Geom	-	3.35	0.00	Y	Arm 5 Right	5.00
											Arm 6 Left	3.20
											Arm 7 Ahead	Inf
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'S0 - Base 2014 - AM'	08:00	09:00	01:00	
2: 'S0 - Base 2014 - PM'	17:00	18:00	01:00	

Scenario 1: 'Scenario 0 - AM' (FG1: 'S0 - Base 2014 - AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	48	110	15	173
	B	51	0	23	12	86
	C	34	36	0	76	146
	D	17	2	42	0	61
	Tot.	102	86	175	103	466

Traffic Lane Flows

Lane	Scenario 1: Scenario 0 - AM
Junction: Cawood B1222 / B1223	
1/1	173
2/1	86
3/1	146
4/1	61
5/1	102
6/1	86
7/1	175
8/1	103

Full Input Data And Results

Lane Saturation Flows

Junction: Cawood B1222 / B1223

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B1223 Thorpe Lane)	3.35	0.00	Y	Arm 6 Ahead	Inf	27.7 %	1647	1647
				Arm 7 Right	6.50	63.6 %		
				Arm 8 Left	3.50	8.7 %		
2/1 (B1223 Rythergate)	2.55	0.00	Y	Arm 5 Ahead	Inf	59.3 %	1567	1567
				Arm 7 Left	2.50	26.7 %		
				Arm 8 Right	6.30	14.0 %		
3/1 (B1222 High Street (Toll Bridge))	2.51	0.00	Y	Arm 5 Left	3.40	23.3 %	1610	1610
				Arm 6 Right	6.60	24.7 %		
				Arm 8 Ahead	Inf	52.1 %		
4/1 (B1222 Market Place)	3.35	0.00	Y	Arm 5 Right	5.00	27.9 %	1774	1774
				Arm 6 Left	3.20	3.3 %		
				Arm 7 Ahead	Inf	68.9 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: 'Scenario 0 - PM' (FG2: 'S0 - Base 2014 - PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	54	40	14	108
	B	54	0	37	15	106
	C	133	29	0	57	219
	D	27	11	99	0	137
	Tot.	214	94	176	86	570

Full Input Data And Results

Traffic Lane Flows

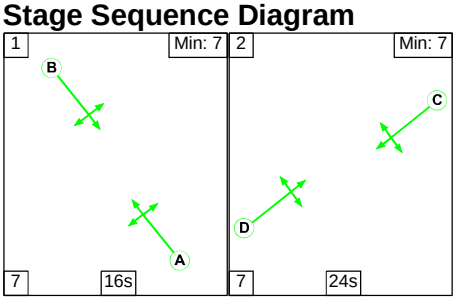
Lane	Scenario 2: Scenario 0 - PM
Junction: Cawood B1222 / B1223	
1/1	108
2/1	106
3/1	219
4/1	137
5/1	214
6/1	94
7/1	176
8/1	86

Lane Saturation Flows

Junction: Cawood B1222 / B1223								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B1223 Thorpe Lane)	3.35	0.00	Y	Arm 6 Ahead	Inf	50.0 %	1709	1709
				Arm 7 Right	6.50	37.0 %		
				Arm 8 Left	3.50	13.0 %		
2/1 (B1223 Rythergate)	2.55	0.00	Y	Arm 5 Ahead	Inf	50.9 %	1504	1504
				Arm 7 Left	2.50	34.9 %		
				Arm 8 Right	6.30	14.2 %		
3/1 (B1222 High Street (Toll Bridge))	2.51	0.00	Y	Arm 5 Left	3.40	60.7 %	1438	1438
				Arm 6 Right	6.60	13.2 %		
				Arm 8 Ahead	Inf	26.0 %		
4/1 (B1222 Market Place)	3.35	0.00	Y	Arm 5 Right	5.00	19.7 %	1778	1778
				Arm 6 Left	3.20	8.0 %		
				Arm 7 Ahead	Inf	72.3 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: 'Scenario 0 - AM' (FG1: 'S0 - Base 2014 - AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

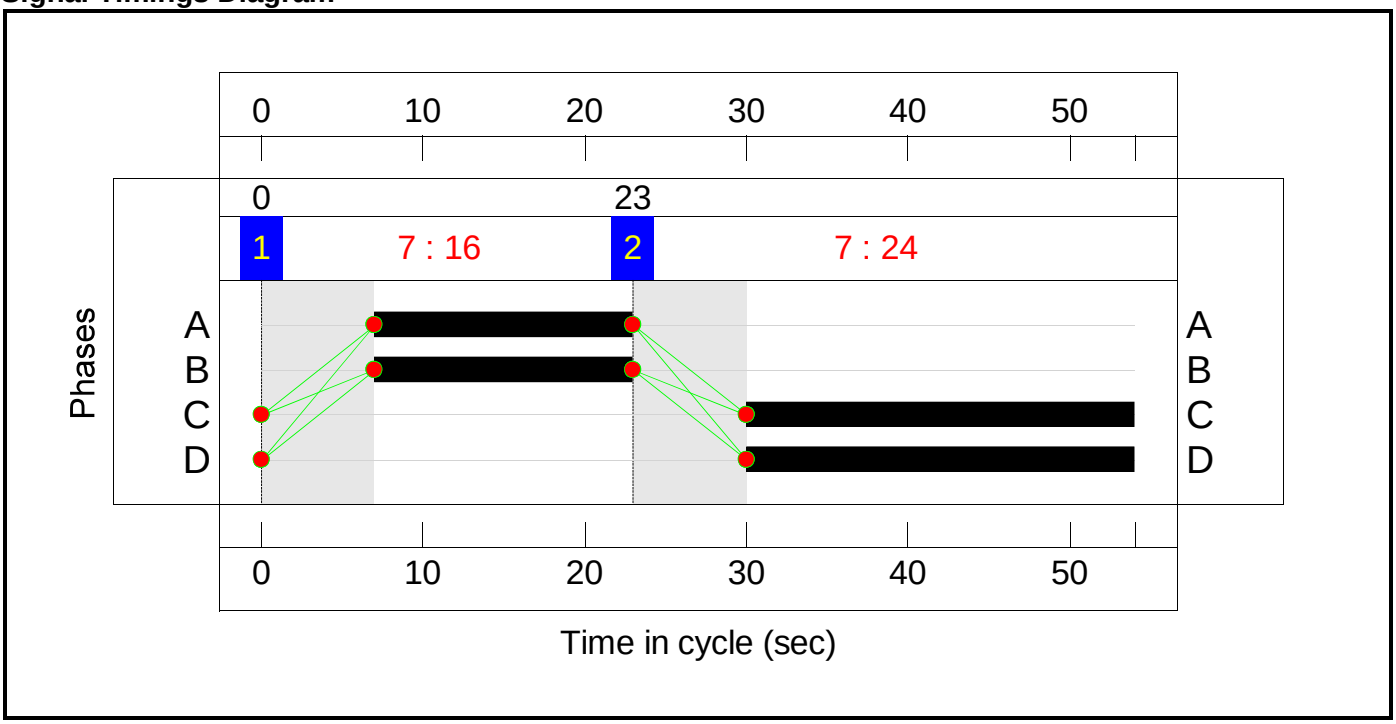


Full Input Data And Results

Stage Timings

Stage	1	2
Duration	16	24
Change Point	0	23

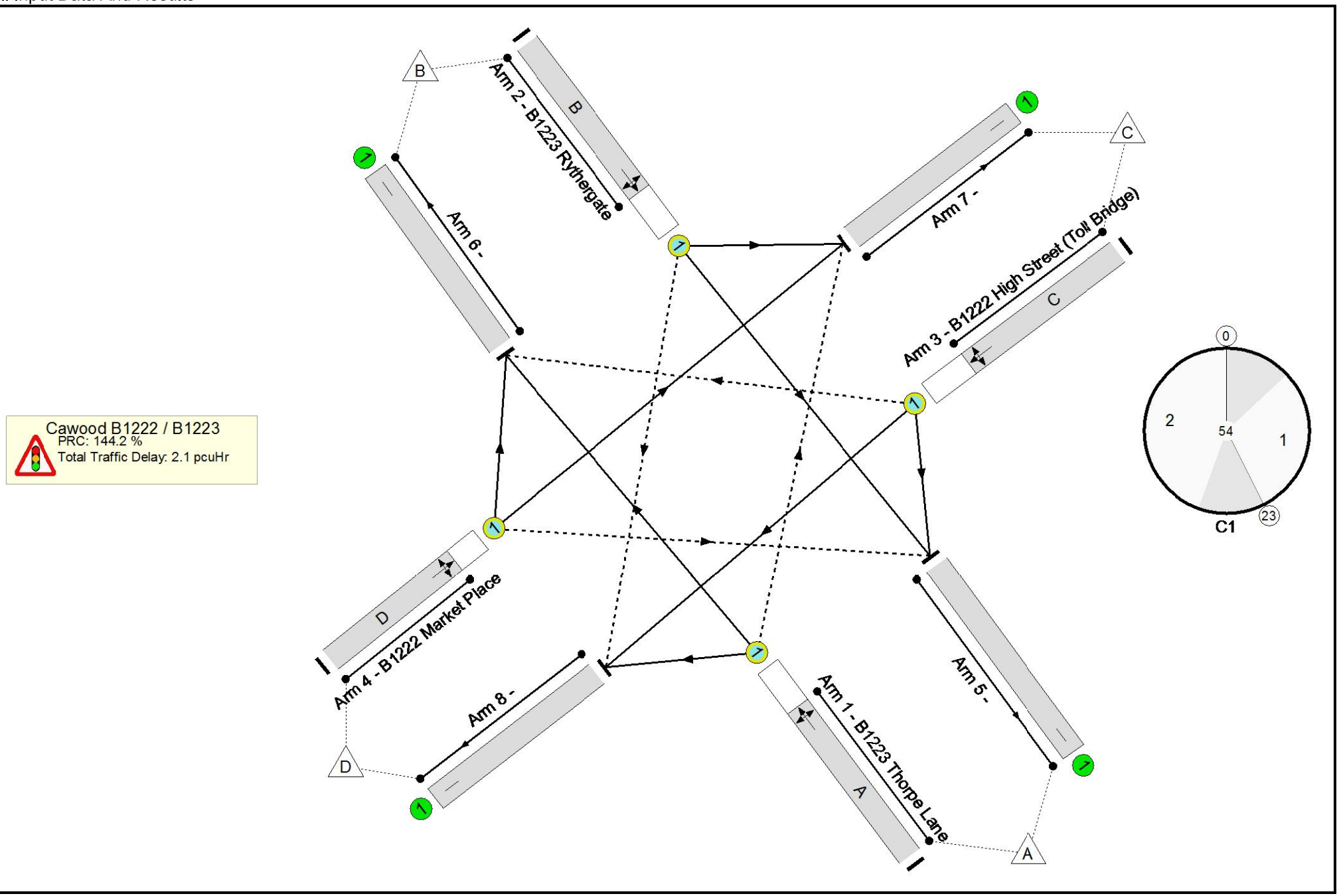
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**36.9%**
Cawood B1222 / B1223	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**36.9%**
1/1	B1223 Thorpe Lane Ahead Right Left	O	N/A	N/A	A		1	16	-	173	1647	469	36.9%
2/1	B1223 Rythergate Ahead Left Right	O	N/A	N/A	B		1	16	-	86	1567	373	23.1%
3/1	B1222 High Street (Toll Bridge) Left Right Ahead	O	N/A	N/A	C		1	24	-	146	1610	745	19.6%
4/1	B1222 Market Place Right Left Ahead	O	N/A	N/A	D		1	24	-	61	1774	717	8.5%
5/1		U	N/A	N/A	-		-	-	-	102	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	86	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	175	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	103	Inf	Inf	0.0%

Full Input Data And Results

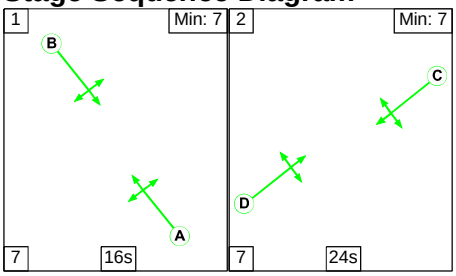
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**166**	**0**	**9**	**1.5**	**0.6**	**0.0**	**2.1**	**-**	**-**	**-**	**-**
Cawood B1222 / B1223	**-**	**-**	**166**	**0**	**9**	**1.5**	**0.6**	**0.0**	**2.1**	**-**	**-**	**-**	**-**
1/1	173	173	104	0	6	0.7	0.3	0.0	1.0	21.0	2.0	0.3	2.3
2/1	86	86	11	0	1	0.3	0.1	0.0	0.5	19.8	0.9	0.1	1.1
3/1	146	146	34	0	2	0.3	0.1	0.0	0.5	11.7	1.3	0.1	1.4
4/1	61	61	16	0	1	0.1	0.0	0.0	0.2	10.9	0.5	0.0	0.6
5/1	102	102	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	86	86	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	175	175	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	103	103	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 144.2 Total Delay for Signalled Lanes (pcuHr): 2.14 Cycle Time (s): 54
PRC Over All Lanes (%): 144.2 Total Delay Over All Lanes(pcuHr): 2.14

Full Input Data And Results

Scenario 2: 'Scenario 0 - PM' (FG2: 'S0 - Base 2014 - PM', Plan 1: 'Network Control Plan 1')

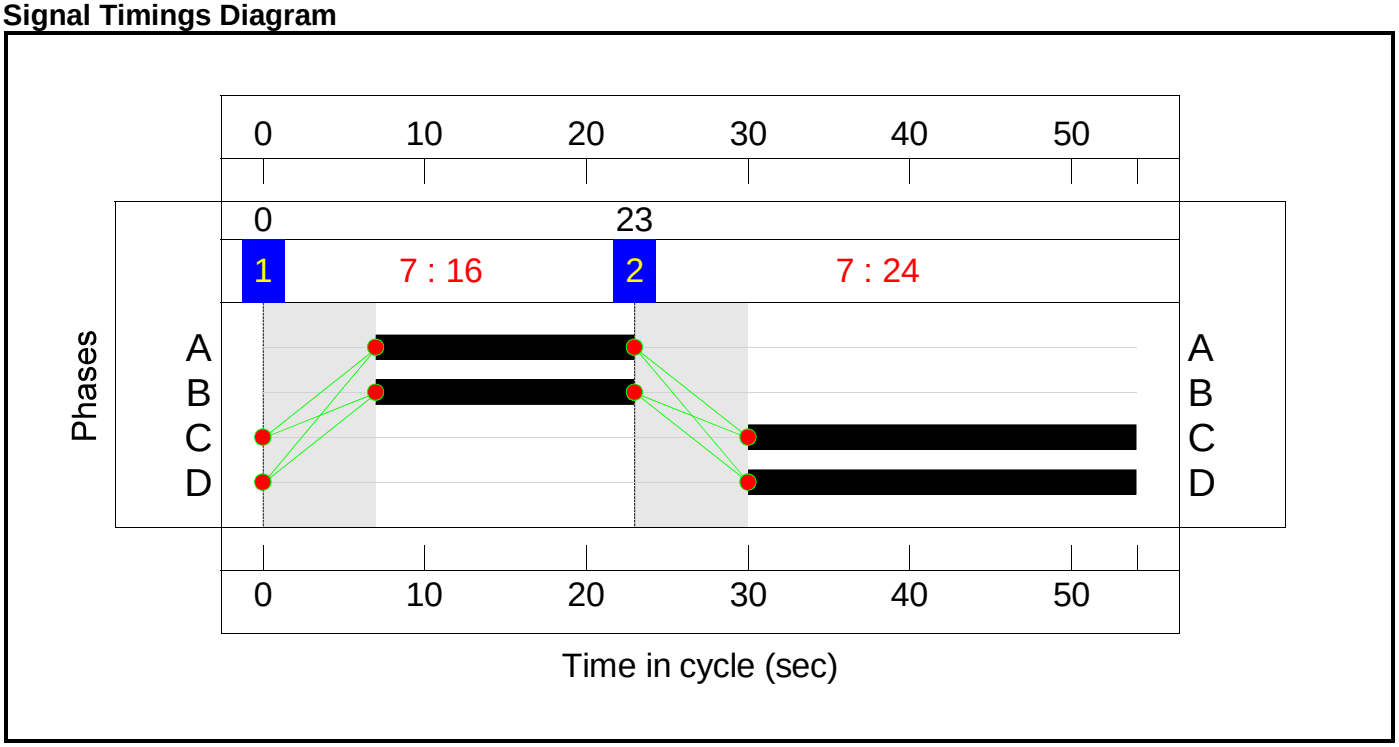
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	16	24
Change Point	0	23

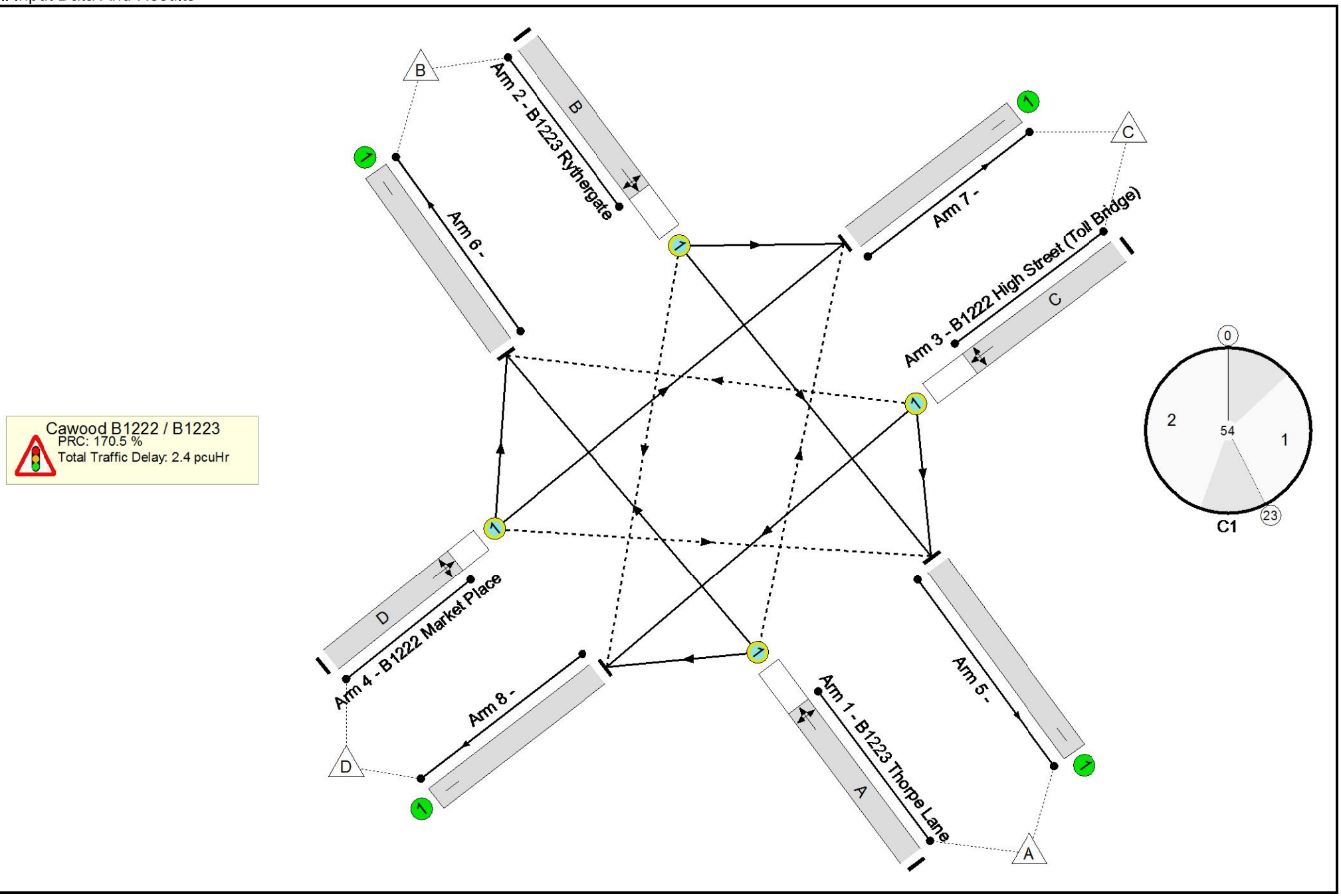
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**33.3%**
Cawood B1222 / B1223	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**33.3%**
1/1	B1223 Thorpe Lane Ahead Right Left	O	N/A	N/A	A		1	16	-	108	1709	481	22.5%
2/1	B1223 Rythergate Ahead Left Right	O	N/A	N/A	B		1	16	-	106	1504	422	25.1%
3/1	B1222 High Street (Toll Bridge) Left Right Ahead	O	N/A	N/A	C		1	24	-	219	1438	658	33.3%
4/1	B1222 Market Place Right Left Ahead	O	N/A	N/A	D		1	24	-	137	1778	669	20.5%
5/1		U	N/A	N/A	-		-	-	-	214	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	94	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	176	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	86	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**105**	**0**	**6**	**1.7**	**0.7**	**0.0**	**2.4**	**-**	**-**	**-**	**-**
Cawood B1222 / B1223	**-**	**-**	**105**	**0**	**6**	**1.7**	**0.7**	**0.0**	**2.4**	**-**	**-**	**-**	**-**
1/1	108	108	38	0	2	0.4	0.1	0.0	0.6	18.6	1.2	0.1	1.3
2/1	106	106	14	0	1	0.4	0.2	0.0	0.6	19.4	1.1	0.2	1.3
3/1	219	219	27	0	2	0.6	0.2	0.0	0.8	13.5	2.1	0.2	2.3
4/1	137	137	26	0	1	0.3	0.1	0.0	0.5	11.9	1.2	0.1	1.3
5/1	214	214	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	94	94	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	176	176	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	86	86	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

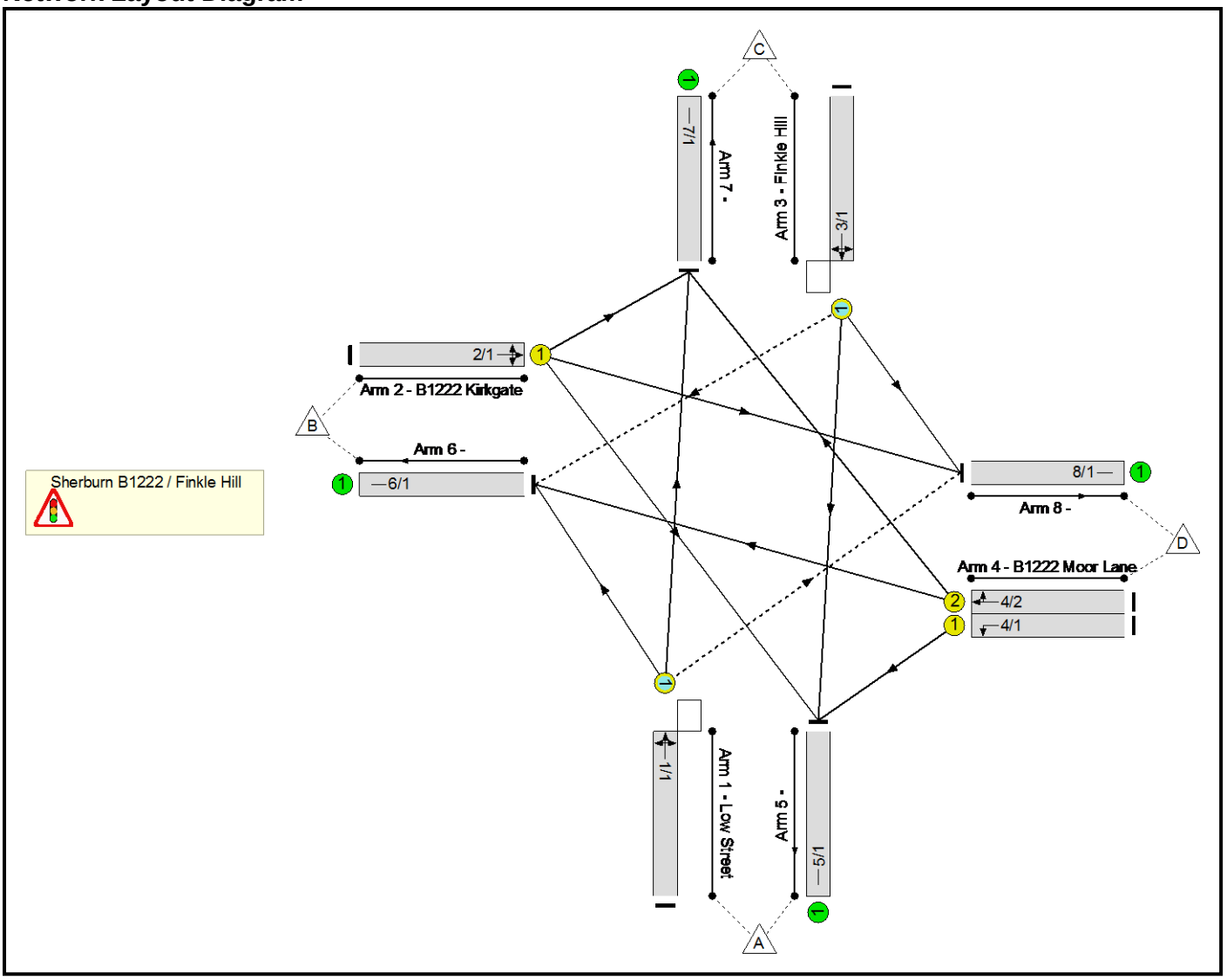
C1 PRC for Signalled Lanes (%): 170.5 Total Delay for Signalled Lanes (pcuHr): 2.40 Cycle Time (s): 54
PRC Over All Lanes (%): 170.5 Total Delay Over All Lanes(pcuHr): 2.40

Full Input Data And Results

User and Project Details

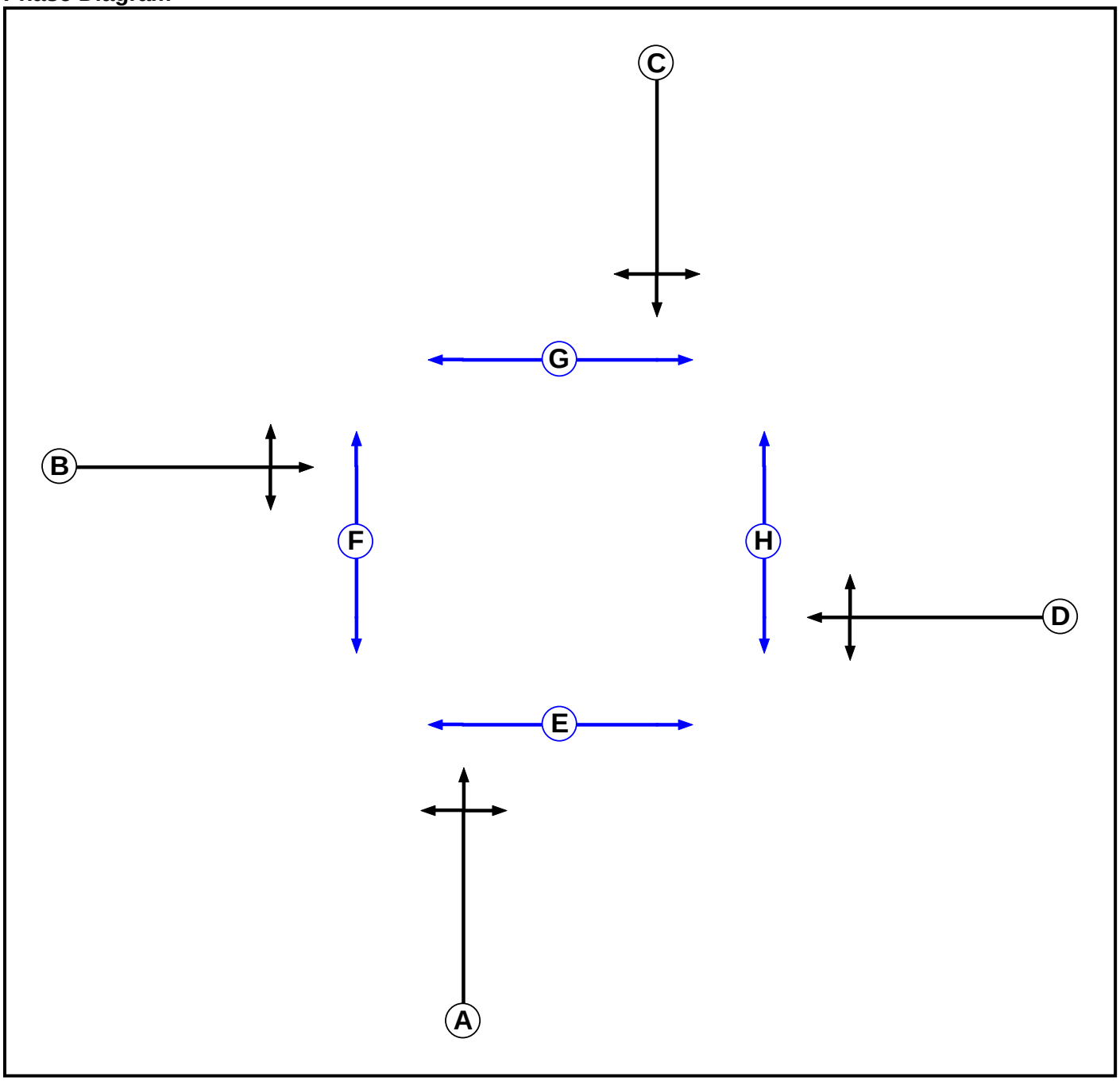
Project:	**Highways Assessment, Selby District**
Title:	Highways Assessment, Selby District
Location:	Sherburn Signals
File name:	Sherburn signals edited(sg).lsg3x
Author:	A Lechmere
Company:	Pell Frischmann
Address:	George House, George Street, Wakefield, WF1 1LY
Notes:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Pedestrian		8	8
F	Pedestrian		8	8
G	Pedestrian		8	8
H	Pedestrian		8	8

Full Input Data And Results

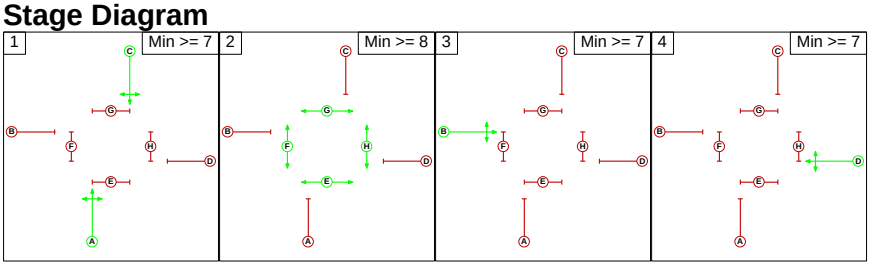
Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H
A		6	-	5	9	9	9	9
B	6		6	6	9	9	9	9
C	-	6		5	9	9	9	9
D	6	6	5		9	9	9	9
E	9	9	9	9		-	-	-
F	9	9	9	9	-		-	-
G	9	9	9	9	-	-		-
H	9	9	9	9	-	-	-	

Phases in Stage

Stage No.	Phases in Stage
1	A C
2	E F G H
3	B
4	D

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage \ To Stage	1	2	3	4
1		9	6	5
2	9		9	9
3	6	9		6
4	6	9	6	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Sherburn B1222 / Finkle Hill											
Lane	**Movement**	**Max Flow when Giving Way (PCU/Hr)**	**Min Flow when Giving Way (PCU/Hr)**	**Opposing Lane**	**Opp. Lane Coeff.**	**Opp. Mvmnts.**	**Right Turn Storage (PCU)**	**Non-Blocking Storage (PCU)**	**RTF**	**Right Turn Move up (s)**	**Max Turns in Intergreen (PCU)**
1/1 (Low Street)	8/1 (Right)	1439	0	3/1	1.09	All	2.00	2.00	0.50	2	2.00
3/1 (Finkle Hill)	6/1 (Right)	1439	0	1/1	1.09	All	2.00	2.00	0.50	2	2.00

Full Input Data And Results

Lane Input Data

Junction: Sherburn B1222 / Finkle Hill

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Low Street)	O	A	2	3	60.0	Geom	-	3.96	0.00	Y	Arm 6 Left	5.50
											Arm 7 Ahead	Inf
											Arm 8 Right	8.30
2/1 (B1222 Kirkgate)	U	B	2	3	60.0	Geom	-	3.37	0.00	Y	Arm 5 Right	8.00
											Arm 7 Left	5.20
											Arm 8 Ahead	Inf
3/1 (Finkle Hill)	O	C	2	3	60.0	Geom	-	2.83	0.00	Y	Arm 5 Ahead	Inf
											Arm 6 Right	6.50
											Arm 8 Left	6.70
4/1 (B1222 Moor Lane)	U	D	2	3	60.0	Geom	-	4.37	0.00	Y	Arm 5 Left	10.30
4/2 (B1222 Moor Lane)	U	D	2	3	60.0	Geom	-	3.25	0.00	N	Arm 6 Ahead	Inf
											Arm 7 Right	9.80
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'S0 - Base 2014 - AM'	08:00	09:00	01:00	
2: 'S0 - Base 2014 - PM'	17:00	18:00	01:00	
3: 'S1 - Base + Development - AM'	08:00	09:00	01:00	
4: 'S1 - Base + Development - PM'	17:00	18:00	01:00	

Scenario 1: 'Scenario 0 - AM' (FG1: 'S0 - Base 2014 - AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	104	173	52	329
	B	47	0	60	118	225
	C	101	62	0	42	205
	D	58	197	43	0	298
	Tot.	206	363	276	212	1057

Traffic Lane Flows

Lane	Scenario 1: Scenario 0 - AM
Junction: Sherburn B1222 / Finkle Hill	
1/1	329
2/1	225
3/1	205
4/1	58
4/2	240
5/1	206
6/1	363
7/1	276
8/1	212

Full Input Data And Results

Lane Saturation Flows

Junction: Sherburn B1222 / Finkle Hill								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Low Street)	3.96	0.00	Y	Arm 6 Left	5.50	31.6 %	1804	1804
				Arm 7 Ahead	Inf	52.6 %		
				Arm 8 Right	8.30	15.8 %		
2/1 (B1222 Kirkgate)	3.37	0.00	Y	Arm 5 Right	8.00	20.9 %	1749	1749
				Arm 7 Left	5.20	26.7 %		
				Arm 8 Ahead	Inf	52.4 %		
3/1 (Finkle Hill)	2.83	0.00	Y	Arm 5 Ahead	Inf	49.3 %	1701	1701
				Arm 6 Right	6.50	30.2 %		
				Arm 8 Left	6.70	20.5 %		
4/1 (B1222 Moor Lane)	4.37	0.00	Y	Arm 5 Left	10.30	100.0 %	1791	1791
4/2 (B1222 Moor Lane)	3.25	0.00	N	Arm 6 Ahead	Inf	82.1 %	2024	2024
				Arm 7 Right	9.80	17.9 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: 'Scenario 0 - PM' (FG2: 'S0 - Base 2014 - PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	75	140	58	273
	B	106	0	74	173	353
	C	216	65	0	79	360
	D	91	176	43	0	310
	Tot.	413	316	257	310	1296

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: Scenario 0 - PM
Junction: Sherburn B1222 / Finkle Hill	
1/1	273
2/1	353
3/1	360
4/1	91
4/2	219
5/1	413
6/1	316
7/1	257
8/1	310

Lane Saturation Flows

Junction: Sherburn B1222 / Finkle Hill								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Low Street)	3.96	0.00	Y	Arm 6 Left	5.50	27.5 %	1806	1806
				Arm 7 Ahead	Inf	51.3 %		
				Arm 8 Right	8.30	21.2 %		
2/1 (B1222 Kirkgate)	3.37	0.00	Y	Arm 5 Right	8.00	30.0 %	1748	1748
				Arm 7 Left	5.20	21.0 %		
				Arm 8 Ahead	Inf	49.0 %		
3/1 (Finkle Hill)	2.83	0.00	Y	Arm 5 Ahead	Inf	60.0 %	1740	1740
				Arm 6 Right	6.50	18.1 %		
				Arm 8 Left	6.70	21.9 %		
4/1 (B1222 Moor Lane)	4.37	0.00	Y	Arm 5 Left	10.30	100.0 %	1791	1791
4/2 (B1222 Moor Lane)	3.25	0.00	N	Arm 6 Ahead	Inf	80.4 %	2019	2019
				Arm 7 Right	9.80	19.6 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 3: 'Scenario 1 - AM' (FG3: 'S1 - Base + Development - AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	127	235	61	423
	B	57	0	60	151	268
	C	124	62	0	51	237
	D	61	222	47	0	330
	Tot.	242	411	342	263	1258

Traffic Lane Flows

Lane	Scenario 3: Scenario 1 - AM
Junction: Sherburn B1222 / Finkle Hill	
1/1	423
2/1	268
3/1	237
4/1	61
4/2	269
5/1	242
6/1	411
7/1	342
8/1	263

Full Input Data And Results

Lane Saturation Flows

Junction: Sherburn B1222 / Finkle Hill								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Low Street)	3.96	0.00	Y	Arm 6 Left	5.50	30.0 %	1815	1815
				Arm 7 Ahead	Inf	55.6 %		
				Arm 8 Right	8.30	14.4 %		
2/1 (B1222 Kirkgate)	3.37	0.00	Y	Arm 5 Right	8.00	21.3 %	1767	1767
				Arm 7 Left	5.20	22.4 %		
				Arm 8 Ahead	Inf	56.3 %		
3/1 (Finkle Hill)	2.83	0.00	Y	Arm 5 Ahead	Inf	52.3 %	1712	1712
				Arm 6 Right	6.50	26.2 %		
				Arm 8 Left	6.70	21.5 %		
4/1 (B1222 Moor Lane)	4.37	0.00	Y	Arm 5 Left	10.30	100.0 %	1791	1791
4/2 (B1222 Moor Lane)	3.25	0.00	N	Arm 6 Ahead	Inf	82.5 %	2026	2026
				Arm 7 Right	9.80	17.5 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: 'Scenario 1 - PM' (FG4: 'S1 - Base + Development - PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	92	184	63	339
	B	136	0	74	190	400
	C	285	65	0	82	432
	D	96	218	51	0	365
	Tot.	517	375	309	335	1536

Full Input Data And Results

Traffic Lane Flows

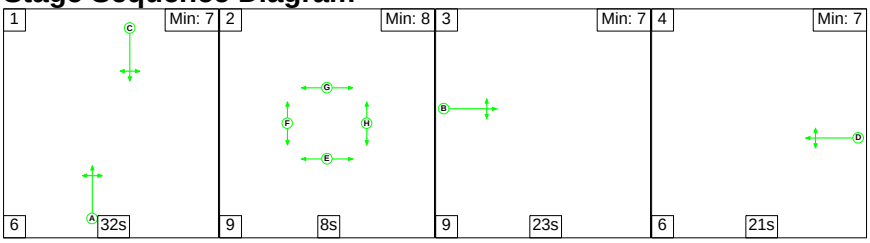
Lane	Scenario 4: Scenario 1 - PM
Junction: Sherburn B1222 / Finkle Hill	
1/1	339
2/1	400
3/1	432
4/1	96
4/2	269
5/1	517
6/1	375
7/1	309
8/1	335

Lane Saturation Flows

Junction: Sherburn B1222 / Finkle Hill								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Low Street)	3.96	0.00	Y	Arm 6 Left	5.50	27.1 %	1816	1816
				Arm 7 Ahead	Inf	54.3 %		
				Arm 8 Right	8.30	18.6 %		
2/1 (B1222 Kirkgate)	3.37	0.00	Y	Arm 5 Right	8.00	34.0 %	1747	1747
				Arm 7 Left	5.20	18.5 %		
				Arm 8 Ahead	Inf	47.5 %		
3/1 (Finkle Hill)	2.83	0.00	Y	Arm 5 Ahead	Inf	66.0 %	1762	1762
				Arm 6 Right	6.50	15.0 %		
				Arm 8 Left	6.70	19.0 %		
4/1 (B1222 Moor Lane)	4.37	0.00	Y	Arm 5 Left	10.30	100.0 %	1791	1791
4/2 (B1222 Moor Lane)	3.25	0.00	N	Arm 6 Ahead	Inf	81.0 %	2021	2021
				Arm 7 Right	9.80	19.0 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: 'Scenario 0 - AM' (FG1: 'S0 - Base 2014 - AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

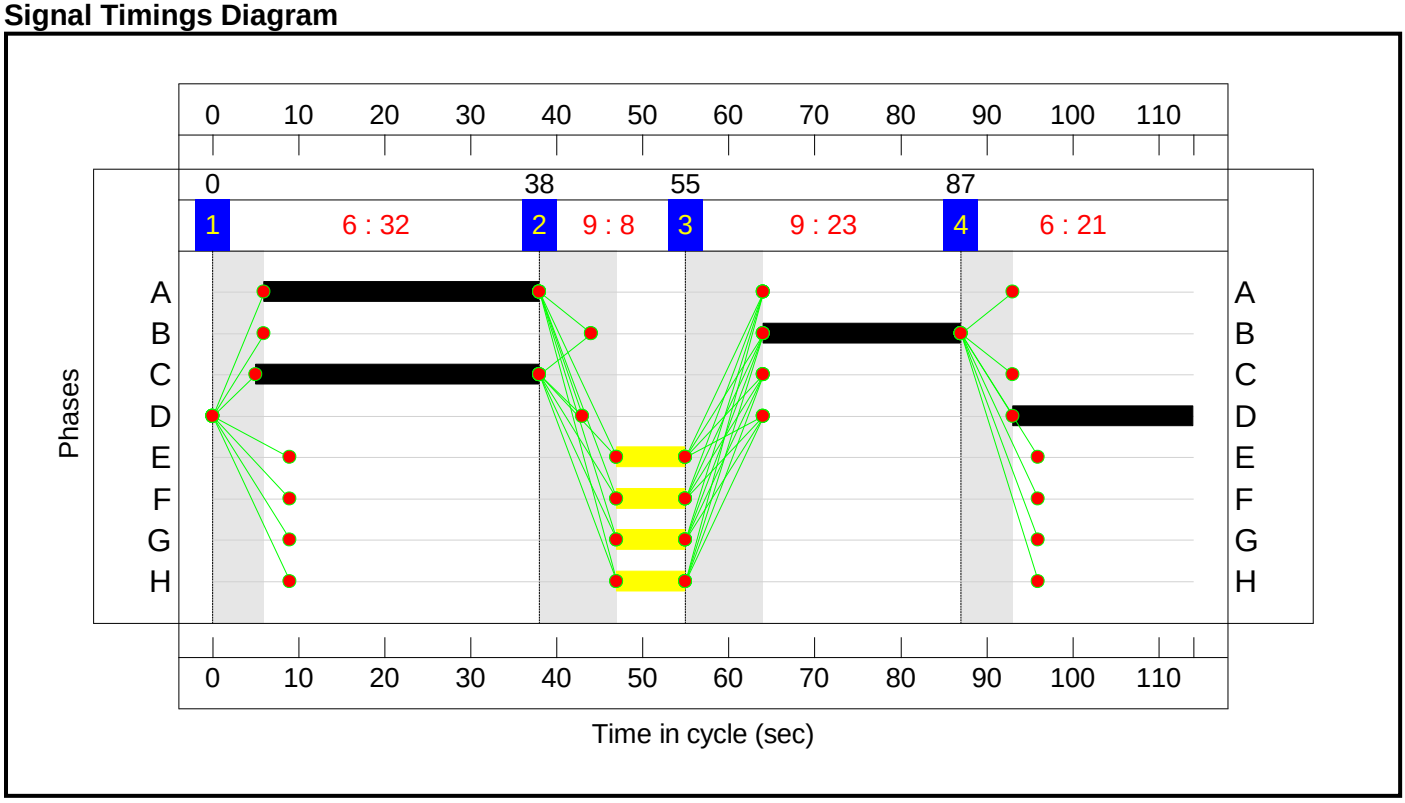


Full Input Data And Results

Stage Timings

Stage	1	2	3	4
Duration	32	8	23	21
Change Point	0	38	55	87

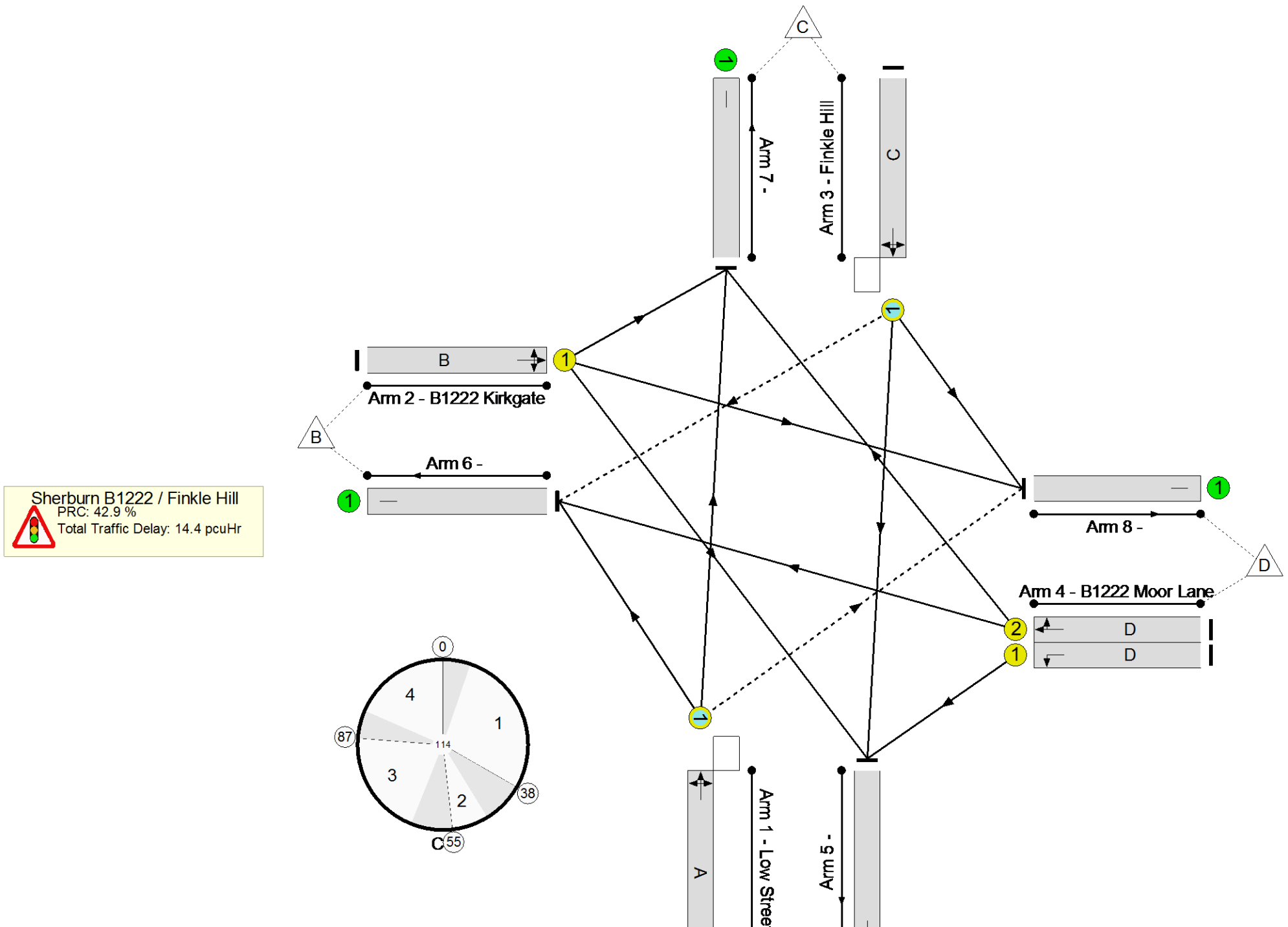
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**63.0%**
Sherburn B1222 / Finkle Hill	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**63.0%**
1/1	Low Street Left Ahead Right	O	N/A	N/A	A		1	32	-	329	1804	522	63.0%
2/1	B1222 Kirkgate Right Left Ahead	U	N/A	N/A	B		1	23	-	225	1749	368	61.1%
3/1	Finkle Hill Ahead Right Left	O	N/A	N/A	C		1	33	-	205	1701	373	55.0%
4/1	B1222 Moor Lane Left	U	N/A	N/A	D		1	21	-	58	1791	346	16.8%
4/2	B1222 Moor Lane Ahead Right	U	N/A	N/A	D		1	21	-	240	2024	391	61.4%
5/1		U	N/A	N/A	-		-	-	-	206	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	363	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	276	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	212	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**114**	**0**	**0**	**11.0**	**3.1**	**0.3**	**14.4**	**-**	**-**	**-**	**-**
Sherburn B1222 / Finkle Hill	**-**	**-**	**114**	**0**	**0**	**11.0**	**3.1**	**0.3**	**14.4**	**-**	**-**	**-**	**-**
1/1	329	329	52	0	0	3.2	0.8	0.0	4.1	44.6	9.0	0.8	9.9
2/1	225	225	-	-	-	2.5	0.8	-	3.3	53.2	6.4	0.8	7.2
3/1	205	205	62	0	0	1.8	0.6	0.2	2.7	46.8	5.1	0.6	5.7
4/1	58	58	-	-	-	0.6	0.1	-	0.7	44.6	1.5	0.1	1.6
4/2	240	240	-	-	-	2.8	0.8	-	3.6	54.0	6.9	0.8	7.7
5/1	206	206	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	363	363	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	276	276	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	212	212	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1

PRC for Signalled Lanes (%): 42.9
PRC Over All Lanes (%): 42.9

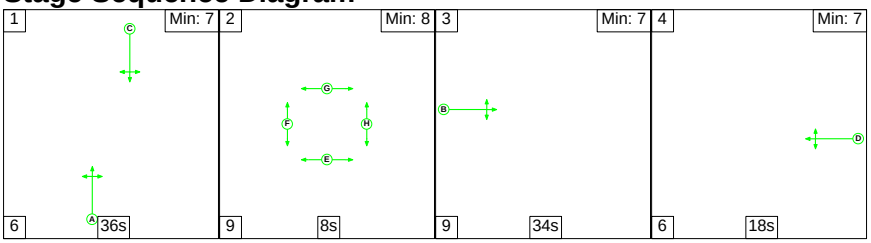
Total Delay for Signalled Lanes (pcuHr): 14.39
Total Delay Over All Lanes(pcuHr): 14.39

Cycle Time (s): 114

Full Input Data And Results

Scenario 2: 'Scenario 0 - PM' (FG2: 'S0 - Base 2014 - PM', Plan 1: 'Network Control Plan 1')

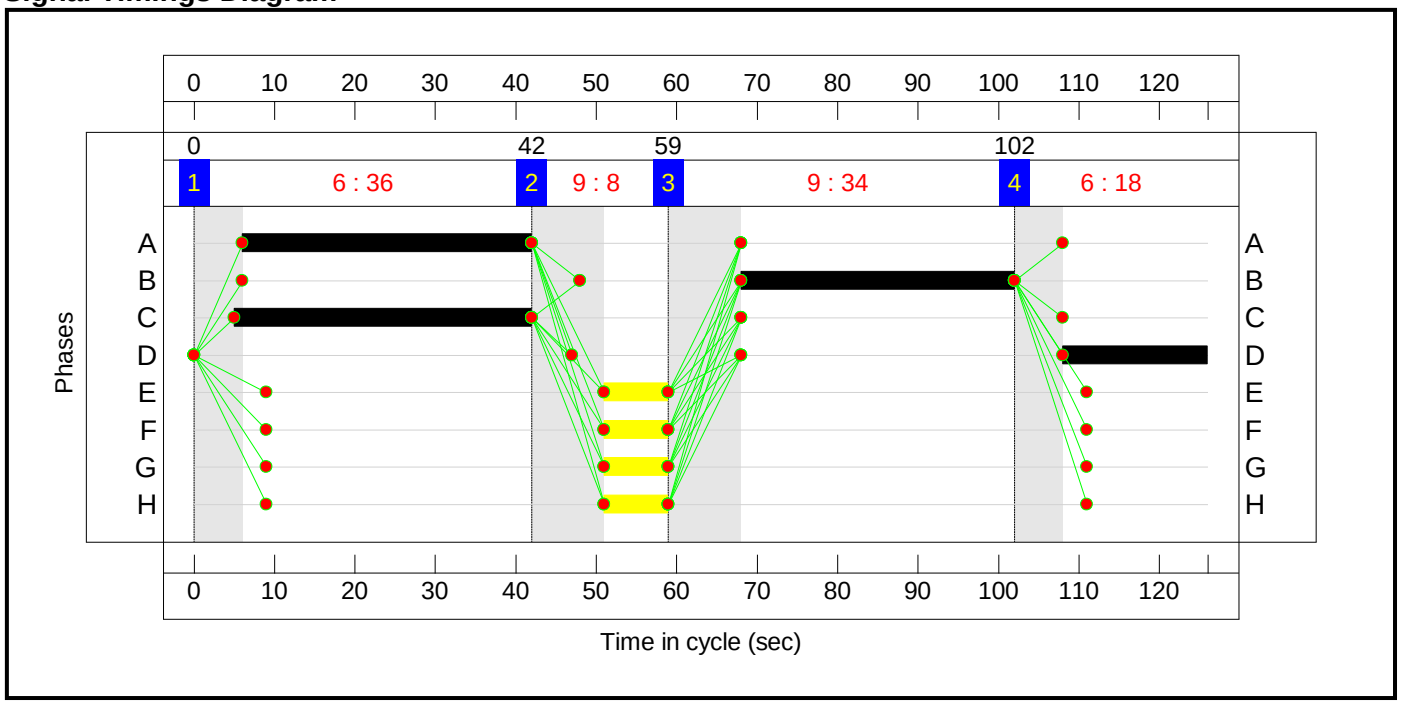
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	36	8	34	18
Change Point	0	42	59	102

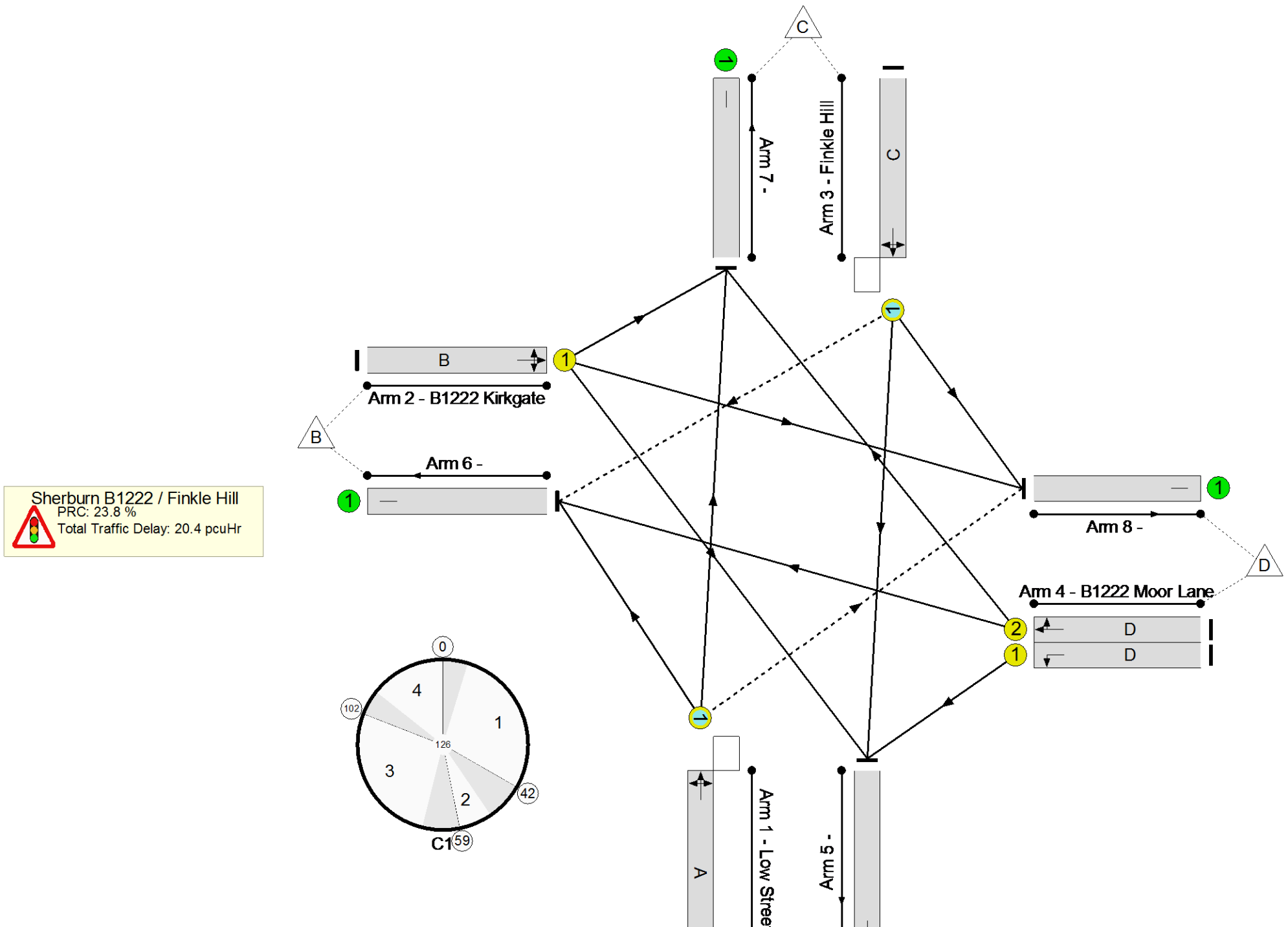
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**72.7%**
Sherburn B1222 / Finkle Hill	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**72.7%**
1/1	Low Street Left Ahead Right	O	N/A	N/A	A		1	36	-	273	1806	418	65.4%
2/1	B1222 Kirkgate Right Left Ahead	U	N/A	N/A	B		1	34	-	353	1748	486	72.7%
3/1	Finkle Hill Ahead Right Left	O	N/A	N/A	C		1	37	-	360	1740	509	70.7%
4/1	B1222 Moor Lane Left	U	N/A	N/A	D		1	18	-	91	1791	270	33.7%
4/2	B1222 Moor Lane Ahead Right	U	N/A	N/A	D		1	18	-	219	2019	304	71.9%
5/1		U	N/A	N/A	-		-	-	-	413	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	316	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	257	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	310	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**123**	**0**	**0**	**15.0**	**4.9**	**0.4**	**20.4**	**-**	**-**	**-**	**-**
Sherburn B1222 / Finkle Hill	**-**	**-**	**123**	**0**	**0**	**15.0**	**4.9**	**0.4**	**20.4**	**-**	**-**	**-**	**-**
1/1	273	273	58	0	0	2.8	0.9	0.3	4.0	52.9	7.9	0.9	8.8
2/1	353	353	-	-	-	4.0	1.3	-	5.3	54.5	11.2	1.3	12.5
3/1	360	360	65	0	0	3.9	1.2	0.1	5.2	52.1	11.2	1.2	12.4
4/1	91	91	-	-	-	1.2	0.3	-	1.5	57.9	2.8	0.3	3.1
4/2	219	219	-	-	-	3.1	1.2	-	4.3	71.4	7.3	1.2	8.5
5/1	413	413	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	316	316	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	257	257	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	310	310	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1

PRC for Signalled Lanes (%): 23.8
PRC Over All Lanes (%): 23.8

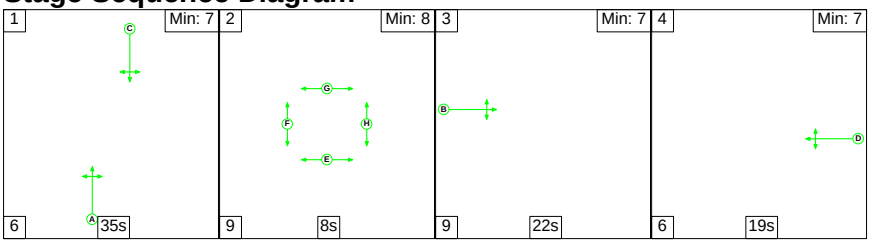
Total Delay for Signalled Lanes (pcuHr): 20.37
Total Delay Over All Lanes(pcuHr): 20.37

Cycle Time (s): 126

Full Input Data And Results

Scenario 3: 'Scenario 1 - AM' (FG3: 'S1 - Base + Development - AM', Plan 1: 'Network Control Plan 1')

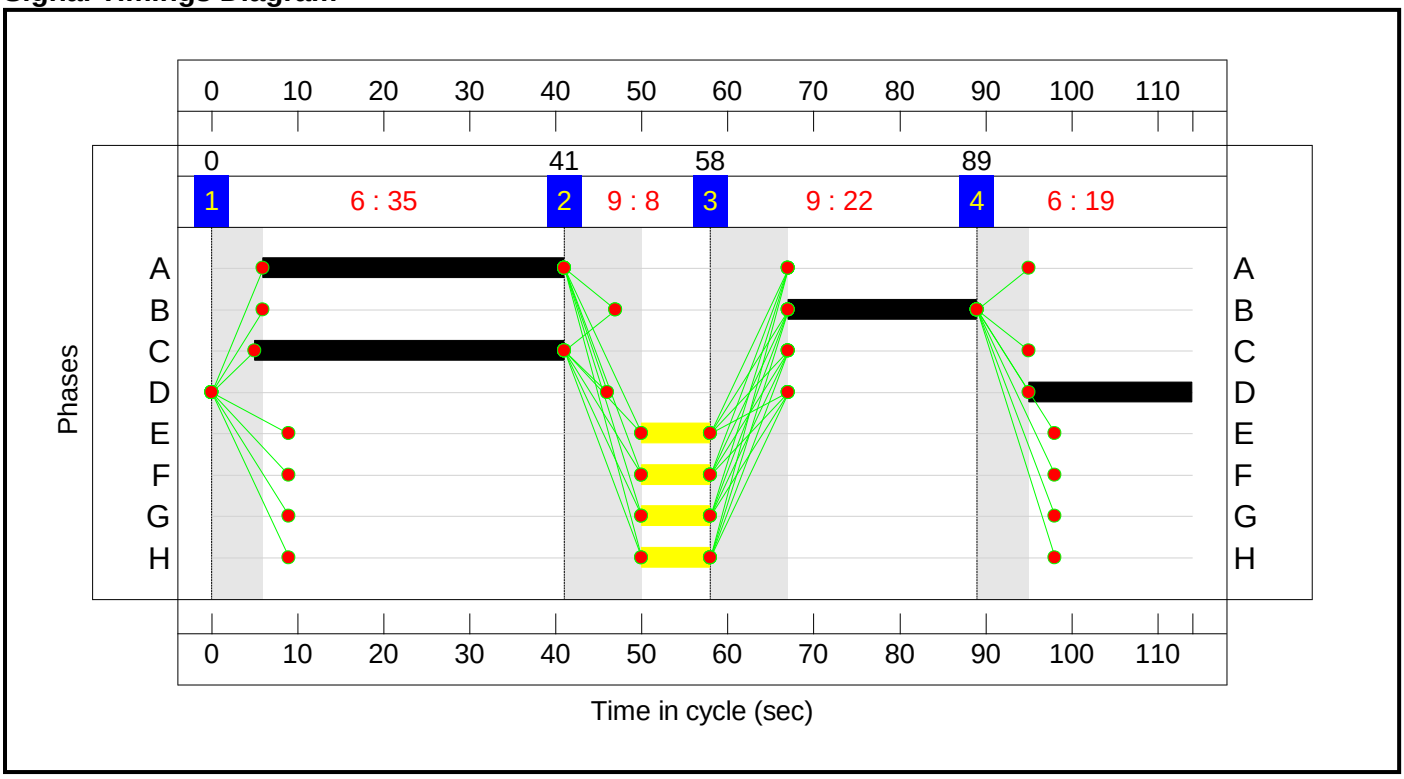
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	35	8	22	19
Change Point	0	41	58	89

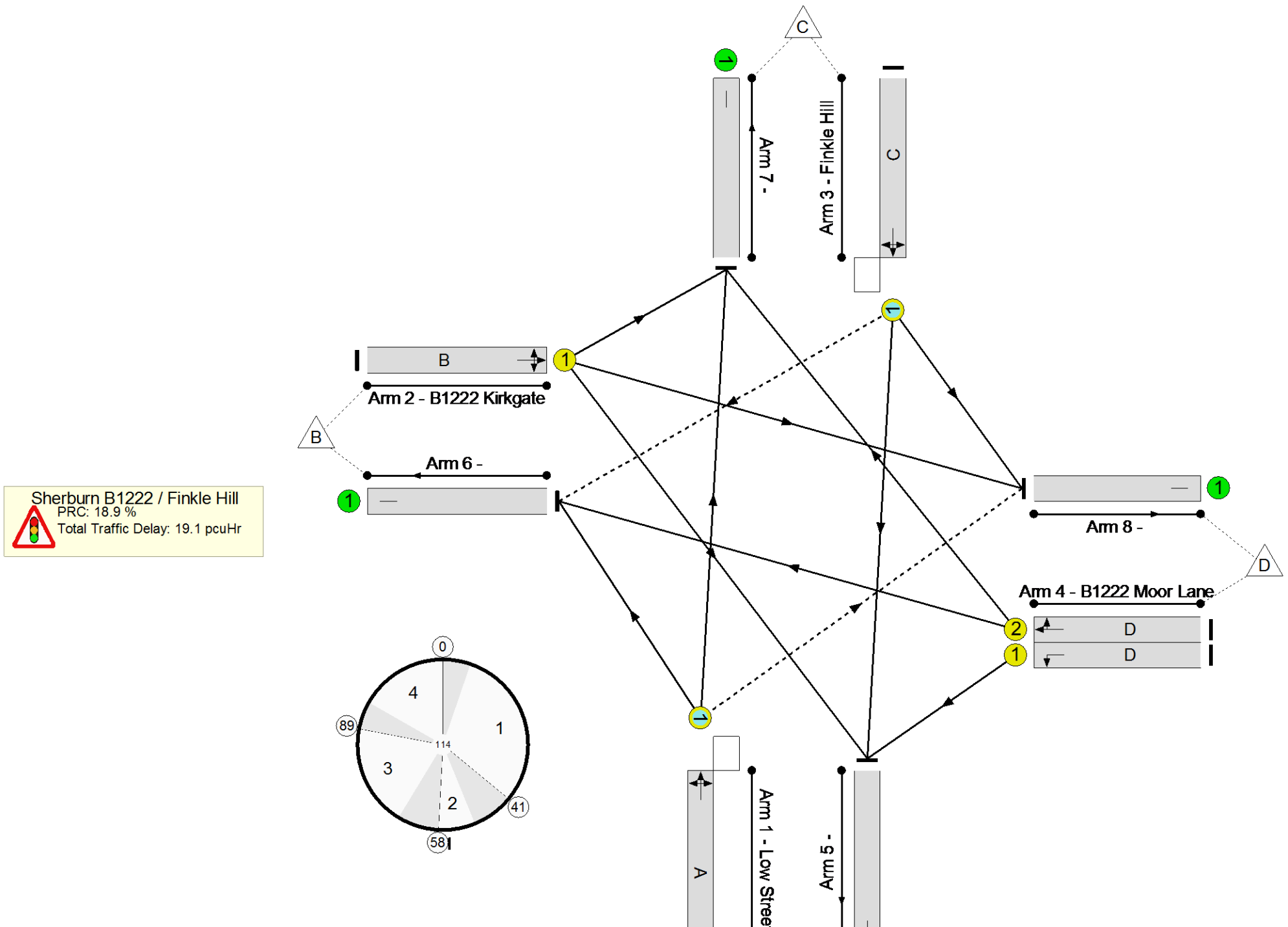
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**75.7%**
Sherburn B1222 / Finkle Hill	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**75.7%**
1/1	Low Street Left Ahead Right	O	N/A	N/A	A		1	35	-	423	1815	573	73.8%
2/1	B1222 Kirkgate Right Left Ahead	U	N/A	N/A	B		1	22	-	268	1767	357	75.2%
3/1	Finkle Hill Ahead Right Left	O	N/A	N/A	C		1	36	-	237	1712	362	65.5%
4/1	B1222 Moor Lane Left	U	N/A	N/A	D		1	19	-	61	1791	314	19.4%
4/2	B1222 Moor Lane Ahead Right	U	N/A	N/A	D		1	19	-	269	2026	355	75.7%
5/1		U	N/A	N/A	-		-	-	-	242	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	411	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	342	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	263	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**123**	**0**	**0**	**13.3**	**5.4**	**0.4**	**19.1**	**-**	**-**	**-**	**-**
Sherburn B1222 / Finkle Hill	**-**	**-**	**123**	**0**	**0**	**13.3**	**5.4**	**0.4**	**19.1**	**-**	**-**	**-**	**-**
1/1	423	423	61	0	0	4.1	1.4	0.0	5.5	46.9	11.9	1.4	13.3
2/1	268	268	-	-	-	3.2	1.5	-	4.7	62.5	8.0	1.5	9.4
3/1	237	237	62	0	0	2.0	0.9	0.3	3.2	49.4	5.9	0.9	6.8
4/1	61	61	-	-	-	0.7	0.1	-	0.8	47.2	1.6	0.1	1.8
4/2	269	269	-	-	-	3.3	1.5	-	4.8	64.8	8.1	1.5	9.6
5/1	242	242	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	411	411	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	342	342	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	263	263	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1

PRC for Signalled Lanes (%): 18.9
PRC Over All Lanes (%): 18.9

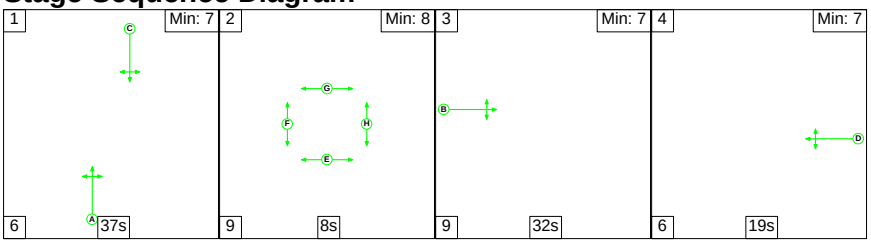
Total Delay for Signalled Lanes (pcuHr): 19.06
Total Delay Over All Lanes(pcuHr): 19.06

Cycle Time (s): 114

Full Input Data And Results

Scenario 4: 'Scenario 1 - PM' (FG4: 'S1 - Base + Development - PM', Plan 1: 'Network Control Plan 1')

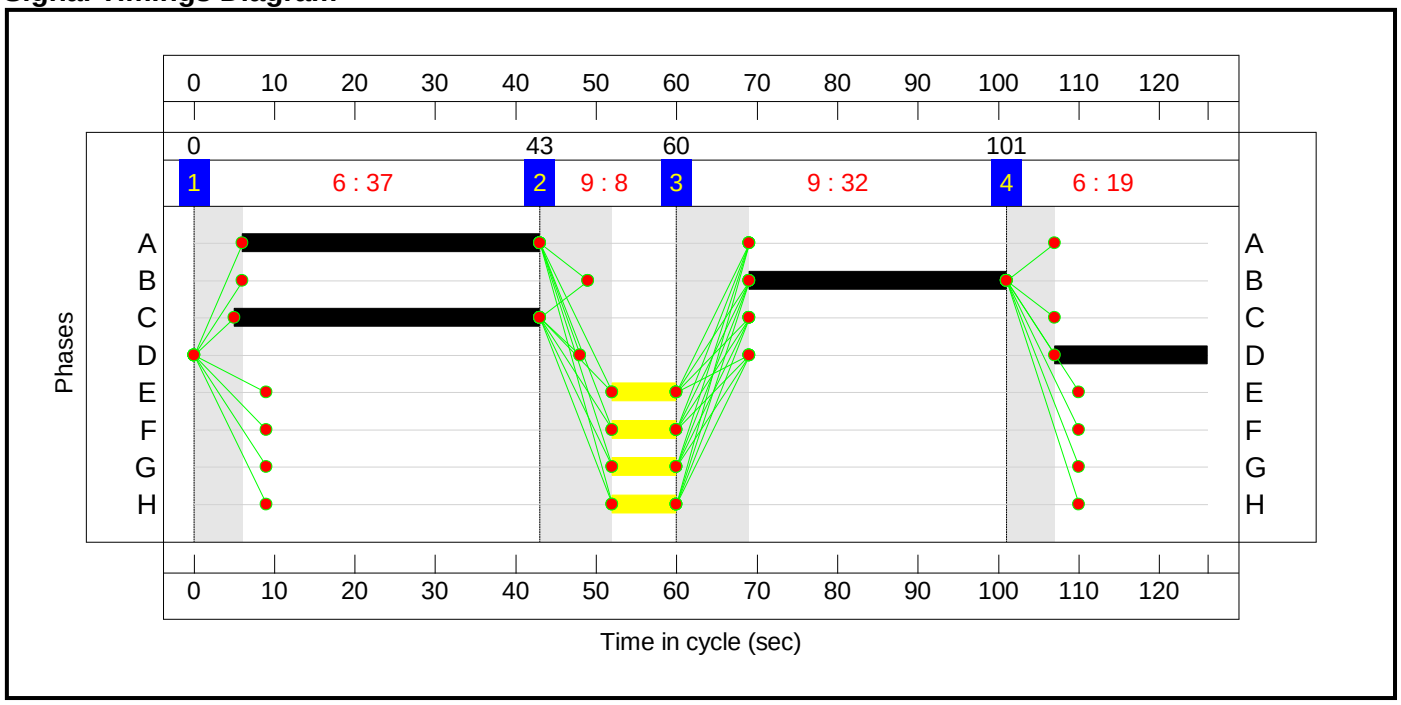
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	37	8	32	19
Change Point	0	43	60	101

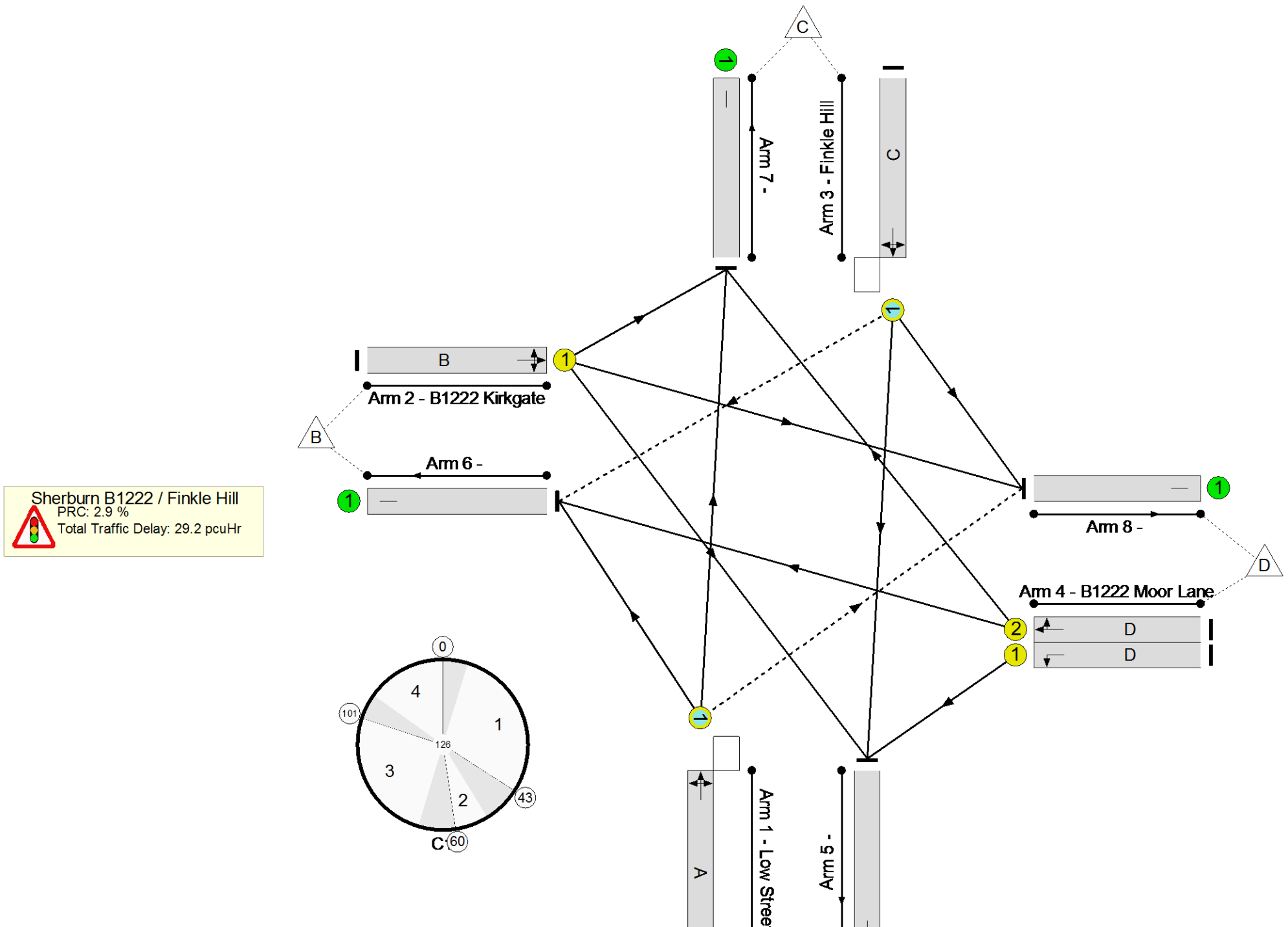
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**87.4%**
Sherburn B1222 / Finkle Hill	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**87.4%**
1/1	Low Street Left Ahead Right	O	N/A	N/A	A		1	37	-	339	1816	405	83.7%
2/1	B1222 Kirkgate Right Left Ahead	U	N/A	N/A	B		1	32	-	400	1747	458	87.4%
3/1	Finkle Hill Ahead Right Left	O	N/A	N/A	C		1	38	-	432	1762	528	81.8%
4/1	B1222 Moor Lane Left	U	N/A	N/A	D		1	19	-	96	1791	284	33.8%
4/2	B1222 Moor Lane Ahead Right	U	N/A	N/A	D		1	19	-	269	2021	321	83.9%
5/1		U	N/A	N/A	-		-	-	-	517	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	375	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	309	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	335	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**128**	**0**	**0**	**18.4**	**10.3**	**0.5**	**29.2**	**-**	**-**	**-**	**-**
Sherburn B1222 / Finkle Hill	**-**	**-**	**128**	**0**	**0**	**18.4**	**10.3**	**0.5**	**29.2**	**-**	**-**	**-**	**-**
1/1	339	339	63	0	0	3.6	2.4	0.4	6.3	67.0	10.2	2.4	12.6
2/1	400	400	-	-	-	4.9	3.1	-	8.1	72.7	13.3	3.1	16.5
3/1	432	432	65	0	0	4.8	2.2	0.2	7.1	59.4	13.9	2.2	16.1
4/1	96	96	-	-	-	1.3	0.3	-	1.5	56.6	3.0	0.3	3.2
4/2	269	269	-	-	-	3.8	2.4	-	6.2	83.3	9.1	2.4	11.5
5/1	517	517	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	375	375	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	309	309	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	335	335	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1

PRC for Signalled Lanes (%): 2.9
PRC Over All Lanes (%): 2.9

Total Delay for Signalled Lanes (pcuHr): 29.25
Total Delay Over All Lanes(pcuHr): 29.25

Cycle Time (s): 126

APPENDIX E

COMMITTED DEVELOPMENT

Application reference number	Site location	Application description
2011/1004/REM	Staynor Hall Development Bawtry Road,Selby	Reserved Matters application for the erection of 87No. dwellings (Phase 3C - amendment to previously approved phase 3C permission 2009/0213/REM) following outline approval CO/2002/1185 (8/19/1011C/PA)
2012/0028/COU	land to the south of Selby Bypass, Gateforth	Change of use of land from mushroom farm to showpeoples quarters on land to the south of Selby Bypass, Gateforth
2011/0563/FUL	Land Adj Southlands House Southlands Close,South Milford	Full planning application for the erection of 115 dwellings on land to the east of
2012/1132/OUT	Shipyard Road Pump Station Shipyard Road,Selby	Outline application including access for the erection of 14No. residential apartments and associated works
2012/0705/FUL	Clariant Uk Ltd Bawtry Road,Selby	Extension of time application for approval 2004/1264/FUL for application under Section 73 to vary time limiting condition on outline approval 8/19/273U/PA (for the expansion of existing chemical works onto land to the south), to extend the time within which reserved matters can be submitted
2012/0852/FUL	Street Record Leeds Road,Thorpe Willoughby	Erection of a residential development of 149 dwellings with associated access, parking and landscaping on land to the south

CO/2002/1185	Staynor Hall Abbots Road Selby	Outline application for the erection of 1200 dwellings (4 existing to be demolished), employment, public open space, shopping and community facilities (including up to 2,000 sq.m. of shops), together with associated footpaths, cycleways, roads, engineering
2012/0399/EIA	Street Record Low Street Sherburn In Elmet	Outline planning application (accompanied by an environmental statement) to include access for the construction of 100 no. dwellings on phase 2 land between Low Street and Moor Lane
2012/0400/EIA	Street Record Low Street Sherburn In Elmet	Outline planning application (accompanied by an Environmental Statement) for the construction of 498 dwellings to include access on Phase 2 land on land between Moor Lane and Low St
2012/0468/EIA	Land Off Carousel Walk Sherburn In Elmet	Outline application for the erection of a residential development of 120No. dwellings and associated parking and public open space
2012/0541/EIA	Bocm Olympia Mill Barlby Road Barlby Selby	Hybrid application for Olympia Park comprising of 863 dwellings, Public House/Restaurant, food retail unit, fast food unit, primary school, public open space, landscaping works and other associated infrastructure works (outline application) and highway & drainage infrastructure (including road bridge over the existing railway line and new link road from A63 Bypass), landscaping works, demolition, remediation and restoration of site, construction of

		playing field, bowling green, play spaces, sports and community hub building, allotments and noise mitigation features (full application).
2013/0565/FUL	Burn Airfield Common Lane Burn	Change of use of part of airfield to facilitate a gypsy/traveller site including 15 pitches, amenity buildings, office and community building and associated infrastructure
2013/0467/OUT	Land At Former Airfield Lennerton Lane Sherburn In Elmet	Outline application including access for B2/B8 use with ancillary offices (1,250,000sq ft), creation of a new bridge access and site infrastructure works
2009/0805/REM	Land At Holme Lane Coupland Road Selby	Revised (Drainage) reserved matters application for appearance, landscaping, layout and scale of 2005/0336/OUT for the erection of 301 dwellings with associated garages and utility buildings
2013/0031/OUT	Street Record Station Road Carlton	Outline application including access for the development of up to 75No. dwellings, associated infrastructure, and open space provision