The Lake Lothing (Lowestoft) Third Crossing Order 201[*]

Document SCC/LLTC/EX/25: Updated Appendix I of the Transport Assessment Junction Modelling Outputs

Revision 1

Planning Act 2008

The Infrastructure Planning (Examination Procedure) Rule 2010

PINS Reference Number: TR010023

Author: Suffolk County Council

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Foreword

This updated Junction Modelling Outputs (Appendix I from the Transport Assessment) relates to an application ("the Application") submitted by Suffolk County Council ("the Applicant") to the Secretary of State (through the Planning Inspectorate) for a development consent order ("DCO") under the Planning Act 2008.

Suffolk County Council in its role as the Highways Authority has reviewed the submitted Transport Assessment (document reference 7.2 / PINS reference APP-093), including Appendix I - Junction Modelling Outputs (document reference 7.2 / PINS reference APP-103). In response to their comments additional junction capacity assessment work has been undertaken for the following junctions. This document includes updated results for these junctions:

Junction	Details of change
2a: A47 Katwijk Way / A1144 St Peter's Street 2b: A47 Artillery Way / A47 Jubilee Way / A47 St Peter's Street	Revised model output report
3: A47 Waveney Road / Station Square / Commercial Road	Further detail provided - no change to model
4: A12 Pier Terrace / B1532 London Road South	Revised model output report
5: A12 Belvedere Road / Mill Road / Kirkley Rise	Revised model output report
8a: A12 Tom Crisp Way / Blackheath Road 8b: Kirkley Run / Blackheath Road / Long Road 8c: Blackheath Road / Carlton Road	Further detail provided - no change to model
9a: A12 Tom Crisp Way / Bloodmoor Road / A1145 / Castleton Avenue 9b: A1117 Elm Tree Road / Long Road / A117 Bloodmoor Road	Revised model output report
13: Denmark Road / Rotterdam Road	Revised model output report
14: A1117 Normanston Drive / A1117 Peto Way	Revised model output report
16: B1531 Waveney Drive / Riverside Road / Durban Road	Further detail provided - no change to model
17: New junction north of the Lake	Revised model output report
18: New junction south of the Lake	Revised model output report
19: Denmark Road / A47 Katwijk Way	Revised model output report
20: B1531 Waveney Drive / Kimberley Road	Revised model output report
21: A1117 Millennium Way / B1074 Somerleyton Road	Revised model output report

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.6.541 [19821,26/11/2015]

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: 01 A12 Yarmouth Rd-Millennium Way v4 - 2017-10-25.arc8
Path: L:\106xxx\1069948 Lowestoft Third Crossing\09 Documents\06_Modelling_Junction Modelling Sep 2017_Junction Modelling\01 A12 Yarmouth Rd-Millennium Way rdbt
Report generation date: 03/04/2018 09:06:00

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2016 Base							
Arm 1	0.54	2.41	0.35	A	0.93	2.97	0.48	A
Arm 2	0.33	6.31	0.25	A	0.25	6.78	0.20	A
Arm 3	0.68	3.61	0.41	A	0.76	3.88	0.43	A
Arm 4	0.49	4.35	0.33	A	0.27	3.70	0.21	A
Arm 5	0.14	4.21	0.12	A	0.09	3.77	0.08	A
	A1 - 2022 Do Minimum							
Arm 1	0.70	2.71	0.41	A	1.10	3.25	0.53	A
Arm 2	0.31	6.70	0.24	A	0.31	7.56	0.24	A
Arm 3	0.80	3.93	0.45	A	1.03	4.55	0.51	A
Arm 4	0.56	4.69	0.36	A	0.32	4.09	0.24	A
Arm 5	0.20	4.63	0.17	A	0.10	4.05	0.09	A
	A1 - 2022 Do Something							
Arm 1	0.88	3.03	0.47	A	1.17	3.35	0.54	A
Arm 2	0.47	8.01	0.32	A	0.30	7.67	0.23	A
Arm 3	0.88	4.32	0.47	A	0.96	4.45	0.49	A
Arm 4	0.70	5.11	0.41	A	0.45	4.42	0.31	A
Arm 5	0.21	4.82	0.17	A	0.13	4.25	0.12	A
	A1 - 2037 Do Minimum							
Arm 1	1.10	3.41	0.52	A	1.49	3.87	0.60	A
Arm 2	0.45	8.63	0.31	A	0.44	9.27	0.31	A
Arm 3	1.14	4.81	0.53	A	1.84	6.52	0.65	A
Arm 4	0.81	5.74	0.45	A	0.50	5.12	0.33	A
Arm 5	0.28	5.42	0.22	A	0.13	4.67	0.12	A
	A1 - 2037 Do Something							
Arm 1	1.44	3.96	0.59	A	1.54	3.94	0.61	A
Arm 2	0.68	10.87	0.41	B	0.45	9.49	0.31	A
Arm 3	1.21	5.21	0.55	A	2.06	7.12	0.68	A
Arm 4	0.96	6.20	0.49	A	0.61	5.60	0.38	A
Arm 5	0.23	5.36	0.19	A	0.17	5.02	0.15	A

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

"D1 - 2016 Base, AM " model duration: 08:00 - 09:30
"D2 - 2016 Base, PM" model duration: 17:00 - 18:30
"D3 - 2022 Do Minimum, AM" model duration: 08:00 - 09:30
"D4 - 2022 Do Minimum, PM" model duration: 17:00 - 18:30
"D5 - 2022 Do Something, AM" model duration: 08:00 - 09:30
"D6 - 2022 Do Something, PM" model duration: 17:00 - 18:30
"D7 - 2037 Do Minimum, AM" model duration: 08:00 - 09:30
"D8 - 2037 Do Minimum, PM" model duration: 17:00 - 18:30
"D9 - 2037 Do Something, AM" model duration: 08:00 - 09:30
"D10 - 2037 Do Something, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.6.541 at 03/04/2018 09:05:54

File summary

Title	A12 Yarmouth Rd-Millennium Way
Location	Lowestoft
Site Number	
Date	16/02/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ecopp
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) - 2016 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
2016 Base, AM	2016 Base	AM		ONE HOUR	08:00	09:30	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			3.58	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A12 Yarmouth Road North	
2	2	B1385 Corton Long Lane	
3	3	A12 Yarmouth Road South	
4	4	A1117 Milenium Way	
5	5	Blunderston 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	7.70	9.20	22.70	19.70	69.40	57.00	
2	3.70	5.90	1.50	15.30	69.40	56.00	
3	4.50	7.70	20.40	22.70	69.40	54.00	
4	4.90	7.60	3.40	18.70	69.40	53.00	
5	3.50	6.00	10.60	41.60	69.40	43.00	

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)	0.605	2452.515
2		(calculated)	(calculated)	0.389	1107.876
3		(calculated)	(calculated)	0.514	1853.427
4		(calculated)	(calculated)	0.468	1572.960
5		(calculated)	(calculated)	0.466	1462.768

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	✓	728.07	100.000
2	ONE HOUR	✓	172.75	100.000
3	ONE HOUR	✓	618.72	100.000
4	ONE HOUR	✓	372.50	100.000
5	ONE HOUR	✓	110.37	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	1.180	583.977	142.915	0.000
	2	20.408	0.000	28.716	113.455	10.176
	3	494.763	74.244	0.000	0.000	49.717
	4	306.694	51.535	0.000	0.000	14.274
	5	0.000	27.686	60.411	22.269	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.00	0.80	0.20	0.00
	2	0.12	0.00	0.17	0.66	0.06
	3	0.80	0.12	0.00	0.00	0.08
	4	0.82	0.14	0.00	0.00	0.04
	5	0.00	0.25	0.55	0.20	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.35	2.41	0.54	A
2	0.25	6.31	0.33	A
3	0.41	3.61	0.68	A
4	0.33	4.35	0.49	A
5	0.12	4.21	0.14	A

Main Results for each time segment

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	548.13	546.91	177.15	0.00	2345.42	0.234	0.30	2.001	A
2	130.06	129.36	608.04	0.00	871.09	0.149	0.17	4.850	A
3	465.81	464.34	231.91	0.00	1734.24	0.269	0.37	2.833	A
4	280.44	279.39	487.25	0.00	1344.82	0.209	0.26	3.376	A
5	83.09	82.77	711.00	0.00	1131.44	0.073	0.08	3.433	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	654.52	654.18	212.10	0.00	2324.29	0.282	0.39	2.155	A
2	155.30	155.08	727.37	0.00	824.61	0.188	0.23	5.376	A
3	556.22	555.76	277.71	0.00	1710.70	0.325	0.48	3.115	A
4	334.87	334.54	583.22	0.00	1299.89	0.258	0.35	3.729	A
5	99.22	99.12	851.15	0.00	1066.12	0.093	0.10	3.722	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	801.62	801.05	259.67	0.00	2295.52	0.349	0.53	2.409	A
2	190.21	189.81	890.66	0.00	761.02	0.250	0.33	6.298	A
3	681.23	680.43	339.98	0.00	1678.70	0.406	0.68	3.602	A
4	410.13	409.55	714.03	0.00	1238.64	0.331	0.49	4.339	A
5	121.52	121.36	1042.03	0.00	977.17	0.124	0.14	4.206	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	801.62	801.62	260.00	0.00	2295.33	0.349	0.54	2.409	A
2	190.21	190.20	891.35	0.00	760.76	0.250	0.33	6.308	A
3	681.23	681.22	340.45	0.00	1678.45	0.406	0.68	3.609	A
4	410.13	410.13	714.89	0.00	1238.23	0.331	0.49	4.346	A
5	121.52	121.51	1043.36	0.00	976.55	0.124	0.14	4.210	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	654.52	655.09	212.62	0.00	2323.97	0.282	0.39	2.159	A
2	155.30	155.69	728.47	0.00	824.19	0.188	0.23	5.389	A
3	556.22	557.01	278.45	0.00	1710.32	0.325	0.48	3.122	A
4	334.87	335.45	584.57	0.00	1299.25	0.258	0.35	3.739	A
5	99.22	99.37	853.24	0.00	1065.15	0.093	0.10	3.730	A

Main results: (09:15-09:30)

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	548.13	548.48	177.98	0.00	2344.91	0.234	0.31	2.004	A
2	130.06	130.29	609.91	0.00	870.36	0.149	0.18	4.865	A
3	465.81	466.27	233.08	0.00	1733.64	0.269	0.37	2.843	A
4	280.44	280.78	489.33	0.00	1343.84	0.209	0.26	3.386	A
5	83.09	83.18	714.21	0.00	1129.94	0.074	0.08	3.438	A

(Default Analysis Set) - 2016 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
2016 Base, PM	2016 Base	PM		ONE HOUR	17:00	18:30	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			3.58	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A12 Yarmouth Road North	
2	2	B1385 Corton Long Lane	
3	3	A12 Yarmouth Road South	
4	4	A1117 Milenium Way	
5	5	Blunderston 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	7.70	9.20	22.70	19.70	69.40	57.00	
2	3.70	5.90	1.50	15.30	69.40	56.00	
3	4.50	7.70	20.40	22.70	69.40	54.00	
4	4.90	7.60	3.40	18.70	69.40	53.00	
5	3.50	6.00	10.60	41.60	69.40	43.00	

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)	0.605	2452.515
2		(calculated)	(calculated)	0.389	1107.876
3		(calculated)	(calculated)	0.514	1853.427
4		(calculated)	(calculated)	0.468	1572.960
5		(calculated)	(calculated)	0.466	1462.768

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	✓	1026.48	100.000
2	ONE HOUR	✓	121.45	100.000
3	ONE HOUR	✓	641.32	100.000
4	ONE HOUR	✓	234.47	100.000
5	ONE HOUR	✓	80.13	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	44.109	665.308	317.066	0.000
	2	2.465	0.000	56.792	39.664	22.529
	3	537.016	51.392	0.000	0.000	52.911
	4	193.402	32.572	0.000	0.000	8.495
	5	0.000	28.042	43.971	8.114	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.04	0.65	0.31	0.00
	2	0.02	0.00	0.47	0.33	0.19
	3	0.84	0.08	0.00	0.00	0.08
	4	0.82	0.14	0.00	0.00	0.04
	5	0.00	0.35	0.55	0.10	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.48	2.97	0.93	A
2	0.20	6.78	0.25	A
3	0.43	3.88	0.76	A
4	0.21	3.70	0.27	A
5	0.08	3.77	0.09	A

Main Results for each time segment

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	772.79	770.87	123.11	0.00	2378.08	0.325	0.48	2.236	A
2	91.43	90.92	776.82	0.00	805.36	0.114	0.13	5.036	A
3	482.82	481.24	292.60	0.00	1703.05	0.284	0.39	2.942	A
4	176.52	175.92	499.96	0.00	1338.87	0.132	0.15	3.094	A
5	60.32	60.11	612.93	0.00	1177.14	0.051	0.05	3.222	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	922.79	922.15	147.39	0.00	2363.40	0.390	0.64	2.496	A
2	109.18	109.01	929.31	0.00	745.97	0.146	0.17	5.650	A
3	576.53	576.02	350.16	0.00	1673.46	0.345	0.52	3.278	A
4	210.78	210.61	598.45	0.00	1292.75	0.163	0.19	3.326	A
5	72.03	71.97	733.69	0.00	1120.86	0.064	0.07	3.431	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	1130.18	1129.03	180.46	0.00	2343.41	0.482	0.93	2.961	A
2	133.72	133.40	1137.80	0.00	664.78	0.201	0.25	6.770	A
3	706.11	705.17	428.68	0.00	1633.11	0.432	0.76	3.875	A
4	258.16	257.87	732.63	0.00	1229.93	0.210	0.26	3.703	A
5	88.22	88.13	898.23	0.00	1044.18	0.084	0.09	3.764	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	1130.18	1130.17	180.67	0.00	2343.29	0.482	0.93	2.966	A
2	133.72	133.71	1138.95	0.00	664.34	0.201	0.25	6.783	A
3	706.11	706.09	429.21	0.00	1632.84	0.432	0.76	3.884	A
4	258.16	258.15	733.61	0.00	1229.47	0.210	0.27	3.705	A
5	88.22	88.22	899.35	0.00	1043.66	0.085	0.09	3.766	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	922.79	923.93	147.72	0.00	2363.21	0.390	0.64	2.502	A
2	109.18	109.49	931.11	0.00	745.27	0.147	0.17	5.666	A
3	576.53	577.45	350.98	0.00	1673.04	0.345	0.53	3.290	A
4	210.78	211.06	599.99	0.00	1292.03	0.163	0.20	3.332	A
5	72.03	72.12	735.45	0.00	1120.04	0.064	0.07	3.437	A

Main results: (18:15-18:30)

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	772.79	773.43	123.66	0.00	2377.75	0.325	0.48	2.244	A
2	91.43	91.61	779.45	0.00	804.34	0.114	0.13	5.051	A
3	482.82	483.34	293.79	0.00	1702.44	0.284	0.40	2.953	A
4	176.52	176.69	502.20	0.00	1337.82	0.132	0.15	3.102	A
5	60.32	60.38	615.62	0.00	1175.88	0.051	0.05	3.229	A

(Default Analysis Set) - 2022 Do Minimum, 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
2022 Do Minimum, AM	2022 Do Minimum	AM		ONE HOUR	08:00	09:30	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			3.83	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A12 Yarmouth Road North	
2	2	B1385 Corton Long Lane	
3	3	A12 Yarmouth Road South	
4	4	A1117 Milenium Way	
5	5	Blunderston 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	7.70	9.20	22.70	19.70	69.40	57.00	
2	3.70	5.90	1.50	15.30	69.40	56.00	
3	4.50	7.70	20.40	22.70	69.40	54.00	
4	4.90	7.60	3.40	18.70	69.40	53.00	
5	3.50	6.00	10.60	41.60	69.40	43.00	

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)	0.605	2452.515
2		(calculated)	(calculated)	0.389	1107.876
3		(calculated)	(calculated)	0.514	1853.427
4		(calculated)	(calculated)	0.468	1572.960
5		(calculated)	(calculated)	0.466	1462.768

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	✓	848.73	100.000
2	ONE HOUR	✓	153.34	100.000
3	ONE HOUR	✓	671.08	100.000
4	ONE HOUR	✓	391.16	100.000
5	ONE HOUR	✓	142.09	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	16.329	632.415	199.982	0.000
	2	31.338	0.000	29.482	66.800	25.724
	3	574.421	41.649	0.000	0.000	55.006
	4	281.495	102.350	0.000	0.000	7.313
	5	0.000	36.636	77.694	27.761	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.02	0.75	0.24	0.00
	2	0.20	0.00	0.19	0.44	0.17
	3	0.86	0.06	0.00	0.00	0.08
	4	0.72	0.26	0.00	0.00	0.02
	5	0.00	0.26	0.55	0.20	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.41	2.71	0.70	A
2	0.24	6.70	0.31	A
3	0.45	3.93	0.80	A
4	0.36	4.69	0.56	A
5	0.17	4.63	0.20	A

Main Results for each time segment

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	638.97	637.45	214.55	0.00	2322.80	0.275	0.38	2.134	A
2	115.45	114.81	704.26	0.00	833.61	0.138	0.16	5.004	A
3	505.22	503.56	263.75	0.00	1717.88	0.294	0.41	2.961	A
4	294.48	293.34	546.28	0.00	1317.18	0.224	0.29	3.513	A
5	106.97	106.55	773.60	0.00	1102.26	0.097	0.11	3.613	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	762.99	762.52	256.92	0.00	2297.19	0.332	0.50	2.346	A
2	137.85	137.64	842.55	0.00	779.76	0.177	0.21	5.605	A
3	603.28	602.74	315.78	0.00	1691.14	0.357	0.55	3.305	A
4	351.64	351.26	653.96	0.00	1266.77	0.278	0.38	3.930	A
5	127.74	127.60	926.16	0.00	1031.17	0.124	0.14	3.984	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	934.47	933.65	314.51	0.00	2262.37	0.413	0.70	2.708	A
2	168.84	168.44	1031.62	0.00	706.13	0.239	0.31	6.691	A
3	738.87	737.87	386.57	0.00	1654.75	0.447	0.80	3.922	A
4	430.67	429.97	800.55	0.00	1198.13	0.359	0.56	4.683	A
5	156.45	156.21	1133.75	0.00	934.43	0.167	0.20	4.625	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	934.47	934.46	314.99	0.00	2262.08	0.413	0.70	2.711	A
2	168.84	168.83	1032.59	0.00	705.76	0.239	0.31	6.704	A
3	738.87	738.86	387.12	0.00	1654.47	0.447	0.80	3.931	A
4	430.67	430.66	801.68	0.00	1197.60	0.360	0.56	4.693	A
5	156.45	156.44	1135.41	0.00	933.66	0.168	0.20	4.631	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	762.99	763.80	257.66	0.00	2296.74	0.332	0.50	2.349	A
2	137.85	138.24	844.08	0.00	779.17	0.177	0.22	5.621	A
3	603.28	604.27	316.63	0.00	1690.70	0.357	0.56	3.318	A
4	351.64	352.33	655.71	0.00	1265.94	0.278	0.39	3.944	A
5	127.74	127.97	928.73	0.00	1029.97	0.124	0.14	3.993	A

Main results: (09:15-09:30)

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	638.97	639.44	215.66	0.00	2322.13	0.275	0.38	2.139	A
2	115.45	115.66	706.63	0.00	832.69	0.139	0.16	5.021	A
3	505.22	505.78	265.02	0.00	1717.22	0.294	0.42	2.974	A
4	294.48	294.87	548.82	0.00	1315.99	0.224	0.29	3.526	A
5	106.97	107.11	777.32	0.00	1100.53	0.097	0.11	3.623	A

(Default Analysis Set) - 2022 Do Minimum, 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
2022 Do Minimum, PM	2022 Do Minimum	PM		ONE HOUR	17:00	18:30	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			4.04	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A12 Yarmouth Road North	
2	2	B1385 Corton Long Lane	
3	3	A12 Yarmouth Road South	
4	4	A1117 Milenium Way	
5	5	Blunderston 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	7.70	9.20	22.70	19.70	69.40	57.00	
2	3.70	5.90	1.50	15.30	69.40	56.00	
3	4.50	7.70	20.40	22.70	69.40	54.00	
4	4.90	7.60	3.40	18.70	69.40	53.00	
5	3.50	6.00	10.60	41.60	69.40	43.00	

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)	0.605	2452.515
2		(calculated)	(calculated)	0.389	1107.876
3		(calculated)	(calculated)	0.514	1853.427
4		(calculated)	(calculated)	0.468	1572.960
5		(calculated)	(calculated)	0.466	1462.768

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	✓	1110.75	100.000
2	ONE HOUR	✓	134.36	100.000
3	ONE HOUR	✓	743.30	100.000
4	ONE HOUR	✓	256.09	100.000
5	ONE HOUR	✓	83.75	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	39.745	733.358	337.650	0.000
	2	14.039	0.000	49.099	32.471	38.750
	3	622.405	48.109	0.000	0.000	72.789
	4	199.490	53.000	0.000	0.000	3.602
	5	0.000	25.720	48.788	9.240	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.04	0.66	0.30	0.00
	2	0.10	0.00	0.37	0.24	0.29
	3	0.84	0.06	0.00	0.00	0.10
	4	0.78	0.21	0.00	0.00	0.01
	5	0.00	0.31	0.58	0.11	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.53	3.25	1.10	A
2	0.24	7.56	0.31	A
3	0.51	4.55	1.03	A
4	0.24	4.09	0.32	A
5	0.09	4.05	0.10	A

Main Results for each time segment

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	836.23	834.06	138.66	0.00	2368.68	0.353	0.54	2.343	A
2	101.15	100.56	847.74	0.00	777.74	0.130	0.15	5.311	A
3	559.60	557.62	324.28	0.00	1686.77	0.332	0.49	3.183	A
4	192.80	192.10	597.13	0.00	1293.37	0.149	0.17	3.267	A
5	63.05	62.82	702.92	0.00	1135.20	0.056	0.06	3.356	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	998.54	997.78	166.03	0.00	2352.14	0.425	0.73	2.656	A
2	120.79	120.57	1014.20	0.00	712.92	0.169	0.20	6.076	A
3	668.21	667.50	388.12	0.00	1653.96	0.404	0.67	3.648	A
4	230.22	230.01	714.87	0.00	1238.24	0.186	0.23	3.570	A
5	75.29	75.22	841.50	0.00	1070.62	0.070	0.08	3.615	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	1222.96	1221.51	203.26	0.00	2329.63	0.525	1.10	3.244	A
2	147.93	147.51	1241.62	0.00	624.35	0.237	0.31	7.543	A
3	818.39	816.99	475.09	0.00	1609.26	0.509	1.02	4.535	A
4	281.96	281.60	874.95	0.00	1163.29	0.242	0.32	4.081	A
5	92.21	92.10	1030.04	0.00	982.76	0.094	0.10	4.042	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	1222.96	1222.94	203.53	0.00	2329.47	0.525	1.10	3.252	A
2	147.93	147.92	1243.08	0.00	623.78	0.237	0.31	7.564	A
3	818.39	818.37	475.80	0.00	1608.90	0.509	1.03	4.553	A
4	281.96	281.96	876.49	0.00	1162.57	0.243	0.32	4.087	A
5	92.21	92.21	1031.68	0.00	982.00	0.094	0.10	4.045	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	998.54	999.98	166.46	0.00	2351.88	0.425	0.74	2.667	A
2	120.79	121.20	1016.44	0.00	712.04	0.170	0.21	6.098	A
3	668.21	669.60	389.21	0.00	1653.40	0.404	0.68	3.666	A
4	230.22	230.58	717.22	0.00	1237.14	0.186	0.23	3.576	A
5	75.29	75.40	844.03	0.00	1069.44	0.070	0.08	3.621	A

Main results: (18:15-18:30)

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	836.23	837.01	139.33	0.00	2368.28	0.353	0.55	2.353	A
2	101.15	101.37	850.79	0.00	776.55	0.130	0.15	5.333	A
3	559.60	560.33	325.73	0.00	1686.02	0.332	0.50	3.201	A
4	192.80	193.01	600.16	0.00	1291.95	0.149	0.18	3.278	A
5	63.05	63.12	706.35	0.00	1133.60	0.056	0.06	3.365	A

(Default Analysis Set) - 2022 Do Something, 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
2022 Do Something, AM	2022 Do Something	AM		ONE HOUR	08:00	09:30	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			4.28	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A12 Yarmouth Road North	
2	2	B1385 Corton Long Lane	
3	3	A12 Yarmouth Road South	
4	4	A1117 Milenium Way	
5	5	Blunderston 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	7.70	9.20	22.70	19.70	69.40	57.00	
2	3.70	5.90	1.50	15.30	69.40	56.00	
3	4.50	7.70	20.40	22.70	69.40	54.00	
4	4.90	7.60	3.40	18.70	69.40	53.00	
5	3.50	6.00	10.60	41.60	69.40	43.00	

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)	0.605	2452.515
2		(calculated)	(calculated)	0.389	1107.876
3		(calculated)	(calculated)	0.514	1853.427
4		(calculated)	(calculated)	0.468	1572.960
5		(calculated)	(calculated)	0.466	1462.768

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	✓	947.93	100.000
2	ONE HOUR	✓	192.84	100.000
3	ONE HOUR	✓	667.58	100.000
4	ONE HOUR	✓	449.91	100.000
5	ONE HOUR	✓	143.43	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	16.175	617.339	314.411	0.000
	2	31.100	0.000	35.504	100.692	25.540
	3	574.664	40.909	0.000	0.000	52.010
	4	295.238	146.376	0.000	0.000	8.292
	5	0.000	34.853	76.654	31.924	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.02	0.65	0.33	0.00
	2	0.16	0.00	0.18	0.52	0.13
	3	0.86	0.06	0.00	0.00	0.08
	4	0.66	0.33	0.00	0.00	0.02
	5	0.00	0.24	0.53	0.22	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	3.03	0.88	A
2	0.32	8.01	0.47	A
3	0.47	4.32	0.88	A
4	0.41	5.11	0.70	A
5	0.17	4.82	0.21	A

Main Results for each time segment

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	713.65	711.86	247.99	0.00	2302.59	0.310	0.45	2.261	A
2	145.18	144.30	781.12	0.00	803.68	0.181	0.22	5.453	A
3	502.59	500.86	377.78	0.00	1659.27	0.303	0.43	3.104	A
4	338.71	337.34	543.25	0.00	1318.60	0.257	0.34	3.664	A
5	107.98	107.54	816.23	0.00	1082.39	0.100	0.11	3.690	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	852.17	851.57	296.97	0.00	2272.97	0.375	0.60	2.531	A
2	173.36	173.03	934.54	0.00	743.94	0.233	0.30	6.303	A
3	600.14	599.54	452.29	0.00	1620.98	0.370	0.58	3.522	A
4	404.46	403.97	650.36	0.00	1268.45	0.319	0.47	4.163	A
5	128.94	128.80	977.26	0.00	1007.36	0.128	0.15	4.098	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	1043.69	1042.58	363.50	0.00	2232.75	0.467	0.87	3.022	A
2	212.32	211.66	1144.15	0.00	662.31	0.321	0.47	7.976	A
3	735.02	733.87	553.59	0.00	1568.92	0.468	0.87	4.304	A
4	495.36	494.43	796.03	0.00	1200.24	0.413	0.70	5.094	A
5	157.92	157.67	1196.15	0.00	905.35	0.174	0.21	4.814	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	1043.69	1043.67	364.12	0.00	2232.38	0.468	0.88	3.027	A
2	212.32	212.30	1145.41	0.00	661.82	0.321	0.47	8.008	A
3	735.02	735.01	554.53	0.00	1568.43	0.469	0.88	4.319	A
4	495.36	495.34	797.36	0.00	1199.62	0.413	0.70	5.111	A
5	157.92	157.92	1198.20	0.00	904.40	0.175	0.21	4.822	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	852.17	853.26	297.93	0.00	2272.39	0.375	0.60	2.538	A
2	173.36	174.00	936.50	0.00	743.18	0.233	0.31	6.333	A
3	600.14	601.29	453.73	0.00	1620.24	0.370	0.59	3.538	A
4	404.46	405.37	652.40	0.00	1267.50	0.319	0.47	4.181	A
5	128.94	129.19	980.40	0.00	1005.89	0.128	0.15	4.108	A

Main results: (09:15-09:30)

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	713.65	714.25	249.32	0.00	2301.78	0.310	0.45	2.269	A
2	145.18	145.52	783.92	0.00	802.59	0.181	0.22	5.483	A
3	502.59	503.21	379.70	0.00	1658.29	0.303	0.44	3.120	A
4	338.71	339.21	545.95	0.00	1317.33	0.257	0.35	3.681	A
5	107.98	108.13	820.43	0.00	1080.44	0.100	0.11	3.705	A

(Default Analysis Set) - 2022 Do Something, 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
2022 Do Something, PM	2022 Do Something	PM		ONE HOUR	17:00	18:30	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			4.09	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A12 Yarmouth Road North	
2	2	B1385 Corton Long Lane	
3	3	A12 Yarmouth Road South	
4	4	A1117 Milenium Way	
5	5	Blunderston 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	7.70	9.20	22.70	19.70	69.40	57.00	
2	3.70	5.90	1.50	15.30	69.40	56.00	
3	4.50	7.70	20.40	22.70	69.40	54.00	
4	4.90	7.60	3.40	18.70	69.40	53.00	
5	3.50	6.00	10.60	41.60	69.40	43.00	

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)	0.605	2452.515
2		(calculated)	(calculated)	0.389	1107.876
3		(calculated)	(calculated)	0.514	1853.427
4		(calculated)	(calculated)	0.468	1572.960
5		(calculated)	(calculated)	0.466	1462.768

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	✓	1150.80	100.000
2	ONE HOUR	✓	129.05	100.000
3	ONE HOUR	✓	710.55	100.000
4	ONE HOUR	✓	332.34	100.000
5	ONE HOUR	✓	102.40	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	39.581	738.850	372.370	0.000
	2	13.868	0.000	48.394	27.887	38.900
	3	597.958	47.590	0.000	0.000	64.999
	4	305.957	16.180	0.000	0.000	10.199
	5	0.000	55.874	37.319	9.211	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.03	0.64	0.32	0.00
	2	0.11	0.00	0.38	0.22	0.30
	3	0.84	0.07	0.00	0.00	0.09
	4	0.92	0.05	0.00	0.00	0.03
	5	0.00	0.55	0.36	0.09	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.54	3.35	1.17	A
2	0.23	7.67	0.30	A
3	0.49	4.45	0.96	A
4	0.31	4.42	0.45	A
5	0.12	4.25	0.13	A

Main Results for each time segment

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	866.38	864.10	124.64	0.00	2377.16	0.364	0.57	2.376	A
2	97.15	96.58	869.28	0.00	769.35	0.126	0.14	5.346	A
3	534.94	533.07	346.87	0.00	1675.16	0.319	0.47	3.146	A
4	250.20	249.26	572.56	0.00	1304.88	0.192	0.24	3.407	A
5	77.10	76.80	736.29	0.00	1119.65	0.069	0.07	3.452	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	1034.55	1033.73	149.24	0.00	2362.29	0.438	0.78	2.708	A
2	116.01	115.80	1039.97	0.00	702.88	0.165	0.20	6.131	A
3	638.77	638.10	415.14	0.00	1640.07	0.389	0.63	3.591	A
4	298.76	298.46	685.45	0.00	1252.02	0.239	0.31	3.775	A
5	92.06	91.97	881.47	0.00	1051.99	0.088	0.10	3.749	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	1267.06	1265.48	182.70	0.00	2342.06	0.541	1.17	3.340	A
2	142.09	141.67	1273.12	0.00	612.09	0.232	0.30	7.646	A
3	782.33	781.03	508.15	0.00	1592.27	0.491	0.96	4.430	A
4	365.91	365.37	838.96	0.00	1180.14	0.310	0.45	4.415	A
5	112.75	112.60	1078.97	0.00	959.96	0.117	0.13	4.248	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	1267.06	1267.04	182.96	0.00	2341.90	0.541	1.17	3.348	A
2	142.09	142.08	1274.69	0.00	611.47	0.232	0.30	7.668	A
3	782.33	782.31	508.92	0.00	1591.87	0.491	0.96	4.446	A
4	365.91	365.90	840.40	0.00	1179.47	0.310	0.45	4.424	A
5	112.75	112.75	1080.68	0.00	959.16	0.118	0.13	4.252	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	1034.55	1036.11	149.64	0.00	2362.04	0.438	0.78	2.717	A
2	116.01	116.42	1042.37	0.00	701.95	0.165	0.20	6.154	A
3	638.77	640.04	416.31	0.00	1639.47	0.390	0.64	3.605	A
4	298.76	299.29	687.65	0.00	1250.99	0.239	0.32	3.786	A
5	92.06	92.20	884.11	0.00	1050.76	0.088	0.10	3.758	A

Main results: (18:15-18:30)

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	866.38	867.21	125.25	0.00	2376.79	0.365	0.58	2.385	A
2	97.15	97.37	872.46	0.00	768.12	0.126	0.15	5.368	A
3	534.94	535.62	348.41	0.00	1674.37	0.319	0.47	3.165	A
4	250.20	250.51	575.43	0.00	1303.53	0.192	0.24	3.418	A
5	77.10	77.18	739.91	0.00	1117.96	0.069	0.07	3.458	A

(Default Analysis Set) - 2037 Do Minimum, 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
2037 Do Minimum, AM	2037 Do Minimum	AM		ONE HOUR	08:00	09:30	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			4.70	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A12 Yarmouth Road North	
2	2	B1385 Corton Long Lane	
3	3	A12 Yarmouth Road South	
4	4	A1117 Milenium Way	
5	5	Blunderston 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	7.70	9.20	22.70	19.70	69.40	57.00	
2	3.70	5.90	1.50	15.30	69.40	56.00	
3	4.50	7.70	20.40	22.70	69.40	54.00	
4	4.90	7.60	3.40	18.70	69.40	53.00	
5	3.50	6.00	10.60	41.60	69.40	43.00	

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)	0.605	2452.515
2		(calculated)	(calculated)	0.389	1107.876
3		(calculated)	(calculated)	0.514	1853.427
4		(calculated)	(calculated)	0.468	1572.960
5		(calculated)	(calculated)	0.466	1462.768

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	✓	1058.90	100.000
2	ONE HOUR	✓	172.31	100.000
3	ONE HOUR	✓	776.28	100.000
4	ONE HOUR	✓	465.82	100.000
5	ONE HOUR	✓	168.39	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	22.496	764.109	272.295	0.000
	2	34.918	0.000	32.760	75.801	28.828
	3	658.507	44.506	0.000	0.000	73.270
	4	322.039	134.237	0.000	0.000	9.543
	5	0.000	36.447	100.257	31.686	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.02	0.72	0.26	0.00
	2	0.20	0.00	0.19	0.44	0.17
	3	0.85	0.06	0.00	0.00	0.09
	4	0.69	0.29	0.00	0.00	0.02
	5	0.00	0.22	0.60	0.19	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.52	3.41	1.10	A
2	0.31	8.63	0.45	A
3	0.53	4.81	1.14	A
4	0.45	5.74	0.81	A
5	0.22	5.42	0.28	A

Main Results for each time segment

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	797.20	795.08	260.23	0.00	2295.18	0.347	0.53	2.397	A
2	129.72	128.91	877.09	0.00	766.31	0.169	0.20	5.641	A
3	584.43	582.31	332.61	0.00	1682.49	0.347	0.53	3.267	A
4	350.69	349.19	630.00	0.00	1277.98	0.274	0.38	3.869	A
5	126.77	126.22	895.51	0.00	1045.45	0.121	0.14	3.913	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	951.93	951.16	311.66	0.00	2264.09	0.420	0.72	2.740	A
2	154.90	154.58	1049.42	0.00	699.20	0.222	0.28	6.605	A
3	697.86	697.06	398.23	0.00	1648.76	0.423	0.73	3.779	A
4	418.76	418.19	754.25	0.00	1219.80	0.343	0.52	4.488	A
5	151.38	151.19	1072.22	0.00	963.10	0.157	0.19	4.432	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	1165.87	1164.38	381.41	0.00	2221.92	0.525	1.10	3.400	A
2	189.71	189.05	1284.63	0.00	607.60	0.312	0.45	8.587	A
3	854.70	853.10	487.34	0.00	1602.96	0.533	1.13	4.790	A
4	512.88	511.72	923.04	0.00	1140.77	0.450	0.81	5.712	A
5	185.40	185.04	1312.13	0.00	851.30	0.218	0.28	5.401	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	1165.87	1165.85	382.19	0.00	2221.45	0.525	1.10	3.409	A
2	189.71	189.70	1286.35	0.00	606.93	0.313	0.45	8.628	A
3	854.70	854.68	488.32	0.00	1602.46	0.533	1.14	4.813	A
4	512.88	512.85	924.86	0.00	1139.92	0.450	0.81	5.740	A
5	185.40	185.39	1314.80	0.00	850.06	0.218	0.28	5.415	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	951.93	953.41	312.84	0.00	2263.38	0.421	0.73	2.752	A
2	154.90	155.56	1052.05	0.00	698.18	0.222	0.29	6.644	A
3	697.86	699.45	399.70	0.00	1648.00	0.423	0.74	3.803	A
4	418.76	419.90	757.00	0.00	1218.52	0.344	0.53	4.513	A
5	151.38	151.74	1076.25	0.00	961.22	0.157	0.19	4.448	A

Main results: (09:15-09:30)

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	797.20	797.98	261.75	0.00	2294.27	0.347	0.53	2.408	A
2	129.72	130.05	880.51	0.00	764.98	0.170	0.21	5.672	A
3	584.43	585.24	334.41	0.00	1681.56	0.348	0.54	3.287	A
4	350.69	351.28	633.36	0.00	1276.41	0.275	0.38	3.895	A
5	126.77	126.97	900.44	0.00	1043.15	0.122	0.14	3.931	A

(Default Analysis Set) - 2037 Do Minimum, 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
2037 Do Minimum, PM	2037 Do Minimum	PM		ONE HOUR	17:00	18:30	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			5.24	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A12 Yarmouth Road North	
2	2	B1385 Corton Long Lane	
3	3	A12 Yarmouth Road South	
4	4	A1117 Milenium Way	
5	5	Blunderston 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	7.70	9.20	22.70	19.70	69.40	57.00	
2	3.70	5.90	1.50	15.30	69.40	56.00	
3	4.50	7.70	20.40	22.70	69.40	54.00	
4	4.90	7.60	3.40	18.70	69.40	53.00	
5	3.50	6.00	10.60	41.60	69.40	43.00	

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)	0.605	2452.515
2		(calculated)	(calculated)	0.389	1107.876
3		(calculated)	(calculated)	0.514	1853.427
4		(calculated)	(calculated)	0.468	1572.960
5		(calculated)	(calculated)	0.466	1462.768

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	✓	1261.65	100.000
2	ONE HOUR	✓	156.23	100.000
3	ONE HOUR	✓	931.93	100.000
4	ONE HOUR	✓	320.23	100.000
5	ONE HOUR	✓	92.33	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	45.631	842.224	373.799	0.000
	2	30.214	0.000	52.741	31.596	41.677
	3	764.889	49.026	0.000	0.000	118.012
	4	246.918	59.906	0.000	0.000	13.411
	5	0.000	31.039	51.518	9.773	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.04	0.67	0.30	0.00
	2	0.19	0.00	0.34	0.20	0.27
	3	0.82	0.05	0.00	0.00	0.13
	4	0.77	0.19	0.00	0.00	0.04
	5	0.00	0.34	0.56	0.11	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.60	3.87	1.49	A
2	0.31	9.27	0.44	A
3	0.65	6.52	1.84	A
4	0.33	5.12	0.50	A
5	0.12	4.67	0.13	A

Main Results for each time segment

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	949.84	947.16	150.91	0.00	2361.28	0.402	0.67	2.542	A
2	117.62	116.86	958.86	0.00	734.47	0.160	0.19	5.821	A
3	701.60	698.71	365.36	0.00	1665.65	0.421	0.72	3.712	A
4	241.09	240.11	752.49	0.00	1220.63	0.198	0.24	3.668	A
5	69.51	69.23	862.89	0.00	1060.65	0.066	0.07	3.631	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	1134.20	1133.15	180.71	0.00	2343.26	0.484	0.93	2.972	A
2	140.45	140.13	1147.21	0.00	661.12	0.212	0.27	6.905	A
3	837.78	836.48	437.33	0.00	1628.67	0.514	1.05	4.537	A
4	287.88	287.54	900.96	0.00	1151.11	0.250	0.33	4.166	A
5	83.00	82.91	1033.15	0.00	981.31	0.085	0.09	4.007	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	1389.11	1386.92	221.15	0.00	2318.81	0.599	1.48	3.853	A
2	172.01	171.34	1404.14	0.00	561.06	0.307	0.44	9.222	A
3	1026.07	1022.98	535.15	0.00	1578.39	0.650	1.82	6.445	A
4	352.58	351.93	1101.82	0.00	1057.06	0.334	0.50	5.101	A
5	101.66	101.50	1263.76	0.00	873.84	0.116	0.13	4.659	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	1389.11	1389.07	221.58	0.00	2318.55	0.599	1.49	3.873	A
2	172.01	172.00	1406.32	0.00	560.21	0.307	0.44	9.273	A
3	1026.07	1025.99	536.24	0.00	1577.83	0.650	1.84	6.521	A
4	352.58	352.57	1105.14	0.00	1055.51	0.334	0.50	5.120	A
5	101.66	101.65	1267.14	0.00	872.27	0.117	0.13	4.671	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	1134.20	1136.37	181.37	0.00	2342.86	0.484	0.94	2.988	A
2	140.45	141.11	1150.47	0.00	659.85	0.213	0.27	6.947	A
3	837.78	840.86	438.96	0.00	1627.83	0.515	1.07	4.593	A
4	287.88	288.54	905.80	0.00	1148.85	0.251	0.34	4.189	A
5	83.00	83.16	1038.12	0.00	978.99	0.085	0.09	4.019	A

Main results: (18:15-18:30)

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	949.84	950.91	151.75	0.00	2360.77	0.402	0.68	2.556	A
2	117.62	117.94	962.72	0.00	732.96	0.160	0.19	5.855	A
3	701.60	702.95	367.22	0.00	1664.70	0.421	0.73	3.747	A
4	241.09	241.44	757.23	0.00	1218.41	0.198	0.25	3.685	A
5	69.51	69.60	868.08	0.00	1058.24	0.066	0.07	3.640	A

(Default Analysis Set) - 2037 Do Something, 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
2037 Do Something, AM	2037 Do Something	AM		ONE HOUR	08:00	09:30	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			5.28	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A12 Yarmouth Road North	
2	2	B1385 Corton Long Lane	
3	3	A12 Yarmouth Road South	
4	4	A1117 Milenium Way	
5	5	Blunderston 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	7.70	9.20	22.70	19.70	69.40	57.00	
2	3.70	5.90	1.50	15.30	69.40	56.00	
3	4.50	7.70	20.40	22.70	69.40	54.00	
4	4.90	7.60	3.40	18.70	69.40	53.00	
5	3.50	6.00	10.60	41.60	69.40	43.00	

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)	0.605	2452.515
2		(calculated)	(calculated)	0.389	1107.876
3		(calculated)	(calculated)	0.514	1853.427
4		(calculated)	(calculated)	0.468	1572.960
5		(calculated)	(calculated)	0.466	1462.768

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	✓	1191.94	100.000
2	ONE HOUR	✓	207.35	100.000
3	ONE HOUR	✓	766.88	100.000
4	ONE HOUR	✓	508.22	100.000
5	ONE HOUR	✓	143.18	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	22.208	788.261	381.471	0.000
	2	34.458	0.000	38.419	96.065	38.407
	3	657.463	43.415	0.000	0.000	66.003
	4	338.173	161.113	0.000	0.000	8.929
	5	0.000	33.661	97.515	12.004	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.02	0.66	0.32	0.00
	2	0.17	0.00	0.19	0.46	0.19
	3	0.86	0.06	0.00	0.00	0.09
	4	0.67	0.32	0.00	0.00	0.02
	5	0.00	0.24	0.68	0.08	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	3.96	1.44	A
2	0.41	10.87	0.68	B
3	0.55	5.21	1.21	A
4	0.49	6.20	0.96	A
5	0.19	5.36	0.23	A

Main Results for each time segment

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	897.36	894.80	260.65	0.00	2294.93	0.391	0.64	2.567	A
2	156.10	155.03	960.22	0.00	733.94	0.213	0.27	6.207	A
3	577.35	575.18	421.68	0.00	1636.71	0.353	0.54	3.384	A
4	382.61	380.91	629.66	0.00	1278.14	0.299	0.42	4.005	A
5	107.79	107.33	925.66	0.00	1031.40	0.105	0.12	3.894	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	1071.53	1070.51	312.16	0.00	2263.79	0.473	0.89	3.014	A
2	186.40	185.92	1148.90	0.00	660.46	0.282	0.39	7.578	A
3	689.41	688.55	504.86	0.00	1593.96	0.433	0.76	3.973	A
4	456.87	456.20	753.89	0.00	1219.98	0.375	0.59	4.709	A
5	128.72	128.55	1108.37	0.00	946.26	0.136	0.16	4.401	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	1312.35	1310.21	381.98	0.00	2221.58	0.591	1.43	3.940	A
2	228.30	227.15	1406.15	0.00	560.28	0.407	0.67	10.769	B
3	844.35	842.56	617.58	0.00	1536.03	0.550	1.21	5.177	A
4	559.56	558.13	922.38	0.00	1141.08	0.490	0.95	6.160	A
5	157.64	157.34	1356.11	0.00	830.81	0.190	0.23	5.343	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	1312.35	1312.32	382.82	0.00	2221.07	0.591	1.44	3.961	A
2	228.30	228.27	1408.45	0.00	559.38	0.408	0.68	10.870	B
3	844.35	844.32	619.18	0.00	1535.20	0.550	1.21	5.210	A
4	559.56	559.53	924.53	0.00	1140.08	0.491	0.96	6.200	A
5	157.64	157.64	1359.28	0.00	829.33	0.190	0.23	5.359	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	1071.53	1073.66	313.43	0.00	2263.02	0.474	0.90	3.033	A
2	186.40	187.54	1152.34	0.00	659.12	0.283	0.40	7.653	A
3	689.41	691.19	507.22	0.00	1592.75	0.433	0.77	4.000	A
4	456.87	458.28	757.09	0.00	1218.47	0.375	0.60	4.743	A
5	128.72	129.02	1113.10	0.00	944.05	0.136	0.16	4.419	A

Main results: (09:15-09:30)

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	897.36	898.39	262.21	0.00	2293.99	0.391	0.65	2.582	A
2	156.10	156.61	964.23	0.00	732.37	0.213	0.27	6.259	A
3	577.35	578.23	424.16	0.00	1635.43	0.353	0.55	3.409	A
4	382.61	383.31	633.26	0.00	1276.45	0.300	0.43	4.035	A
5	107.79	107.96	931.06	0.00	1028.88	0.105	0.12	3.911	A

(Default Analysis Set) - 2037 Do Something, 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
2037 Do Something, PM	2037 Do Something	PM		ONE HOUR	17:00	18:30	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			5.55	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A12 Yarmouth Road North	
2	2	B1385 Corton Long Lane	
3	3	A12 Yarmouth Road South	
4	4	A1117 Milenium Way	
5	5	Blunderston 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	7.70	9.20	22.70	19.70	69.40	57.00	
2	3.70	5.90	1.50	15.30	69.40	56.00	
3	4.50	7.70	20.40	22.70	69.40	54.00	
4	4.90	7.60	3.40	18.70	69.40	53.00	
5	3.50	6.00	10.60	41.60	69.40	43.00	

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)	0.605	2452.515
2		(calculated)	(calculated)	0.389	1107.876
3		(calculated)	(calculated)	0.514	1853.427
4		(calculated)	(calculated)	0.468	1572.960
5		(calculated)	(calculated)	0.466	1462.768

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	✓	1287.35	100.000
2	ONE HOUR	✓	157.04	100.000
3	ONE HOUR	✓	957.49	100.000
4	ONE HOUR	✓	360.29	100.000
5	ONE HOUR	✓	111.26	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	45.030	837.841	404.475	0.000
	2	33.857	0.000	51.641	28.936	42.610
	3	787.880	49.088	0.000	0.000	120.521
	4	319.872	23.585	0.000	0.000	16.833
	5	0.000	57.684	44.343	9.234	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.03	0.65	0.31	0.00
	2	0.22	0.00	0.33	0.18	0.27
	3	0.82	0.05	0.00	0.00	0.13
	4	0.89	0.07	0.00	0.00	0.05
	5	0.00	0.52	0.40	0.08	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.61	3.94	1.54	A
2	0.31	9.49	0.45	A
3	0.68	7.12	2.06	A
4	0.38	5.60	0.61	A
5	0.15	5.02	0.17	A

Main Results for each time segment

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	969.18	966.43	137.89	0.00	2369.15	0.409	0.69	2.562	A
2	118.23	117.46	972.79	0.00	729.04	0.162	0.19	5.879	A
3	720.85	717.78	389.40	0.00	1653.30	0.436	0.77	3.836	A
4	271.25	270.10	774.97	0.00	1210.10	0.224	0.29	3.824	A
5	83.76	83.41	910.23	0.00	1038.59	0.081	0.09	3.769	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	1157.30	1156.21	165.13	0.00	2352.68	0.492	0.96	3.006	A
2	141.18	140.86	1163.87	0.00	654.63	0.216	0.27	7.002	A
3	860.76	859.31	466.10	0.00	1613.88	0.533	1.13	4.762	A
4	323.89	323.46	927.90	0.00	1138.50	0.284	0.39	4.415	A
5	100.02	99.91	1089.87	0.00	954.88	0.105	0.12	4.210	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	1417.40	1415.10	202.06	0.00	2330.35	0.608	1.54	3.924	A
2	172.91	172.21	1424.49	0.00	553.14	0.313	0.45	9.434	A
3	1054.21	1050.60	570.34	0.00	1560.30	0.676	2.04	7.012	A
4	396.69	395.83	1134.45	0.00	1041.79	0.381	0.61	5.566	A
5	122.50	122.29	1332.82	0.00	841.66	0.146	0.17	5.003	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	1417.40	1417.36	202.51	0.00	2330.08	0.608	1.54	3.944	A
2	172.91	172.89	1426.77	0.00	552.25	0.313	0.45	9.489	A
3	1054.21	1054.11	571.53	0.00	1559.69	0.676	2.06	7.118	A
4	396.69	396.67	1138.30	0.00	1039.99	0.381	0.61	5.595	A
5	122.50	122.50	1336.84	0.00	839.79	0.146	0.17	5.018	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	1157.30	1159.58	165.80	0.00	2352.27	0.492	0.97	3.023	A
2	141.18	141.87	1167.28	0.00	653.30	0.216	0.28	7.050	A
3	860.76	864.38	467.87	0.00	1612.97	0.534	1.16	4.831	A
4	323.89	324.74	933.46	0.00	1135.90	0.285	0.40	4.442	A
5	100.02	100.23	1095.73	0.00	952.15	0.105	0.12	4.228	A

Main results: (18:15-18:30)

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	969.18	970.30	138.70	0.00	2368.66	0.409	0.70	2.576	A
2	118.23	118.56	976.75	0.00	727.50	0.163	0.20	5.914	A
3	720.85	722.36	391.40	0.00	1652.27	0.436	0.78	3.878	A
4	271.25	271.69	780.09	0.00	1207.71	0.225	0.29	3.847	A
5	83.76	83.88	915.99	0.00	1035.91	0.081	0.09	3.780	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.6.541 [19821,26/11/2015]

Filename: 02 A12 St Peter's Street rdbts v7 with ped 2018-08-13.arc8
Path: L:\106xxx\1069948 Lowestoft Third Crossing\09 Documents\06_Modelling_Junction Modelling Aug 2018\02 A12 St Peter's Street rdbts
Report generation date: 14/12/2018 12:00:07

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2016 Base							
Junction 1 - Arm 1	0.21	2.16	0.17	A	0.21	2.09	0.18	A
Junction 1 - Arm 2	0.17	3.14	0.15	A	0.13	3.06	0.11	A
Junction 1 - Arm 3	1.82	8.77	0.65	A	0.75	5.99	0.43	A
Junction 2 - Arm 1	0.61	4.79	0.38	A	0.52	4.16	0.35	A
Junction 2 - Arm 2	0.32	4.14	0.24	A	0.47	4.51	0.32	A
Junction 2 - Arm 3	0.32	3.17	0.24	A	0.75	4.10	0.43	A
Junction 2 - Arm 5	0.90	4.88	0.48	A	0.53	4.36	0.35	A
	A1 - 2022 Do Minimum							
Junction 1 - Arm 1	0.17	2.08	0.15	A	0.25	2.14	0.20	A
Junction 1 - Arm 2	0.18	3.13	0.16	A	0.14	3.17	0.12	A
Junction 1 - Arm 3	1.81	8.79	0.65	A	1.12	6.99	0.53	A
Junction 2 - Arm 1	0.60	4.84	0.38	A	0.55	4.47	0.36	A
Junction 2 - Arm 2	0.40	4.26	0.29	A	0.65	5.21	0.40	A
Junction 2 - Arm 3	0.39	3.35	0.28	A	0.92	4.69	0.48	A
Junction 2 - Arm 5	1.03	5.33	0.51	A	0.86	5.27	0.46	A
	A1 - 2022 Do Something							
Junction 1 - Arm 1	0.16	2.04	0.14	A	0.25	2.17	0.20	A
Junction 1 - Arm 2	0.17	3.06	0.15	A	0.17	3.24	0.14	A
Junction 1 - Arm 3	1.61	8.37	0.62	A	0.76	6.15	0.44	A
Junction 2 - Arm 1	0.54	4.66	0.35	A	0.49	4.13	0.33	A
Junction 2 - Arm 2	0.39	4.16	0.28	A	0.60	4.73	0.38	A
Junction 2 - Arm 3	0.26	3.02	0.20	A	0.56	3.84	0.36	A

Junction 2 - Arm 5	0.97	5.02	0.50	A	0.57	4.34	0.37	A
	A1 - 2037 Do Minimum							
Junction 1 - Arm 1	0.20	2.14	0.17	A	0.27	2.19	0.21	A
Junction 1 - Arm 2	0.21	3.25	0.17	A	0.16	3.27	0.14	A
Junction 1 - Arm 3	2.04	9.35	0.68	A	1.27	7.40	0.56	A
Junction 2 - Arm 1	0.61	4.94	0.38	A	0.55	4.55	0.36	A
Junction 2 - Arm 2	0.46	4.36	0.32	A	0.75	5.48	0.43	A
Junction 2 - Arm 3	0.43	3.52	0.30	A	1.66	6.65	0.63	A
Junction 2 - Arm 5	1.17	5.67	0.54	A	1.09	6.25	0.53	A
	A1 - 2037 Do Something							
Junction 1 - Arm 1	0.17	2.07	0.15	A	0.28	2.23	0.22	A
Junction 1 - Arm 2	0.19	3.13	0.16	A	0.18	3.34	0.16	A
Junction 1 - Arm 3	1.86	8.99	0.66	A	0.89	6.52	0.47	A
Junction 2 - Arm 1	0.58	4.84	0.37	A	0.50	4.25	0.34	A
Junction 2 - Arm 2	0.46	4.32	0.32	A	0.70	5.03	0.41	A
Junction 2 - Arm 3	0.31	3.23	0.24	A	0.91	4.77	0.48	A
Junction 2 - Arm 5	1.09	5.36	0.53	A	0.70	4.90	0.42	A

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

"D1 - 2016 Base, AM " model duration: 08:00 - 09:30
"D2 - 2016 Base, PM" model duration: 17:00 - 18:30
"D3 - 2022 Do Minimum, AM" model duration: 08:00 - 09:30
"D4 - 2022 Do Minimum, PM" model duration: 17:00 - 18:30
"D5 - 2022 Do Something, AM" model duration: 08:00 - 09:30
"D6 - 2022 Do Something, PM" model duration: 17:00 - 18:30
"D7 - 2037 Do Minimum, AM" model duration: 08:00 - 09:30
"D8 - 2037 Do Minimum, PM" model duration: 17:00 - 18:30
"D9 - 2037 Do Something, AM" model duration: 08:00 - 09:30
"D10 - 2037 Do Something, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.6.541 at 14/12/2018 11:59:56

File summary

Title	A12 St Peter's Street rdbts
Location	Lowestoft
Site Number	02 and 03
Date	13/02/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ecopp
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) - 2016 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
2016 Base, AM	2016 Base	AM		Varies by Arm	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	1	(untitled)	Roundabout	1,2,3			6.16	A
2	2	(untitled)	Roundabout	1,2,3,4,5			4.39	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Arm	Name	Description
1	**1**	1	(untitled)	
1	**2**	2	(untitled)	
1	**3**	3	(untitled)	
2	**1**	1	(untitled)	
2	**2**	2	(untitled)	
2	**3**	3	(untitled)	
2	**4**	4	(untitled)	
2	**5**	5	(untitled)	

Capacity Options

Junction	Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	1	0.00	99999.00
1	2	0.00	99999.00
1	3	0.00	99999.00
2	1	0.00	99999.00
2	2	0.00	99999.00
2	3	0.00	99999.00
2	4	0.00	99999.00
2	5	0.00	99999.00

Roundabout Geometry

Junction	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	1	7.60	7.60	0.00	23.80	54.50	52.00	
1	2	3.60	6.10	6.70	31.00	54.50	16.00	
1	3	3.50	6.40	14.00	13.10	54.50	29.00	
2	1	7.50	7.90	4.10	21.30	56.60	41.00	
2	2	3.90	7.00	10.40	11.30	56.60	49.00	
2	3	4.30	8.00	15.90	17.80	56.60	60.00	
2	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	✓
2	5	8.20	8.20	0.00	17.60	56.60	52.00	

Pedestrian Crossings

Junction	Arm	Crossing Type
1	1	None
1	2	None
1	3	Puffin
2	1	Puffin
2	2	None
2	3	None
2	4	None
2	5	Puffin

Pelican/ Puffin Crossings

Junction	Arm	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)	Space between crossing and junction entry (PCU)
1	3	3.00	2.90	1.00	6.00	6.00	7.00	11.00
2	1	3.00	2.90	1.00	6.00	6.00	7.00	8.00
2	5	3.00	2.90	1.00	6.00	6.00	7.00	8.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1	1		(calculated)	(calculated)	0.649	2144.984
1	2		(calculated)	(calculated)	0.574	1530.737
1	3		(calculated)	(calculated)	0.554	1553.516
2	1		(calculated)	(calculated)	0.670	2281.655
2	2		(calculated)	(calculated)	0.510	1490.250
2	3		(calculated)	(calculated)	0.552	1731.208
2	4		(calculated)	(calculated)	Exit-only	Exit-only
2	5		(calculated)	(calculated)	0.657	2278.358

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

Junction	Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	1	Linked Arm		N/A	
1	2	ONE HOUR	✓	177.00	100.000
1	3	ONE HOUR	✓	687.14	100.000
2	1	ONE HOUR	✓	417.99	100.000
2	2	ONE HOUR	✓	250.11	100.000
2	3	ONE HOUR	✓	331.49	100.000
2	4	Exit-only	✓	Exit-only	Exit-only
2	5	Linked Arm		N/A	

Linked Arm Data

Junction	Arm	From Junction ID	From Arm ID	Link Type	Flow Source	Uniform Flow (PCU/hr)	Flow Multiplier (%)	Internal Storage Space (PCU)
1	1	2	5	Queue limited	Normal	0.00	100.00	36.00
2	5	1	1	Queue limited	Normal	0.00	100.00	40.00

Pedestrian Flows

General Flows Data

Junction	Arm	Profile Type	Average Pedestrian Flow (Ped/hr)
1	1	-	-
1	2	-	-
1	3	ONE HOUR	500.00
2	1	ONE HOUR	500.00
2	2	-	-
2	3	-	-
2	4	-	-
2	5	ONE HOUR	500.00

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	16.000	313.384
	2	103.614	0.000	73.389
	3	504.850	182.289	0.000

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

		To		
		1	2	3
From	1	0.00	0.05	0.95
	2	0.59	0.00	0.41
	3	0.73	0.27	0.00

Turning Counts / Proportions (PCU/hr) - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.000	95.741	191.332	44.029	86.890
	2	124.177	0.309	13.912	2.397	109.315
	3	149.389	64.218	2.427	4.142	111.313
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	0.000	316.513	281.346	1.488	9.118

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Turning Proportions (PCU) - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.00	0.23	0.46	0.11	0.21
	2	0.50	0.00	0.06	0.01	0.44
	3	0.45	0.19	0.01	0.01	0.34
	4	0.20	0.20	0.20	0.20	0.20
	5	0.00	0.52	0.46	0.00	0.01

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	1.000	1.000	1.000	1.000	1.000

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Heavy Vehicle Percentages - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	0.0	0.0	0.0	0.0	0.0

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1	0.17	2.16	0.21	A
1	2	0.15	3.14	0.17	A
1	3	0.65	8.77	1.82	A
2	1	0.38	4.79	0.61	A
2	2	0.24	4.14	0.32	A
2	3	0.24	3.17	0.32	A
2	4	Exit-only	Exit-only	Exit-only	Exit-only
2	5	0.48	4.88	0.90	A

Main Results for each time segment

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	237.50	236.98	136.30	0.00	2056.49	0.115	0.13	1.978	A
1	2	133.26	132.84	225.47	0.00	1401.25	0.095	0.10	2.838	A
1	3	517.31	513.79	77.76	376.43	1097.13	0.472	0.88	6.135	A
2	1	314.69	313.48	503.74	376.43	1355.00	0.232	0.30	3.454	A
2	2	188.30	187.59	461.09	0.00	1255.03	0.150	0.18	3.371	A
2	3	249.56	248.81	283.25	0.00	1574.99	0.158	0.19	2.713	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	455.25	453.48	255.52	376.43	1480.33	0.308	0.44	3.500	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	284.38	284.25	163.57	0.00	2038.79	0.139	0.16	2.051	A
1	2	159.12	159.02	270.45	0.00	1375.42	0.116	0.13	2.959	A
1	3	617.72	616.58	93.09	449.49	1138.86	0.542	1.17	6.877	A
2	1	375.77	375.34	605.62	449.49	1292.75	0.291	0.41	3.922	A
2	2	224.84	224.64	553.27	0.00	1208.00	0.186	0.23	3.660	A
2	3	298.00	297.80	339.21	0.00	1544.13	0.193	0.24	2.888	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	546.10	545.47	305.88	449.49	1452.46	0.376	0.60	3.966	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	348.15	347.96	200.01	0.00	2015.13	0.173	0.21	2.159	A
1	2	194.88	194.73	331.06	0.00	1340.62	0.145	0.17	3.141	A
1	3	756.55	753.94	113.99	550.51	1161.53	0.651	1.82	8.774	A
2	1	460.22	459.41	740.37	550.51	1210.69	0.380	0.61	4.787	A
2	2	275.38	275.03	676.76	0.00	1145.01	0.241	0.31	4.136	A
2	3	364.98	364.65	415.24	0.00	1502.19	0.243	0.32	3.164	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	667.92	666.72	374.53	550.51	1403.17	0.476	0.90	4.880	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	348.63	348.62	200.79	0.00	2014.62	0.173	0.21	2.160	A
1	2	194.88	194.88	331.69	0.00	1340.25	0.145	0.17	3.142	A
1	3	756.55	756.89	114.08	550.51	1200.55	0.630	1.73	8.125	A
2	1	460.22	460.23	743.92	550.51	1223.27	0.376	0.61	4.717	A
2	2	275.38	275.37	679.06	0.00	1143.84	0.241	0.32	4.144	A
2	3	364.98	364.97	415.88	0.00	1501.84	0.243	0.32	3.165	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	670.18	670.20	374.91	550.51	1423.92	0.471	0.89	4.778	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	285.12	285.31	164.56	0.00	2038.15	0.140	0.16	2.053	A
1	2	159.12	159.28	271.45	0.00	1374.85	0.116	0.13	2.963	A
1	3	617.72	620.30	93.24	449.49	1191.55	0.518	1.09	6.329	A
2	1	375.77	376.57	610.44	449.49	1311.17	0.287	0.40	3.856	A
2	2	224.84	225.19	556.49	0.00	1206.36	0.186	0.23	3.669	A
2	3	298.00	298.32	340.20	0.00	1543.58	0.193	0.24	2.893	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	548.98	550.18	306.50	449.49	1482.55	0.370	0.59	3.865	A

Main results: (09:15-09:30)

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	238.65	238.78	137.54	0.00	2055.69	0.116	0.13	1.982	A
1	2	133.26	133.36	227.18	0.00	1400.27	0.095	0.11	2.841	A
1	3	517.31	518.44	78.07	376.43	1163.20	0.445	0.81	5.592	A
2	1	314.69	315.11	510.05	376.43	1378.20	0.228	0.30	3.389	A
2	2	188.30	188.51	465.29	0.00	1252.89	0.150	0.18	3.382	A
2	3	249.56	249.77	284.73	0.00	1574.17	0.159	0.19	2.720	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	458.97	459.60	256.60	376.43	1518.02	0.302	0.44	3.405	A

(Default Analysis Set) - 2016 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
2016 Base, PM	2016 Base	PM		Varies by Arm	17:00	18:30	90	15		

Junction Network

Junctions

Junction	Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	1	(untitled)	Roundabout	1,2,3			4.07	A
2	2	(untitled)	Roundabout	1,2,3,4,5			4.25	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Arm	Name	Description
1	**1**	1	(untitled)	
1	**2**	2	(untitled)	
1	**3**	3	(untitled)	
2	**1**	1	(untitled)	
2	**2**	2	(untitled)	
2	**3**	3	(untitled)	
2	**4**	4	(untitled)	
2	**5**	5	(untitled)	

Capacity Options

Junction	Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	**1**	0.00	99999.00
1	**2**	0.00	99999.00
1	**3**	0.00	99999.00
2	**1**	0.00	99999.00
2	**2**	0.00	99999.00
2	**3**	0.00	99999.00
2	**4**	0.00	99999.00
2	**5**	0.00	99999.00

Roundabout Geometry

Junction	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	1	7.60	7.60	0.00	23.80	54.50	52.00	
1	2	3.60	6.10	6.70	31.00	54.50	16.00	
1	3	3.50	6.40	14.00	13.10	54.50	29.00	
2	1	7.50	7.90	4.10	21.30	56.60	41.00	
2	2	3.90	7.00	10.40	11.30	56.60	49.00	
2	3	4.30	8.00	15.90	17.80	56.60	60.00	
2	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	✓
2	5	8.20	8.20	0.00	17.60	56.60	52.00	

Pedestrian Crossings

Junction	Arm	Crossing Type
1	1	None
1	2	None
1	3	Puffin
2	1	Puffin
2	2	None
2	3	None
2	4	None
2	5	Puffin

Pelican/ Puffin Crossings

Junction	Arm	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)	Space between crossing and junction entry (PCU)
1	3	3.00	2.90	1.00	6.00	6.00	7.00	11.00
2	1	3.00	2.90	1.00	6.00	6.00	7.00	8.00
2	5	3.00	2.90	1.00	6.00	6.00	7.00	8.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1	1		(calculated)	(calculated)	0.649	2144.984
1	2		(calculated)	(calculated)	0.574	1530.737
1	3		(calculated)	(calculated)	0.554	1553.516
2	1		(calculated)	(calculated)	0.670	2281.655
2	2		(calculated)	(calculated)	0.510	1490.250
2	3		(calculated)	(calculated)	0.552	1731.208
2	4		(calculated)	(calculated)	Exit-only	Exit-only
2	5		(calculated)	(calculated)	0.657	2278.358

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

Junction	Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	1	Linked Arm		N/A	
1	2	ONE HOUR	✓	133.95	100.000
1	3	ONE HOUR	✓	414.26	100.000
2	1	ONE HOUR	✓	414.44	100.000
2	2	ONE HOUR	✓	340.35	100.000
2	3	ONE HOUR	✓	597.97	100.000
2	4	Exit-only	✓	Exit-only	Exit-only
2	5	Linked Arm		N/A	

Linked Arm Data

Junction	Arm	From Junction ID	From Arm ID	Link Type	Flow Source	Uniform Flow (PCU/hr)	Flow Multiplier (%)	Internal Storage Space (PCU)
1	1	2	5	Queue limited	Normal	0.00	100.00	36.00
2	5	1	1	Queue limited	Normal	0.00	100.00	40.00

Pedestrian Flows

General Flows Data

Junction	Arm	Profile Type	Average Pedestrian Flow (Ped/hr)
1	1	-	-
1	2	-	-
1	3	ONE HOUR	500.00
2	1	ONE HOUR	500.00
2	2	-	-
2	3	-	-
2	4	-	-
2	5	ONE HOUR	500.00

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	8.000	501.601
	2	67.846	0.000	66.103
	3	333.822	80.436	0.000

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

		To		
		1	2	3
From	1	0.00	0.02	0.98
	2	0.51	0.00	0.49
	3	0.81	0.19	0.00

Turning Counts / Proportions (PCU/hr) - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.000	62.338	284.410	22.455	45.236
	2	97.515	0.309	93.396	14.360	134.766
	3	397.409	17.846	31.740	1.921	149.058
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	30.915	190.191	172.988	1.283	6.251

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Turning Proportions (PCU) - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.00	0.15	0.69	0.05	0.11
	2	0.29	0.00	0.27	0.04	0.40
	3	0.66	0.03	0.05	0.00	0.25
	4	0.20	0.20	0.20	0.20	0.20
	5	0.08	0.47	0.43	0.00	0.02

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	1.000	1.000	1.000	1.000	1.000

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Heavy Vehicle Percentages - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	0.0	0.0	0.0	0.0	0.0

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1	0.18	2.09	0.21	A
1	2	0.11	3.06	0.13	A
1	3	0.43	5.99	0.75	A
2	1	0.35	4.16	0.52	A
2	2	0.32	4.51	0.47	A
2	3	0.43	4.10	0.75	A
2	4	Exit-only	Exit-only	Exit-only	Exit-only
2	5	0.35	4.36	0.53	A

Main Results for each time segment

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	251.49	250.95	60.24	0.00	2105.87	0.119	0.14	1.941	A
1	2	100.84	100.53	247.01	0.00	1388.88	0.073	0.08	2.794	A
1	3	311.88	310.25	50.92	376.43	1074.27	0.290	0.41	4.703	A
2	1	312.01	310.91	314.19	376.43	1440.61	0.217	0.28	3.184	A
2	2	256.23	255.23	422.73	0.00	1274.60	0.201	0.25	3.528	A
2	3	450.19	448.63	241.60	0.00	1597.96	0.282	0.39	3.128	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	300.93	299.84	408.71	376.43	1398.44	0.215	0.27	3.274	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	301.14	301.01	72.22	0.00	2098.10	0.144	0.17	2.003	A
1	2	120.42	120.34	296.28	0.00	1360.59	0.089	0.10	2.902	A
1	3	372.41	371.92	60.95	449.49	1072.00	0.347	0.53	5.139	A
2	1	372.57	372.22	377.37	449.49	1389.56	0.268	0.36	3.538	A
2	2	305.96	305.65	506.68	0.00	1231.77	0.248	0.33	3.886	A
2	3	537.57	537.06	289.33	0.00	1571.64	0.342	0.52	3.477	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	360.66	360.29	489.31	449.49	1341.81	0.269	0.37	3.668	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	368.65	368.46	88.39	0.00	2087.60	0.177	0.21	2.093	A
1	2	147.48	147.37	362.68	0.00	1322.46	0.112	0.13	3.063	A
1	3	456.11	455.21	74.64	550.51	1055.31	0.432	0.75	5.990	A
2	1	456.31	455.67	461.73	550.51	1320.75	0.345	0.52	4.159	A
2	2	374.73	374.18	620.15	0.00	1173.89	0.319	0.47	4.499	A
2	3	658.38	657.47	354.19	0.00	1535.86	0.429	0.74	4.094	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	441.46	440.80	599.02	550.51	1265.56	0.349	0.53	4.361	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	369.18	369.18	88.57	0.00	2087.48	0.177	0.21	2.094	A
1	2	147.48	147.48	363.38	0.00	1322.05	0.112	0.13	3.064	A
1	3	456.11	456.13	74.70	550.51	1070.85	0.426	0.75	5.856	A
2	1	456.31	456.31	463.16	550.51	1331.41	0.343	0.52	4.115	A
2	2	374.73	374.72	621.41	0.00	1173.25	0.319	0.47	4.507	A
2	3	658.38	658.37	354.72	0.00	1535.57	0.429	0.75	4.103	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	442.26	442.27	599.85	550.51	1277.00	0.346	0.53	4.312	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	301.97	302.15	72.49	0.00	2097.92	0.144	0.17	2.006	A
1	2	120.42	120.53	297.41	0.00	1359.94	0.089	0.10	2.904	A
1	3	372.41	373.32	61.05	449.49	1094.67	0.340	0.52	4.996	A
2	1	372.57	373.21	379.57	449.49	1405.37	0.265	0.36	3.491	A
2	2	305.96	306.50	508.61	0.00	1230.79	0.249	0.33	3.898	A
2	3	537.57	538.46	290.15	0.00	1571.18	0.342	0.52	3.488	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	361.88	362.54	490.61	449.49	1358.83	0.266	0.36	3.617	A

Main results: (18:15-18:30)

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	252.75	252.87	60.65	0.00	2105.61	0.120	0.14	1.944	A
1	2	100.84	100.92	248.90	0.00	1387.80	0.073	0.08	2.799	A
1	3	311.88	312.38	51.12	376.43	1107.35	0.282	0.39	4.530	A
2	1	312.01	312.37	317.48	376.43	1462.55	0.213	0.27	3.130	A
2	2	256.23	256.55	425.59	0.00	1273.14	0.201	0.25	3.544	A
2	3	450.19	450.70	242.86	0.00	1597.27	0.282	0.39	3.140	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	302.84	303.21	410.65	376.43	1421.30	0.213	0.27	3.222	A

(Default Analysis Set) - 2022 Do Minimum, 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
2022 Do Minimum, AM	2022 Do Minimum	AM		Varies by Arm	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	1	(untitled)	Roundabout	1,2,3			6.24	A
2	2	(untitled)	Roundabout	1,2,3,4,5			4.59	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Arm	Name	Description
1	1	1	(untitled)	
1	2	2	(untitled)	
1	3	3	(untitled)	
2	1	1	(untitled)	
2	2	2	(untitled)	
2	3	3	(untitled)	
2	4	4	(untitled)	
2	5	5	(untitled)	

Capacity Options

Junction	Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	1	0.00	99999.00
1	2	0.00	99999.00
1	3	0.00	99999.00
2	1	0.00	99999.00
2	2	0.00	99999.00
2	3	0.00	99999.00
2	4	0.00	99999.00
2	5	0.00	99999.00

Roundabout Geometry

Junction	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	1	7.60	7.60	0.00	23.80	54.50	52.00	
1	2	3.60	6.10	6.70	31.00	54.50	16.00	
1	3	3.50	6.40	14.00	13.10	54.50	29.00	
2	1	7.50	7.90	4.10	21.30	56.60	41.00	
2	2	3.90	7.00	10.40	11.30	56.60	49.00	
2	3	4.30	8.00	15.90	17.80	56.60	60.00	
2	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	✓
2	5	8.20	8.20	0.00	17.60	56.60	52.00	

Pedestrian Crossings

Junction	Arm	Crossing Type
1	1	None
1	2	None
1	3	Puffin
2	1	Puffin
2	2	None
2	3	None
2	4	None
2	5	Puffin

Pelican/ Puffin Crossings

Junction	Arm	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)	Space between crossing and junction entry (PCU)
1	3	3.00	2.90	1.00	6.00	6.00	7.00	11.00
2	1	3.00	2.90	1.00	6.00	6.00	7.00	8.00
2	5	3.00	2.90	1.00	6.00	6.00	7.00	8.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1	1		(calculated)	(calculated)	0.649	2144.984
1	2		(calculated)	(calculated)	0.574	1530.737
1	3		(calculated)	(calculated)	0.554	1553.516
2	1		(calculated)	(calculated)	0.670	2281.655
2	2		(calculated)	(calculated)	0.510	1490.250
2	3		(calculated)	(calculated)	0.552	1731.208
2	4		(calculated)	(calculated)	Exit-only	Exit-only
2	5		(calculated)	(calculated)	0.657	2278.358

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

Junction	Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	1	Linked Arm		N/A	
1	2	ONE HOUR	✓	192.80	100.000
1	3	ONE HOUR	✓	684.49	100.000
2	1	ONE HOUR	✓	405.92	100.000
2	2	ONE HOUR	✓	307.71	100.000
2	3	ONE HOUR	✓	383.87	100.000
2	4	Exit-only	✓	Exit-only	Exit-only
2	5	Linked Arm		N/A	

Linked Arm Data

Junction	Arm	From Junction ID	From Arm ID	Link Type	Flow Source	Uniform Flow (PCU/hr)	Flow Multiplier (%)	Internal Storage Space (PCU)
1	1	2	5	Queue limited	Normal	0.00	100.00	36.00
2	5	1	1	Queue limited	Normal	0.00	100.00	40.00

Pedestrian Flows

General Flows Data

Junction	Arm	Profile Type	Average Pedestrian Flow (Ped/hr)
1	1	-	-
1	2	-	-
1	3	ONE HOUR	500.00
2	1	ONE HOUR	500.00
2	2	-	-
2	3	-	-
2	4	-	-
2	5	ONE HOUR	500.00

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	8.000	310.352
	2	111.211	0.000	81.587
	3	529.667	154.826	0.000

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

		To		
		1	2	3
From	1	0.00	0.03	0.97
	2	0.58	0.00	0.42
	3	0.77	0.23	0.00

Turning Counts / Proportions (PCU/hr) - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.000	113.628	195.296	52.222	44.773
	2	132.665	0.405	26.071	12.191	136.380
	3	219.868	69.710	5.650	0.000	88.646
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	0.000	392.151	241.447	2.031	5.249

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Turning Proportions (PCU) - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.00	0.28	0.48	0.13	0.11
	2	0.43	0.00	0.08	0.04	0.44
	3	0.57	0.18	0.01	0.00	0.23
	4	0.20	0.20	0.20	0.20	0.20
	5	0.00	0.61	0.38	0.00	0.01

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	1.000	1.000	1.000	1.000	1.000

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Heavy Vehicle Percentages - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	0.0	0.0	0.0	0.0	0.0

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1	0.15	2.08	0.17	A
1	2	0.16	3.13	0.18	A
1	3	0.65	8.79	1.81	A
2	1	0.38	4.84	0.60	A
2	2	0.29	4.26	0.40	A
2	3	0.28	3.35	0.39	A
2	4	Exit-only	Exit-only	Exit-only	Exit-only
2	5	0.51	5.33	1.03	A

Main Results for each time segment

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	206.30	205.86	115.77	0.00	2069.82	0.100	0.11	1.931	A
1	2	145.15	144.69	200.69	0.00	1415.49	0.103	0.11	2.833	A
1	3	515.32	511.81	83.46	376.43	1094.74	0.471	0.88	6.139	A
2	1	305.60	304.42	534.41	376.43	1340.38	0.228	0.29	3.472	A
2	2	231.66	230.78	408.78	0.00	1281.71	0.181	0.22	3.422	A
2	3	289.00	288.10	289.40	0.00	1571.60	0.184	0.22	2.804	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	479.51	477.55	321.37	376.43	1454.16	0.330	0.49	3.678	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	247.03	246.92	138.93	0.00	2054.79	0.120	0.14	1.991	A
1	2	173.32	173.21	240.72	0.00	1392.50	0.124	0.14	2.952	A
1	3	615.34	614.20	99.91	449.49	1136.02	0.542	1.16	6.883	A
2	1	364.91	364.49	642.53	449.49	1275.15	0.286	0.40	3.951	A
2	2	276.63	276.36	490.49	0.00	1240.03	0.223	0.29	3.735	A
2	3	345.09	344.84	346.57	0.00	1540.07	0.224	0.29	3.011	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	575.19	574.46	384.72	449.49	1427.18	0.403	0.67	4.218	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	302.42	302.27	169.88	0.00	2034.69	0.149	0.17	2.077	A
1	2	212.27	212.10	294.67	0.00	1361.51	0.156	0.18	3.131	A
1	3	753.64	751.03	122.35	550.51	1158.06	0.651	1.81	8.786	A
2	1	446.93	446.13	785.39	550.51	1189.83	0.376	0.60	4.835	A
2	2	338.80	338.35	599.93	0.00	1184.20	0.286	0.40	4.254	A
2	3	422.65	422.24	424.26	0.00	1497.22	0.282	0.39	3.349	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	703.51	702.05	471.05	550.51	1376.19	0.511	1.03	5.328	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	302.83	302.83	170.55	0.00	2034.26	0.149	0.17	2.078	A
1	2	212.27	212.27	295.22	0.00	1361.20	0.156	0.18	3.132	A
1	3	753.64	754.00	122.44	550.51	1198.16	0.629	1.73	8.116	A
2	1	446.93	446.93	789.35	550.51	1202.05	0.372	0.59	4.767	A
2	2	338.80	338.79	602.02	0.00	1183.13	0.286	0.40	4.263	A
2	3	422.65	422.65	424.90	0.00	1496.87	0.282	0.39	3.350	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	705.89	705.94	471.56	550.51	1401.00	0.504	1.02	5.181	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	247.67	247.82	139.76	0.00	2054.25	0.121	0.14	1.994	A
1	2	173.32	173.49	241.59	0.00	1392.00	0.125	0.14	2.954	A
1	3	615.34	617.89	100.07	449.49	1188.36	0.518	1.09	6.337	A
2	1	364.91	365.71	647.85	449.49	1293.08	0.282	0.40	3.884	A
2	2	276.63	277.07	493.39	0.00	1238.55	0.223	0.29	3.744	A
2	3	345.09	345.50	347.57	0.00	1539.52	0.224	0.29	3.015	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	578.20	579.66	385.54	449.49	1462.37	0.395	0.66	4.086	A

Main results: (09:15-09:30)

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	207.31	207.41	116.82	0.00	2069.14	0.100	0.11	1.933	A
1	2	145.15	145.26	202.20	0.00	1414.62	0.103	0.11	2.837	A
1	3	515.32	516.45	83.79	376.43	1160.66	0.444	0.81	5.597	A
2	1	305.60	306.02	541.23	376.43	1362.81	0.224	0.29	3.407	A
2	2	231.66	231.93	412.51	0.00	1279.81	0.181	0.22	3.435	A
2	3	289.00	289.26	290.90	0.00	1570.77	0.184	0.23	2.809	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	483.42	484.14	322.76	376.43	1495.85	0.323	0.48	3.559	A

(Default Analysis Set) - 2022 Do Minimum, 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
2022 Do Minimum, PM	2022 Do Minimum	PM		Varies by Arm	17:00	18:30	90	15		

Junction Network

Junctions

Junction	Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	1	(untitled)	Roundabout	1,2,3			4.73	A
2	2	(untitled)	Roundabout	1,2,3,4,5			4.91	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Arm	Name	Description
1	**1**	1	(untitled)	
1	**2**	2	(untitled)	
1	**3**	3	(untitled)	
2	**1**	1	(untitled)	
2	**2**	2	(untitled)	
2	**3**	3	(untitled)	
2	**4**	4	(untitled)	
2	**5**	5	(untitled)	

Capacity Options

Junction	Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	**1**	0.00	99999.00
1	**2**	0.00	99999.00
1	**3**	0.00	99999.00
2	**1**	0.00	99999.00
2	**2**	0.00	99999.00
2	**3**	0.00	99999.00
2	**4**	0.00	99999.00
2	**5**	0.00	99999.00

Roundabout Geometry

Junction	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	1	7.60	7.60	0.00	23.80	54.50	52.00	
1	2	3.60	6.10	6.70	31.00	54.50	16.00	
1	3	3.50	6.40	14.00	13.10	54.50	29.00	
2	1	7.50	7.90	4.10	21.30	56.60	41.00	
2	2	3.90	7.00	10.40	11.30	56.60	49.00	
2	3	4.30	8.00	15.90	17.80	56.60	60.00	
2	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	✓
2	5	8.20	8.20	0.00	17.60	56.60	52.00	

Pedestrian Crossings

Junction	Arm	Crossing Type
1	1	None
1	2	None
1	3	Puffin
2	1	Puffin
2	2	None
2	3	None
2	4	None
2	5	Puffin

Pelican/ Puffin Crossings

Junction	Arm	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)	Space between crossing and junction entry (PCU)
1	3	3.00	2.90	1.00	6.00	6.00	7.00	11.00
2	1	3.00	2.90	1.00	6.00	6.00	7.00	8.00
2	5	3.00	2.90	1.00	6.00	6.00	7.00	8.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1	1		(calculated)	(calculated)	0.649	2144.984
1	2		(calculated)	(calculated)	0.574	1530.737
1	3		(calculated)	(calculated)	0.554	1553.516
2	1		(calculated)	(calculated)	0.670	2281.655
2	2		(calculated)	(calculated)	0.510	1490.250
2	3		(calculated)	(calculated)	0.552	1731.208
2	4		(calculated)	(calculated)	Exit-only	Exit-only
2	5		(calculated)	(calculated)	0.657	2278.358

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

Junction	Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	1	Linked Arm		N/A	
1	2	ONE HOUR	✓	145.87	100.000
1	3	ONE HOUR	✓	531.48	100.000
2	1	ONE HOUR	✓	406.78	100.000
2	2	ONE HOUR	✓	411.68	100.000
2	3	ONE HOUR	✓	642.21	100.000
2	4	Exit-only	✓	Exit-only	Exit-only
2	5	Linked Arm		N/A	

Linked Arm Data

Junction	Arm	From Junction ID	From Arm ID	Link Type	Flow Source	Uniform Flow (PCU/hr)	Flow Multiplier (%)	Internal Storage Space (PCU)
1	1	2	5	Queue limited	Normal	0.00	100.00	36.00
2	5	1	1	Queue limited	Normal	0.00	100.00	40.00

Pedestrian Flows

General Flows Data

Junction	Arm	Profile Type	Average Pedestrian Flow (Ped/hr)
1	1	-	-
1	2	-	-
1	3	ONE HOUR	500.00
2	1	ONE HOUR	500.00
2	2	-	-
2	3	-	-
2	4	-	-
2	5	ONE HOUR	500.00

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	8.000	538.467
	2	76.310	0.000	69.555
	3	461.322	70.157	0.000

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

		To		
		1	2	3
From	1	0.00	0.01	0.99
	2	0.52	0.00	0.48
	3	0.87	0.13	0.00

Turning Counts / Proportions (PCU/hr) - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.000	68.948	259.660	31.905	46.271
	2	144.640	0.515	78.946	29.513	158.067
	3	434.251	17.907	24.017	1.391	164.641
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	4.191	278.669	243.679	3.047	8.048

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Turning Proportions (PCU) - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.00	0.17	0.64	0.08	0.11
	2	0.35	0.00	0.19	0.07	0.38
	3	0.68	0.03	0.04	0.00	0.26
	4	0.20	0.20	0.20	0.20	0.20
	5	0.01	0.52	0.45	0.01	0.01

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	1.000	1.000	1.000	1.000	1.000

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Heavy Vehicle Percentages - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	0.0	0.0	0.0	0.0	0.0

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1	0.20	2.14	0.25	A
1	2	0.12	3.17	0.14	A
1	3	0.53	6.99	1.12	A
2	1	0.36	4.47	0.55	A
2	2	0.40	5.21	0.65	A
2	3	0.48	4.69	0.92	A
2	4	Exit-only	Exit-only	Exit-only	Exit-only
2	5	0.46	5.27	0.86	A

Main Results for each time segment

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	282.70	282.08	52.51	0.00	2110.89	0.134	0.15	1.968	A
1	2	109.82	109.47	277.95	0.00	1371.11	0.080	0.09	2.853	A
1	3	400.13	397.81	57.27	376.43	1083.74	0.369	0.58	5.230	A
2	1	306.25	305.12	429.64	376.43	1387.85	0.221	0.28	3.322	A
2	2	309.93	308.63	461.41	0.00	1254.87	0.247	0.33	3.799	A
2	3	483.49	481.70	316.36	0.00	1556.73	0.311	0.45	3.343	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	402.56	400.93	465.98	376.43	1382.24	0.291	0.41	3.662	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	338.54	338.39	62.97	0.00	2104.10	0.161	0.19	2.038	A
1	2	131.13	131.04	333.44	0.00	1339.25	0.098	0.11	2.979	A
1	3	477.79	477.06	68.56	449.49	1098.06	0.435	0.76	5.789	A
2	1	365.69	365.31	516.39	449.49	1329.01	0.275	0.38	3.733	A
2	2	370.09	369.64	553.38	0.00	1207.95	0.306	0.44	4.292	A
2	3	577.33	576.70	378.91	0.00	1522.23	0.379	0.61	3.805	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	482.64	482.03	557.93	449.49	1336.10	0.361	0.56	4.212	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	414.36	414.14	77.05	0.00	2094.96	0.198	0.25	2.141	A
1	2	160.60	160.47	408.08	0.00	1296.38	0.124	0.14	3.168	A
1	3	585.17	583.72	83.95	550.51	1097.20	0.533	1.12	6.991	A
2	1	447.88	447.17	631.48	550.51	1251.07	0.358	0.55	4.474	A
2	2	453.27	452.43	677.09	0.00	1144.84	0.396	0.65	5.192	A
2	3	707.08	705.87	463.77	0.00	1475.43	0.479	0.91	4.670	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	590.62	589.43	682.90	550.51	1270.96	0.465	0.86	5.272	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	415.11	415.10	77.26	0.00	2094.83	0.198	0.25	2.142	A
1	2	160.60	160.60	409.03	0.00	1295.84	0.124	0.14	3.170	A
1	3	585.17	585.26	84.02	550.51	1121.28	0.522	1.10	6.717	A
2	1	447.88	447.88	634.16	550.51	1262.32	0.355	0.55	4.421	A
2	2	453.27	453.25	678.97	0.00	1143.88	0.396	0.65	5.212	A
2	3	707.08	707.06	464.63	0.00	1474.96	0.479	0.92	4.687	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	592.02	592.05	684.08	550.51	1291.10	0.459	0.85	5.151	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	339.68	339.90	63.26	0.00	2103.91	0.161	0.19	2.042	A
1	2	131.13	131.26	334.92	0.00	1338.40	0.098	0.11	2.981	A
1	3	477.79	479.25	68.67	449.49	1131.97	0.422	0.74	5.527	A
2	1	365.69	366.40	520.29	449.49	1345.55	0.272	0.38	3.678	A
2	2	370.09	370.92	556.16	0.00	1206.53	0.307	0.45	4.313	A
2	3	577.33	578.53	380.23	0.00	1521.50	0.379	0.62	3.824	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	484.65	485.85	559.75	449.49	1365.04	0.355	0.55	4.101	A

Main results: (18:15-18:30)

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	284.25	284.40	52.92	0.00	2110.63	0.135	0.16	1.971	A
1	2	109.82	109.90	280.24	0.00	1369.80	0.080	0.09	2.856	A
1	3	400.13	400.87	57.50	376.43	1129.93	0.354	0.55	4.942	A
2	1	306.25	306.63	434.88	376.43	1409.71	0.217	0.28	3.266	A
2	2	309.93	310.39	465.19	0.00	1252.94	0.247	0.33	3.823	A
2	3	483.49	484.14	318.18	0.00	1555.73	0.311	0.45	3.360	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	405.45	406.05	468.41	376.43	1416.91	0.286	0.40	3.562	A

(Default Analysis Set) - 2022 Do Something, 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
2022 Do Something, AM	2022 Do Something	AM		Varies by Arm	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	1	(untitled)	Roundabout	1,2,3			5.94	A
2	2	(untitled)	Roundabout	1,2,3,4,5			4.42	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Arm	Name	Description
1	1	1	(untitled)	
1	2	2	(untitled)	
1	3	3	(untitled)	
2	1	1	(untitled)	
2	2	2	(untitled)	
2	3	3	(untitled)	
2	4	4	(untitled)	
2	5	5	(untitled)	

Capacity Options

Junction	Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	1	0.00	99999.00
1	2	0.00	99999.00
1	3	0.00	99999.00
2	1	0.00	99999.00
2	2	0.00	99999.00
2	3	0.00	99999.00
2	4	0.00	99999.00
2	5	0.00	99999.00

Roundabout Geometry

Junction	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	1	7.60	7.60	0.00	23.80	54.50	52.00	
1	2	3.60	6.10	6.70	31.00	54.50	16.00	
1	3	3.50	6.40	14.00	13.10	54.50	29.00	
2	1	7.50	7.90	4.10	21.30	56.60	41.00	
2	2	3.90	7.00	10.40	11.30	56.60	49.00	
2	3	4.30	8.00	15.90	17.80	56.60	60.00	
2	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	✓
2	5	8.20	8.20	0.00	17.60	56.60	52.00	

Pedestrian Crossings

Junction	Arm	Crossing Type
1	1	None
1	2	None
1	3	Puffin
2	1	Puffin
2	2	None
2	3	None
2	4	None
2	5	Puffin

Pelican/ Puffin Crossings

Junction	Arm	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)	Space between crossing and junction entry (PCU)
1	3	3.00	2.90	1.00	6.00	6.00	7.00	11.00
2	1	3.00	2.90	1.00	6.00	6.00	7.00	8.00
2	5	3.00	2.90	1.00	6.00	6.00	7.00	8.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1	1		(calculated)	(calculated)	0.649	2144.984
1	2		(calculated)	(calculated)	0.574	1530.737
1	3		(calculated)	(calculated)	0.554	1553.516
2	1		(calculated)	(calculated)	0.670	2281.655
2	2		(calculated)	(calculated)	0.510	1490.250
2	3		(calculated)	(calculated)	0.552	1731.208
2	4		(calculated)	(calculated)	Exit-only	Exit-only
2	5		(calculated)	(calculated)	0.657	2278.358

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

Junction	Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	1	Linked Arm		N/A	
1	2	ONE HOUR	✓	184.50	100.000
1	3	ONE HOUR	✓	635.75	100.000
2	1	ONE HOUR	✓	380.23	100.000
2	2	ONE HOUR	✓	309.38	100.000
2	3	ONE HOUR	✓	277.09	100.000
2	4	Exit-only	✓	Exit-only	Exit-only
2	5	Linked Arm		N/A	

Linked Arm Data

Junction	Arm	From Junction ID	From Arm ID	Link Type	Flow Source	Uniform Flow (PCU/hr)	Flow Multiplier (%)	Internal Storage Space (PCU)
1	1	2	5	Queue limited	Normal	0.00	100.00	36.00
2	5	1	1	Queue limited	Normal	0.00	100.00	40.00

Pedestrian Flows

General Flows Data

Junction	Arm	Profile Type	Average Pedestrian Flow (Ped/hr)
1	1	-	-
1	2	-	-
1	3	ONE HOUR	500.00
2	1	ONE HOUR	500.00
2	2	-	-
2	3	-	-
2	4	-	-
2	5	ONE HOUR	500.00

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	25.803	267.823
	2	137.716	0.000	46.786
	3	501.648	134.098	0.000

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

		To		
		1	2	3
From	1	0.00	0.09	0.91
	2	0.75	0.00	0.25
	3	0.79	0.21	0.00

Turning Counts / Proportions (PCU/hr) - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.000	115.092	168.224	52.049	44.862
	2	132.336	0.403	28.377	21.650	126.617
	3	131.015	56.692	4.666	0.000	84.719
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	0.000	401.498	230.522	2.082	5.261

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Turning Proportions (PCU) - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.00	0.30	0.44	0.14	0.12
	2	0.43	0.00	0.09	0.07	0.41
	3	0.47	0.20	0.02	0.00	0.31
	4	0.20	0.20	0.20	0.20	0.20
	5	0.00	0.63	0.36	0.00	0.01

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	1.000	1.000	1.000	1.000	1.000

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Heavy Vehicle Percentages - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	0.0	0.0	0.0	0.0	0.0

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1	0.14	2.04	0.16	A
1	2	0.15	3.06	0.17	A
1	3	0.62	8.37	1.61	A
2	1	0.35	4.66	0.54	A
2	2	0.28	4.16	0.39	A
2	3	0.20	3.02	0.26	A
2	4	Exit-only	Exit-only	Exit-only	Exit-only
2	5	0.50	5.02	0.97	A

Main Results for each time segment

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	196.13	195.72	100.29	0.00	2079.87	0.094	0.10	1.910	A
1	2	138.90	138.47	178.52	0.00	1428.22	0.097	0.11	2.791	A
1	3	478.62	475.48	103.36	376.43	1080.55	0.443	0.79	5.919	A
2	1	286.26	285.18	523.02	376.43	1344.02	0.213	0.27	3.397	A
2	2	232.92	232.05	379.69	0.00	1296.55	0.180	0.22	3.378	A
2	3	208.61	208.00	288.92	0.00	1571.86	0.133	0.15	2.638	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	478.55	476.66	243.96	376.43	1487.98	0.322	0.47	3.554	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	234.83	234.74	120.34	0.00	2066.86	0.114	0.13	1.964	A
1	2	165.86	165.76	214.11	0.00	1407.78	0.118	0.13	2.898	A
1	3	571.52	570.50	123.73	449.49	1112.40	0.514	1.04	6.631	A
2	1	341.82	341.44	628.70	449.49	1277.08	0.268	0.36	3.845	A
2	2	278.13	277.87	455.54	0.00	1257.86	0.221	0.28	3.673	A
2	3	249.10	248.94	345.99	0.00	1540.39	0.162	0.19	2.787	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	573.89	573.22	292.05	449.49	1464.41	0.392	0.64	4.037	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	287.51	287.37	147.17	0.00	2049.44	0.140	0.16	2.042	A
1	2	203.14	202.98	262.11	0.00	1380.21	0.147	0.17	3.057	A
1	3	699.97	697.70	151.51	550.51	1125.25	0.622	1.61	8.375	A
2	1	418.64	417.94	768.67	550.51	1190.04	0.352	0.54	4.659	A
2	2	340.64	340.20	557.26	0.00	1205.97	0.282	0.39	4.156	A
2	3	305.08	304.83	423.57	0.00	1497.60	0.204	0.25	3.018	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	702.05	700.72	357.59	550.51	1417.16	0.495	0.97	5.016	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	287.87	287.87	147.70	0.00	2049.09	0.140	0.16	2.043	A
1	2	203.14	203.14	262.57	0.00	1379.95	0.147	0.17	3.058	A
1	3	699.97	700.23	151.63	550.51	1160.88	0.603	1.54	7.823	A
2	1	418.64	418.64	772.19	550.51	1200.89	0.349	0.54	4.601	A
2	2	340.64	340.63	559.04	0.00	1205.06	0.283	0.39	4.164	A
2	3	305.08	305.08	424.18	0.00	1497.26	0.204	0.26	3.019	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	704.16	704.19	357.95	550.51	1439.93	0.489	0.96	4.894	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	235.41	235.54	121.02	0.00	2066.41	0.114	0.13	1.966	A
1	2	165.86	166.02	214.84	0.00	1407.36	0.118	0.13	2.899	A
1	3	571.52	573.76	123.92	449.49	1159.76	0.493	0.98	6.165	A
2	1	341.82	342.52	633.56	449.49	1293.06	0.264	0.36	3.792	A
2	2	278.13	278.56	458.07	0.00	1256.57	0.221	0.29	3.681	A
2	3	249.10	249.35	346.95	0.00	1539.86	0.162	0.19	2.791	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	576.65	577.98	292.62	449.49	1497.00	0.385	0.63	3.922	A

Main results: (09:15-09:30)

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	197.05	197.15	101.17	0.00	2079.30	0.095	0.10	1.911	A
1	2	138.90	139.01	179.82	0.00	1427.47	0.097	0.11	2.793	A
1	3	478.62	479.64	103.76	376.43	1140.73	0.420	0.73	5.453	A
2	1	286.26	286.63	529.43	376.43	1364.46	0.210	0.27	3.343	A
2	2	232.92	233.18	383.04	0.00	1294.85	0.180	0.22	3.390	A
2	3	208.61	208.77	290.40	0.00	1571.05	0.133	0.15	2.642	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	482.23	482.89	244.99	376.43	1528.09	0.316	0.46	3.445	A

(Default Analysis Set) - 2022 Do Something, 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
2022 Do Something, PM	2022 Do Something	PM		Varies by Arm	17:00	18:30	90	15		

Junction Network

Junctions

Junction	Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	1	(untitled)	Roundabout	1,2,3			4.06	A
2	2	(untitled)	Roundabout	1,2,3,4,5			4.25	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Arm	Name	Description
1	**1**	1	(untitled)	
1	**2**	2	(untitled)	
1	**3**	3	(untitled)	
2	**1**	1	(untitled)	
2	**2**	2	(untitled)	
2	**3**	3	(untitled)	
2	**4**	4	(untitled)	
2	**5**	5	(untitled)	

Capacity Options

Junction	Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	**1**	0.00	99999.00
1	**2**	0.00	99999.00
1	**3**	0.00	99999.00
2	**1**	0.00	99999.00
2	**2**	0.00	99999.00
2	**3**	0.00	99999.00
2	**4**	0.00	99999.00
2	**5**	0.00	99999.00

Roundabout Geometry

Junction	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	1	7.60	7.60	0.00	23.80	54.50	52.00	
1	2	3.60	6.10	6.70	31.00	54.50	16.00	
1	3	3.50	6.40	14.00	13.10	54.50	29.00	
2	1	7.50	7.90	4.10	21.30	56.60	41.00	
2	2	3.90	7.00	10.40	11.30	56.60	49.00	
2	3	4.30	8.00	15.90	17.80	56.60	60.00	
2	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	✓
2	5	8.20	8.20	0.00	17.60	56.60	52.00	

Pedestrian Crossings

Junction	Arm	Crossing Type
1	1	None
1	2	None
1	3	Puffin
2	1	Puffin
2	2	None
2	3	None
2	4	None
2	5	Puffin

Pelican/ Puffin Crossings

Junction	Arm	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)	Space between crossing and junction entry (PCU)
1	3	3.00	2.90	1.00	6.00	6.00	7.00	11.00
2	1	3.00	2.90	1.00	6.00	6.00	7.00	8.00
2	5	3.00	2.90	1.00	6.00	6.00	7.00	8.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1	1		(calculated)	(calculated)	0.649	2144.984
1	2		(calculated)	(calculated)	0.574	1530.737
1	3		(calculated)	(calculated)	0.554	1553.516
2	1		(calculated)	(calculated)	0.670	2281.655
2	2		(calculated)	(calculated)	0.510	1490.250
2	3		(calculated)	(calculated)	0.552	1731.208
2	4		(calculated)	(calculated)	Exit-only	Exit-only
2	5		(calculated)	(calculated)	0.657	2278.358

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

Junction	Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	1	Linked Arm		N/A	
1	2	ONE HOUR	✓	168.28	100.000
1	3	ONE HOUR	✓	410.04	100.000
2	1	ONE HOUR	✓	388.00	100.000
2	2	ONE HOUR	✓	415.84	100.000
2	3	ONE HOUR	✓	482.45	100.000
2	4	Exit-only	✓	Exit-only	Exit-only
2	5	Linked Arm		N/A	

Linked Arm Data

Junction	Arm	From Junction ID	From Arm ID	Link Type	Flow Source	Uniform Flow (PCU/hr)	Flow Multiplier (%)	Internal Storage Space (PCU)
1	1	2	5	Queue limited	Normal	0.00	100.00	36.00
2	5	1	1	Queue limited	Normal	0.00	100.00	40.00

Pedestrian Flows

General Flows Data

Junction	Arm	Profile Type	Average Pedestrian Flow (Ped/hr)
1	1	-	-
1	2	-	-
1	3	ONE HOUR	500.00
2	1	ONE HOUR	500.00
2	2	-	-
2	3	-	-
2	4	-	-
2	5	ONE HOUR	500.00

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	8.000	539.191
	2	122.887	0.000	45.397
	3	310.474	99.568	0.000

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

		To		
		1	2	3
From	1	0.00	0.01	0.99
	2	0.73	0.00	0.27
	3	0.76	0.24	0.00

Turning Counts / Proportions (PCU/hr) - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.000	64.000	245.165	32.814	46.024
	2	149.090	0.513	74.729	27.501	164.007
	3	284.340	19.602	17.476	1.391	159.637
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	9.520	282.182	129.605	3.032	9.021

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Turning Proportions (PCU) - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.00	0.16	0.63	0.08	0.12
	2	0.36	0.00	0.18	0.07	0.39
	3	0.59	0.04	0.04	0.00	0.33
	4	0.20	0.20	0.20	0.20	0.20
	5	0.02	0.65	0.30	0.01	0.02

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	1.000	1.000	1.000	1.000	1.000

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Heavy Vehicle Percentages - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	0.0	0.0	0.0	0.0	0.0

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1	0.20	2.17	0.25	A
1	2	0.14	3.24	0.17	A
1	3	0.44	6.15	0.76	A
2	1	0.33	4.13	0.49	A
2	2	0.38	4.73	0.60	A
2	3	0.36	3.84	0.56	A
2	4	Exit-only	Exit-only	Exit-only	Exit-only
2	5	0.37	4.34	0.57	A

Main Results for each time segment

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	284.02	283.40	74.56	0.00	2096.57	0.135	0.16	1.985	A
1	2	126.69	126.29	279.25	0.00	1370.37	0.092	0.10	2.894	A
1	3	308.70	307.07	92.22	376.43	1058.70	0.292	0.41	4.778	A
2	1	292.11	291.08	344.64	376.43	1425.33	0.205	0.26	3.171	A
2	2	313.07	311.81	361.94	0.00	1305.61	0.240	0.31	3.617	A
2	3	363.21	361.99	323.92	0.00	1552.56	0.234	0.30	3.021	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	324.72	323.55	353.35	376.43	1424.86	0.228	0.29	3.266	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	340.09	339.94	89.39	0.00	2086.95	0.163	0.19	2.060	A
1	2	151.28	151.18	334.97	0.00	1338.37	0.113	0.13	3.031	A
1	3	368.62	368.12	110.40	449.49	1054.32	0.350	0.53	5.243	A
2	1	348.81	348.47	413.96	449.49	1370.15	0.255	0.34	3.523	A
2	2	373.83	373.43	433.76	0.00	1268.97	0.295	0.42	4.018	A
2	3	433.71	433.33	387.94	0.00	1517.25	0.286	0.40	3.321	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	389.13	388.73	423.04	449.49	1374.23	0.283	0.39	3.650	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	416.34	416.11	109.40	0.00	2073.96	0.201	0.25	2.171	A
1	2	185.28	185.13	410.03	0.00	1295.26	0.143	0.17	3.242	A
1	3	451.46	450.54	135.19	550.51	1035.09	0.436	0.76	6.148	A
2	1	427.20	426.61	506.50	550.51	1296.90	0.329	0.49	4.134	A
2	2	457.85	457.12	530.93	0.00	1219.40	0.375	0.60	4.719	A
2	3	531.18	530.52	474.89	0.00	1469.30	0.362	0.56	3.833	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	476.32	475.61	517.90	550.51	1304.74	0.365	0.57	4.338	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	416.94	416.93	109.63	0.00	2073.81	0.201	0.25	2.172	A
1	2	185.28	185.28	410.84	0.00	1294.80	0.143	0.17	3.243	A
1	3	451.46	451.49	135.30	550.51	1051.05	0.430	0.76	6.006	A
2	1	427.20	427.20	508.07	550.51	1306.70	0.327	0.49	4.094	A
2	2	457.85	457.84	531.95	0.00	1218.88	0.376	0.60	4.730	A
2	3	531.18	531.17	475.64	0.00	1468.89	0.362	0.56	3.838	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	477.16	477.16	518.59	550.51	1317.03	0.362	0.57	4.286	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	341.03	341.25	89.74	0.00	2086.72	0.163	0.20	2.062	A
1	2	151.28	151.44	336.26	0.00	1337.63	0.113	0.13	3.037	A
1	3	368.62	369.55	110.59	449.49	1077.52	0.342	0.52	5.091	A
2	1	348.81	349.40	416.37	449.49	1384.71	0.252	0.34	3.481	A
2	2	373.83	374.55	435.35	0.00	1268.16	0.295	0.42	4.033	A
2	3	433.71	434.36	389.11	0.00	1516.61	0.286	0.40	3.330	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	390.40	391.11	424.13	449.49	1392.52	0.280	0.39	3.596	A

Main results: (18:15-18:30)

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	285.44	285.60	75.08	0.00	2096.24	0.136	0.16	1.988	A
1	2	126.69	126.80	281.42	0.00	1369.12	0.093	0.10	2.899	A
1	3	308.70	309.21	92.59	376.43	1091.99	0.283	0.40	4.603	A
2	1	292.11	292.45	348.26	376.43	1445.59	0.202	0.25	3.122	A
2	2	313.07	313.48	364.31	0.00	1304.40	0.240	0.32	3.636	A
2	3	363.21	363.59	325.66	0.00	1551.60	0.234	0.31	3.032	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	326.72	327.12	355.01	376.43	1449.56	0.225	0.29	3.207	A

(Default Analysis Set) - 2037 Do Minimum, 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
2037 Do Minimum, AM	2037 Do Minimum	AM		Varies by Arm	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	1	(untitled)	Roundabout	1,2,3			6.52	A
2	2	(untitled)	Roundabout	1,2,3,4,5			4.79	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Arm	Name	Description
1	1	1	(untitled)	
1	2	2	(untitled)	
1	3	3	(untitled)	
2	1	1	(untitled)	
2	2	2	(untitled)	
2	3	3	(untitled)	
2	4	4	(untitled)	
2	5	5	(untitled)	

Capacity Options

Junction	Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	1	0.00	99999.00
1	2	0.00	99999.00
1	3	0.00	99999.00
2	1	0.00	99999.00
2	2	0.00	99999.00
2	3	0.00	99999.00
2	4	0.00	99999.00
2	5	0.00	99999.00

Roundabout Geometry

Junction	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	1	7.60	7.60	0.00	23.80	54.50	52.00	
1	2	3.60	6.10	6.70	31.00	54.50	16.00	
1	3	3.50	6.40	14.00	13.10	54.50	29.00	
2	1	7.50	7.90	4.10	21.30	56.60	41.00	
2	2	3.90	7.00	10.40	11.30	56.60	49.00	
2	3	4.30	8.00	15.90	17.80	56.60	60.00	
2	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	✓
2	5	8.20	8.20	0.00	17.60	56.60	52.00	

Pedestrian Crossings

Junction	Arm	Crossing Type
1	1	None
1	2	None
1	3	Puffin
2	1	Puffin
2	2	None
2	3	None
2	4	None
2	5	Puffin

Pelican/ Puffin Crossings

Junction	Arm	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)	Space between crossing and junction entry (PCU)
1	3	3.00	2.90	1.00	6.00	6.00	7.00	11.00
2	1	3.00	2.90	1.00	6.00	6.00	7.00	8.00
2	5	3.00	2.90	1.00	6.00	6.00	7.00	8.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1	1		(calculated)	(calculated)	0.649	2144.984
1	2		(calculated)	(calculated)	0.574	1530.737
1	3		(calculated)	(calculated)	0.554	1553.516
2	1		(calculated)	(calculated)	0.670	2281.655
2	2		(calculated)	(calculated)	0.510	1490.250
2	3		(calculated)	(calculated)	0.552	1731.208
2	4		(calculated)	(calculated)	Exit-only	Exit-only
2	5		(calculated)	(calculated)	0.657	2278.358

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

Junction	Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	1	Linked Arm		N/A	
1	2	ONE HOUR	✓	211.27	100.000
1	3	ONE HOUR	✓	725.76	100.000
2	1	ONE HOUR	✓	405.94	100.000
2	2	ONE HOUR	✓	346.72	100.000
2	3	ONE HOUR	✓	401.17	100.000
2	4	Exit-only	✓	Exit-only	Exit-only
2	5	Linked Arm		N/A	

Linked Arm Data

Junction	Arm	From Junction ID	From Arm ID	Link Type	Flow Source	Uniform Flow (PCU/hr)	Flow Multiplier (%)	Internal Storage Space (PCU)
1	1	2	5	Queue limited	Normal	0.00	100.00	36.00
2	5	1	1	Queue limited	Normal	0.00	100.00	40.00

Pedestrian Flows

General Flows Data

Junction	Arm	Profile Type	Average Pedestrian Flow (Ped/hr)
1	1	-	-
1	2	-	-
1	3	ONE HOUR	500.00
2	1	ONE HOUR	500.00
2	2	-	-
2	3	-	-
2	4	-	-
2	5	ONE HOUR	500.00

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	8.000	361.857
	2	124.949	0.000	86.318
	3	557.506	168.258	0.000

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

		To		
		1	2	3
From	1	0.00	0.02	0.98
	2	0.59	0.00	0.41
	3	0.77	0.23	0.00

Turning Counts / Proportions (PCU/hr) - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.000	159.310	130.060	63.642	52.929
	2	151.281	0.438	27.504	15.990	151.508
	3	226.041	64.537	6.171	2.945	101.475
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	0.000	432.432	245.871	0.400	3.752

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Turning Proportions (PCU) - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.00	0.39	0.32	0.16	0.13
	2	0.44	0.00	0.08	0.05	0.44
	3	0.56	0.16	0.02	0.01	0.25
	4	0.20	0.20	0.20	0.20	0.20
	5	0.00	0.63	0.36	0.00	0.01

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	1.000	1.000	1.000	1.000	1.000

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Heavy Vehicle Percentages - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	0.0	0.0	0.0	0.0	0.0

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1	0.17	2.14	0.20	A
1	2	0.17	3.25	0.21	A
1	3	0.68	9.35	2.04	A
2	1	0.38	4.94	0.61	A
2	2	0.32	4.36	0.46	A
2	3	0.30	3.52	0.43	A
2	4	Exit-only	Exit-only	Exit-only	Exit-only
2	5	0.54	5.67	1.17	A

Main Results for each time segment

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	232.27	231.76	125.77	0.00	2063.33	0.113	0.13	1.965	A
1	2	159.05	158.54	226.75	0.00	1400.52	0.114	0.13	2.896	A
1	3	546.39	542.49	93.77	376.43	1097.86	0.498	0.98	6.438	A
2	1	305.61	304.42	561.72	376.43	1328.04	0.230	0.30	3.514	A
2	2	261.03	260.03	375.82	0.00	1298.53	0.201	0.25	3.463	A
2	3	302.02	301.06	329.91	0.00	1549.25	0.195	0.24	2.883	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	510.48	508.33	336.48	376.43	1451.34	0.352	0.54	3.810	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	278.11	277.99	150.96	0.00	2046.97	0.136	0.16	2.034	A
1	2	189.93	189.80	271.98	0.00	1374.55	0.138	0.16	3.038	A
1	3	652.45	651.16	112.25	449.49	1146.17	0.569	1.30	7.253	A
2	1	364.93	364.50	675.54	449.49	1261.14	0.289	0.40	4.013	A
2	2	311.69	311.39	451.07	0.00	1260.14	0.247	0.33	3.794	A
2	3	360.64	360.36	395.08	0.00	1513.31	0.238	0.31	3.122	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	612.45	611.63	402.82	449.49	1428.31	0.429	0.74	4.403	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	340.47	340.29	184.56	0.00	2025.16	0.168	0.20	2.136	A
1	2	232.61	232.41	332.93	0.00	1339.54	0.174	0.21	3.251	A
1	3	799.08	796.10	137.45	550.51	1178.14	0.678	2.04	9.348	A
2	1	446.95	446.13	825.53	550.51	1174.02	0.381	0.61	4.941	A
2	2	381.75	381.22	551.61	0.00	1208.85	0.316	0.46	4.347	A
2	3	441.70	441.22	483.64	0.00	1464.47	0.302	0.43	3.516	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	748.99	747.28	493.19	550.51	1380.62	0.543	1.17	5.669	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	340.94	340.94	185.28	0.00	2024.70	0.168	0.20	2.137	A
1	2	232.61	232.61	333.57	0.00	1339.18	0.174	0.21	3.252	A
1	3	799.08	799.17	137.57	550.51	1199.16	0.666	2.02	9.007	A
2	1	446.95	446.96	829.87	550.51	1186.55	0.377	0.61	4.867	A
2	2	381.75	381.74	553.68	0.00	1207.80	0.316	0.46	4.357	A
2	3	441.70	441.69	484.38	0.00	1464.06	0.302	0.43	3.520	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	751.46	751.53	493.76	550.51	1409.37	0.533	1.15	5.475	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	278.86	279.03	152.04	0.00	2046.28	0.136	0.16	2.036	A
1	2	189.93	190.12	273.00	0.00	1373.96	0.138	0.16	3.040	A
1	3	652.45	655.79	112.44	449.49	1209.77	0.539	1.19	6.536	A
2	1	364.93	365.75	681.93	449.49	1279.20	0.285	0.40	3.945	A
2	2	311.69	312.21	454.14	0.00	1258.58	0.248	0.33	3.808	A
2	3	360.64	361.11	396.24	0.00	1512.68	0.238	0.31	3.129	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	616.19	617.89	403.73	449.49	1468.10	0.420	0.73	4.242	A

Main results: (09:15-09:30)

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	233.41	233.53	126.95	0.00	2062.56	0.113	0.13	1.969	A
1	2	159.05	159.18	228.48	0.00	1399.53	0.114	0.13	2.902	A
1	3	546.39	547.60	94.14	376.43	1168.92	0.467	0.89	5.804	A
2	1	305.61	306.04	569.21	376.43	1350.54	0.226	0.29	3.449	A
2	2	261.03	261.34	379.48	0.00	1296.66	0.201	0.25	3.480	A
2	3	302.02	302.31	331.63	0.00	1548.31	0.195	0.24	2.891	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	514.79	515.60	337.98	376.43	1497.31	0.344	0.53	3.669	A

(Default Analysis Set) - 2037 Do Minimum, 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
2037 Do Minimum, PM	2037 Do Minimum	PM		Varies by Arm	17:00	18:30	90	15		

Junction Network

Junctions

Junction	Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	1	(untitled)	Roundabout	1,2,3			4.95	A
2	2	(untitled)	Roundabout	1,2,3,4,5			5.94	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Arm	Name	Description
1	**1**	1	(untitled)	
1	**2**	2	(untitled)	
1	**3**	3	(untitled)	
2	**1**	1	(untitled)	
2	**2**	2	(untitled)	
2	**3**	3	(untitled)	
2	**4**	4	(untitled)	
2	**5**	5	(untitled)	

Capacity Options

Junction	Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	**1**	0.00	99999.00
1	**2**	0.00	99999.00
1	**3**	0.00	99999.00
2	**1**	0.00	99999.00
2	**2**	0.00	99999.00
2	**3**	0.00	99999.00
2	**4**	0.00	99999.00
2	**5**	0.00	99999.00

Roundabout Geometry

Junction	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	1	7.60	7.60	0.00	23.80	54.50	52.00	
1	2	3.60	6.10	6.70	31.00	54.50	16.00	
1	3	3.50	6.40	14.00	13.10	54.50	29.00	
2	1	7.50	7.90	4.10	21.30	56.60	41.00	
2	2	3.90	7.00	10.40	11.30	56.60	49.00	
2	3	4.30	8.00	15.90	17.80	56.60	60.00	
2	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	✓
2	5	8.20	8.20	0.00	17.60	56.60	52.00	

Pedestrian Crossings

Junction	Arm	Crossing Type
1	1	None
1	2	None
1	3	Puffin
2	1	Puffin
2	2	None
2	3	None
2	4	None
2	5	Puffin

Pelican/ Puffin Crossings

Junction	Arm	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)	Space between crossing and junction entry (PCU)
1	3	3.00	2.90	1.00	6.00	6.00	7.00	11.00
2	1	3.00	2.90	1.00	6.00	6.00	7.00	8.00
2	5	3.00	2.90	1.00	6.00	6.00	7.00	8.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1	1		(calculated)	(calculated)	0.649	2144.984
1	2		(calculated)	(calculated)	0.574	1530.737
1	3		(calculated)	(calculated)	0.554	1553.516
2	1		(calculated)	(calculated)	0.670	2281.655
2	2		(calculated)	(calculated)	0.510	1490.250
2	3		(calculated)	(calculated)	0.552	1731.208
2	4		(calculated)	(calculated)	Exit-only	Exit-only
2	5		(calculated)	(calculated)	0.657	2278.358

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

Junction	Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	1	Linked Arm		N/A	
1	2	ONE HOUR	✓	162.73	100.000
1	3	ONE HOUR	✓	566.66	100.000
2	1	ONE HOUR	✓	400.20	100.000
2	2	ONE HOUR	✓	447.59	100.000
2	3	ONE HOUR	✓	823.47	100.000
2	4	Exit-only	✓	Exit-only	Exit-only
2	5	Linked Arm		N/A	

Linked Arm Data

Junction	Arm	From Junction ID	From Arm ID	Link Type	Flow Source	Uniform Flow (PCU/hr)	Flow Multiplier (%)	Internal Storage Space (PCU)
1	1	2	5	Queue limited	Normal	0.00	100.00	36.00
2	5	1	1	Queue limited	Normal	0.00	100.00	40.00

Pedestrian Flows

General Flows Data

Junction	Arm	Profile Type	Average Pedestrian Flow (Ped/hr)
1	1	-	-
1	2	-	-
1	3	ONE HOUR	500.00
2	1	ONE HOUR	500.00
2	2	-	-
2	3	-	-
2	4	-	-
2	5	ONE HOUR	500.00

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	8.000	567.864
	2	91.779	0.000	70.955
	3	486.306	80.354	0.000

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

		To		
		1	2	3
From	1	0.00	0.01	0.99
	2	0.56	0.00	0.44
	3	0.86	0.14	0.00

Turning Counts / Proportions (PCU/hr) - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.000	81.414	227.642	38.014	53.127
	2	171.264	0.555	83.323	33.018	159.429
	3	593.542	19.415	24.979	1.639	183.894
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	4.618	311.832	250.745	3.346	7.668

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Turning Proportions (PCU) - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.00	0.20	0.57	0.09	0.13
	2	0.38	0.00	0.19	0.07	0.36
	3	0.72	0.02	0.03	0.00	0.22
	4	0.20	0.20	0.20	0.20	0.20
	5	0.01	0.54	0.43	0.01	0.01

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	1.000	1.000	1.000	1.000	1.000

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Heavy Vehicle Percentages - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	0.0	0.0	0.0	0.0	0.0

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1	0.21	2.19	0.27	A
1	2	0.14	3.27	0.16	A
1	3	0.56	7.40	1.27	A
2	1	0.36	4.55	0.55	A
2	2	0.43	5.48	0.75	A
2	3	0.63	6.65	1.66	A
2	4	Exit-only	Exit-only	Exit-only	Exit-only
2	5	0.53	6.25	1.09	A

Main Results for each time segment

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	302.92	302.25	60.13	0.00	2105.95	0.144	0.17	1.996	A
1	2	122.51	122.12	298.05	0.00	1359.57	0.090	0.10	2.909	A
1	3	426.61	424.04	68.87	376.43	1083.70	0.394	0.64	5.437	A
2	1	301.29	300.17	461.10	376.43	1373.21	0.219	0.28	3.352	A
2	2	336.97	335.52	452.88	0.00	1259.22	0.268	0.36	3.897	A
2	3	619.95	617.27	349.63	0.00	1538.38	0.403	0.67	3.898	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	432.78	430.85	606.99	376.43	1323.81	0.327	0.48	4.024	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	362.77	362.61	72.12	0.00	2098.16	0.173	0.21	2.074	A
1	2	146.29	146.19	357.57	0.00	1325.39	0.110	0.12	3.052	A
1	3	509.42	508.60	82.45	449.49	1103.48	0.462	0.85	6.042	A
2	1	359.77	359.39	554.35	449.49	1311.82	0.274	0.38	3.777	A
2	2	402.37	401.86	543.26	0.00	1213.11	0.332	0.49	4.434	A
2	3	740.28	739.10	418.76	0.00	1500.25	0.493	0.96	4.730	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	518.93	518.14	726.84	449.49	1276.15	0.407	0.68	4.744	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	443.85	443.60	88.23	0.00	2087.70	0.213	0.27	2.189	A
1	2	179.17	179.02	437.44	0.00	1279.52	0.140	0.16	3.270	A
1	3	623.90	622.22	100.96	550.51	1106.98	0.564	1.27	7.397	A
2	1	440.63	439.92	677.58	550.51	1231.13	0.358	0.55	4.546	A
2	2	492.81	491.81	664.54	0.00	1151.24	0.428	0.74	5.451	A
2	3	906.66	903.95	512.51	0.00	1448.55	0.626	1.64	6.577	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	634.95	633.30	889.08	550.51	1207.98	0.526	1.09	6.247	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	444.92	444.92	88.49	0.00	2087.53	0.213	0.27	2.191	A
1	2	179.17	179.17	438.74	0.00	1278.78	0.140	0.16	3.273	A
1	3	623.90	624.03	101.05	550.51	1134.51	0.550	1.24	7.054	A
2	1	440.63	440.63	681.07	550.51	1242.15	0.355	0.55	4.491	A
2	2	492.81	492.79	666.72	0.00	1150.13	0.428	0.75	5.476	A
2	3	906.66	906.59	513.53	0.00	1447.99	0.626	1.66	6.646	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	636.59	636.67	891.50	550.51	1234.86	0.516	1.07	6.018	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	364.38	364.62	72.48	0.00	2097.93	0.174	0.21	2.078	A
1	2	146.29	146.45	359.55	0.00	1324.25	0.110	0.12	3.056	A
1	3	509.42	511.10	82.59	449.49	1141.59	0.446	0.81	5.724	A
2	1	359.77	360.48	559.24	449.49	1328.05	0.271	0.37	3.725	A
2	2	402.37	403.35	546.39	0.00	1211.52	0.332	0.50	4.461	A
2	3	740.28	742.97	420.32	0.00	1499.39	0.494	0.99	4.777	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	521.22	522.86	730.41	449.49	1313.72	0.397	0.66	4.561	A

Main results: (18:15-18:30)

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	304.77	304.94	60.61	0.00	2105.63	0.145	0.17	2.000	A
1	2	122.51	122.61	300.70	0.00	1358.05	0.090	0.10	2.915	A
1	3	426.61	427.44	69.15	376.43	1134.35	0.376	0.61	5.098	A
2	1	301.29	301.68	467.16	376.43	1394.60	0.216	0.28	3.294	A
2	2	336.97	337.50	456.86	0.00	1257.19	0.268	0.37	3.917	A
2	3	619.95	621.17	351.69	0.00	1537.24	0.403	0.68	3.936	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	435.98	436.74	610.77	376.43	1364.64	0.319	0.47	3.884	A

(Default Analysis Set) - 2037 Do Something, 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
2037 Do Something, AM	2037 Do Something	AM		Varies by Arm	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	1	(untitled)	Roundabout	1,2,3			6.37	A
2	2	(untitled)	Roundabout	1,2,3,4,5			4.64	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Arm	Name	Description
1	1	1	(untitled)	
1	2	2	(untitled)	
1	3	3	(untitled)	
2	1	1	(untitled)	
2	2	2	(untitled)	
2	3	3	(untitled)	
2	4	4	(untitled)	
2	5	5	(untitled)	

Capacity Options

Junction	Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	1	0.00	99999.00
1	2	0.00	99999.00
1	3	0.00	99999.00
2	1	0.00	99999.00
2	2	0.00	99999.00
2	3	0.00	99999.00
2	4	0.00	99999.00
2	5	0.00	99999.00

Roundabout Geometry

Junction	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	1	7.60	7.60	0.00	23.80	54.50	52.00	
1	2	3.60	6.10	6.70	31.00	54.50	16.00	
1	3	3.50	6.40	14.00	13.10	54.50	29.00	
2	1	7.50	7.90	4.10	21.30	56.60	41.00	
2	2	3.90	7.00	10.40	11.30	56.60	49.00	
2	3	4.30	8.00	15.90	17.80	56.60	60.00	
2	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	✓
2	5	8.20	8.20	0.00	17.60	56.60	52.00	

Pedestrian Crossings

Junction	Arm	Crossing Type
1	1	None
1	2	None
1	3	Puffin
2	1	Puffin
2	2	None
2	3	None
2	4	None
2	5	Puffin

Pelican/ Puffin Crossings

Junction	Arm	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)	Space between crossing and junction entry (PCU)
1	3	3.00	2.90	1.00	6.00	6.00	7.00	11.00
2	1	3.00	2.90	1.00	6.00	6.00	7.00	8.00
2	5	3.00	2.90	1.00	6.00	6.00	7.00	8.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1	1		(calculated)	(calculated)	0.649	2144.984
1	2		(calculated)	(calculated)	0.574	1530.737
1	3		(calculated)	(calculated)	0.554	1553.516
2	1		(calculated)	(calculated)	0.670	2281.655
2	2		(calculated)	(calculated)	0.510	1490.250
2	3		(calculated)	(calculated)	0.552	1731.208
2	4		(calculated)	(calculated)	Exit-only	Exit-only
2	5		(calculated)	(calculated)	0.657	2278.358

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

Junction	Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	1	Linked Arm		N/A	
1	2	ONE HOUR	✓	198.30	100.000
1	3	ONE HOUR	✓	686.59	100.000
2	1	ONE HOUR	✓	392.24	100.000
2	2	ONE HOUR	✓	350.31	100.000
2	3	ONE HOUR	✓	319.14	100.000
2	4	Exit-only	✓	Exit-only	Exit-only
2	5	Linked Arm		N/A	

Linked Arm Data

Junction	Arm	From Junction ID	From Arm ID	Link Type	Flow Source	Uniform Flow (PCU/hr)	Flow Multiplier (%)	Internal Storage Space (PCU)
1	1	2	5	Queue limited	Normal	0.00	100.00	36.00
2	5	1	1	Queue limited	Normal	0.00	100.00	40.00

Pedestrian Flows

General Flows Data

Junction	Arm	Profile Type	Average Pedestrian Flow (Ped/hr)
1	1	-	-
1	2	-	-
1	3	ONE HOUR	500.00
2	1	ONE HOUR	500.00
2	2	-	-
2	3	-	-
2	4	-	-
2	5	ONE HOUR	500.00

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	16.000	313.175
	2	142.503	0.000	55.801
	3	531.677	154.913	0.000

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

		To		
		1	2	3
From	1	0.00	0.05	0.95
	2	0.72	0.00	0.28
	3	0.77	0.23	0.00

Turning Counts / Proportions (PCU/hr) - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.000	151.527	124.764	63.244	52.707
	2	149.850	0.435	31.935	52.002	116.087
	3	150.648	64.533	5.334	1.631	96.998
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	0.000	437.894	231.010	1.635	3.641

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Turning Proportions (PCU) - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.00	0.39	0.32	0.16	0.13
	2	0.43	0.00	0.09	0.15	0.33
	3	0.47	0.20	0.02	0.01	0.30
	4	0.20	0.20	0.20	0.20	0.20
	5	0.00	0.65	0.34	0.00	0.01

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	1.000	1.000	1.000	1.000	1.000

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Heavy Vehicle Percentages - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	0.0	0.0	0.0	0.0	0.0

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1	0.15	2.07	0.17	A
1	2	0.16	3.13	0.19	A
1	3	0.66	8.99	1.86	A
2	1	0.37	4.84	0.58	A
2	2	0.32	4.32	0.46	A
2	3	0.24	3.23	0.31	A
2	4	Exit-only	Exit-only	Exit-only	Exit-only
2	5	0.53	5.36	1.09	A

Main Results for each time segment

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	202.11	201.67	115.82	0.00	2069.79	0.098	0.11	1.927	A
1	2	149.29	148.83	191.87	0.00	1420.55	0.105	0.12	2.831	A
1	3	516.90	513.32	106.95	376.43	1086.91	0.476	0.89	6.238	A
2	1	295.30	294.16	555.15	376.43	1330.17	0.222	0.28	3.472	A
2	2	263.73	262.72	360.60	0.00	1306.29	0.202	0.25	3.446	A
2	3	240.27	239.54	329.66	0.00	1549.39	0.155	0.18	2.747	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	504.45	502.39	278.22	376.43	1476.03	0.342	0.52	3.689	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	241.99	241.89	139.00	0.00	2054.74	0.118	0.13	1.985	A
1	2	178.27	178.16	230.13	0.00	1398.58	0.127	0.15	2.949	A
1	3	617.23	616.06	128.03	449.49	1128.39	0.547	1.19	7.008	A
2	1	352.62	352.21	667.48	449.49	1262.39	0.279	0.39	3.953	A
2	2	314.92	314.62	432.74	0.00	1269.49	0.248	0.33	3.770	A
2	3	286.90	286.70	394.78	0.00	1513.48	0.190	0.23	2.934	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	605.08	604.32	333.07	449.49	1455.42	0.416	0.71	4.226	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	296.26	296.11	169.95	0.00	2034.64	0.146	0.17	2.070	A
1	2	218.34	218.16	281.72	0.00	1368.95	0.159	0.19	3.128	A
1	3	755.95	753.26	156.77	550.51	1150.99	0.657	1.86	8.988	A
2	1	431.87	431.10	815.86	550.51	1174.30	0.368	0.58	4.839	A
2	2	385.70	385.17	529.27	0.00	1220.25	0.316	0.46	4.308	A
2	3	351.38	351.06	483.28	0.00	1464.67	0.240	0.31	3.232	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	740.08	738.52	407.81	550.51	1408.41	0.525	1.09	5.362	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	296.65	296.65	170.65	0.00	2034.19	0.146	0.17	2.071	A
1	2	218.34	218.34	282.23	0.00	1368.66	0.160	0.19	3.128	A
1	3	755.95	756.33	156.90	550.51	1192.14	0.634	1.77	8.273	A
2	1	431.87	431.87	820.04	550.51	1186.00	0.364	0.57	4.775	A
2	2	385.70	385.69	531.19	0.00	1219.27	0.316	0.46	4.318	A
2	3	351.38	351.38	484.01	0.00	1464.27	0.240	0.31	3.234	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	742.58	742.64	408.25	550.51	1434.86	0.518	1.08	5.200	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	242.61	242.75	139.86	0.00	2054.18	0.118	0.13	1.988	A
1	2	178.27	178.44	230.95	0.00	1398.11	0.128	0.15	2.951	A
1	3	617.23	619.86	128.23	449.49	1181.92	0.522	1.11	6.433	A
2	1	352.62	353.39	673.05	449.49	1279.59	0.276	0.38	3.891	A
2	2	314.92	315.44	435.39	0.00	1268.14	0.248	0.33	3.779	A
2	3	286.90	287.22	395.92	0.00	1512.85	0.190	0.23	2.937	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	608.23	609.78	333.78	449.49	1492.09	0.408	0.69	4.088	A

Main results: (09:15-09:30)

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	203.07	203.17	116.89	0.00	2069.10	0.098	0.11	1.929	A
1	2	149.29	149.41	193.30	0.00	1419.73	0.105	0.12	2.835	A
1	3	516.90	518.05	107.37	376.43	1153.84	0.448	0.82	5.674	A
2	1	295.30	295.71	562.26	376.43	1351.65	0.218	0.28	3.409	A
2	2	263.73	264.04	363.99	0.00	1304.57	0.202	0.25	3.462	A
2	3	240.27	240.47	331.37	0.00	1548.45	0.155	0.18	2.752	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	508.53	509.28	279.43	376.43	1519.92	0.335	0.51	3.563	A

(Default Analysis Set) - 2037 Do Something, 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
2037 Do Something, PM	2037 Do Something	PM		Varies by Arm	17:00	18:30	90	15		

Junction Network

Junctions

Junction	Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	1	(untitled)	Roundabout	1,2,3			4.28	A
2	2	(untitled)	Roundabout	1,2,3,4,5			4.76	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Arm	Name	Description
1	**1**	1	(untitled)	
1	**2**	2	(untitled)	
1	**3**	3	(untitled)	
2	**1**	1	(untitled)	
2	**2**	2	(untitled)	
2	**3**	3	(untitled)	
2	**4**	4	(untitled)	
2	**5**	5	(untitled)	

Capacity Options

Junction	Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	**1**	0.00	99999.00
1	**2**	0.00	99999.00
1	**3**	0.00	99999.00
2	**1**	0.00	99999.00
2	**2**	0.00	99999.00
2	**3**	0.00	99999.00
2	**4**	0.00	99999.00
2	**5**	0.00	99999.00

Roundabout Geometry

Junction	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	1	7.60	7.60	0.00	23.80	54.50	52.00	
1	2	3.60	6.10	6.70	31.00	54.50	16.00	
1	3	3.50	6.40	14.00	13.10	54.50	29.00	
2	1	7.50	7.90	4.10	21.30	56.60	41.00	
2	2	3.90	7.00	10.40	11.30	56.60	49.00	
2	3	4.30	8.00	15.90	17.80	56.60	60.00	
2	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	✓
2	5	8.20	8.20	0.00	17.60	56.60	52.00	

Pedestrian Crossings

Junction	Arm	Crossing Type
1	1	None
1	2	None
1	3	Puffin
2	1	Puffin
2	2	None
2	3	None
2	4	None
2	5	Puffin

Pelican/ Puffin Crossings

Junction	Arm	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)	Space between crossing and junction entry (PCU)
1	3	3.00	2.90	1.00	6.00	6.00	7.00	11.00
2	1	3.00	2.90	1.00	6.00	6.00	7.00	8.00
2	5	3.00	2.90	1.00	6.00	6.00	7.00	8.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1	1		(calculated)	(calculated)	0.649	2144.984
1	2		(calculated)	(calculated)	0.574	1530.737
1	3		(calculated)	(calculated)	0.554	1553.516
2	1		(calculated)	(calculated)	0.670	2281.655
2	2		(calculated)	(calculated)	0.510	1490.250
2	3		(calculated)	(calculated)	0.552	1731.208
2	4		(calculated)	(calculated)	Exit-only	Exit-only
2	5		(calculated)	(calculated)	0.657	2278.358

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

Junction	Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	1	Linked Arm		N/A	
1	2	ONE HOUR	✓	180.45	100.000
1	3	ONE HOUR	✓	448.12	100.000
2	1	ONE HOUR	✓	389.29	100.000
2	2	ONE HOUR	✓	454.65	100.000
2	3	ONE HOUR	✓	627.89	100.000
2	4	Exit-only	✓	Exit-only	Exit-only
2	5	Linked Arm		N/A	

Linked Arm Data

Junction	Arm	From Junction ID	From Arm ID	Link Type	Flow Source	Uniform Flow (PCU/hr)	Flow Multiplier (%)	Internal Storage Space (PCU)
1	1	2	5	Queue limited	Normal	0.00	100.00	36.00
2	5	1	1	Queue limited	Normal	0.00	100.00	40.00

Pedestrian Flows

General Flows Data

Junction	Arm	Profile Type	Average Pedestrian Flow (Ped/hr)
1	1	-	-
1	2	-	-
1	3	ONE HOUR	500.00
2	1	ONE HOUR	500.00
2	2	-	-
2	3	-	-
2	4	-	-
2	5	ONE HOUR	500.00

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	8.000	577.145
	2	138.268	0.000	42.185
	3	334.781	113.340	0.000

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

		To		
		1	2	3
From	1	0.00	0.01	0.99
	2	0.77	0.00	0.23
	3	0.75	0.25	0.00

Turning Counts / Proportions (PCU/hr) - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.000	80.288	217.365	39.109	52.525
	2	170.796	0.552	87.277	30.376	165.645
	3	397.308	30.564	19.228	1.641	179.147
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	10.524	303.306	147.139	3.325	8.754

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Turning Proportions (PCU) - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.00	0.21	0.56	0.10	0.13
	2	0.38	0.00	0.19	0.07	0.36
	3	0.63	0.05	0.03	0.00	0.29
	4	0.20	0.20	0.20	0.20	0.20
	5	0.02	0.64	0.31	0.01	0.02

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	1.000	1.000	1.000	1.000	1.000

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Heavy Vehicle Percentages - Junction 2 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	0.0	0.0	0.0	0.0	0.0

Arm 4 is exit only and so the above grid should be ignored for this Arm.

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1	0.22	2.23	0.28	A
1	2	0.16	3.34	0.18	A
1	3	0.47	6.52	0.89	A
2	1	0.34	4.25	0.50	A
2	2	0.41	5.03	0.70	A
2	3	0.48	4.77	0.91	A
2	4	Exit-only	Exit-only	Exit-only	Exit-only
2	5	0.42	4.90	0.70	A

Main Results for each time segment

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	304.49	303.81	84.86	0.00	2089.89	0.146	0.17	2.016	A
1	2	135.85	135.41	299.66	0.00	1358.65	0.100	0.11	2.943	A
1	3	337.37	335.51	103.76	376.43	1058.05	0.319	0.46	4.969	A
2	1	293.08	292.03	382.94	376.43	1408.03	0.208	0.26	3.223	A
2	2	342.28	340.87	365.04	0.00	1304.03	0.262	0.35	3.733	A
2	3	472.71	470.94	353.19	0.00	1536.42	0.308	0.44	3.372	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	354.41	353.03	463.81	376.43	1378.50	0.257	0.34	3.506	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	364.63	364.46	101.74	0.00	2078.93	0.175	0.21	2.099	A
1	2	162.22	162.11	359.48	0.00	1324.30	0.123	0.14	3.097	A
1	3	402.85	402.27	124.21	449.49	1058.46	0.381	0.61	5.481	A
2	1	349.96	349.62	460.01	449.49	1350.57	0.259	0.35	3.596	A
2	2	408.72	408.24	437.57	0.00	1267.03	0.323	0.47	4.190	A
2	3	564.46	563.82	423.00	0.00	1497.91	0.377	0.60	3.851	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	424.74	424.25	555.34	449.49	1325.59	0.320	0.47	3.992	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	446.30	446.05	124.51	0.00	2064.15	0.216	0.28	2.224	A
1	2	198.68	198.51	439.95	0.00	1278.08	0.155	0.18	3.334	A
1	3	493.39	492.28	152.10	550.51	1043.51	0.473	0.89	6.517	A
2	1	428.61	427.99	562.72	550.51	1274.55	0.336	0.50	4.250	A
2	2	500.58	499.70	535.52	0.00	1217.06	0.411	0.69	5.012	A
2	3	691.32	690.09	517.77	0.00	1445.65	0.478	0.91	4.757	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	519.87	518.94	679.72	550.51	1252.47	0.415	0.70	4.902	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	447.08	447.08	124.80	0.00	2063.96	0.217	0.28	2.226	A
1	2	198.68	198.68	440.97	0.00	1277.50	0.156	0.18	3.336	A
1	3	493.39	493.43	152.23	550.51	1062.32	0.464	0.87	6.328	A
2	1	428.61	428.62	564.72	550.51	1284.66	0.334	0.50	4.206	A
2	2	500.58	500.56	536.70	0.00	1216.46	0.412	0.70	5.028	A
2	3	691.32	691.30	518.66	0.00	1445.16	0.478	0.91	4.775	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	520.87	520.88	680.90	550.51	1268.42	0.411	0.70	4.815	A

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

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	365.83	366.08	102.17	0.00	2078.65	0.176	0.21	2.102	A
1	2	162.22	162.40	361.07	0.00	1323.38	0.123	0.14	3.103	A
1	3	402.85	403.97	124.43	449.49	1085.44	0.371	0.60	5.290	A
2	1	349.96	350.58	463.02	449.49	1365.55	0.256	0.35	3.551	A
2	2	408.72	409.58	439.38	0.00	1266.11	0.323	0.48	4.208	A
2	3	564.46	565.67	424.39	0.00	1497.15	0.377	0.61	3.869	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	426.23	427.17	557.16	449.49	1348.82	0.316	0.46	3.909	A

Main results: (18:15-18:30)

Junction	Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1	306.14	306.31	85.48	0.00	2089.49	0.147	0.17	2.020	A
1	2	135.85	135.97	302.12	0.00	1357.23	0.100	0.11	2.947	A
1	3	337.37	337.96	104.18	376.43	1095.65	0.308	0.45	4.756	A
2	1	293.08	293.42	387.17	376.43	1428.51	0.205	0.26	3.171	A
2	2	342.28	342.77	367.62	0.00	1302.72	0.263	0.36	3.751	A
2	3	472.71	473.36	355.16	0.00	1535.33	0.308	0.45	3.393	A
2	4	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
2	5	356.66	357.16	466.24	376.43	1407.51	0.253	0.34	3.428	A

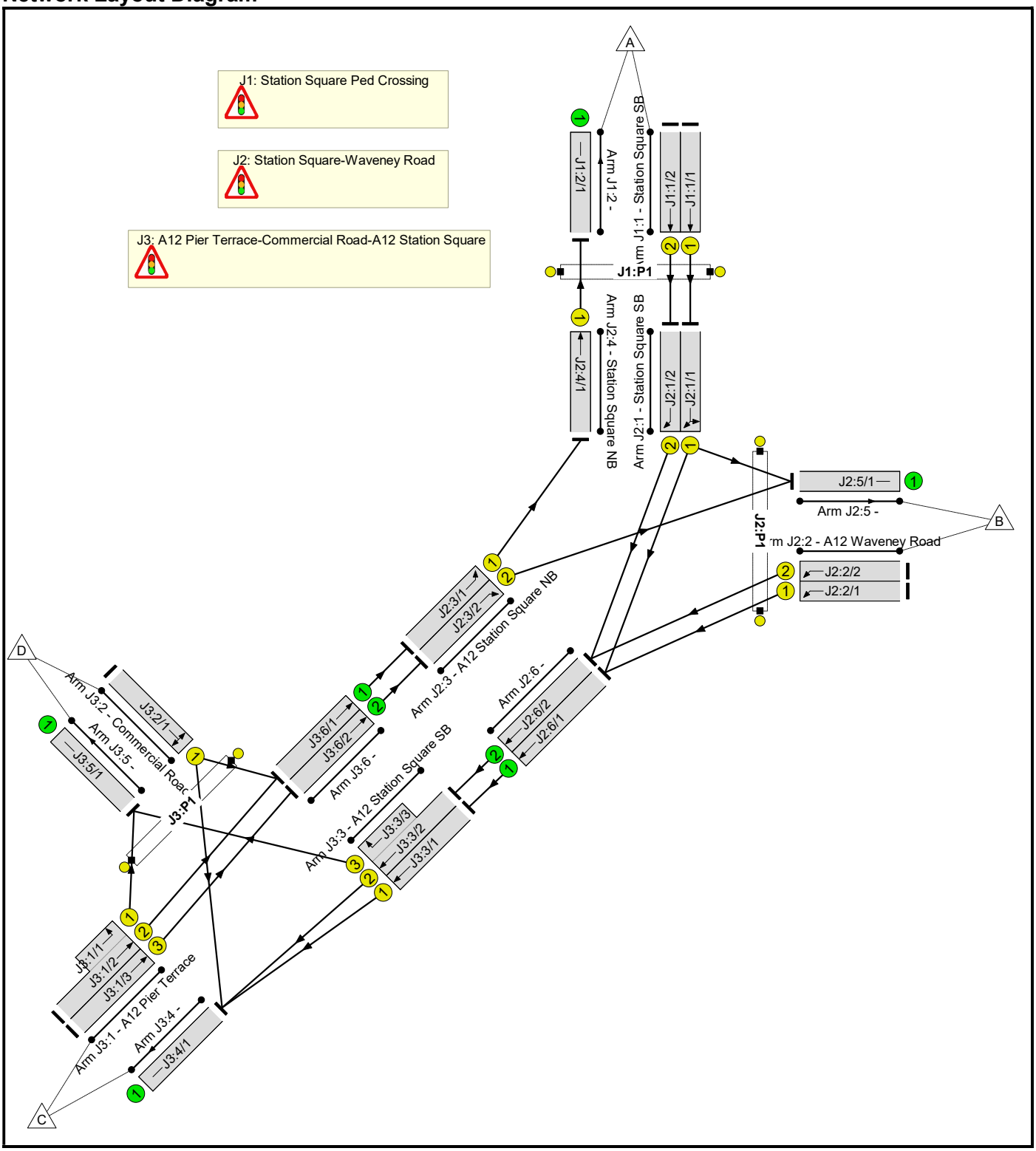
Full Input Data And Results

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	03 A12 Waveney Rd-Stn Square-Commercial Rd AM v3 - 2017-10-25.lsg3x
Author:	
Company:	
Address:	

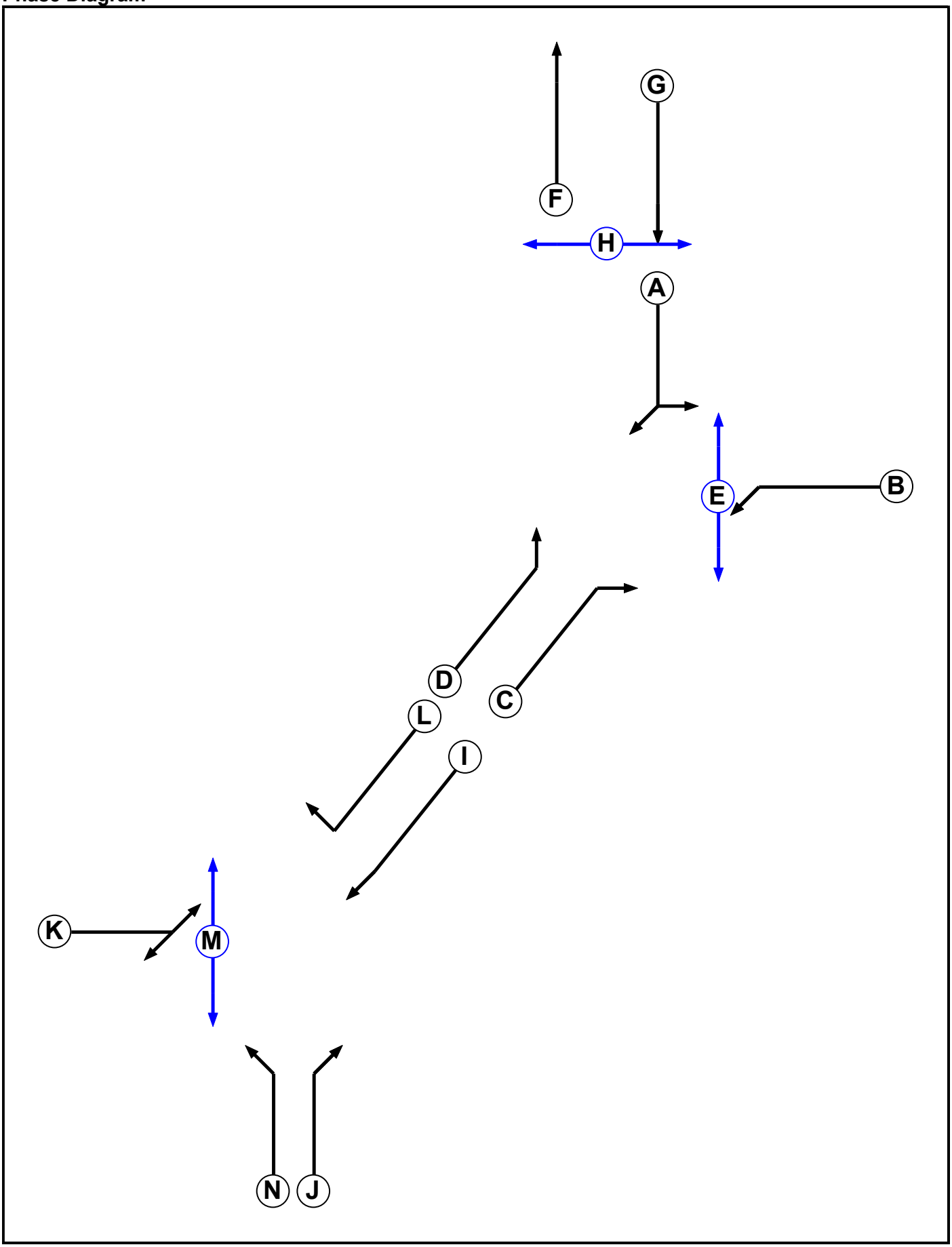
Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	1		7	7
D	Traffic	1		7	7
E	Pedestrian	1		5	5
F	Traffic	2		7	7
G	Traffic	2		7	7
H	Pedestrian	2		5	5
I	Traffic	3		7	7
J	Traffic	3		7	7
K	Traffic	3		7	7
L	Traffic	3		7	7
M	Pedestrian	3		7	7
N	Traffic	3		7	7

Full Input Data And Results

Phase Intergreens Matrix

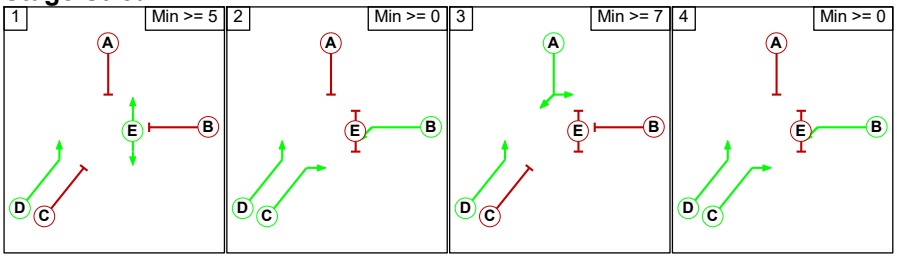
Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N
A		5	5	-	8	-	-	-	-	-	-	-	-	-
B	7		-	-	6	-	-	-	-	-	-	-	-	-
C	6	-		-	8	-	-	-	-	-	-	-	-	-
D	-	-	-		-	-	-	-	-	-	-	-	-	-
E	5	5	5	-		-	-	-	-	-	-	-	-	-
F	-	-	-	-	-		-	5	-	-	-	-	-	-
G	-	-	-	-	-	-		5	-	-	-	-	-	-
H	-	-	-	-	-	5	5		-	-	-	-	-	-
I	-	-	-	-	-	-	-	-		-	5	-	-	-
J	-	-	-	-	-	-	-	-	-		5	5	-	-
K	-	-	-	-	-	-	-	-	8	7		7	6	-
L	-	-	-	-	-	-	-	-	-	6	6		8	7
M	-	-	-	-	-	-	-	-	-	-	5	5		5
N	-	-	-	-	-	-	-	-	-	-	-	6	7	

Phases in Stage

Stream	Stage No.	Phases in Stage
1	1	D E
1	2	B C D
1	3	A D
1	4	B C D
2	1	F G
2	2	H
3	1	I L
3	2	K N
3	3	I J N
3	4	I J M
3	5	K N

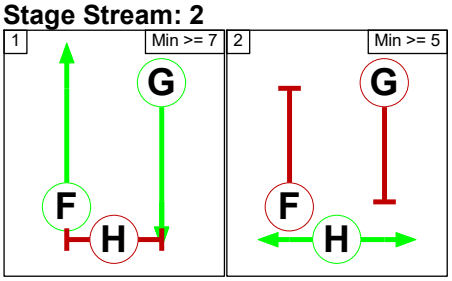
Stage Diagram

Stage Stream: 1

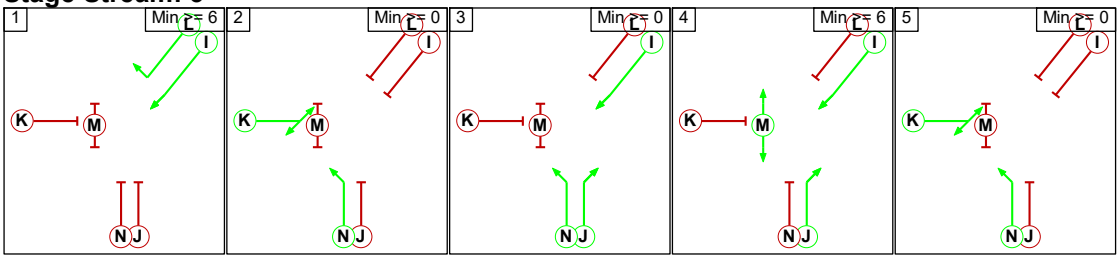


Full Input Data And Results

Stage Stream: 2



Stage Stream: 3



Phase Delays

Stage Stream: 1

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Stage Stream: 2

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Stage Stream: 3

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

Stage Stream: 1

		To Stage			
		1	2	3	4
From Stage	1		5	5	5
	2	8		7	0
	3	8	5		5
	4	8	0	7	

Stage Stream: 2

		To Stage	
		1	2
From Stage	1		5
	2	5	

Full Input Data And Results

Stage Stream: 3

		To Stage				
		1	2	3	4	5
From Stage	1		7	7	8	7
	2	8		8	8	0
	3	6	5		7	5
	4	5	5	5		5
	5	8	0	8	8	

Full Input Data And Results

Give-Way Lane Input Data

Junction: J1: Station Square Ped Crossing
There are no Opposed Lanes in this Junction

Junction: J2: Station Square-Waveney Road
There are no Opposed Lanes in this Junction

Junction: J3: A12 Pier Terrace-Commercial Road-A12 Station Square
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: J1: Station Square Ped Crossing

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)
J1:1/1 (Station Square SB)	U	G	2	3	28.3	Geom	-	3.40	0.00	Y	Arm J2:1 Ahead	Inf
J1:1/2 (Station Square SB)	U	G	2	3	18.3	Geom	-	3.40	0.00	Y	Arm J2:1 Ahead	Inf
J1:2/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Junction: J2: Station Square-Waveney Road

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)
J2:1/1 (Station Square SB)	U	A	2	3	60.0	Geom	-	3.40	0.00	Y	Arm J2:5 Left	12.00
											Arm J2:6 Right	19.30
J2:1/2 (Station Square SB)	U	A	2	3	18.3	Geom	-	3.40	0.00	Y	Arm J2:6 Right	16.80
J2:2/1 (A12 Waveney Road)	U	B	2	3	60.0	Geom	-	3.40	0.00	Y	Arm J2:6 Left	14.50
J2:2/2 (A12 Waveney Road)	U	B	2	3	60.0	Geom	-	3.40	0.00	Y	Arm J2:6 Left	17.00
J2:3/1 (A12 Station Square NB)	U	D	2	3	4.4	Geom	-	3.60	0.00	Y	Arm J2:4 Left	21.20
J2:3/2 (A12 Station Square NB)	U	C	2	3	4.4	Geom	-	3.60	0.00	Y	Arm J2:5 Right	29.90
J2:4/1 (Station Square NB)	U	F	2	3	5.4	Geom	-	4.00	0.00	Y	Arm J1:2 Ahead	Inf
J2:5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:6/2	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Junction: J3: A12 Pier Terrace-Commercial Road-A12 Station Square												
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)**
J3:1/1 (A12 Pier Terrace)	U	N	2	3	3.9	Geom	-	3.20	0.00	Y	Arm J3:5 Left	12.40
J3:1/2 (A12 Pier Terrace)	U	J	2	3	33.6	Geom	-	3.00	0.00	Y	Arm J3:6 Ahead	Inf
J3:1/3 (A12 Pier Terrace)	U	J	2	3	33.6	Geom	-	3.00	0.00	Y	Arm J3:6 Ahead	Inf
J3:2/1 (Commercial Road)	U	K	2	3	60.0	Geom	-	3.90	0.00	Y	Arm J3:4 Right	14.50
											Arm J3:6 Left	11.70
J3:3/1 (A12 Station Square SB)	U	I	2	3	6.9	Geom	-	3.00	0.00	Y	Arm J3:4 Ahead	Inf
J3:3/2 (A12 Station Square SB)	U	I	2	3	6.9	Geom	-	3.00	0.00	Y	Arm J3:4 Ahead	Inf
J3:3/3 (A12 Station Square SB)	U	L	2	3	4.7	Geom	-	3.00	0.00	Y	Arm J3:5 Right	7.90
J3:4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J3:5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J3:6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J3:6/2	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'Base 2016 AM'	08:00	09:00	01:00	
2: '2022 DM AM'	08:00	09:00	01:00	
3: '2022 DS AM'	08:00	09:00	01:00	
4: '2037 DM AM'	08:00	09:00	01:00	
5: '2037 DS AM'	08:00	09:00	01:00	

Scenario 1: 'Base 2016 AM' (FG1: 'Base 2016 AM', Plan 1: 'All Stages at All Junctions')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	2	381	38	421
	B	0	0	393	39	432
	C	660	708	0	69	1437
	D	37	0	38	0	75
	Tot.	697	710	812	146	2365

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: Base 2016 AM
Junction: J1: Station Square Ped Crossing	
J1:1/1	124
J1:1/2	297
J1:2/1	697
Junction: J2: Station Square-Waveney Road	
J2:1/1	124
J2:1/2	297
J2:2/1	389
J2:2/2	43
J2:3/1	697
J2:3/2	708
J2:4/1	697
J2:5/1	710
J2:6/1	511
J2:6/2	340
Junction: J3: A12 Pier Terrace-Commercial Road-A12 Station Square	
J3:1/1 (short)	69
J3:1/2 (with short)	729(In) 660(Out)
J3:1/3	708
J3:2/1	75
J3:3/1	511
J3:3/2 (with short)	340(In) 263(Out)
J3:3/3 (short)	77
J3:4/1	812
J3:5/1	146
J3:6/1	697
J3:6/2	708

Lane Saturation Flows

Junction: J1: Station Square Ped Crossing								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (Station Square SB)	3.40	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1955	1955
J1:1/2 (Station Square SB)	3.40	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1955	1955
J1:2/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: Station Square-Waveney Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Station Square SB)	3.40	0.00	Y	Arm J2:5 Left	12.00	1.6 %	1813	1813
				Arm J2:6 Right	19.30	98.4 %		
J2:1/2 (Station Square SB)	3.40	0.00	Y	Arm J2:6 Right	16.80	100.0 %	1795	1795
J2:2/1 (A12 Waveney Road)	3.40	0.00	Y	Arm J2:6 Left	14.50	100.0 %	1772	1772
J2:2/2 (A12 Waveney Road)	3.40	0.00	Y	Arm J2:6 Left	17.00	100.0 %	1796	1796
J2:3/1 (A12 Station Square NB)	3.60	0.00	Y	Arm J2:4 Left	21.20	100.0 %	1844	1844
J2:3/2 (A12 Station Square NB)	3.60	0.00	Y	Arm J2:5 Right	29.90	100.0 %	1881	1881
J2:4/1 (Station Square NB)	4.00	0.00	Y	Arm J1:2 Ahead	Inf	100.0 %	2015	2015
J2:5/1	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf
J2:6/2	Infinite Saturation Flow						Inf	Inf

Junction: J3: A12 Pier Terrace-Commercial Road-A12 Station Square								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J3:1/1 (A12 Pier Terrace)	3.20	0.00	Y	Arm J3:5 Left	12.40	100.0 %	1726	1726
J3:1/2 (A12 Pier Terrace)	3.00	0.00	Y	Arm J3:6 Ahead	Inf	100.0 %	1915	1915
J3:1/3 (A12 Pier Terrace)	3.00	0.00	Y	Arm J3:6 Ahead	Inf	100.0 %	1915	1915
J3:2/1 (Commercial Road)	3.90	0.00	Y	Arm J3:4 Right	14.50	50.7 %	1797	1797
				Arm J3:6 Left	11.70	49.3 %		
J3:3/1 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1915	1915
J3:3/2 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1915	1915
J3:3/3 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:5 Right	7.90	100.0 %	1609	1609
J3:4/1	Infinite Saturation Flow						Inf	Inf
J3:5/1	Infinite Saturation Flow						Inf	Inf
J3:6/1	Infinite Saturation Flow						Inf	Inf
J3:6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: '2022 DM AM' (FG2: '2022 DM AM', Plan 1: 'All Stages at All Junctions')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	1	401	40	442
	B	0	0	417	43	460
	C	696	715	0	74	1485
	D	39	0	40	0	79
	Tot.	735	716	858	157	2466

Traffic Lane Flows

Lane	Scenario 2: 2022 DM AM
Junction: J1: Station Square Ped Crossing	
J1:1/1	103
J1:1/2	339
J1:2/1	735
Junction: J2: Station Square-Waveney Road	
J2:1/1	103
J2:1/2	339
J2:2/1	380
J2:2/2	80
J2:3/1	735
J2:3/2	715
J2:4/1	735
J2:5/1	716
J2:6/1	482
J2:6/2	419
Junction: J3: A12 Pier Terrace-Commercial Road-A12 Station Square	
J3:1/1 (short)	74
J3:1/2 (with short)	770(In) 696(Out)
J3:1/3	715
J3:2/1	79
J3:3/1	482
J3:3/2 (with short)	419(In) 336(Out)
J3:3/3 (short)	83
J3:4/1	858
J3:5/1	157
J3:6/1	735
J3:6/2	715

Full Input Data And Results

Lane Saturation Flows

Junction: J1: Station Square Ped Crossing								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (Station Square SB)	3.40	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1955	1955
J1:1/2 (Station Square SB)	3.40	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1955	1955
J1:2/1	Infinite Saturation Flow						Inf	Inf

Junction: J2: Station Square-Waveney Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Station Square SB)	3.40	0.00	Y	Arm J2:5 Left	12.00	1.0 %	1813	1813
				Arm J2:6 Right	19.30	99.0 %		
J2:1/2 (Station Square SB)	3.40	0.00	Y	Arm J2:6 Right	16.80	100.0 %	1795	1795
J2:2/1 (A12 Waveney Road)	3.40	0.00	Y	Arm J2:6 Left	14.50	100.0 %	1772	1772
J2:2/2 (A12 Waveney Road)	3.40	0.00	Y	Arm J2:6 Left	17.00	100.0 %	1796	1796
J2:3/1 (A12 Station Square NB)	3.60	0.00	Y	Arm J2:4 Left	21.20	100.0 %	1844	1844
J2:3/2 (A12 Station Square NB)	3.60	0.00	Y	Arm J2:5 Right	29.90	100.0 %	1881	1881
J2:4/1 (Station Square NB)	4.00	0.00	Y	Arm J1:2 Ahead	Inf	100.0 %	2015	2015
J2:5/1	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf
J2:6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J3: A12 Pier Terrace-Commercial Road-A12 Station Square								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J3:1/1 (A12 Pier Terrace)	3.20	0.00	Y	Arm J3:5 Left	12.40	100.0 %	1726	1726
J3:1/2 (A12 Pier Terrace)	3.00	0.00	Y	Arm J3:6 Ahead	Inf	100.0 %	1915	1915
J3:1/3 (A12 Pier Terrace)	3.00	0.00	Y	Arm J3:6 Ahead	Inf	100.0 %	1915	1915
J3:2/1 (Commercial Road)	3.90	0.00	Y	Arm J3:4 Right	14.50	50.6 %	1797	1797
				Arm J3:6 Left	11.70	49.4 %		
J3:3/1 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1915	1915
J3:3/2 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1915	1915
J3:3/3 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:5 Right	7.90	100.0 %	1609	1609
J3:4/1	Infinite Saturation Flow						Inf	Inf
J3:5/1	Infinite Saturation Flow						Inf	Inf
J3:6/1	Infinite Saturation Flow						Inf	Inf
J3:6/2	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2022 DS AM' (FG3: '2022 DS AM', Plan 1: 'All Stages at All Junctions')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	27	241	27	295
	B	0	0	178	17	195
	C	187	526	0	63	776
	D	31	0	41	0	72
	Tot.	218	553	460	107	1338

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2022 DS AM
Junction: J1: Station Square Ped Crossing	
J1:1/1	64
J1:1/2	231
J1:2/1	218
Junction: J2: Station Square-Waveney Road	
J2:1/1	64
J2:1/2	231
J2:2/1	166
J2:2/2	29
J2:3/1	218
J2:3/2	526
J2:4/1	218
J2:5/1	553
J2:6/1	203
J2:6/2	260
Junction: J3: A12 Pier Terrace-Commercial Road-A12 Station Square	
J3:1/1 (short)	63
J3:1/2 (with short)	250(In) 187(Out)
J3:1/3	526
J3:2/1	72
J3:3/1	203
J3:3/2 (with short)	260(In) 216(Out)
J3:3/3 (short)	44
J3:4/1	460
J3:5/1	107
J3:6/1	218
J3:6/2	526

Lane Saturation Flows

Junction: J1: Station Square Ped Crossing								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (Station Square SB)	3.40	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1955	1955
J1:1/2 (Station Square SB)	3.40	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1955	1955
J1:2/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: Station Square-Waveney Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Station Square SB)	3.40	0.00	Y	Arm J2:5 Left	12.00	42.2 %	1781	1781
				Arm J2:6 Right	19.30	57.8 %		
J2:1/2 (Station Square SB)	3.40	0.00	Y	Arm J2:6 Right	16.80	100.0 %	1795	1795
J2:2/1 (A12 Waveney Road)	3.40	0.00	Y	Arm J2:6 Left	14.50	100.0 %	1772	1772
J2:2/2 (A12 Waveney Road)	3.40	0.00	Y	Arm J2:6 Left	17.00	100.0 %	1796	1796
J2:3/1 (A12 Station Square NB)	3.60	0.00	Y	Arm J2:4 Left	21.20	100.0 %	1844	1844
J2:3/2 (A12 Station Square NB)	3.60	0.00	Y	Arm J2:5 Right	29.90	100.0 %	1881	1881
J2:4/1 (Station Square NB)	4.00	0.00	Y	Arm J1:2 Ahead	Inf	100.0 %	2015	2015
J2:5/1	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf
J2:6/2	Infinite Saturation Flow						Inf	Inf

Junction: J3: A12 Pier Terrace-Commercial Road-A12 Station Square								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J3:1/1 (A12 Pier Terrace)	3.20	0.00	Y	Arm J3:5 Left	12.40	100.0 %	1726	1726
J3:1/2 (A12 Pier Terrace)	3.00	0.00	Y	Arm J3:6 Ahead	Inf	100.0 %	1915	1915
J3:1/3 (A12 Pier Terrace)	3.00	0.00	Y	Arm J3:6 Ahead	Inf	100.0 %	1915	1915
J3:2/1 (Commercial Road)	3.90	0.00	Y	Arm J3:4 Right	14.50	56.9 %	1800	1800
				Arm J3:6 Left	11.70	43.1 %		
J3:3/1 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1915	1915
J3:3/2 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1915	1915
J3:3/3 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:5 Right	7.90	100.0 %	1609	1609
J3:4/1	Infinite Saturation Flow						Inf	Inf
J3:5/1	Infinite Saturation Flow						Inf	Inf
J3:6/1	Infinite Saturation Flow						Inf	Inf
J3:6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 4: '2037DM AM' (FG4: '2037 DM AM', Plan 1: 'All Stages at All Junctions')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	1	437	38	476
	B	0	0	461	41	502
	C	734	719	0	101	1554
	D	35	0	52	0	87
	Tot.	769	720	950	180	2619

Traffic Lane Flows

Lane	Scenario 4: 2037DM AM
Junction: J1: Station Square Ped Crossing	
J1:1/1	123
J1:1/2	353
J1:2/1	769
Junction: J2: Station Square-Waveney Road	
J2:1/1	123
J2:1/2	353
J2:2/1	403
J2:2/2	99
J2:3/1	769
J2:3/2	719
J2:4/1	769
J2:5/1	720
J2:6/1	525
J2:6/2	452
Junction: J3: A12 Pier Terrace-Commercial Road-A12 Station Square	
J3:1/1 (short)	101
J3:1/2 (with short)	835(In) 734(Out)
J3:1/3	719
J3:2/1	87
J3:3/1	525
J3:3/2 (with short)	452(In) 373(Out)
J3:3/3 (short)	79
J3:4/1	950
J3:5/1	180
J3:6/1	769
J3:6/2	719

Full Input Data And Results

Lane Saturation Flows

Junction: J1: Station Square Ped Crossing								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (Station Square SB)	3.40	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1955	1955
J1:1/2 (Station Square SB)	3.40	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1955	1955
J1:2/1	Infinite Saturation Flow						Inf	Inf

Junction: J2: Station Square-Waveney Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Station Square SB)	3.40	0.00	Y	Arm J2:5 Left	12.00	0.8 %	1813	1813
				Arm J2:6 Right	19.30	99.2 %		
J2:1/2 (Station Square SB)	3.40	0.00	Y	Arm J2:6 Right	16.80	100.0 %	1795	1795
J2:2/1 (A12 Waveney Road)	3.40	0.00	Y	Arm J2:6 Left	14.50	100.0 %	1772	1772
J2:2/2 (A12 Waveney Road)	3.40	0.00	Y	Arm J2:6 Left	17.00	100.0 %	1796	1796
J2:3/1 (A12 Station Square NB)	3.60	0.00	Y	Arm J2:4 Left	21.20	100.0 %	1844	1844
J2:3/2 (A12 Station Square NB)	3.60	0.00	Y	Arm J2:5 Right	29.90	100.0 %	1881	1881
J2:4/1 (Station Square NB)	4.00	0.00	Y	Arm J1:2 Ahead	Inf	100.0 %	2015	2015
J2:5/1	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf
J2:6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J3: A12 Pier Terrace-Commercial Road-A12 Station Square								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J3:1/1 (A12 Pier Terrace)	3.20	0.00	Y	Arm J3:5 Left	12.40	100.0 %	1726	1726
J3:1/2 (A12 Pier Terrace)	3.00	0.00	Y	Arm J3:6 Ahead	Inf	100.0 %	1915	1915
J3:1/3 (A12 Pier Terrace)	3.00	0.00	Y	Arm J3:6 Ahead	Inf	100.0 %	1915	1915
J3:2/1 (Commercial Road)	3.90	0.00	Y	Arm J3:4 Right	14.50	59.8 %	1801	1801
				Arm J3:6 Left	11.70	40.2 %		
J3:3/1 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1915	1915
J3:3/2 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1915	1915
J3:3/3 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:5 Right	7.90	100.0 %	1609	1609
J3:4/1	Infinite Saturation Flow						Inf	Inf
J3:5/1	Infinite Saturation Flow						Inf	Inf
J3:6/1	Infinite Saturation Flow						Inf	Inf
J3:6/2	Infinite Saturation Flow						Inf	Inf

Scenario 5: '2037 DS AM' (FG5: '2037 DS AM', Plan 1: 'All Stages at All Junctions')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	7	182	20	209
	B	0	0	293	40	333
	C	242	664	0	120	1026
	D	44	0	45	0	89
	Tot.	286	671	520	180	1657

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: 2037 DS AM
Junction: J1: Station Square Ped Crossing	
J1:1/1	7
J1:1/2	202
J1:2/1	286
Junction: J2: Station Square-Waveney Road	
J2:1/1	7
J2:1/2	202
J2:2/1	264
J2:2/2	69
J2:3/1	286
J2:3/2	664
J2:4/1	286
J2:5/1	671
J2:6/1	264
J2:6/2	271
Junction: J3: A12 Pier Terrace-Commercial Road-A12 Station Square	
J3:1/1 (short)	120
J3:1/2 (with short)	362(In) 242(Out)
J3:1/3	664
J3:2/1	89
J3:3/1	264
J3:3/2 (with short)	271(In) 211(Out)
J3:3/3 (short)	60
J3:4/1	520
J3:5/1	180
J3:6/1	286
J3:6/2	664

Lane Saturation Flows

Junction: J1: Station Square Ped Crossing								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (Station Square SB)	3.40	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1955	1955
J1:1/2 (Station Square SB)	3.40	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1955	1955
J1:2/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: Station Square-Waveney Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Station Square SB)	3.40	0.00	Y	Arm J2:5 Left	12.00	100.0 %	1738	1738
				Arm J2:6 Right	19.30	0.0 %		
J2:1/2 (Station Square SB)	3.40	0.00	Y	Arm J2:6 Right	16.80	100.0 %	1795	1795
J2:2/1 (A12 Waveney Road)	3.40	0.00	Y	Arm J2:6 Left	14.50	100.0 %	1772	1772
J2:2/2 (A12 Waveney Road)	3.40	0.00	Y	Arm J2:6 Left	17.00	100.0 %	1796	1796
J2:3/1 (A12 Station Square NB)	3.60	0.00	Y	Arm J2:4 Left	21.20	100.0 %	1844	1844
J2:3/2 (A12 Station Square NB)	3.60	0.00	Y	Arm J2:5 Right	29.90	100.0 %	1881	1881
J2:4/1 (Station Square NB)	4.00	0.00	Y	Arm J1:2 Ahead	Inf	100.0 %	2015	2015
J2:5/1	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf
J2:6/2	Infinite Saturation Flow						Inf	Inf

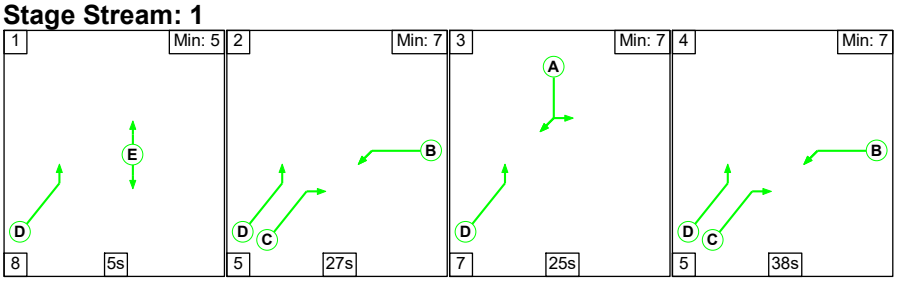
Junction: J3: A12 Pier Terrace-Commercial Road-A12 Station Square								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J3:1/1 (A12 Pier Terrace)	3.20	0.00	Y	Arm J3:5 Left	12.40	100.0 %	1726	1726
J3:1/2 (A12 Pier Terrace)	3.00	0.00	Y	Arm J3:6 Ahead	Inf	100.0 %	1915	1915
J3:1/3 (A12 Pier Terrace)	3.00	0.00	Y	Arm J3:6 Ahead	Inf	100.0 %	1915	1915
J3:2/1 (Commercial Road)	3.90	0.00	Y	Arm J3:4 Right	14.50	50.6 %	1797	1797
				Arm J3:6 Left	11.70	49.4 %		
J3:3/1 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1915	1915
J3:3/2 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1915	1915
J3:3/3 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:5 Right	7.90	100.0 %	1609	1609
J3:4/1	Infinite Saturation Flow						Inf	Inf
J3:5/1	Infinite Saturation Flow						Inf	Inf
J3:6/1	Infinite Saturation Flow						Inf	Inf
J3:6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

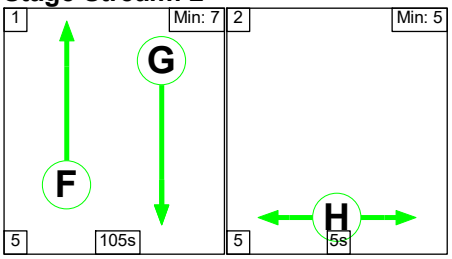
Scenario 1: 'Base 2016 AM' (FG1: 'Base 2016 AM', Plan 1: 'All Stages at All Junctions')

Stage Sequence Diagram

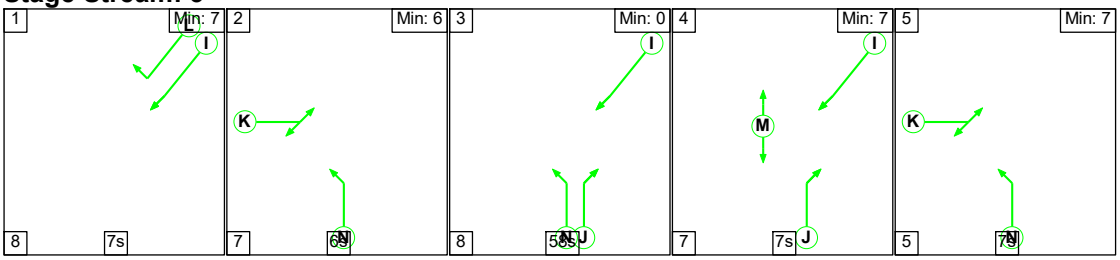
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2	3	4
Duration	5	27	25	38
Change Point	0	13	45	77

Stage Stream: 2

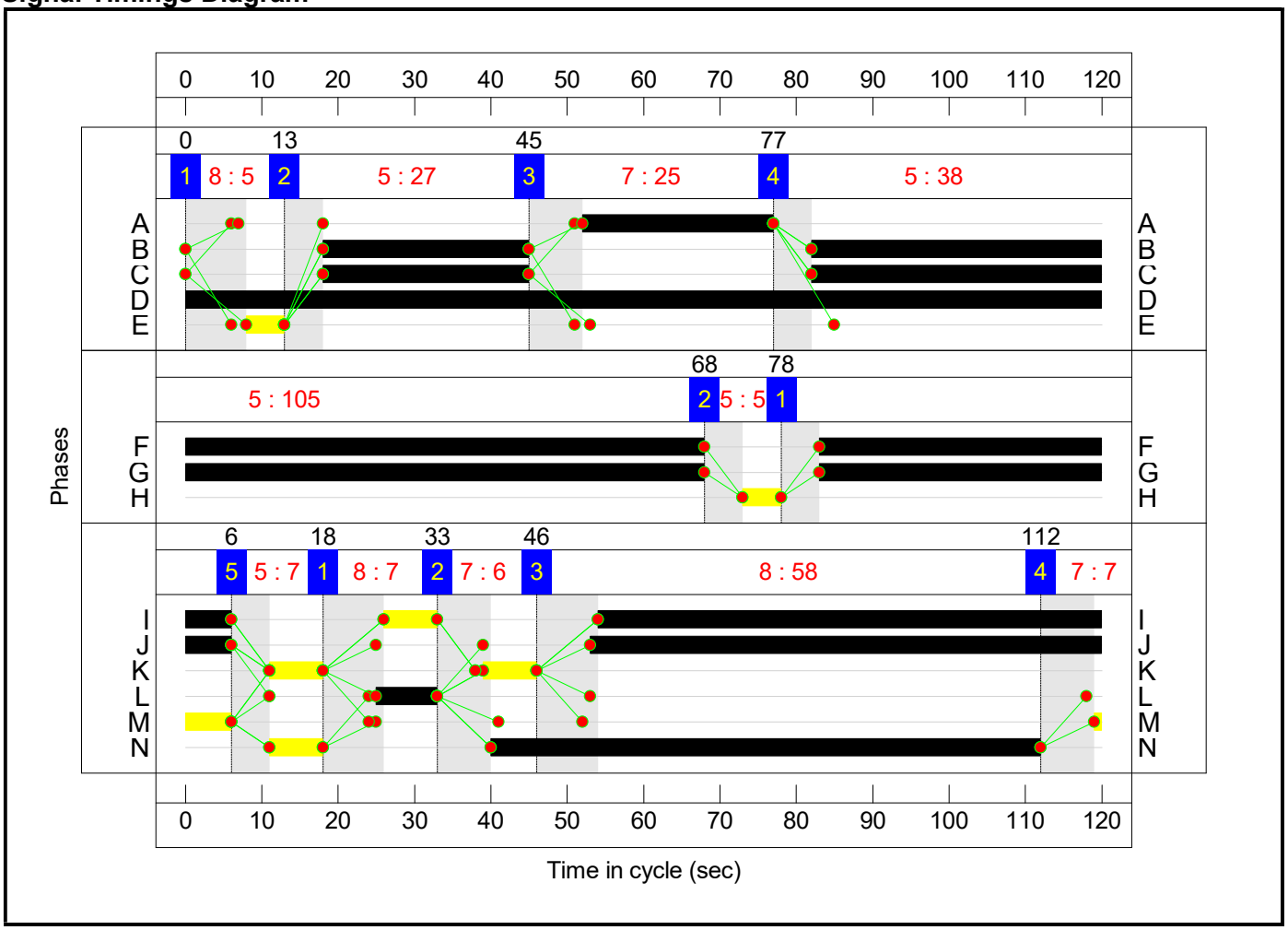
Stage	1	2
Duration	105	5
Change Point	78	68

Stage Stream: 3

Stage	1	2	3	4	5
Duration	7	6	58	7	7
Change Point	18	33	46	112	6

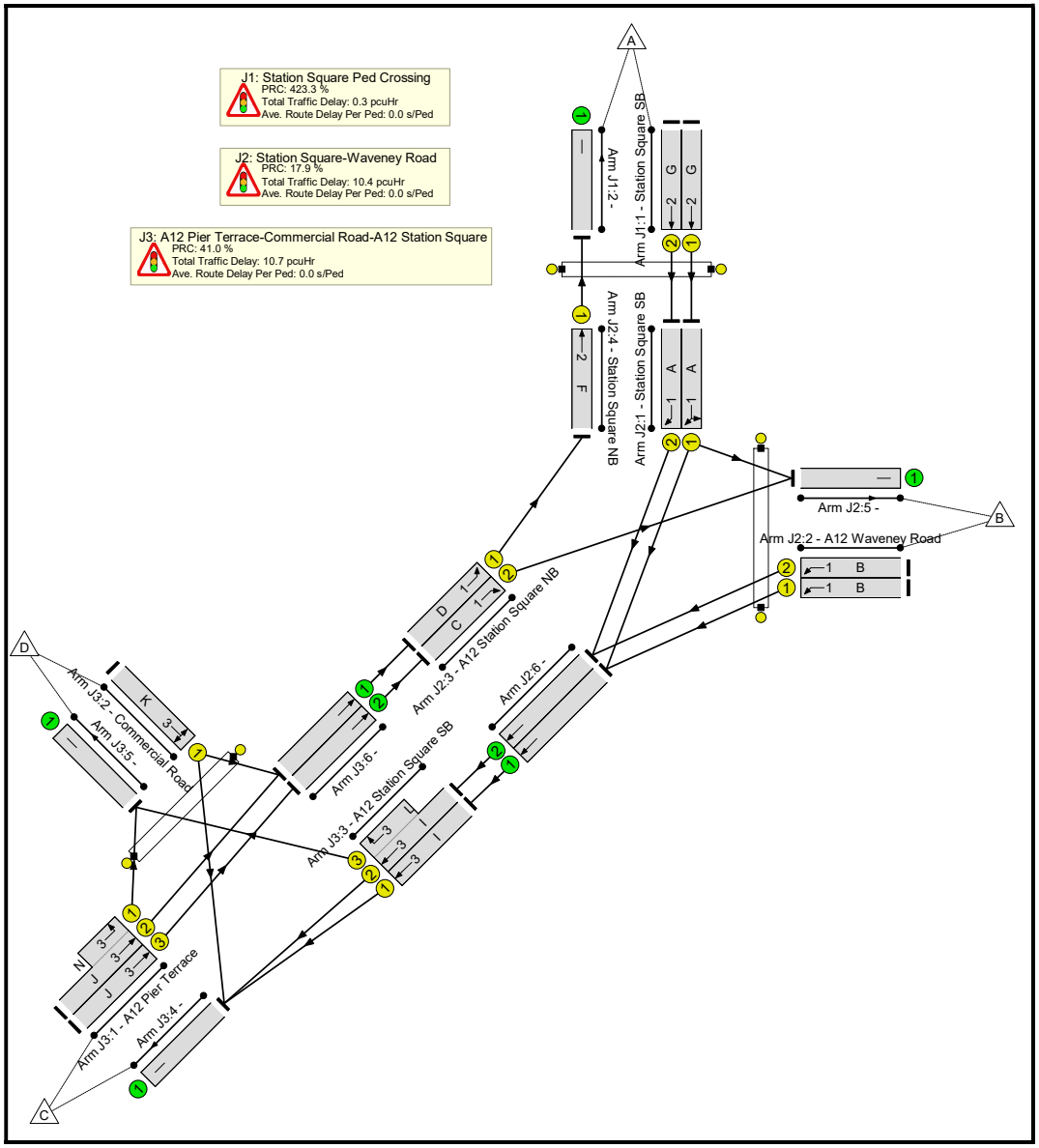
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**76.4%**
J1: Station Square Ped Crossing	-	-	**N/A**	-	-		-	-	-	-	-	-	**17.2%**
1/1	Station Square SB Ahead	U	2	N/A	G		1	105	-	124	1955	1727	7.2%
1/2	Station Square SB Ahead	U	2	N/A	G		1	105	-	297	1955	1727	17.2%
2/1		U	N/A	N/A	-		-	-	-	697	Inf	Inf	0.0%
Ped Link: P1	Station Square Ped	-	2	-	H		1	5	-	0	-	0	0.0%
J2: Station Square-Waveney Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**76.4%**
1/1	Station Square SB Left Right	U	1	N/A	A		1	25	-	124	1813	393	31.6%
1/2	Station Square SB Right	U	1	N/A	A		1	25	-	297	1795	389	76.4%
2/1	A12 Waveney Road Left	U	1	N/A	B		2	65	-	389	1772	989	39.3%
2/2	A12 Waveney Road Left	U	1	N/A	B		2	65	-	43	1796	1003	4.3%
3/1	A12 Station Square NB Left	U	1	N/A	D		1	120	-	697	1844	1844	37.8%
3/2	A12 Station Square NB Right	U	1	N/A	C		2	65	-	708	1881	1050	67.4%
4/1	Station Square NB Ahead	U	2	N/A	F		1	105	-	697	2015	1780	39.2%
5/1		U	N/A	N/A	-		-	-	-	710	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	511	Inf	Inf	0.0%
6/2	Ahead	U	N/A	N/A	-		-	-	-	340	Inf	Inf	0.0%
Ped Link: P1	A12 Waveney Road Ped	-	1	-	E		1	5	-	0	-	0	0.0%

Full Input Data And Results

J3: A12 Pier Terrace-Commercial Road-A12 Station Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**63.8%**
1/2+1/1	A12 Pier Terrace Left Ahead	U	3	N/A	J N		1:2	73:79	-	729	1915:1726	1077+113	61.3 : 61.3%
1/3	A12 Pier Terrace Ahead	U	3	N/A	J		1	73	-	708	1915	1181	60.0%
2/1	Commercial Road Right Left	U	3	N/A	K		2	14	-	75	1797	240	31.3%
3/1	A12 Station Square SB Ahead	U	3	N/A	I		2	79	-	511	1915	1293	39.5%
3/2+3/3	A12 Station Square SB Ahead Right	U	3	N/A	I L		2:1	79:8	-	340	1915:1609	412+121	63.8 : 63.8%
4/1		U	N/A	N/A	-		-	-	-	812	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	146	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	697	Inf	Inf	0.0%
6/2	Ahead	U	N/A	N/A	-		-	-	-	708	Inf	Inf	0.0%
Ped Link: P1	Commercial Road Ped	-	3	-	M		1	7	-	0	-	0	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	**-**	**-**	**0**	**0**	**0**	**14.5**	**6.9**	**0.0**	**21.4**	**-**	**-**	**-**	**-**
J1: Station Square Ped Crossing	**-**	**-**	**0**	**0**	**0**	**0.1**	**0.1**	**0.0**	**0.3**	**-**	**-**	**-**	**-**
1/1	124	124	-	-	-	0.0	0.0	-	0.1	2.0	0.5	0.0	0.5
1/2	297	297	-	-	-	0.1	0.1	-	0.2	2.2	1.3	0.1	1.4
2/1	697	697	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J2: Station Square-Waveney Road	**-**	**-**	**0**	**0**	**0**	**6.7**	**3.8**	**0.0**	**10.4**	**-**	**-**	**-**	**-**
1/1	124	124	-	-	-	1.3	0.2	-	1.6	45.3	3.4	0.2	3.7
1/2	297	297	-	-	-	3.6	1.6	-	5.1	62.1	9.2	1.6	10.8
2/1	389	389	-	-	-	0.9	0.3	-	1.2	11.5	5.0	0.3	5.3
2/2	43	43	-	-	-	0.1	0.0	-	0.1	8.7	0.4	0.0	0.5
3/1	697	697	-	-	-	0.0	0.3	-	0.3	1.6	0.0	0.3	0.3
3/2	708	708	-	-	-	0.7	1.0	-	1.8	9.0	6.9	1.0	7.9
4/1	697	697	-	-	-	0.0	0.3	-	0.3	1.8	0.3	0.3	0.7
5/1	710	710	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	511	511	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	340	340	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J3: A12 Pier Terrace-Commercial Road-A12 Station Square	**-**	**-**	**0**	**0**	**0**	**7.7**	**3.0**	**0.0**	**10.7**	**-**	**-**	**-**	**-**
1/2+1/1	729	729	-	-	-	2.7	0.8	-	3.5	17.2	14.2	0.8	15.0
1/3	708	708	-	-	-	2.8	0.7	-	3.5	17.8	14.2	0.7	14.9
2/1	75	75	-	-	-	0.7	0.2	-	0.9	43.4	1.8	0.2	2.0
3/1	511	511	-	-	-	0.6	0.3	-	0.9	6.5	4.4	0.3	4.8
3/2+3/3	340	340	-	-	-	1.0	0.9	-	1.9	20.0	2.5	0.9	3.4

Full Input Data And Results

4/1	812	812	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	146	146	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	697	697	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	708	708	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-

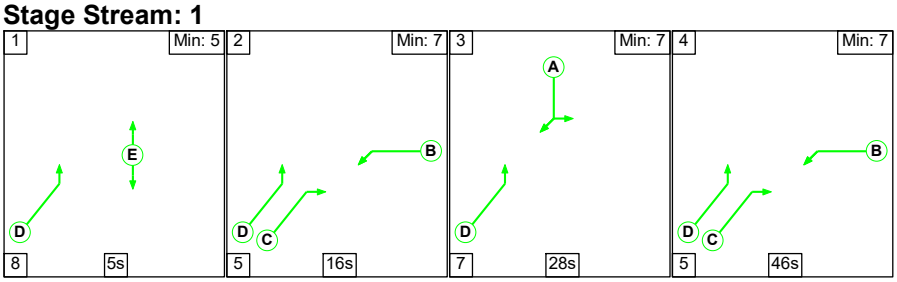
C1	Stream: 1 PRC for Signalled Lanes (%):	17.9	Total Delay for Signalled Lanes (pcuHr):	10.11	Cycle Time (s):	120
C1	Stream: 2 PRC for Signalled Lanes (%):	129.8	Total Delay for Signalled Lanes (pcuHr):	0.60	Cycle Time (s):	120
C1	Stream: 3 PRC for Signalled Lanes (%):	41.0	Total Delay for Signalled Lanes (pcuHr):	10.69	Cycle Time (s):	120
	PRC Over All Lanes (%):	17.9	Total Delay Over All Lanes(pcuHr):	21.39		

Full Input Data And Results

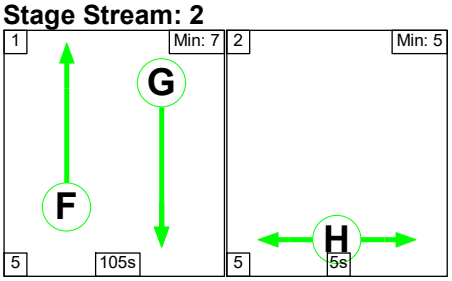
Scenario 2: '2022 DM AM' (FG2: '2022 DM AM', Plan 1: 'All Stages at All Junctions')

Stage Sequence Diagram

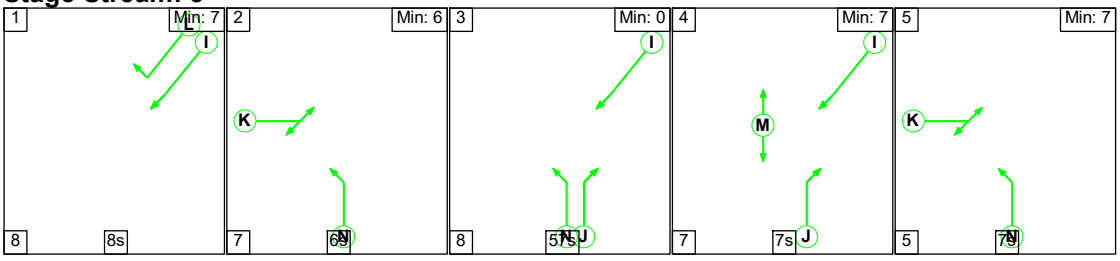
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2	3	4
Duration	5	16	28	46
Change Point	0	13	34	69

Stage Stream: 2

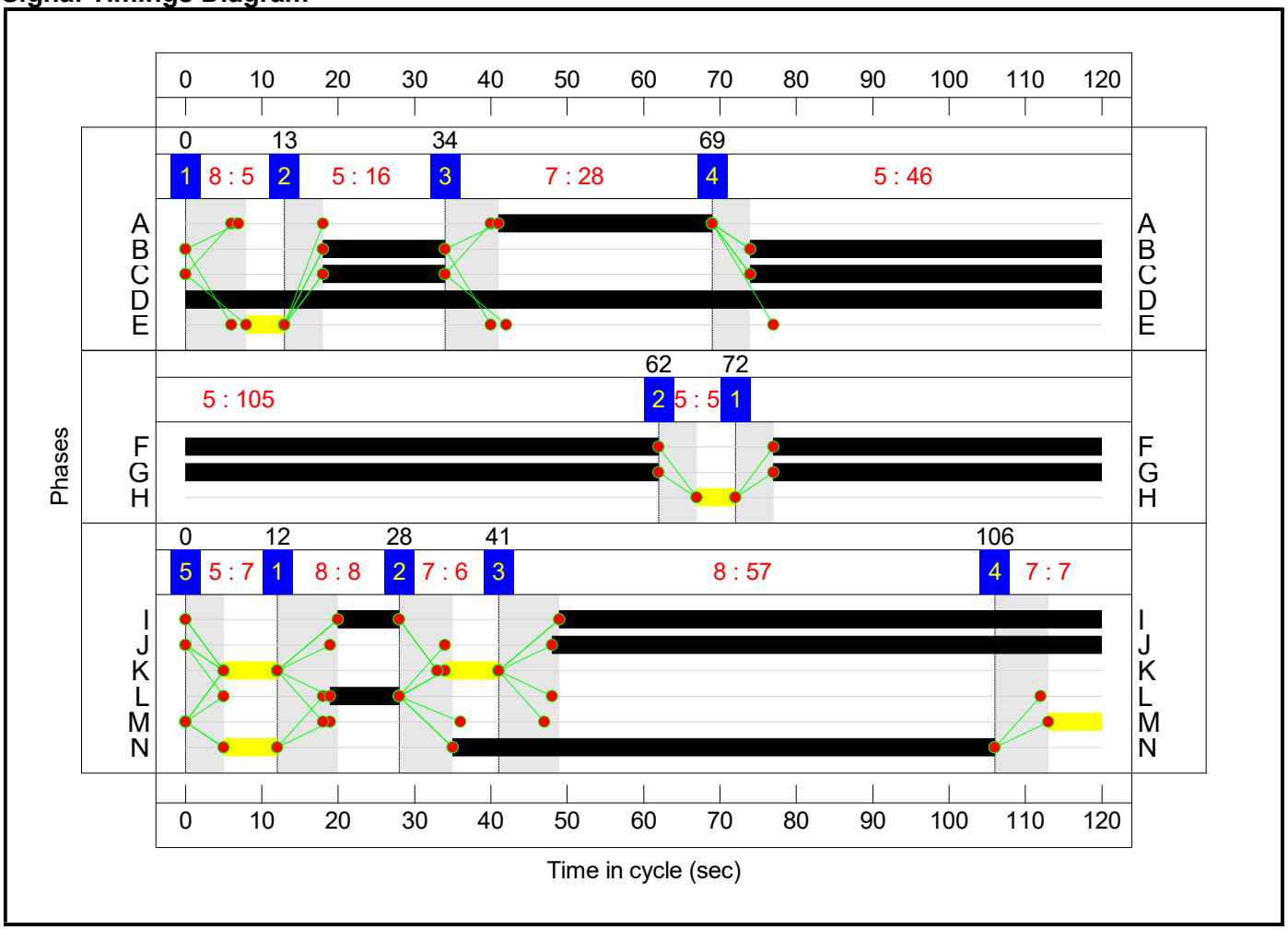
Stage	1	2
Duration	105	5
Change Point	72	62

Stage Stream: 3

Stage	1	2	3	4	5
Duration	8	6	57	7	7
Change Point	12	28	41	106	0

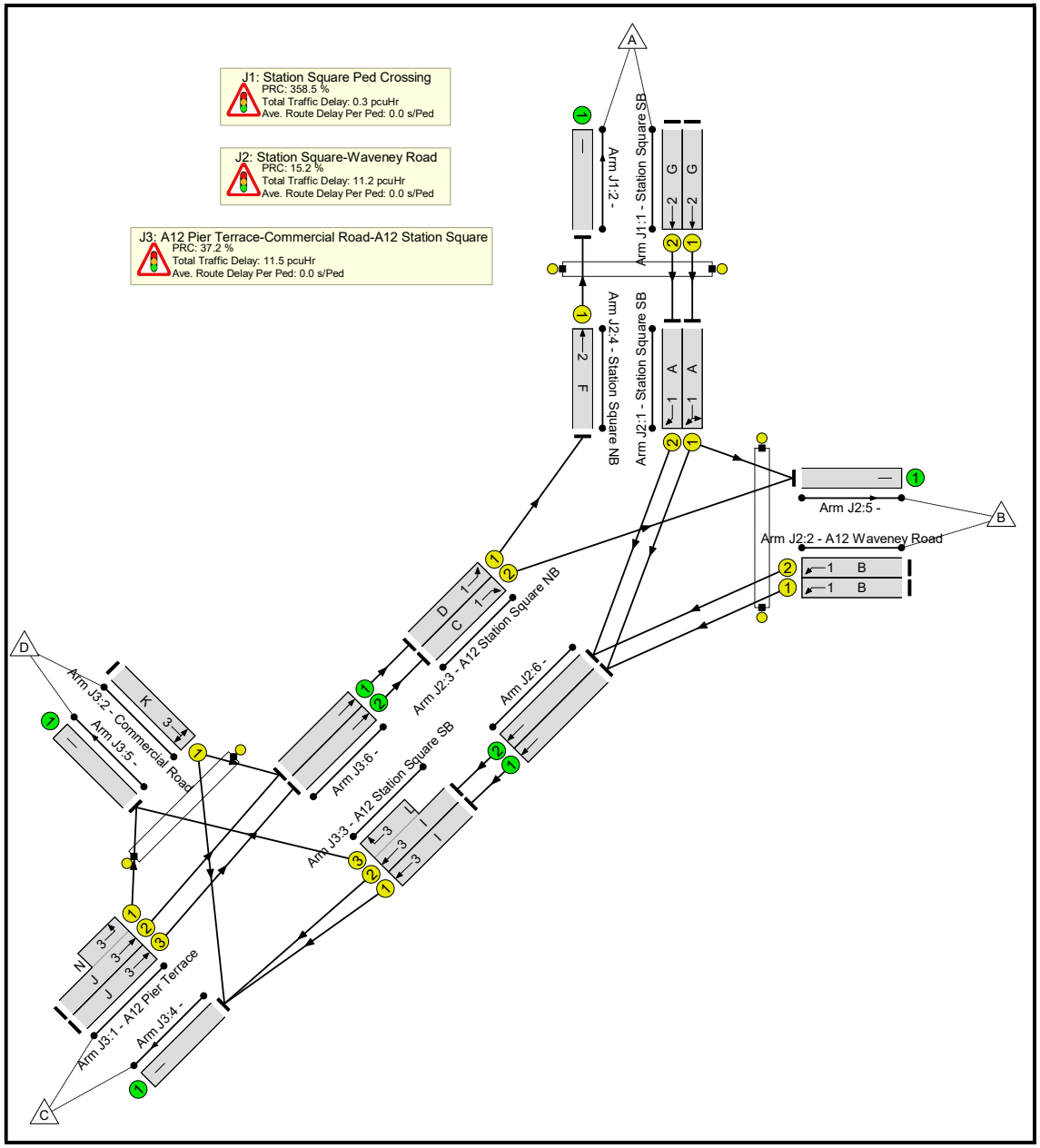
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**78.1%**
J1: Station Square Ped Crossing	-	-	**N/A**	-	-		-	-	-	-	-	-	**19.6%**
1/1	Station Square SB Ahead	U	2	N/A	G		1	105	-	103	1955	1727	6.0%
1/2	Station Square SB Ahead	U	2	N/A	G		1	105	-	339	1955	1727	19.6%
2/1		U	N/A	N/A	-		-	-	-	735	Inf	Inf	0.0%
Ped Link: P1	Station Square Ped	-	2	-	H		1	5	-	0	-	0	0.0%
J2: Station Square-Waveney Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**78.1%**
1/1	Station Square SB Left Right	U	1	N/A	A		1	28	-	103	1813	438	23.5%
1/2	Station Square SB Right	U	1	N/A	A		1	28	-	339	1795	434	78.1%
2/1	A12 Waveney Road Left	U	1	N/A	B		2	62	-	380	1772	945	40.2%
2/2	A12 Waveney Road Left	U	1	N/A	B		2	62	-	80	1796	958	8.4%
3/1	A12 Station Square NB Left	U	1	N/A	D		1	120	-	735	1844	1844	39.9%
3/2	A12 Station Square NB Right	U	1	N/A	C		2	62	-	715	1881	1003	71.3%
4/1	Station Square NB Ahead	U	2	N/A	F		1	105	-	735	2015	1780	41.3%
5/1		U	N/A	N/A	-		-	-	-	716	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	482	Inf	Inf	0.0%
6/2	Ahead	U	N/A	N/A	-		-	-	-	419	Inf	Inf	0.0%
Ped Link: P1	A12 Waveney Road Ped	-	1	-	E		1	5	-	0	-	0	0.0%

Full Input Data And Results

J3: A12 Pier Terrace-Commercial Road-A12 Station Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**65.6%**
1/2+1/1	A12 Pier Terrace Left Ahead	U	3	N/A	J N		1:2	72:78	-	770	1915:1726	1061+113	65.6 : 65.6%
1/3	A12 Pier Terrace Ahead	U	3	N/A	J		1	72	-	715	1915	1165	61.4%
2/1	Commercial Road Right Left	U	3	N/A	K		2	14	-	79	1797	240	33.0%
3/1	A12 Station Square SB Ahead	U	3	N/A	I		2	79	-	482	1915	1293	37.3%
3/2+3/3	A12 Station Square SB Ahead Right	U	3	N/A	I L		2:1	79:9	-	419	1915:1609	543+134	61.9 : 61.9%
4/1		U	N/A	N/A	-		-	-	-	858	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	157	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	735	Inf	Inf	0.0%
6/2	Ahead	U	N/A	N/A	-		-	-	-	715	Inf	Inf	0.0%
Ped Link: P1	Commercial Road Ped	-	3	-	M		1	7	-	0	-	0	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	**-**	**-**	**0**	**0**	**0**	**15.5**	**7.4**	**0.0**	**22.9**	**-**	**-**	**-**	**-**
J1: Station Square Ped Crossing	**-**	**-**	**0**	**0**	**0**	**0.1**	**0.2**	**0.0**	**0.3**	**-**	**-**	**-**	**-**
1/1	103	103	-	-	-	0.0	0.0	-	0.1	2.0	0.4	0.0	0.4
1/2	339	339	-	-	-	0.1	0.1	-	0.2	2.3	1.5	0.1	1.6
2/1	735	735	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J2: Station Square-Waveney Road	**-**	**-**	**0**	**0**	**0**	**7.0**	**4.2**	**0.0**	**11.2**	**-**	**-**	**-**	**-**
1/1	103	103	-	-	-	1.0	0.2	-	1.2	41.1	2.7	0.2	2.9
1/2	339	339	-	-	-	3.9	1.7	-	5.6	59.9	10.5	1.7	12.3
2/1	380	380	-	-	-	1.0	0.3	-	1.3	12.8	5.2	0.3	5.5
2/2	80	80	-	-	-	0.2	0.0	-	0.2	10.0	0.9	0.0	0.9
3/1	735	735	-	-	-	0.0	0.3	-	0.3	1.6	0.0	0.3	0.3
3/2	715	715	-	-	-	0.9	1.2	-	2.1	10.6	6.4	1.2	7.7
4/1	735	735	-	-	-	0.0	0.4	-	0.4	1.8	0.3	0.4	0.7
5/1	716	716	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	482	482	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	419	419	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J3: A12 Pier Terrace-Commercial Road-A12 Station Square	**-**	**-**	**0**	**0**	**0**	**8.4**	**3.1**	**0.0**	**11.5**	**-**	**-**	**-**	**-**
1/2+1/1	770	770	-	-	-	3.1	0.9	-	4.0	18.9	15.8	0.9	16.8
1/3	715	715	-	-	-	2.9	0.8	-	3.7	18.7	14.9	0.8	15.7
2/1	79	79	-	-	-	0.7	0.2	-	0.9	43.1	1.9	0.2	2.1
3/1	482	482	-	-	-	0.5	0.3	-	0.8	6.3	4.1	0.3	4.4
3/2+3/3	419	419	-	-	-	1.1	0.8	-	1.9	16.7	2.7	0.8	3.5

Full Input Data And Results

4/1	858	858	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	157	157	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	735	735	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	715	715	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-

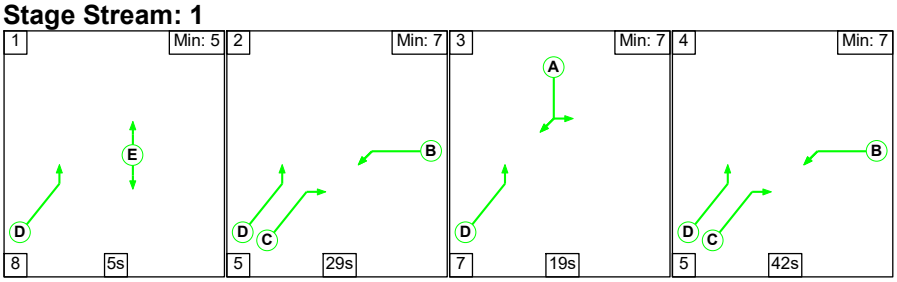
C1	Stream: 1 PRC for Signalled Lanes (%):	15.2	Total Delay for Signalled Lanes (pcuHr):	10.81	Cycle Time (s):	120
C1	Stream: 2 PRC for Signalled Lanes (%):	117.9	Total Delay for Signalled Lanes (pcuHr):	0.64	Cycle Time (s):	120
C1	Stream: 3 PRC for Signalled Lanes (%):	37.2	Total Delay for Signalled Lanes (pcuHr):	11.48	Cycle Time (s):	120
	PRC Over All Lanes (%):	15.2	Total Delay Over All Lanes(pcuHr):	22.94		

Full Input Data And Results

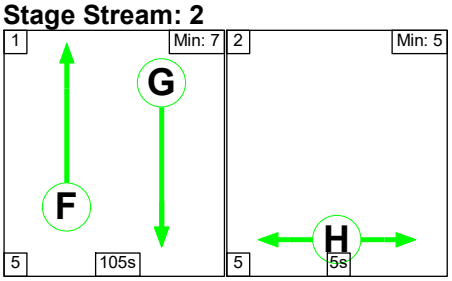
Scenario 3: '2022 DS AM' (FG3: '2022 DS AM', Plan 1: 'All Stages at All Junctions')

Stage Sequence Diagram

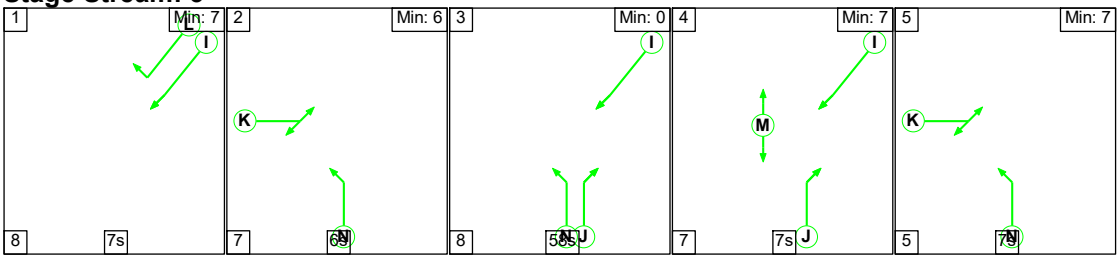
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2	3	4
Duration	5	29	19	42
Change Point	0	13	47	73

Stage Stream: 2

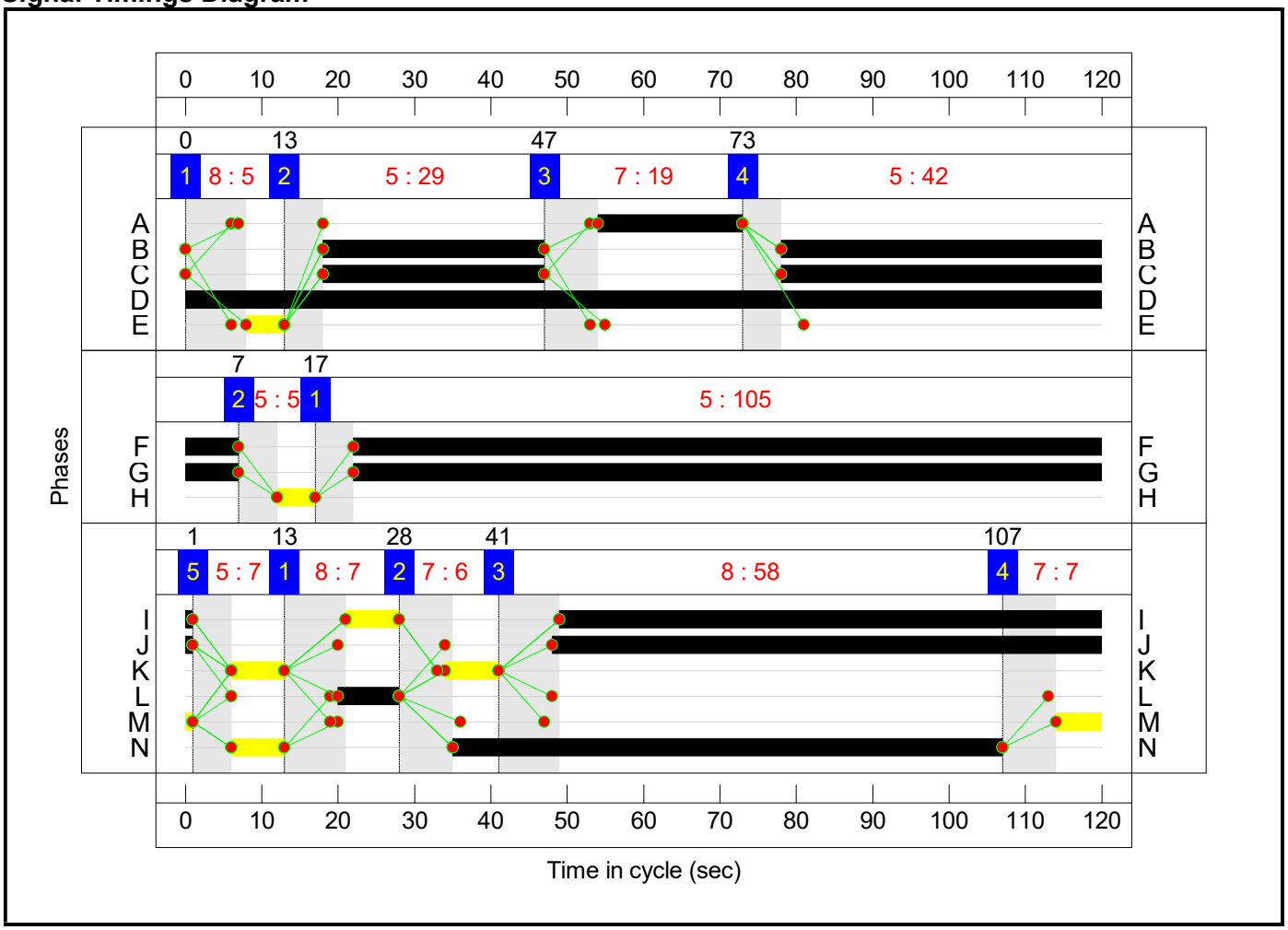
Stage	1	2
Duration	105	5
Change Point	17	7

Stage Stream: 3

Stage	1	2	3	4	5
Duration	7	6	58	7	7
Change Point	13	28	41	107	1

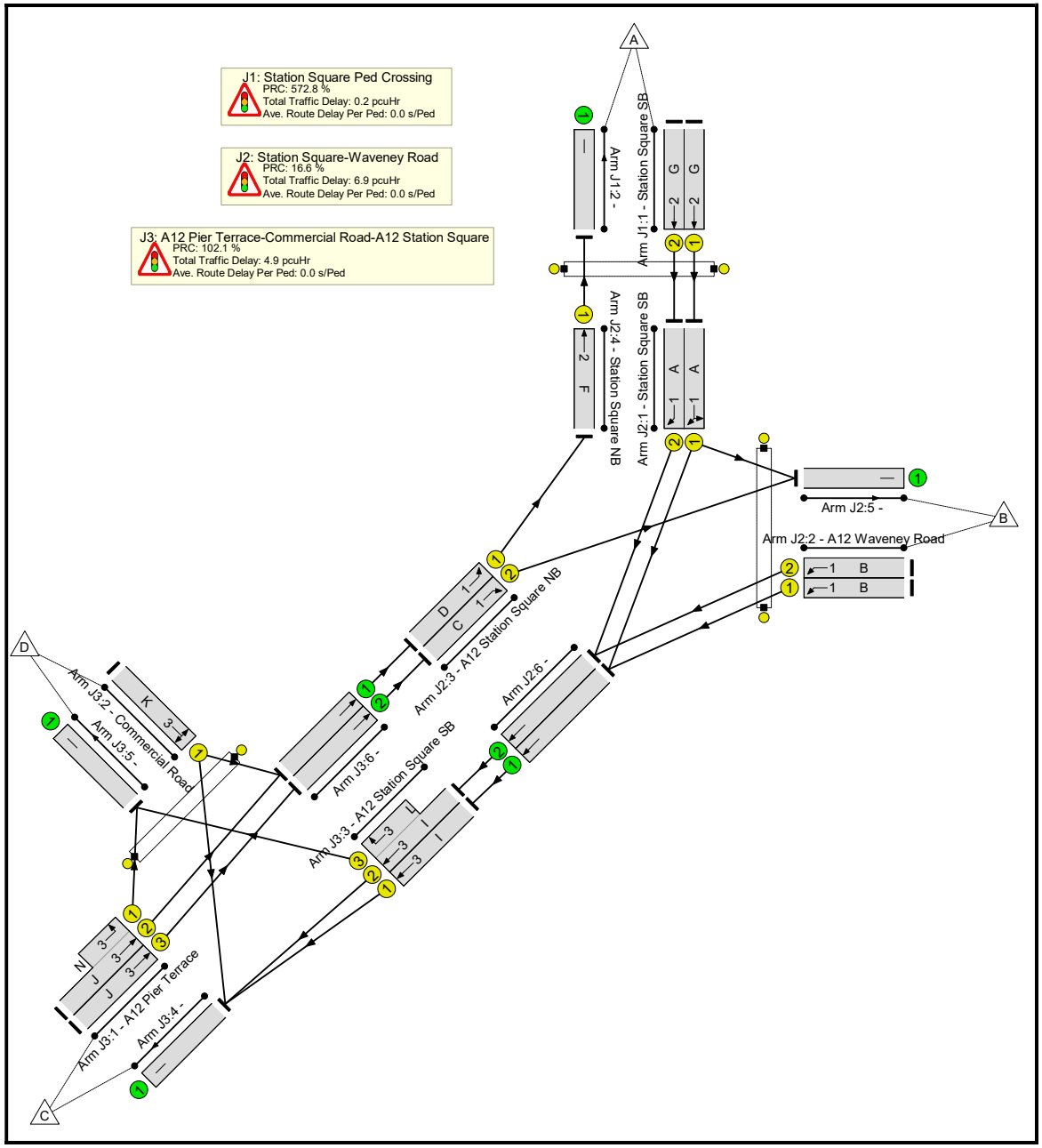
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**77.2%**
J1: Station Square Ped Crossing	-	-	**N/A**	-	-		-	-	-	-	-	-	**13.4%**
1/1	Station Square SB Ahead	U	2	N/A	G		1	105	-	64	1955	1727	3.7%
1/2	Station Square SB Ahead	U	2	N/A	G		1	105	-	231	1955	1727	13.4%
2/1		U	N/A	N/A	-		-	-	-	218	Inf	Inf	0.0%
Ped Link: P1	Station Square Ped	-	2	-	H		1	5	-	0	-	0	0.0%
J2: Station Square-Waveney Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**77.2%**
1/1	Station Square SB Left Right	U	1	N/A	A		1	19	-	64	1781	297	21.6%
1/2	Station Square SB Right	U	1	N/A	A		1	19	-	231	1795	299	77.2%
2/1	A12 Waveney Road Left	U	1	N/A	B		2	71	-	166	1772	1078	15.4%
2/2	A12 Waveney Road Left	U	1	N/A	B		2	71	-	29	1796	1093	2.7%
3/1	A12 Station Square NB Left	U	1	N/A	D		1	120	-	218	1844	1844	11.8%
3/2	A12 Station Square NB Right	U	1	N/A	C		2	71	-	526	1881	1144	46.0%
4/1	Station Square NB Ahead	U	2	N/A	F		1	105	-	218	2015	1780	12.2%
5/1		U	N/A	N/A	-		-	-	-	553	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	203	Inf	Inf	0.0%
6/2	Ahead	U	N/A	N/A	-		-	-	-	260	Inf	Inf	0.0%
Ped Link: P1	A12 Waveney Road Ped	-	1	-	E		1	5	-	0	-	0	0.0%

Full Input Data And Results

J3: A12 Pier Terrace-Commercial Road-A12 Station Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**44.5%**
1/2+1/1	A12 Pier Terrace Left Ahead	U	3	N/A	J N		1:2	73:79	-	250	1915:1726	897+302	20.9 : 20.9%
1/3	A12 Pier Terrace Ahead	U	3	N/A	J		1	73	-	526	1915	1181	44.5%
2/1	Commercial Road Right Left	U	3	N/A	K		2	14	-	72	1800	240	30.0%
3/1	A12 Station Square SB Ahead	U	3	N/A	I		2	79	-	203	1915	1293	15.7%
3/2+3/3	A12 Station Square SB Ahead Right	U	3	N/A	I L		2:1	79:8	-	260	1915:1609	592+121	36.5 : 36.5%
4/1		U	N/A	N/A	-		-	-	-	460	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	107	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	218	Inf	Inf	0.0%
6/2	Ahead	U	N/A	N/A	-		-	-	-	526	Inf	Inf	0.0%
Ped Link: P1	Commercial Road Ped	-	3	-	M		1	7	-	0	-	0	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	**-**	**-**	**0**	**0**	**0**	**8.3**	**3.6**	**0.0**	**11.9**	**-**	**-**	**-**	**-**
J1: Station Square Ped Crossing	**-**	**-**	**0**	**0**	**0**	**0.1**	**0.1**	**0.0**	**0.2**	**-**	**-**	**-**	**-**
1/1	64	64	-	-	-	0.0	0.0	-	0.0	2.0	0.2	0.0	0.3
1/2	231	231	-	-	-	0.1	0.1	-	0.1	2.1	1.0	0.1	1.0
2/1	218	218	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J2: Station Square-Waveney Road	**-**	**-**	**0**	**0**	**0**	**4.5**	**2.4**	**0.0**	**6.9**	**-**	**-**	**-**	**-**
1/1	64	64	-	-	-	0.8	0.1	-	0.9	50.9	1.8	0.1	1.9
1/2	231	231	-	-	-	3.0	1.6	-	4.6	72.1	7.3	1.6	8.9
2/1	166	166	-	-	-	0.3	0.1	-	0.3	7.5	1.5	0.1	1.6
2/2	29	29	-	-	-	0.0	0.0	-	0.1	6.8	0.2	0.0	0.3
3/1	218	218	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
3/2	526	526	-	-	-	0.3	0.4	-	0.8	5.2	3.7	0.4	4.2
4/1	218	218	-	-	-	0.0	0.1	-	0.1	2.0	0.8	0.1	0.9
5/1	553	553	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	203	203	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	260	260	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J3: A12 Pier Terrace-Commercial Road-A12 Station Square	**-**	**-**	**0**	**0**	**0**	**3.7**	**1.1**	**0.0**	**4.9**	**-**	**-**	**-**	**-**
1/2+1/1	250	250	-	-	-	0.6	0.1	-	0.7	10.0	2.6	0.1	2.7
1/3	526	526	-	-	-	1.8	0.4	-	2.2	14.9	9.2	0.4	9.6
2/1	72	72	-	-	-	0.6	0.2	-	0.9	43.1	1.7	0.2	2.0
3/1	203	203	-	-	-	0.2	0.1	-	0.3	4.9	1.3	0.1	1.4
3/2+3/3	260	260	-	-	-	0.6	0.3	-	0.9	11.8	1.4	0.3	1.7

Full Input Data And Results

4/1	460	460	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	107	107	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	218	218	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	526	526	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-

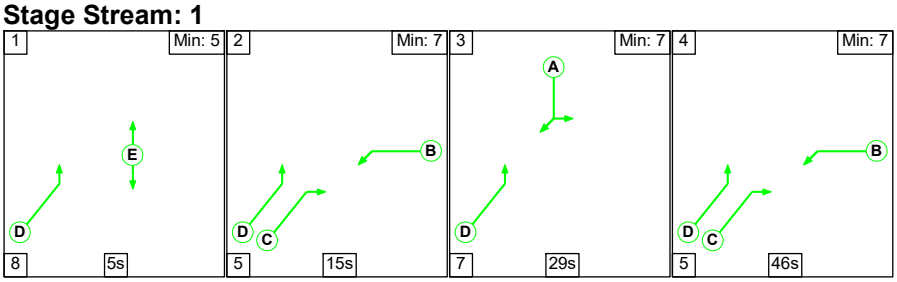
C1	Stream: 1 PRC for Signalled Lanes (%):	16.6	Total Delay for Signalled Lanes (pcuHr):	6.75	Cycle Time (s):	120
C1	Stream: 2 PRC for Signalled Lanes (%):	572.8	Total Delay for Signalled Lanes (pcuHr):	0.29	Cycle Time (s):	120
C1	Stream: 3 PRC for Signalled Lanes (%):	102.1	Total Delay for Signalled Lanes (pcuHr):	4.86	Cycle Time (s):	120
	PRC Over All Lanes (%):	16.6	Total Delay Over All Lanes(pcuHr):	11.91		

Full Input Data And Results

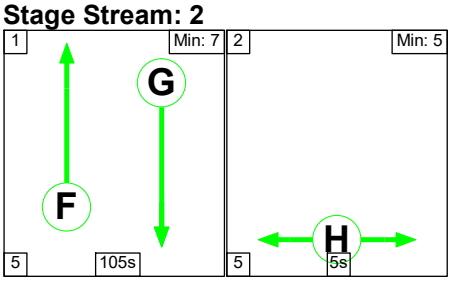
Scenario 4: '2037DM AM' (FG4: '2037 DM AM', Plan 1: 'All Stages at All Junctions')

Stage Sequence Diagram

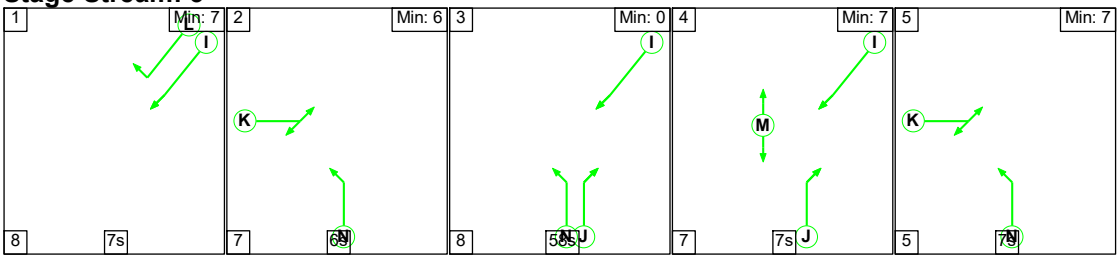
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2	3	4
Duration	5	15	29	46
Change Point	0	13	33	69

Stage Stream: 2

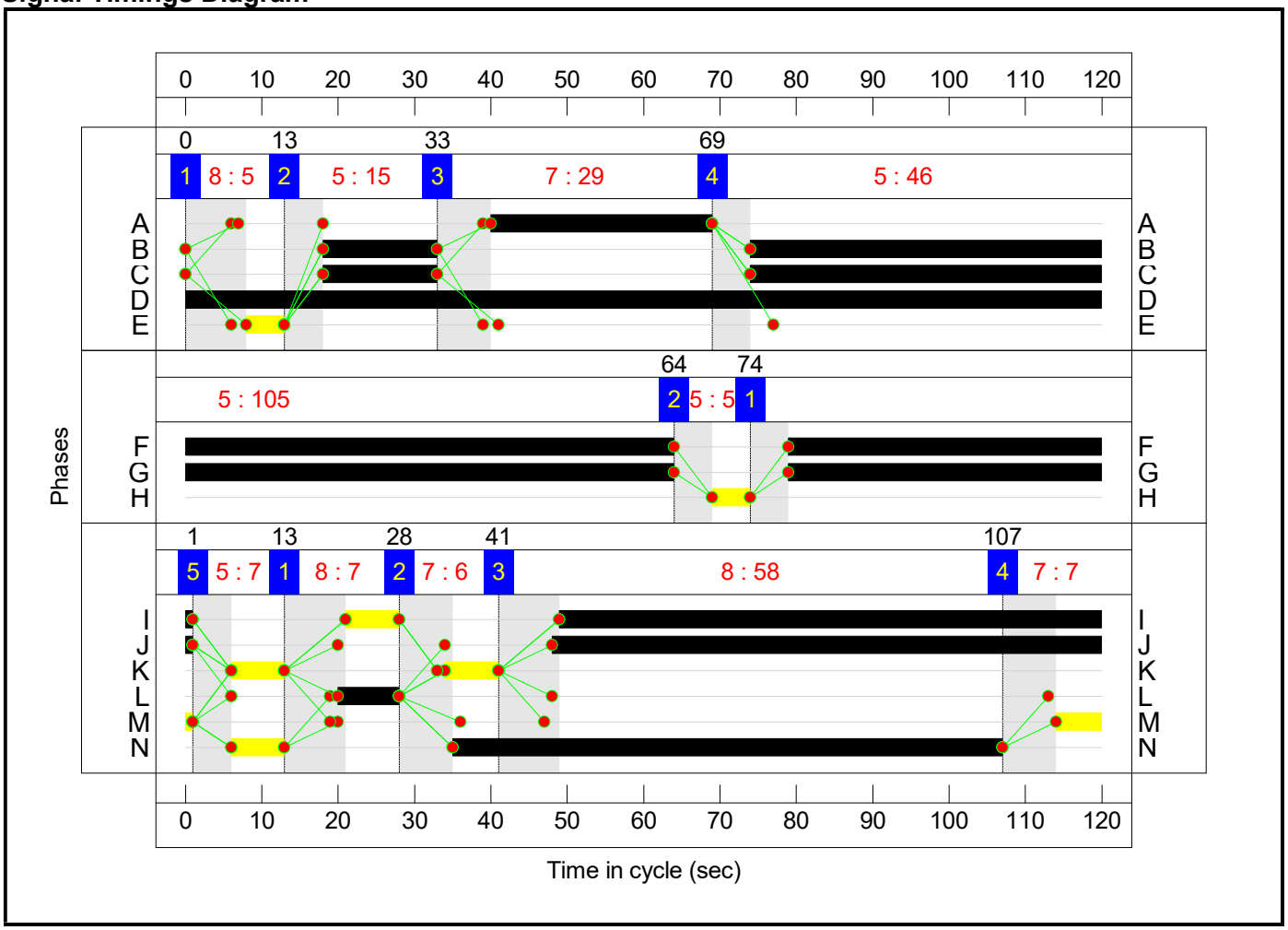
Stage	1	2
Duration	105	5
Change Point	74	64

Stage Stream: 3

Stage	1	2	3	4	5
Duration	7	6	58	7	7
Change Point	13	28	41	107	1

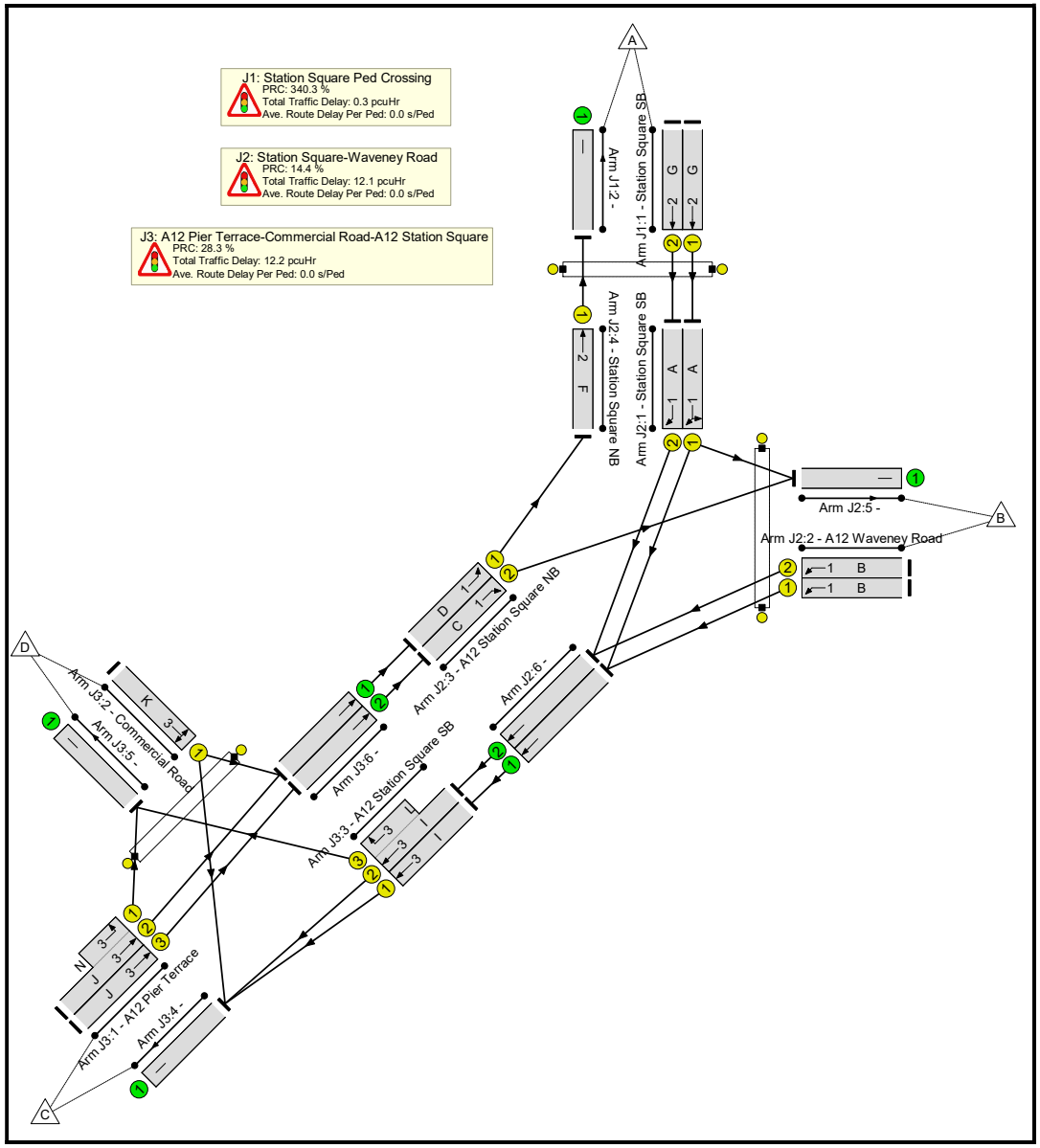
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**78.7%**
J1: Station Square Ped Crossing	-	-	**N/A**	-	-		-	-	-	-	-	-	**20.4%**
1/1	Station Square SB Ahead	U	2	N/A	G		1	105	-	123	1955	1727	7.1%
1/2	Station Square SB Ahead	U	2	N/A	G		1	105	-	353	1955	1727	20.4%
2/1		U	N/A	N/A	-		-	-	-	769	Inf	Inf	0.0%
Ped Link: P1	Station Square Ped	-	2	-	H		1	5	-	0	-	0	0.0%
J2: Station Square-Waveney Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**78.7%**
1/1	Station Square SB Left Right	U	1	N/A	A		1	29	-	123	1813	453	27.1%
1/2	Station Square SB Right	U	1	N/A	A		1	29	-	353	1795	449	78.7%
2/1	A12 Waveney Road Left	U	1	N/A	B		2	61	-	403	1772	930	43.3%
2/2	A12 Waveney Road Left	U	1	N/A	B		2	61	-	99	1796	943	10.5%
3/1	A12 Station Square NB Left	U	1	N/A	D		1	120	-	769	1844	1844	41.7%
3/2	A12 Station Square NB Right	U	1	N/A	C		2	61	-	719	1881	988	72.8%
4/1	Station Square NB Ahead	U	2	N/A	F		1	105	-	769	2015	1780	43.2%
5/1		U	N/A	N/A	-		-	-	-	720	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	525	Inf	Inf	0.0%
6/2	Ahead	U	N/A	N/A	-		-	-	-	452	Inf	Inf	0.0%
Ped Link: P1	A12 Waveney Road Ped	-	1	-	E		1	5	-	0	-	0	0.0%

Full Input Data And Results

J3: A12 Pier Terrace-Commercial Road-A12 Station Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**70.2%**
1/2+1/1	A12 Pier Terrace Left Ahead	U	3	N/A	J N		1:2	73:79	-	835	1915:1726	1046+144	70.2 : 70.2%
1/3	A12 Pier Terrace Ahead	U	3	N/A	J		1	73	-	719	1915	1181	60.9%
2/1	Commercial Road Right Left	U	3	N/A	K		2	14	-	87	1801	240	36.2%
3/1	A12 Station Square SB Ahead	U	3	N/A	I		2	79	-	525	1915	1293	40.6%
3/2+3/3	A12 Station Square SB Ahead Right	U	3	N/A	I L		2:1	79:8	-	452	1915:1609	570+121	65.5 : 65.5%
4/1		U	N/A	N/A	-		-	-	-	950	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	180	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	769	Inf	Inf	0.0%
6/2	Ahead	U	N/A	N/A	-		-	-	-	719	Inf	Inf	0.0%
Ped Link: P1	Commercial Road Ped	-	3	-	M		1	7	-	0	-	0	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	**-**	**-**	**0**	**0**	**0**	**16.4**	**8.1**	**0.0**	**24.6**	**-**	**-**	**-**	**-**
J1: Station Square Ped Crossing	**-**	**-**	**0**	**0**	**0**	**0.1**	**0.2**	**0.0**	**0.3**	**-**	**-**	**-**	**-**
1/1	123	123	-	-	-	0.0	0.0	-	0.1	2.0	0.5	0.0	0.5
1/2	353	353	-	-	-	0.1	0.1	-	0.2	2.3	1.7	0.1	1.8
2/1	769	769	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J2: Station Square-Waveney Road	**-**	**-**	**0**	**0**	**0**	**7.6**	**4.5**	**0.0**	**12.1**	**-**	**-**	**-**	**-**
1/1	123	123	-	-	-	1.2	0.2	-	1.4	40.8	3.3	0.2	3.5
1/2	353	353	-	-	-	4.0	1.8	-	5.8	59.1	11.0	1.8	12.8
2/1	403	403	-	-	-	1.1	0.4	-	1.5	13.6	5.7	0.4	6.1
2/2	99	99	-	-	-	0.2	0.1	-	0.3	10.5	1.2	0.1	1.2
3/1	769	769	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
3/2	719	719	-	-	-	1.0	1.3	-	2.3	11.5	6.5	1.3	7.8
4/1	769	769	-	-	-	0.0	0.4	-	0.4	1.9	0.3	0.4	0.7
5/1	720	720	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	525	525	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	452	452	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J3: A12 Pier Terrace-Commercial Road-A12 Station Square	**-**	**-**	**0**	**0**	**0**	**8.7**	**3.5**	**0.0**	**12.2**	**-**	**-**	**-**	**-**
1/2+1/1	835	835	-	-	-	3.3	1.2	-	4.5	19.5	17.8	1.2	19.0
1/3	719	719	-	-	-	2.8	0.8	-	3.6	18.0	14.6	0.8	15.4
2/1	87	87	-	-	-	0.8	0.3	-	1.1	44.4	2.1	0.3	2.4
3/1	525	525	-	-	-	0.6	0.3	-	1.0	6.7	4.5	0.3	4.8
3/2+3/3	452	452	-	-	-	1.1	0.9	-	2.1	16.5	2.6	0.9	3.5

Full Input Data And Results

4/1	950	950	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	180	180	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	769	769	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	719	719	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-

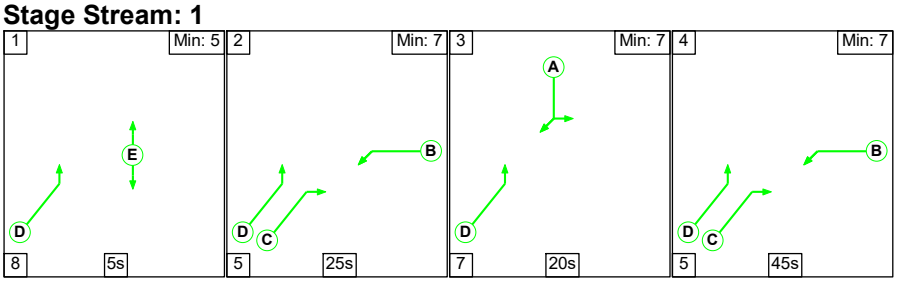
C1	Stream: 1 PRC for Signalled Lanes (%):	14.4	Total Delay for Signalled Lanes (pcuHr):	11.65	Cycle Time (s):	120
C1	Stream: 2 PRC for Signalled Lanes (%):	108.3	Total Delay for Signalled Lanes (pcuHr):	0.70	Cycle Time (s):	120
C1	Stream: 3 PRC for Signalled Lanes (%):	28.3	Total Delay for Signalled Lanes (pcuHr):	12.23	Cycle Time (s):	120
	PRC Over All Lanes (%):	14.4	Total Delay Over All Lanes(pcuHr):	24.58		

Full Input Data And Results

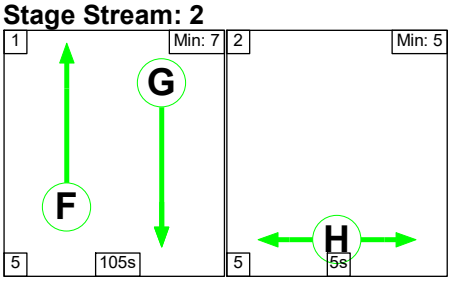
Scenario 5: '2037 DS AM' (FG5: '2037 DS AM', Plan 1: 'All Stages at All Junctions')

Stage Sequence Diagram

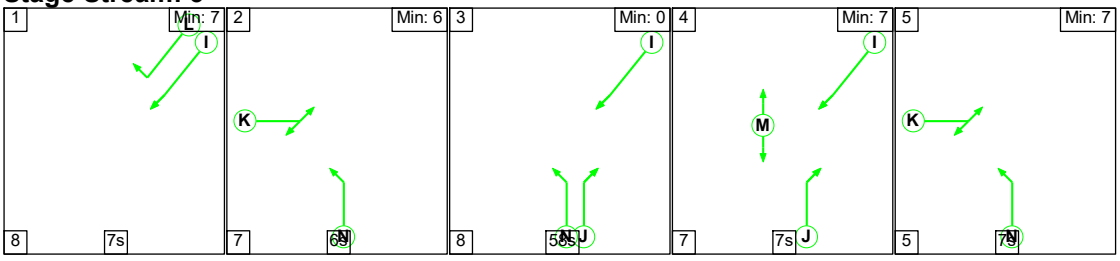
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2	3	4
Duration	5	25	20	45
Change Point	0	13	43	70

Stage Stream: 2

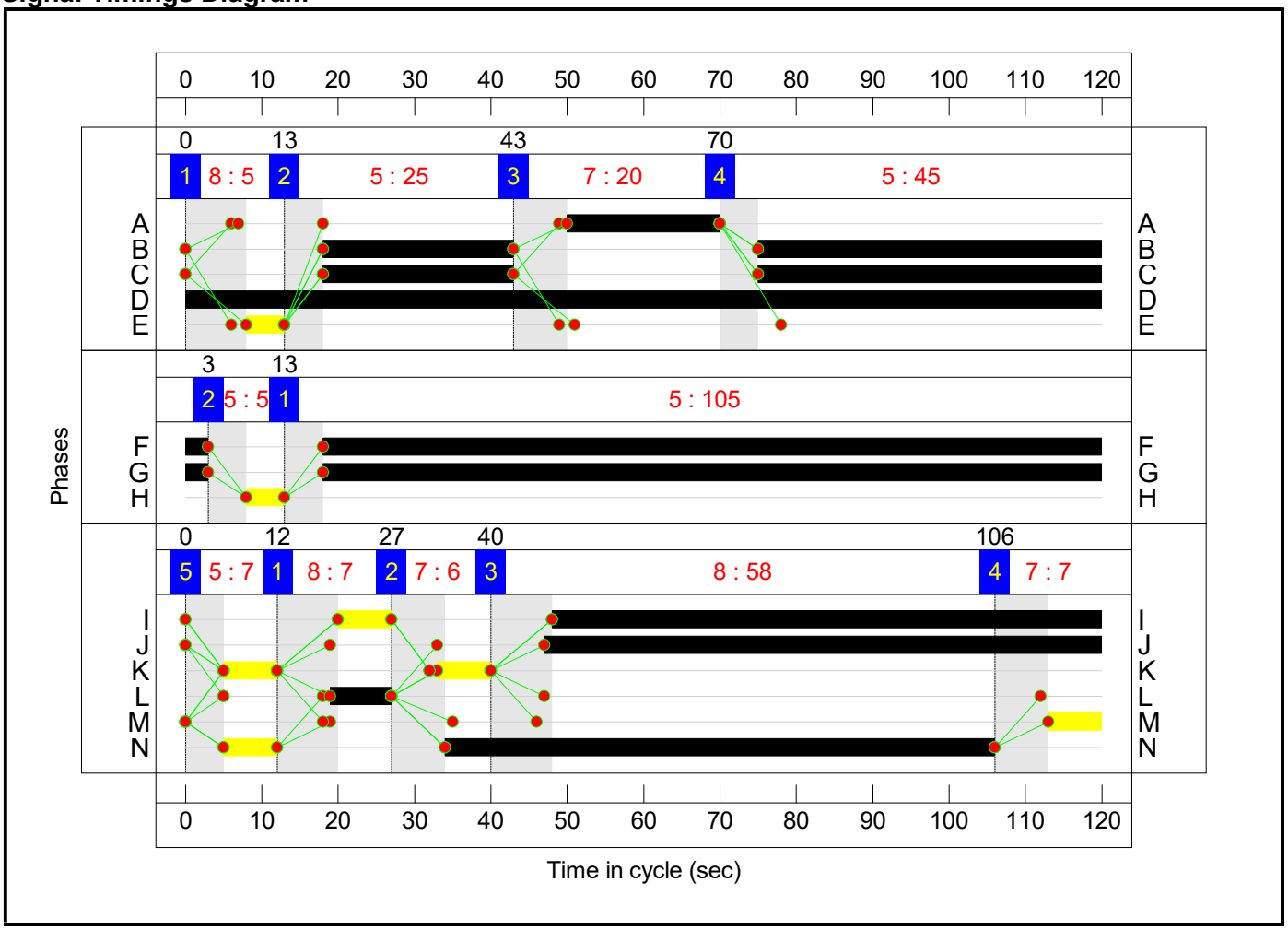
Stage	1	2
Duration	105	5
Change Point	13	3

Stage Stream: 3

Stage	1	2	3	4	5
Duration	7	6	58	7	7
Change Point	12	27	40	106	0

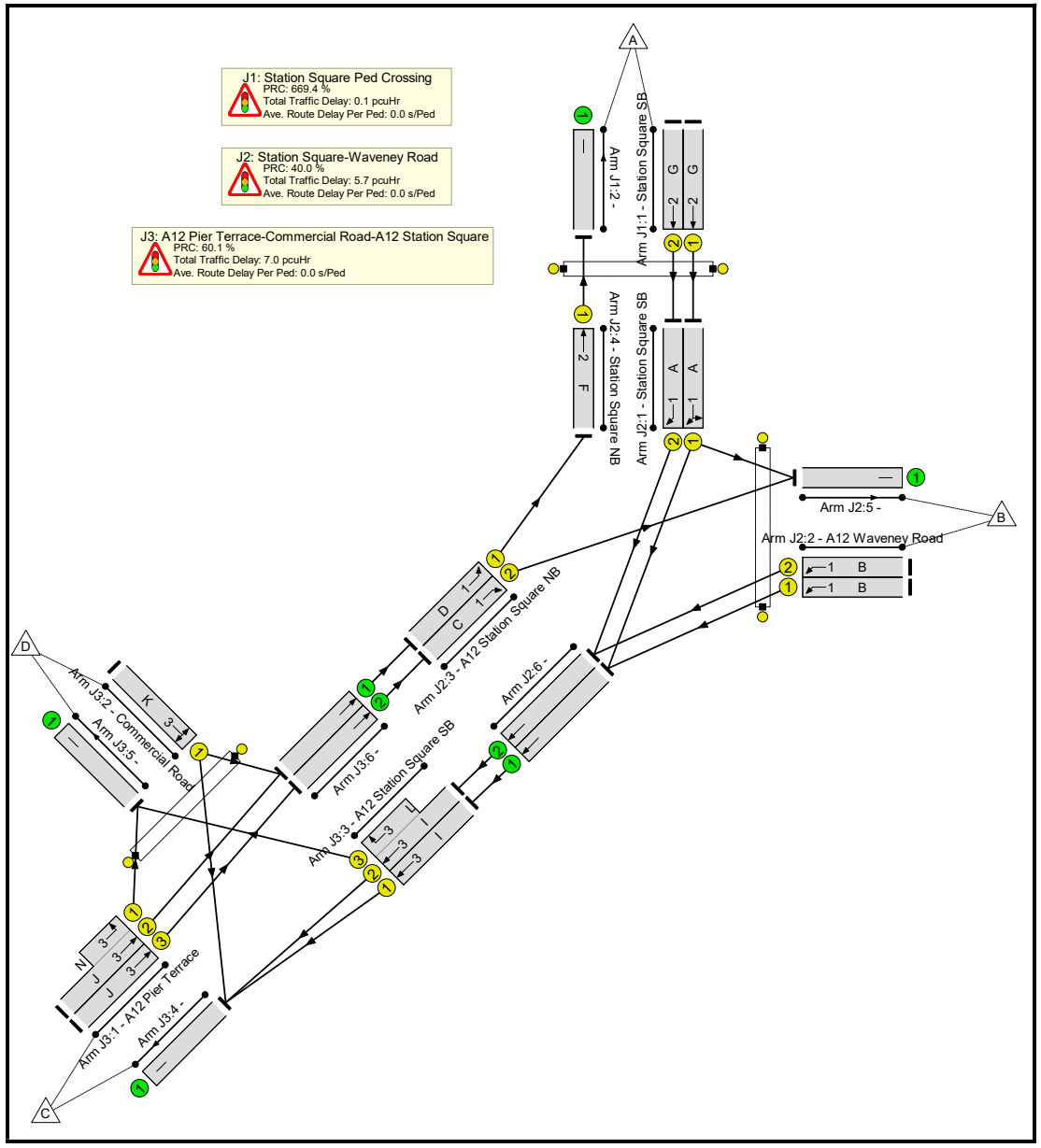
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**64.3%**
J1: Station Square Ped Crossing	-	-	**N/A**	-	-		-	-	-	-	-	-	**11.7%**
1/1	Station Square SB Ahead	U	2	N/A	G		1	105	-	7	1955	1727	0.4%
1/2	Station Square SB Ahead	U	2	N/A	G		1	105	-	202	1955	1727	11.7%
2/1		U	N/A	N/A	-		-	-	-	286	Inf	Inf	0.0%
Ped Link: P1	Station Square Ped	-	2	-	H		1	5	-	0	-	0	0.0%
J2: Station Square-Waveney Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**64.3%**
1/1	Station Square SB Left Right	U	1	N/A	A		1	20	-	7	1738	304	2.3%
1/2	Station Square SB Right	U	1	N/A	A		1	20	-	202	1795	314	64.3%
2/1	A12 Waveney Road Left	U	1	N/A	B		2	70	-	264	1772	1063	24.8%
2/2	A12 Waveney Road Left	U	1	N/A	B		2	70	-	69	1796	1078	6.4%
3/1	A12 Station Square NB Left	U	1	N/A	D		1	120	-	286	1844	1844	15.5%
3/2	A12 Station Square NB Right	U	1	N/A	C		2	70	-	664	1881	1129	58.8%
4/1	Station Square NB Ahead	U	2	N/A	F		1	105	-	286	2015	1780	16.1%
5/1		U	N/A	N/A	-		-	-	-	671	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	264	Inf	Inf	0.0%
6/2	Ahead	U	N/A	N/A	-		-	-	-	271	Inf	Inf	0.0%
Ped Link: P1	A12 Waveney Road Ped	-	1	-	E		1	5	-	0	-	0	0.0%

Full Input Data And Results

J3: A12 Pier Terrace-Commercial Road-A12 Station Square	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**56.2%**
1/2+1/1	A12 Pier Terrace Left Ahead	U	3	N/A	J N		1:2	73:79	-	362	1915:1726	808+401	29.9 : 29.9%
1/3	A12 Pier Terrace Ahead	U	3	N/A	J		1	73	-	664	1915	1181	56.2%
2/1	Commercial Road Right Left	U	3	N/A	K		2	14	-	89	1797	240	37.1%
3/1	A12 Station Square SB Ahead	U	3	N/A	I		2	79	-	264	1915	1293	20.4%
3/2+3/3	A12 Station Square SB Ahead Right	U	3	N/A	I L		2:1	79:8	-	271	1915:1609	424+121	49.7 : 49.7%
4/1		U	N/A	N/A	-		-	-	-	520	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	180	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	286	Inf	Inf	0.0%
6/2	Ahead	U	N/A	N/A	-		-	-	-	664	Inf	Inf	0.0%
Ped Link: P1	Commercial Road Ped	-	3	-	M		1	7	-	0	-	0	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	**-**	**-**	**0**	**0**	**0**	**9.0**	**3.8**	**0.0**	**12.8**	**-**	**-**	**-**	**-**
J1: Station Square Ped Crossing	**-**	**-**	**0**	**0**	**0**	**0.1**	**0.1**	**0.0**	**0.1**	**-**	**-**	**-**	**-**
1/1	7	7	-	-	-	0.0	0.0	-	0.0	1.9	0.0	0.0	0.0
1/2	202	202	-	-	-	0.1	0.1	-	0.1	2.1	0.8	0.1	0.9
2/1	286	286	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J2: Station Square-Waveney Road	**-**	**-**	**0**	**0**	**0**	**3.7**	**2.0**	**0.0**	**5.7**	**-**	**-**	**-**	**-**
1/1	7	7	-	-	-	0.1	0.0	-	0.1	47.2	0.2	0.0	0.2
1/2	202	202	-	-	-	2.5	0.9	-	3.4	60.9	6.2	0.9	7.1
2/1	264	264	-	-	-	0.4	0.2	-	0.6	8.4	2.6	0.2	2.8
2/2	69	69	-	-	-	0.1	0.0	-	0.1	7.2	0.6	0.0	0.6
3/1	286	286	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
3/2	664	664	-	-	-	0.5	0.7	-	1.2	6.6	5.4	0.7	6.1
4/1	286	286	-	-	-	0.1	0.1	-	0.2	2.0	1.0	0.1	1.1
5/1	671	671	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	264	264	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	271	271	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J3: A12 Pier Terrace-Commercial Road-A12 Station Square	**-**	**-**	**0**	**0**	**0**	**5.2**	**1.8**	**0.0**	**7.0**	**-**	**-**	**-**	**-**
1/2+1/1	362	362	-	-	-	0.8	0.2	-	1.0	10.0	3.5	0.2	3.7
1/3	664	664	-	-	-	2.5	0.6	-	3.1	17.0	12.9	0.6	13.6
2/1	89	89	-	-	-	0.8	0.3	-	1.1	44.6	2.2	0.3	2.5
3/1	264	264	-	-	-	0.3	0.1	-	0.4	5.8	2.2	0.1	2.3
3/2+3/3	271	271	-	-	-	0.8	0.5	-	1.3	17.5	1.9	0.5	2.4

Full Input Data And Results

4/1	520	520	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	180	180	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	286	286	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	664	664	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-

C1	Stream: 1 PRC for Signalled Lanes (%):	40.0	Total Delay for Signalled Lanes (pcuHr):	5.58	Cycle Time (s):	120
C1	Stream: 2 PRC for Signalled Lanes (%):	460.1	Total Delay for Signalled Lanes (pcuHr):	0.28	Cycle Time (s):	120
C1	Stream: 3 PRC for Signalled Lanes (%):	60.1	Total Delay for Signalled Lanes (pcuHr):	6.99	Cycle Time (s):	120
	PRC Over All Lanes (%):	40.0	Total Delay Over All Lanes(pcuHr):	12.85		

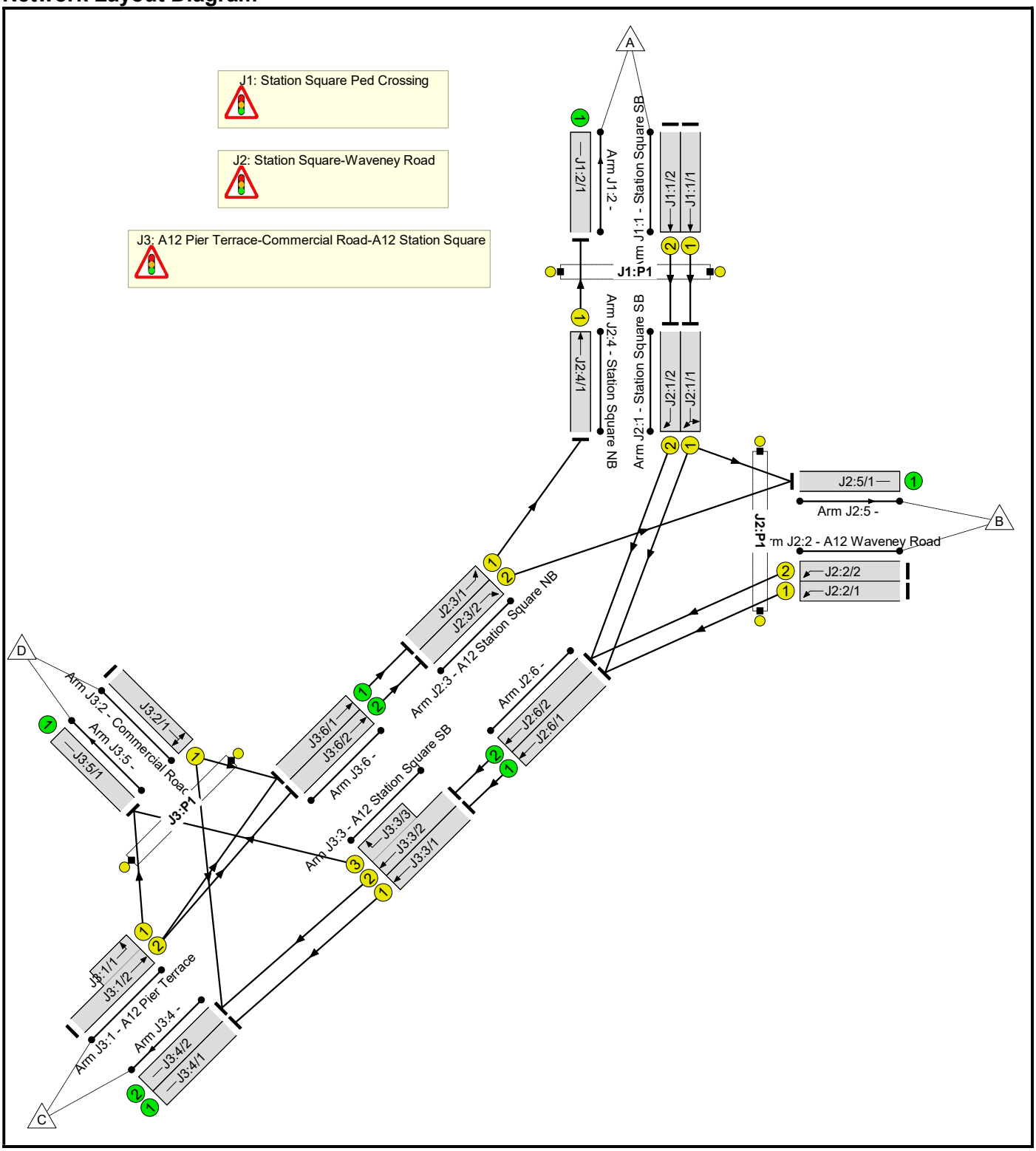
Full Input Data And Results

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	03 A12 Waveney Rd-Stn Square-Commercial Rd PM v3 - 2017-10-25.lsg3x
Author:	
Company:	
Address:	

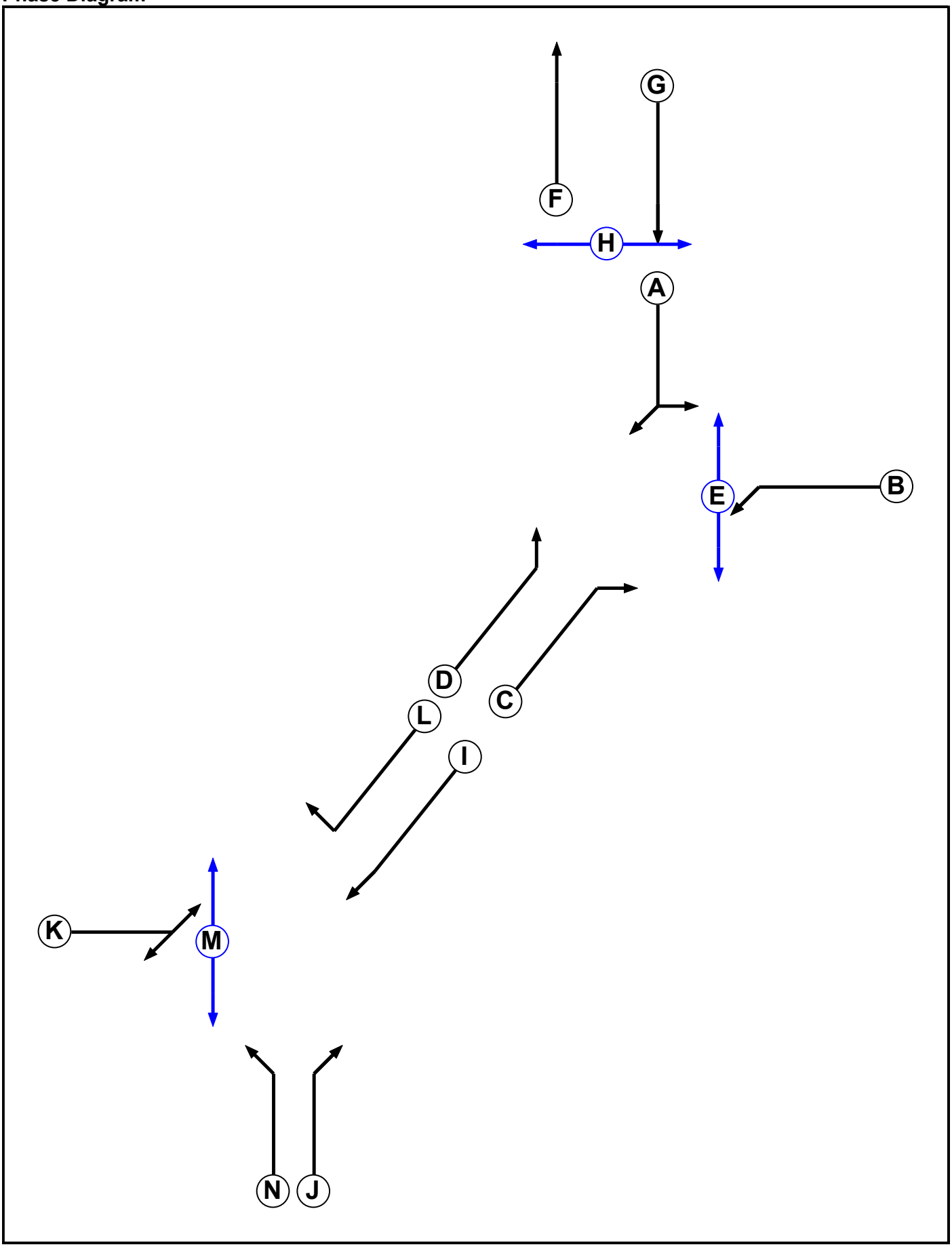
Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	1		7	7
D	Traffic	1		7	7
E	Pedestrian	1		5	5
F	Traffic	2		7	7
G	Traffic	2		7	7
H	Pedestrian	2		5	5
I	Traffic	3		7	7
J	Traffic	3		7	7
K	Traffic	3		7	7
L	Traffic	3		7	7
M	Pedestrian	3		7	7
N	Traffic	3		7	7

Full Input Data And Results

Phase Intergreens Matrix

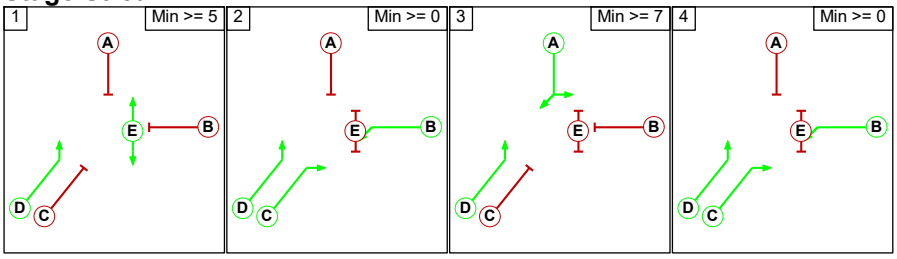
Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N
A		5	5	-	8	-	-	-	-	-	-	-	-	-
B	7		-	-	6	-	-	-	-	-	-	-	-	-
C	6	-		-	8	-	-	-	-	-	-	-	-	-
D	-	-	-		-	-	-	-	-	-	-	-	-	-
E	5	5	5	-		-	-	-	-	-	-	-	-	-
F	-	-	-	-	-		-	5	-	-	-	-	-	-
G	-	-	-	-	-	-		5	-	-	-	-	-	-
H	-	-	-	-	-	5	5		-	-	-	-	-	-
I	-	-	-	-	-	-	-	-		-	5	-	-	-
J	-	-	-	-	-	-	-	-	-		5	5	-	-
K	-	-	-	-	-	-	-	-	8	7		7	6	-
L	-	-	-	-	-	-	-	-	-	6	6		8	7
M	-	-	-	-	-	-	-	-	-	-	5	5		5
N	-	-	-	-	-	-	-	-	-	-	-	6	7	

Phases in Stage

Stream	Stage No.	Phases in Stage
1	1	D E
1	2	B C D
1	3	A D
1	4	B C D
2	1	F G
2	2	H
3	1	I L
3	2	K N
3	3	I J N
3	4	I J M
3	5	K N

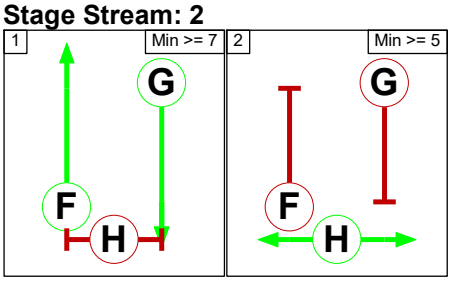
Stage Diagram

Stage Stream: 1

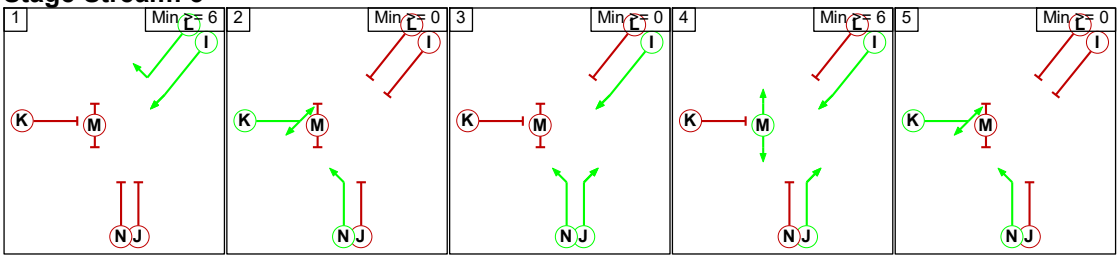


Full Input Data And Results

Stage Stream: 2



Stage Stream: 3



Phase Delays

Stage Stream: 1

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Stage Stream: 2

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Stage Stream: 3

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

Stage Stream: 1

		To Stage			
		1	2	3	4
From Stage	1		5	5	5
	2	8		7	0
	3	8	5		5
	4	8	0	7	

Stage Stream: 2

		To Stage	
		1	2
From Stage	1		5
	2	5	

Full Input Data And Results

Stage Stream: 3

		To Stage				
		1	2	3	4	5
From Stage	1		7	7	8	7
	2	8		8	8	0
	3	6	5		7	5
	4	5	5	5		5
	5	8	0	8	8	

Full Input Data And Results

Give-Way Lane Input Data

Junction: J1: Station Square Ped Crossing
There are no Opposed Lanes in this Junction

Junction: J2: Station Square-Waveney Road
There are no Opposed Lanes in this Junction

Junction: J3: A12 Pier Terrace-Commercial Road-A12 Station Square
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: J1: Station Square Ped Crossing

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)
J1:1/1 (Station Square SB)	U	G	2	3	28.3	Geom	-	3.40	0.00	Y	Arm J2:1 Ahead	Inf
J1:1/2 (Station Square SB)	U	G	2	3	18.3	Geom	-	3.40	0.00	Y	Arm J2:1 Ahead	Inf
J1:2/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Junction: J2: Station Square-Waveney Road

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)
J2:1/1 (Station Square SB)	U	A	2	3	60.0	Geom	-	3.40	0.00	Y	Arm J2:5 Left	12.00
											Arm J2:6 Right	19.30
J2:1/2 (Station Square SB)	U	A	2	3	18.3	Geom	-	3.40	0.00	Y	Arm J2:6 Right	16.80
J2:2/1 (A12 Waveney Road)	U	B	2	3	60.0	Geom	-	3.40	0.00	Y	Arm J2:6 Left	14.50
J2:2/2 (A12 Waveney Road)	U	B	2	3	60.0	Geom	-	3.40	0.00	Y	Arm J2:6 Left	17.00
J2:3/1 (A12 Station Square NB)	U	D	2	3	4.4	Geom	-	3.60	0.00	Y	Arm J2:4 Left	21.20
J2:3/2 (A12 Station Square NB)	U	C	2	3	4.4	Geom	-	3.60	0.00	Y	Arm J2:5 Right	29.90
J2:4/1 (Station Square NB)	U	F	2	3	5.4	Geom	-	4.00	0.00	Y	Arm J1:2 Ahead	Inf
J2:5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:6/2	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Junction: J3: A12 Pier Terrace-Commercial Road-A12 Station Square												
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)**
J3:1/1 (A12 Pier Terrace)	U	N	2	3	3.9	Geom	-	3.20	0.00	Y	Arm J3:5 Left	12.40
J3:1/2 (A12 Pier Terrace)	U	J	2	3	33.6	Geom	-	3.00	0.00	Y	Arm J3:6 Ahead	Inf
J3:2/1 (Commercial Road)	U	K	2	3	60.0	Geom	-	3.90	0.00	Y	Arm J3:4 Right	14.50
											Arm J3:6 Left	11.70
J3:3/1 (A12 Station Square SB)	U	I	2	3	6.9	Geom	-	3.00	0.00	Y	Arm J3:4 Ahead	Inf
J3:3/2 (A12 Station Square SB)	U	I	2	3	6.9	Geom	-	3.00	0.00	Y	Arm J3:4 Ahead	Inf
J3:3/3 (A12 Station Square SB)	U	L	2	3	4.7	Geom	-	3.00	0.00	Y	Arm J3:5 Right	7.90
J3:4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J3:4/2	U		2	3	60.0	Inf	-	-	-	-	-	-
J3:5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J3:6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J3:6/2	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'Base 2016 PM'	17:00	18:00	01:00	
2: '2022 DM PM'	17:00	18:00	01:00	
3: '2022 DS PM'	17:00	18:00	01:00	
4: '2037 DM PM'	17:00	18:00	01:00	
5: '2037 DS PM'	17:00	18:00	01:00	

Scenario 1: 'Base 2016 PM' (FG1: 'Base 2016 PM', Plan 1: 'All Stages at All Junctions')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	26	701	27	754
	B	0	0	920	42	962
	C	444	506	0	40	990
	D	65	0	52	0	117
	Tot.	509	532	1673	109	2823

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: Base 2016 PM
Junction: J1: Station Square Ped Crossing	
J1:1/1	273
J1:1/2	481
J1:2/1	509
Junction: J2: Station Square-Waveney Road	
J2:1/1	273
J2:1/2	481
J2:2/1	498
J2:2/2	464
J2:3/1	509
J2:3/2	506
J2:4/1	509
J2:5/1	532
J2:6/1	745
J2:6/2	945
Junction: J3: A12 Pier Terrace-Commercial Road-A12 Station Square	
J3:1/1 (short)	40
J3:1/2 (with short)	990(In) 950(Out)
J3:2/1	117
J3:3/1	745
J3:3/2 (with short)	945(In) 876(Out)
J3:3/3 (short)	69
J3:4/1	745
J3:4/2	928
J3:5/1	109
J3:6/1	509
J3:6/2	506

Lane Saturation Flows

Junction: J1: Station Square Ped Crossing								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (Station Square SB)	3.40	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1955	1955
J1:1/2 (Station Square SB)	3.40	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1955	1955
J1:2/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: Station Square-Waveney Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Station Square SB)	3.40	0.00	Y	Arm J2:5 Left	12.00	9.5 %	1806	1806
				Arm J2:6 Right	19.30	90.5 %		
J2:1/2 (Station Square SB)	3.40	0.00	Y	Arm J2:6 Right	16.80	100.0 %	1795	1795
J2:2/1 (A12 Waveney Road)	3.40	0.00	Y	Arm J2:6 Left	14.50	100.0 %	1772	1772
J2:2/2 (A12 Waveney Road)	3.40	0.00	Y	Arm J2:6 Left	17.00	100.0 %	1796	1796
J2:3/1 (A12 Station Square NB)	3.60	0.00	Y	Arm J2:4 Left	21.20	100.0 %	1844	1844
J2:3/2 (A12 Station Square NB)	3.60	0.00	Y	Arm J2:5 Right	29.90	100.0 %	1881	1881
J2:4/1 (Station Square NB)	4.00	0.00	Y	Arm J1:2 Ahead	Inf	100.0 %	2015	2015
J2:5/1	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf
J2:6/2	Infinite Saturation Flow						Inf	Inf

Junction: J3: A12 Pier Terrace-Commercial Road-A12 Station Square								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J3:1/1 (A12 Pier Terrace)	3.20	0.00	Y	Arm J3:5 Left	12.40	100.0 %	1726	1726
J3:1/2 (A12 Pier Terrace)	3.00	0.00	Y	Arm J3:6 Ahead	Inf	100.0 %	1915	1915
J3:2/1 (Commercial Road)	3.90	0.00	Y	Arm J3:4 Right	14.50	44.4 %	1795	1795
				Arm J3:6 Left	11.70	55.6 %		
J3:3/1 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1915	1915
J3:3/2 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1915	1915
J3:3/3 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:5 Right	7.90	100.0 %	1609	1609
J3:4/1	Infinite Saturation Flow						Inf	Inf
J3:4/2	Infinite Saturation Flow						Inf	Inf
J3:5/1	Infinite Saturation Flow						Inf	Inf
J3:6/1	Infinite Saturation Flow						Inf	Inf
J3:6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: '2022 DM PM' (FG2: '2022 DM PM', Plan 1: 'All Stages at All Junctions')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	26	733	30	789
	B	0	0	973	47	1020
	C	481	519	0	39	1039
	D	58	0	67	0	125
	Tot.	539	545	1773	116	2973

Traffic Lane Flows

Lane	Scenario 2: 2022 DM PM
Junction: J1: Station Square Ped Crossing	
J1:1/1	282
J1:1/2	507
J1:2/1	539
Junction: J2: Station Square-Waveney Road	
J2:1/1	282
J2:1/2	507
J2:2/1	523
J2:2/2	497
J2:3/1	539
J2:3/2	519
J2:4/1	539
J2:5/1	545
J2:6/1	779
J2:6/2	1004
Junction: J3: A12 Pier Terrace-Commercial Road-A12 Station Square	
J3:1/1 (short)	39
J3:1/2 (with short)	1039(In) 1000(Out)
J3:2/1	125
J3:3/1	779
J3:3/2 (with short)	1004(In) 927(Out)
J3:3/3 (short)	77
J3:4/1	779
J3:4/2	994
J3:5/1	116
J3:6/1	539
J3:6/2	519

Full Input Data And Results

Lane Saturation Flows

Junction: J1: Station Square Ped Crossing								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (Station Square SB)	3.40	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1955	1955
J1:1/2 (Station Square SB)	3.40	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1955	1955
J1:2/1	Infinite Saturation Flow						Inf	Inf

Junction: J2: Station Square-Waveney Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Station Square SB)	3.40	0.00	Y	Arm J2:5 Left	12.00	9.2 %	1807	1807
				Arm J2:6 Right	19.30	90.8 %		
J2:1/2 (Station Square SB)	3.40	0.00	Y	Arm J2:6 Right	16.80	100.0 %	1795	1795
J2:2/1 (A12 Waveney Road)	3.40	0.00	Y	Arm J2:6 Left	14.50	100.0 %	1772	1772
J2:2/2 (A12 Waveney Road)	3.40	0.00	Y	Arm J2:6 Left	17.00	100.0 %	1796	1796
J2:3/1 (A12 Station Square NB)	3.60	0.00	Y	Arm J2:4 Left	21.20	100.0 %	1844	1844
J2:3/2 (A12 Station Square NB)	3.60	0.00	Y	Arm J2:5 Right	29.90	100.0 %	1881	1881
J2:4/1 (Station Square NB)	4.00	0.00	Y	Arm J1:2 Ahead	Inf	100.0 %	2015	2015
J2:5/1	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf
J2:6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J3: A12 Pier Terrace-Commercial Road-A12 Station Square								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J3:1/1 (A12 Pier Terrace)	3.20	0.00	Y	Arm J3:5 Left	12.40	100.0 %	1726	1726
J3:1/2 (A12 Pier Terrace)	3.00	0.00	Y	Arm J3:6 Ahead	Inf	100.0 %	1915	1915
J3:2/1 (Commercial Road)	3.90	0.00	Y	Arm J3:4 Right	14.50	53.6 %	1798	1798
				Arm J3:6 Left	11.70	46.4 %		
J3:3/1 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1915	1915
J3:3/2 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1915	1915
J3:3/3 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:5 Right	7.90	100.0 %	1609	1609
J3:4/1	Infinite Saturation Flow						Inf	Inf
J3:4/2	Infinite Saturation Flow						Inf	Inf
J3:5/1	Infinite Saturation Flow						Inf	Inf
J3:6/1	Infinite Saturation Flow						Inf	Inf
J3:6/2	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2022 DS PM' (FG3: '2022 DS PM', Plan 1: 'All Stages at All Junctions')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	33	381	13	427
	B	0	0	824	45	869
	C	84	351	0	58	493
	D	68	0	56	0	124
	Tot.	152	384	1261	116	1913

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2022 DS PM
Junction: J1: Station Square Ped Crossing	
J1:1/1	33
J1:1/2	394
J1:2/1	152
Junction: J2: Station Square-Waveney Road	
J2:1/1	33
J2:1/2	394
J2:2/1	485
J2:2/2	384
J2:3/1	152
J2:3/2	351
J2:4/1	152
J2:5/1	384
J2:6/1	485
J2:6/2	778
Junction: J3: A12 Pier Terrace-Commercial Road-A12 Station Square	
J3:1/1 (short)	58
J3:1/2 (with short)	493(In) 435(Out)
J3:2/1	124
J3:3/1	485
J3:3/2 (with short)	778(In) 720(Out)
J3:3/3 (short)	58
J3:4/1	485
J3:4/2	776
J3:5/1	116
J3:6/1	152
J3:6/2	351

Lane Saturation Flows

Junction: J1: Station Square Ped Crossing								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (Station Square SB)	3.40	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1955	1955
J1:1/2 (Station Square SB)	3.40	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1955	1955
J1:2/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: Station Square-Waveney Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Station Square SB)	3.40	0.00	Y	Arm J2:5 Left	12.00	100.0 %	1738	1738
				Arm J2:6 Right	19.30	0.0 %		
J2:1/2 (Station Square SB)	3.40	0.00	Y	Arm J2:6 Right	16.80	100.0 %	1795	1795
J2:2/1 (A12 Waveney Road)	3.40	0.00	Y	Arm J2:6 Left	14.50	100.0 %	1772	1772
J2:2/2 (A12 Waveney Road)	3.40	0.00	Y	Arm J2:6 Left	17.00	100.0 %	1796	1796
J2:3/1 (A12 Station Square NB)	3.60	0.00	Y	Arm J2:4 Left	21.20	100.0 %	1844	1844
J2:3/2 (A12 Station Square NB)	3.60	0.00	Y	Arm J2:5 Right	29.90	100.0 %	1881	1881
J2:4/1 (Station Square NB)	4.00	0.00	Y	Arm J1:2 Ahead	Inf	100.0 %	2015	2015
J2:5/1	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf
J2:6/2	Infinite Saturation Flow						Inf	Inf

Junction: J3: A12 Pier Terrace-Commercial Road-A12 Station Square								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J3:1/1 (A12 Pier Terrace)	3.20	0.00	Y	Arm J3:5 Left	12.40	100.0 %	1726	1726
J3:1/2 (A12 Pier Terrace)	3.00	0.00	Y	Arm J3:6 Ahead	Inf	100.0 %	1915	1915
J3:2/1 (Commercial Road)	3.90	0.00	Y	Arm J3:4 Right	14.50	45.2 %	1795	1795
				Arm J3:6 Left	11.70	54.8 %		
J3:3/1 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1915	1915
J3:3/2 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1915	1915
J3:3/3 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:5 Right	7.90	100.0 %	1609	1609
J3:4/1	Infinite Saturation Flow						Inf	Inf
J3:4/2	Infinite Saturation Flow						Inf	Inf
J3:5/1	Infinite Saturation Flow						Inf	Inf
J3:6/1	Infinite Saturation Flow						Inf	Inf
J3:6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 4: '2037 DM PM' (FG4: '2037 DM PM', Plan 1: 'All Stages at All Junctions')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	17	802	30	849
	B	0	0	1086	49	1135
	C	506	532	0	48	1086
	D	74	0	64	0	138
	Tot.	580	549	1952	127	3208

Traffic Lane Flows

Lane	Scenario 4: 2037 DM PM
Junction: J1: Station Square Ped Crossing	
J1:1/1	345
J1:1/2	504
J1:2/1	580
Junction: J2: Station Square-Waveney Road	
J2:1/1	345
J2:1/2	504
J2:2/1	578
J2:2/2	557
J2:3/1	580
J2:3/2	532
J2:4/1	580
J2:5/1	549
J2:6/1	906
J2:6/2	1061
Junction: J3: A12 Pier Terrace-Commercial Road-A12 Station Square	
J3:1/1 (short)	48
J3:1/2 (with short)	1086(In) 1038(Out)
J3:2/1	138
J3:3/1	906
J3:3/2 (with short)	1061(In) 982(Out)
J3:3/3 (short)	79
J3:4/1	906
J3:4/2	1046
J3:5/1	127
J3:6/1	580
J3:6/2	532

Full Input Data And Results

Lane Saturation Flows

Junction: J1: Station Square Ped Crossing								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (Station Square SB)	3.40	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1955	1955
J1:1/2 (Station Square SB)	3.40	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1955	1955
J1:2/1	Infinite Saturation Flow						Inf	Inf

Junction: J2: Station Square-Waveney Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Station Square SB)	3.40	0.00	Y	Arm J2:5 Left	12.00	4.9 %	1810	1810
				Arm J2:6 Right	19.30	95.1 %		
J2:1/2 (Station Square SB)	3.40	0.00	Y	Arm J2:6 Right	16.80	100.0 %	1795	1795
J2:2/1 (A12 Waveney Road)	3.40	0.00	Y	Arm J2:6 Left	14.50	100.0 %	1772	1772
J2:2/2 (A12 Waveney Road)	3.40	0.00	Y	Arm J2:6 Left	17.00	100.0 %	1796	1796
J2:3/1 (A12 Station Square NB)	3.60	0.00	Y	Arm J2:4 Left	21.20	100.0 %	1844	1844
J2:3/2 (A12 Station Square NB)	3.60	0.00	Y	Arm J2:5 Right	29.90	100.0 %	1881	1881
J2:4/1 (Station Square NB)	4.00	0.00	Y	Arm J1:2 Ahead	Inf	100.0 %	2015	2015
J2:5/1	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf
J2:6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J3: A12 Pier Terrace-Commercial Road-A12 Station Square								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J3:1/1 (A12 Pier Terrace)	3.20	0.00	Y	Arm J3:5 Left	12.40	100.0 %	1726	1726
J3:1/2 (A12 Pier Terrace)	3.00	0.00	Y	Arm J3:6 Ahead	Inf	100.0 %	1915	1915
J3:2/1 (Commercial Road)	3.90	0.00	Y	Arm J3:4 Right	14.50	46.4 %	1795	1795
				Arm J3:6 Left	11.70	53.6 %		
J3:3/1 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1915	1915
J3:3/2 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1915	1915
J3:3/3 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:5 Right	7.90	100.0 %	1609	1609
J3:4/1	Infinite Saturation Flow						Inf	Inf
J3:4/2	Infinite Saturation Flow						Inf	Inf
J3:5/1	Infinite Saturation Flow						Inf	Inf
J3:6/1	Infinite Saturation Flow						Inf	Inf
J3:6/2	Infinite Saturation Flow						Inf	Inf

Scenario 5: '2037 DS PM' (FG5: '2037 DS PM', Plan 1: 'All Stages at All Junctions')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	14	628	20	662
	B	0	0	672	23	695
	C	94	363	0	41	498
	D	71	0	79	0	150
	Tot.	165	377	1379	84	2005

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: 2037 DS PM
Junction: J1: Station Square Ped Crossing	
J1:1/1	197
J1:1/2	465
J1:2/1	165
Junction: J2: Station Square-Waveney Road	
J2:1/1	197
J2:1/2	465
J2:2/1	430
J2:2/2	265
J2:3/1	165
J2:3/2	363
J2:4/1	165
J2:5/1	377
J2:6/1	613
J2:6/2	730
Junction: J3: A12 Pier Terrace-Commercial Road-A12 Station Square	
J3:1/1 (short)	41
J3:1/2 (with short)	498(In) 457(Out)
J3:2/1	150
J3:3/1	613
J3:3/2 (with short)	730(In) 687(Out)
J3:3/3 (short)	43
J3:4/1	613
J3:4/2	766
J3:5/1	84
J3:6/1	165
J3:6/2	363

Lane Saturation Flows

Junction: J1: Station Square Ped Crossing								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (Station Square SB)	3.40	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1955	1955
J1:1/2 (Station Square SB)	3.40	0.00	Y	Arm J2:1 Ahead	Inf	100.0 %	1955	1955
J1:2/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: Station Square-Waveney Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Station Square SB)	3.40	0.00	Y	Arm J2:5 Left	12.00	7.1 %	1808	1808
				Arm J2:6 Right	19.30	92.9 %		
J2:1/2 (Station Square SB)	3.40	0.00	Y	Arm J2:6 Right	16.80	100.0 %	1795	1795
J2:2/1 (A12 Waveney Road)	3.40	0.00	Y	Arm J2:6 Left	14.50	100.0 %	1772	1772
J2:2/2 (A12 Waveney Road)	3.40	0.00	Y	Arm J2:6 Left	17.00	100.0 %	1796	1796
J2:3/1 (A12 Station Square NB)	3.60	0.00	Y	Arm J2:4 Left	21.20	100.0 %	1844	1844
J2:3/2 (A12 Station Square NB)	3.60	0.00	Y	Arm J2:5 Right	29.90	100.0 %	1881	1881
J2:4/1 (Station Square NB)	4.00	0.00	Y	Arm J1:2 Ahead	Inf	100.0 %	2015	2015
J2:5/1	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf
J2:6/2	Infinite Saturation Flow						Inf	Inf

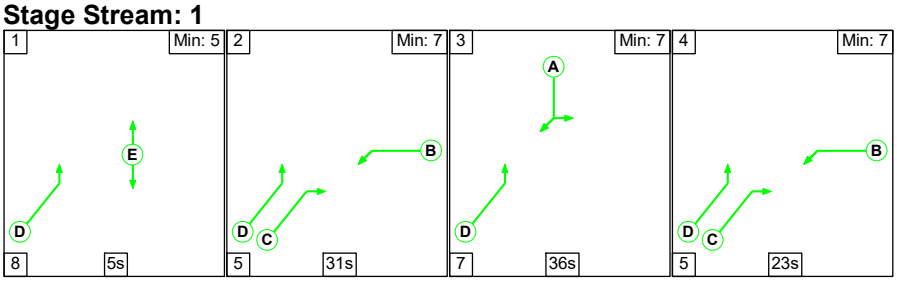
Junction: J3: A12 Pier Terrace-Commercial Road-A12 Station Square								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J3:1/1 (A12 Pier Terrace)	3.20	0.00	Y	Arm J3:5 Left	12.40	100.0 %	1726	1726
J3:1/2 (A12 Pier Terrace)	3.00	0.00	Y	Arm J3:6 Ahead	Inf	100.0 %	1915	1915
J3:2/1 (Commercial Road)	3.90	0.00	Y	Arm J3:4 Right	14.50	52.7 %	1798	1798
				Arm J3:6 Left	11.70	47.3 %		
J3:3/1 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1915	1915
J3:3/2 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1915	1915
J3:3/3 (A12 Station Square SB)	3.00	0.00	Y	Arm J3:5 Right	7.90	100.0 %	1609	1609
J3:4/1	Infinite Saturation Flow						Inf	Inf
J3:4/2	Infinite Saturation Flow						Inf	Inf
J3:5/1	Infinite Saturation Flow						Inf	Inf
J3:6/1	Infinite Saturation Flow						Inf	Inf
J3:6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

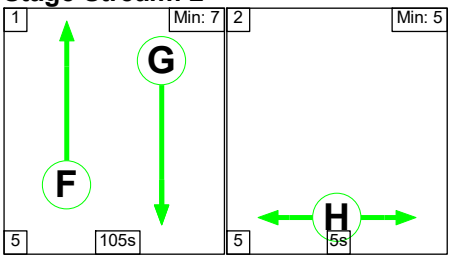
Scenario 1: 'Base 2016 PM' (FG1: 'Base 2016 PM', Plan 1: 'All Stages at All Junctions')

Stage Sequence Diagram

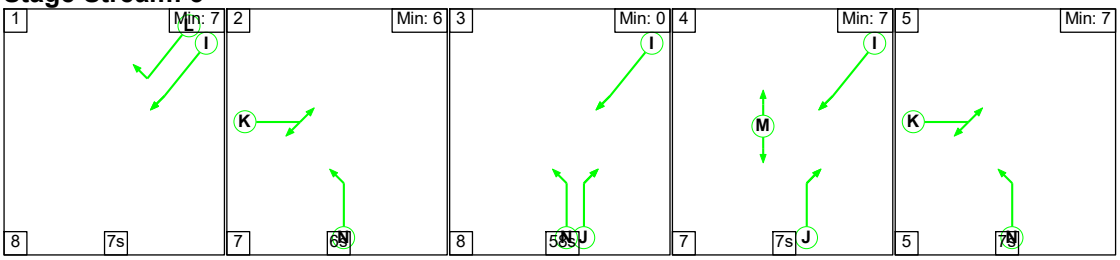
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2	3	4
Duration	5	31	36	23
Change Point	0	13	49	92

Stage Stream: 2

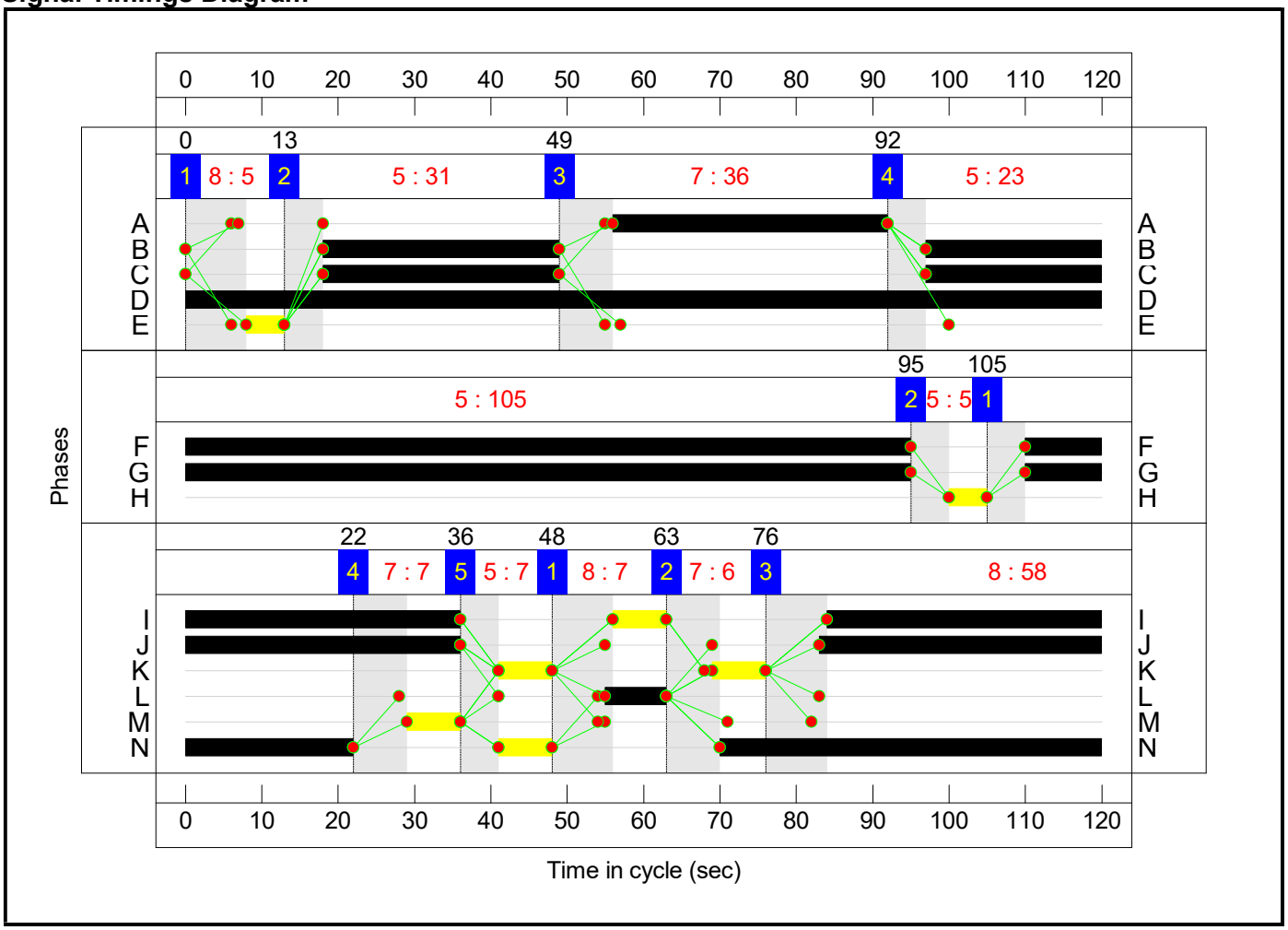
Stage	1	2
Duration	105	5
Change Point	105	95

Stage Stream: 3

Stage	1	2	3	4	5
Duration	7	6	58	7	7
Change Point	48	63	76	22	36

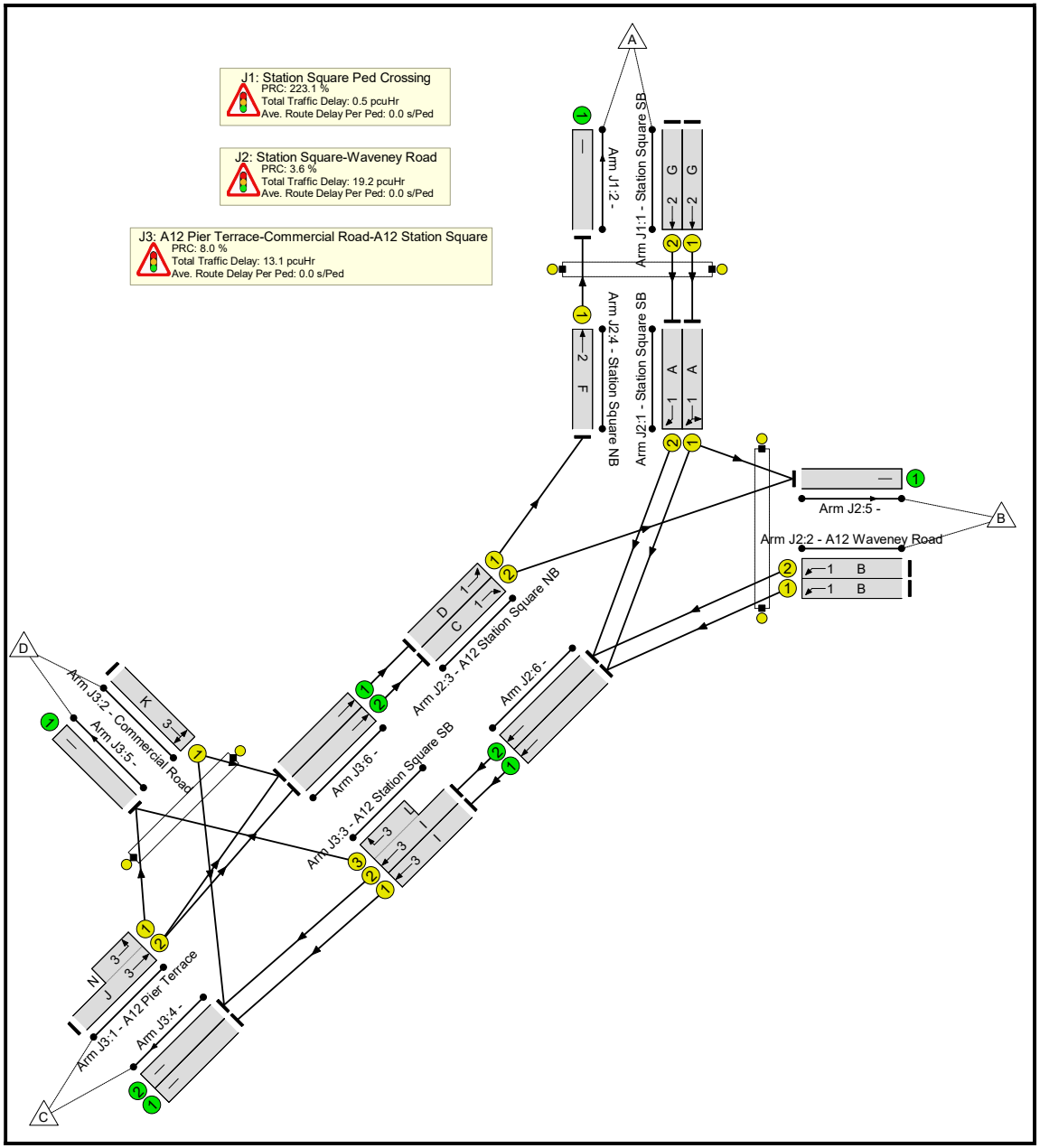
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**86.9%**
J1: Station Square Ped Crossing	-	-	**N/A**	-	-		-	-	-	-	-	-	**27.9%**
1/1	Station Square SB Ahead	U	2	N/A	G		1	105	-	273	1955	1727	15.8%
1/2	Station Square SB Ahead	U	2	N/A	G		1	105	-	481	1955	1727	27.9%
2/1		U	N/A	N/A	-		-	-	-	509	Inf	Inf	0.0%
Ped Link: P1	Station Square Ped	-	2	-	H		1	5	-	0	-	0	0.0%
J2: Station Square-Waveney Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**86.9%**
1/1	Station Square SB Left Right	U	1	N/A	A		1	36	-	273	1806	557	49.0%
1/2	Station Square SB Right	U	1	N/A	A		1	36	-	481	1795	553	86.9%
2/1	A12 Waveney Road Left	U	1	N/A	B		2	54	-	498	1772	827	60.2%
2/2	A12 Waveney Road Left	U	1	N/A	B		2	54	-	464	1796	838	55.4%
3/1	A12 Station Square NB Left	U	1	N/A	D		1	120	-	509	1844	1844	27.6%
3/2	A12 Station Square NB Right	U	1	N/A	C		2	54	-	506	1881	878	57.6%
4/1	Station Square NB Ahead	U	2	N/A	F		1	105	-	509	2015	1780	28.6%
5/1		U	N/A	N/A	-		-	-	-	532	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	745	Inf	Inf	0.0%
6/2	Ahead	U	N/A	N/A	-		-	-	-	945	Inf	Inf	0.0%
Ped Link: P1	A12 Waveney Road Ped	-	1	-	E		1	5	-	0	-	0	0.0%

Full Input Data And Results

J3: A12 Pier Terrace-Commercial Road-A12 Station Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**83.3%**
1/2+1/1	A12 Pier Terrace Left Ahead	U	3	N/A	J N		1:2	73:79	-	990	1915:1726	1140+48	83.3 : 83.3%
2/1	Commercial Road Right Left	U	3	N/A	K		2	14	-	117	1795	239	48.9%
3/1	A12 Station Square SB Ahead	U	3	N/A	I		2	79	-	745	1915	1293	57.6%
3/2+3/3	A12 Station Square SB Ahead Right	U	3	N/A	I L		2:1	79:8	-	945	1915:1609	1207+95	72.6 : 72.6%
4/1		U	N/A	N/A	-		-	-	-	745	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	928	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	109	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	509	Inf	Inf	0.0%
6/2	Ahead	U	N/A	N/A	-		-	-	-	506	Inf	Inf	0.0%
Ped Link: P1	Commercial Road Ped	-	3	-	M		1	7	-	0	-	0	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	**-**	**-**	**0**	**0**	**0**	**21.6**	**11.2**	**0.0**	**32.8**	**-**	**-**	**-**	**-**
J1: Station Square Ped Crossing	**-**	**-**	**0**	**0**	**0**	**0.2**	**0.3**	**0.0**	**0.5**	**-**	**-**	**-**	**-**
1/1	273	273	-	-	-	0.1	0.1	-	0.2	2.2	1.2	0.1	1.3
1/2	481	481	-	-	-	0.1	0.2	-	0.3	2.5	2.4	0.2	2.6
2/1	509	509	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J2: Station Square-Waveney Road	**-**	**-**	**0**	**0**	**0**	**13.2**	**6.0**	**0.0**	**19.2**	**-**	**-**	**-**	**-**
1/1	273	273	-	-	-	2.5	0.5	-	3.0	39.2	7.4	0.5	7.8
1/2	481	481	-	-	-	5.1	3.1	-	8.2	61.0	15.1	3.1	18.2
2/1	498	498	-	-	-	2.0	0.8	-	2.8	19.9	9.0	0.8	9.7
2/2	464	464	-	-	-	1.8	0.6	-	2.4	18.8	8.1	0.6	8.7
3/1	509	509	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
3/2	506	506	-	-	-	1.8	0.7	-	2.5	17.6	7.3	0.7	8.0
4/1	509	509	-	-	-	0.0	0.2	-	0.2	1.6	0.5	0.2	0.7
5/1	532	532	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	745	745	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	945	945	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J3: A12 Pier Terrace-Commercial Road-A12 Station Square	**-**	**-**	**0**	**0**	**0**	**8.2**	**4.9**	**0.0**	**13.1**	**-**	**-**	**-**	**-**
1/2+1/1	990	990	-	-	-	4.9	2.4	-	7.3	26.6	25.7	2.4	28.1
2/1	117	117	-	-	-	1.1	0.5	-	1.6	47.9	2.9	0.5	3.4
3/1	745	745	-	-	-	0.7	0.7	-	1.4	6.7	4.4	0.7	5.1
3/2+3/3	945	945	-	-	-	1.5	1.3	-	2.8	10.8	3.3	1.3	4.7
4/1	745	745	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

4/2	928	928	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	109	109	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	509	509	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	506	506	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-

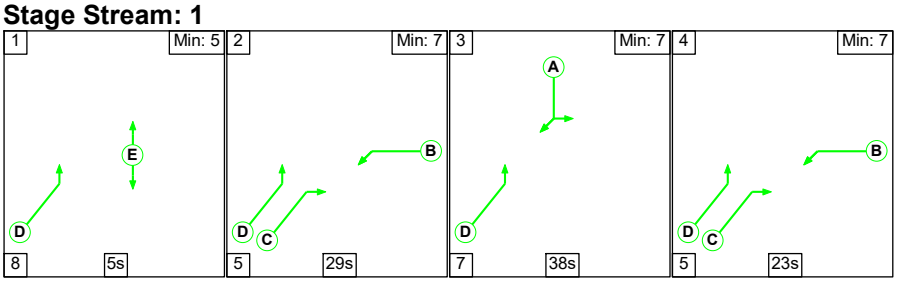
C1	Stream: 1 PRC for Signalled Lanes (%):	3.6	Total Delay for Signalled Lanes (pcuHr):	18.98	Cycle Time (s):	120
C1	Stream: 2 PRC for Signalled Lanes (%):	214.7	Total Delay for Signalled Lanes (pcuHr):	0.73	Cycle Time (s):	120
C1	Stream: 3 PRC for Signalled Lanes (%):	8.0	Total Delay for Signalled Lanes (pcuHr):	13.07	Cycle Time (s):	120
	PRC Over All Lanes (%):	3.6	Total Delay Over All Lanes(pcuHr):	32.78		

Full Input Data And Results

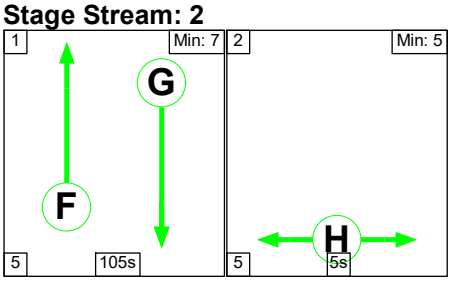
Scenario 2: '2022 DM PM' (FG2: '2022 DM PM', Plan 1: 'All Stages at All Junctions')

Stage Sequence Diagram

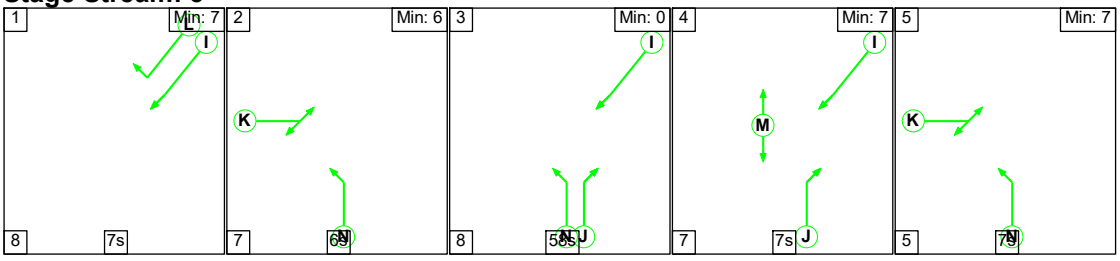
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2	3	4
Duration	5	29	38	23
Change Point	0	13	47	92

Stage Stream: 2

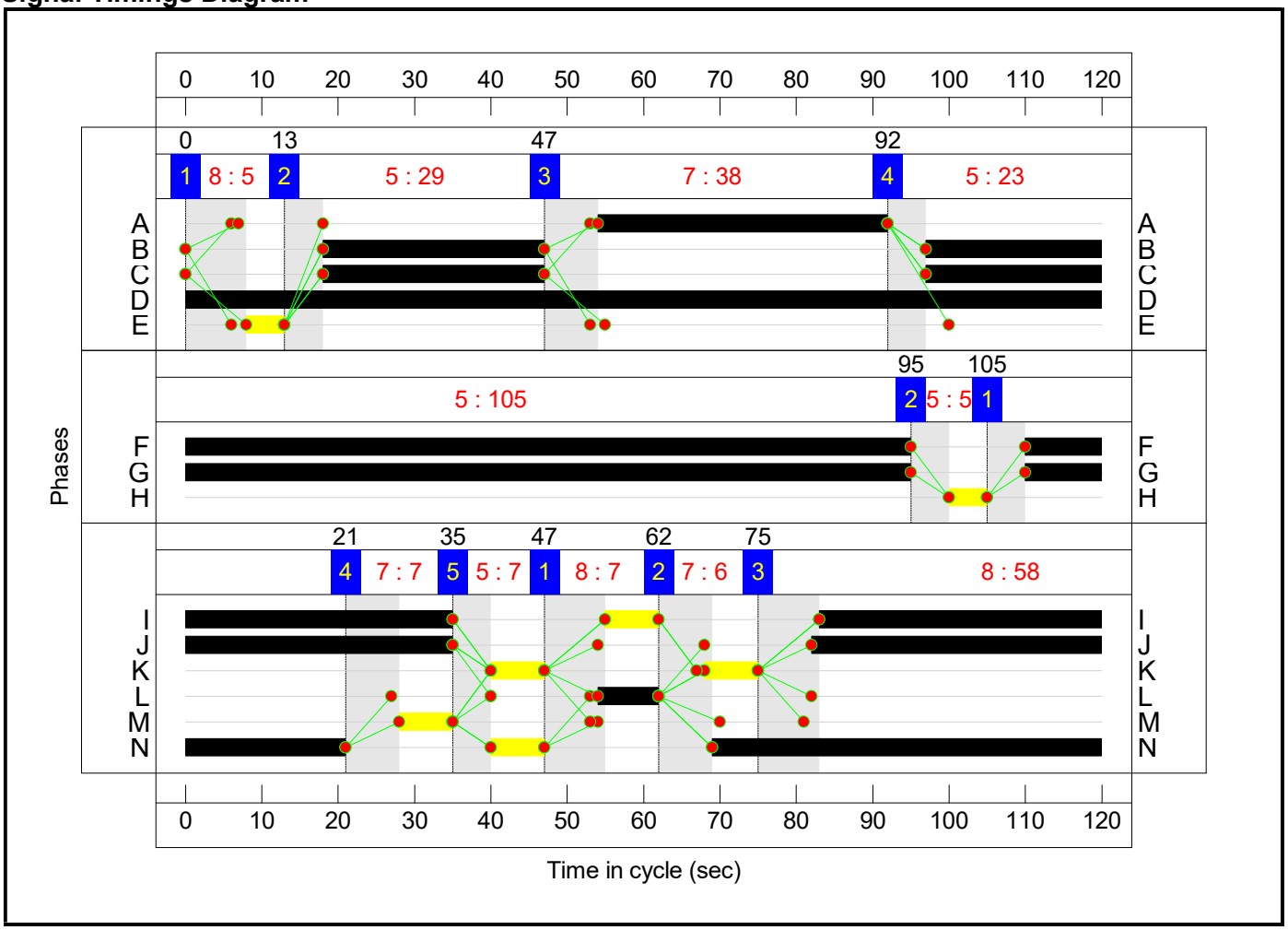
Stage	1	2
Duration	105	5
Change Point	105	95

Stage Stream: 3

Stage	1	2	3	4	5
Duration	7	6	58	7	7
Change Point	47	62	75	21	35

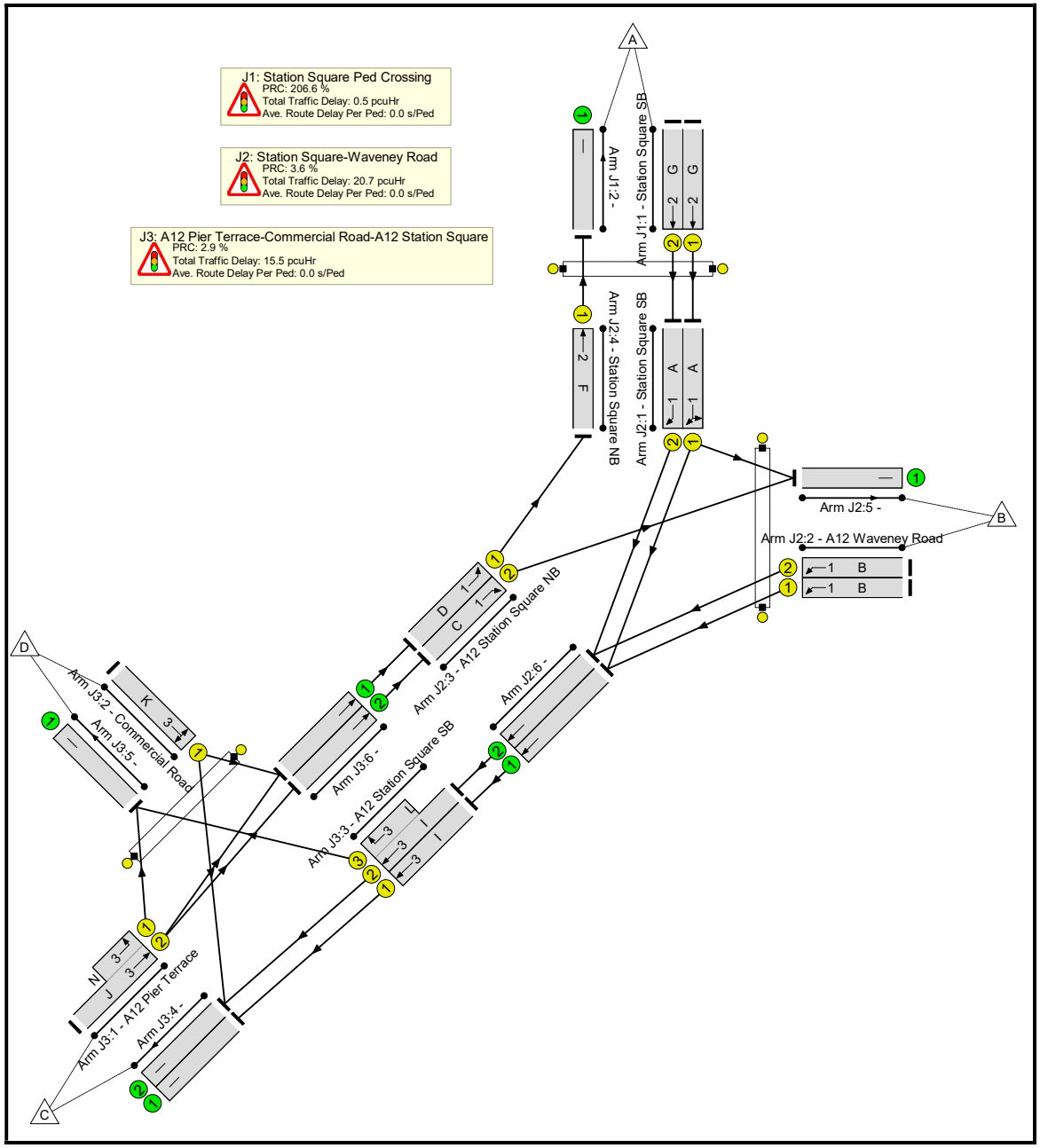
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**87.5%**
J1: Station Square Ped Crossing	-	-	**N/A**	-	-		-	-	-	-	-	-	**29.4%**
1/1	Station Square SB Ahead	U	2	N/A	G		1	105	-	282	1955	1727	16.3%
1/2	Station Square SB Ahead	U	2	N/A	G		1	105	-	507	1955	1727	29.4%
2/1		U	N/A	N/A	-		-	-	-	539	Inf	Inf	0.0%
Ped Link: P1	Station Square Ped	-	2	-	H		1	5	-	0	-	0	0.0%
J2: Station Square-Waveney Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**86.9%**
1/1	Station Square SB Left Right	U	1	N/A	A		1	38	-	282	1807	587	48.0%
1/2	Station Square SB Right	U	1	N/A	A		1	38	-	507	1795	583	86.9%
2/1	A12 Waveney Road Left	U	1	N/A	B		2	52	-	523	1772	797	65.6%
2/2	A12 Waveney Road Left	U	1	N/A	B		2	52	-	497	1796	808	61.5%
3/1	A12 Station Square NB Left	U	1	N/A	D		1	120	-	539	1844	1844	29.2%
3/2	A12 Station Square NB Right	U	1	N/A	C		2	52	-	519	1881	846	61.3%
4/1	Station Square NB Ahead	U	2	N/A	F		1	105	-	539	2015	1780	30.3%
5/1		U	N/A	N/A	-		-	-	-	545	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	779	Inf	Inf	0.0%
6/2	Ahead	U	N/A	N/A	-		-	-	-	1004	Inf	Inf	0.0%
Ped Link: P1	A12 Waveney Road Ped	-	1	-	E		1	5	-	0	-	0	0.0%

Full Input Data And Results

J3: A12 Pier Terrace-Commercial Road-A12 Station Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.5%**
1/2+1/1	A12 Pier Terrace Left Ahead	U	3	N/A	J N		1:2	73:79	-	1039	1915:1726	1143+45	87.5 : 87.5%
2/1	Commercial Road Right Left	U	3	N/A	K		2	14	-	125	1798	240	52.1%
3/1	A12 Station Square SB Ahead	U	3	N/A	I		2	79	-	779	1915	1293	60.3%
3/2+3/3	A12 Station Square SB Ahead Right	U	3	N/A	I L		2:1	79:8	-	1004	1915:1609	1203+100	77.1 : 77.1%
4/1		U	N/A	N/A	-		-	-	-	779	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	994	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	116	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	539	Inf	Inf	0.0%
6/2	Ahead	U	N/A	N/A	-		-	-	-	519	Inf	Inf	0.0%
Ped Link: P1	Commercial Road Ped	-	3	-	M		1	7	-	0	-	0	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	**-**	**-**	**0**	**0**	**0**	**23.7**	**13.1**	**0.0**	**36.8**	**-**	**-**	**-**	**-**
J1: Station Square Ped Crossing	**-**	**-**	**0**	**0**	**0**	**0.2**	**0.3**	**0.0**	**0.5**	**-**	**-**	**-**	**-**
1/1	282	282	-	-	-	0.1	0.1	-	0.2	2.2	1.3	0.1	1.4
1/2	507	507	-	-	-	0.2	0.2	-	0.4	2.6	2.5	0.2	2.7
2/1	539	539	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J2: Station Square-Waveney Road	**-**	**-**	**0**	**0**	**0**	**14.3**	**6.5**	**0.0**	**20.7**	**-**	**-**	**-**	**-**
1/1	282	282	-	-	-	2.5	0.5	-	2.9	37.3	7.4	0.5	7.9
1/2	507	507	-	-	-	5.2	3.1	-	8.3	58.8	15.8	3.1	18.8
2/1	523	523	-	-	-	2.3	0.9	-	3.3	22.4	10.0	0.9	11.0
2/2	497	497	-	-	-	2.1	0.8	-	2.9	21.3	9.2	0.8	10.0
3/1	539	539	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2
3/2	519	519	-	-	-	2.1	0.8	-	2.9	20.1	7.0	0.8	7.8
4/1	539	539	-	-	-	0.0	0.2	-	0.2	1.6	0.5	0.2	0.7
5/1	545	545	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	779	779	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1004	1004	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J3: A12 Pier Terrace-Commercial Road-A12 Station Square	**-**	**-**	**0**	**0**	**0**	**9.2**	**6.3**	**0.0**	**15.5**	**-**	**-**	**-**	**-**
1/2+1/1	1039	1039	-	-	-	5.4	3.3	-	8.7	30.3	28.4	3.3	31.8
2/1	125	125	-	-	-	1.2	0.5	-	1.7	49.0	3.1	0.5	3.7
3/1	779	779	-	-	-	0.9	0.8	-	1.7	7.8	6.0	0.8	6.8
3/2+3/3	1004	1004	-	-	-	1.7	1.7	-	3.4	12.1	3.9	1.7	5.6
4/1	779	779	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

4/2	994	994	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	116	116	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	539	539	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	519	519	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-

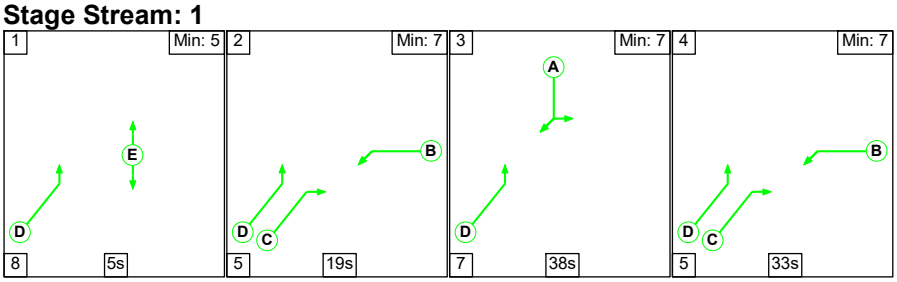
C1	Stream: 1 PRC for Signalled Lanes (%):	3.6	Total Delay for Signalled Lanes (pcuHr):	20.50	Cycle Time (s):	120
C1	Stream: 2 PRC for Signalled Lanes (%):	197.2	Total Delay for Signalled Lanes (pcuHr):	0.78	Cycle Time (s):	120
C1	Stream: 3 PRC for Signalled Lanes (%):	2.9	Total Delay for Signalled Lanes (pcuHr):	15.50	Cycle Time (s):	120
	PRC Over All Lanes (%):	2.9	Total Delay Over All Lanes(pcuHr):	36.78		

Full Input Data And Results

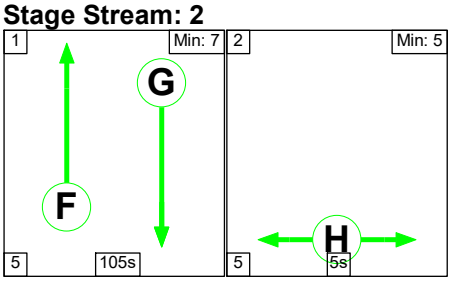
Scenario 3: '2022 DS PM' (FG3: '2022 DS PM', Plan 1: 'All Stages at All Junctions')

Stage Sequence Diagram

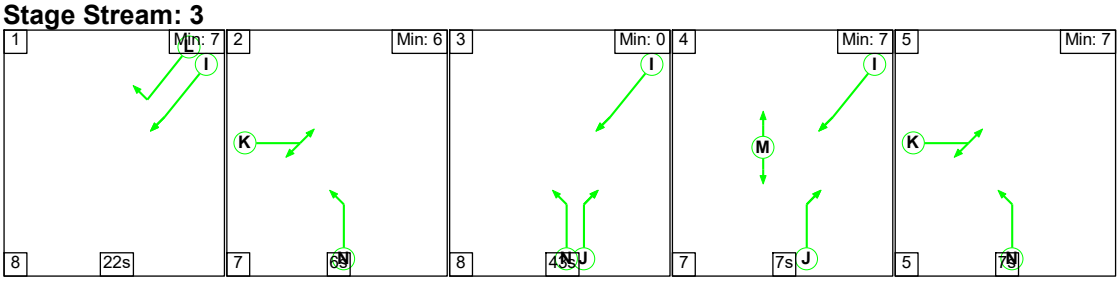
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2	3	4
Duration	5	19	38	33
Change Point	0	13	37	82

Stage Stream: 2

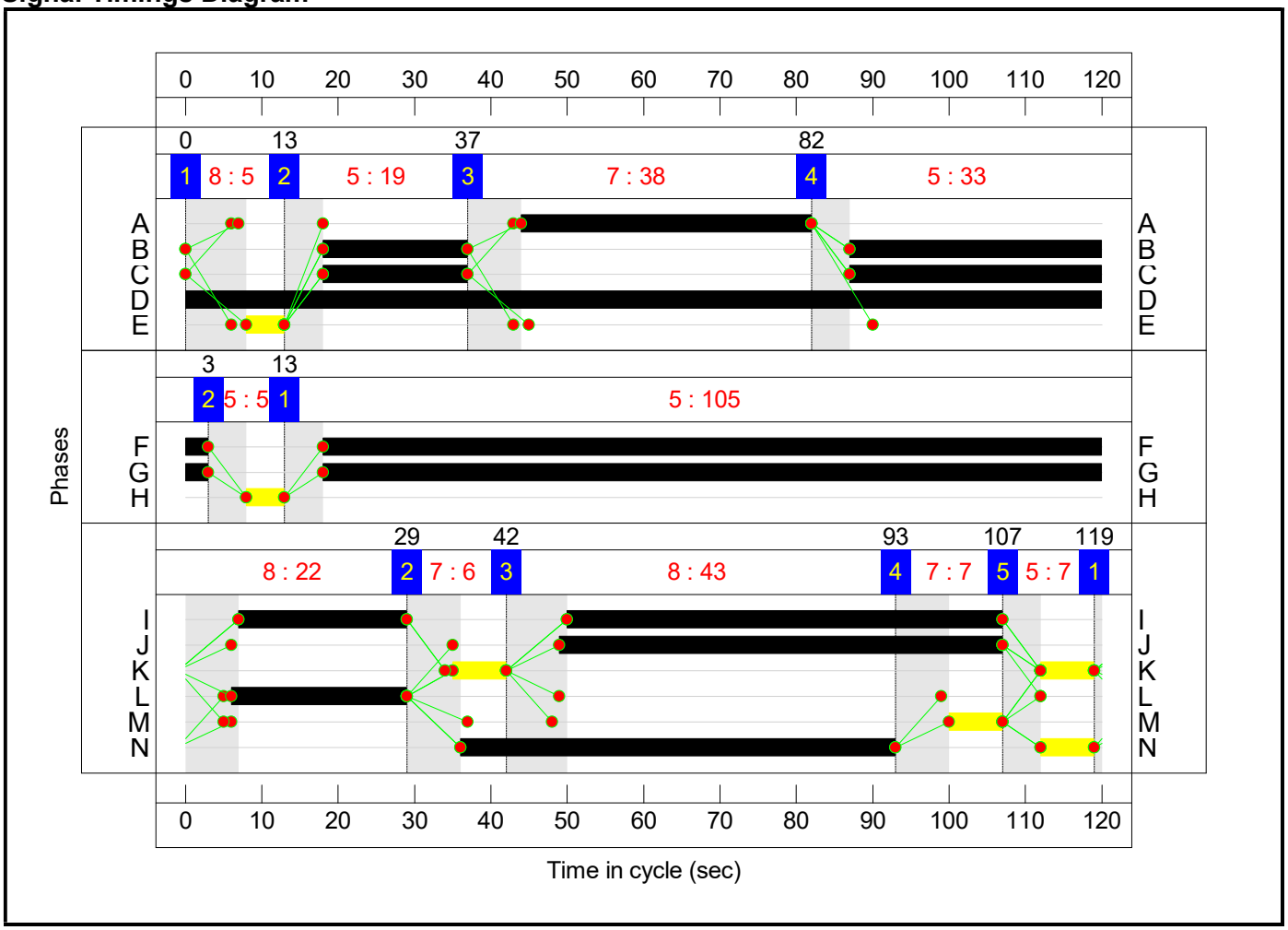
Stage	1	2
Duration	105	5
Change Point	13	3

Stage Stream: 3

Stage	1	2	3	4	5
Duration	22	6	43	7	7
Change Point	119	29	42	93	107

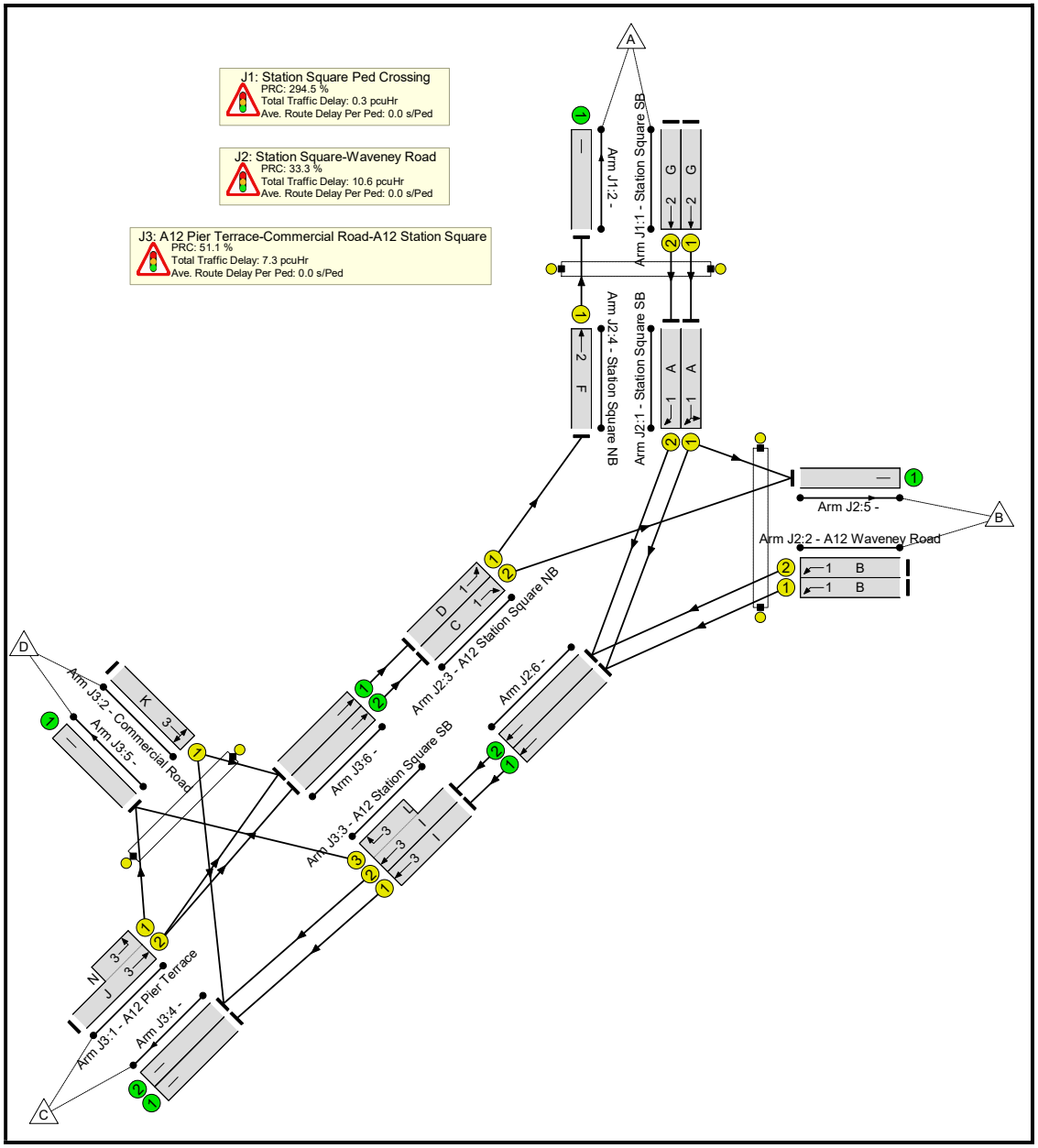
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**67.5%**
J1: Station Square Ped Crossing	-	-	**N/A**	-	-		-	-	-	-	-	-	**22.8%**
1/1	Station Square SB Ahead	U	2	N/A	G		1	105	-	33	1955	1727	1.9%
1/2	Station Square SB Ahead	U	2	N/A	G		1	105	-	394	1955	1727	22.8%
2/1		U	N/A	N/A	-		-	-	-	152	Inf	Inf	0.0%
Ped Link: P1	Station Square Ped	-	2	-	H		1	5	-	0	-	0	0.0%
J2: Station Square-Waveney Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**67.5%**
1/1	Station Square SB Left Right	U	1	N/A	A		1	38	-	33	1738	565	5.8%
1/2	Station Square SB Right	U	1	N/A	A		1	38	-	394	1795	583	67.5%
2/1	A12 Waveney Road Left	U	1	N/A	B		2	52	-	485	1772	797	60.8%
2/2	A12 Waveney Road Left	U	1	N/A	B		2	52	-	384	1796	808	47.5%
3/1	A12 Station Square NB Left	U	1	N/A	D		1	120	-	152	1844	1844	8.2%
3/2	A12 Station Square NB Right	U	1	N/A	C		2	52	-	351	1881	846	41.5%
4/1	Station Square NB Ahead	U	2	N/A	F		1	105	-	152	2015	1780	8.5%
5/1		U	N/A	N/A	-		-	-	-	384	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	485	Inf	Inf	0.0%
6/2	Ahead	U	N/A	N/A	-		-	-	-	778	Inf	Inf	0.0%
Ped Link: P1	A12 Waveney Road Ped	-	1	-	E		1	5	-	0	-	0	0.0%

Full Input Data And Results

J3: A12 Pier Terrace-Commercial Road-A12 Station Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**59.6%**
1/2+1/1	A12 Pier Terrace Left Ahead	U	3	N/A	J N		1:2	58:64	-	493	1915:1726	841+112	51.7 : 51.7%
2/1	Commercial Road Right Left	U	3	N/A	K		2	14	-	124	1795	239	51.8%
3/1	A12 Station Square SB Ahead	U	3	N/A	I		2	79	-	485	1915	1293	37.5%
3/2+3/3	A12 Station Square SB Ahead Right	U	3	N/A	I L		2:1	79:23	-	778	1915:1609	1209+97	59.6 : 59.6%
4/1		U	N/A	N/A	-		-	-	-	485	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	776	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	116	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	152	Inf	Inf	0.0%
6/2	Ahead	U	N/A	N/A	-		-	-	-	351	Inf	Inf	0.0%
Ped Link: P1	Commercial Road Ped	-	3	-	M		1	7	-	0	-	0	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	**-**	**-**	**0**	**0**	**0**	**13.2**	**5.0**	**0.0**	**18.1**	**-**	**-**	**-**	**-**
J1: Station Square Ped Crossing	**-**	**-**	**0**	**0**	**0**	**0.1**	**0.2**	**0.0**	**0.3**	**-**	**-**	**-**	**-**
1/1	33	33	-	-	-	0.0	0.0	-	0.0	1.9	0.1	0.0	0.1
1/2	394	394	-	-	-	0.1	0.1	-	0.3	2.4	1.9	0.1	2.0
2/1	152	152	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J2: Station Square-Waveney Road	**-**	**-**	**0**	**0**	**0**	**7.9**	**2.7**	**0.0**	**10.6**	**-**	**-**	**-**	**-**
1/1	33	33	-	-	-	0.3	0.0	-	0.3	31.1	0.7	0.0	0.7
1/2	394	394	-	-	-	3.7	1.0	-	4.8	43.4	11.3	1.0	12.3
2/1	485	485	-	-	-	2.1	0.8	-	2.9	21.2	9.0	0.8	9.8
2/2	384	384	-	-	-	1.5	0.5	-	2.0	18.5	6.6	0.5	7.1
3/1	152	152	-	-	-	0.0	0.0	-	0.0	1.1	0.0	0.0	0.0
3/2	351	351	-	-	-	0.3	0.4	-	0.6	6.4	2.2	0.4	2.6
4/1	152	152	-	-	-	0.0	0.0	-	0.1	1.7	0.4	0.0	0.4
5/1	384	384	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	485	485	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	778	778	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J3: A12 Pier Terrace-Commercial Road-A12 Station Square	**-**	**-**	**0**	**0**	**0**	**5.2**	**2.1**	**0.0**	**7.3**	**-**	**-**	**-**	**-**
1/2+1/1	493	493	-	-	-	2.7	0.5	-	3.2	23.3	10.4	0.5	11.0
2/1	124	124	-	-	-	0.9	0.5	-	1.5	42.3	2.5	0.5	3.1
3/1	485	485	-	-	-	0.4	0.3	-	0.7	4.9	3.3	0.3	3.6
3/2+3/3	778	778	-	-	-	1.2	0.7	-	2.0	9.1	8.6	0.7	9.3
4/1	485	485	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

4/2	776	776	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	116	116	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	152	152	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	351	351	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-

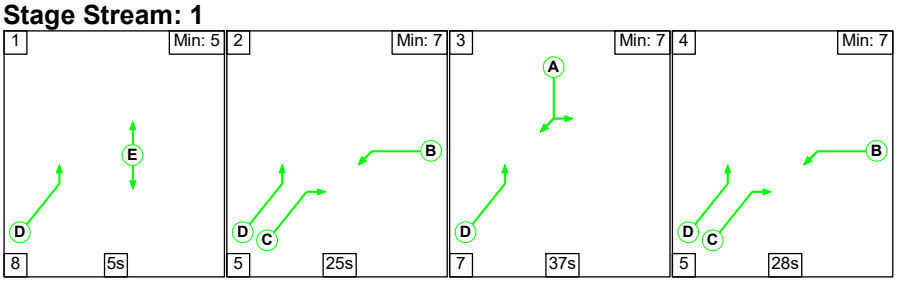
C1	Stream: 1 PRC for Signalled Lanes (%):	33.3	Total Delay for Signalled Lanes (pcuHr):	10.53	Cycle Time (s):	120
C1	Stream: 2 PRC for Signalled Lanes (%):	294.5	Total Delay for Signalled Lanes (pcuHr):	0.35	Cycle Time (s):	120
C1	Stream: 3 PRC for Signalled Lanes (%):	51.1	Total Delay for Signalled Lanes (pcuHr):	7.27	Cycle Time (s):	120
	PRC Over All Lanes (%):	33.3	Total Delay Over All Lanes(pcuHr):	18.15		

Full Input Data And Results

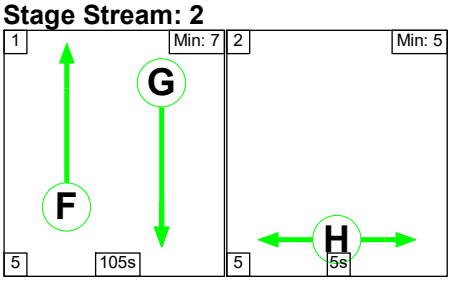
Scenario 4: '2037 DM PM' (FG4: '2037 DM PM', Plan 1: 'All Stages at All Junctions')

Stage Sequence Diagram

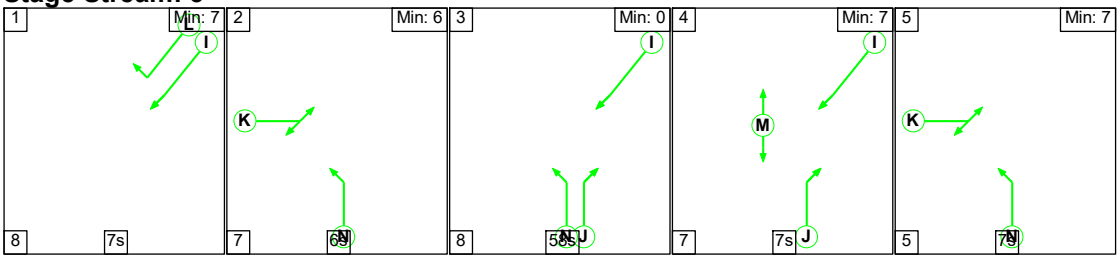
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2	3	4
Duration	5	25	37	28
Change Point	0	13	43	87

Stage Stream: 2

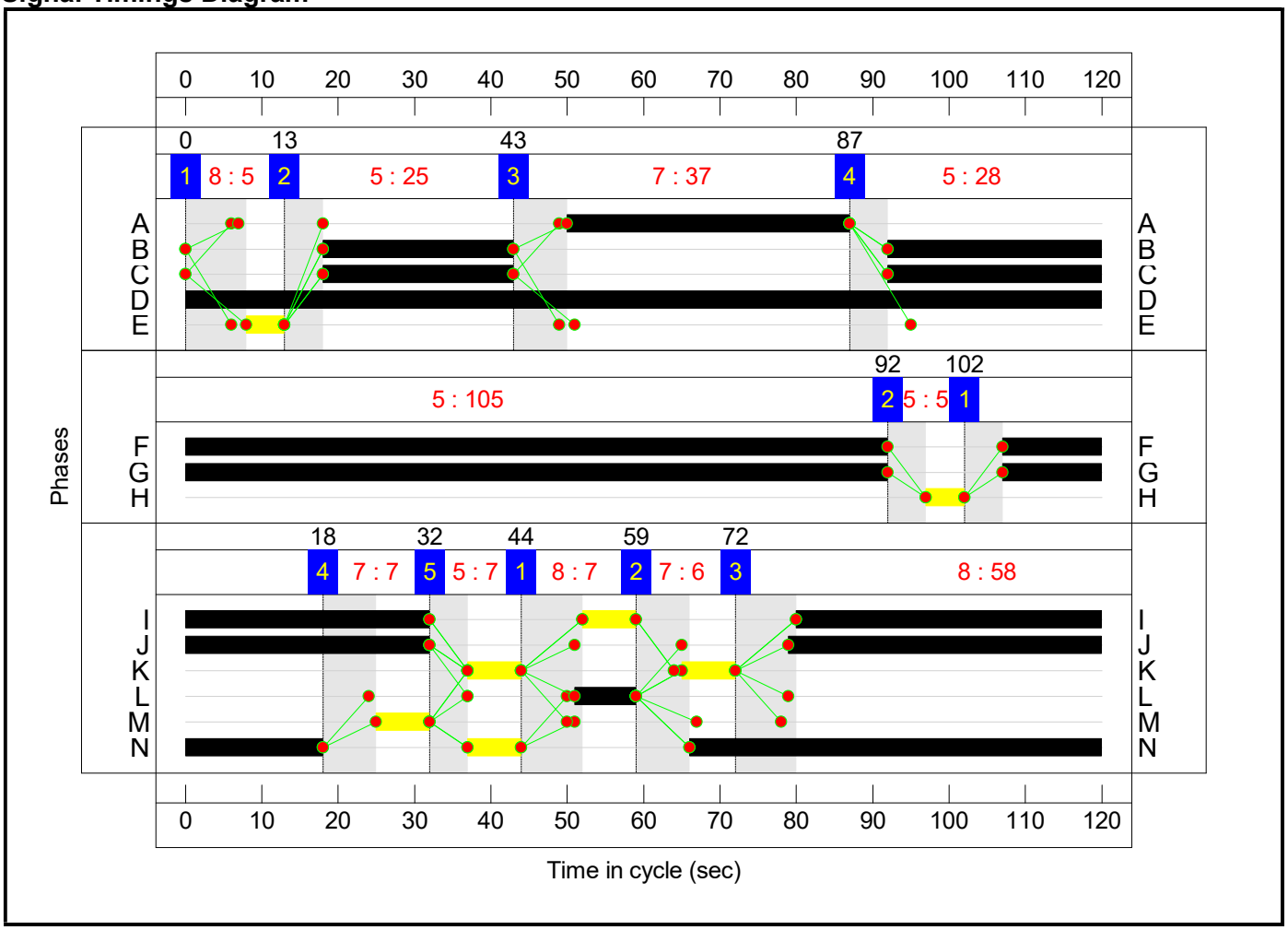
Stage	1	2
Duration	105	5
Change Point	102	92

Stage Stream: 3

Stage	1	2	3	4	5
Duration	7	6	58	7	7
Change Point	44	59	72	18	32

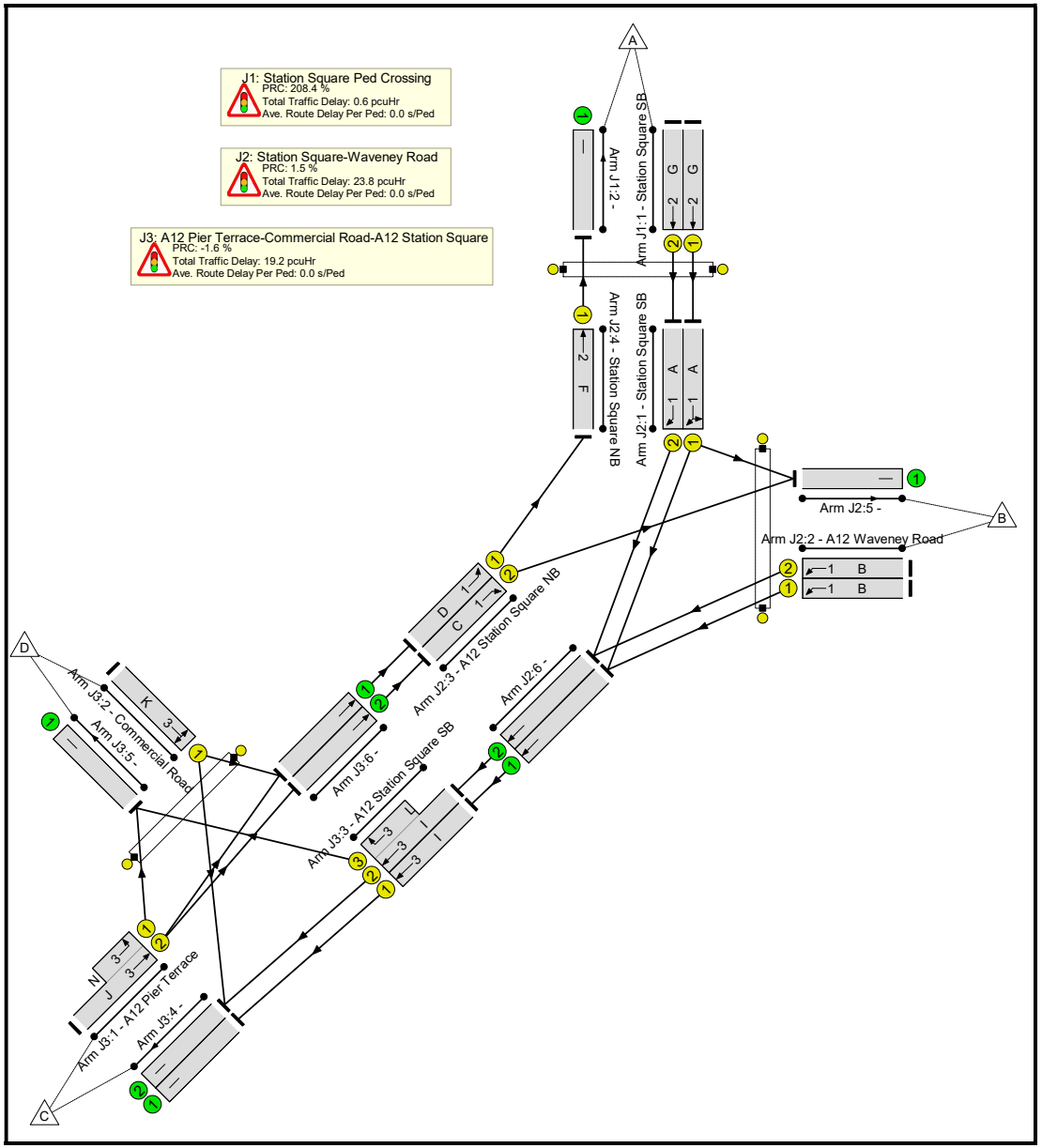
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**91.4%**
J1: Station Square Ped Crossing	-	-	**N/A**	-	-		-	-	-	-	-	-	**29.2%**
1/1	Station Square SB Ahead	U	2	N/A	G		1	105	-	345	1955	1727	20.0%
1/2	Station Square SB Ahead	U	2	N/A	G		1	105	-	504	1955	1727	29.2%
2/1		U	N/A	N/A	-		-	-	-	580	Inf	Inf	0.0%
Ped Link: P1	Station Square Ped	-	2	-	H		1	5	-	0	-	0	0.0%
J2: Station Square-Waveney Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**88.7%**
1/1	Station Square SB Left Right	U	1	N/A	A		1	37	-	345	1810	573	60.2%
1/2	Station Square SB Right	U	1	N/A	A		1	37	-	504	1795	568	88.7%
2/1	A12 Waveney Road Left	U	1	N/A	B		2	53	-	578	1772	812	71.2%
2/2	A12 Waveney Road Left	U	1	N/A	B		2	53	-	557	1796	823	67.7%
3/1	A12 Station Square NB Left	U	1	N/A	D		1	120	-	580	1844	1844	31.5%
3/2	A12 Station Square NB Right	U	1	N/A	C		2	53	-	532	1881	862	61.7%
4/1	Station Square NB Ahead	U	2	N/A	F		1	105	-	580	2015	1780	32.6%
5/1		U	N/A	N/A	-		-	-	-	549	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	906	Inf	Inf	0.0%
6/2	Ahead	U	N/A	N/A	-		-	-	-	1061	Inf	Inf	0.0%
Ped Link: P1	A12 Waveney Road Ped	-	1	-	E		1	5	-	0	-	0	0.0%

Full Input Data And Results

J3: A12 Pier Terrace-Commercial Road-A12 Station Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.4%**
1/2+1/1	A12 Pier Terrace Left Ahead	U	3	N/A	J N		1:2	73:79	-	1086	1915:1726	1136+53	91.4 : 91.4%
2/1	Commercial Road Right Left	U	3	N/A	K		2	14	-	138	1795	239	57.7%
3/1	A12 Station Square SB Ahead	U	3	N/A	I		2	79	-	906	1915	1293	70.1%
3/2+3/3	A12 Station Square SB Ahead Right	U	3	N/A	I L		2:1	79:8	-	1061	1915:1609	1205+97	81.5 : 81.5%
4/1		U	N/A	N/A	-		-	-	-	906	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1046	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	127	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	580	Inf	Inf	0.0%
6/2	Ahead	U	N/A	N/A	-		-	-	-	532	Inf	Inf	0.0%
Ped Link: P1	Commercial Road Ped	-	3	-	M		1	7	-	0	-	0	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	**-**	**-**	**0**	**0**	**0**	**26.5**	**17.0**	**0.0**	**43.5**	**-**	**-**	**-**	**-**
J1: Station Square Ped Crossing	**-**	**-**	**0**	**0**	**0**	**0.2**	**0.3**	**0.0**	**0.6**	**-**	**-**	**-**	**-**
1/1	345	345	-	-	-	0.1	0.1	-	0.2	2.3	1.5	0.1	1.7
1/2	504	504	-	-	-	0.2	0.2	-	0.4	2.6	2.5	0.2	2.7
2/1	580	580	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J2: Station Square-Waveney Road	**-**	**-**	**0**	**0**	**0**	**16.0**	**7.8**	**0.0**	**23.8**	**-**	**-**	**-**	**-**
1/1	345	345	-	-	-	3.2	0.8	-	4.0	41.5	9.7	0.8	10.4
1/2	504	504	-	-	-	5.3	3.5	-	8.8	63.0	16.0	3.5	19.5
2/1	578	578	-	-	-	2.6	1.2	-	3.8	23.6	11.4	1.2	12.6
2/2	557	557	-	-	-	2.4	1.0	-	3.5	22.4	10.7	1.0	11.7
3/1	580	580	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2
3/2	532	532	-	-	-	2.4	0.8	-	3.2	21.8	7.4	0.8	8.2
4/1	580	580	-	-	-	0.0	0.2	-	0.3	1.7	0.6	0.2	0.9
5/1	549	549	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	906	906	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1061	1061	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J3: A12 Pier Terrace-Commercial Road-A12 Station Square	**-**	**-**	**0**	**0**	**0**	**10.3**	**8.9**	**0.0**	**19.2**	**-**	**-**	**-**	**-**
1/2+1/1	1086	1086	-	-	-	6.0	4.9	-	10.8	35.8	31.5	4.9	36.3
2/1	138	138	-	-	-	1.3	0.7	-	2.0	51.2	3.4	0.7	4.1
3/1	906	906	-	-	-	1.1	1.2	-	2.3	9.2	9.6	1.2	10.8
3/2+3/3	1061	1061	-	-	-	1.9	2.2	-	4.1	13.9	5.6	2.2	7.7
4/1	906	906	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

4/2	1046	1046	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	127	127	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	580	580	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	532	532	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-

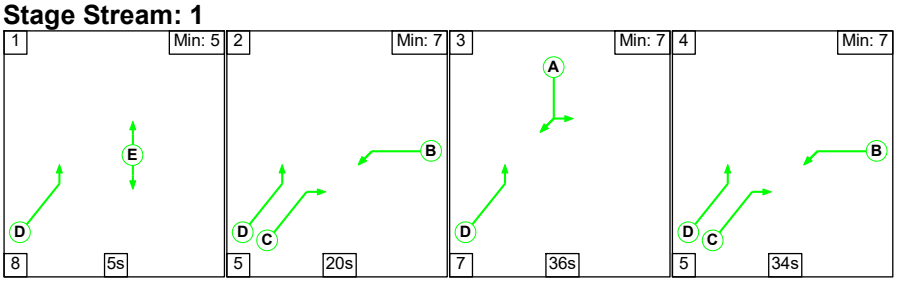
C1	Stream: 1 PRC for Signalled Lanes (%):	1.5	Total Delay for Signalled Lanes (pcuHr):	23.50	Cycle Time (s):	120
C1	Stream: 2 PRC for Signalled Lanes (%):	176.2	Total Delay for Signalled Lanes (pcuHr):	0.86	Cycle Time (s):	120
C1	Stream: 3 PRC for Signalled Lanes (%):	-1.6	Total Delay for Signalled Lanes (pcuHr):	19.17	Cycle Time (s):	120
	PRC Over All Lanes (%):	-1.6	Total Delay Over All Lanes(pcuHr):	43.53		

Full Input Data And Results

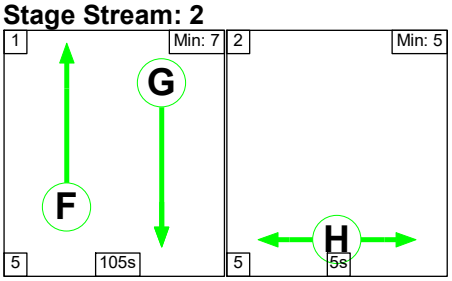
Scenario 5: '2037 DS PM' (FG5: '2037 DS PM', Plan 1: 'All Stages at All Junctions')

Stage Sequence Diagram

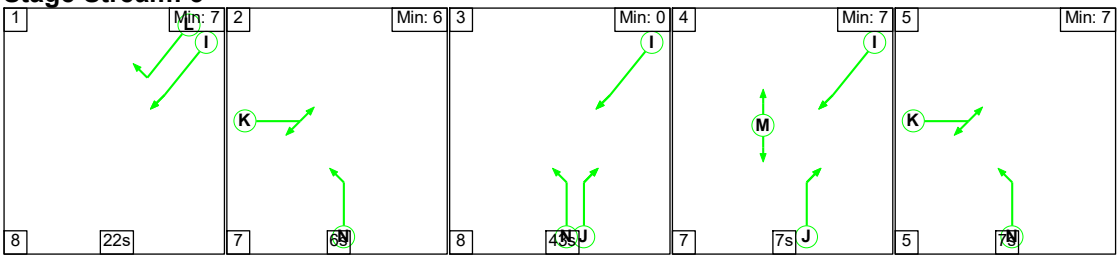
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2	3	4
Duration	5	20	36	34
Change Point	0	13	38	81

Stage Stream: 2

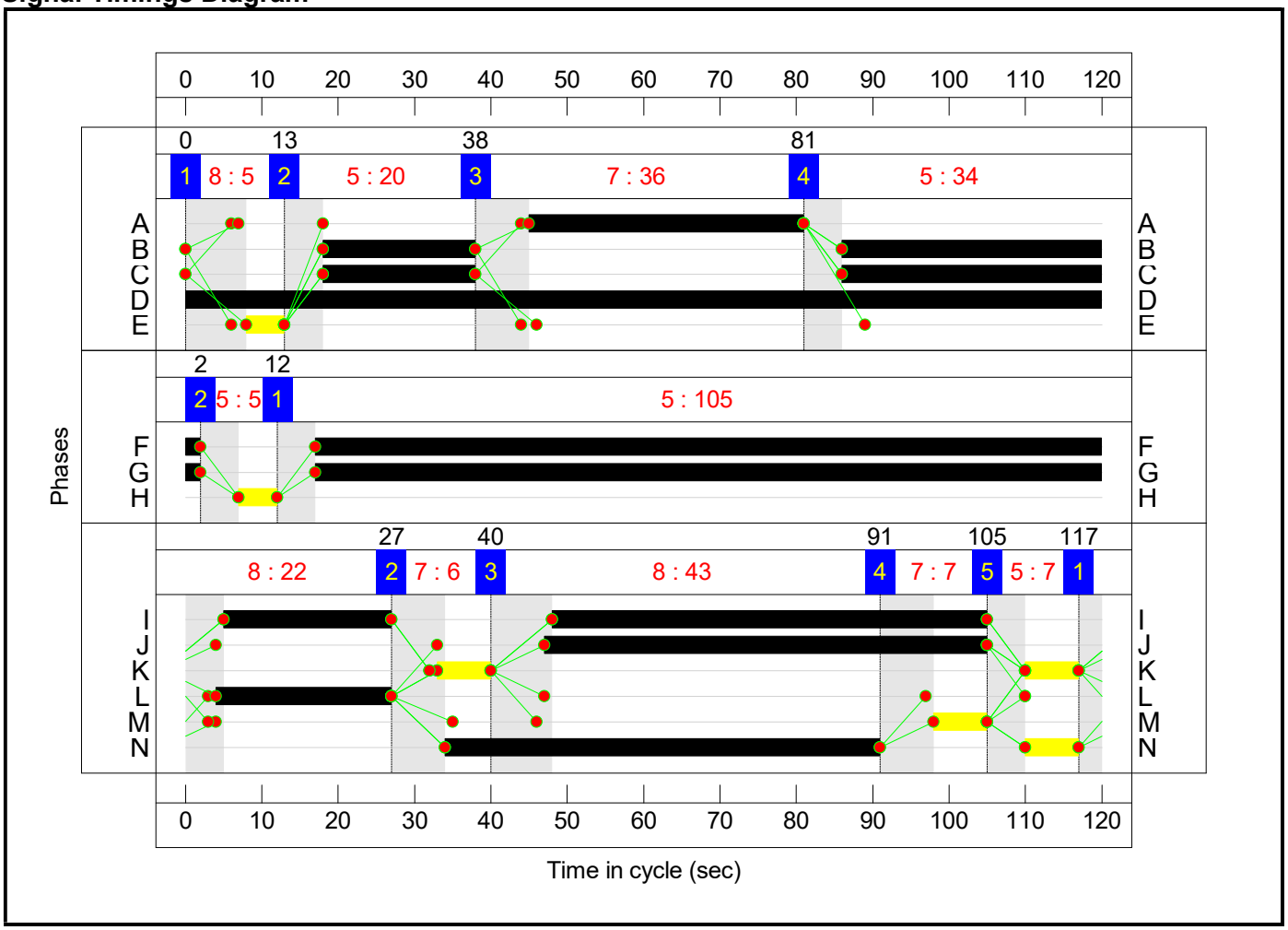
Stage	1	2
Duration	105	5
Change Point	12	2

Stage Stream: 3

Stage	1	2	3	4	5
Duration	22	6	43	7	7
Change Point	117	27	40	91	105

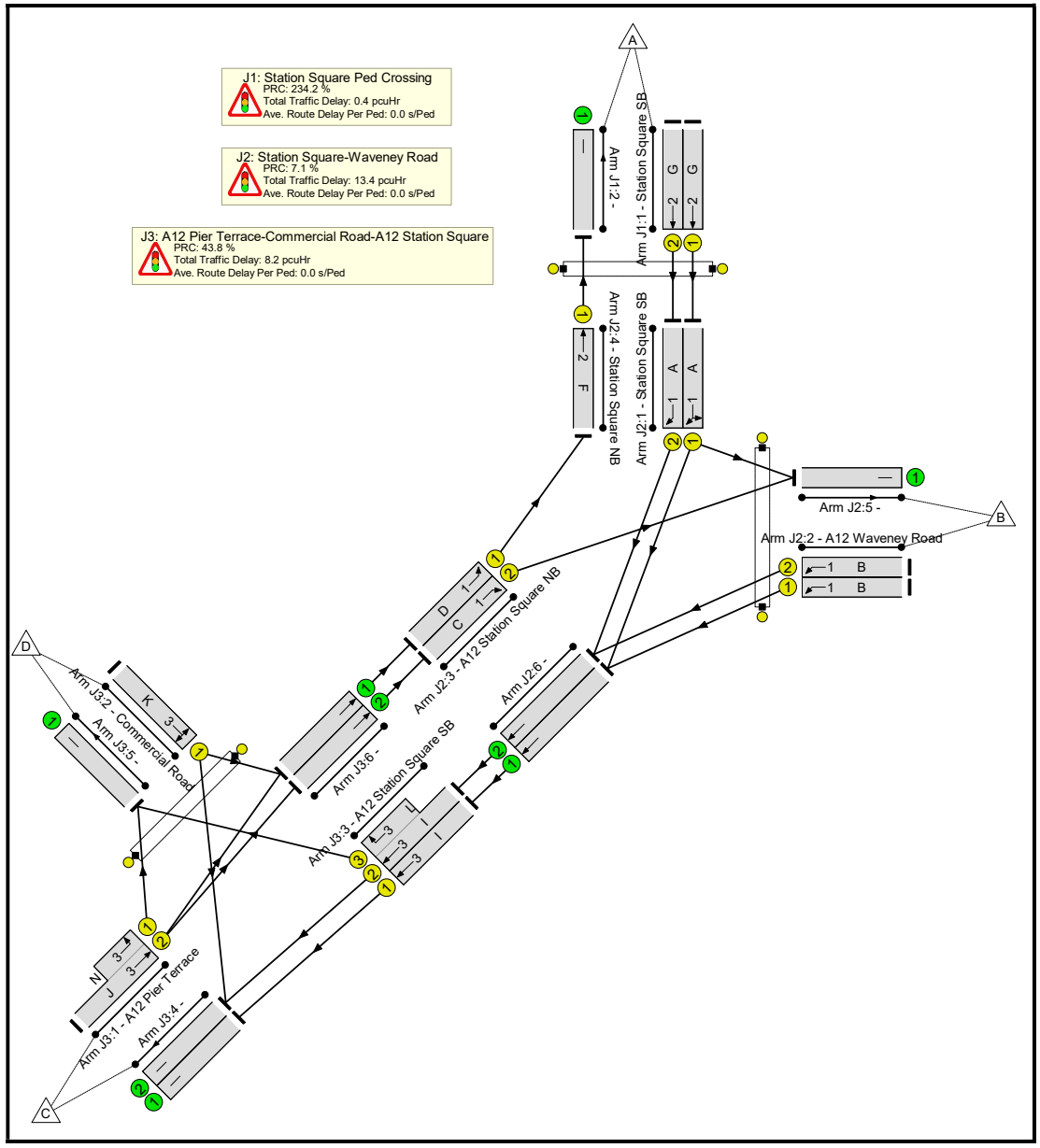
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**84.0%**
J1: Station Square Ped Crossing	-	-	**N/A**	-	-		-	-	-	-	-	-	**26.9%**
1/1	Station Square SB Ahead	U	2	N/A	G		1	105	-	197	1955	1727	11.4%
1/2	Station Square SB Ahead	U	2	N/A	G		1	105	-	465	1955	1727	26.9%
2/1		U	N/A	N/A	-		-	-	-	165	Inf	Inf	0.0%
Ped Link: P1	Station Square Ped	-	2	-	H		1	5	-	0	-	0	0.0%
J2: Station Square-Waveney Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**84.0%**
1/1	Station Square SB Left Right	U	1	N/A	A		1	36	-	197	1808	557	35.3%
1/2	Station Square SB Right	U	1	N/A	A		1	36	-	465	1795	553	84.0%
2/1	A12 Waveney Road Left	U	1	N/A	B		2	54	-	430	1772	827	52.0%
2/2	A12 Waveney Road Left	U	1	N/A	B		2	54	-	265	1796	838	31.6%
3/1	A12 Station Square NB Left	U	1	N/A	D		1	120	-	165	1844	1844	8.9%
3/2	A12 Station Square NB Right	U	1	N/A	C		2	54	-	363	1881	878	41.4%
4/1	Station Square NB Ahead	U	2	N/A	F		1	105	-	165	2015	1780	9.3%
5/1		U	N/A	N/A	-		-	-	-	377	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	613	Inf	Inf	0.0%
6/2	Ahead	U	N/A	N/A	-		-	-	-	730	Inf	Inf	0.0%
Ped Link: P1	A12 Waveney Road Ped	-	1	-	E		1	5	-	0	-	0	0.0%

Full Input Data And Results

J3: A12 Pier Terrace-Commercial Road-A12 Station Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**62.6%**
1/2+1/1	A12 Pier Terrace Left Ahead	U	3	N/A	J N		1:2	58:64	-	498	1915:1726	873+78	52.3 : 52.3%
2/1	Commercial Road Right Left	U	3	N/A	K		2	14	-	150	1798	240	62.6%
3/1	A12 Station Square SB Ahead	U	3	N/A	I		2	79	-	613	1915	1293	47.4%
3/2+3/3	A12 Station Square SB Ahead Right	U	3	N/A	I L		2:1	79:23	-	730	1915:1609	1227+77	56.0 : 56.0%
4/1		U	N/A	N/A	-		-	-	-	613	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	766	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	84	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	165	Inf	Inf	0.0%
6/2	Ahead	U	N/A	N/A	-		-	-	-	363	Inf	Inf	0.0%
Ped Link: P1	Commercial Road Ped	-	3	-	M		1	7	-	0	-	0	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	**-**	**-**	**0**	**0**	**0**	**15.4**	**6.7**	**0.0**	**22.1**	**-**	**-**	**-**	**-**
J1: Station Square Ped Crossing	**-**	**-**	**0**	**0**	**0**	**0.2**	**0.2**	**0.0**	**0.4**	**-**	**-**	**-**	**-**
1/1	197	197	-	-	-	0.1	0.1	-	0.1	2.1	0.8	0.1	0.9
1/2	465	465	-	-	-	0.1	0.2	-	0.3	2.5	2.3	0.2	2.5
2/1	165	165	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J2: Station Square-Waveney Road	**-**	**-**	**0**	**0**	**0**	**9.4**	**4.0**	**0.0**	**13.4**	**-**	**-**	**-**	**-**
1/1	197	197	-	-	-	1.7	0.3	-	2.0	36.7	4.9	0.3	5.2
1/2	465	465	-	-	-	4.9	2.5	-	7.4	56.9	14.5	2.5	17.0
2/1	430	430	-	-	-	1.6	0.5	-	2.2	18.3	7.4	0.5	7.9
2/2	265	265	-	-	-	0.9	0.2	-	1.1	15.4	4.0	0.2	4.3
3/1	165	165	-	-	-	0.0	0.0	-	0.0	1.1	0.0	0.0	0.0
3/2	363	363	-	-	-	0.3	0.4	-	0.6	6.2	2.7	0.4	3.1
4/1	165	165	-	-	-	0.0	0.1	-	0.1	1.7	0.4	0.1	0.5
5/1	377	377	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	613	613	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	730	730	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J3: A12 Pier Terrace-Commercial Road-A12 Station Square	**-**	**-**	**0**	**0**	**0**	**5.8**	**2.5**	**0.0**	**8.2**	**-**	**-**	**-**	**-**
1/2+1/1	498	498	-	-	-	2.8	0.5	-	3.3	23.8	10.9	0.5	11.4
2/1	150	150	-	-	-	1.1	0.8	-	2.0	46.9	3.1	0.8	3.9
3/1	613	613	-	-	-	0.5	0.5	-	0.9	5.5	5.9	0.5	6.4
3/2+3/3	730	730	-	-	-	1.4	0.6	-	2.0	10.0	9.3	0.6	10.0
4/1	613	613	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

4/2	766	766	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	84	84	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	165	165	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	363	363	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-

C1	Stream: 1 PRC for Signalled Lanes (%):	7.1	Total Delay for Signalled Lanes (pcuHr):	13.35	Cycle Time (s):	120
C1	Stream: 2 PRC for Signalled Lanes (%):	234.2	Total Delay for Signalled Lanes (pcuHr):	0.52	Cycle Time (s):	120
C1	Stream: 3 PRC for Signalled Lanes (%):	43.8	Total Delay for Signalled Lanes (pcuHr):	8.21	Cycle Time (s):	120
	PRC Over All Lanes (%):	7.1	Total Delay Over All Lanes(pcuHr):	22.07		

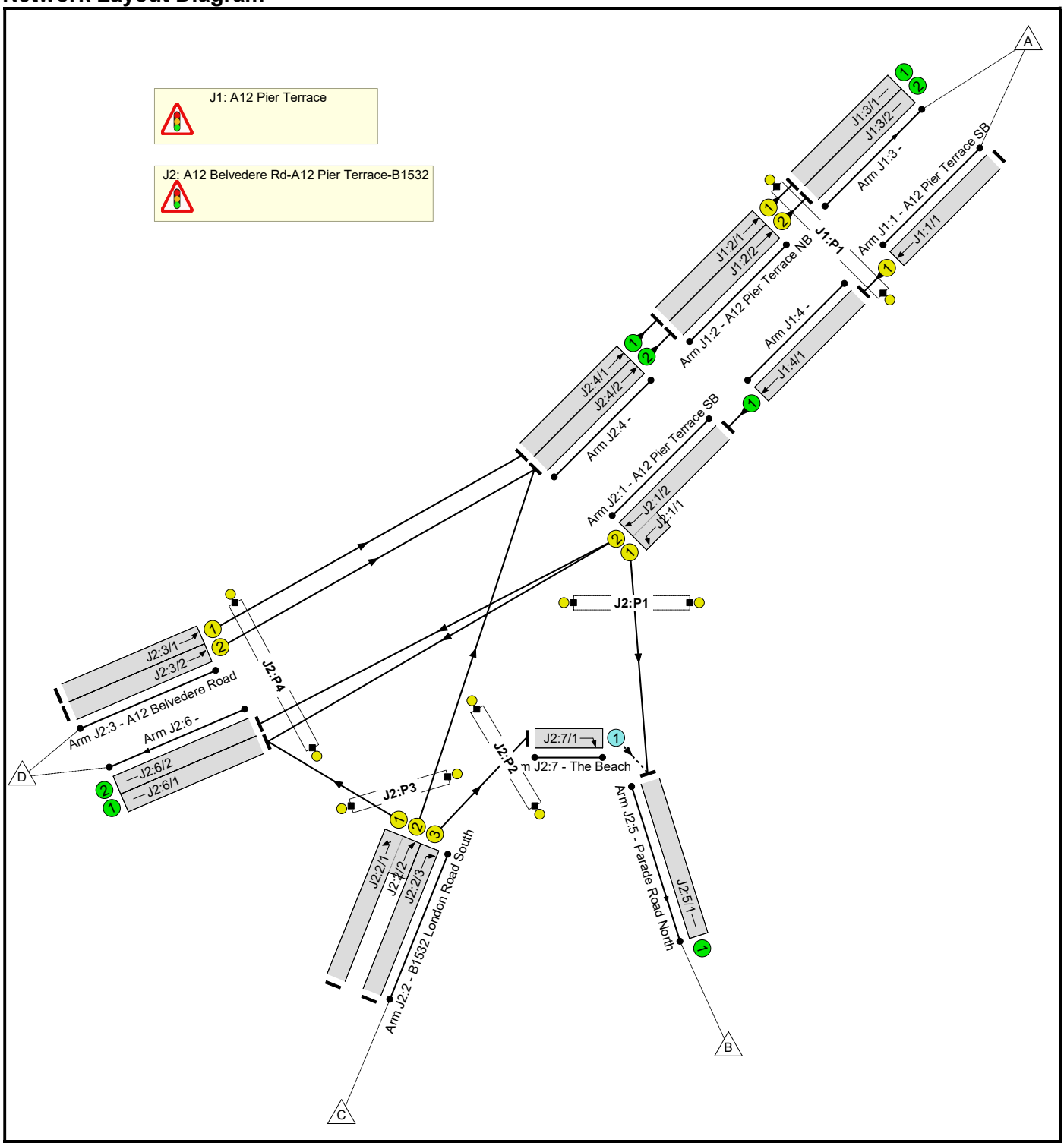
Full Input Data And Results

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	04 A12 Pier Terrace-London Rd sig AM v4 - 2018-08-13.lsg3x
Author:	
Company:	
Address:	

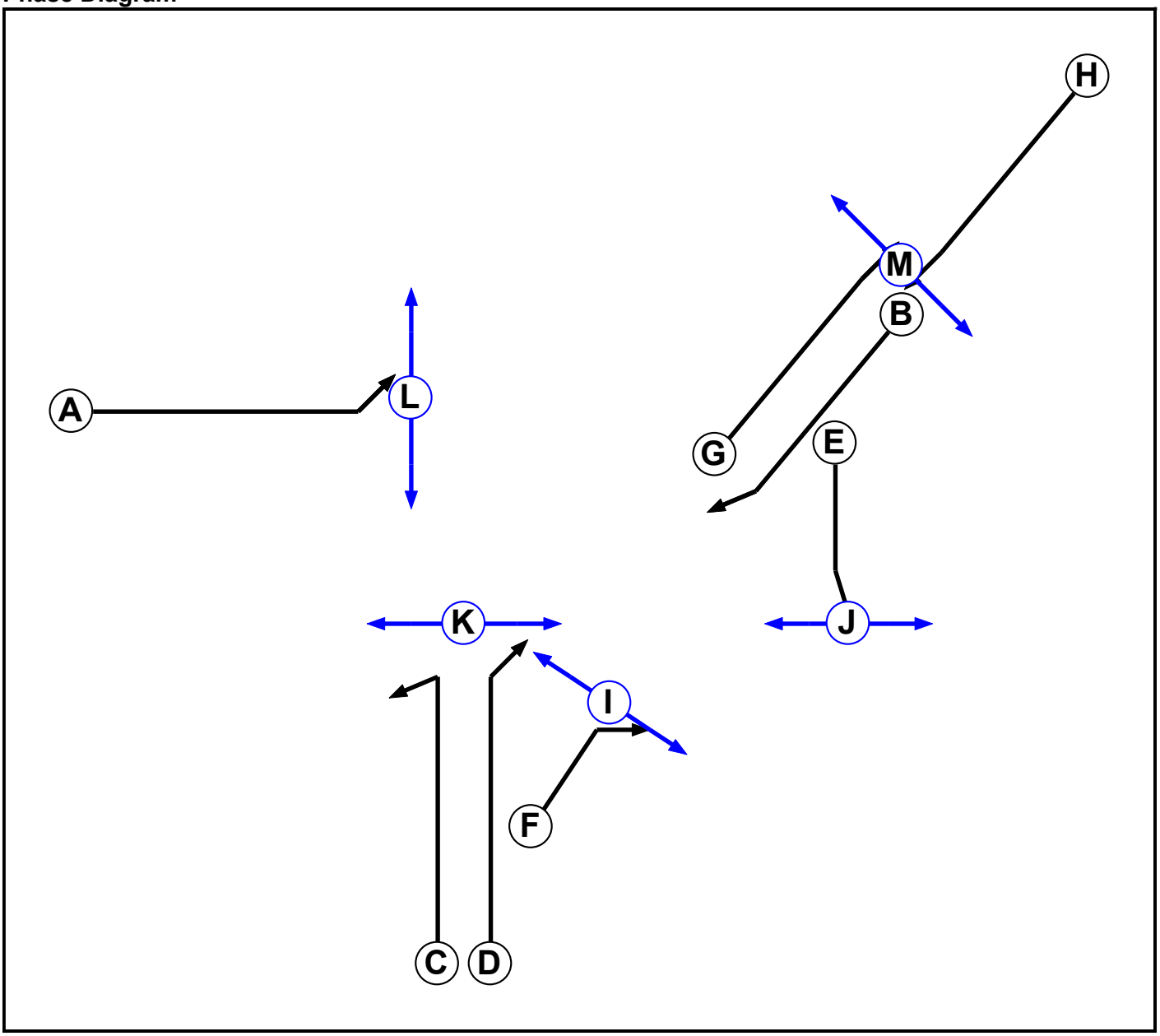
Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	1		7	7
D	Traffic	1		7	7
E	Traffic	1		7	7
F	Traffic	1		7	7
G	Traffic	2		7	7
H	Traffic	2		7	7
I	Pedestrian	1		5	5
J	Pedestrian	1		5	5
K	Pedestrian	1		5	5
L	Pedestrian	1		5	5
M	Pedestrian	2		5	5

Phase Intergreens Matrix

		Starting Phase												
		A	B	C	D	E	F	G	H	I	J	K	L	M
Terminating Phase	A		-	-	5	-	-	-	-	-	-	-	5	-
	B	-		5	5	-	-	-	-	-	-	-	9	-
	C	-	5		-	-	-	-	-	-	-	5	10	-
	D	5	6	-		-	-	-	-	-	-	5	10	-
	E	-	-	-	-		5	-	-	-	5	-	-	-
	F	-	-	-	-	5		-	-	5	-	-	-	-
	G	-	-	-	-	-	-		-	-	-	-	-	5
	H	-	-	-	-	-	-	-		-	-	-	-	5
	I	-	-	-	-	-	5	-	-		-	-	-	-
	J	-	-	-	-	5	-	-	-	-		-	-	-
	K	-	-	5	5	-	-	-	-	-	-		-	-
	L	5	5	5	5	-	-	-	-	-	-	-		-
	M	-	-	-	-	-	-	5	5	-	-	-	-	

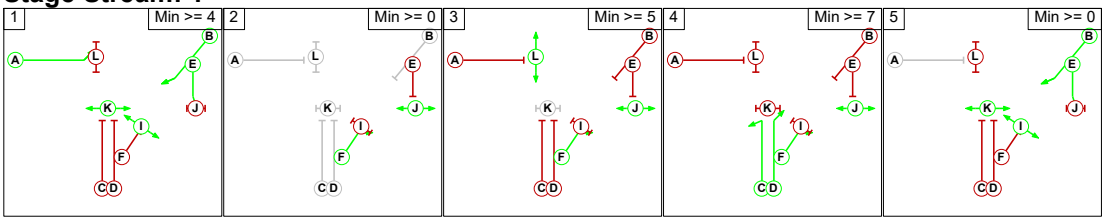
Phases in Stage

Stream	Stage No.	Phases in Stage
1	1	A B E I K
1	2	F J
1	3	F J L
1	4	C D F J
1	5	B E I K
2	1	G H
2	2	M

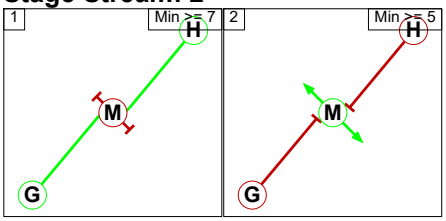
Full Input Data And Results

Stage Diagram

Stage Stream: 1



Stage Stream: 2



Phase Delays

Stage Stream: 1

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Stage Stream: 2

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

Stage Stream: 1

		To Stage				
		1	2	3	4	5
From Stage	1		5	9	5	0
	2	5		0	2	5
	3	5	0		5	5
	4	6	0	10		6
	5	2	5	9	5	

Stage Stream: 2

		To Stage	
		1	2
From Stage	1		5
	2	5	

Full Input Data And Results

Give-Way Lane Input Data

Junction: J1: A12 Pier Terrace
There are no Opposed Lanes in this Junction

Junction: J2: A12 Belvedere Rd-A12 Pier Terrace-B1532											
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)**
J2:7/1 (The Beach)	J2:5/1 (Right)	1439	0	J2:5/1	1.09	All	-	-	-	-	-

Full Input Data And Results

Lane Input Data

Junction: J1: A12 Pier Terrace												
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)**
J1:1/1 (A12 Pier Terrace SB)	U	H	2	3	34.8	Geom	-	3.80	0.00	Y	Arm J1:4 Ahead	Inf
J1:2/1 (A12 Pier Terrace NB)	U	G	2	3	8.7	Geom	-	3.80	0.00	Y	Arm J1:3 Ahead	Inf
J1:2/2 (A12 Pier Terrace NB)	U	G	2	3	8.7	Geom	-	3.80	0.00	Y	Arm J1:3 Ahead	Inf
J1:3/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:3/2	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:4/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Junction: J2: A12 Belvedere Rd-A12 Pier Terrace-B1532												
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)**
J2:1/1 (A12 Pier Terrace SB)	U	E	2	3	2.6	Geom	-	5.00	0.00	Y	Arm J2:5 Left	Inf
J2:1/2 (A12 Pier Terrace SB)	U	B	2	3	8.7	Geom	-	3.80	0.00	Y	Arm J2:6 Ahead	Inf
J2:2/1 (B1532 London Road South)	U	C	2	3	60.0	Geom	-	4.10	0.00	Y	Arm J2:6 Left	17.30
J2:2/2 (B1532 London Road South)	U	D	2	3	3.0	Geom	-	4.10	0.00	Y	Arm J2:4 Ahead	12.10
J2:2/3 (B1532 London Road South)	U	F	2	3	60.0	Geom	-	5.00	0.00	Y	Arm J2:7 Right	Inf
J2:3/1 (A12 Belvedere Road)	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J2:4 Ahead	Inf
J2:3/2 (A12 Belvedere Road)	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J2:4 Ahead	Inf
J2:4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:4/2	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:5/1 (Parade Road North)	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:6/2	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:7/1 (The Beach)	O		2	3	1.7	Geom	-	5.00	0.00	Y	Arm J2:5 Right	Inf

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'Base 2016 AM'	08:00	09:00	01:00	
2: '2022 DM AM'	08:00	09:00	01:00	
3: '2022 DS AM'	08:00	09:00	01:00	
4: '2037 DM AM'	08:00	09:00	01:00	
5: '2037 DS AM'	08:00	09:00	01:00	

Scenario 1: 'Base 2016 AM' (FG1: 'Base 2016 AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	361	0	451	812
	B	0	0	0	0	0
	C	308	104	0	15	427
	D	1129	0	0	0	1129
	Tot.	1437	465	0	466	2368

Traffic Lane Flows

Lane	Scenario 1: Base 2016 AM
Junction: J1: A12 Pier Terrace	
J1:1/1	812
J1:2/1	575
J1:2/2	862
J1:3/1	575
J1:3/2	862
J1:4/1	812
Junction: J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	
J2:1/1 (short)	361
J2:1/2 (with short)	812(In) 451(Out)
J2:2/1 (with short)	323(In) 15(Out)
J2:2/2 (short)	308
J2:2/3	104
J2:3/1	575
J2:3/2	554
J2:4/1	575
J2:4/2	862
J2:5/1	465
J2:6/1	240
J2:6/2	226
J2:7/1	104

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 Pier Terrace								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (A12 Pier Terrace SB)	3.80	0.00	Y	Arm J1:4 Ahead	Inf	100.0 %	1995	1995
J1:2/1 (A12 Pier Terrace NB)	3.80	0.00	Y	Arm J1:3 Ahead	Inf	100.0 %	1995	1995
J1:2/2 (A12 Pier Terrace NB)	3.80	0.00	Y	Arm J1:3 Ahead	Inf	100.0 %	1995	1995
J1:3/1	Infinite Saturation Flow						Inf	Inf
J1:3/2	Infinite Saturation Flow						Inf	Inf
J1:4/1	Infinite Saturation Flow						Inf	Inf

Junction: J2: A12 Belvedere Rd-A12 Pier Terrace-B1532								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (A12 Pier Terrace SB)	5.00	0.00	Y	Arm J2:5 Left	Inf	100.0 %	2115	2115
J2:1/2 (A12 Pier Terrace SB)	3.80	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1995	1995
J2:2/1 (B1532 London Road South)	4.10	0.00	Y	Arm J2:6 Left	17.30	100.0 %	1863	1863
J2:2/2 (B1532 London Road South)	4.10	0.00	Y	Arm J2:4 Ahead	12.10	100.0 %	1802	1802
J2:2/3 (B1532 London Road South)	5.00	0.00	Y	Arm J2:7 Right	Inf	100.0 %	2115	2115
J2:3/1 (A12 Belvedere Road)	3.00	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1915	1915
J2:3/2 (A12 Belvedere Road)	3.00	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1915	1915
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:4/2	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Parade Road North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf
J2:6/2	Infinite Saturation Flow						Inf	Inf
J2:7/1 (The Beach)	5.00	0.00	Y	Arm J2:5 Right	Inf	100.0 %	2115	2115

Full Input Data And Results

Scenario 2: '2022 DM AM' (FG2: '2022 DM AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	378	0	479	857
	B	0	0	0	0	0
	C	325	110	0	15	450
	D	1159	0	0	0	1159
	Tot.	1484	488	0	494	2466

Traffic Lane Flows

Lane	Scenario 2: 2022 DM AM
Junction: J1: A12 Pier Terrace	
J1:1/1	857
J1:2/1	591
J1:2/2	893
J1:3/1	591
J1:3/2	893
J1:4/1	857
Junction: J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	
J2:1/1 (short)	378
J2:1/2 (with short)	857(In) 479(Out)
J2:2/1 (with short)	340(In) 15(Out)
J2:2/2 (short)	325
J2:2/3	110
J2:3/1	591
J2:3/2	568
J2:4/1	591
J2:4/2	893
J2:5/1	488
J2:6/1	254
J2:6/2	240
J2:7/1	110

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 Pier Terrace								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (A12 Pier Terrace SB)	3.80	0.00	Y	Arm J1:4 Ahead	Inf	100.0 %	1995	1995
J1:2/1 (A12 Pier Terrace NB)	3.80	0.00	Y	Arm J1:3 Ahead	Inf	100.0 %	1995	1995
J1:2/2 (A12 Pier Terrace NB)	3.80	0.00	Y	Arm J1:3 Ahead	Inf	100.0 %	1995	1995
J1:3/1	Infinite Saturation Flow						Inf	Inf
J1:3/2	Infinite Saturation Flow						Inf	Inf
J1:4/1	Infinite Saturation Flow						Inf	Inf

Junction: J2: A12 Belvedere Rd-A12 Pier Terrace-B1532								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (A12 Pier Terrace SB)	5.00	0.00	Y	Arm J2:5 Left	Inf	100.0 %	2115	2115
J2:1/2 (A12 Pier Terrace SB)	3.80	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1995	1995
J2:2/1 (B1532 London Road South)	4.10	0.00	Y	Arm J2:6 Left	17.30	100.0 %	1863	1863
J2:2/2 (B1532 London Road South)	4.10	0.00	Y	Arm J2:4 Ahead	12.10	100.0 %	1802	1802
J2:2/3 (B1532 London Road South)	5.00	0.00	Y	Arm J2:7 Right	Inf	100.0 %	2115	2115
J2:3/1 (A12 Belvedere Road)	3.00	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1915	1915
J2:3/2 (A12 Belvedere Road)	3.00	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1915	1915
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:4/2	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Parade Road North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf
J2:6/2	Infinite Saturation Flow						Inf	Inf
J2:7/1 (The Beach)	5.00	0.00	Y	Arm J2:5 Right	Inf	100.0 %	2115	2115

Full Input Data And Results

Scenario 3: '2022 DS AM' (FG3: '2022 DS AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	231	0	231	462
	B	0	0	0	0	0
	C	236	120	0	16	372
	D	730	0	0	0	730
	Tot.	966	351	0	247	1564

Traffic Lane Flows

Lane	Scenario 3: 2022 DS AM
Junction: J1: A12 Pier Terrace	
J1:1/1	462
J1:2/1	372
J1:2/2	594
J1:3/1	372
J1:3/2	594
J1:4/1	462
Junction: J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	
J2:1/1 (short)	231
J2:1/2 (with short)	462(In) 231(Out)
J2:2/1 (with short)	252(In) 16(Out)
J2:2/2 (short)	236
J2:2/3	120
J2:3/1	372
J2:3/2	358
J2:4/1	372
J2:4/2	594
J2:5/1	351
J2:6/1	131
J2:6/2	116
J2:7/1	120

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 Pier Terrace								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (A12 Pier Terrace SB)	3.80	0.00	Y	Arm J1:4 Ahead	Inf	100.0 %	1995	1995
J1:2/1 (A12 Pier Terrace NB)	3.80	0.00	Y	Arm J1:3 Ahead	Inf	100.0 %	1995	1995
J1:2/2 (A12 Pier Terrace NB)	3.80	0.00	Y	Arm J1:3 Ahead	Inf	100.0 %	1995	1995
J1:3/1	Infinite Saturation Flow						Inf	Inf
J1:3/2	Infinite Saturation Flow						Inf	Inf
J1:4/1	Infinite Saturation Flow						Inf	Inf

Junction: J2: A12 Belvedere Rd-A12 Pier Terrace-B1532								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (A12 Pier Terrace SB)	5.00	0.00	Y	Arm J2:5 Left	Inf	100.0 %	2115	2115
J2:1/2 (A12 Pier Terrace SB)	3.80	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1995	1995
J2:2/1 (B1532 London Road South)	4.10	0.00	Y	Arm J2:6 Left	17.30	100.0 %	1863	1863
J2:2/2 (B1532 London Road South)	4.10	0.00	Y	Arm J2:4 Ahead	12.10	100.0 %	1802	1802
J2:2/3 (B1532 London Road South)	5.00	0.00	Y	Arm J2:7 Right	Inf	100.0 %	2115	2115
J2:3/1 (A12 Belvedere Road)	3.00	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1915	1915
J2:3/2 (A12 Belvedere Road)	3.00	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1915	1915
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:4/2	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Parade Road North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf
J2:6/2	Infinite Saturation Flow						Inf	Inf
J2:7/1 (The Beach)	5.00	0.00	Y	Arm J2:5 Right	Inf	100.0 %	2115	2115

Full Input Data And Results

Scenario 4: '2037 DM AM' (FG4: '2037 DM AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	416	0	535	951
	B	0	0	0	0	0
	C	371	121	0	17	509
	D	1225	0	0	0	1225
	Tot.	1596	537	0	552	2685

Traffic Lane Flows

Lane	Scenario 4: 2037 DM AM
Junction: J1: A12 Pier Terrace	
J1:1/1	951
J1:2/1	625
J1:2/2	971
J1:3/1	625
J1:3/2	971
J1:4/1	951
Junction: J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	
J2:1/1 (short)	416
J2:1/2 (with short)	951(In) 535(Out)
J2:2/1 (with short)	388(In) 17(Out)
J2:2/2 (short)	371
J2:2/3	121
J2:3/1	625
J2:3/2	600
J2:4/1	625
J2:4/2	971
J2:5/1	537
J2:6/1	284
J2:6/2	268
J2:7/1	121

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 Pier Terrace								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (A12 Pier Terrace SB)	3.80	0.00	Y	Arm J1:4 Ahead	Inf	100.0 %	1995	1995
J1:2/1 (A12 Pier Terrace NB)	3.80	0.00	Y	Arm J1:3 Ahead	Inf	100.0 %	1995	1995
J1:2/2 (A12 Pier Terrace NB)	3.80	0.00	Y	Arm J1:3 Ahead	Inf	100.0 %	1995	1995
J1:3/1	Infinite Saturation Flow						Inf	Inf
J1:3/2	Infinite Saturation Flow						Inf	Inf
J1:4/1	Infinite Saturation Flow						Inf	Inf

Junction: J2: A12 Belvedere Rd-A12 Pier Terrace-B1532								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (A12 Pier Terrace SB)	5.00	0.00	Y	Arm J2:5 Left	Inf	100.0 %	2115	2115
J2:1/2 (A12 Pier Terrace SB)	3.80	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1995	1995
J2:2/1 (B1532 London Road South)	4.10	0.00	Y	Arm J2:6 Left	17.30	100.0 %	1863	1863
J2:2/2 (B1532 London Road South)	4.10	0.00	Y	Arm J2:4 Ahead	12.10	100.0 %	1802	1802
J2:2/3 (B1532 London Road South)	5.00	0.00	Y	Arm J2:7 Right	Inf	100.0 %	2115	2115
J2:3/1 (A12 Belvedere Road)	3.00	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1915	1915
J2:3/2 (A12 Belvedere Road)	3.00	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1915	1915
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:4/2	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Parade Road North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf
J2:6/2	Infinite Saturation Flow						Inf	Inf
J2:7/1 (The Beach)	5.00	0.00	Y	Arm J2:5 Right	Inf	100.0 %	2115	2115

Full Input Data And Results

Scenario 5: '2037 DS AM' (FG5: '2037 DS AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	349	0	232	581
	B	0	0	0	0	0
	C	130	75	0	45	250
	D	734	0	0	0	734
	Tot.	864	424	0	277	1565

Traffic Lane Flows

Lane	Scenario 5: 2037 DS AM
Junction: J1: A12 Pier Terrace	
J1:1/1	581
J1:2/1	372
J1:2/2	492
J1:3/1	372
J1:3/2	492
J1:4/1	581
Junction: J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	
J2:1/1 (short)	349
J2:1/2 (with short)	581(In) 232(Out)
J2:2/1 (with short)	175(In) 45(Out)
J2:2/2 (short)	130
J2:2/3	75
J2:3/1	372
J2:3/2	362
J2:4/1	372
J2:4/2	492
J2:5/1	424
J2:6/1	161
J2:6/2	116
J2:7/1	75

Full Input Data And Results

Lane Saturation Flows

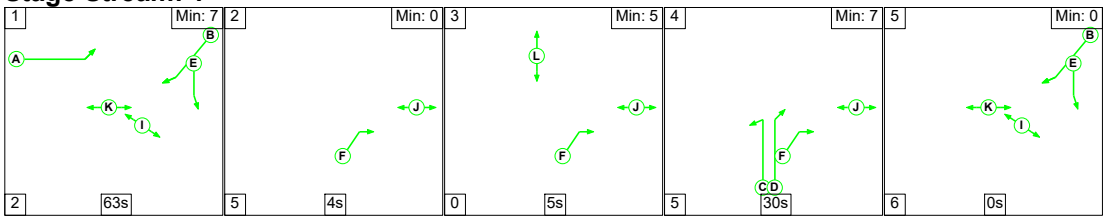
Junction: J1: A12 Pier Terrace								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (A12 Pier Terrace SB)	3.80	0.00	Y	Arm J1:4 Ahead	Inf	100.0 %	1995	1995
J1:2/1 (A12 Pier Terrace NB)	3.80	0.00	Y	Arm J1:3 Ahead	Inf	100.0 %	1995	1995
J1:2/2 (A12 Pier Terrace NB)	3.80	0.00	Y	Arm J1:3 Ahead	Inf	100.0 %	1995	1995
J1:3/1	Infinite Saturation Flow						Inf	Inf
J1:3/2	Infinite Saturation Flow						Inf	Inf
J1:4/1	Infinite Saturation Flow						Inf	Inf

Junction: J2: A12 Belvedere Rd-A12 Pier Terrace-B1532								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (A12 Pier Terrace SB)	5.00	0.00	Y	Arm J2:5 Left	Inf	100.0 %	2115	2115
J2:1/2 (A12 Pier Terrace SB)	3.80	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1995	1995
J2:2/1 (B1532 London Road South)	4.10	0.00	Y	Arm J2:6 Left	17.30	100.0 %	1863	1863
J2:2/2 (B1532 London Road South)	4.10	0.00	Y	Arm J2:4 Ahead	12.10	100.0 %	1802	1802
J2:2/3 (B1532 London Road South)	5.00	0.00	Y	Arm J2:7 Right	Inf	100.0 %	2115	2115
J2:3/1 (A12 Belvedere Road)	3.00	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1915	1915
J2:3/2 (A12 Belvedere Road)	3.00	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1915	1915
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:4/2	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Parade Road North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf
J2:6/2	Infinite Saturation Flow						Inf	Inf
J2:7/1 (The Beach)	5.00	0.00	Y	Arm J2:5 Right	Inf	100.0 %	2115	2115

Scenario 1: 'Base 2016 AM' (FG1: 'Base 2016 AM', Plan 1: 'Network Control Plan 1')

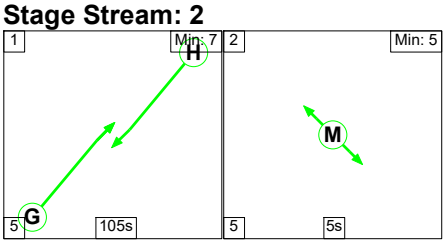
Stage Sequence Diagram

Stage Stream: 1



Full Input Data And Results

Stage Stream: 2



Stage Timings

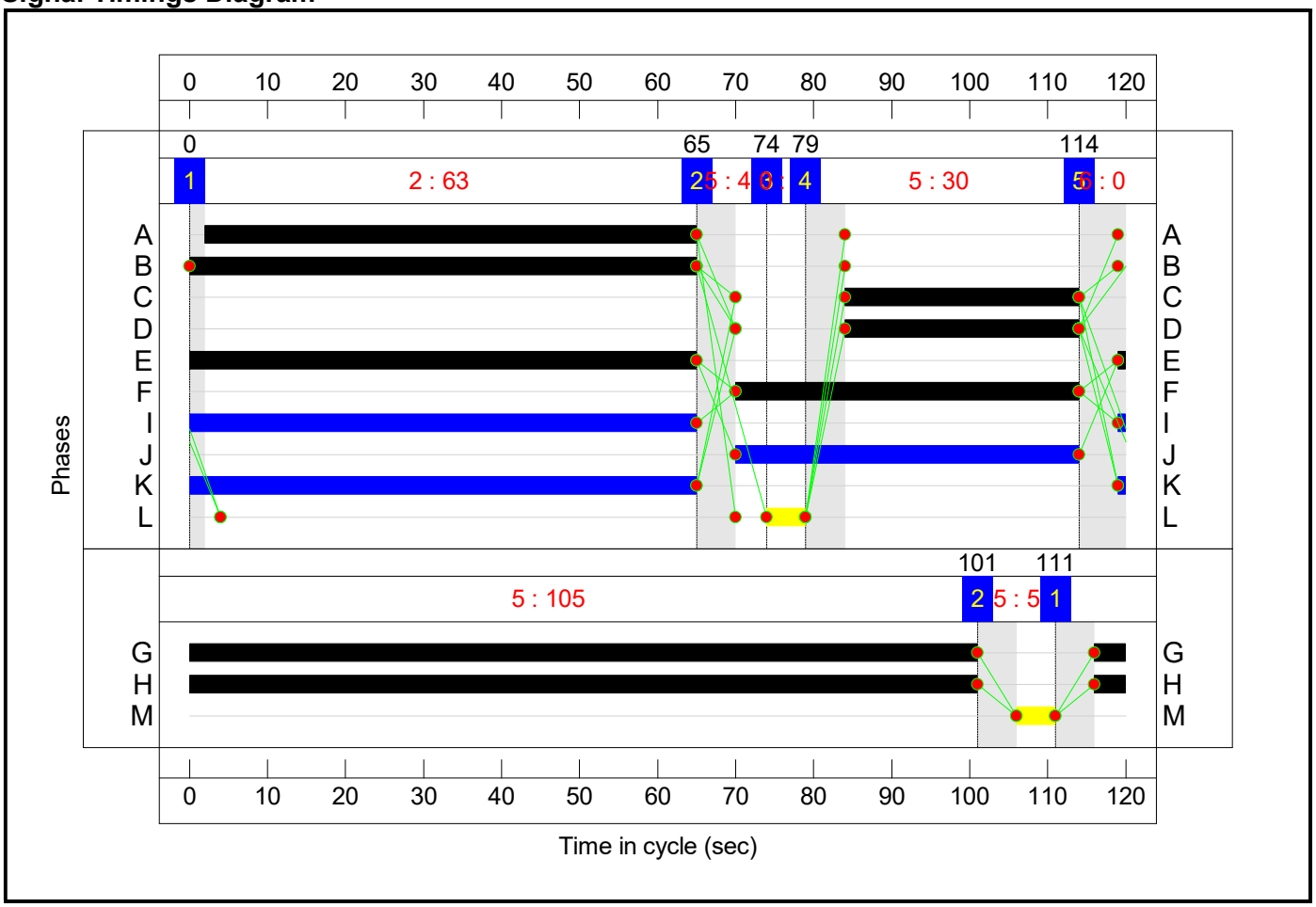
Stage Stream: 1

Stage	1	2	3	4	5
Duration	63	4	5	30	0
Change Point	0	65	74	79	114

Stage Stream: 2

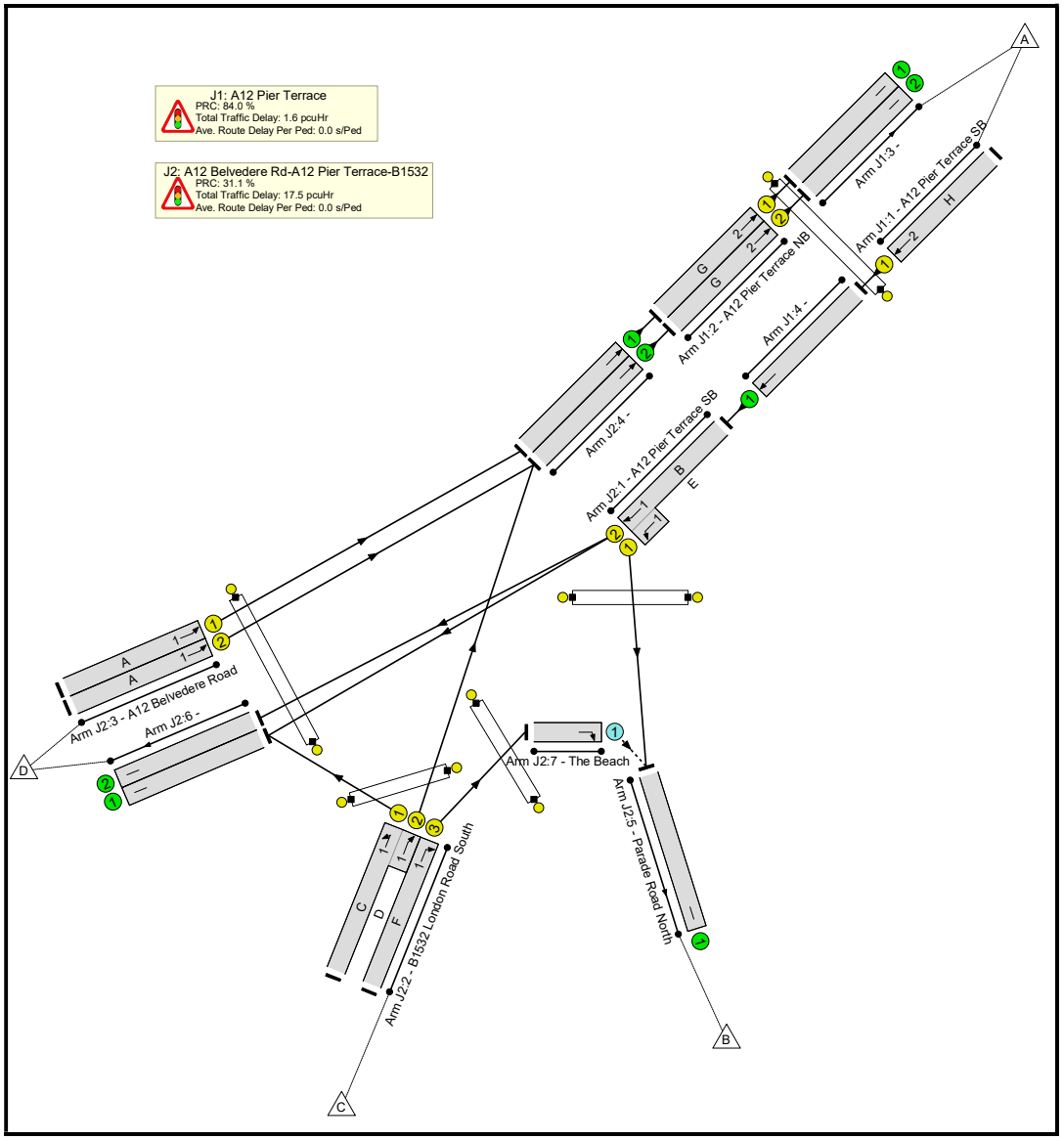
Stage	1	2
Duration	105	5
Change Point	111	101

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**68.7%**
J1: A12 Pier Terrace	-	-	**N/A**	-	-		-	-	-	-	-	-	**48.9%**
1/1	A12 Pier Terrace SB Ahead	U	2	N/A	H		1	105	-	812	1995	1762	46.1%
2/1	A12 Pier Terrace NB Ahead	U	2	N/A	G		1	105	-	575	1995	1762	32.6%
2/2	A12 Pier Terrace NB Ahead	U	2	N/A	G		1	105	-	862	1995	1762	48.9%
3/1		U	N/A	N/A	-		-	-	-	575	Inf	Inf	0.0%
3/2		U	N/A	N/A	-		-	-	-	862	Inf	Inf	0.0%
4/1	Ahead	U	N/A	N/A	-		-	-	-	812	Inf	Inf	0.0%
Ped Link: P1	A12 Pier Terrace Ped	-	2	-	M		1	5	-	0	-	0	0.0%
J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	-	-	**N/A**	-	-		-	-	-	-	-	-	**68.7%**
1/2+1/1	A12 Pier Terrace SB Left Ahead	U	1	N/A	B E		1	65:66	-	812	1995:2115	661+529	68.2 : 68.2%
2/1+2/2	B1532 London Road South Ahead Left	U	1	N/A	C D		1	30	-	323	1863:1802	22+449	68.7 : 68.7%
2/3	B1532 London Road South Right	U	1	N/A	F		1	44	-	104	2115	793	13.1%
3/1	A12 Belvedere Road Ahead	U	1	N/A	A		1	63	-	575	1915	1021	56.3%
3/2	A12 Belvedere Road Ahead	U	1	N/A	A		1	63	-	554	1915	1021	54.2%
4/1	Ahead	U	N/A	N/A	-		-	-	-	575	Inf	Inf	0.0%
4/2	Ahead	U	N/A	N/A	-		-	-	-	862	Inf	Inf	0.0%

Full Input Data And Results

5/1	Parade Road North	U	N/A	N/A	-		-	-	-	465	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	240	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	226	Inf	Inf	0.0%
7/1	The Beach Right	O	N/A	N/A	-		-	-	-	104	2115	2115	4.9%
Ped Link: P1	Parade Road North Ped	-	1	-	J		1	44	-	0	-	0	0.0%
Ped Link: P2	The Beach Ped	-	1	-	I		1	66	-	0	-	0	0.0%
Ped Link: P3	London Road South	-	1	-	K		1	66	-	0	-	0	0.0%
Ped Link: P4	A12 Belvedere Road Ped	-	1	-	L		1	5	-	0	-	0	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	**-**	**-**	**0**	**104**	**0**	**14.5**	**4.6**	**0.0**	**19.2**	**-**	**-**	**-**	**-**
J1: A12 Pier Terrace	**-**	**-**	**0**	**0**	**0**	**0.5**	**1.1**	**0.0**	**1.6**	**-**	**-**	**-**	**-**
1/1	812	812	-	-	-	0.3	0.4	-	0.7	3.3	5.2	0.4	5.6
2/1	575	575	-	-	-	0.1	0.2	-	0.3	2.0	1.0	0.2	1.2
2/2	862	862	-	-	-	0.1	0.5	-	0.6	2.3	1.0	0.5	1.4
3/1	575	575	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	862	862	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	812	812	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	**-**	**-**	**0**	**104**	**0**	**14.1**	**3.5**	**0.0**	**17.5**	**-**	**-**	**-**	**-**
1/2+1/1	812	812	-	-	-	4.0	1.1	-	5.0	22.3	15.1	1.1	16.1
2/1+2/2	323	323	-	-	-	3.6	1.1	-	4.7	52.0	9.5	1.1	10.6
2/3	104	104	-	-	-	0.7	0.1	-	0.8	27.3	2.3	0.1	2.3
3/1	575	575	-	-	-	3.0	0.6	-	3.6	22.7	12.8	0.6	13.4
3/2	554	554	-	-	-	2.8	0.6	-	3.4	22.2	12.0	0.6	12.6
4/1	575	575	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	862	862	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	465	465	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	240	240	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	226	226	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	104	104	0	104	0	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

Full Input Data And Results

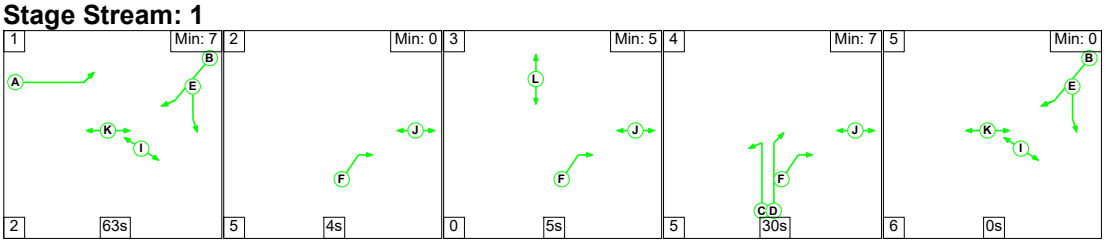
C1	Stream: 1	PRC for Signalled Lanes (%):	31.1	Total Delay for Signalled Lanes (pcuHr):	17.52	Cycle Time (s):	120
C1	Stream: 2	PRC for Signalled Lanes (%):	84.0	Total Delay for Signalled Lanes (pcuHr):	1.61	Cycle Time (s):	120
		PRC Over All Lanes (%):	31.1	Total Delay Over All Lanes(pcuHr):	19.15		

Full Input Data And Results

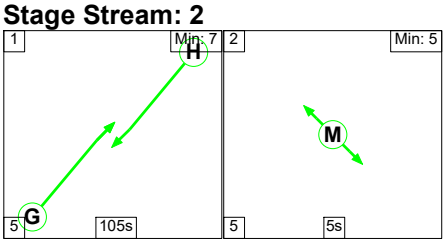
Scenario 2: '2022 DM AM' (FG2: '2022 DM AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

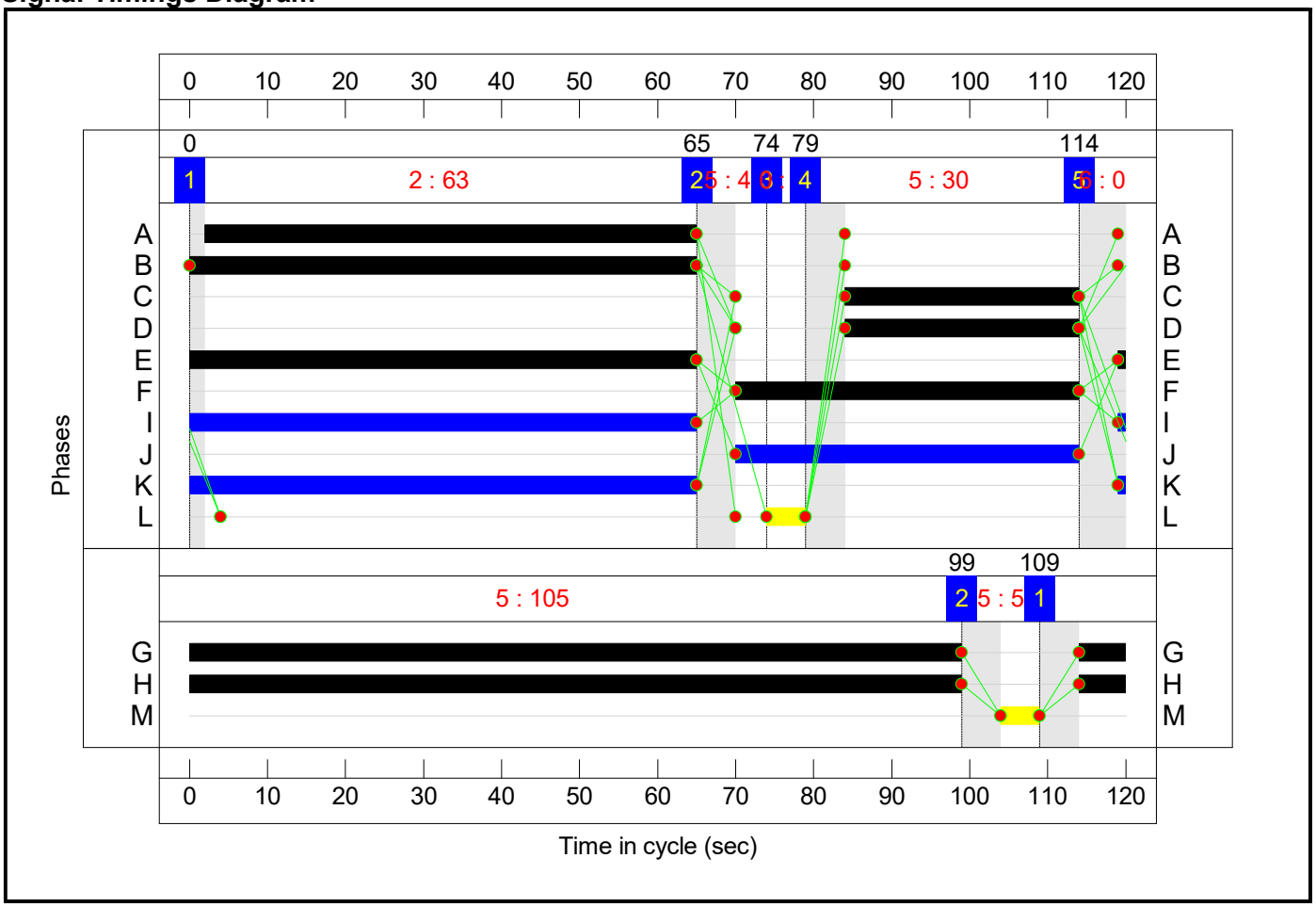
Stage	1	2	3	4	5
Duration	63	4	5	30	0
Change Point	0	65	74	79	114

Stage Stream: 2

Stage	1	2
Duration	105	5
Change Point	109	99

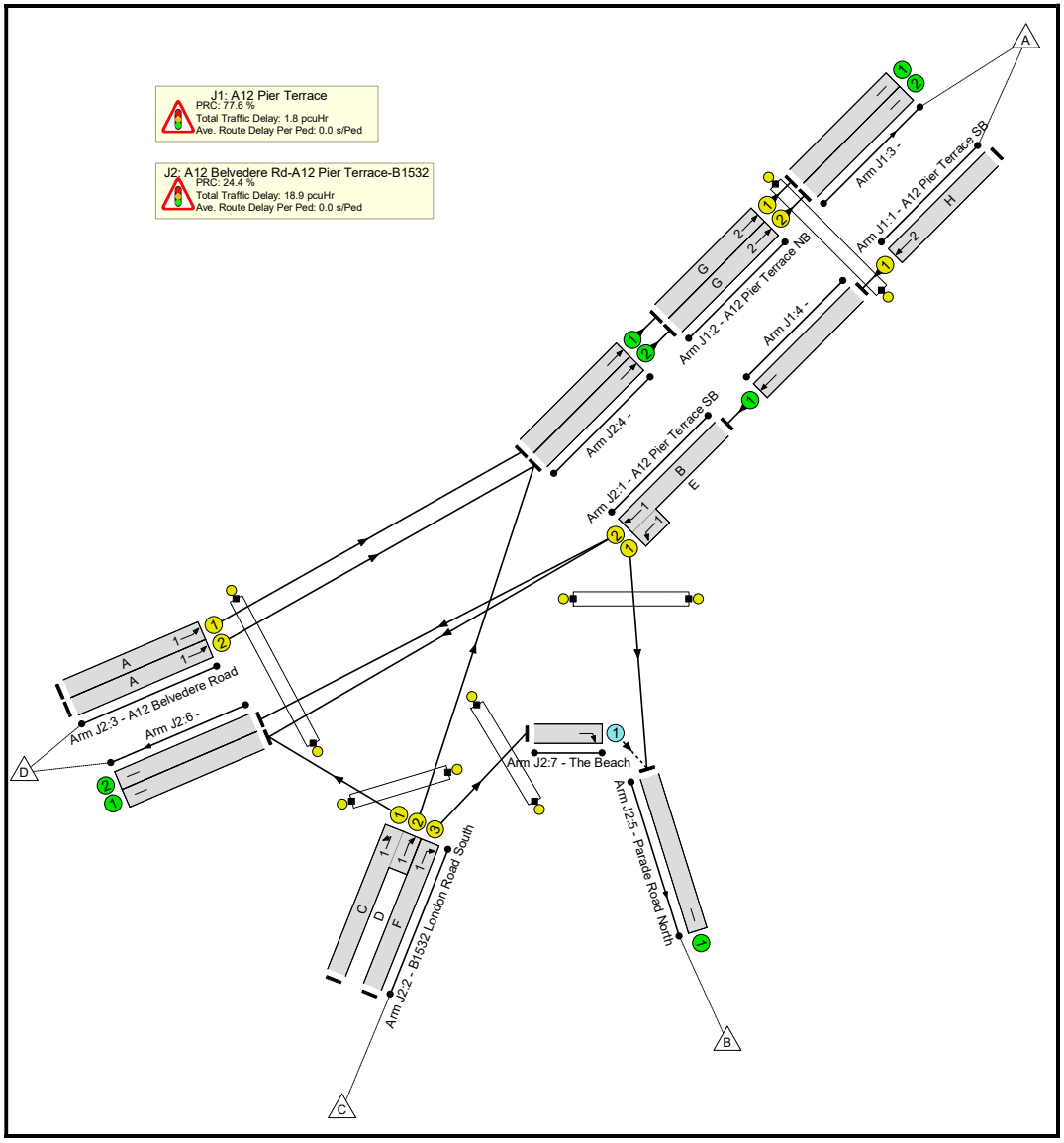
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**72.3%**
J1: A12 Pier Terrace	-	-	**N/A**	-	-		-	-	-	-	-	-	**50.7%**
1/1	A12 Pier Terrace SB Ahead	U	2	N/A	H		1	105	-	857	1995	1762	48.6%
2/1	A12 Pier Terrace NB Ahead	U	2	N/A	G		1	105	-	591	1995	1762	33.5%
2/2	A12 Pier Terrace NB Ahead	U	2	N/A	G		1	105	-	893	1995	1762	50.7%
3/1		U	N/A	N/A	-		-	-	-	591	Inf	Inf	0.0%
3/2		U	N/A	N/A	-		-	-	-	893	Inf	Inf	0.0%
4/1	Ahead	U	N/A	N/A	-		-	-	-	857	Inf	Inf	0.0%
Ped Link: P1	A12 Pier Terrace Ped	-	2	-	M		1	5	-	0	-	0	0.0%
J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	-	-	**N/A**	-	-		-	-	-	-	-	-	**72.3%**
1/2+1/1	A12 Pier Terrace SB Left Ahead	U	1	N/A	B E		1	65:66	-	857	1995:2115	664+524	72.1 : 72.1%
2/1+2/2	B1532 London Road South Ahead Left	U	1	N/A	C D		1	30	-	340	1863:1802	21+449	72.3 : 72.3%
2/3	B1532 London Road South Right	U	1	N/A	F		1	44	-	110	2115	793	13.9%
3/1	A12 Belvedere Road Ahead	U	1	N/A	A		1	63	-	591	1915	1021	57.9%
3/2	A12 Belvedere Road Ahead	U	1	N/A	A		1	63	-	568	1915	1021	55.6%
4/1	Ahead	U	N/A	N/A	-		-	-	-	591	Inf	Inf	0.0%
4/2	Ahead	U	N/A	N/A	-		-	-	-	893	Inf	Inf	0.0%

Full Input Data And Results

5/1	Parade Road North	U	N/A	N/A	-		-	-	-	488	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	254	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	240	Inf	Inf	0.0%
7/1	The Beach Right	O	N/A	N/A	-		-	-	-	110	2115	2115	5.2%
Ped Link: P1	Parade Road North Ped	-	1	-	J		1	44	-	0	-	0	0.0%
Ped Link: P2	The Beach Ped	-	1	-	I		1	66	-	0	-	0	0.0%
Ped Link: P3	London Road South	-	1	-	K		1	66	-	0	-	0	0.0%
Ped Link: P4	A12 Belvedere Road Ped	-	1	-	L		1	5	-	0	-	0	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	**-**	**-**	**0**	**110**	**0**	**15.4**	**5.2**	**0.0**	**20.6**	**-**	**-**	**-**	**-**
J1: A12 Pier Terrace	**-**	**-**	**0**	**0**	**0**	**0.5**	**1.2**	**0.0**	**1.8**	**-**	**-**	**-**	**-**
1/1	857	857	-	-	-	0.3	0.5	-	0.8	3.4	5.7	0.5	6.2
2/1	591	591	-	-	-	0.1	0.3	-	0.3	2.1	1.3	0.3	1.5
2/2	893	893	-	-	-	0.1	0.5	-	0.6	2.4	1.2	0.5	1.7
3/1	591	591	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	893	893	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	857	857	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	**-**	**-**	**0**	**110**	**0**	**14.9**	**4.0**	**0.0**	**18.9**	**-**	**-**	**-**	**-**
1/2+1/1	857	857	-	-	-	4.3	1.3	-	5.6	23.3	15.8	1.3	17.1
2/1+2/2	340	340	-	-	-	3.8	1.3	-	5.1	54.0	10.2	1.3	11.4
2/3	110	110	-	-	-	0.8	0.1	-	0.8	27.4	2.4	0.1	2.5
3/1	591	591	-	-	-	3.1	0.7	-	3.8	23.1	13.1	0.7	13.8
3/2	568	568	-	-	-	2.9	0.6	-	3.6	22.5	12.5	0.6	13.1
4/1	591	591	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	893	893	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	488	488	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	254	254	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	240	240	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	110	110	0	110	0	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

Full Input Data And Results

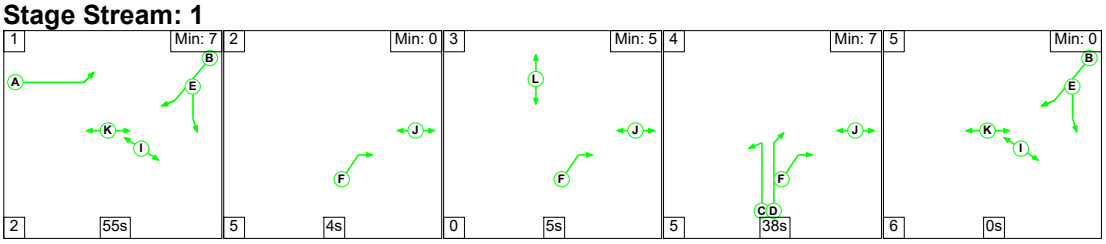
C1	Stream: 1	PRC for Signalled Lanes (%):	24.4	Total Delay for Signalled Lanes (pcuHr):	18.83	Cycle Time (s):	120
C1	Stream: 2	PRC for Signalled Lanes (%):	77.6	Total Delay for Signalled Lanes (pcuHr):	1.77	Cycle Time (s):	120
		PRC Over All Lanes (%):	24.4	Total Delay Over All Lanes(pcuHr):	20.63		

Full Input Data And Results

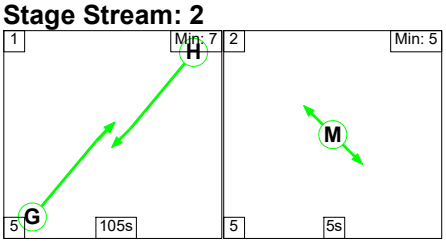
Scenario 3: '2022 DS AM' (FG3: '2022 DS AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

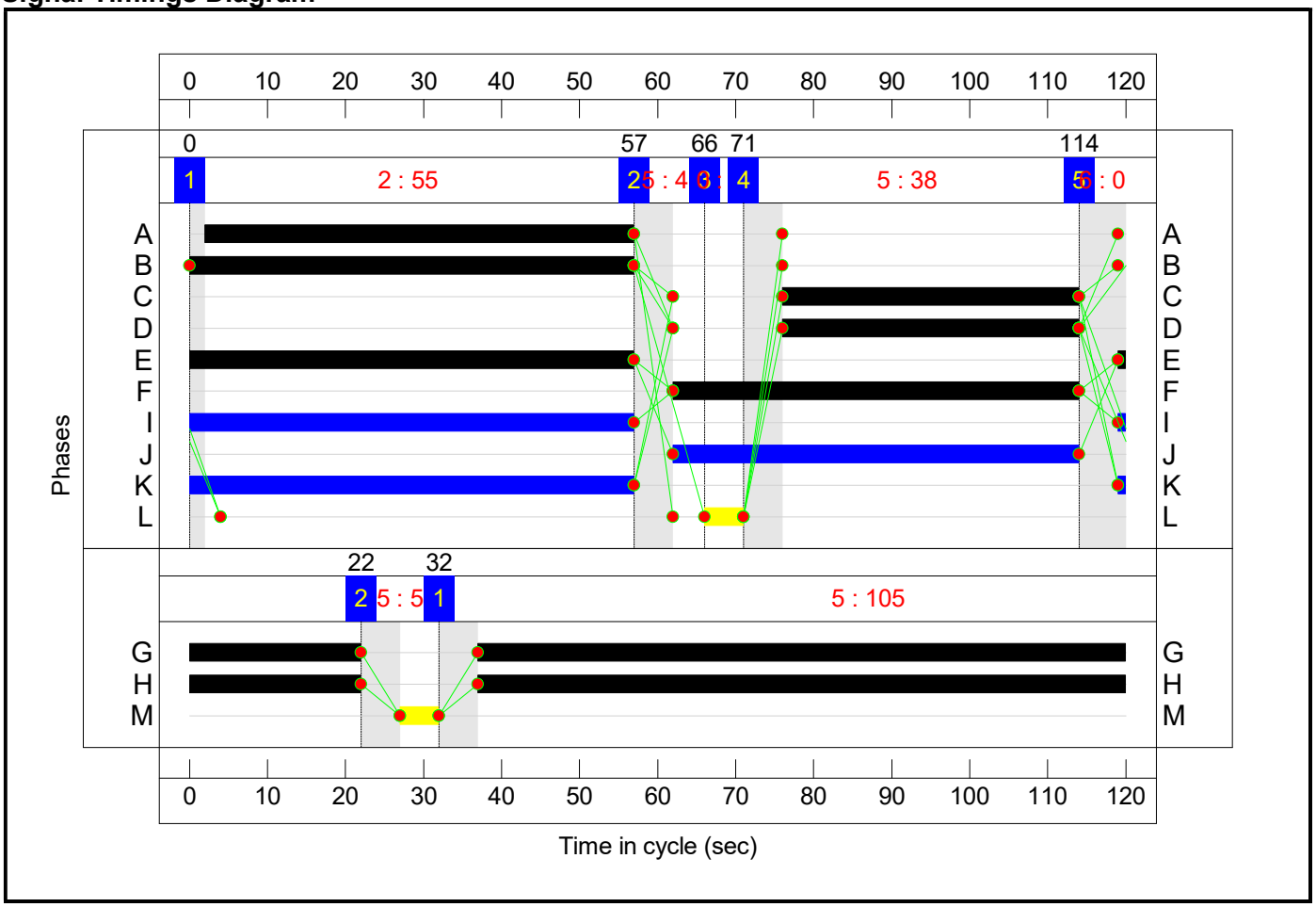
Stage	1	2	3	4	5
Duration	55	4	5	38	0
Change Point	0	57	66	71	114

Stage Stream: 2

Stage	1	2
Duration	105	5
Change Point	32	22

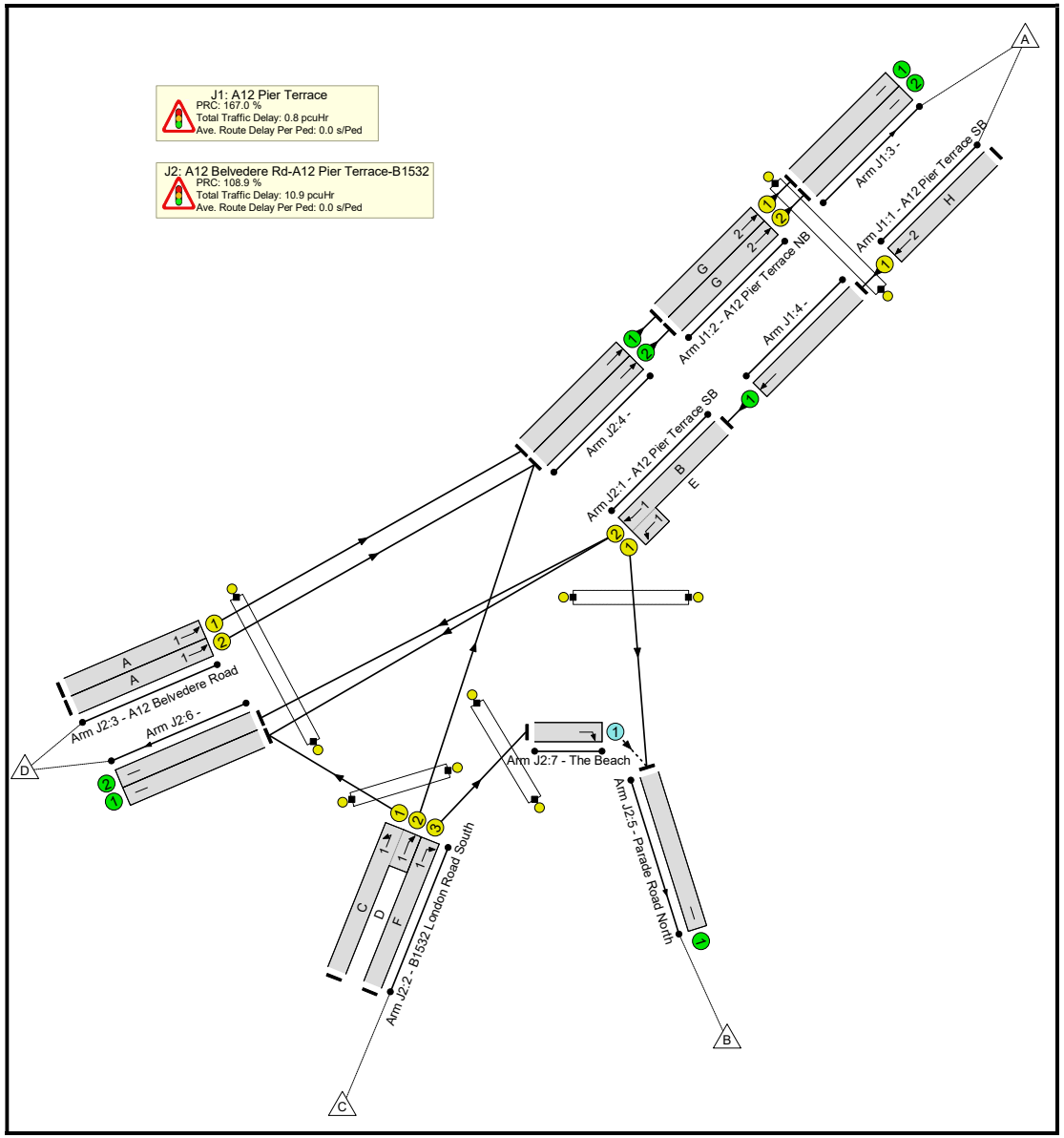
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**43.1%**
J1: A12 Pier Terrace	-	-	**N/A**	-	-		-	-	-	-	-	-	**33.7%**
1/1	A12 Pier Terrace SB Ahead	U	2	N/A	H		1	105	-	462	1995	1762	26.2%
2/1	A12 Pier Terrace NB Ahead	U	2	N/A	G		1	105	-	372	1995	1762	21.1%
2/2	A12 Pier Terrace NB Ahead	U	2	N/A	G		1	105	-	594	1995	1762	33.7%
3/1		U	N/A	N/A	-		-	-	-	372	Inf	Inf	0.0%
3/2		U	N/A	N/A	-		-	-	-	594	Inf	Inf	0.0%
4/1	Ahead	U	N/A	N/A	-		-	-	-	462	Inf	Inf	0.0%
Ped Link: P1	A12 Pier Terrace Ped	-	2	-	M		1	5	-	0	-	0	0.0%
J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	-	-	**N/A**	-	-		-	-	-	-	-	-	**43.1%**
1/2+1/1	A12 Pier Terrace SB Left Ahead	U	1	N/A	B E		1	57:58	-	462	1995:2115	536+536	43.1 : 43.1%
2/1+2/2	B1532 London Road South Ahead Left	U	1	N/A	C D		1	38	-	252	1863:1802	38+555	42.5 : 42.5%
2/3	B1532 London Road South Right	U	1	N/A	F		1	52	-	120	2115	934	12.8%
3/1	A12 Belvedere Road Ahead	U	1	N/A	A		1	55	-	372	1915	894	41.6%
3/2	A12 Belvedere Road Ahead	U	1	N/A	A		1	55	-	358	1915	894	40.1%
4/1	Ahead	U	N/A	N/A	-		-	-	-	372	Inf	Inf	0.0%
4/2	Ahead	U	N/A	N/A	-		-	-	-	594	Inf	Inf	0.0%

Full Input Data And Results

5/1	Parade Road North	U	N/A	N/A	-		-	-	-	351	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	131	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	116	Inf	Inf	0.0%
7/1	The Beach Right	O	N/A	N/A	-		-	-	-	120	2115	2115	5.7%
Ped Link: P1	Parade Road North Ped	-	1	-	J		1	52	-	0	-	0	0.0%
Ped Link: P2	The Beach Ped	-	1	-	I		1	58	-	0	-	0	0.0%
Ped Link: P3	London Road South	-	1	-	K		1	58	-	0	-	0	0.0%
Ped Link: P4	A12 Belvedere Road Ped	-	1	-	L		1	5	-	0	-	0	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	**-**	**-**	**0**	**120**	**0**	**9.6**	**2.1**	**0.0**	**11.7**	**-**	**-**	**-**	**-**
J1: A12 Pier Terrace	**-**	**-**	**0**	**0**	**0**	**0.2**	**0.6**	**0.0**	**0.8**	**-**	**-**	**-**	**-**
1/1	462	462	-	-	-	0.1	0.2	-	0.3	2.4	2.3	0.2	2.5
2/1	372	372	-	-	-	0.0	0.1	-	0.1	1.3	0.2	0.1	0.3
2/2	594	594	-	-	-	0.1	0.3	-	0.3	2.0	1.7	0.3	2.0
3/1	372	372	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	594	594	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	462	462	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	**-**	**-**	**0**	**120**	**0**	**9.4**	**1.5**	**0.0**	**10.9**	**-**	**-**	**-**	**-**
1/2+1/1	462	462	-	-	-	2.2	0.4	-	2.6	20.3	6.9	0.4	7.3
2/1+2/2	252	252	-	-	-	2.2	0.4	-	2.6	36.8	6.3	0.4	6.7
2/3	120	120	-	-	-	0.7	0.1	-	0.7	22.0	2.4	0.1	2.4
3/1	372	372	-	-	-	2.2	0.4	-	2.5	24.6	8.2	0.4	8.5
3/2	358	358	-	-	-	2.1	0.3	-	2.4	24.4	7.8	0.3	8.1
4/1	372	372	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	594	594	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	351	351	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	131	131	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	116	116	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	120	120	0	120	0	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

Full Input Data And Results

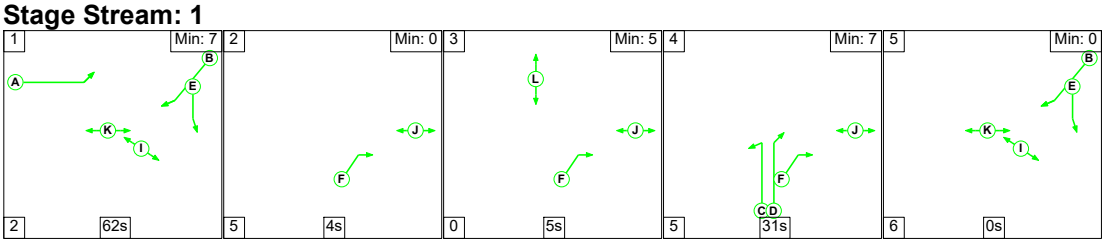
C1	Stream: 1	PRC for Signalled Lanes (%):	108.9	Total Delay for Signalled Lanes (pcuHr):	10.88	Cycle Time (s):	120
C1	Stream: 2	PRC for Signalled Lanes (%):	167.0	Total Delay for Signalled Lanes (pcuHr):	0.79	Cycle Time (s):	120
		PRC Over All Lanes (%):	108.9	Total Delay Over All Lanes(pcuHr):	11.70		

Full Input Data And Results

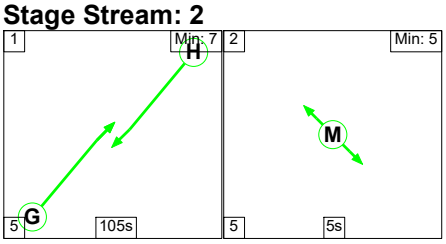
Scenario 4: '2037 DM AM' (FG4: '2037 DM AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

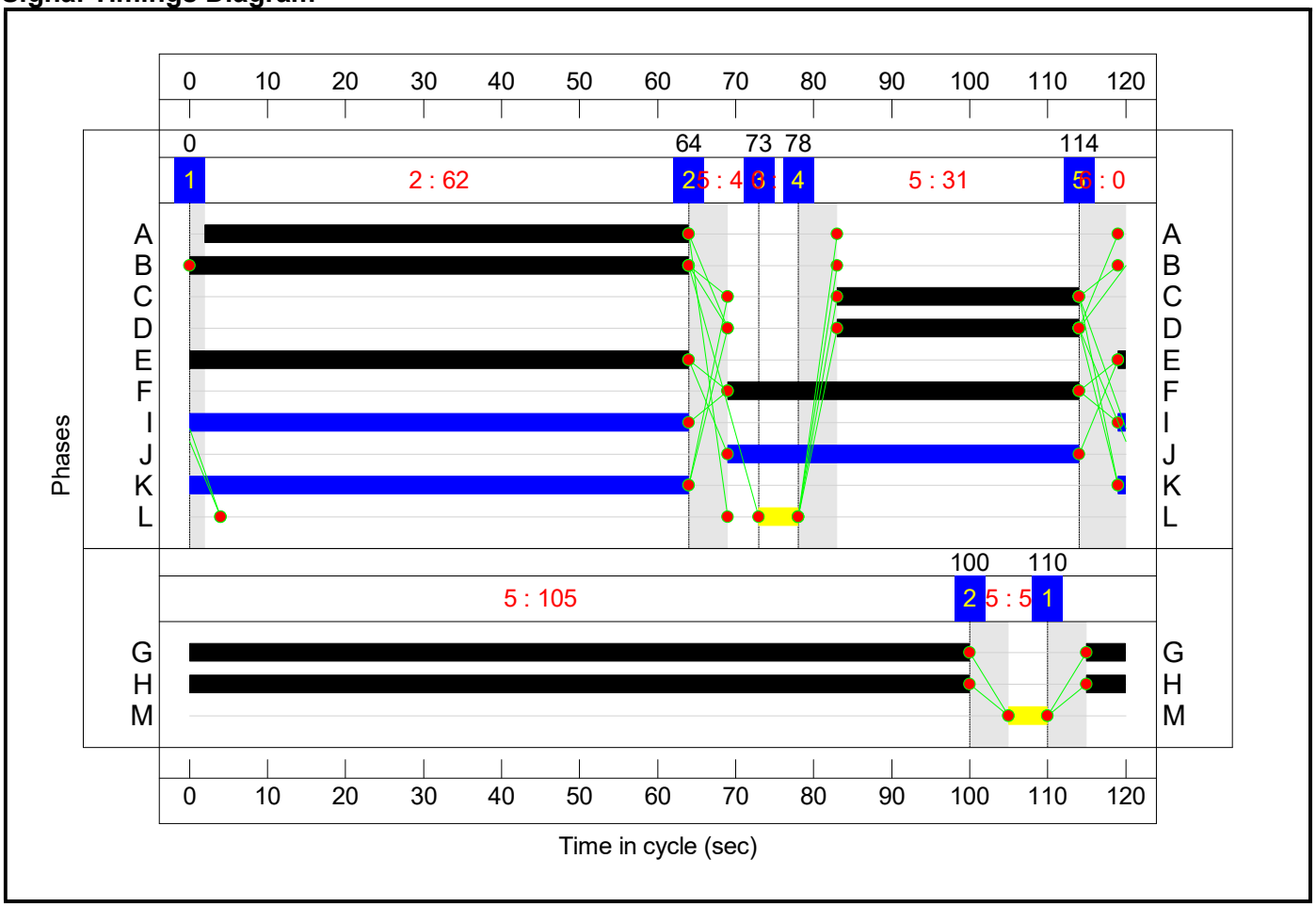
Stage	1	2	3	4	5
Duration	62	4	5	31	0
Change Point	0	64	73	78	114

Stage Stream: 2

Stage	1	2
Duration	105	5
Change Point	110	100

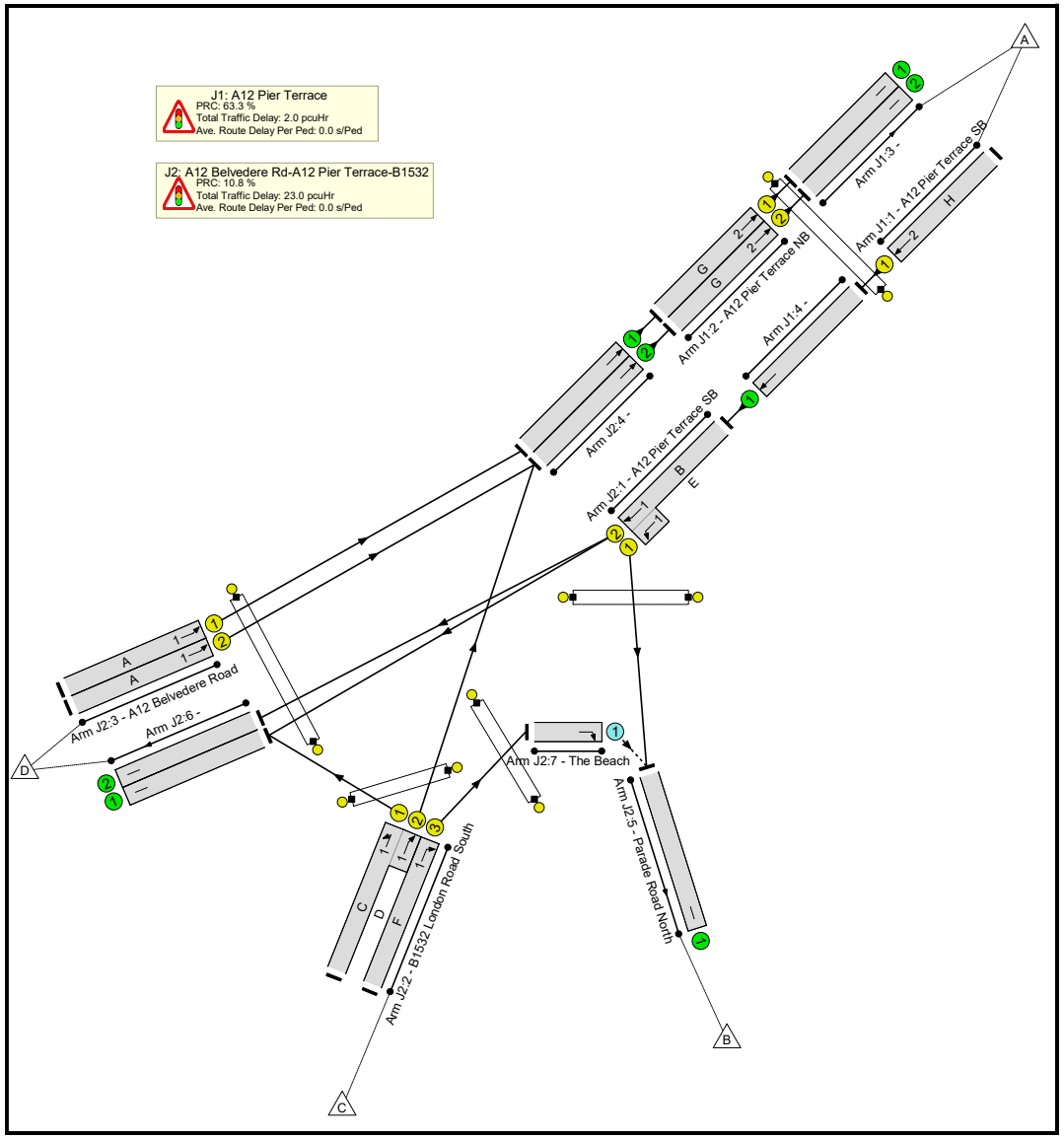
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**81.2%**
J1: A12 Pier Terrace	-	-	**N/A**	-	-		-	-	-	-	-	-	**55.1%**
1/1	A12 Pier Terrace SB Ahead	U	2	N/A	H		1	105	-	951	1995	1762	54.0%
2/1	A12 Pier Terrace NB Ahead	U	2	N/A	G		1	105	-	625	1995	1762	35.5%
2/2	A12 Pier Terrace NB Ahead	U	2	N/A	G		1	105	-	971	1995	1762	55.1%
3/1		U	N/A	N/A	-		-	-	-	625	Inf	Inf	0.0%
3/2		U	N/A	N/A	-		-	-	-	971	Inf	Inf	0.0%
4/1	Ahead	U	N/A	N/A	-		-	-	-	951	Inf	Inf	0.0%
Ped Link: P1	A12 Pier Terrace Ped	-	2	-	M		1	5	-	0	-	0	0.0%
J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	-	-	**N/A**	-	-		-	-	-	-	-	-	**81.2%**
1/2+1/1	A12 Pier Terrace SB Left Ahead	U	1	N/A	B E		1	64:65	-	951	1995:2115	659+512	81.2 : 81.2%
2/1+2/2	B1532 London Road South Ahead Left	U	1	N/A	C D		1	31	-	388	1863:1802	21+464	80.0 : 80.0%
2/3	B1532 London Road South Right	U	1	N/A	F		1	45	-	121	2115	811	14.9%
3/1	A12 Belvedere Road Ahead	U	1	N/A	A		1	62	-	625	1915	1005	62.2%
3/2	A12 Belvedere Road Ahead	U	1	N/A	A		1	62	-	600	1915	1005	59.7%
4/1	Ahead	U	N/A	N/A	-		-	-	-	625	Inf	Inf	0.0%
4/2	Ahead	U	N/A	N/A	-		-	-	-	971	Inf	Inf	0.0%

Full Input Data And Results

5/1	Parade Road North	U	N/A	N/A	-		-	-	-	537	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	284	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	268	Inf	Inf	0.0%
7/1	The Beach Right	O	N/A	N/A	-		-	-	-	121	2115	2115	5.7%
Ped Link: P1	Parade Road North Ped	-	1	-	J		1	45	-	0	-	0	0.0%
Ped Link: P2	The Beach Ped	-	1	-	I		1	65	-	0	-	0	0.0%
Ped Link: P3	London Road South	-	1	-	K		1	65	-	0	-	0	0.0%
Ped Link: P4	A12 Belvedere Road Ped	-	1	-	L		1	5	-	0	-	0	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	**-**	**-**	**0**	**121**	**0**	**17.9**	**7.2**	**0.0**	**25.0**	**-**	**-**	**-**	**-**
J1: A12 Pier Terrace	**-**	**-**	**0**	**0**	**0**	**0.6**	**1.5**	**0.0**	**2.0**	**-**	**-**	**-**	**-**
1/1	951	951	-	-	-	0.4	0.6	-	1.0	3.8	6.9	0.6	7.5
2/1	625	625	-	-	-	0.1	0.3	-	0.4	2.1	1.1	0.3	1.4
2/2	971	971	-	-	-	0.1	0.6	-	0.7	2.6	1.1	0.6	1.8
3/1	625	625	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	971	971	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	951	951	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	**-**	**-**	**0**	**121**	**0**	**17.3**	**5.7**	**0.0**	**23.0**	**-**	**-**	**-**	**-**
1/2+1/1	951	951	-	-	-	5.3	2.1	-	7.4	28.0	19.5	2.1	21.6
2/1+2/2	388	388	-	-	-	4.4	1.9	-	6.3	58.7	11.8	1.9	13.7
2/3	121	121	-	-	-	0.8	0.1	-	0.9	26.8	2.6	0.1	2.7
3/1	625	625	-	-	-	3.5	0.8	-	4.3	24.8	14.6	0.8	15.4
3/2	600	600	-	-	-	3.3	0.7	-	4.0	24.1	13.8	0.7	14.6
4/1	625	625	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	971	971	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	537	537	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	284	284	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	268	268	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	121	121	0	121	0	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

Full Input Data And Results

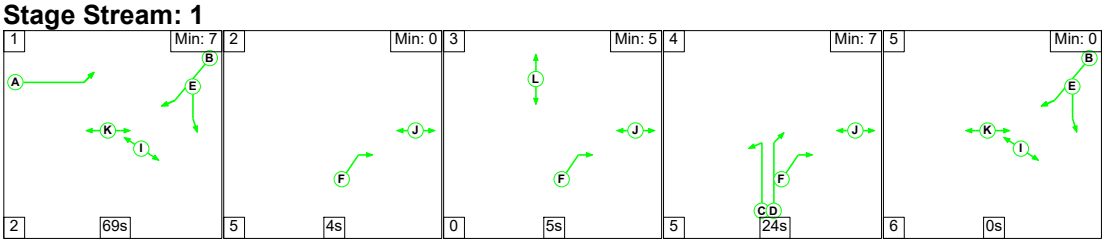
C1	Stream: 1	PRC for Signalled Lanes (%):	10.8	Total Delay for Signalled Lanes (pcuHr):	22.96	Cycle Time (s):	120
C1	Stream: 2	PRC for Signalled Lanes (%):	63.3	Total Delay for Signalled Lanes (pcuHr):	2.05	Cycle Time (s):	120
		PRC Over All Lanes (%):	10.8	Total Delay Over All Lanes(pcuHr):	25.04		

Full Input Data And Results

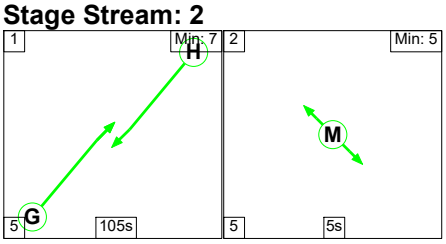
Scenario 5: '2037 DS AM' (FG5: '2037 DS AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

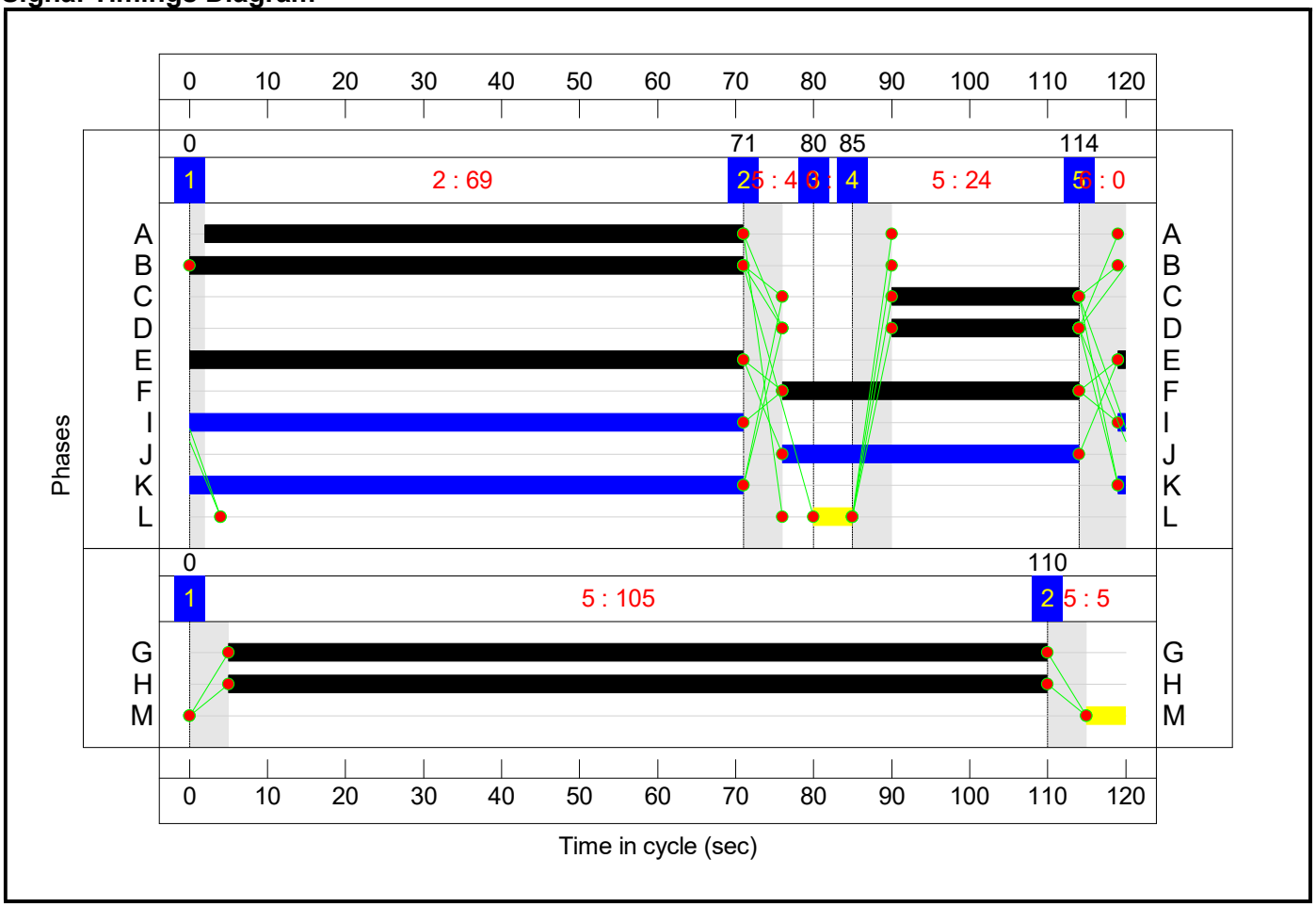
Stage	1	2	3	4	5
Duration	69	4	5	24	0
Change Point	0	71	80	85	114

Stage Stream: 2

Stage	1	2
Duration	105	5
Change Point	0	110

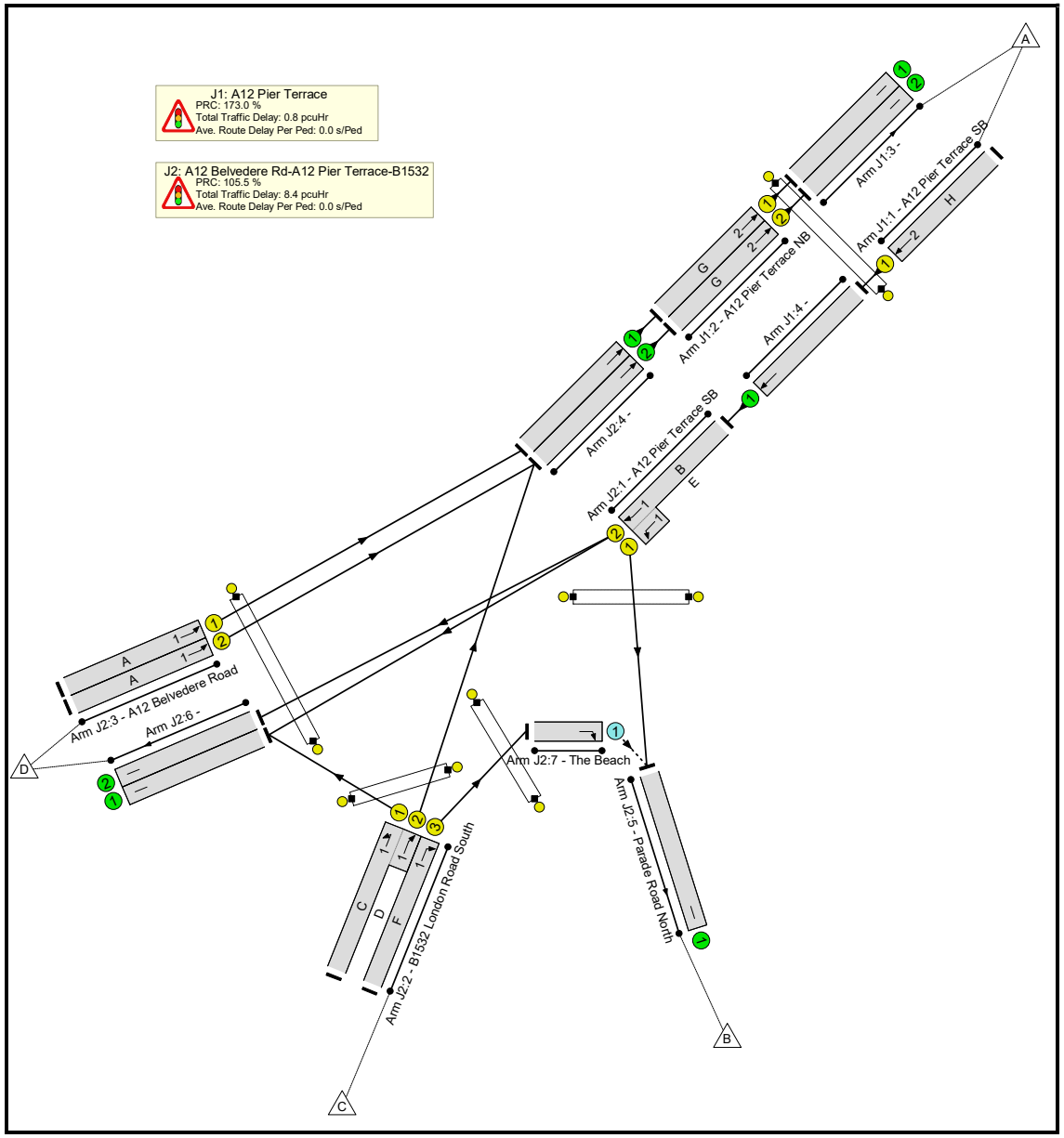
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**43.8%**
J1: A12 Pier Terrace	-	-	**N/A**	-	-		-	-	-	-	-	-	**33.0%**
1/1	A12 Pier Terrace SB Ahead	U	2	N/A	H		1	105	-	581	1995	1762	33.0%
2/1	A12 Pier Terrace NB Ahead	U	2	N/A	G		1	105	-	372	1995	1762	21.1%
2/2	A12 Pier Terrace NB Ahead	U	2	N/A	G		1	105	-	492	1995	1762	27.9%
3/1		U	N/A	N/A	-		-	-	-	372	Inf	Inf	0.0%
3/2		U	N/A	N/A	-		-	-	-	492	Inf	Inf	0.0%
4/1	Ahead	U	N/A	N/A	-		-	-	-	581	Inf	Inf	0.0%
Ped Link: P1	A12 Pier Terrace Ped	-	2	-	M		1	5	-	0	-	0	0.0%
J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	-	-	**N/A**	-	-		-	-	-	-	-	-	**43.8%**
1/2+1/1	A12 Pier Terrace SB Left Ahead	U	1	N/A	B E		1	71:72	-	581	1995:2115	530+797	43.8 : 43.8%
2/1+2/2	B1532 London Road South Ahead Left	U	1	N/A	C D		1	24	-	175	1863:1802	105+304	42.8 : 42.8%
2/3	B1532 London Road South Right	U	1	N/A	F		1	38	-	75	2115	687	10.9%
3/1	A12 Belvedere Road Ahead	U	1	N/A	A		1	69	-	372	1915	1117	33.3%
3/2	A12 Belvedere Road Ahead	U	1	N/A	A		1	69	-	362	1915	1117	32.4%
4/1	Ahead	U	N/A	N/A	-		-	-	-	372	Inf	Inf	0.0%
4/2	Ahead	U	N/A	N/A	-		-	-	-	492	Inf	Inf	0.0%

Full Input Data And Results

5/1	Parade Road North	U	N/A	N/A	-		-	-	-	424	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	161	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	116	Inf	Inf	0.0%
7/1	The Beach Right	O	N/A	N/A	-		-	-	-	75	2115	2115	3.5%
Ped Link: P1	Parade Road North Ped	-	1	-	J		1	38	-	0	-	0	0.0%
Ped Link: P2	The Beach Ped	-	1	-	I		1	72	-	0	-	0	0.0%
Ped Link: P3	London Road South	-	1	-	K		1	72	-	0	-	0	0.0%
Ped Link: P4	A12 Belvedere Road Ped	-	1	-	L		1	5	-	0	-	0	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	**-**	**-**	**0**	**75**	**0**	**7.3**	**1.9**	**0.0**	**9.2**	**-**	**-**	**-**	**-**
J1: A12 Pier Terrace	**-**	**-**	**0**	**0**	**0**	**0.3**	**0.6**	**0.0**	**0.8**	**-**	**-**	**-**	**-**
1/1	581	581	-	-	-	0.2	0.2	-	0.4	2.7	3.1	0.2	3.3
2/1	372	372	-	-	-	0.0	0.1	-	0.2	1.6	0.4	0.1	0.6
2/2	492	492	-	-	-	0.0	0.2	-	0.2	1.7	0.7	0.2	0.9
3/1	372	372	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	492	492	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	581	581	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	**-**	**-**	**0**	**75**	**0**	**7.0**	**1.3**	**0.0**	**8.4**	**-**	**-**	**-**	**-**
1/2+1/1	581	581	-	-	-	1.9	0.4	-	2.3	14.0	7.9	0.4	8.2
2/1+2/2	175	175	-	-	-	2.0	0.4	-	2.3	47.9	3.9	0.4	4.3
2/3	75	75	-	-	-	0.6	0.1	-	0.7	31.3	1.7	0.1	1.8
3/1	372	372	-	-	-	1.3	0.2	-	1.6	15.3	6.4	0.2	6.7
3/2	362	362	-	-	-	1.3	0.2	-	1.5	15.2	6.1	0.2	6.4
4/1	372	372	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	492	492	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	424	424	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	161	161	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	116	116	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	75	75	0	75	0	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

Full Input Data And Results

C1	Stream: 1	PRC for Signalled Lanes (%):	105.5	Total Delay for Signalled Lanes (pcuHr):	8.35	Cycle Time (s):	120
C1	Stream: 2	PRC for Signalled Lanes (%):	173.0	Total Delay for Signalled Lanes (pcuHr):	0.83	Cycle Time (s):	120
		PRC Over All Lanes (%):	105.5	Total Delay Over All Lanes(pcuHr):	9.20		

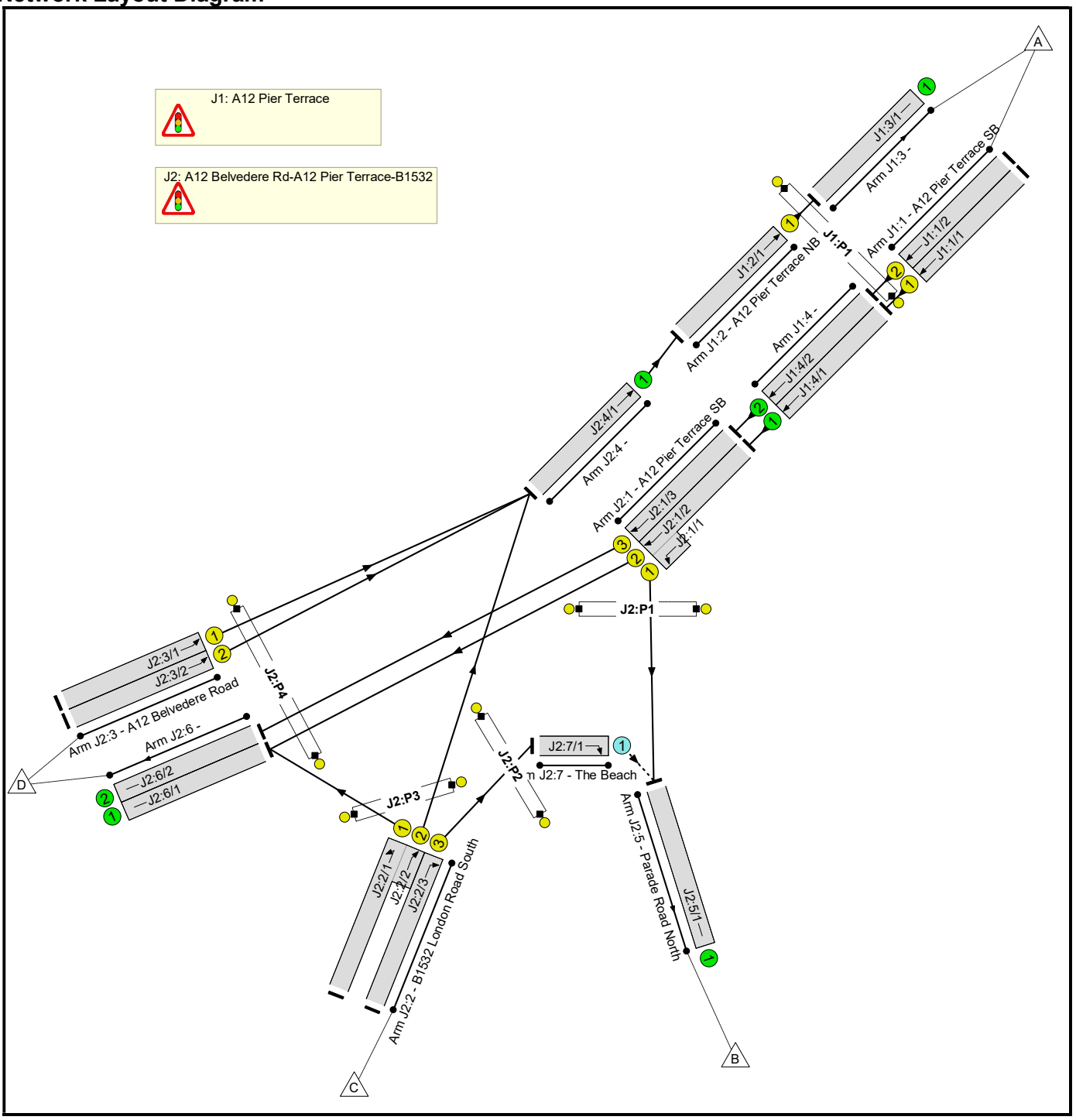
Full Input Data And Results

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	04 A12 Pier Terrace-London Rd sig PM v4 - 2018-08-13.lsg3x
Author:	
Company:	
Address:	

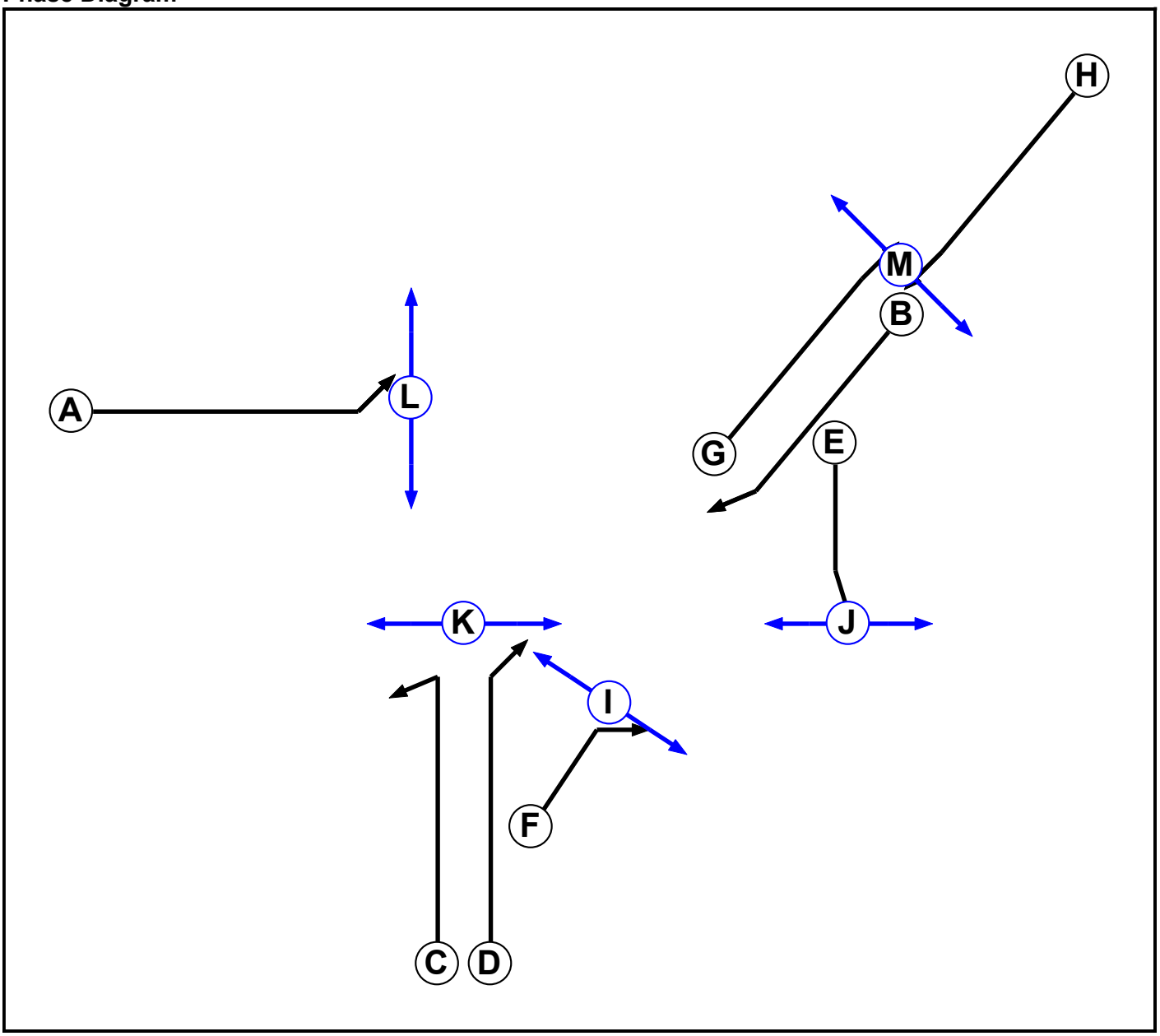
Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	1		7	7
D	Traffic	1		7	7
E	Traffic	1		7	7
F	Traffic	1		7	7
G	Traffic	2		7	7
H	Traffic	2		7	7
I	Pedestrian	1		5	5
J	Pedestrian	1		5	5
K	Pedestrian	1		5	5
L	Pedestrian	1		5	5
M	Pedestrian	2		5	5

Phase Intergreens Matrix

		Starting Phase												
		A	B	C	D	E	F	G	H	I	J	K	L	M
Terminating Phase	A		-	-	5	-	-	-	-	-	-	-	5	-
	B	-		5	5	-	-	-	-	-	-	-	9	-
	C	-	5		-	-	-	-	-	-	-	5	10	-
	D	5	6	-		-	-	-	-	-	-	5	10	-
	E	-	-	-	-		5	-	-	-	5	-	-	-
	F	-	-	-	-	5		-	-	5	-	-	-	-
	G	-	-	-	-	-	-		-	-	-	-	-	5
	H	-	-	-	-	-	-	-		-	-	-	-	5
	I	-	-	-	-	-	5	-	-		-	-	-	-
	J	-	-	-	-	5	-	-	-	-		-	-	-
	K	-	-	5	5	-	-	-	-	-	-		-	-
	L	5	5	5	5	-	-	-	-	-	-	-		-
	M	-	-	-	-	-	-	5	5	-	-	-	-	

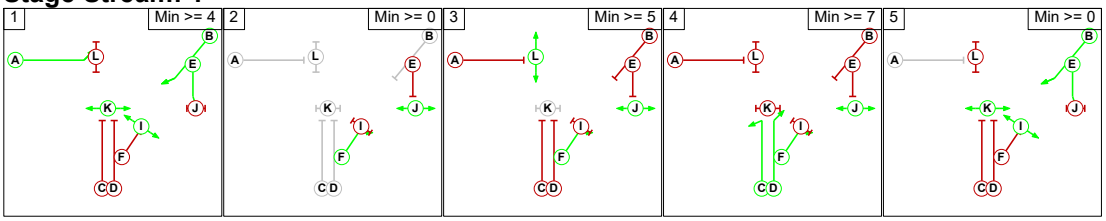
Phases in Stage

Stream	Stage No.	Phases in Stage
1	1	A B E I K
1	2	F J
1	3	F J L
1	4	C D F J
1	5	B E I K
2	1	G H
2	2	M

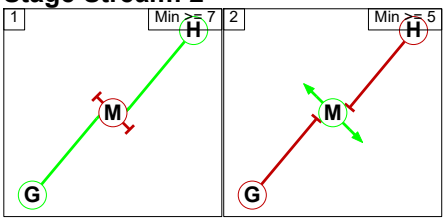
Full Input Data And Results

Stage Diagram

Stage Stream: 1



Stage Stream: 2



Phase Delays

Stage Stream: 1

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Stage Stream: 2

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

Stage Stream: 1

		To Stage				
		1	2	3	4	5
From Stage	1		5	9	5	0
	2	5		0	2	5
	3	5	0		5	5
	4	6	0	10		6
	5	2	5	9	5	

Stage Stream: 2

		To Stage	
		1	2
From Stage	1		5
	2	5	

Full Input Data And Results

Give-Way Lane Input Data

Junction: J1: A12 Pier Terrace
There are no Opposed Lanes in this Junction

Junction: J2: A12 Belvedere Rd-A12 Pier Terrace-B1532											
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)**
J2:7/1 (The Beach)	J2:5/1 (Right)	1439	0	J2:5/1	1.09	All	-	-	-	-	-

Full Input Data And Results

Lane Input Data

Junction: J1: A12 Pier Terrace												
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)**
J1:1/1 (A12 Pier Terrace SB)	U	H	2	3	34.8	Geom	-	3.80	0.00	Y	Arm J1:4 Ahead	Inf
J1:1/2 (A12 Pier Terrace SB)	U	H	2	3	60.0	Geom	-	3.80	0.00	Y	Arm J1:4 Ahead	Inf
J1:2/1 (A12 Pier Terrace NB)	U	G	2	3	8.7	Geom	-	3.80	0.00	Y	Arm J1:3 Ahead	Inf
J1:3/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:4/2	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Junction: J2: A12 Belvedere Rd-A12 Pier Terrace-B1532												
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)**
J2:1/1 (A12 Pier Terrace SB)	U	E	2	3	2.6	Geom	-	5.00	0.00	Y	Arm J2:5 Left	Inf
J2:1/2 (A12 Pier Terrace SB)	U	B	2	3	8.7	Geom	-	3.50	0.00	Y	Arm J2:6 Ahead	Inf
J2:1/3 (A12 Pier Terrace SB)	U	B	2	3	8.7	Geom	-	3.80	0.00	Y	Arm J2:6 Ahead	Inf
J2:2/1 (B1532 London Road South)	U	C	2	3	60.0	Geom	-	4.10	0.00	Y	Arm J2:6 Left	17.30
J2:2/2 (B1532 London Road South)	U	D	2	3	3.0	Geom	-	4.10	0.00	Y	Arm J2:4 Ahead	Inf
J2:2/3 (B1532 London Road South)	U	F	2	3	60.0	Geom	-	5.00	0.00	Y	Arm J2:7 Right	Inf
J2:3/1 (A12 Belvedere Road)	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J2:4 Ahead	Inf
J2:3/2 (A12 Belvedere Road)	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J2:4 Ahead	Inf
J2:4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:5/1 (Parade Road North)	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:6/2	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:7/1 (The Beach)	O		2	3	1.7	Geom	-	5.00	0.00	Y	Arm J2:5 Right	Inf

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'Base 2016 PM'	17:00	18:00	01:00	
2: '2022 DM PM'	17:00	18:00	01:00	
3: '2022 DS PM'	17:00	18:00	01:00	
4: '2037 DM PM'	17:00	18:00	01:00	
5: '2037 DS PM'	17:00	18:00	01:00	

Scenario 1: 'Base 2016 PM' (FG1: 'Base 2016 PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	585	0	1088	1673
	B	0	0	0	0	0
	C	119	48	0	7	174
	D	876	0	0	0	876
	Tot.	995	633	0	1095	2723

Traffic Lane Flows

Lane	Scenario 1: Base 2016 PM
Junction: J1: A12 Pier Terrace	
J1:1/1	925
J1:1/2	748
J1:2/1	995
J1:3/1	995
J1:4/1	925
J1:4/2	748
Junction: J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	
J2:1/1 (short)	585
J2:1/2 (with short)	925(In) 340(Out)
J2:1/3	748
J2:2/1 (with short)	126(In) 7(Out)
J2:2/2 (short)	119
J2:2/3	48
J2:3/1	438
J2:3/2	438
J2:4/1	995
J2:5/1	633
J2:6/1	347
J2:6/2	748
J2:7/1	48

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 Pier Terrace								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (A12 Pier Terrace SB)	3.80	0.00	Y	Arm J1:4 Ahead	Inf	100.0 %	1995	1995
J1:1/2 (A12 Pier Terrace SB)	3.80	0.00	Y	Arm J1:4 Ahead	Inf	100.0 %	1995	1995
J1:2/1 (A12 Pier Terrace NB)	3.80	0.00	Y	Arm J1:3 Ahead	Inf	100.0 %	1995	1995
J1:3/1	Infinite Saturation Flow						Inf	Inf
J1:4/1	Infinite Saturation Flow						Inf	Inf
J1:4/2	Infinite Saturation Flow						Inf	Inf

Junction: J2: A12 Belvedere Rd-A12 Pier Terrace-B1532								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (A12 Pier Terrace SB)	5.00	0.00	Y	Arm J2:5 Left	Inf	100.0 %	2115	2115
J2:1/2 (A12 Pier Terrace SB)	3.50	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1965	1965
J2:1/3 (A12 Pier Terrace SB)	3.80	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1995	1995
J2:2/1 (B1532 London Road South)	4.10	0.00	Y	Arm J2:6 Left	17.30	100.0 %	1863	1863
J2:2/2 (B1532 London Road South)	4.10	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	2025	2025
J2:2/3 (B1532 London Road South)	5.00	0.00	Y	Arm J2:7 Right	Inf	100.0 %	2115	2115
J2:3/1 (A12 Belvedere Road)	3.00	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1915	1915
J2:3/2 (A12 Belvedere Road)	3.00	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1915	1915
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Parade Road North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf
J2:6/2	Infinite Saturation Flow						Inf	Inf
J2:7/1 (The Beach)	5.00	0.00	Y	Arm J2:5 Right	Inf	100.0 %	2115	2115

Full Input Data And Results

Scenario 2: '2022 DM PM' (FG2: '2022 DM PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	628	0	1130	1758
	B	0	0	0	0	0
	C	118	50	0	8	176
	D	916	0	0	0	916
	Tot.	1034	678	0	1138	2850

Traffic Lane Flows

Lane	Scenario 2: 2022 DM PM
Junction: J1: A12 Pier Terrace	
J1:1/1	962
J1:1/2	796
J1:2/1	1034
J1:3/1	1034
J1:4/1	962
J1:4/2	796
Junction: J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	
J2:1/1 (short)	628
J2:1/2 (with short)	962(In) 334(Out)
J2:1/3	796
J2:2/1 (with short)	126(In) 8(Out)
J2:2/2 (short)	118
J2:2/3	50
J2:3/1	458
J2:3/2	458
J2:4/1	1034
J2:5/1	678
J2:6/1	342
J2:6/2	796
J2:7/1	50

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 Pier Terrace								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (A12 Pier Terrace SB)	3.80	0.00	Y	Arm J1:4 Ahead	Inf	100.0 %	1995	1995
J1:1/2 (A12 Pier Terrace SB)	3.80	0.00	Y	Arm J1:4 Ahead	Inf	100.0 %	1995	1995
J1:2/1 (A12 Pier Terrace NB)	3.80	0.00	Y	Arm J1:3 Ahead	Inf	100.0 %	1995	1995
J1:3/1	Infinite Saturation Flow						Inf	Inf
J1:4/1	Infinite Saturation Flow						Inf	Inf
J1:4/2	Infinite Saturation Flow						Inf	Inf

Junction: J2: A12 Belvedere Rd-A12 Pier Terrace-B1532								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (A12 Pier Terrace SB)	5.00	0.00	Y	Arm J2:5 Left	Inf	100.0 %	2115	2115
J2:1/2 (A12 Pier Terrace SB)	3.50	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1965	1965
J2:1/3 (A12 Pier Terrace SB)	3.80	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1995	1995
J2:2/1 (B1532 London Road South)	4.10	0.00	Y	Arm J2:6 Left	17.30	100.0 %	1863	1863
J2:2/2 (B1532 London Road South)	4.10	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	2025	2025
J2:2/3 (B1532 London Road South)	5.00	0.00	Y	Arm J2:7 Right	Inf	100.0 %	2115	2115
J2:3/1 (A12 Belvedere Road)	3.00	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1915	1915
J2:3/2 (A12 Belvedere Road)	3.00	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1915	1915
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Parade Road North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf
J2:6/2	Infinite Saturation Flow						Inf	Inf
J2:7/1 (The Beach)	5.00	0.00	Y	Arm J2:5 Right	Inf	100.0 %	2115	2115

Full Input Data And Results

Scenario 3: '2022 DS PM' (FG3: '2022 DS PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	539	0	722	1261
	B	0	0	0	0	0
	C	95	59	0	8	162
	D	397	0	0	0	397
	Tot.	492	598	0	730	1820

Traffic Lane Flows

Lane	Scenario 3: 2022 DS PM
Junction: J1: A12 Pier Terrace	
J1:1/1	713
J1:1/2	548
J1:2/1	492
J1:3/1	492
J1:4/1	713
J1:4/2	548
Junction: J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	
J2:1/1 (short)	539
J2:1/2 (with short)	713(In) 174(Out)
J2:1/3	548
J2:2/1 (with short)	103(In) 8(Out)
J2:2/2 (short)	95
J2:2/3	59
J2:3/1	199
J2:3/2	198
J2:4/1	492
J2:5/1	598
J2:6/1	182
J2:6/2	548
J2:7/1	59

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 Pier Terrace								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (A12 Pier Terrace SB)	3.80	0.00	Y	Arm J1:4 Ahead	Inf	100.0 %	1995	1995
J1:1/2 (A12 Pier Terrace SB)	3.80	0.00	Y	Arm J1:4 Ahead	Inf	100.0 %	1995	1995
J1:2/1 (A12 Pier Terrace NB)	3.80	0.00	Y	Arm J1:3 Ahead	Inf	100.0 %	1995	1995
J1:3/1	Infinite Saturation Flow						Inf	Inf
J1:4/1	Infinite Saturation Flow						Inf	Inf
J1:4/2	Infinite Saturation Flow						Inf	Inf

Junction: J2: A12 Belvedere Rd-A12 Pier Terrace-B1532								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (A12 Pier Terrace SB)	5.00	0.00	Y	Arm J2:5 Left	Inf	100.0 %	2115	2115
J2:1/2 (A12 Pier Terrace SB)	3.50	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1965	1965
J2:1/3 (A12 Pier Terrace SB)	3.80	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1995	1995
J2:2/1 (B1532 London Road South)	4.10	0.00	Y	Arm J2:6 Left	17.30	100.0 %	1863	1863
J2:2/2 (B1532 London Road South)	4.10	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	2025	2025
J2:2/3 (B1532 London Road South)	5.00	0.00	Y	Arm J2:7 Right	Inf	100.0 %	2115	2115
J2:3/1 (A12 Belvedere Road)	3.00	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1915	1915
J2:3/2 (A12 Belvedere Road)	3.00	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1915	1915
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Parade Road North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf
J2:6/2	Infinite Saturation Flow						Inf	Inf
J2:7/1 (The Beach)	5.00	0.00	Y	Arm J2:5 Right	Inf	100.0 %	2115	2115

Full Input Data And Results

Scenario 4: '2037 DM PM' (FG4: '2037 DM PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	759	0	1192	1951
	B	0	0	0	0	0
	C	120	59	0	9	188
	D	978	0	0	0	978
	Tot.	1098	818	0	1201	3117

Traffic Lane Flows

Lane	Scenario 4: 2037 DM PM
Junction: J1: A12 Pier Terrace	
J1:1/1	1046
J1:1/2	905
J1:2/1	1098
J1:3/1	1098
J1:4/1	1046
J1:4/2	905
Junction: J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	
J2:1/1 (short)	759
J2:1/2 (with short)	1046(In) 287(Out)
J2:1/3	905
J2:2/1 (with short)	129(In) 9(Out)
J2:2/2 (short)	120
J2:2/3	59
J2:3/1	489
J2:3/2	489
J2:4/1	1098
J2:5/1	818
J2:6/1	296
J2:6/2	905
J2:7/1	59

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 Pier Terrace								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (A12 Pier Terrace SB)	3.80	0.00	Y	Arm J1:4 Ahead	Inf	100.0 %	1995	1995
J1:1/2 (A12 Pier Terrace SB)	3.80	0.00	Y	Arm J1:4 Ahead	Inf	100.0 %	1995	1995
J1:2/1 (A12 Pier Terrace NB)	3.80	0.00	Y	Arm J1:3 Ahead	Inf	100.0 %	1995	1995
J1:3/1	Infinite Saturation Flow						Inf	Inf
J1:4/1	Infinite Saturation Flow						Inf	Inf
J1:4/2	Infinite Saturation Flow						Inf	Inf

Junction: J2: A12 Belvedere Rd-A12 Pier Terrace-B1532								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (A12 Pier Terrace SB)	5.00	0.00	Y	Arm J2:5 Left	Inf	100.0 %	2115	2115
J2:1/2 (A12 Pier Terrace SB)	3.50	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1965	1965
J2:1/3 (A12 Pier Terrace SB)	3.80	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1995	1995
J2:2/1 (B1532 London Road South)	4.10	0.00	Y	Arm J2:6 Left	17.30	100.0 %	1863	1863
J2:2/2 (B1532 London Road South)	4.10	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	2025	2025
J2:2/3 (B1532 London Road South)	5.00	0.00	Y	Arm J2:7 Right	Inf	100.0 %	2115	2115
J2:3/1 (A12 Belvedere Road)	3.00	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1915	1915
J2:3/2 (A12 Belvedere Road)	3.00	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1915	1915
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Parade Road North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf
J2:6/2	Infinite Saturation Flow						Inf	Inf
J2:7/1 (The Beach)	5.00	0.00	Y	Arm J2:5 Right	Inf	100.0 %	2115	2115

Full Input Data And Results

Scenario 5: '2037 DS PM' (FG5: '2037 DS PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	769	0	610	1379
	B	0	0	0	0	0
	C	161	64	0	22	247
	D	338	0	0	0	338
	Tot.	499	833	0	632	1964

Traffic Lane Flows

Lane	Scenario 5: 2037 DS PM
Junction: J1: A12 Pier Terrace	
J1:1/1	769
J1:1/2	610
J1:2/1	499
J1:3/1	499
J1:4/1	769
J1:4/2	610
Junction: J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	
J2:1/1 (short)	769
J2:1/2 (with short)	769(In) 0(Out)
J2:1/3	610
J2:2/1 (with short)	183(In) 22(Out)
J2:2/2 (short)	161
J2:2/3	64
J2:3/1	169
J2:3/2	169
J2:4/1	499
J2:5/1	833
J2:6/1	22
J2:6/2	610
J2:7/1	64

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 Pier Terrace								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (A12 Pier Terrace SB)	3.80	0.00	Y	Arm J1:4 Ahead	Inf	100.0 %	1995	1995
J1:1/2 (A12 Pier Terrace SB)	3.80	0.00	Y	Arm J1:4 Ahead	Inf	100.0 %	1995	1995
J1:2/1 (A12 Pier Terrace NB)	3.80	0.00	Y	Arm J1:3 Ahead	Inf	100.0 %	1995	1995
J1:3/1	Infinite Saturation Flow						Inf	Inf
J1:4/1	Infinite Saturation Flow						Inf	Inf
J1:4/2	Infinite Saturation Flow						Inf	Inf

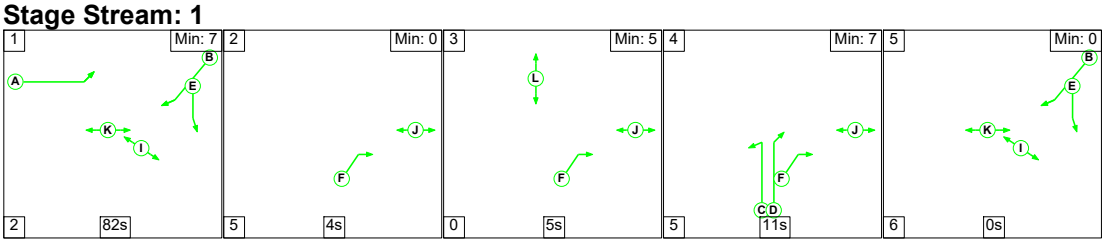
Junction: J2: A12 Belvedere Rd-A12 Pier Terrace-B1532								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (A12 Pier Terrace SB)	5.00	0.00	Y	Arm J2:5 Left	Inf	100.0 %	2115	2115
J2:1/2 (A12 Pier Terrace SB)	3.50	0.00	Y	Arm J2:6 Ahead	Inf	0.0 %	1965	1965
J2:1/3 (A12 Pier Terrace SB)	3.80	0.00	Y	Arm J2:6 Ahead	Inf	100.0 %	1995	1995
J2:2/1 (B1532 London Road South)	4.10	0.00	Y	Arm J2:6 Left	17.30	100.0 %	1863	1863
J2:2/2 (B1532 London Road South)	4.10	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	2025	2025
J2:2/3 (B1532 London Road South)	5.00	0.00	Y	Arm J2:7 Right	Inf	100.0 %	2115	2115
J2:3/1 (A12 Belvedere Road)	3.00	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1915	1915
J2:3/2 (A12 Belvedere Road)	3.00	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1915	1915
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Parade Road North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf
J2:6/2	Infinite Saturation Flow						Inf	Inf
J2:7/1 (The Beach)	5.00	0.00	Y	Arm J2:5 Right	Inf	100.0 %	2115	2115

Full Input Data And Results

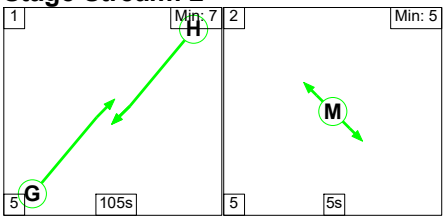
Scenario 1: 'Base 2016 PM' (FG1: 'Base 2016 PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

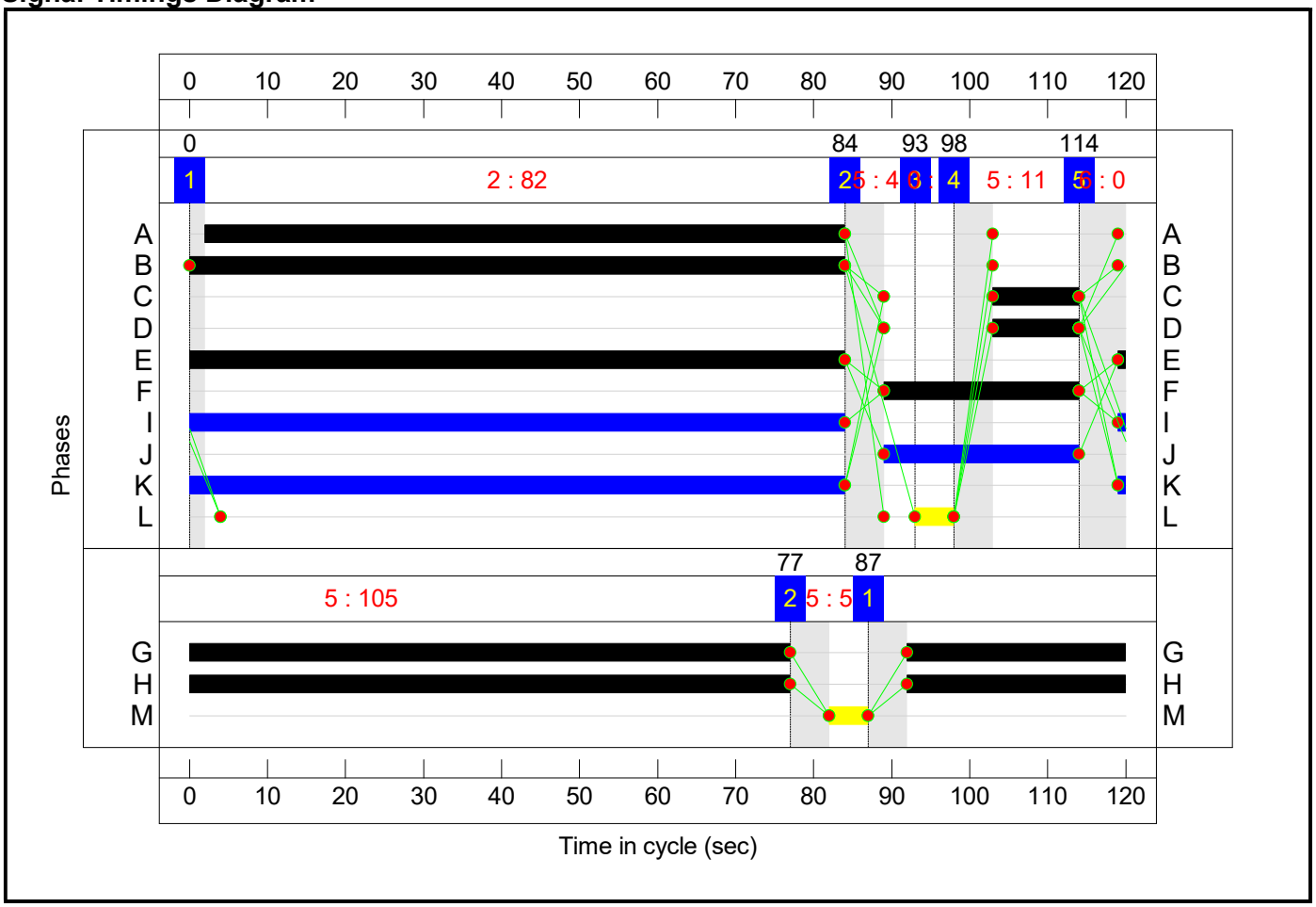
Stage	1	2	3	4	5
Duration	82	4	5	11	0
Change Point	0	84	93	98	114

Stage Stream: 2

Stage	1	2
Duration	105	5
Change Point	87	77

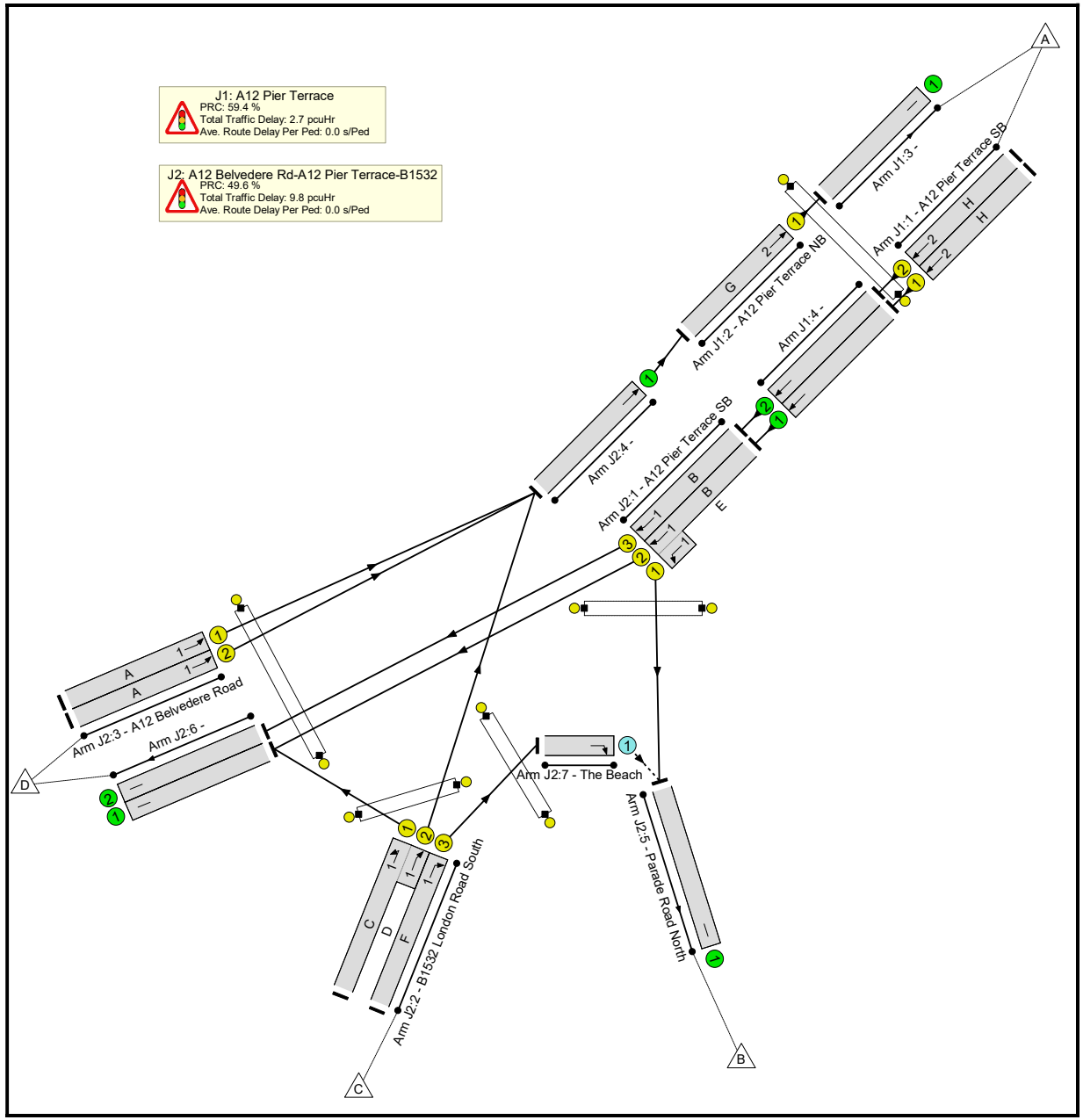
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**60.1%**
J1: A12 Pier Terrace	-	-	**N/A**	-	-		-	-	-	-	-	-	**56.5%**
1/1	A12 Pier Terrace SB Ahead	U	2	N/A	H		1	105	-	925	1995	1762	52.5%
1/2	A12 Pier Terrace SB Ahead	U	2	N/A	H		1	105	-	748	1995	1762	42.4%
2/1	A12 Pier Terrace NB Ahead	U	2	N/A	G		1	105	-	995	1995	1762	56.5%
3/1		U	N/A	N/A	-		-	-	-	995	Inf	Inf	0.0%
4/1	Ahead	U	N/A	N/A	-		-	-	-	925	Inf	Inf	0.0%
4/2	Ahead	U	N/A	N/A	-		-	-	-	748	Inf	Inf	0.0%
Ped Link: P1	A12 Pier Terrace Ped	-	2	-	M		1	5	-	0	-	0	0.0%
J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	-	-	**N/A**	-	-		-	-	-	-	-	-	**60.1%**
1/2+1/1	A12 Pier Terrace SB Left Ahead	U	1	N/A	B E		1	84:85	-	925	1965:2115	565+973	60.1 : 60.1%
1/3	A12 Pier Terrace SB Ahead	U	1	N/A	B		1	84	-	748	1995	1413	52.9%
2/1+2/2	B1532 London Road South Ahead Left	U	1	N/A	C D		1	11	-	126	1863:2025	12+201	59.2 : 59.2%
2/3	B1532 London Road South Right	U	1	N/A	F		1	25	-	48	2115	458	10.5%
3/1	A12 Belvedere Road Ahead	U	1	N/A	A		1	82	-	438	1915	1325	33.1%
3/2	A12 Belvedere Road Ahead	U	1	N/A	A		1	82	-	438	1915	1325	33.1%

Full Input Data And Results

4/1	Ahead	U	N/A	N/A	-		-	-	-	995	Inf	Inf	0.0%
5/1	Parade Road North	U	N/A	N/A	-		-	-	-	633	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	347	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	748	Inf	Inf	0.0%
7/1	The Beach Right	O	N/A	N/A	-		-	-	-	48	2115	2115	2.3%
Ped Link: P1	Parade Road North Ped	-	1	-	J		1	25	-	0	-	0	0.0%
Ped Link: P2	The Beach Ped	-	1	-	I		1	85	-	0	-	0	0.0%
Ped Link: P3	London Road South	-	1	-	K		1	85	-	0	-	0	0.0%
Ped Link: P4	A12 Belvedere Road Ped	-	1	-	L		1	5	-	0	-	0	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	**-**	**-**	**0**	**48**	**0**	**8.3**	**4.2**	**0.0**	**12.5**	**-**	**-**	**-**	**-**
J1: A12 Pier Terrace	**-**	**-**	**0**	**0**	**0**	**1.1**	**1.6**	**0.0**	**2.7**	**-**	**-**	**-**	**-**
1/1	925	925	-	-	-	0.4	0.6	-	0.9	3.7	6.7	0.6	7.2
1/2	748	748	-	-	-	0.3	0.4	-	0.6	3.1	4.6	0.4	4.9
2/1	995	995	-	-	-	0.4	0.6	-	1.1	3.9	8.9	0.6	9.5
3/1	995	995	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	925	925	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	748	748	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	**-**	**-**	**0**	**48**	**0**	**7.2**	**2.6**	**0.0**	**9.8**	**-**	**-**	**-**	**-**
1/2+1/1	925	925	-	-	-	1.6	0.8	-	2.4	9.2	9.3	0.8	10.1
1/3	748	748	-	-	-	1.5	0.6	-	2.0	9.8	10.2	0.6	10.7
2/1+2/2	126	126	-	-	-	1.8	0.7	-	2.5	72.0	3.8	0.7	4.5
2/3	48	48	-	-	-	0.5	0.1	-	0.6	42.1	1.3	0.1	1.3
3/1	438	438	-	-	-	0.9	0.2	-	1.1	9.4	5.7	0.2	6.0
3/2	438	438	-	-	-	0.9	0.2	-	1.1	9.4	5.7	0.2	6.0
4/1	995	995	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	633	633	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	347	347	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	748	748	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	48	48	0	48	0	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

Full Input Data And Results

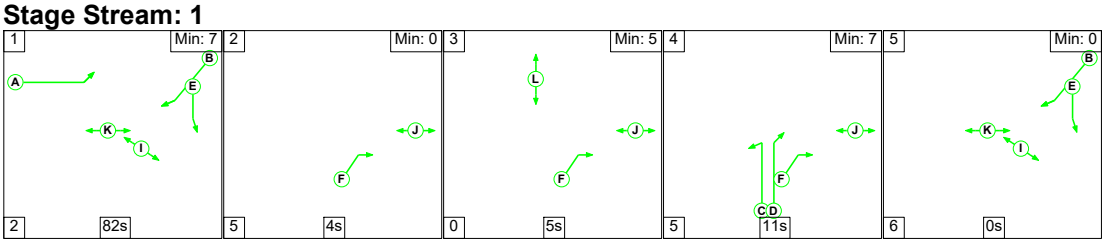
C1	Stream: 1	PRC for Signalled Lanes (%):	49.6	Total Delay for Signalled Lanes (pcuHr):	9.78	Cycle Time (s):	120
C1	Stream: 2	PRC for Signalled Lanes (%):	59.4	Total Delay for Signalled Lanes (pcuHr):	2.67	Cycle Time (s):	120
		PRC Over All Lanes (%):	49.6	Total Delay Over All Lanes(pcuHr):	12.46		

Full Input Data And Results

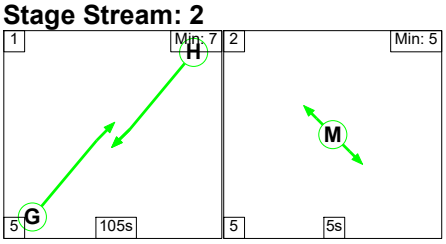
Scenario 2: '2022 DM PM' (FG2: '2022 DM PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

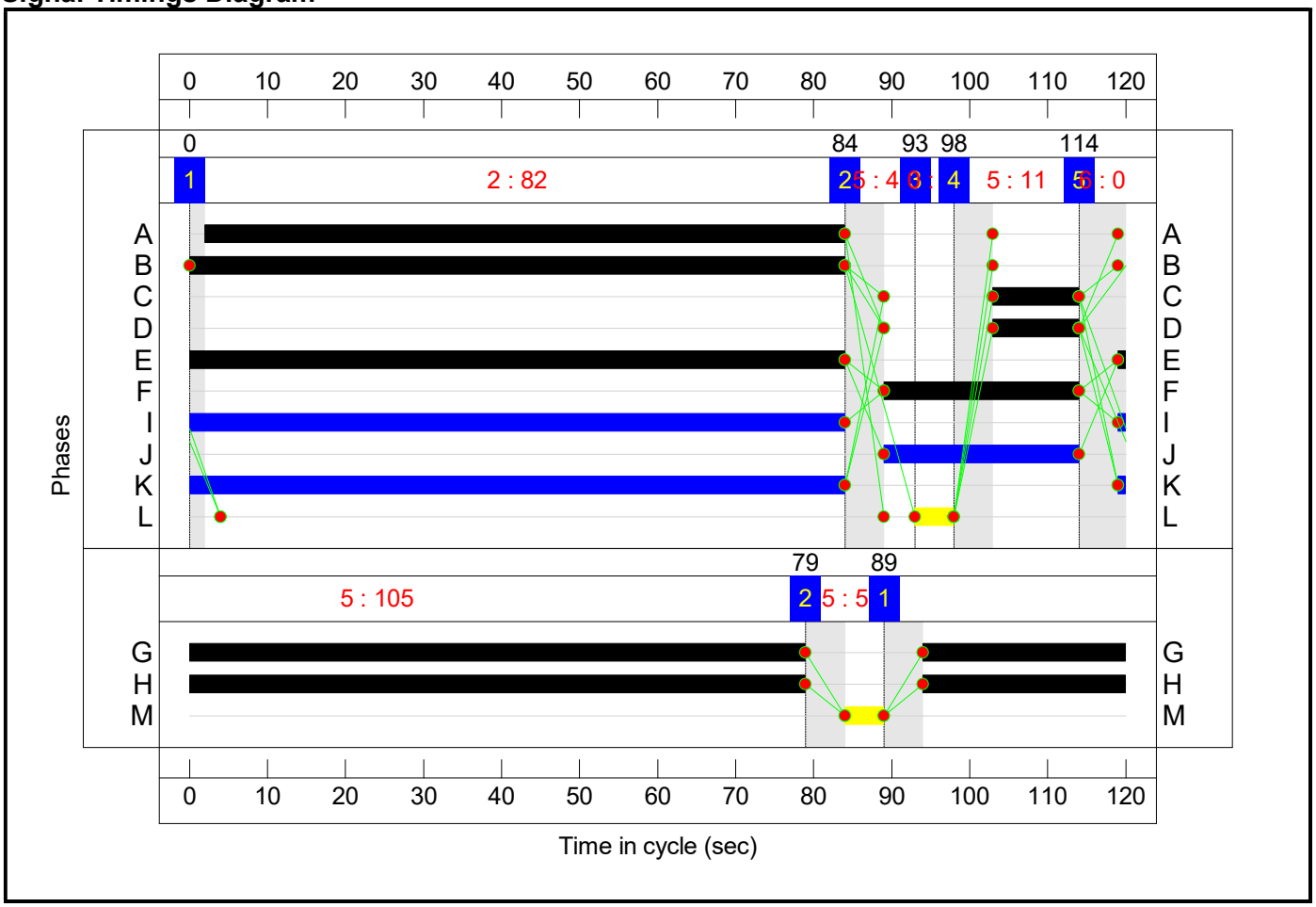
Stage	1	2	3	4	5
Duration	82	4	5	11	0
Change Point	0	84	93	98	114

Stage Stream: 2

Stage	1	2
Duration	105	5
Change Point	89	79

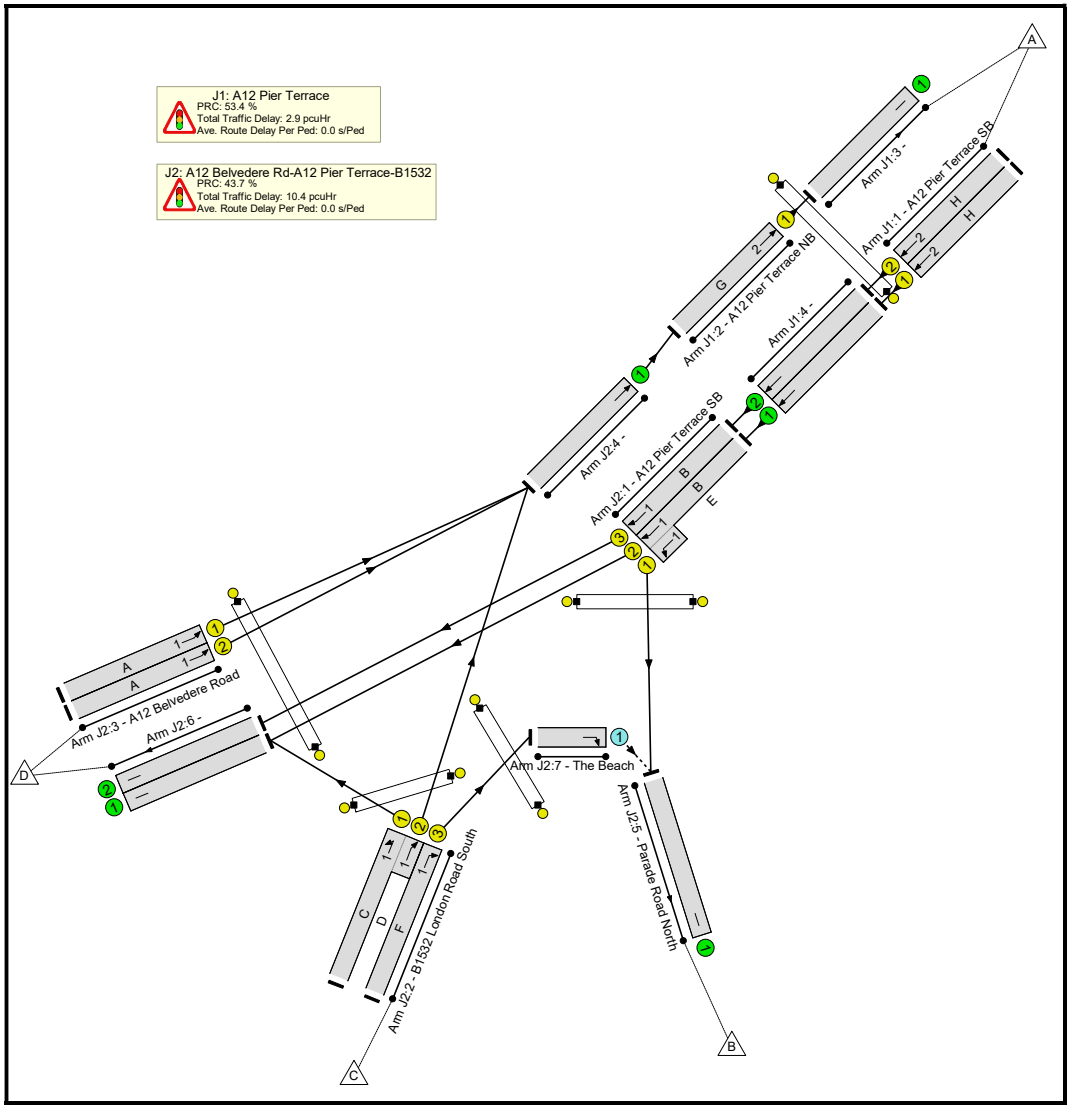
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**62.6%**
J1: A12 Pier Terrace	-	-	**N/A**	-	-		-	-	-	-	-	-	**58.7%**
1/1	A12 Pier Terrace SB Ahead	U	2	N/A	H		1	105	-	962	1995	1762	54.6%
1/2	A12 Pier Terrace SB Ahead	U	2	N/A	H		1	105	-	796	1995	1762	45.2%
2/1	A12 Pier Terrace NB Ahead	U	2	N/A	G		1	105	-	1034	1995	1762	58.7%
3/1		U	N/A	N/A	-		-	-	-	1034	Inf	Inf	0.0%
4/1	Ahead	U	N/A	N/A	-		-	-	-	962	Inf	Inf	0.0%
4/2	Ahead	U	N/A	N/A	-		-	-	-	796	Inf	Inf	0.0%
Ped Link: P1	A12 Pier Terrace Ped	-	2	-	M		1	5	-	0	-	0	0.0%
J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	-	-	**N/A**	-	-		-	-	-	-	-	-	**62.6%**
1/2+1/1	A12 Pier Terrace SB Left Ahead	U	1	N/A	B E		1	84:85	-	962	1965:2115	533+1003	62.6 : 62.6%
1/3	A12 Pier Terrace SB Ahead	U	1	N/A	B		1	84	-	796	1995	1413	56.3%
2/1+2/2	B1532 London Road South Ahead Left	U	1	N/A	C D		1	11	-	126	1863:2025	14+200	59.0 : 59.0%
2/3	B1532 London Road South Right	U	1	N/A	F		1	25	-	50	2115	458	10.9%
3/1	A12 Belvedere Road Ahead	U	1	N/A	A		1	82	-	458	1915	1325	34.6%
3/2	A12 Belvedere Road Ahead	U	1	N/A	A		1	82	-	458	1915	1325	34.6%

Full Input Data And Results

4/1	Ahead	U	N/A	N/A	-		-	-	-	1034	Inf	Inf	0.0%
5/1	Parade Road North	U	N/A	N/A	-		-	-	-	678	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	342	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	796	Inf	Inf	0.0%
7/1	The Beach Right	O	N/A	N/A	-		-	-	-	50	2115	2115	2.4%
Ped Link: P1	Parade Road North Ped	-	1	-	J		1	25	-	0	-	0	0.0%
Ped Link: P2	The Beach Ped	-	1	-	I		1	85	-	0	-	0	0.0%
Ped Link: P3	London Road South	-	1	-	K		1	85	-	0	-	0	0.0%
Ped Link: P4	A12 Belvedere Road Ped	-	1	-	L		1	5	-	0	-	0	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	**-**	**-**	**0**	**50**	**0**	**8.8**	**4.5**	**0.0**	**13.4**	**-**	**-**	**-**	**-**
J1: A12 Pier Terrace	**-**	**-**	**0**	**0**	**0**	**1.2**	**1.7**	**0.0**	**2.9**	**-**	**-**	**-**	**-**
1/1	962	962	-	-	-	0.4	0.6	-	1.0	3.8	7.2	0.6	7.8
1/2	796	796	-	-	-	0.3	0.4	-	0.7	3.2	5.1	0.4	5.5
2/1	1034	1034	-	-	-	0.5	0.7	-	1.2	4.2	10.1	0.7	10.8
3/1	1034	1034	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	962	962	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	796	796	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	**-**	**-**	**0**	**50**	**0**	**7.6**	**2.8**	**0.0**	**10.4**	**-**	**-**	**-**	**-**
1/2+1/1	962	962	-	-	-	1.8	0.8	-	2.6	9.7	10.0	0.8	10.8
1/3	796	796	-	-	-	1.6	0.6	-	2.3	10.4	11.2	0.6	11.9
2/1+2/2	126	126	-	-	-	1.8	0.7	-	2.5	71.7	3.8	0.7	4.5
2/3	50	50	-	-	-	0.5	0.1	-	0.6	42.2	1.3	0.1	1.4
3/1	458	458	-	-	-	1.0	0.3	-	1.2	9.6	6.1	0.3	6.4
3/2	458	458	-	-	-	1.0	0.3	-	1.2	9.6	6.1	0.3	6.4
4/1	1034	1034	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	678	678	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	342	342	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	796	796	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	50	50	0	50	0	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

Full Input Data And Results

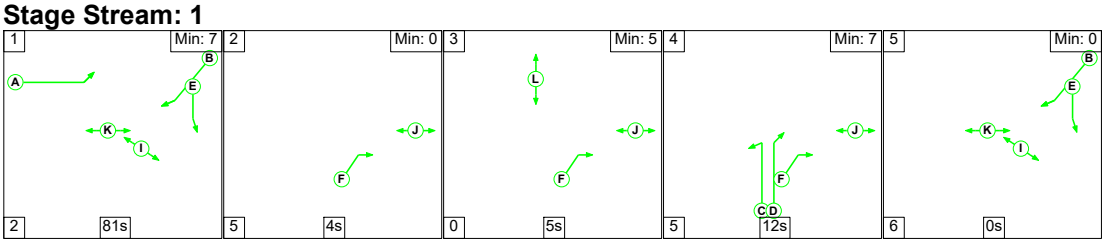
C1	Stream: 1	PRC for Signalled Lanes (%):	43.7	Total Delay for Signalled Lanes (pcuHr):	10.41	Cycle Time (s):	120
C1	Stream: 2	PRC for Signalled Lanes (%):	53.4	Total Delay for Signalled Lanes (pcuHr):	2.94	Cycle Time (s):	120
		PRC Over All Lanes (%):	43.7	Total Delay Over All Lanes(pcuHr):	13.36		

Full Input Data And Results

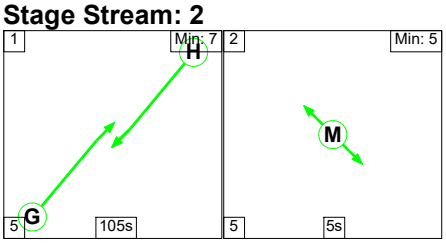
Scenario 3: '2022 DS PM' (FG3: '2022 DS PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

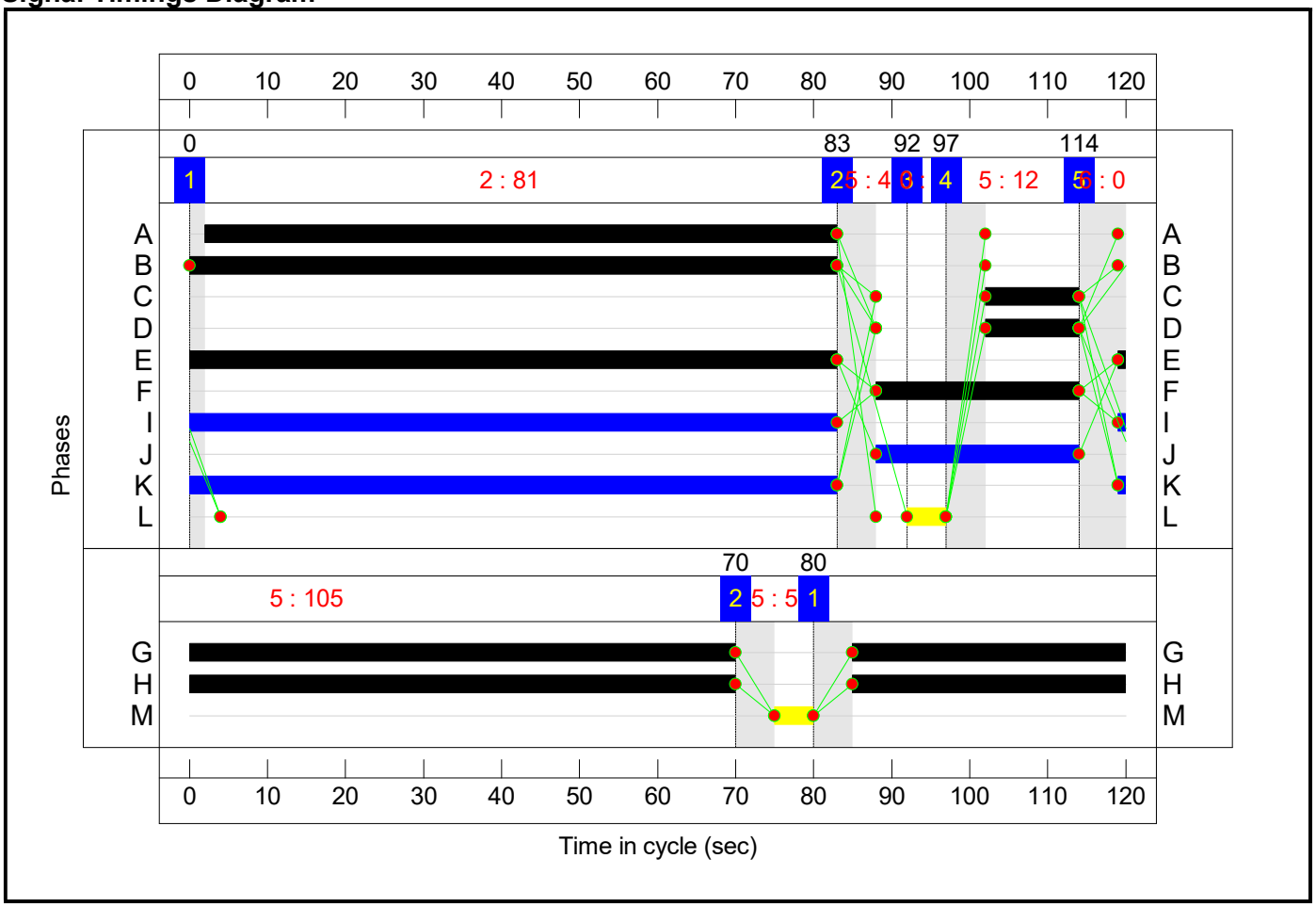
Stage	1	2	3	4	5
Duration	81	4	5	12	0
Change Point	0	83	92	97	114

Stage Stream: 2

Stage	1	2
Duration	105	5
Change Point	80	70

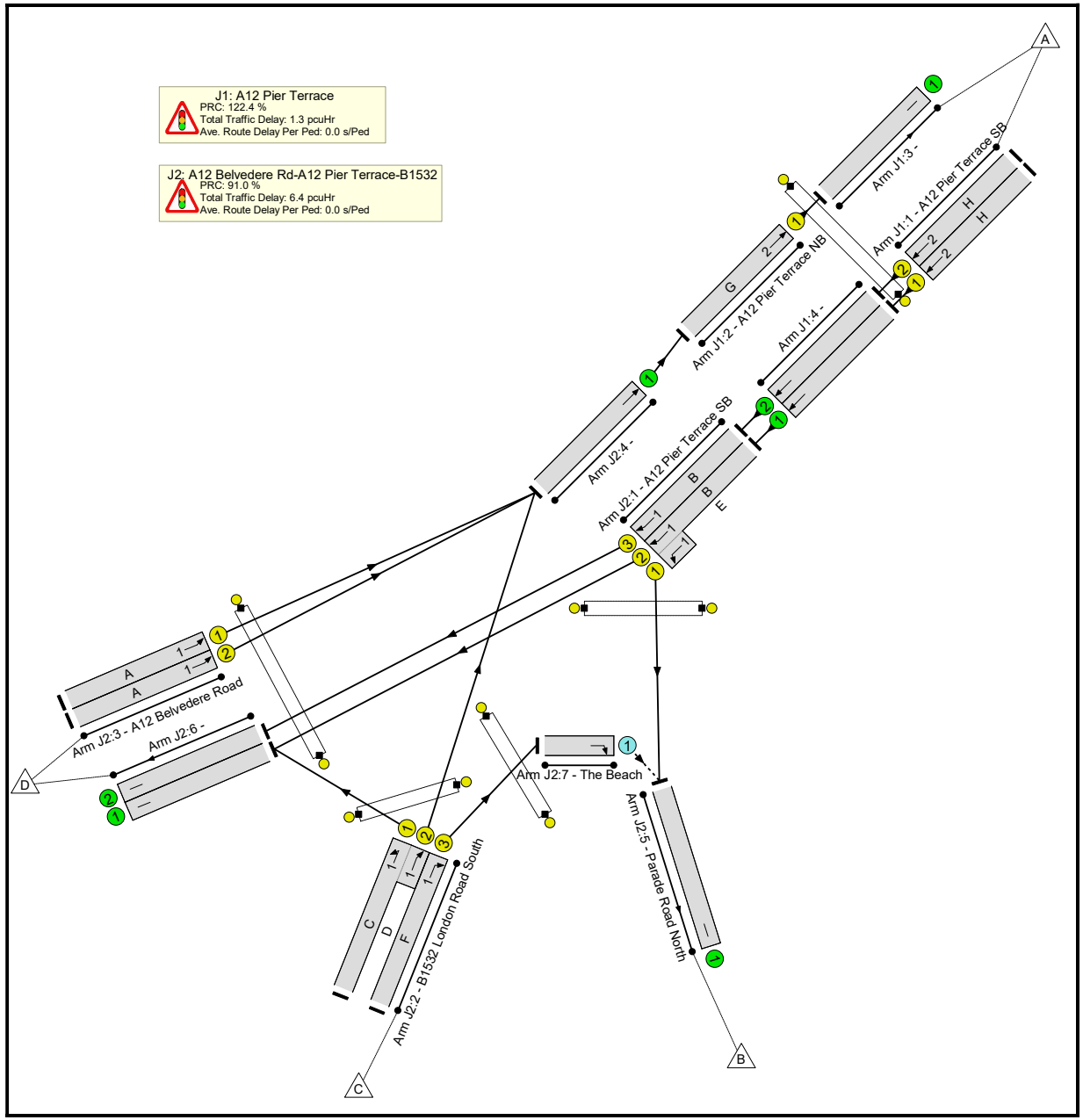
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**47.1%**
J1: A12 Pier Terrace	-	-	**N/A**	-	-		-	-	-	-	-	-	**40.5%**
1/1	A12 Pier Terrace SB Ahead	U	2	N/A	H		1	105	-	713	1995	1762	40.5%
1/2	A12 Pier Terrace SB Ahead	U	2	N/A	H		1	105	-	548	1995	1762	31.1%
2/1	A12 Pier Terrace NB Ahead	U	2	N/A	G		1	105	-	492	1995	1762	27.9%
3/1		U	N/A	N/A	-		-	-	-	492	Inf	Inf	0.0%
4/1	Ahead	U	N/A	N/A	-		-	-	-	713	Inf	Inf	0.0%
4/2	Ahead	U	N/A	N/A	-		-	-	-	548	Inf	Inf	0.0%
Ped Link: P1	A12 Pier Terrace Ped	-	2	-	M		1	5	-	0	-	0	0.0%
J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	-	-	**N/A**	-	-		-	-	-	-	-	-	**47.1%**
1/2+1/1	A12 Pier Terrace SB Left Ahead	U	1	N/A	B E		1	83:84	-	713	1965:2115	369+1144	47.1 : 47.1%
1/3	A12 Pier Terrace SB Ahead	U	1	N/A	B		1	83	-	548	1995	1397	39.2%
2/1+2/2	B1532 London Road South Ahead Left	U	1	N/A	C D		1	12	-	103	1863:2025	18+214	44.5 : 44.5%
2/3	B1532 London Road South Right	U	1	N/A	F		1	26	-	59	2115	476	12.4%
3/1	A12 Belvedere Road Ahead	U	1	N/A	A		1	81	-	199	1915	1309	15.2%
3/2	A12 Belvedere Road Ahead	U	1	N/A	A		1	81	-	198	1915	1309	15.1%

Full Input Data And Results

4/1	Ahead	U	N/A	N/A	-		-	-	-	492	Inf	Inf	0.0%
5/1	Parade Road North	U	N/A	N/A	-		-	-	-	598	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	182	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	548	Inf	Inf	0.0%
7/1	The Beach Right	O	N/A	N/A	-		-	-	-	59	2115	2115	2.8%
Ped Link: P1	Parade Road North Ped	-	1	-	J		1	26	-	0	-	0	0.0%
Ped Link: P2	The Beach Ped	-	1	-	I		1	84	-	0	-	0	0.0%
Ped Link: P3	London Road South	-	1	-	K		1	84	-	0	-	0	0.0%
Ped Link: P4	A12 Belvedere Road Ped	-	1	-	L		1	5	-	0	-	0	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	**-**	**-**	**0**	**59**	**0**	**5.5**	**2.2**	**0.0**	**7.7**	**-**	**-**	**-**	**-**
J1: A12 Pier Terrace	**-**	**-**	**0**	**0**	**0**	**0.5**	**0.8**	**0.0**	**1.3**	**-**	**-**	**-**	**-**
1/1	713	713	-	-	-	0.3	0.3	-	0.6	3.0	4.2	0.3	4.5
1/2	548	548	-	-	-	0.2	0.2	-	0.4	2.6	2.9	0.2	3.1
2/1	492	492	-	-	-	0.1	0.2	-	0.3	2.3	2.0	0.2	2.2
3/1	492	492	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	713	713	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	548	548	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	**-**	**-**	**0**	**59**	**0**	**5.0**	**1.4**	**0.0**	**6.4**	**-**	**-**	**-**	**-**
1/2+1/1	713	713	-	-	-	1.2	0.4	-	1.6	8.3	7.8	0.4	8.2
1/3	548	548	-	-	-	1.0	0.3	-	1.3	8.7	6.9	0.3	7.2
2/1+2/2	103	103	-	-	-	1.4	0.4	-	1.8	63.8	3.0	0.4	3.4
2/3	59	59	-	-	-	0.6	0.1	-	0.7	41.4	1.6	0.1	1.6
3/1	199	199	-	-	-	0.4	0.1	-	0.5	8.3	2.3	0.1	2.4
3/2	198	198	-	-	-	0.4	0.1	-	0.5	8.3	2.3	0.1	2.4
4/1	492	492	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	598	598	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	182	182	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	548	548	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	59	59	0	59	0	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

Full Input Data And Results

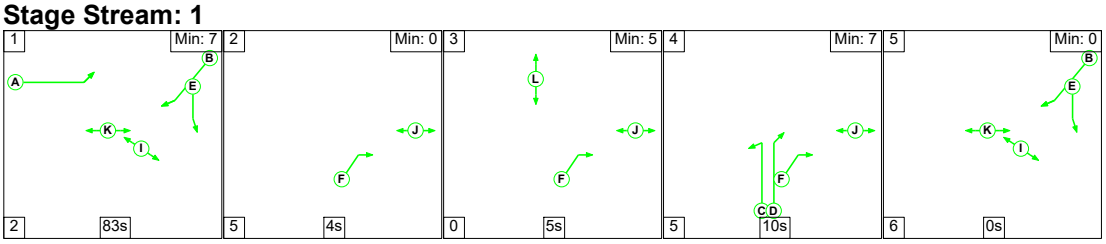
C1	Stream: 1	PRC for Signalled Lanes (%):	91.0	Total Delay for Signalled Lanes (pcuHr):	6.38	Cycle Time (s):	120
C1	Stream: 2	PRC for Signalled Lanes (%):	122.4	Total Delay for Signalled Lanes (pcuHr):	1.31	Cycle Time (s):	120
		PRC Over All Lanes (%):	91.0	Total Delay Over All Lanes(pcuHr):	7.70		

Full Input Data And Results

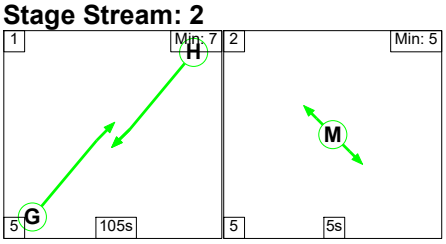
Scenario 4: '2037 DM PM' (FG4: '2037 DM PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

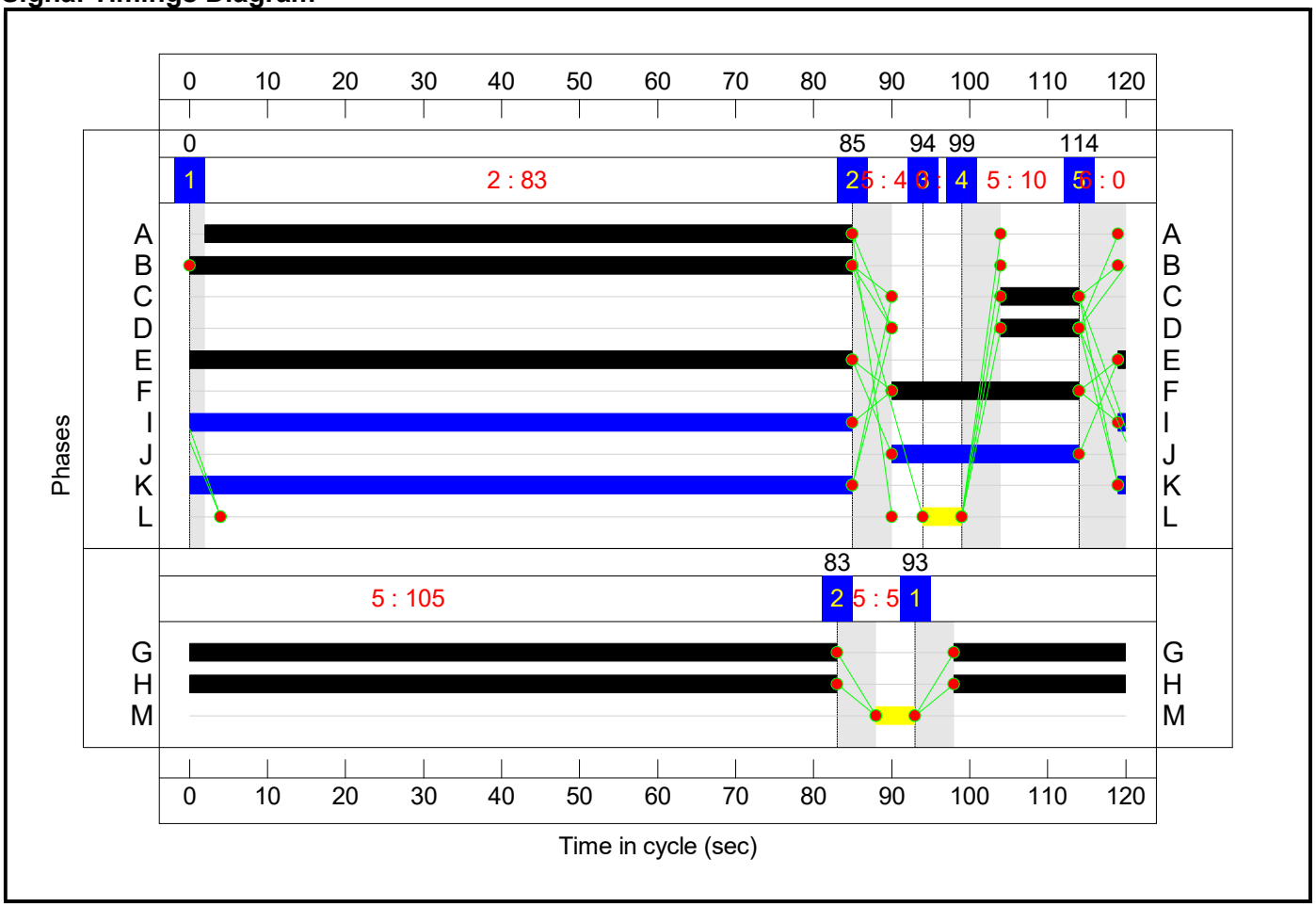
Stage	1	2	3	4	5
Duration	83	4	5	10	0
Change Point	0	85	94	99	114

Stage Stream: 2

Stage	1	2
Duration	105	5
Change Point	93	83

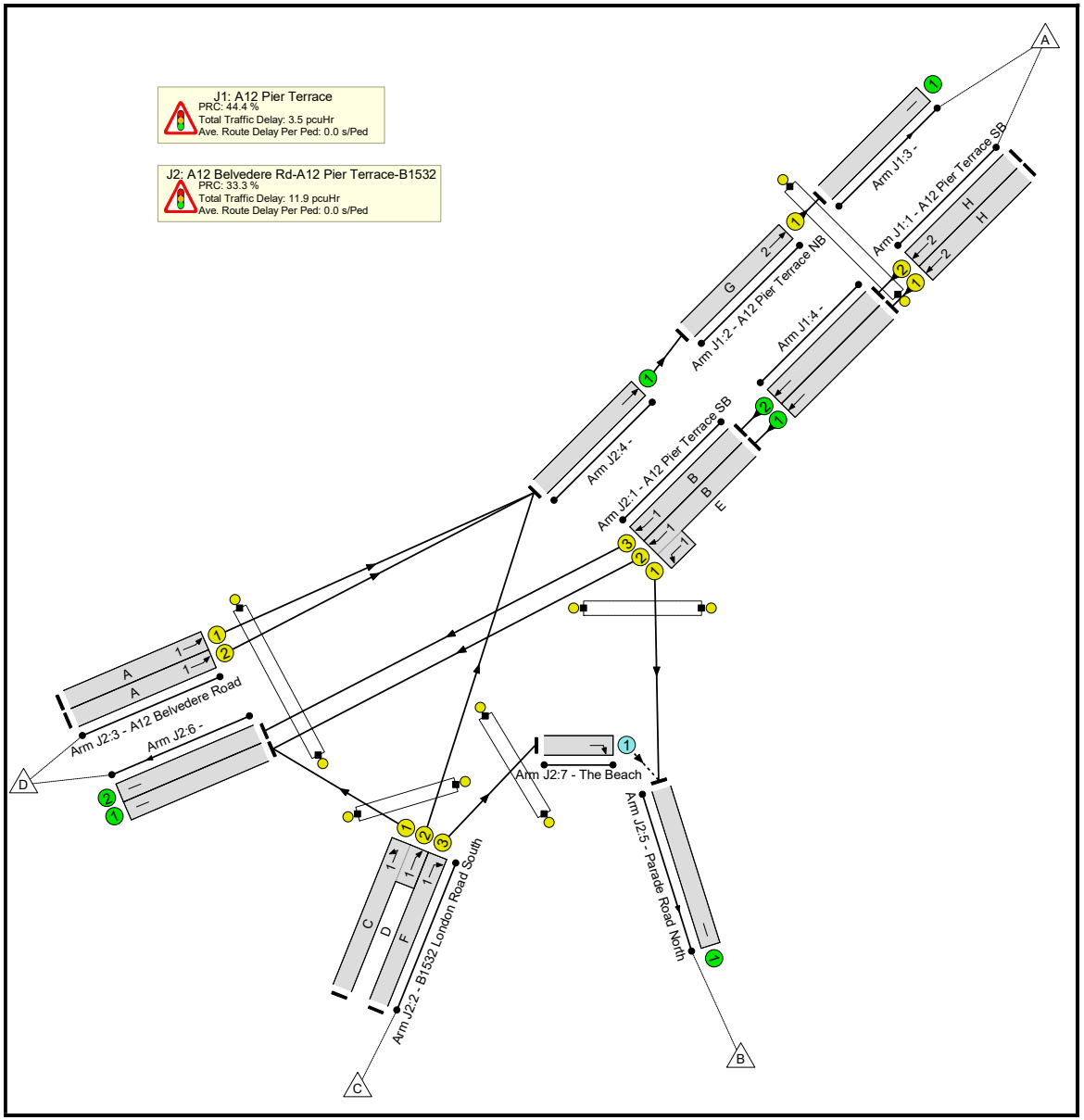
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**67.5%**
J1: A12 Pier Terrace	-	-	**N/A**	-	-		-	-	-	-	-	-	**62.3%**
1/1	A12 Pier Terrace SB Ahead	U	2	N/A	H		1	105	-	1046	1995	1762	59.4%
1/2	A12 Pier Terrace SB Ahead	U	2	N/A	H		1	105	-	905	1995	1762	51.4%
2/1	A12 Pier Terrace NB Ahead	U	2	N/A	G		1	105	-	1098	1995	1762	62.3%
3/1		U	N/A	N/A	-		-	-	-	1098	Inf	Inf	0.0%
4/1	Ahead	U	N/A	N/A	-		-	-	-	1046	Inf	Inf	0.0%
4/2	Ahead	U	N/A	N/A	-		-	-	-	905	Inf	Inf	0.0%
Ped Link: P1	A12 Pier Terrace Ped	-	2	-	M		1	5	-	0	-	0	0.0%
J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	-	-	**N/A**	-	-		-	-	-	-	-	-	**67.5%**
1/2+1/1	A12 Pier Terrace SB Left Ahead	U	1	N/A	B E		1	85:86	-	1046	1965:2115	425+1124	67.5 : 67.5%
1/3	A12 Pier Terrace SB Ahead	U	1	N/A	B		1	85	-	905	1995	1430	63.3%
2/1+2/2	B1532 London Road South Ahead Left	U	1	N/A	C D		1	10	-	129	1863:2025	14+184	65.4 : 65.4%
2/3	B1532 London Road South Right	U	1	N/A	F		1	24	-	59	2115	441	13.4%
3/1	A12 Belvedere Road Ahead	U	1	N/A	A		1	83	-	489	1915	1340	36.5%
3/2	A12 Belvedere Road Ahead	U	1	N/A	A		1	83	-	489	1915	1340	36.5%

Full Input Data And Results

4/1	Ahead	U	N/A	N/A	-		-	-	-	1098	Inf	Inf	0.0%
5/1	Parade Road North	U	N/A	N/A	-		-	-	-	818	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	296	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	905	Inf	Inf	0.0%
7/1	The Beach Right	O	N/A	N/A	-		-	-	-	59	2115	2115	2.8%
Ped Link: P1	Parade Road North Ped	-	1	-	J		1	24	-	0	-	0	0.0%
Ped Link: P2	The Beach Ped	-	1	-	I		1	86	-	0	-	0	0.0%
Ped Link: P3	London Road South	-	1	-	K		1	86	-	0	-	0	0.0%
Ped Link: P4	A12 Belvedere Road Ped	-	1	-	L		1	5	-	0	-	0	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	**-**	**-**	**0**	**59**	**0**	**9.9**	**5.6**	**0.0**	**15.4**	**-**	**-**	**-**	**-**
J1: A12 Pier Terrace	**-**	**-**	**0**	**0**	**0**	**1.5**	**2.1**	**0.0**	**3.5**	**-**	**-**	**-**	**-**
1/1	1046	1046	-	-	-	0.5	0.7	-	1.2	4.2	8.4	0.7	9.2
1/2	905	905	-	-	-	0.4	0.5	-	0.9	3.6	6.3	0.5	6.8
2/1	1098	1098	-	-	-	0.6	0.8	-	1.4	4.6	12.2	0.8	13.1
3/1	1098	1098	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	1046	1046	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	905	905	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	**-**	**-**	**0**	**59**	**0**	**8.4**	**3.5**	**0.0**	**11.9**	**-**	**-**	**-**	**-**
1/2+1/1	1046	1046	-	-	-	2.0	1.0	-	3.0	10.4	11.7	1.0	12.8
1/3	905	905	-	-	-	1.9	0.9	-	2.8	11.1	12.9	0.9	13.8
2/1+2/2	129	129	-	-	-	1.9	0.9	-	2.8	78.2	3.9	0.9	4.8
2/3	59	59	-	-	-	0.6	0.1	-	0.7	43.4	1.6	0.1	1.7
3/1	489	489	-	-	-	1.0	0.3	-	1.3	9.4	6.5	0.3	6.8
3/2	489	489	-	-	-	1.0	0.3	-	1.3	9.4	6.5	0.3	6.8
4/1	1098	1098	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	818	818	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	296	296	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	905	905	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	59	59	0	59	0	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

Full Input Data And Results

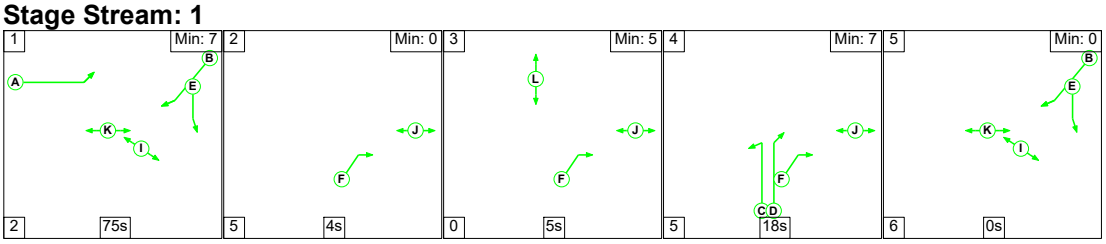
C1	Stream: 1	PRC for Signalled Lanes (%):	33.3	Total Delay for Signalled Lanes (pcuHr):	11.87	Cycle Time (s):	120
C1	Stream: 2	PRC for Signalled Lanes (%):	44.4	Total Delay for Signalled Lanes (pcuHr):	3.54	Cycle Time (s):	120
		PRC Over All Lanes (%):	33.3	Total Delay Over All Lanes(pcuHr):	15.43		

Full Input Data And Results

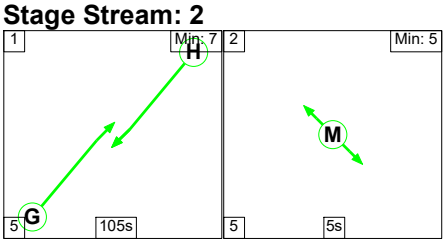
Scenario 5: '2037 DS PM' (FG5: '2037 DS PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

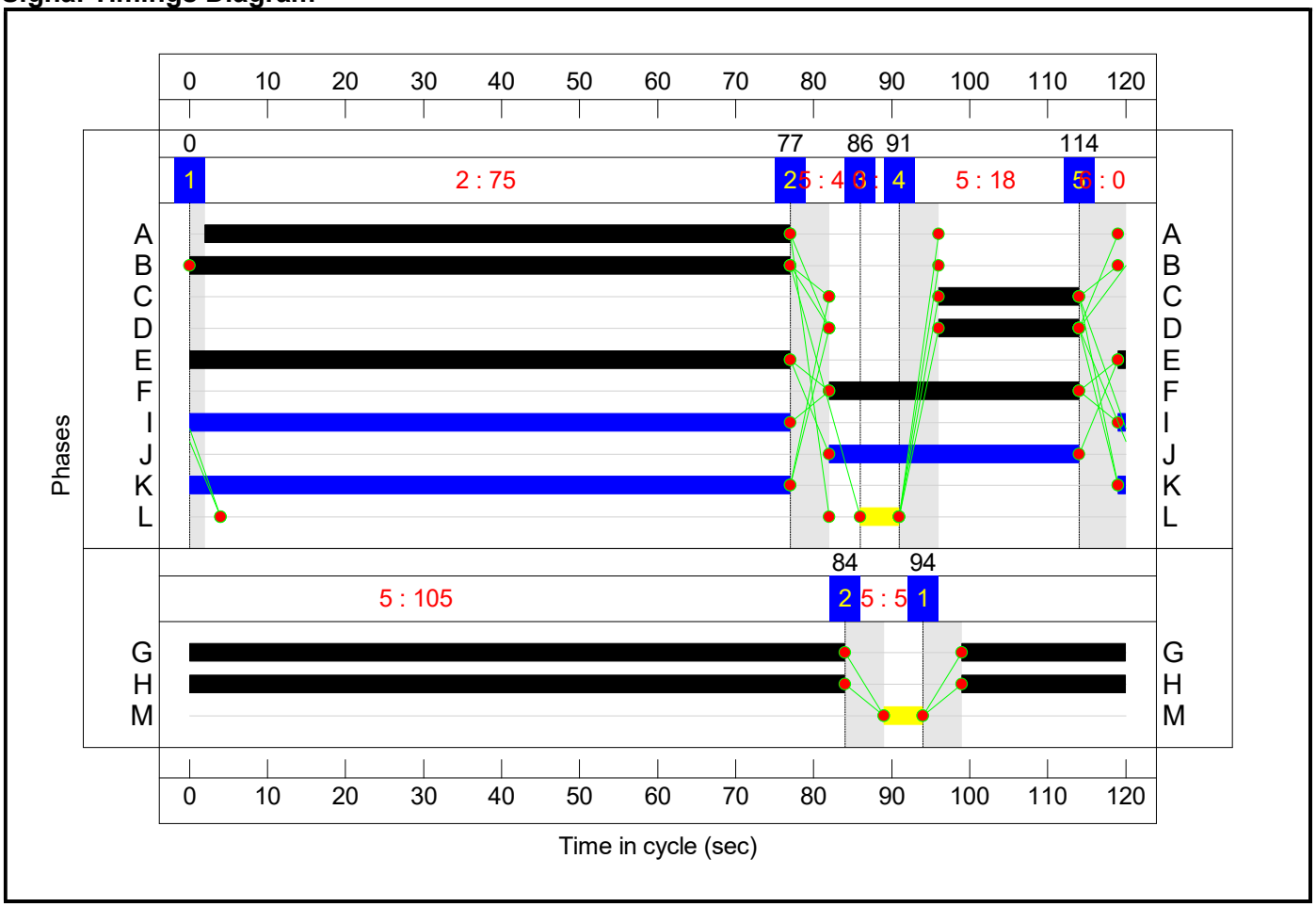
Stage	1	2	3	4	5
Duration	75	4	5	18	0
Change Point	0	77	86	91	114

Stage Stream: 2

Stage	1	2
Duration	105	5
Change Point	94	84

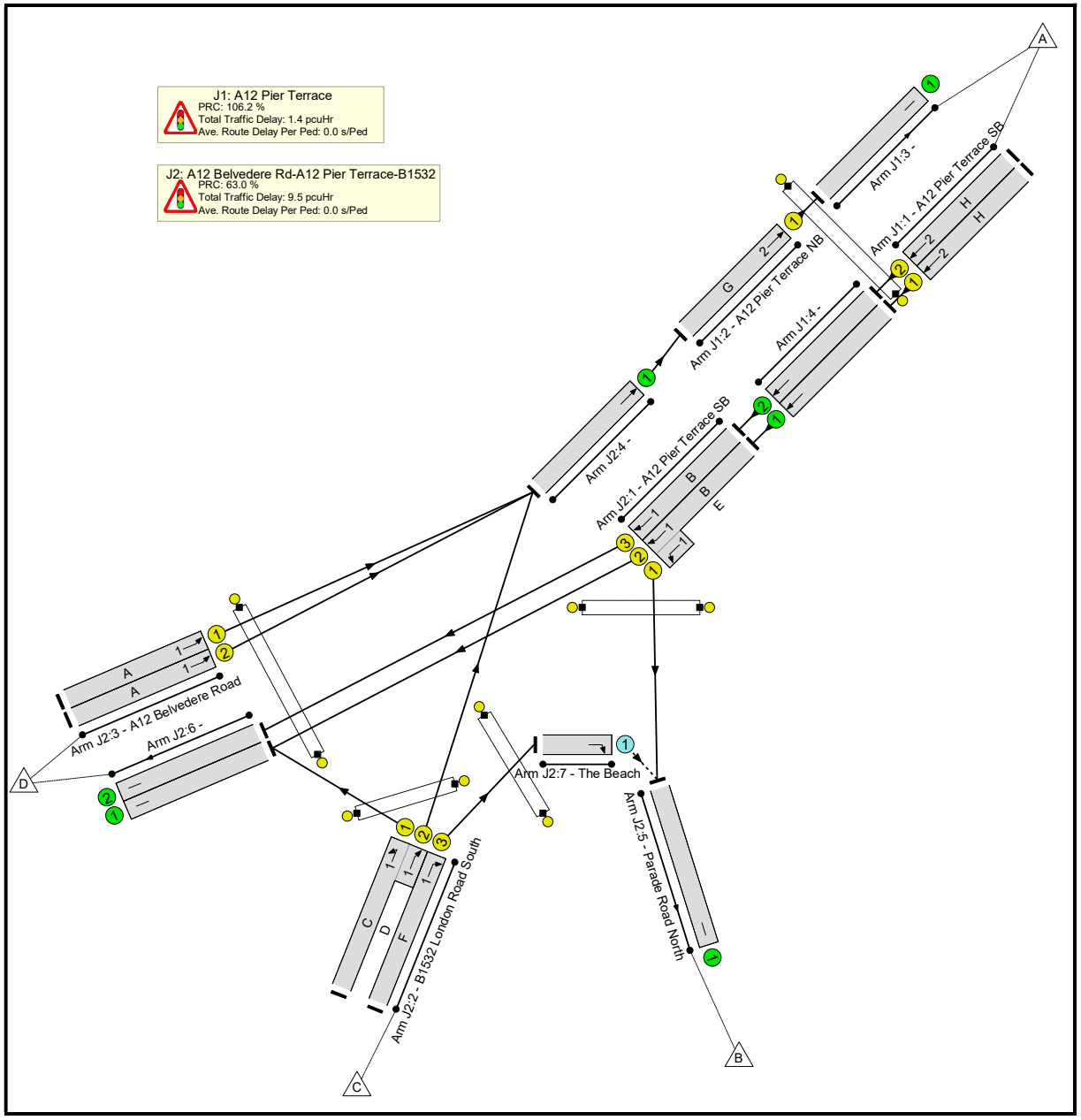
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**55.2%**
J1: A12 Pier Terrace	-	-	**N/A**	-	-		-	-	-	-	-	-	**43.6%**
1/1	A12 Pier Terrace SB Ahead	U	2	N/A	H		1	105	-	769	1995	1762	43.6%
1/2	A12 Pier Terrace SB Ahead	U	2	N/A	H		1	105	-	610	1995	1762	34.6%
2/1	A12 Pier Terrace NB Ahead	U	2	N/A	G		1	105	-	499	1995	1762	28.3%
3/1		U	N/A	N/A	-		-	-	-	499	Inf	Inf	0.0%
4/1	Ahead	U	N/A	N/A	-		-	-	-	769	Inf	Inf	0.0%
4/2	Ahead	U	N/A	N/A	-		-	-	-	610	Inf	Inf	0.0%
Ped Link: P1	A12 Pier Terrace Ped	-	2	-	M		1	5	-	0	-	0	0.0%
J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	-	-	**N/A**	-	-		-	-	-	-	-	-	**55.2%**
1/2+1/1	A12 Pier Terrace SB Left Ahead	U	1	N/A	B E		1	77:78	-	769	1965:2115	0+1392	0.0 : 55.2%
1/3	A12 Pier Terrace SB Ahead	U	1	N/A	B		1	77	-	610	1995	1297	47.0%
2/1+2/2	B1532 London Road South Ahead Left	U	1	N/A	C D		1	18	-	183	1863:2025	40+296	54.4 : 54.4%
2/3	B1532 London Road South Right	U	1	N/A	F		1	32	-	64	2115	582	11.0%
3/1	A12 Belvedere Road Ahead	U	1	N/A	A		1	75	-	169	1915	1213	13.9%
3/2	A12 Belvedere Road Ahead	U	1	N/A	A		1	75	-	169	1915	1213	13.9%

Full Input Data And Results

4/1	Ahead	U	N/A	N/A	-		-	-	-	499	Inf	Inf	0.0%
5/1	Parade Road North	U	N/A	N/A	-		-	-	-	833	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	22	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	610	Inf	Inf	0.0%
7/1	The Beach Right	O	N/A	N/A	-		-	-	-	64	2115	2115	3.0%
Ped Link: P1	Parade Road North Ped	-	1	-	J		1	32	-	0	-	0	0.0%
Ped Link: P2	The Beach Ped	-	1	-	I		1	78	-	0	-	0	0.0%
Ped Link: P3	London Road South	-	1	-	K		1	78	-	0	-	0	0.0%
Ped Link: P4	A12 Belvedere Road Ped	-	1	-	L		1	5	-	0	-	0	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	**-**	**-**	**0**	**64**	**0**	**8.2**	**2.7**	**0.0**	**11.0**	**-**	**-**	**-**	**-**
J1: A12 Pier Terrace	**-**	**-**	**0**	**0**	**0**	**0.6**	**0.8**	**0.0**	**1.4**	**-**	**-**	**-**	**-**
1/1	769	769	-	-	-	0.3	0.4	-	0.7	3.1	4.7	0.4	5.1
1/2	610	610	-	-	-	0.2	0.3	-	0.5	2.7	3.4	0.3	3.7
2/1	499	499	-	-	-	0.1	0.2	-	0.3	2.1	1.5	0.2	1.7
3/1	499	499	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	769	769	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	610	610	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
J2: A12 Belvedere Rd-A12 Pier Terrace-B1532	**-**	**-**	**0**	**64**	**0**	**7.6**	**1.9**	**0.0**	**9.5**	**-**	**-**	**-**	**-**
1/2+1/1	769	769	-	-	-	2.2	0.6	-	2.8	13.1	11.3	0.6	11.9
1/3	610	610	-	-	-	1.7	0.4	-	2.1	12.6	8.5	0.4	8.9
2/1+2/2	183	183	-	-	-	2.3	0.6	-	2.9	57.7	5.1	0.6	5.7
2/3	64	64	-	-	-	0.6	0.1	-	0.6	36.0	1.6	0.1	1.6
3/1	169	169	-	-	-	0.4	0.1	-	0.5	10.6	2.3	0.1	2.3
3/2	169	169	-	-	-	0.4	0.1	-	0.5	10.6	2.3	0.1	2.3
4/1	499	499	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	833	833	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	22	22	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	610	610	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	64	64	0	64	0	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

Full Input Data And Results

C1	Stream: 1	PRC for Signalled Lanes (%):	63.0	Total Delay for Signalled Lanes (pcuHr):	9.51	Cycle Time (s):	120
C1	Stream: 2	PRC for Signalled Lanes (%):	106.2	Total Delay for Signalled Lanes (pcuHr):	1.43	Cycle Time (s):	120
		PRC Over All Lanes (%):	63.0	Total Delay Over All Lanes(pcuHr):	10.95		

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.6.541 [19821,26/11/2015]

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: 05 A12 Belvedere Rd-Mill Rd-Kirkley Rise v6 2018-11-12.arc8
Path: L:\TPS01\106xxx\1069948 Lowestoft Third Crossing\09 Documents\06_Modelling_November 2018
Report generation date: 22/11/2018 09:56:35

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2016 Base							
Arm 1	0.42	2.77	0.29	A	2.19	6.52	0.69	A
Arm 2	0.08	4.65	0.07	A	0.20	10.19	0.17	B
Arm 3	0.01	3.96	0.01	A	0.00	0.00	0.00	A
Arm 4	3.68	9.92	0.79	A	0.90	4.06	0.48	A
Arm 5	0.22	4.51	0.18	A	0.37	3.73	0.27	A
	A1 - 2022 Do Minimum							
Arm 1	0.50	2.98	0.33	A	2.80	7.90	0.74	A
Arm 2	0.09	4.87	0.08	A	0.42	13.08	0.30	B
Arm 3	0.00	0.00	0.00	A	0.00	0.00	0.00	A
Arm 4	5.36	13.63	0.85	B	1.04	4.41	0.51	A
Arm 5	0.29	4.90	0.22	A	0.45	4.01	0.31	A
	A1 - 2022 Do Something							
Arm 1	0.15	2.34	0.13	A	0.66	3.56	0.40	A
Arm 2	0.19	4.48	0.16	A	0.46	8.19	0.32	A
Arm 3	0.00	0.00	0.00	A	0.00	0.00	0.00	A
Arm 4	1.45	5.04	0.59	A	0.57	3.27	0.37	A
Arm 5	0.22	3.54	0.18	A	0.38	3.29	0.27	A
	A1 - 2037 Do Minimum							
Arm 1	0.58	3.20	0.37	A	4.10	11.01	0.81	B
Arm 2	0.11	5.23	0.10	A	0.71	18.99	0.42	C
Arm 3	0.01	4.35	0.01	A	0.00	0.00	0.00	A
Arm 4	10.28	24.78	0.92	C	1.31	5.02	0.57	A
Arm 5	0.37	5.55	0.27	A	0.57	4.46	0.36	A
	A1 - 2037 Do Something							
Arm 1	0.18	2.44	0.16	A	0.85	4.06	0.46	A
Arm 2	0.24	4.83	0.19	A	0.60	10.12	0.38	B
Arm 3	0.00	0.00	0.00	A	0.00	0.00	0.00	A
Arm 4	2.03	6.24	0.67	A	0.76	3.66	0.43	A
Arm 5	0.27	3.88	0.22	A	0.47	3.62	0.32	A

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

"D1 - 2016 Base, AM " model duration: 08:00 - 09:30
"D2 - 2016 Base, PM" model duration: 17:00 - 18:30
"D3 - 2022 Do Minimum, AM" model duration: 08:00 - 09:30
"D4 - 2022 Do Minimum, PM" model duration: 17:00 - 18:30
"D5 - 2022 Do Something, AM" model duration: 08:00 - 09:30
"D6 - 2022 Do Something, PM" model duration: 17:00 - 18:30
"D7 - 2037 Do Minimum, AM" model duration: 08:00 - 09:30
"D8 - 2037 Do Minimum, PM" model duration: 17:00 - 18:30
"D9 - 2037 Do Something, AM" model duration: 08:00 - 09:30
"D10 - 2037 Do Something, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.6.541 at 22/11/2018 09:56:24

File summary

Title	A12 Belvedere Rd/Mill Rd/Kirkley Rise
Location	Lowestoft
Site Number	
Date	16/02/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ecopp
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) - 2016 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
2016 Base, AM	2016 Base	AM		ONE HOUR	08:00	09:30	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			7.50	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A12 Belvedere Road	
2	2	Mill Road	
3	3	Kirkley Rise	
4	4	A12 Horn Hill	
5	5	Asda	

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	6.20	7.40	29.10	9.70	49.70	48.00	
2	2.80	4.60	6.50	31.80	49.70	26.00	
3	3.40	5.70	6.00	9.10	49.70	26.00	
4	6.10	7.80	9.00	8.90	49.70	64.00	
5	5.00	6.10	25.10	15.00	49.70	42.00	

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)	0.624	1948.188
2		(calculated)	(calculated)	0.519	1173.991
3		(calculated)	(calculated)	0.518	1283.149
4		(calculated)	(calculated)	0.574	1781.103
5		(calculated)	(calculated)	0.594	1702.592

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	493.89	100.000
2	ONE HOUR	✓	55.36	100.000
3	ONE HOUR	✓	5.40	100.000
4	ONE HOUR	✓	1240.52	100.000
5	ONE HOUR	✓	161.28	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	6.251	0.000	421.812	65.823
	2	0.000	0.000	0.000	41.528	13.834
	3	5.398	0.000	0.000	0.000	0.000
	4	1063.539	42.688	0.000	0.000	134.296
	5	53.443	3.737	0.000	104.103	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.01	0.00	0.85	0.13
	2	0.00	0.00	0.00	0.75	0.25
	3	1.00	0.00	0.00	0.00	0.00
	4	0.86	0.03	0.00	0.00	0.11
	5	0.33	0.02	0.00	0.65	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.29	2.77	0.42	A
2	0.07	4.65	0.08	A
3	0.01	3.96	0.01	A
4	0.79	9.92	3.68	A
5	0.18	4.51	0.22	A

Main Results for each time segment

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	371.82	370.84	112.87	0.00	1877.75	0.198	0.25	2.388	A
2	41.68	41.50	444.23	0.00	943.31	0.044	0.05	3.990	A
3	4.06	4.05	485.73	0.00	1031.58	0.004	0.00	3.502	A
4	933.93	929.37	63.84	0.00	1744.47	0.535	1.14	4.392	A
5	121.42	120.98	832.81	0.00	1208.16	0.101	0.11	3.309	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	443.99	443.73	135.13	0.00	1863.86	0.238	0.31	2.534	A
2	49.77	49.72	531.60	0.00	897.95	0.055	0.06	4.244	A
3	4.85	4.85	581.32	0.00	982.06	0.005	0.00	3.683	A
4	1115.21	1112.72	76.41	0.00	1737.26	0.642	1.76	5.741	A
5	144.99	144.84	997.11	0.00	1110.62	0.131	0.15	3.727	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	543.78	543.36	165.29	0.00	1845.04	0.295	0.42	2.765	A
2	60.95	60.88	650.92	0.00	835.99	0.073	0.08	4.644	A
3	5.94	5.94	711.80	0.00	914.49	0.007	0.01	3.962	A
4	1365.84	1358.49	93.57	0.00	1727.41	0.791	3.60	9.569	A
5	177.58	177.29	1217.36	0.00	979.85	0.181	0.22	4.485	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	543.78	543.77	165.72	0.00	1844.77	0.295	0.42	2.766	A
2	60.95	60.95	651.51	0.00	835.68	0.073	0.08	4.646	A
3	5.94	5.94	712.46	0.00	914.14	0.007	0.01	3.963	A
4	1365.84	1365.50	93.65	0.00	1727.37	0.791	3.68	9.922	A
5	177.58	177.57	1223.62	0.00	976.14	0.182	0.22	4.507	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	443.99	444.41	135.76	0.00	1863.46	0.238	0.31	2.537	A
2	49.77	49.85	532.55	0.00	897.45	0.055	0.06	4.247	A
3	4.85	4.86	582.39	0.00	981.51	0.005	0.00	3.685	A
4	1115.21	1122.64	76.54	0.00	1737.18	0.642	1.82	5.926	A
5	144.99	145.27	1005.97	0.00	1105.36	0.131	0.15	3.752	A

Main results: (09:15-09:30)

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	371.82	372.09	113.52	0.00	1877.35	0.198	0.25	2.391	A
2	41.68	41.73	445.85	0.00	942.47	0.044	0.05	3.996	A
3	4.06	4.07	487.58	0.00	1030.62	0.004	0.00	3.506	A
4	933.93	936.57	64.09	0.00	1744.33	0.535	1.16	4.470	A
5	121.42	121.58	839.25	0.00	1204.34	0.101	0.11	3.324	A

(Default Analysis Set) - 2016 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
2016 Base, PM	2016 Base	PM		ONE HOUR	17:00	18:30	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			5.42	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A12 Belvedere Road	
2	2	Mill Road	
3	3	Kirkley Rise	
4	4	A12 Horn Hill	
5	5	Asda	

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	6.20	7.40	29.10	9.70	49.70	48.00	
2	2.80	4.60	6.50	31.80	49.70	26.00	
3	3.40	5.70	6.00	9.10	49.70	26.00	
4	6.10	7.80	9.00	8.90	49.70	64.00	
5	5.00	6.10	25.10	15.00	49.70	42.00	

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)	0.624	1948.188
2		(calculated)	(calculated)	0.519	1173.991
3		(calculated)	(calculated)	0.518	1283.149
4		(calculated)	(calculated)	0.574	1781.103
5		(calculated)	(calculated)	0.594	1702.592

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	✓	1111.61	100.000
2	ONE HOUR	✓	65.90	100.000
3	ONE HOUR	✓	0.00	100.000
4	ONE HOUR	✓	729.15	100.000
5	ONE HOUR	✓	328.36	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	6.768	0.000	976.414	128.429
	2	0.000	0.000	0.000	49.835	16.065
	3	0.000	0.000	0.000	0.000	0.000
	4	545.462	29.322	0.000	0.000	154.366
	5	106.269	17.941	0.000	204.151	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.01	0.00	0.88	0.12
	2	0.00	0.00	0.00	0.76	0.24
	3	0.20	0.20	0.20	0.20	0.20
	4	0.75	0.04	0.00	0.00	0.21
	5	0.32	0.05	0.00	0.62	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.69	6.52	2.19	A
2	0.17	10.19	0.20	B
3	0.00	0.00	0.00	A
4	0.48	4.06	0.90	A
5	0.27	3.73	0.37	A

Main Results for each time segment

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	836.88	833.53	188.65	0.00	1830.46	0.457	0.84	3.599	A
2	49.61	49.29	981.65	0.00	664.25	0.075	0.08	5.851	A
3	0.00	0.00	1030.94	0.00	749.20	0.000	0.00	0.000	A
4	548.94	547.08	108.32	0.00	1718.95	0.319	0.47	3.066	A
5	247.21	246.39	431.26	0.00	1446.56	0.171	0.21	2.998	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	999.32	997.77	225.83	0.00	1807.26	0.553	1.22	4.439	A
2	59.24	59.10	1175.07	0.00	563.81	0.105	0.12	7.131	A
3	0.00	0.00	1234.16	0.00	643.94	0.000	0.00	0.000	A
4	655.49	654.88	129.68	0.00	1706.69	0.384	0.62	3.421	A
5	295.19	294.94	516.24	0.00	1396.11	0.211	0.27	3.269	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	1223.91	1220.12	276.48	0.00	1775.65	0.689	2.17	6.437	A
2	72.56	72.22	1437.21	0.00	427.69	0.170	0.20	10.118	B
3	0.00	0.00	1509.42	0.00	501.37	0.000	0.00	0.000	A
4	802.81	801.70	158.57	0.00	1690.12	0.475	0.90	4.047	A
5	361.53	361.11	631.97	0.00	1327.40	0.272	0.37	3.723	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	1223.91	1223.81	276.81	0.00	1775.45	0.689	2.19	6.523	A
2	72.56	72.55	1441.13	0.00	425.65	0.170	0.20	10.194	B
3	0.00	0.00	1513.68	0.00	499.17	0.000	0.00	0.000	A
4	802.81	802.79	159.08	0.00	1689.82	0.475	0.90	4.058	A
5	361.53	361.53	632.84	0.00	1326.88	0.272	0.37	3.728	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	999.32	1003.09	226.34	0.00	1806.94	0.553	1.25	4.500	A
2	59.24	59.58	1180.77	0.00	560.85	0.106	0.12	7.188	A
3	0.00	0.00	1240.35	0.00	640.74	0.000	0.00	0.000	A
4	655.49	656.59	130.42	0.00	1706.27	0.384	0.63	3.432	A
5	295.19	295.61	517.58	0.00	1395.31	0.212	0.27	3.276	A

Main results: (18:15-18:30)

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	836.88	838.49	189.47	0.00	1829.95	0.457	0.85	3.638	A
2	49.61	49.76	987.23	0.00	661.35	0.075	0.08	5.889	A
3	0.00	0.00	1037.00	0.00	746.06	0.000	0.00	0.000	A
4	548.94	549.57	109.01	0.00	1718.56	0.319	0.47	3.082	A
5	247.21	247.46	433.22	0.00	1445.39	0.171	0.21	3.007	A

(Default Analysis Set) - 2022 Do Minimum, 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
2022 Do Minimum, AM	2022 Do Minimum	AM		ONE HOUR	08:00	09:30	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			9.86	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A12 Belvedere Road	
2	2	Mill Road	
3	3	Kirkley Rise	
4	4	A12 Horn Hill	
5	5	Asda	

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	6.20	7.40	29.10	9.70	49.70	48.00	
2	2.80	4.60	6.50	31.80	49.70	26.00	
3	3.40	5.70	6.00	9.10	49.70	26.00	
4	6.10	7.80	9.00	8.90	49.70	64.00	
5	5.00	6.10	25.10	15.00	49.70	42.00	

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)	0.624	1948.188
2		(calculated)	(calculated)	0.519	1173.991
3		(calculated)	(calculated)	0.518	1283.149
4		(calculated)	(calculated)	0.574	1781.103
5		(calculated)	(calculated)	0.594	1702.592

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	✓	547.38	100.000
2	ONE HOUR	✓	60.59	100.000
3	ONE HOUR	✓	1.88	100.000
4	ONE HOUR	✓	1332.12	100.000
5	ONE HOUR	✓	191.25	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	15.287	0.000	455.765	76.325
	2	0.000	0.000	0.000	52.382	8.205
	3	1.881	0.000	0.000	0.000	0.000
	4	1072.091	87.149	0.000	0.000	172.882
	5	76.022	4.215	0.000	111.008	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.03	0.00	0.83	0.14
	2	0.00	0.00	0.00	0.86	0.14
	3	1.00	0.00	0.00	0.00	0.00
	4	0.80	0.07	0.00	0.00	0.13
	5	0.40	0.02	0.00	0.58	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.33	2.98	0.50	A
2	0.08	4.87	0.09	A
3	0.00	0.00	0.00	A
4	0.85	13.63	5.36	B
5	0.22	4.90	0.29	A

Main Results for each time segment

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	412.09	410.95	151.68	0.00	1853.54	0.222	0.28	2.492	A
2	45.61	45.41	482.73	0.00	923.32	0.049	0.05	4.099	A
3	0.00	0.00	528.14	0.00	1009.61	0.000	0.00	0.000	A
4	1002.89	997.55	63.45	0.00	1744.69	0.575	1.34	4.786	A
5	143.98	143.43	868.09	0.00	1187.22	0.121	0.14	3.447	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	492.08	491.76	181.59	0.00	1834.87	0.268	0.37	2.680	A
2	54.47	54.41	577.70	0.00	874.01	0.062	0.07	4.392	A
3	0.00	0.00	632.11	0.00	955.76	0.000	0.00	0.000	A
4	1197.55	1194.22	75.94	0.00	1737.53	0.689	2.17	6.585	A
5	171.93	171.73	1039.23	0.00	1085.61	0.158	0.19	3.938	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	602.67	602.15	221.81	0.00	1809.77	0.333	0.50	2.979	A
2	66.71	66.61	707.33	0.00	806.70	0.083	0.09	4.864	A
3	0.00	0.00	773.94	0.00	882.30	0.000	0.00	0.000	A
4	1466.69	1454.78	92.98	0.00	1727.75	0.849	5.15	12.660	B
5	210.56	210.18	1265.98	0.00	950.99	0.221	0.28	4.857	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	602.67	602.67	222.75	0.00	1809.18	0.333	0.50	2.983	A
2	66.71	66.71	708.05	0.00	806.32	0.083	0.09	4.866	A
3	0.00	0.00	774.76	0.00	881.88	0.000	0.00	0.000	A
4	1466.69	1465.84	93.07	0.00	1727.70	0.849	5.36	13.630	B
5	210.56	210.55	1275.60	0.00	945.28	0.223	0.29	4.899	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	492.08	492.60	182.96	0.00	1834.01	0.268	0.37	2.684	A
2	54.47	54.56	578.86	0.00	873.41	0.062	0.07	4.398	A
3	0.00	0.00	633.41	0.00	955.08	0.000	0.00	0.000	A
4	1197.55	1209.92	76.08	0.00	1737.45	0.689	2.27	6.976	A
5	171.93	172.30	1052.90	0.00	1077.50	0.160	0.19	3.978	A

Main results: (09:15-09:30)

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	412.09	412.42	152.72	0.00	1852.89	0.222	0.29	2.499	A
2	45.61	45.67	484.59	0.00	922.36	0.049	0.05	4.107	A
3	0.00	0.00	530.26	0.00	1008.51	0.000	0.00	0.000	A
4	1002.89	1006.49	63.69	0.00	1744.56	0.575	1.37	4.900	A
5	143.98	144.19	875.87	0.00	1182.60	0.122	0.14	3.469	A

(Default Analysis Set) - 2022 Do Minimum, 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
2022 Do Minimum, PM	2022 Do Minimum	PM		ONE HOUR	17:00	18:30	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			6.42	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A12 Belvedere Road	
2	2	Mill Road	
3	3	Kirkley Rise	
4	4	A12 Horn Hill	
5	5	Asda	

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	6.20	7.40	29.10	9.70	49.70	48.00	
2	2.80	4.60	6.50	31.80	49.70	26.00	
3	3.40	5.70	6.00	9.10	49.70	26.00	
4	6.10	7.80	9.00	8.90	49.70	64.00	
5	5.00	6.10	25.10	15.00	49.70	42.00	

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)	0.624	1948.188
2		(calculated)	(calculated)	0.519	1173.991
3		(calculated)	(calculated)	0.518	1283.149
4		(calculated)	(calculated)	0.574	1781.103
5		(calculated)	(calculated)	0.594	1702.592

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	✓	1177.40	100.000
2	ONE HOUR	✓	105.21	100.000
3	ONE HOUR	✓	0.00	100.000
4	ONE HOUR	✓	778.44	100.000
5	ONE HOUR	✓	365.91	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	31.091	0.000	988.307	158.000
	2	0.000	0.000	0.000	93.704	11.509
	3	0.000	0.000	0.000	0.000	0.000
	4	563.445	51.380	0.000	0.000	163.611
	5	130.597	11.857	0.000	223.456	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.03	0.00	0.84	0.13
	2	0.00	0.00	0.00	0.89	0.11
	3	0.20	0.20	0.20	0.20	0.20
	4	0.72	0.07	0.00	0.00	0.21
	5	0.36	0.03	0.00	0.61	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.74	7.90	2.80	A
2	0.30	13.08	0.42	B
3	0.00	0.00	0.00	A
4	0.51	4.41	1.04	A
5	0.31	4.01	0.45	A

Main Results for each time segment

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	886.41	882.62	215.09	0.00	1813.96	0.489	0.95	3.850	A
2	79.21	78.65	1026.96	0.00	640.72	0.124	0.14	6.397	A
3	0.00	0.00	1105.61	0.00	710.52	0.000	0.00	0.000	A
4	586.05	583.97	127.05	0.00	1708.20	0.343	0.52	3.197	A
5	275.48	274.53	461.23	0.00	1428.76	0.193	0.24	3.115	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	1058.46	1056.51	257.49	0.00	1787.50	0.592	1.43	4.912	A
2	94.58	94.30	1229.31	0.00	535.64	0.177	0.21	8.152	A
3	0.00	0.00	1323.61	0.00	597.61	0.000	0.00	0.000	A
4	699.80	699.08	152.09	0.00	1693.83	0.413	0.70	3.617	A
5	328.95	328.65	552.15	0.00	1374.79	0.239	0.31	3.441	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	1296.34	1291.04	315.22	0.00	1751.47	0.740	2.76	7.730	A
2	115.84	115.06	1502.65	0.00	393.71	0.294	0.41	12.884	B
3	0.00	0.00	1617.70	0.00	445.29	0.000	0.00	0.000	A
4	857.07	855.72	185.84	0.00	1674.47	0.512	1.04	4.390	A
5	402.87	402.34	675.86	0.00	1301.34	0.310	0.45	4.001	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	1296.34	1296.16	315.65	0.00	1751.21	0.740	2.80	7.903	A
2	115.84	115.81	1507.96	0.00	390.95	0.296	0.42	13.082	B
3	0.00	0.00	1623.77	0.00	442.15	0.000	0.00	0.000	A
4	857.07	857.05	186.61	0.00	1674.03	0.512	1.04	4.406	A
5	402.87	402.87	676.92	0.00	1300.71	0.310	0.45	4.009	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	1058.46	1063.78	258.16	0.00	1787.09	0.592	1.47	5.014	A
2	94.58	95.37	1236.89	0.00	531.71	0.178	0.22	8.266	A
3	0.00	0.00	1332.27	0.00	593.13	0.000	0.00	0.000	A
4	699.80	701.14	153.19	0.00	1693.20	0.413	0.71	3.635	A
5	328.95	329.47	553.77	0.00	1373.82	0.239	0.32	3.448	A

Main results: (18:15-18:30)

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	886.41	888.44	216.08	0.00	1813.34	0.489	0.96	3.900	A
2	79.21	79.51	1033.39	0.00	637.38	0.124	0.14	6.455	A
3	0.00	0.00	1112.90	0.00	706.74	0.000	0.00	0.000	A
4	586.05	586.78	127.92	0.00	1707.70	0.343	0.53	3.215	A
5	275.48	275.78	463.45	0.00	1427.44	0.193	0.24	3.128	A

(Default Analysis Set) - 2022 Do Something, 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
2022 Do Something, AM	2022 Do Something	AM		ONE HOUR	08:00	09:30	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			4.40	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A12 Belvedere Road	
2	2	Mill Road	
3	3	Kirkley Rise	
4	4	A12 Horn Hill	
5	5	Asda	

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	6.20	7.40	29.10	9.70	49.70	48.00	
2	2.80	4.60	6.50	31.80	49.70	26.00	
3	3.40	5.70	6.00	9.10	49.70	26.00	
4	6.10	7.80	9.00	8.90	49.70	64.00	
5	5.00	6.10	25.10	15.00	49.70	42.00	

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)	0.624	1948.188
2		(calculated)	(calculated)	0.519	1173.991
3		(calculated)	(calculated)	0.518	1283.149
4		(calculated)	(calculated)	0.574	1781.103
5		(calculated)	(calculated)	0.594	1702.592

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	✓	216.15	100.000
2	ONE HOUR	✓	142.60	100.000
3	ONE HOUR	✓	0.00	100.000
4	ONE HOUR	✓	949.56	100.000
5	ONE HOUR	✓	200.22	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	5.766	0.000	189.229	21.157
	2	0.000	0.000	0.000	130.084	12.519
	3	0.000	0.000	0.000	0.000	0.000
	4	630.690	81.361	0.000	0.000	237.510
	5	31.641	6.616	0.000	161.964	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.03	0.00	0.88	0.10
	2	0.00	0.00	0.00	0.91	0.09
	3	0.20	0.20	0.20	0.20	0.20
	4	0.66	0.09	0.00	0.00	0.25
	5	0.16	0.03	0.00	0.81	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.13	2.34	0.15	A
2	0.16	4.48	0.19	A
3	0.00	0.00	0.00	A
4	0.59	5.04	1.45	A
5	0.18	3.54	0.22	A

Main Results for each time segment

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	162.73	162.34	187.53	0.00	1831.16	0.089	0.10	2.157	A
2	107.36	106.90	279.55	0.00	1028.83	0.104	0.12	3.903	A
3	0.00	0.00	386.45	0.00	1083.00	0.000	0.00	0.000	A
4	714.88	712.18	25.27	0.00	1766.60	0.405	0.68	3.406	A
5	150.74	150.25	534.04	0.00	1385.54	0.109	0.12	2.912	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	194.32	194.22	224.49	0.00	1808.10	0.107	0.12	2.230	A
2	128.20	128.08	334.53	0.00	1000.28	0.128	0.15	4.127	A
3	0.00	0.00	462.61	0.00	1043.55	0.000	0.00	0.000	A
4	853.64	852.62	30.25	0.00	1763.74	0.484	0.93	3.947	A
5	179.99	179.85	639.36	0.00	1323.01	0.136	0.16	3.148	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	237.99	237.85	274.82	0.00	1776.69	0.134	0.15	2.339	A
2	157.01	156.82	409.64	0.00	961.28	0.163	0.19	4.474	A
3	0.00	0.00	566.46	0.00	989.76	0.000	0.00	0.000	A
4	1045.49	1043.43	37.05	0.00	1759.84	0.594	1.44	5.011	A
5	220.45	220.21	782.44	0.00	1238.06	0.178	0.22	3.536	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	237.99	237.99	275.19	0.00	1776.46	0.134	0.15	2.339	A
2	157.01	157.01	409.96	0.00	961.11	0.163	0.19	4.476	A
3	0.00	0.00	566.97	0.00	989.50	0.000	0.00	0.000	A
4	1045.49	1045.45	37.08	0.00	1759.83	0.594	1.45	5.039	A
5	220.45	220.45	783.95	0.00	1237.17	0.178	0.22	3.539	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	194.32	194.45	225.06	0.00	1807.74	0.107	0.12	2.231	A
2	128.20	128.38	335.05	0.00	1000.01	0.128	0.15	4.132	A
3	0.00	0.00	463.44	0.00	1043.12	0.000	0.00	0.000	A
4	853.64	855.67	30.30	0.00	1763.71	0.484	0.95	3.973	A
5	179.99	180.23	641.64	0.00	1321.66	0.136	0.16	3.153	A

Main results: (09:15-09:30)

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	162.73	162.82	188.38	0.00	1830.63	0.089	0.10	2.159	A
2	107.36	107.48	280.53	0.00	1028.32	0.104	0.12	3.909	A
3	0.00	0.00	388.01	0.00	1082.19	0.000	0.00	0.000	A
4	714.88	715.93	25.37	0.00	1766.54	0.405	0.68	3.429	A
5	150.74	150.88	536.85	0.00	1383.87	0.109	0.12	2.919	A

(Default Analysis Set) - 2022 Do Something, 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
2022 Do Something, PM	2022 Do Something	PM		ONE HOUR	17:00	18:30	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			3.89	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A12 Belvedere Road	
2	2	Mill Road	
3	3	Kirkley Rise	
4	4	A12 Horn Hill	
5	5	Asda	

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	6.20	7.40	29.10	9.70	49.70	48.00	
2	2.80	4.60	6.50	31.80	49.70	26.00	
3	3.40	5.70	6.00	9.10	49.70	26.00	
4	6.10	7.80	9.00	8.90	49.70	64.00	
5	5.00	6.10	25.10	15.00	49.70	42.00	

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)	0.624	1948.188
2		(calculated)	(calculated)	0.519	1173.991
3		(calculated)	(calculated)	0.518	1283.149
4		(calculated)	(calculated)	0.574	1781.103
5		(calculated)	(calculated)	0.594	1702.592

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	✓	605.31	100.000
2	ONE HOUR	✓	184.19	100.000
3	ONE HOUR	✓	0.00	100.000
4	ONE HOUR	✓	576.16	100.000
5	ONE HOUR	✓	375.61	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	8.278	0.000	536.810	60.221
	2	0.000	0.000	0.000	172.974	11.218
	3	0.000	0.000	0.000	0.000	0.000
	4	248.553	48.821	0.000	0.000	278.782
	5	30.679	11.745	0.000	333.190	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.01	0.00	0.89	0.10
	2	0.00	0.00	0.00	0.94	0.06
	3	0.20	0.20	0.20	0.20	0.20
	4	0.43	0.08	0.00	0.00	0.48
	5	0.08	0.03	0.00	0.89	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.40	3.56	0.66	A
2	0.32	8.19	0.46	A
3	0.00	0.00	0.00	A
4	0.37	3.27	0.57	A
5	0.27	3.29	0.38	A

Main Results for each time segment

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	455.71	454.32	295.53	0.00	1763.77	0.258	0.35	2.747	A
2	138.67	137.85	698.17	0.00	811.45	0.171	0.20	5.337	A
3	0.00	0.00	836.03	0.00	850.15	0.000	0.00	0.000	A
4	433.76	432.45	53.60	0.00	1750.35	0.248	0.33	2.729	A
5	282.78	281.91	223.20	0.00	1570.08	0.180	0.22	2.793	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	544.16	543.72	353.73	0.00	1727.44	0.315	0.46	3.041	A
2	165.59	165.26	835.60	0.00	740.09	0.224	0.29	6.260	A
3	0.00	0.00	1000.86	0.00	764.77	0.000	0.00	0.000	A
4	517.95	517.58	64.16	0.00	1744.29	0.297	0.42	2.934	A
5	337.67	337.43	267.14	0.00	1543.99	0.219	0.28	2.983	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	666.46	665.67	433.13	0.00	1677.90	0.397	0.65	3.551	A
2	202.80	202.12	1023.07	0.00	642.74	0.316	0.46	8.158	A
3	0.00	0.00	1225.19	0.00	648.58	0.000	0.00	0.000	A
4	634.36	633.75	78.54	0.00	1736.04	0.365	0.57	3.264	A
5	413.56	413.17	327.10	0.00	1508.40	0.274	0.38	3.287	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	666.46	666.45	433.53	0.00	1677.64	0.397	0.66	3.559	A
2	202.80	202.79	1024.18	0.00	642.16	0.316	0.46	8.193	A
3	0.00	0.00	1226.97	0.00	647.67	0.000	0.00	0.000	A
4	634.36	634.35	78.65	0.00	1735.97	0.365	0.57	3.267	A
5	413.56	413.56	327.41	0.00	1508.21	0.274	0.38	3.287	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	544.16	544.94	354.38	0.00	1727.04	0.315	0.46	3.049	A
2	165.59	166.25	837.36	0.00	739.18	0.224	0.29	6.292	A
3	0.00	0.00	1003.61	0.00	763.35	0.000	0.00	0.000	A
4	517.95	518.55	64.34	0.00	1744.18	0.297	0.42	2.938	A
5	337.67	338.05	267.64	0.00	1543.70	0.219	0.28	2.986	A

Main results: (18:15-18:30)

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	455.71	456.16	296.69	0.00	1763.04	0.258	0.35	2.757	A
2	138.67	139.00	700.98	0.00	809.99	0.171	0.21	5.369	A
3	0.00	0.00	839.98	0.00	848.10	0.000	0.00	0.000	A
4	433.76	434.13	53.85	0.00	1750.20	0.248	0.33	2.735	A
5	282.78	283.02	224.07	0.00	1569.56	0.180	0.22	2.798	A

(Default Analysis Set) - 2037 Do Minimum, 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
2037 Do Minimum, AM	2037 Do Minimum	AM		ONE HOUR	08:00	09:30	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			16.80	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A12 Belvedere Road	
2	2	Mill Road	
3	3	Kirkley Rise	
4	4	A12 Horn Hill	
5	5	Asda	

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	6.20	7.40	29.10	9.70	49.70	48.00	
2	2.80	4.60	6.50	31.80	49.70	26.00	
3	3.40	5.70	6.00	9.10	49.70	26.00	
4	6.10	7.80	9.00	8.90	49.70	64.00	
5	5.00	6.10	25.10	15.00	49.70	42.00	

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)	0.624	1948.188
2		(calculated)	(calculated)	0.519	1173.991
3		(calculated)	(calculated)	0.518	1283.149
4		(calculated)	(calculated)	0.574	1781.103
5		(calculated)	(calculated)	0.594	1702.592

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	✓	597.97	100.000
2	ONE HOUR	✓	70.31	100.000
3	ONE HOUR	✓	7.49	100.000
4	ONE HOUR	✓	1442.93	100.000
5	ONE HOUR	✓	220.90	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	17.102	0.000	502.325	78.540
	2	0.000	0.000	0.000	61.362	8.947
	3	6.950	0.255	0.000	0.000	0.281
	4	1134.661	101.222	0.000	0.000	207.045
	5	82.608	4.560	0.000	133.731	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.03	0.00	0.84	0.13
	2	0.00	0.00	0.00	0.87	0.13
	3	0.93	0.03	0.00	0.00	0.04
	4	0.79	0.07	0.00	0.00	0.14
	5	0.37	0.02	0.00	0.61	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.37	3.20	0.58	A
2	0.10	5.23	0.11	A
3	0.01	4.35	0.01	A
4	0.92	24.78	10.28	C
5	0.27	5.55	0.37	A

Main Results for each time segment

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	450.18	448.89	179.63	0.00	1836.09	0.245	0.32	2.593	A
2	52.93	52.68	536.32	0.00	895.50	0.059	0.06	4.270	A
3	5.64	5.61	589.00	0.00	978.09	0.006	0.01	3.701	A
4	1086.31	1079.77	71.28	0.00	1740.21	0.624	1.63	5.399	A
5	166.30	165.63	930.24	0.00	1150.32	0.145	0.17	3.654	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	537.56	537.18	215.03	0.00	1814.00	0.296	0.42	2.819	A
2	63.21	63.13	641.88	0.00	840.68	0.075	0.08	4.629	A
3	6.73	6.72	705.01	0.00	918.00	0.007	0.01	3.950	A
4	1297.16	1292.17	85.31	0.00	1732.15	0.749	2.88	8.089	A
5	198.58	198.32	1113.23	0.00	1041.68	0.191	0.23	4.267	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	658.37	657.73	261.88	0.00	1784.76	0.369	0.58	3.192	A
2	77.41	77.29	785.84	0.00	765.93	0.101	0.11	5.228	A
3	8.24	8.23	863.13	0.00	836.11	0.010	0.01	4.348	A
4	1588.69	1563.27	104.46	0.00	1721.17	0.923	9.24	20.162	C
5	243.22	242.69	1346.88	0.00	902.96	0.269	0.37	5.447	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	658.37	658.37	263.68	0.00	1783.64	0.369	0.58	3.198	A
2	77.41	77.41	786.76	0.00	765.45	0.101	0.11	5.231	A
3	8.24	8.24	864.17	0.00	835.57	0.010	0.01	4.351	A
4	1588.69	1584.54	104.56	0.00	1721.10	0.923	10.28	24.781	C
5	243.22	243.19	1365.10	0.00	892.14	0.273	0.37	5.547	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	537.56	538.20	217.89	0.00	1812.21	0.297	0.42	2.828	A
2	63.21	63.33	643.34	0.00	839.92	0.075	0.08	4.635	A
3	6.73	6.74	706.67	0.00	917.14	0.007	0.01	3.955	A
4	1297.16	1325.91	85.49	0.00	1732.05	0.749	3.09	9.449	A
5	198.58	199.11	1142.14	0.00	1024.52	0.194	0.24	4.363	A

Main results: (09:15-09:30)

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	450.18	450.57	181.08	0.00	1835.18	0.245	0.33	2.602	A
2	52.93	53.01	538.54	0.00	894.35	0.059	0.06	4.278	A
3	5.64	5.64	591.54	0.00	976.77	0.006	0.01	3.706	A
4	1086.31	1091.93	71.57	0.00	1740.04	0.624	1.69	5.601	A
5	166.30	166.59	940.68	0.00	1144.12	0.145	0.17	3.682	A

(Default Analysis Set) - 2037 Do Minimum, 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
2037 Do Minimum, PM	2037 Do Minimum	PM		ONE HOUR	17:00	18:30	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			8.41	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A12 Belvedere Road	
2	2	Mill Road	
3	3	Kirkley Rise	
4	4	A12 Horn Hill	
5	5	Asda	

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	6.20	7.40	29.10	9.70	49.70	48.00	
2	2.80	4.60	6.50	31.80	49.70	26.00	
3	3.40	5.70	6.00	9.10	49.70	26.00	
4	6.10	7.80	9.00	8.90	49.70	64.00	
5	5.00	6.10	25.10	15.00	49.70	42.00	

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)	0.624	1948.188
2		(calculated)	(calculated)	0.519	1173.991
3		(calculated)	(calculated)	0.518	1283.149
4		(calculated)	(calculated)	0.574	1781.103
5		(calculated)	(calculated)	0.594	1702.592

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	✓	1248.16	100.000
2	ONE HOUR	✓	124.50	100.000
3	ONE HOUR	✓	0.00	100.000
4	ONE HOUR	✓	861.77	100.000
5	ONE HOUR	✓	416.81	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	33.277	0.000	1045.833	169.050
	2	0.027	0.000	0.000	111.787	12.686
	3	0.000	0.000	0.000	0.000	0.000
	4	590.494	78.382	0.000	0.000	192.893
	5	133.121	15.529	0.000	268.162	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.03	0.00	0.84	0.14
	2	0.00	0.00	0.00	0.90	0.10
	3	0.20	0.20	0.20	0.20	0.20
	4	0.69	0.09	0.00	0.00	0.22
	5	0.32	0.04	0.00	0.64	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.81	11.01	4.10	B
2	0.42	18.99	0.71	C
3	0.00	0.00	0.00	A
4	0.57	5.02	1.31	A
5	0.36	4.46	0.57	A

Main Results for each time segment

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	939.68	935.25	271.59	0.00	1778.71	0.528	1.11	4.246	A
2	93.73	92.99	1111.46	0.00	596.84	0.157	0.18	7.135	A
3	0.00	0.00	1204.45	0.00	659.33	0.000	0.00	0.000	A
4	648.78	646.34	136.17	0.00	1702.97	0.381	0.61	3.400	A
5	313.80	312.65	501.69	0.00	1404.75	0.223	0.29	3.293	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	1122.07	1119.43	325.15	0.00	1745.28	0.643	1.77	5.728	A
2	111.92	111.47	1330.40	0.00	483.15	0.232	0.30	9.674	A
3	0.00	0.00	1441.88	0.00	536.36	0.000	0.00	0.000	A
4	774.71	773.79	163.00	0.00	1687.57	0.459	0.84	3.935	A
5	374.71	374.32	600.61	0.00	1346.01	0.278	0.38	3.702	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	1374.25	1365.40	397.99	0.00	1699.82	0.808	3.98	10.495	B
2	137.08	135.53	1623.78	0.00	330.81	0.414	0.68	18.293	C
3	0.00	0.00	1759.31	0.00	371.95	0.000	0.00	0.000	A
4	948.82	946.97	198.77	0.00	1667.05	0.569	1.30	4.986	A
5	458.92	458.20	735.04	0.00	1266.21	0.362	0.56	4.452	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	1374.25	1373.79	398.64	0.00	1699.42	0.809	4.10	11.012	B
2	137.08	136.98	1632.41	0.00	326.33	0.420	0.71	18.992	C
3	0.00	0.00	1769.39	0.00	366.73	0.000	0.00	0.000	A
4	948.82	948.79	200.05	0.00	1666.31	0.569	1.31	5.017	A
5	458.92	458.91	736.45	0.00	1265.37	0.363	0.57	4.463	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	1122.07	1131.13	326.15	0.00	1744.66	0.643	1.83	5.953	A
2	111.92	113.51	1342.50	0.00	476.87	0.235	0.31	9.951	A
3	0.00	0.00	1456.01	0.00	529.04	0.000	0.00	0.000	A
4	774.71	776.54	164.79	0.00	1686.55	0.459	0.86	3.965	A
5	374.71	375.42	602.75	0.00	1344.75	0.279	0.39	3.718	A

Main results: (18:15-18:30)

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	939.68	942.49	272.94	0.00	1777.86	0.529	1.13	4.323	A
2	93.73	94.22	1119.50	0.00	592.67	0.158	0.19	7.231	A
3	0.00	0.00	1213.72	0.00	654.53	0.000	0.00	0.000	A
4	648.78	649.73	137.27	0.00	1702.34	0.381	0.62	3.425	A
5	313.80	314.19	504.32	0.00	1403.18	0.224	0.29	3.306	A

(Default Analysis Set) - 2037 Do Something, 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
2037 Do Something, AM	2037 Do Something	AM		ONE HOUR	08:00	09:30	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			5.24	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A12 Belvedere Road	
2	2	Mill Road	
3	3	Kirkley Rise	
4	4	A12 Horn Hill	
5	5	Asda	

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	6.20	7.40	29.10	9.70	49.70	48.00	
2	2.80	4.60	6.50	31.80	49.70	26.00	
3	3.40	5.70	6.00	9.10	49.70	26.00	
4	6.10	7.80	9.00	8.90	49.70	64.00	
5	5.00	6.10	25.10	15.00	49.70	42.00	

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)	0.624	1948.188
2		(calculated)	(calculated)	0.519	1173.991
3		(calculated)	(calculated)	0.518	1283.149
4		(calculated)	(calculated)	0.574	1781.103
5		(calculated)	(calculated)	0.594	1702.592

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	✓	247.63	100.000
2	ONE HOUR	✓	163.25	100.000
3	ONE HOUR	✓	0.00	100.000
4	ONE HOUR	✓	1072.42	100.000
5	ONE HOUR	✓	232.00	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	6.018	0.000	218.509	23.106
	2	0.000	0.000	0.000	148.926	14.325
	3	0.000	0.000	0.000	0.000	0.000
	4	701.463	94.700	0.000	0.000	276.253
	5	32.975	6.192	0.000	192.833	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.02	0.00	0.88	0.09
	2	0.00	0.00	0.00	0.91	0.09
	3	0.20	0.20	0.20	0.20	0.20
	4	0.65	0.09	0.00	0.00	0.26
	5	0.14	0.03	0.00	0.83	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.16	2.44	0.18	A
2	0.19	4.83	0.24	A
3	0.00	0.00	0.00	A
4	0.67	6.24	2.03	A
5	0.22	3.88	0.27	A

Main Results for each time segment

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	186.43	185.97	220.33	0.00	1810.69	0.103	0.11	2.216	A
2	122.90	122.35	326.14	0.00	1004.64	0.122	0.14	4.077	A
3	0.00	0.00	448.48	0.00	1050.87	0.000	0.00	0.000	A
4	807.37	804.02	28.09	0.00	1764.99	0.457	0.84	3.734	A
5	174.66	174.07	596.91	0.00	1348.21	0.130	0.15	3.064	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	222.62	222.51	263.77	0.00	1783.58	0.125	0.14	2.305	A
2	146.76	146.61	390.30	0.00	971.32	0.151	0.18	4.365	A
3	0.00	0.00	536.90	0.00	1005.07	0.000	0.00	0.000	A
4	964.08	962.64	33.63	0.00	1761.81	0.547	1.20	4.496	A
5	208.56	208.38	714.67	0.00	1278.30	0.163	0.19	3.364	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	272.65	272.48	322.84	0.00	1746.72	0.156	0.18	2.441	A
2	179.74	179.49	477.91	0.00	925.83	0.194	0.24	4.822	A
3	0.00	0.00	657.40	0.00	942.66	0.000	0.00	0.000	A
4	1180.75	1177.51	41.18	0.00	1757.48	0.672	2.01	6.173	A
5	255.44	255.12	874.18	0.00	1183.60	0.216	0.27	3.876	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	272.65	272.65	323.39	0.00	1746.38	0.156	0.18	2.442	A
2	179.74	179.74	478.33	0.00	925.61	0.194	0.24	4.826	A
3	0.00	0.00	658.07	0.00	942.31	0.000	0.00	0.000	A
4	1180.75	1180.67	41.21	0.00	1757.46	0.672	2.03	6.239	A
5	255.44	255.43	876.53	0.00	1182.20	0.216	0.27	3.884	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	222.62	222.78	264.61	0.00	1783.06	0.125	0.14	2.308	A
2	146.76	147.00	390.98	0.00	970.96	0.151	0.18	4.371	A
3	0.00	0.00	537.99	0.00	1004.51	0.000	0.00	0.000	A
4	964.08	967.30	33.69	0.00	1761.77	0.547	1.22	4.549	A
5	208.56	208.88	718.12	0.00	1276.25	0.163	0.20	3.375	A

Main results: (09:15-09:30)

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	186.43	186.54	221.42	0.00	1810.01	0.103	0.12	2.217	A
2	122.90	123.06	327.34	0.00	1004.01	0.122	0.14	4.088	A
3	0.00	0.00	450.40	0.00	1049.87	0.000	0.00	0.000	A
4	807.37	808.86	28.20	0.00	1764.92	0.457	0.85	3.770	A
5	174.66	174.85	600.50	0.00	1346.08	0.130	0.15	3.075	A

(Default Analysis Set) - 2037 Do Something, 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
2037 Do Something, PM	2037 Do Something	PM		ONE HOUR	17:00	18:30	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			4.42	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A12 Belvedere Road	
2	2	Mill Road	
3	3	Kirkley Rise	
4	4	A12 Horn Hill	
5	5	Asda	

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	6.20	7.40	29.10	9.70	49.70	48.00	
2	2.80	4.60	6.50	31.80	49.70	26.00	
3	3.40	5.70	6.00	9.10	49.70	26.00	
4	6.10	7.80	9.00	8.90	49.70	64.00	
5	5.00	6.10	25.10	15.00	49.70	42.00	

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)	0.624	1948.188
2		(calculated)	(calculated)	0.519	1173.991
3		(calculated)	(calculated)	0.518	1283.149
4		(calculated)	(calculated)	0.574	1781.103
5		(calculated)	(calculated)	0.594	1702.592

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	✓	682.85	100.000
2	ONE HOUR	✓	195.42	100.000
3	ONE HOUR	✓	0.00	100.000
4	ONE HOUR	✓	679.08	100.000
5	ONE HOUR	✓	429.64	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	9.243	0.559	607.500	65.548
	2	0.000	0.000	0.000	183.457	11.959
	3	0.000	0.000	0.000	0.000	0.000
	4	302.829	57.558	0.000	0.000	318.688
	5	35.423	12.960	0.018	381.237	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.01	0.00	0.89	0.10
	2	0.00	0.00	0.00	0.94	0.06
	3	0.20	0.20	0.20	0.20	0.20
	4	0.45	0.08	0.00	0.00	0.47
	5	0.08	0.03	0.00	0.89	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.46	4.06	0.85	A
2	0.38	10.12	0.60	B
3	0.00	0.00	0.00	A
4	0.43	3.66	0.76	A
5	0.32	3.62	0.47	A

Main Results for each time segment

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	514.09	512.41	339.01	0.00	1736.63	0.296	0.42	2.937	A
2	147.12	146.17	791.57	0.00	762.95	0.193	0.24	5.829	A
3	0.00	0.00	937.30	0.00	797.69	0.000	0.00	0.000	A
4	511.24	509.60	58.13	0.00	1747.75	0.293	0.41	2.903	A
5	323.45	322.40	270.44	0.00	1542.03	0.210	0.26	2.948	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	613.87	613.28	405.81	0.00	1694.94	0.362	0.56	3.326	A
2	175.68	175.25	947.45	0.00	682.01	0.258	0.34	7.097	A
3	0.00	0.00	1122.18	0.00	701.94	0.000	0.00	0.000	A
4	610.47	609.97	69.60	0.00	1741.17	0.351	0.54	3.180	A
5	386.24	385.93	323.71	0.00	1510.41	0.256	0.34	3.201	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	751.83	750.73	496.86	0.00	1638.12	0.459	0.84	4.052	A
2	215.16	214.16	1159.87	0.00	571.71	0.376	0.59	10.041	B
3	0.00	0.00	1373.39	0.00	571.83	0.000	0.00	0.000	A
4	747.68	746.81	85.17	0.00	1732.23	0.432	0.75	3.649	A
5	473.04	472.52	396.33	0.00	1467.29	0.322	0.47	3.617	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	751.83	751.82	497.40	0.00	1637.78	0.459	0.85	4.063	A
2	215.16	215.13	1161.41	0.00	570.91	0.377	0.60	10.116	B
3	0.00	0.00	1375.90	0.00	570.53	0.000	0.00	0.000	A
4	747.68	747.66	85.33	0.00	1732.14	0.432	0.76	3.655	A
5	473.04	473.03	396.79	0.00	1467.02	0.322	0.47	3.620	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	613.87	614.96	406.68	0.00	1694.40	0.362	0.57	3.340	A
2	175.68	176.67	949.84	0.00	680.77	0.258	0.35	7.157	A
3	0.00	0.00	1125.98	0.00	699.97	0.000	0.00	0.000	A
4	610.47	611.33	69.84	0.00	1741.03	0.351	0.54	3.190	A
5	386.24	386.75	324.43	0.00	1509.98	0.256	0.35	3.208	A

Main results: (18:15-18:30)

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	514.09	514.68	340.45	0.00	1735.73	0.296	0.42	2.949	A
2	147.12	147.56	795.02	0.00	761.16	0.193	0.24	5.870	A
3	0.00	0.00	942.15	0.00	795.18	0.000	0.00	0.000	A
4	511.24	511.75	58.44	0.00	1747.57	0.293	0.42	2.915	A
5	323.45	323.77	271.59	0.00	1541.35	0.210	0.27	2.959	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.6.541 [19821,26/11/2015]

For sales and distribution information, program advice and maintenance, contact TRL:
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Filename: 06 A12 Tom Crisp Way-A12 Horn Hill-Waveney Drive rdbt v4.arc8
Path: L:\106xxx\1069948 Lowestoft Third Crossing\09 Documents\06_Modelling_Junction Modelling Mar 2018\06 A12 Tom Crisp Way-A12 Horn Hill-Waveney Drive rdbt
Report generation date: 03/04/2018 12:38:11

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2016 DN								
A12 Tom Crisp Way WB	0.51	2.86	0.34	A	2.61	6.77	0.73	A
Manconochie Way	0.04	3.07	0.03	A	0.10	5.45	0.09	A
A12 Tom Crisp WayEB	1.52	4.94	0.60	A	0.47	3.21	0.32	A
B1531 Waveney Dr	0.53	3.88	0.35	A	0.29	2.56	0.22	A
2022 DM								
A12 Tom Crisp Way WB	0.52	2.86	0.34	A	2.90	7.40	0.75	A
Manconochie Way	0.02	3.14	0.02	A	0.05	5.55	0.04	A
A12 Tom Crisp WayEB	1.60	5.13	0.62	A	0.45	3.05	0.31	A
B1531 Waveney Dr	0.63	4.00	0.39	A	0.33	2.54	0.25	A
2022 DS								
A12 Tom Crisp Way WB	0.57	3.98	0.36	A	3.63	11.64	0.79	B
Manconochie Way	0.04	4.62	0.04	A	0.07	8.72	0.07	A
A12 Tom Crisp WayEB	2.93	7.93	0.75	A	1.49	5.51	0.60	A
B1531 Waveney Dr	2.64	7.56	0.73	A	1.27	4.08	0.56	A
2037 DM								
A12 Tom Crisp Way WB	0.64	3.18	0.39	A	4.55	10.72	0.82	B
Manconochie Way	0.02	3.31	0.02	A	0.06	6.53	0.06	A
A12 Tom Crisp WayEB	1.71	5.35	0.63	A	0.54	3.33	0.35	A
B1531 Waveney Dr	0.89	4.84	0.47	A	0.37	2.67	0.27	A
2037 DS								
A12 Tom Crisp Way WB	0.73	4.54	0.42	A	7.10	20.64	0.89	C
Manconochie Way	0.05	5.18	0.05	A	0.10	10.95	0.09	B
A12 Tom Crisp WayEB	4.01	10.38	0.80	B	2.03	6.96	0.67	A
B1531 Waveney Dr	5.09	13.09	0.84	B	1.41	4.41	0.59	A

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

"D1 - 2022 DM, AM " model duration: 07:45 - 09:15
"D2 - 2022 DM, PM" model duration: 15:45 - 17:15
"D3 - 2037 DM, AM" model duration: 07:45 - 09:15
"D4 - 2037 DM, PM" model duration: 15:45 - 17:15
"D5 - 2022 DS, AM" model duration: 07:45 - 09:15
"D6 - 2022 DS, PM" model duration: 15:45 - 17:15
"D7 - 2037 DS, AM" model duration: 07:45 - 09:15
"D8 - 2037 DS, PM" model duration: 15:45 - 17:15
"D9 - 2016 DN, AM" model duration: 07:45 - 09:15
"D10 - 2016 DN, PM" model duration: 15:45 - 17:15

Run using Junctions 8.0.6.541 at 03/04/2018 12:38:04

File summary

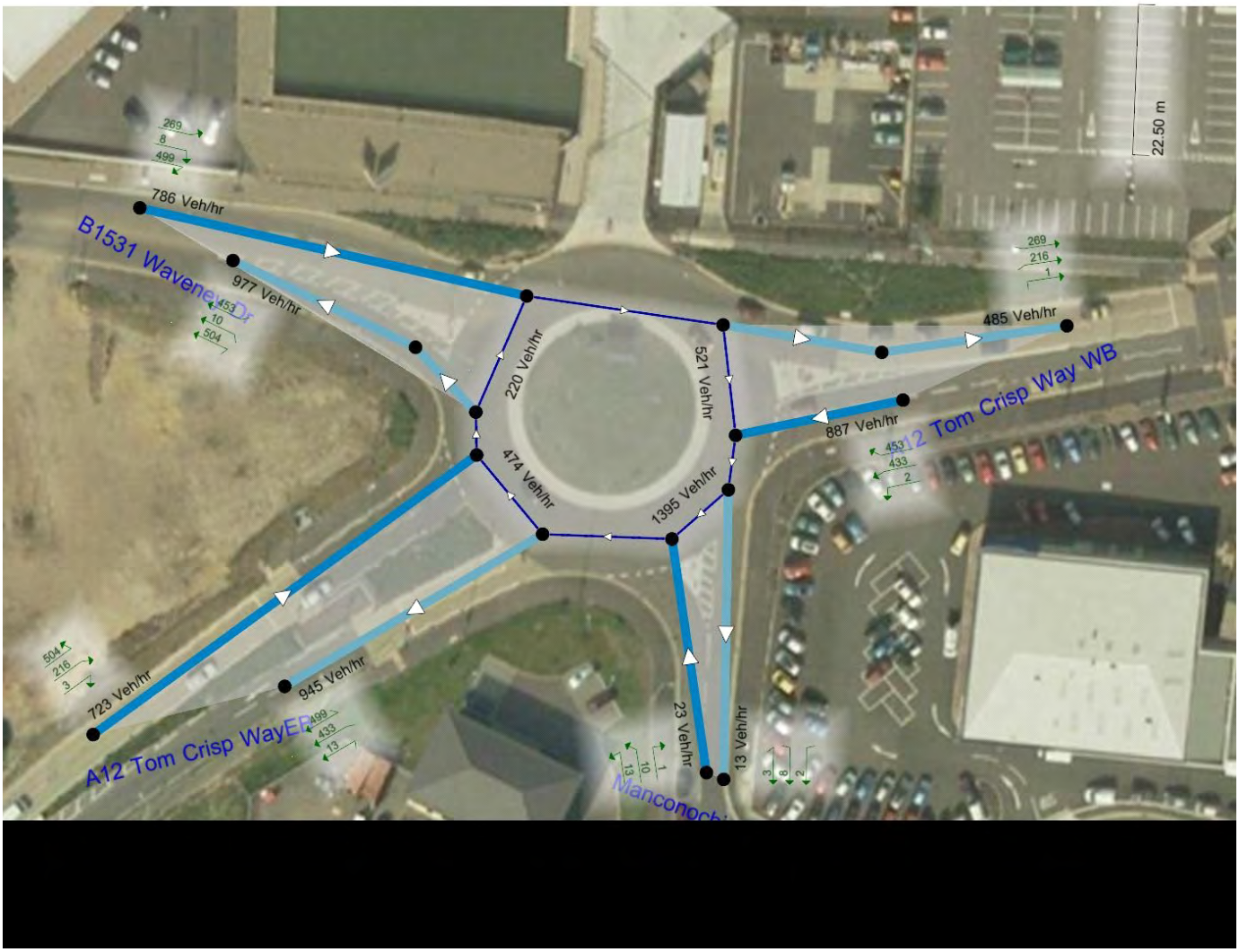
Title	(untitled)
Location	
Site Number	
Date	24/06/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JMThomps
Description	Updated March 2018 flows

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	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of ARCADY.

2022 DM, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A12 Tom Crisp Way WB - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	B1531 Waveney Dr - 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
2022 DM, AM	2022 DM	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			4.23	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
A12 Tom Crisp Way WB	1	A12 Tom Crisp Way WB	
Manconochie Way	2	Manconochie Way	
A12 Tom Crisp WayEB	3	A12 Tom Crisp WayEB	
B1531 Waveney Dr	4	B1531 Waveney Dr	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
A12 Tom Crisp Way WB	0.00	99999.00
Manconochie Way	0.00	99999.00
A12 Tom Crisp WayEB	0.00	99999.00
B1531 Waveney Dr	0.00	99999.00

Roundabout Geometry

Name	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
A12 Tom Crisp Way WB	6.20	6.90	39.10	14.70	50.00	27.50	
Manconochie Way	3.90	6.50	10.80	15.00	50.00	25.50	
A12 Tom Crisp WayEB	6.90	7.50	19.30	11.10	50.00	34.00	
B1531 Waveney Dr	6.20	8.10	49.70	19.70	50.00	41.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A12 Tom Crisp Way WB		(calculated)	(calculated)	0.674	2060.587
Manconochie Way		(calculated)	(calculated)	0.594	1625.577
A12 Tom Crisp WayEB		(calculated)	(calculated)	0.676	2136.281
B1531 Waveney Dr		(calculated)	(calculated)	0.711	2298.483

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	2.30				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A12 Tom Crisp Way WB	ONE HOUR	✓	591.00	100.000
Manconochie Way	ONE HOUR	✓	24.00	100.000
A12 Tom Crisp WayEB	ONE HOUR	✓	1026.00	100.000
B1531 Waveney Dr	ONE HOUR	✓	521.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A12 Tom Crisp Way WB	444.94	461.98		
07:45-08:00	Manconochie Way	18.07	18.07		
07:45-08:00	A12 Tom Crisp WayEB	772.43	829.31		
07:45-08:00	B1531 Waveney Dr	392.24	409.79		
08:00-08:15	A12 Tom Crisp Way WB	531.30	551.65		
08:00-08:15	Manconochie Way	21.58	21.58		
08:00-08:15	A12 Tom Crisp WayEB	922.35	990.27		
08:00-08:15	B1531 Waveney Dr	468.37	489.33		
08:15-08:30	A12 Tom Crisp Way WB	650.70	675.63		
08:15-08:30	Manconochie Way	26.42	26.42		
08:15-08:30	A12 Tom Crisp WayEB	1129.65	1212.83		
08:15-08:30	B1531 Waveney Dr	573.63	599.30		
08:30-08:45	A12 Tom Crisp Way WB	650.70	675.63		
08:30-08:45	Manconochie Way	26.42	26.42		
08:30-08:45	A12 Tom Crisp WayEB	1129.65	1212.83		
08:30-08:45	B1531 Waveney Dr	573.63	599.30		
08:45-09:00	A12 Tom Crisp Way WB	531.30	551.65		
08:45-09:00	Manconochie Way	21.58	21.58		
08:45-09:00	A12 Tom Crisp WayEB	922.35	990.27		
08:45-09:00	B1531 Waveney Dr	468.37	489.33		
09:00-09:15	A12 Tom Crisp Way WB	444.94	461.98		
09:00-09:15	Manconochie Way	18.07	18.07		
09:00-09:15	A12 Tom Crisp WayEB	772.43	829.31		
09:00-09:15	B1531 Waveney Dr	392.24	409.79		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.000	5.000	377.000	209.000
	Manconochie Way	5.000	0.000	11.000	8.000
	A12 Tom Crisp WayEB	882.000	12.000	0.000	132.000
	B1531 Waveney Dr	431.000	12.000	78.000	0.000

Turning Proportions (Veh) - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.00	0.01	0.64	0.35
	Manconochie Way	0.21	0.00	0.46	0.33
	A12 Tom Crisp WayEB	0.86	0.01	0.00	0.13
	B1531 Waveney Dr	0.83	0.02	0.15	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	1.000	1.000	1.044	1.029
	Manconochie Way	1.000	1.000	1.000	1.000
	A12 Tom Crisp WayEB	1.081	1.000	1.000	1.034
	B1531 Waveney Dr	1.047	1.000	1.040	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.0	0.0	3.4	2.2
	Manconochie Way	0.0	0.0	0.0	0.0
	A12 Tom Crisp WayEB	6.2	0.0	0.0	2.6
	B1531 Waveney Dr	3.6	0.0	3.1	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A12 Tom Crisp Way WB	0.34	2.86	0.52	A
Manconochie Way	0.02	3.14	0.02	A
A12 Tom Crisp WayEB	0.62	5.13	1.60	A
B1531 Waveney Dr	0.39	4.00	0.63	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	444.94	443.74	76.55	0.00	1933.32	0.230	0.30	2.414	A
Manconochie Way	18.07	18.01	498.54	0.00	1317.81	0.014	0.01	2.769	A
A12 Tom Crisp WayEB	772.42	769.66	166.68	0.00	1882.00	0.410	0.69	3.228	A
B1531 Waveney Dr	392.24	391.05	674.39	0.00	1705.02	0.230	0.30	2.737	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	531.30	530.97	91.61	0.00	1923.24	0.276	0.38	2.585	A
Manconochie Way	21.58	21.56	596.53	0.00	1257.32	0.017	0.02	2.912	A
A12 Tom Crisp WayEB	922.35	921.22	199.45	0.00	1860.81	0.496	0.97	3.826	A
B1531 Waveney Dr	468.37	467.92	807.19	0.00	1607.54	0.291	0.41	3.156	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	650.70	650.17	112.12	0.00	1909.51	0.341	0.51	2.857	A
Manconochie Way	26.42	26.40	730.41	0.00	1174.67	0.023	0.02	3.134	A
A12 Tom Crisp WayEB	1129.64	1127.20	244.22	0.00	1831.87	0.617	1.59	5.092	A
B1531 Waveney Dr	573.63	572.74	987.68	0.00	1475.06	0.389	0.63	3.985	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	650.70	650.70	112.30	0.00	1909.39	0.341	0.52	2.859	A
Manconochie Way	26.42	26.42	731.07	0.00	1174.26	0.023	0.02	3.135	A
A12 Tom Crisp WayEB	1129.64	1129.60	244.42	0.00	1831.74	0.617	1.60	5.127	A
B1531 Waveney Dr	573.63	573.62	989.77	0.00	1473.53	0.389	0.63	4.000	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	531.30	531.83	91.88	0.00	1923.06	0.276	0.38	2.590	A
Manconochie Way	21.58	21.60	597.58	0.00	1256.67	0.017	0.02	2.914	A
A12 Tom Crisp WayEB	922.35	924.77	199.77	0.00	1860.60	0.496	0.99	3.858	A
B1531 Waveney Dr	468.37	469.25	810.30	0.00	1605.26	0.292	0.41	3.173	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	444.94	445.27	76.88	0.00	1933.10	0.230	0.30	2.419	A
Manconochie Way	18.07	18.08	500.29	0.00	1316.73	0.014	0.01	2.771	A
A12 Tom Crisp WayEB	772.42	773.59	167.26	0.00	1881.62	0.411	0.70	3.251	A
B1531 Waveney Dr	392.24	392.69	677.83	0.00	1702.50	0.230	0.30	2.751	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
07:45-08:00	A12 Tom Crisp Way WB	444.94	1933.32	0.230	0.00	0.00	0.30	4.40	-	2.414
07:45-08:00	Manconochie Way	18.07	1317.81	0.014	0.00	0.00	0.01	0.20	-	2.769
07:45-08:00	A12 Tom Crisp WayEB	772.42	1882.00	0.410	0.00	0.00	0.69	10.13	-	3.228
07:45-08:00	B1531 Waveney Dr	392.24	1705.02	0.230	0.00	0.00	0.30	4.39	-	2.737
08:00-08:15	A12 Tom Crisp Way WB	531.30	1923.24	0.276	0.00	0.30	0.38	5.63	-	2.585
08:00-08:15	Manconochie Way	21.58	1257.32	0.017	0.00	0.01	0.02	0.26	-	2.912
08:00-08:15	A12 Tom Crisp WayEB	922.35	1860.81	0.496	0.00	0.69	0.97	14.30	-	3.826
08:00-08:15	B1531 Waveney Dr	468.37	1607.54	0.291	0.00	0.30	0.41	6.04	-	3.156
08:15-08:30	A12 Tom Crisp Way WB	650.70	1909.51	0.341	0.00	0.38	0.51	7.60	-	2.857
08:15-08:30	Manconochie Way	26.42	1174.67	0.023	0.00	0.02	0.02	0.34	-	3.134
08:15-08:30	A12 Tom Crisp WayEB	1129.64	1831.87	0.617	0.00	0.97	1.59	22.96	-	5.092
08:15-08:30	B1531 Waveney Dr	573.63	1475.06	0.389	0.00	0.41	0.63	9.28	-	3.985
08:30-08:45	A12 Tom Crisp Way WB	650.70	1909.39	0.341	0.00	0.51	0.52	7.73	-	2.859
08:30-08:45	Manconochie Way	26.42	1174.26	0.023	0.00	0.02	0.02	0.35	-	3.135
08:30-08:45	A12 Tom Crisp WayEB	1129.64	1831.74	0.617	0.00	1.59	1.60	23.89	-	5.127
08:30-08:45	B1531 Waveney Dr	573.63	1473.53	0.389	0.00	0.63	0.63	9.51	-	4.000
08:45-09:00	A12 Tom Crisp Way WB	531.30	1923.06	0.276	0.00	0.52	0.38	5.83	-	2.590
08:45-09:00	Manconochie Way	21.58	1256.67	0.017	0.00	0.02	0.02	0.27	-	2.914
08:45-09:00	A12 Tom Crisp WayEB	922.35	1860.60	0.496	0.00	1.60	0.99	15.27	-	3.858
08:45-09:00	B1531 Waveney Dr	468.37	1605.26	0.292	0.00	0.63	0.41	6.32	-	3.173
09:00-09:15	A12 Tom Crisp Way WB	444.94	1933.10	0.230	0.00	0.38	0.30	4.55	-	2.419
09:00-09:15	Manconochie Way	18.07	1316.73	0.014	0.00	0.02	0.01	0.21	-	2.771
09:00-09:15	A12 Tom Crisp WayEB	772.42	1881.62	0.411	0.00	0.99	0.70	10.72	-	3.251
09:00-09:15	B1531 Waveney Dr	392.24	1702.50	0.230	0.00	0.41	0.30	4.57	-	2.751

2022 DM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A12 Tom Crisp Way WB - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	B1531 Waveney Dr - 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
2022 DM, PM	2022 DM	PM		ONE HOUR	15:45	17:15	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			5.52	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
A12 Tom Crisp Way WB	1	A12 Tom Crisp Way WB	
Manconochie Way	2	Manconochie Way	
A12 Tom Crisp WayEB	3	A12 Tom Crisp WayEB	
B1531 Waveney Dr	4	B1531 Waveney Dr	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
A12 Tom Crisp Way WB	0.00	99999.00
Manconochie Way	0.00	99999.00
A12 Tom Crisp WayEB	0.00	99999.00
B1531 Waveney Dr	0.00	99999.00

Roundabout Geometry

Name	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
A12 Tom Crisp Way WB	6.20	6.90	39.10	14.70	50.00	27.50	
Manconochie Way	3.90	6.50	10.80	15.00	50.00	25.50	
A12 Tom Crisp WayEB	6.90	7.50	19.30	11.10	50.00	34.00	
B1531 Waveney Dr	6.20	8.10	49.70	19.70	50.00	41.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A12 Tom Crisp Way WB		(calculated)	(calculated)	0.674	2060.587
Manconochie Way		(calculated)	(calculated)	0.594	1625.577
A12 Tom Crisp WayEB		(calculated)	(calculated)	0.676	2136.281
B1531 Waveney Dr		(calculated)	(calculated)	0.711	2298.483

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	2.30				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A12 Tom Crisp Way WB	ONE HOUR	✓	1302.00	100.000
Manconochie Way	ONE HOUR	✓	27.00	100.000
A12 Tom Crisp WayEB	ONE HOUR	✓	483.00	100.000
B1531 Waveney Dr	ONE HOUR	✓	420.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
15:45-16:00	A12 Tom Crisp Way WB	980.21	1003.72		
15:45-16:00	Manconochie Way	20.33	20.33		
15:45-16:00	A12 Tom Crisp WayEB	363.63	374.24		
15:45-16:00	B1531 Waveney Dr	316.20	324.17		
16:00-16:15	A12 Tom Crisp Way WB	1170.47	1198.54		
16:00-16:15	Manconochie Way	24.27	24.27		
16:00-16:15	A12 Tom Crisp WayEB	434.21	446.88		
16:00-16:15	B1531 Waveney Dr	377.57	387.10		
16:15-16:30	A12 Tom Crisp Way WB	1433.53	1467.91		
16:15-16:30	Manconochie Way	29.73	29.73		
16:15-16:30	A12 Tom Crisp WayEB	531.79	547.32		
16:15-16:30	B1531 Waveney Dr	462.43	474.09		
16:30-16:45	A12 Tom Crisp Way WB	1433.53	1467.91		
16:30-16:45	Manconochie Way	29.73	29.73		
16:30-16:45	A12 Tom Crisp WayEB	531.79	547.32		
16:30-16:45	B1531 Waveney Dr	462.43	474.09		
16:45-17:00	A12 Tom Crisp Way WB	1170.47	1198.54		
16:45-17:00	Manconochie Way	24.27	24.27		
16:45-17:00	A12 Tom Crisp WayEB	434.21	446.88		
16:45-17:00	B1531 Waveney Dr	377.57	387.10		
17:00-17:15	A12 Tom Crisp Way WB	980.21	1003.72		
17:00-17:15	Manconochie Way	20.33	20.33		
17:00-17:15	A12 Tom Crisp WayEB	363.63	374.24		
17:00-17:15	B1531 Waveney Dr	316.20	324.17		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.000	4.000	813.000	485.000
	Manconochie Way	4.000	0.000	16.000	7.000
	A12 Tom Crisp WayEB	452.000	4.000	0.000	27.000
	B1531 Waveney Dr	305.000	5.000	110.000	0.000

Turning Proportions (Veh) - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.00	0.00	0.62	0.37
	Manconochie Way	0.15	0.00	0.59	0.26
	A12 Tom Crisp WayEB	0.94	0.01	0.00	0.06
	B1531 Waveney Dr	0.73	0.01	0.26	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	1.000	1.000	1.026	1.021
	Manconochie Way	1.000	1.000	1.000	1.000
	A12 Tom Crisp WayEB	1.031	1.000	1.000	1.000
	B1531 Waveney Dr	1.005	1.000	1.082	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.0	0.0	2.0	1.6
	Manconochie Way	0.0	0.0	0.0	0.0
	A12 Tom Crisp WayEB	2.4	0.0	0.0	0.0
	B1531 Waveney Dr	0.4	0.0	6.3	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A12 Tom Crisp Way WB	0.75	7.40	2.90	A
Manconochie Way	0.04	5.55	0.05	A
A12 Tom Crisp WayEB	0.31	3.05	0.45	A
B1531 Waveney Dr	0.25	2.54	0.33	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	980.22	976.20	89.38	0.00	1949.03	0.503	1.00	3.685	A
Manconochie Way	20.33	20.24	1055.82	0.00	980.21	0.021	0.02	3.749	A
A12 Tom Crisp WayEB	363.63	362.64	371.88	0.00	1826.48	0.199	0.25	2.458	A
B1531 Waveney Dr	316.20	315.45	345.36	0.00	1995.18	0.158	0.19	2.142	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	1170.47	1168.46	106.92	0.00	1936.60	0.604	1.51	4.674	A
Manconochie Way	24.27	24.24	1263.70	0.00	853.15	0.028	0.03	4.342	A
A12 Tom Crisp WayEB	434.21	433.91	445.13	0.00	1777.40	0.244	0.32	2.679	A
B1531 Waveney Dr	377.57	377.36	413.24	0.00	1946.69	0.194	0.24	2.293	A

Main results: (16:15-16:30)

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	1433.53	1428.13	130.92	0.00	1919.60	0.747	2.86	7.246	A
Manconochie Way	29.73	29.66	1544.75	0.00	681.35	0.044	0.05	5.524	A
A12 Tom Crisp WayEB	531.79	531.28	544.06	0.00	1711.10	0.311	0.45	3.049	A
B1531 Waveney Dr	462.43	462.09	505.98	0.00	1880.43	0.246	0.32	2.538	A

Main results: (16:30-16:45)

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	1433.53	1433.36	131.02	0.00	1919.53	0.747	2.90	7.397	A
Manconochie Way	29.73	29.73	1550.06	0.00	678.11	0.044	0.05	5.551	A
A12 Tom Crisp WayEB	531.79	531.79	546.04	0.00	1709.78	0.311	0.45	3.055	A
B1531 Waveney Dr	462.43	462.42	506.46	0.00	1880.09	0.246	0.33	2.538	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	1170.47	1175.90	107.07	0.00	1936.49	0.604	1.55	4.765	A
Manconochie Way	24.27	24.34	1271.26	0.00	848.54	0.029	0.03	4.367	A
A12 Tom Crisp WayEB	434.21	434.71	447.94	0.00	1775.52	0.245	0.32	2.685	A
B1531 Waveney Dr	377.57	377.91	414.01	0.00	1946.14	0.194	0.24	2.295	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	980.22	982.33	89.65	0.00	1948.83	0.503	1.02	3.731	A
Manconochie Way	20.33	20.36	1062.17	0.00	976.34	0.021	0.02	3.764	A
A12 Tom Crisp WayEB	363.63	363.93	374.21	0.00	1824.92	0.199	0.25	2.464	A
B1531 Waveney Dr	316.20	316.41	346.60	0.00	1994.30	0.159	0.19	2.145	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
15:45-16:00	A12 Tom Crisp Way WB	980.22	1949.03	0.503	0.00	0.00	1.00	14.60	-	3.685
15:45-16:00	Manconochie Way	20.33	980.21	0.021	0.00	0.00	0.02	0.31	-	3.749
15:45-16:00	A12 Tom Crisp WayEB	363.63	1826.48	0.199	0.00	0.00	0.25	3.66	-	2.458
15:45-16:00	B1531 Waveney Dr	316.20	1995.18	0.158	0.00	0.00	0.19	2.78	-	2.142
16:00-16:15	A12 Tom Crisp Way WB	1170.47	1936.60	0.604	0.00	1.00	1.51	21.93	-	4.674
16:00-16:15	Manconochie Way	24.27	853.15	0.028	0.00	0.02	0.03	0.43	-	4.342
16:00-16:15	A12 Tom Crisp WayEB	434.21	1777.40	0.244	0.00	0.25	0.32	4.77	-	2.679
16:00-16:15	B1531 Waveney Dr	377.57	1946.69	0.194	0.00	0.19	0.24	3.56	-	2.293
16:15-16:30	A12 Tom Crisp Way WB	1433.53	1919.60	0.747	0.00	1.51	2.86	40.36	-	7.246
16:15-16:30	Manconochie Way	29.73	681.35	0.044	0.00	0.03	0.05	0.67	-	5.524
16:15-16:30	A12 Tom Crisp WayEB	531.79	1711.10	0.311	0.00	0.32	0.45	6.63	-	3.049
16:15-16:30	B1531 Waveney Dr	462.43	1880.43	0.246	0.00	0.24	0.32	4.81	-	2.538
16:30-16:45	A12 Tom Crisp Way WB	1433.53	1919.53	0.747	0.00	2.86	2.90	43.30	-	7.397
16:30-16:45	Manconochie Way	29.73	678.11	0.044	0.00	0.05	0.05	0.68	-	5.551
16:30-16:45	A12 Tom Crisp WayEB	531.79	1709.78	0.311	0.00	0.45	0.45	6.75	-	3.055
16:30-16:45	B1531 Waveney Dr	462.43	1880.09	0.246	0.00	0.32	0.33	4.88	-	2.538
16:45-17:00	A12 Tom Crisp Way WB	1170.47	1936.49	0.604	0.00	2.90	1.55	24.13	-	4.765
16:45-17:00	Manconochie Way	24.27	848.54	0.029	0.00	0.05	0.03	0.45	-	4.367
16:45-17:00	A12 Tom Crisp WayEB	434.21	1775.52	0.245	0.00	0.45	0.32	4.94	-	2.685
16:45-17:00	B1531 Waveney Dr	377.57	1946.14	0.194	0.00	0.33	0.24	3.66	-	2.295
17:00-17:15	A12 Tom Crisp Way WB	980.22	1948.83	0.503	0.00	1.55	1.02	15.70	-	3.731
17:00-17:15	Manconochie Way	20.33	976.34	0.021	0.00	0.03	0.02	0.33	-	3.764
17:00-17:15	A12 Tom Crisp WayEB	363.63	1824.92	0.199	0.00	0.32	0.25	3.79	-	2.464
17:00-17:15	B1531 Waveney Dr	316.20	1994.30	0.159	0.00	0.24	0.19	2.86	-	2.145

2037 DM, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A12 Tom Crisp Way WB - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	B1531 Waveney Dr - 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
2037 DM, AM	2037 DM	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			4.59	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
A12 Tom Crisp Way WB	1	A12 Tom Crisp Way WB	
Manconochie Way	2	Manconochie Way	
A12 Tom Crisp WayEB	3	A12 Tom Crisp WayEB	
B1531 Waveney Dr	4	B1531 Waveney Dr	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
A12 Tom Crisp Way WB	0.00	99999.00
Manconochie Way	0.00	99999.00
A12 Tom Crisp WayEB	0.00	99999.00
B1531 Waveney Dr	0.00	99999.00

Roundabout Geometry

Name	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
A12 Tom Crisp Way WB	6.20	6.90	39.10	14.70	50.00	27.50	
Manconochie Way	3.90	6.50	10.80	15.00	50.00	25.50	
A12 Tom Crisp WayEB	6.90	7.50	19.30	11.10	50.00	34.00	
B1531 Waveney Dr	6.20	8.10	49.70	19.70	50.00	41.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A12 Tom Crisp Way WB		(calculated)	(calculated)	0.674	2060.587
Manconochie Way		(calculated)	(calculated)	0.594	1625.577
A12 Tom Crisp WayEB		(calculated)	(calculated)	0.676	2136.281
B1531 Waveney Dr		(calculated)	(calculated)	0.711	2298.483

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	2.30				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A12 Tom Crisp Way WB	ONE HOUR	✓	658.00	100.000
Manconochie Way	ONE HOUR	✓	22.00	100.000
A12 Tom Crisp WayEB	ONE HOUR	✓	1052.00	100.000
B1531 Waveney Dr	ONE HOUR	✓	608.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A12 Tom Crisp Way WB	495.38	525.53		
07:45-08:00	Manconochie Way	16.56	16.56		
07:45-08:00	A12 Tom Crisp WayEB	792.00	847.44		
07:45-08:00	B1531 Waveney Dr	457.73	484.95		
08:00-08:15	A12 Tom Crisp Way WB	591.53	627.54		
08:00-08:15	Manconochie Way	19.78	19.78		
08:00-08:15	A12 Tom Crisp WayEB	945.73	1011.92		
08:00-08:15	B1531 Waveney Dr	546.58	579.08		
08:15-08:30	A12 Tom Crisp Way WB	724.47	768.57		
08:15-08:30	Manconochie Way	24.22	24.22		
08:15-08:30	A12 Tom Crisp WayEB	1158.27	1239.35		
08:15-08:30	B1531 Waveney Dr	669.42	709.23		
08:30-08:45	A12 Tom Crisp Way WB	724.47	768.57		
08:30-08:45	Manconochie Way	24.22	24.22		
08:30-08:45	A12 Tom Crisp WayEB	1158.27	1239.35		
08:30-08:45	B1531 Waveney Dr	669.42	709.23		
08:45-09:00	A12 Tom Crisp Way WB	591.53	627.54		
08:45-09:00	Manconochie Way	19.78	19.78		
08:45-09:00	A12 Tom Crisp WayEB	945.73	1011.92		
08:45-09:00	B1531 Waveney Dr	546.58	579.08		
09:00-09:15	A12 Tom Crisp Way WB	495.38	525.53		
09:00-09:15	Manconochie Way	16.56	16.56		
09:00-09:15	A12 Tom Crisp WayEB	792.00	847.44		
09:00-09:15	B1531 Waveney Dr	457.73	484.95		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.000	5.000	432.000	221.000
	Manconochie Way	0.000	0.000	13.000	9.000
	A12 Tom Crisp WayEB	938.000	14.000	0.000	100.000
	B1531 Waveney Dr	502.000	14.000	92.000	0.000

Turning Proportions (Veh) - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.00	0.01	0.66	0.34
	Manconochie Way	0.00	0.00	0.59	0.41
	A12 Tom Crisp WayEB	0.89	0.01	0.00	0.10
	B1531 Waveney Dr	0.83	0.02	0.15	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	1.000	1.000	1.074	1.036
	Manconochie Way	1.000	1.000	1.000	1.000
	A12 Tom Crisp WayEB	1.077	1.000	1.000	1.017
	B1531 Waveney Dr	1.066	1.000	1.031	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.0	0.0	5.7	2.8
	Manconochie Way	0.0	0.0	0.0	0.0
	A12 Tom Crisp WayEB	5.9	0.0	0.0	1.3
	B1531 Waveney Dr	5.1	0.0	2.4	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A12 Tom Crisp Way WB	0.39	3.18	0.64	A
Manconochie Way	0.02	3.31	0.02	A
A12 Tom Crisp WayEB	0.63	5.35	1.71	A
B1531 Waveney Dr	0.47	4.84	0.89	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	495.38	493.96	90.04	0.00	1883.76	0.263	0.36	2.588	A
Manconochie Way	16.56	16.51	559.23	0.00	1274.10	0.013	0.01	2.862	A
A12 Tom Crisp WayEB	792.00	789.12	172.66	0.00	1883.66	0.420	0.72	3.281	A
B1531 Waveney Dr	457.74	456.21	714.11	0.00	1654.28	0.277	0.38	3.000	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	591.53	591.11	107.75	0.00	1872.24	0.316	0.46	2.810	A
Manconochie Way	19.78	19.76	669.23	0.00	1204.97	0.016	0.02	3.036	A
A12 Tom Crisp WayEB	945.73	944.52	206.62	0.00	1861.46	0.508	1.02	3.921	A
B1531 Waveney Dr	546.58	545.94	854.73	0.00	1552.82	0.352	0.54	3.573	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	724.47	723.77	131.84	0.00	1856.56	0.390	0.64	3.176	A
Manconochie Way	24.22	24.20	819.35	0.00	1110.61	0.022	0.02	3.312	A
A12 Tom Crisp WayEB	1158.28	1155.60	252.99	0.00	1831.14	0.633	1.69	5.307	A
B1531 Waveney Dr	669.42	668.03	1045.75	0.00	1415.02	0.473	0.89	4.810	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	724.47	724.47	132.12	0.00	1856.38	0.390	0.64	3.179	A
Manconochie Way	24.22	24.22	820.25	0.00	1110.05	0.022	0.02	3.314	A
A12 Tom Crisp WayEB	1158.28	1158.23	253.23	0.00	1830.98	0.633	1.71	5.351	A
B1531 Waveney Dr	669.42	669.40	1048.13	0.00	1413.30	0.474	0.89	4.839	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	591.53	592.23	108.15	0.00	1871.98	0.316	0.46	2.814	A
Manconochie Way	19.78	19.80	670.64	0.00	1204.08	0.016	0.02	3.041	A
A12 Tom Crisp WayEB	945.73	948.39	207.01	0.00	1861.20	0.508	1.04	3.955	A
B1531 Waveney Dr	546.58	547.97	858.24	0.00	1550.29	0.353	0.55	3.595	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	495.38	495.80	90.47	0.00	1883.48	0.263	0.36	2.596	A
Manconochie Way	16.56	16.58	561.39	0.00	1272.74	0.013	0.01	2.867	A
A12 Tom Crisp WayEB	792.00	793.25	173.30	0.00	1883.24	0.421	0.73	3.305	A
B1531 Waveney Dr	457.74	458.39	717.85	0.00	1651.58	0.277	0.39	3.018	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
07:45-08:00	A12 Tom Crisp Way WB	495.38	1883.76	0.263	0.00	0.00	0.36	5.24	-	2.588
07:45-08:00	Manconochie Way	16.56	1274.10	0.013	0.00	0.00	0.01	0.19	-	2.862
07:45-08:00	A12 Tom Crisp WayEB	792.00	1883.66	0.420	0.00	0.00	0.72	10.55	-	3.281
07:45-08:00	B1531 Waveney Dr	457.74	1654.28	0.277	0.00	0.00	0.38	5.60	-	3.000
08:00-08:15	A12 Tom Crisp Way WB	591.53	1872.24	0.316	0.00	0.36	0.46	6.80	-	2.810
08:00-08:15	Manconochie Way	19.78	1204.97	0.016	0.00	0.01	0.02	0.25	-	3.036
08:00-08:15	A12 Tom Crisp WayEB	945.73	1861.46	0.508	0.00	0.72	1.02	15.01	-	3.921
08:00-08:15	B1531 Waveney Dr	546.58	1552.82	0.352	0.00	0.38	0.54	7.95	-	3.573
08:15-08:30	A12 Tom Crisp Way WB	724.47	1856.56	0.390	0.00	0.46	0.64	9.38	-	3.176
08:15-08:30	Manconochie Way	24.22	1110.61	0.022	0.00	0.02	0.02	0.33	-	3.312
08:15-08:30	A12 Tom Crisp WayEB	1158.28	1831.14	0.633	0.00	1.02	1.69	24.48	-	5.307
08:15-08:30	B1531 Waveney Dr	669.42	1415.02	0.473	0.00	0.54	0.89	12.97	-	4.810
08:30-08:45	A12 Tom Crisp Way WB	724.47	1856.38	0.390	0.00	0.64	0.64	9.56	-	3.179
08:30-08:45	Manconochie Way	24.22	1110.05	0.022	0.00	0.02	0.02	0.33	-	3.314
08:30-08:45	A12 Tom Crisp WayEB	1158.28	1830.98	0.633	0.00	1.69	1.71	25.54	-	5.351
08:30-08:45	B1531 Waveney Dr	669.42	1413.30	0.474	0.00	0.89	0.89	13.39	-	4.839
08:45-09:00	A12 Tom Crisp Way WB	591.53	1871.98	0.316	0.00	0.64	0.46	7.07	-	2.814
08:45-09:00	Manconochie Way	19.78	1204.08	0.016	0.00	0.02	0.02	0.25	-	3.041
08:45-09:00	A12 Tom Crisp WayEB	945.73	1861.20	0.508	0.00	1.71	1.04	16.07	-	3.955
08:45-09:00	B1531 Waveney Dr	546.58	1550.29	0.353	0.00	0.89	0.55	8.40	-	3.595
09:00-09:15	A12 Tom Crisp Way WB	495.38	1883.48	0.263	0.00	0.46	0.36	5.44	-	2.596
09:00-09:15	Manconochie Way	16.56	1272.74	0.013	0.00	0.02	0.01	0.20	-	2.867
09:00-09:15	A12 Tom Crisp WayEB	792.00	1883.24	0.421	0.00	1.04	0.73	11.18	-	3.305
09:00-09:15	B1531 Waveney Dr	457.74	1651.58	0.277	0.00	0.55	0.39	5.87	-	3.018

2037 DM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A12 Tom Crisp Way WB - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	B1531 Waveney Dr - 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
2037 DM, PM	2037 DM	PM		ONE HOUR	15:45	17:15	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			7.55	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
A12 Tom Crisp Way WB	1	A12 Tom Crisp Way WB	
Manconochie Way	2	Manconochie Way	
A12 Tom Crisp WayEB	3	A12 Tom Crisp WayEB	
B1531 Waveney Dr	4	B1531 Waveney Dr	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
A12 Tom Crisp Way WB	0.00	99999.00
Manconochie Way	0.00	99999.00
A12 Tom Crisp WayEB	0.00	99999.00
B1531 Waveney Dr	0.00	99999.00

Roundabout Geometry

Name	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
A12 Tom Crisp Way WB	6.20	6.90	39.10	14.70	50.00	27.50	
Manconochie Way	3.90	6.50	10.80	15.00	50.00	25.50	
A12 Tom Crisp WayEB	6.90	7.50	19.30	11.10	50.00	34.00	
B1531 Waveney Dr	6.20	8.10	49.70	19.70	50.00	41.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A12 Tom Crisp Way WB		(calculated)	(calculated)	0.674	2060.587
Manconochie Way		(calculated)	(calculated)	0.594	1625.577
A12 Tom Crisp WayEB		(calculated)	(calculated)	0.676	2136.281
B1531 Waveney Dr		(calculated)	(calculated)	0.711	2298.483

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	2.30				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A12 Tom Crisp Way WB	ONE HOUR	✓	1424.00	100.000
Manconochie Way	ONE HOUR	✓	30.00	100.000
A12 Tom Crisp WayEB	ONE HOUR	✓	531.00	100.000
B1531 Waveney Dr	ONE HOUR	✓	458.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
15:45-16:00	A12 Tom Crisp Way WB	1072.06	1100.86		
15:45-16:00	Manconochie Way	22.59	22.59		
15:45-16:00	A12 Tom Crisp WayEB	399.76	412.23		
15:45-16:00	B1531 Waveney Dr	344.81	352.94		
16:00-16:15	A12 Tom Crisp Way WB	1280.15	1314.54		
16:00-16:15	Manconochie Way	26.97	26.97		
16:00-16:15	A12 Tom Crisp WayEB	477.36	492.25		
16:00-16:15	B1531 Waveney Dr	411.73	421.44		
16:15-16:30	A12 Tom Crisp Way WB	1567.85	1609.97		
16:15-16:30	Manconochie Way	33.03	33.03		
16:15-16:30	A12 Tom Crisp WayEB	584.64	602.88		
16:15-16:30	B1531 Waveney Dr	504.27	516.16		
16:30-16:45	A12 Tom Crisp Way WB	1567.85	1609.97		
16:30-16:45	Manconochie Way	33.03	33.03		
16:30-16:45	A12 Tom Crisp WayEB	584.64	602.88		
16:30-16:45	B1531 Waveney Dr	504.27	516.16		
16:45-17:00	A12 Tom Crisp Way WB	1280.15	1314.54		
16:45-17:00	Manconochie Way	26.97	26.97		
16:45-17:00	A12 Tom Crisp WayEB	477.36	492.25		
16:45-17:00	B1531 Waveney Dr	411.73	421.44		
17:00-17:15	A12 Tom Crisp Way WB	1072.06	1100.86		
17:00-17:15	Manconochie Way	22.59	22.59		
17:00-17:15	A12 Tom Crisp WayEB	399.76	412.23		
17:00-17:15	B1531 Waveney Dr	344.81	352.94		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.000	4.000	881.000	539.000
	Manconochie Way	4.000	0.000	18.000	8.000
	A12 Tom Crisp WayEB	490.000	5.000	0.000	36.000
	B1531 Waveney Dr	327.000	6.000	125.000	0.000

Turning Proportions (Veh) - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.00	0.00	0.62	0.38
	Manconochie Way	0.13	0.00	0.60	0.27
	A12 Tom Crisp WayEB	0.92	0.01	0.00	0.07
	B1531 Waveney Dr	0.71	0.01	0.27	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	1.000	1.000	1.030	1.022
	Manconochie Way	1.000	1.000	1.000	1.000
	A12 Tom Crisp WayEB	1.034	1.000	1.000	1.000
	B1531 Waveney Dr	1.005	1.000	1.073	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.0	0.0	2.3	1.7
	Manconochie Way	0.0	0.0	0.0	0.0
	A12 Tom Crisp WayEB	2.6	0.0	0.0	0.0
	B1531 Waveney Dr	0.4	0.0	5.6	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A12 Tom Crisp Way WB	0.82	10.72	4.55	B
Manconochie Way	0.06	6.53	0.06	A
A12 Tom Crisp WayEB	0.35	3.33	0.54	A
B1531 Waveney Dr	0.27	2.67	0.37	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	1072.07	1067.15	102.14	0.00	1935.14	0.554	1.23	4.125	A
Manconochie Way	22.59	22.48	1158.02	0.00	916.31	0.025	0.03	4.027	A
A12 Tom Crisp WayEB	399.76	398.62	412.92	0.00	1795.16	0.223	0.29	2.575	A
B1531 Waveney Dr	344.81	343.96	374.60	0.00	1976.82	0.174	0.21	2.203	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	1280.15	1277.22	122.19	0.00	1921.09	0.666	1.96	5.565	A
Manconochie Way	26.97	26.93	1385.93	0.00	776.72	0.035	0.04	4.801	A
A12 Tom Crisp WayEB	477.36	477.00	494.21	0.00	1740.73	0.274	0.38	2.848	A
B1531 Waveney Dr	411.73	411.49	448.25	0.00	1923.99	0.214	0.27	2.380	A

Main results: (16:15-16:30)

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	1567.86	1558.05	149.62	0.00	1901.88	0.824	4.41	10.187	B
Manconochie Way	33.03	32.94	1691.18	0.00	589.75	0.056	0.06	6.465	A
A12 Tom Crisp WayEB	584.64	584.00	602.91	0.00	1667.94	0.351	0.54	3.319	A
B1531 Waveney Dr	504.27	503.86	548.80	0.00	1851.86	0.272	0.37	2.670	A

Main results: (16:30-16:45)

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	1567.86	1567.33	149.74	0.00	1901.79	0.824	4.55	10.716	B
Manconochie Way	33.03	33.03	1700.55	0.00	584.03	0.057	0.06	6.532	A
A12 Tom Crisp WayEB	584.64	584.63	606.46	0.00	1665.56	0.351	0.54	3.329	A
B1531 Waveney Dr	504.27	504.26	549.40	0.00	1851.43	0.272	0.37	2.671	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	1280.15	1290.20	122.38	0.00	1920.96	0.666	2.03	5.797	A
Manconochie Way	26.97	27.06	1399.05	0.00	768.71	0.035	0.04	4.854	A
A12 Tom Crisp WayEB	477.36	477.99	499.18	0.00	1737.40	0.275	0.38	2.859	A
B1531 Waveney Dr	411.73	412.13	449.19	0.00	1923.31	0.214	0.27	2.382	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	1072.07	1075.18	102.46	0.00	1934.91	0.554	1.26	4.203	A
Manconochie Way	22.59	22.63	1166.33	0.00	911.23	0.025	0.03	4.052	A
A12 Tom Crisp WayEB	399.76	400.13	416.02	0.00	1793.09	0.223	0.29	2.584	A
B1531 Waveney Dr	344.81	345.05	376.02	0.00	1975.80	0.175	0.21	2.209	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
15:45-16:00	A12 Tom Crisp Way WB	1072.07	1935.14	0.554	0.00	0.00	1.23	17.80	-	4.125
15:45-16:00	Manconochie Way	22.59	916.31	0.025	0.00	0.00	0.03	0.37	-	4.027
15:45-16:00	A12 Tom Crisp WayEB	399.76	1795.16	0.223	0.00	0.00	0.29	4.21	-	2.575
15:45-16:00	B1531 Waveney Dr	344.81	1976.82	0.174	0.00	0.00	0.21	3.12	-	2.203
16:00-16:15	A12 Tom Crisp Way WB	1280.15	1921.09	0.666	0.00	1.23	1.96	28.26	-	5.565
16:00-16:15	Manconochie Way	26.97	776.72	0.035	0.00	0.03	0.04	0.53	-	4.801
16:00-16:15	A12 Tom Crisp WayEB	477.36	1740.73	0.274	0.00	0.29	0.38	5.57	-	2.848
16:00-16:15	B1531 Waveney Dr	411.73	1923.99	0.214	0.00	0.21	0.27	4.03	-	2.380
16:15-16:30	A12 Tom Crisp Way WB	1567.86	1901.88	0.824	0.00	1.96	4.41	60.12	-	10.187
16:15-16:30	Manconochie Way	33.03	589.75	0.056	0.00	0.04	0.06	0.86	-	6.465
16:15-16:30	A12 Tom Crisp WayEB	584.64	1667.94	0.351	0.00	0.38	0.54	7.91	-	3.319
16:15-16:30	B1531 Waveney Dr	504.27	1851.86	0.272	0.00	0.27	0.37	5.52	-	2.670
16:30-16:45	A12 Tom Crisp Way WB	1567.86	1901.79	0.824	0.00	4.41	4.55	67.41	-	10.716
16:30-16:45	Manconochie Way	33.03	584.03	0.057	0.00	0.06	0.06	0.89	-	6.532
16:30-16:45	A12 Tom Crisp WayEB	584.64	1665.56	0.351	0.00	0.54	0.54	8.07	-	3.329
16:30-16:45	B1531 Waveney Dr	504.27	1851.43	0.272	0.00	0.37	0.37	5.60	-	2.671
16:45-17:00	A12 Tom Crisp Way WB	1280.15	1920.96	0.666	0.00	4.55	2.03	32.28	-	5.797
16:45-17:00	Manconochie Way	26.97	768.71	0.035	0.00	0.06	0.04	0.56	-	4.854
16:45-17:00	A12 Tom Crisp WayEB	477.36	1737.40	0.275	0.00	0.54	0.38	5.80	-	2.859
16:45-17:00	B1531 Waveney Dr	411.73	1923.31	0.214	0.00	0.37	0.27	4.15	-	2.382
17:00-17:15	A12 Tom Crisp Way WB	1072.07	1934.91	0.554	0.00	2.03	1.26	19.42	-	4.203
17:00-17:15	Manconochie Way	22.59	911.23	0.025	0.00	0.04	0.03	0.39	-	4.052
17:00-17:15	A12 Tom Crisp WayEB	399.76	1793.09	0.223	0.00	0.38	0.29	4.37	-	2.584
17:00-17:15	B1531 Waveney Dr	344.81	1975.80	0.175	0.00	0.27	0.21	3.21	-	2.209

2022 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A12 Tom Crisp Way WB - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	B1531 Waveney Dr - 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
2022 DS, AM	2022 DS	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			7.12	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
A12 Tom Crisp Way WB	1	A12 Tom Crisp Way WB	
Manconochie Way	2	Manconochie Way	
A12 Tom Crisp WayEB	3	A12 Tom Crisp WayEB	
B1531 Waveney Dr	4	B1531 Waveney Dr	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
A12 Tom Crisp Way WB	0.00	99999.00
Manconochie Way	0.00	99999.00
A12 Tom Crisp WayEB	0.00	99999.00
B1531 Waveney Dr	0.00	99999.00

Roundabout Geometry

Name	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
A12 Tom Crisp Way WB	6.20	6.90	39.10	14.70	50.00	27.50	
Manconochie Way	3.90	6.50	10.80	15.00	50.00	25.50	
A12 Tom Crisp WayEB	6.90	7.50	19.30	11.10	50.00	34.00	
B1531 Waveney Dr	6.20	8.10	49.70	19.70	50.00	41.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A12 Tom Crisp Way WB		(calculated)	(calculated)	0.674	2060.587
Manconochie Way		(calculated)	(calculated)	0.594	1625.577
A12 Tom Crisp WayEB		(calculated)	(calculated)	0.676	2136.281
B1531 Waveney Dr		(calculated)	(calculated)	0.711	2298.483

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	2.30				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A12 Tom Crisp Way WB	ONE HOUR	✓	468.00	100.000
Manconochie Way	ONE HOUR	✓	27.00	100.000
A12 Tom Crisp WayEB	ONE HOUR	✓	1225.00	100.000
B1531 Waveney Dr	ONE HOUR	✓	1158.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A12 Tom Crisp Way WB	352.33	364.50		
07:45-08:00	Manconochie Way	20.33	20.33		
07:45-08:00	A12 Tom Crisp WayEB	922.24	972.51		
07:45-08:00	B1531 Waveney Dr	871.80	908.18		
08:00-08:15	A12 Tom Crisp Way WB	420.72	435.25		
08:00-08:15	Manconochie Way	24.27	24.27		
08:00-08:15	A12 Tom Crisp WayEB	1101.25	1161.28		
08:00-08:15	B1531 Waveney Dr	1041.02	1084.45		
08:15-08:30	A12 Tom Crisp Way WB	515.28	533.07		
08:15-08:30	Manconochie Way	29.73	29.73		
08:15-08:30	A12 Tom Crisp WayEB	1348.75	1422.27		
08:15-08:30	B1531 Waveney Dr	1274.98	1328.18		
08:30-08:45	A12 Tom Crisp Way WB	515.28	533.07		
08:30-08:45	Manconochie Way	29.73	29.73		
08:30-08:45	A12 Tom Crisp WayEB	1348.75	1422.27		
08:30-08:45	B1531 Waveney Dr	1274.98	1328.18		
08:45-09:00	A12 Tom Crisp Way WB	420.72	435.25		
08:45-09:00	Manconochie Way	24.27	24.27		
08:45-09:00	A12 Tom Crisp WayEB	1101.25	1161.28		
08:45-09:00	B1531 Waveney Dr	1041.02	1084.45		
09:00-09:15	A12 Tom Crisp Way WB	352.33	364.50		
09:00-09:15	Manconochie Way	20.33	20.33		
09:00-09:15	A12 Tom Crisp WayEB	922.24	972.51		
09:00-09:15	B1531 Waveney Dr	871.80	908.18		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.000	1.000	180.000	287.000
	Manconochie Way	2.000	0.000	10.000	15.000
	A12 Tom Crisp WayEB	550.000	11.000	0.000	664.000
	B1531 Waveney Dr	402.000	19.000	732.000	5.000

Turning Proportions (Veh) - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.00	0.00	0.38	0.61
	Manconochie Way	0.07	0.00	0.37	0.56
	A12 Tom Crisp WayEB	0.45	0.01	0.00	0.54
	B1531 Waveney Dr	0.35	0.02	0.63	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	1.000	1.000	1.044	1.029
	Manconochie Way	1.000	1.000	1.000	1.000
	A12 Tom Crisp WayEB	1.081	1.000	1.000	1.034
	B1531 Waveney Dr	1.047	1.000	1.040	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.0	0.0	3.4	2.2
	Manconochie Way	0.0	0.0	0.0	0.0
	A12 Tom Crisp WayEB	6.2	0.0	0.0	2.6
	B1531 Waveney Dr	3.6	0.0	3.1	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A12 Tom Crisp Way WB	0.36	3.98	0.57	A
Manconochie Way	0.04	4.62	0.04	A
A12 Tom Crisp WayEB	0.75	7.93	2.93	A
B1531 Waveney Dr	0.73	7.56	2.64	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	352.33	351.21	575.20	0.00	1602.51	0.220	0.28	2.874	A
Manconochie Way	20.33	20.25	903.16	0.00	1068.51	0.019	0.02	3.433	A
A12 Tom Crisp WayEB	922.24	918.40	231.88	0.00	1873.28	0.492	0.96	3.754	A
B1531 Waveney Dr	871.80	868.42	422.09	0.00	1895.81	0.460	0.85	3.492	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	420.72	420.33	688.32	0.00	1525.95	0.276	0.38	3.256	A
Manconochie Way	24.27	24.25	1080.83	0.00	958.92	0.025	0.03	3.851	A
A12 Tom Crisp WayEB	1101.25	1099.24	277.52	0.00	1843.25	0.597	1.47	4.826	A
B1531 Waveney Dr	1041.02	1039.21	505.20	0.00	1834.65	0.567	1.30	4.516	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	515.28	514.54	841.04	0.00	1422.59	0.362	0.56	3.961	A
Manconochie Way	29.73	29.68	1321.59	0.00	810.43	0.037	0.04	4.610	A
A12 Tom Crisp WayEB	1348.75	1343.10	339.71	0.00	1802.33	0.748	2.88	7.744	A
B1531 Waveney Dr	1274.98	1269.79	617.28	0.00	1752.16	0.728	2.60	7.384	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	515.28	515.27	844.37	0.00	1420.35	0.363	0.57	3.977	A
Manconochie Way	29.73	29.73	1325.50	0.00	808.01	0.037	0.04	4.625	A
A12 Tom Crisp WayEB	1348.75	1348.56	340.21	0.00	1802.00	0.748	2.93	7.929	A
B1531 Waveney Dr	1274.98	1274.80	619.79	0.00	1750.32	0.728	2.64	7.563	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	420.72	421.46	692.99	0.00	1522.79	0.276	0.38	3.270	A
Manconochie Way	24.27	24.32	1086.44	0.00	955.46	0.025	0.03	3.867	A
A12 Tom Crisp WayEB	1101.25	1106.93	278.29	0.00	1842.74	0.598	1.50	4.931	A
B1531 Waveney Dr	1041.02	1046.25	508.73	0.00	1832.05	0.568	1.33	4.612	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	352.33	352.74	578.69	0.00	1600.15	0.220	0.28	2.888	A
Manconochie Way	20.33	20.35	908.03	0.00	1065.50	0.019	0.02	3.443	A
A12 Tom Crisp WayEB	922.24	924.35	232.90	0.00	1872.61	0.492	0.98	3.806	A
B1531 Waveney Dr	871.80	873.69	424.82	0.00	1893.80	0.460	0.86	3.534	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
07:45-08:00	A12 Tom Crisp Way WB	352.33	1602.51	0.220	0.00	0.00	0.28	4.13	-	2.874
07:45-08:00	Manconochie Way	20.33	1068.51	0.019	0.00	0.00	0.02	0.28	-	3.433
07:45-08:00	A12 Tom Crisp WayEB	922.24	1873.28	0.492	0.00	0.00	0.96	14.00	-	3.754
07:45-08:00	B1531 Waveney Dr	871.80	1895.81	0.460	0.00	0.00	0.85	12.34	-	3.492
08:00-08:15	A12 Tom Crisp Way WB	420.72	1525.95	0.276	0.00	0.28	0.38	5.60	-	3.256
08:00-08:15	Manconochie Way	24.27	958.92	0.025	0.00	0.02	0.03	0.38	-	3.851
08:00-08:15	A12 Tom Crisp WayEB	1101.25	1843.25	0.597	0.00	0.96	1.47	21.29	-	4.826
08:00-08:15	B1531 Waveney Dr	1041.02	1834.65	0.567	0.00	0.85	1.30	18.89	-	4.516
08:15-08:30	A12 Tom Crisp Way WB	515.28	1422.59	0.362	0.00	0.38	0.56	8.29	-	3.961
08:15-08:30	Manconochie Way	29.73	810.43	0.037	0.00	0.03	0.04	0.56	-	4.610
08:15-08:30	A12 Tom Crisp WayEB	1348.75	1802.33	0.748	0.00	1.47	2.88	40.45	-	7.744
08:15-08:30	B1531 Waveney Dr	1274.98	1752.16	0.728	0.00	1.30	2.60	36.64	-	7.384
08:30-08:45	A12 Tom Crisp Way WB	515.28	1420.35	0.363	0.00	0.56	0.57	8.49	-	3.977
08:30-08:45	Manconochie Way	29.73	808.01	0.037	0.00	0.04	0.04	0.57	-	4.625
08:30-08:45	A12 Tom Crisp WayEB	1348.75	1802.00	0.748	0.00	2.88	2.93	43.60	-	7.929
08:30-08:45	B1531 Waveney Dr	1274.98	1750.32	0.728	0.00	2.60	2.64	39.34	-	7.563
08:45-09:00	A12 Tom Crisp Way WB	420.72	1522.79	0.276	0.00	0.57	0.38	5.86	-	3.270
08:45-09:00	Manconochie Way	24.27	955.46	0.025	0.00	0.04	0.03	0.40	-	3.867
08:45-09:00	A12 Tom Crisp WayEB	1101.25	1842.74	0.598	0.00	2.93	1.50	23.48	-	4.931
08:45-09:00	B1531 Waveney Dr	1041.02	1832.05	0.568	0.00	2.64	1.33	20.71	-	4.612
09:00-09:15	A12 Tom Crisp Way WB	352.33	1600.15	0.220	0.00	0.38	0.28	4.31	-	2.888
09:00-09:15	Manconochie Way	20.33	1065.50	0.019	0.00	0.03	0.02	0.30	-	3.443
09:00-09:15	A12 Tom Crisp WayEB	922.24	1872.61	0.492	0.00	1.50	0.98	15.06	-	3.806
09:00-09:15	B1531 Waveney Dr	871.80	1893.80	0.460	0.00	1.33	0.86	13.19	-	3.534

2022 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A12 Tom Crisp Way WB - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	B1531 Waveney Dr - 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
2022 DS, PM	2022 DS	PM		ONE HOUR	15:45	17:15	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			7.19	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
A12 Tom Crisp Way WB	1	A12 Tom Crisp Way WB	
Manconochie Way	2	Manconochie Way	
A12 Tom Crisp WayEB	3	A12 Tom Crisp WayEB	
B1531 Waveney Dr	4	B1531 Waveney Dr	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
A12 Tom Crisp Way WB	0.00	99999.00
Manconochie Way	0.00	99999.00
A12 Tom Crisp WayEB	0.00	99999.00
B1531 Waveney Dr	0.00	99999.00

Roundabout Geometry

Name	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
A12 Tom Crisp Way WB	6.20	6.90	39.10	14.70	50.00	27.50	
Manconochie Way	3.90	6.50	10.80	15.00	50.00	25.50	
A12 Tom Crisp WayEB	6.90	7.50	19.30	11.10	50.00	34.00	
B1531 Waveney Dr	6.20	8.10	49.70	19.70	50.00	41.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A12 Tom Crisp Way WB		(calculated)	(calculated)	0.674	2060.587
Manconochie Way		(calculated)	(calculated)	0.594	1625.577
A12 Tom Crisp WayEB		(calculated)	(calculated)	0.676	2136.281
B1531 Waveney Dr		(calculated)	(calculated)	0.711	2298.483

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	2.30				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A12 Tom Crisp Way WB	ONE HOUR	✓	1046.00	100.000
Manconochie Way	ONE HOUR	✓	27.00	100.000
A12 Tom Crisp WayEB	ONE HOUR	✓	890.00	100.000
B1531 Waveney Dr	ONE HOUR	✓	1020.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
15:45-16:00	A12 Tom Crisp Way WB	787.48	815.99		
15:45-16:00	Manconochie Way	20.33	20.33		
15:45-16:00	A12 Tom Crisp WayEB	670.04	701.28		
15:45-16:00	B1531 Waveney Dr	767.91	799.69		
16:00-16:15	A12 Tom Crisp Way WB	940.33	974.37		
16:00-16:15	Manconochie Way	24.27	24.27		
16:00-16:15	A12 Tom Crisp WayEB	800.09	837.39		
16:00-16:15	B1531 Waveney Dr	916.96	954.90		
16:15-16:30	A12 Tom Crisp Way WB	1151.67	1193.35		
16:15-16:30	Manconochie Way	29.73	29.73		
16:15-16:30	A12 Tom Crisp WayEB	979.91	1025.59		
16:15-16:30	B1531 Waveney Dr	1123.04	1169.51		
16:30-16:45	A12 Tom Crisp Way WB	1151.67	1193.35		
16:30-16:45	Manconochie Way	29.73	29.73		
16:30-16:45	A12 Tom Crisp WayEB	979.91	1025.59		
16:30-16:45	B1531 Waveney Dr	1123.04	1169.51		
16:45-17:00	A12 Tom Crisp Way WB	940.33	974.37		
16:45-17:00	Manconochie Way	24.27	24.27		
16:45-17:00	A12 Tom Crisp WayEB	800.09	837.39		
16:45-17:00	B1531 Waveney Dr	916.96	954.90		
17:00-17:15	A12 Tom Crisp Way WB	787.48	815.99		
17:00-17:15	Manconochie Way	20.33	20.33		
17:00-17:15	A12 Tom Crisp WayEB	670.04	701.28		
17:00-17:15	B1531 Waveney Dr	767.91	799.69		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.000	1.000	511.000	534.000
	Manconochie Way	1.000	0.000	15.000	11.000
	A12 Tom Crisp WayEB	246.000	3.000	0.000	641.000
	B1531 Waveney Dr	312.000	10.000	685.000	13.000

Turning Proportions (Veh) - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.00	0.00	0.49	0.51
	Manconochie Way	0.04	0.00	0.56	0.41
	A12 Tom Crisp WayEB	0.28	0.00	0.00	0.72
	B1531 Waveney Dr	0.31	0.01	0.67	0.01

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	1.000	1.000	1.044	1.029
	Manconochie Way	1.000	1.000	1.000	1.000
	A12 Tom Crisp WayEB	1.081	1.000	1.000	1.034
	B1531 Waveney Dr	1.047	1.000	1.040	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.0	0.0	3.4	2.2
	Manconochie Way	0.0	0.0	0.0	0.0
	A12 Tom Crisp WayEB	6.2	0.0	0.0	2.6
	B1531 Waveney Dr	3.6	0.0	3.1	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A12 Tom Crisp Way WB	0.79	11.64	3.63	B
Manconochie Way	0.07	8.72	0.07	A
A12 Tom Crisp WayEB	0.60	5.51	1.49	A
B1531 Waveney Dr	0.56	4.08	1.27	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	787.49	783.77	533.64	0.00	1627.91	0.484	0.93	4.246	A
Manconochie Way	20.33	20.23	1306.90	0.00	819.77	0.025	0.03	4.502	A
A12 Tom Crisp WayEB	670.04	667.60	418.87	0.00	1763.23	0.380	0.61	3.279	A
B1531 Waveney Dr	767.91	765.56	187.53	0.00	2069.03	0.371	0.59	2.757	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	940.34	938.05	638.55	0.00	1557.00	0.604	1.50	5.793	A
Manconochie Way	24.27	24.22	1564.02	0.00	661.23	0.037	0.04	5.651	A
A12 Tom Crisp WayEB	800.09	799.04	501.33	0.00	1708.53	0.468	0.87	3.952	A
B1531 Waveney Dr	916.96	916.07	224.45	0.00	2041.84	0.449	0.81	3.194	A

Main results: (16:15-16:30)

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	1151.67	1143.56	781.56	0.00	1460.33	0.789	3.53	11.085	B
Manconochie Way	29.73	29.60	1909.75	0.00	448.06	0.066	0.07	8.600	A
A12 Tom Crisp WayEB	979.91	977.51	611.25	0.00	1635.60	0.599	1.47	5.451	A
B1531 Waveney Dr	1123.04	1121.24	274.58	0.00	2004.91	0.560	1.26	4.065	A

Main results: (16:30-16:45)

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	1151.67	1151.26	782.80	0.00	1459.49	0.789	3.63	11.637	B
Manconochie Way	29.73	29.72	1918.65	0.00	442.58	0.067	0.07	8.719	A
A12 Tom Crisp WayEB	979.91	979.85	615.26	0.00	1632.94	0.600	1.49	5.512	A
B1531 Waveney Dr	1123.04	1123.01	275.24	0.00	2004.43	0.560	1.27	4.084	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	940.34	948.65	640.42	0.00	1555.73	0.604	1.55	6.010	A
Manconochie Way	24.27	24.40	1576.45	0.00	653.58	0.037	0.04	5.722	A
A12 Tom Crisp WayEB	800.09	802.48	506.85	0.00	1704.86	0.469	0.89	4.001	A
B1531 Waveney Dr	916.96	918.75	225.42	0.00	2041.12	0.449	0.82	3.214	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	787.49	789.91	535.91	0.00	1626.38	0.484	0.95	4.315	A
Manconochie Way	20.33	20.38	1315.26	0.00	814.61	0.025	0.03	4.534	A
A12 Tom Crisp WayEB	670.04	671.14	422.12	0.00	1761.08	0.380	0.62	3.305	A
B1531 Waveney Dr	767.91	768.82	188.52	0.00	2068.30	0.371	0.59	2.773	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
15:45-16:00	A12 Tom Crisp Way WB	787.49	1627.91	0.484	0.00	0.00	0.93	13.48	-	4.246
15:45-16:00	Manconochie Way	20.33	819.77	0.025	0.00	0.00	0.03	0.37	-	4.502
15:45-16:00	A12 Tom Crisp WayEB	670.04	1763.23	0.380	0.00	0.00	0.61	8.93	-	3.279
15:45-16:00	B1531 Waveney Dr	767.91	2069.03	0.371	0.00	0.00	0.59	8.63	-	2.757
16:00-16:15	A12 Tom Crisp Way WB	940.34	1557.00	0.604	0.00	0.93	1.50	21.69	-	5.793
16:00-16:15	Manconochie Way	24.27	661.23	0.037	0.00	0.03	0.04	0.56	-	5.651
16:00-16:15	A12 Tom Crisp WayEB	800.09	1708.53	0.468	0.00	0.61	0.87	12.81	-	3.952
16:00-16:15	B1531 Waveney Dr	916.96	2041.84	0.449	0.00	0.59	0.81	11.93	-	3.194
16:15-16:30	A12 Tom Crisp Way WB	1151.67	1460.33	0.789	0.00	1.50	3.53	48.22	-	11.085
16:15-16:30	Manconochie Way	29.73	448.06	0.066	0.00	0.04	0.07	1.02	-	8.600
16:15-16:30	A12 Tom Crisp WayEB	979.91	1635.60	0.599	0.00	0.87	1.47	21.29	-	5.451
16:15-16:30	B1531 Waveney Dr	1123.04	2004.91	0.560	0.00	0.81	1.26	18.40	-	4.065
16:30-16:45	A12 Tom Crisp Way WB	1151.67	1459.49	0.789	0.00	3.53	3.63	53.86	-	11.637
16:30-16:45	Manconochie Way	29.73	442.58	0.067	0.00	0.07	0.07	1.07	-	8.719
16:30-16:45	A12 Tom Crisp WayEB	979.91	1632.94	0.600	0.00	1.47	1.49	22.23	-	5.512
16:30-16:45	B1531 Waveney Dr	1123.04	2004.43	0.560	0.00	1.26	1.27	18.97	-	4.084
16:45-17:00	A12 Tom Crisp Way WB	940.34	1555.73	0.604	0.00	3.63	1.55	24.58	-	6.010
16:45-17:00	Manconochie Way	24.27	653.58	0.037	0.00	0.07	0.04	0.60	-	5.722
16:45-17:00	A12 Tom Crisp WayEB	800.09	1704.86	0.469	0.00	1.49	0.89	13.74	-	4.001
16:45-17:00	B1531 Waveney Dr	916.96	2041.12	0.449	0.00	1.27	0.82	12.58	-	3.214
17:00-17:15	A12 Tom Crisp Way WB	787.49	1626.38	0.484	0.00	1.55	0.95	14.62	-	4.315
17:00-17:15	Manconochie Way	20.33	814.61	0.025	0.00	0.04	0.03	0.39	-	4.534
17:00-17:15	A12 Tom Crisp WayEB	670.04	1761.08	0.380	0.00	0.89	0.62	9.45	-	3.305
17:00-17:15	B1531 Waveney Dr	767.91	2068.30	0.371	0.00	0.82	0.59	9.05	-	2.773

2037 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A12 Tom Crisp Way WB - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	B1531 Waveney Dr - 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
2037 DS, AM	2037 DS	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			10.49	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
A12 Tom Crisp Way WB	1	A12 Tom Crisp Way WB	
Manconochie Way	2	Manconochie Way	
A12 Tom Crisp WayEB	3	A12 Tom Crisp WayEB	
B1531 Waveney Dr	4	B1531 Waveney Dr	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
A12 Tom Crisp Way WB	0.00	99999.00
Manconochie Way	0.00	99999.00
A12 Tom Crisp WayEB	0.00	99999.00
B1531 Waveney Dr	0.00	99999.00

Roundabout Geometry

Name	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
A12 Tom Crisp Way WB	6.20	6.90	39.10	14.70	50.00	27.50	
Manconochie Way	3.90	6.50	10.80	15.00	50.00	25.50	
A12 Tom Crisp WayEB	6.90	7.50	19.30	11.10	50.00	34.00	
B1531 Waveney Dr	6.20	8.10	49.70	19.70	50.00	41.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A12 Tom Crisp Way WB		(calculated)	(calculated)	0.674	2060.587
Manconochie Way		(calculated)	(calculated)	0.594	1625.577
A12 Tom Crisp WayEB		(calculated)	(calculated)	0.676	2136.281
B1531 Waveney Dr		(calculated)	(calculated)	0.711	2298.483

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	2.30				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A12 Tom Crisp Way WB	ONE HOUR	✓	529.00	100.000
Manconochie Way	ONE HOUR	✓	30.00	100.000
A12 Tom Crisp WayEB	ONE HOUR	✓	1292.00	100.000
B1531 Waveney Dr	ONE HOUR	✓	1316.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A12 Tom Crisp Way WB	398.26	411.93		
07:45-08:00	Manconochie Way	22.59	22.59		
07:45-08:00	A12 Tom Crisp WayEB	972.69	1025.87		
07:45-08:00	B1531 Waveney Dr	990.75	1032.31		
08:00-08:15	A12 Tom Crisp Way WB	475.56	491.88		
08:00-08:15	Manconochie Way	26.97	26.97		
08:00-08:15	A12 Tom Crisp WayEB	1161.48	1224.99		
08:00-08:15	B1531 Waveney Dr	1183.06	1232.68		
08:15-08:30	A12 Tom Crisp Way WB	582.44	602.43		
08:15-08:30	Manconochie Way	33.03	33.03		
08:15-08:30	A12 Tom Crisp WayEB	1422.52	1500.30		
08:15-08:30	B1531 Waveney Dr	1448.94	1509.72		
08:30-08:45	A12 Tom Crisp Way WB	582.44	602.43		
08:30-08:45	Manconochie Way	33.03	33.03		
08:30-08:45	A12 Tom Crisp WayEB	1422.52	1500.30		
08:30-08:45	B1531 Waveney Dr	1448.94	1509.72		
08:45-09:00	A12 Tom Crisp Way WB	475.56	491.88		
08:45-09:00	Manconochie Way	26.97	26.97		
08:45-09:00	A12 Tom Crisp WayEB	1161.48	1224.99		
08:45-09:00	B1531 Waveney Dr	1183.06	1232.68		
09:00-09:15	A12 Tom Crisp Way WB	398.26	411.93		
09:00-09:15	Manconochie Way	22.59	22.59		
09:00-09:15	A12 Tom Crisp WayEB	972.69	1025.87		
09:00-09:15	B1531 Waveney Dr	990.75	1032.31		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.000	1.000	196.000	332.000
	Manconochie Way	2.000	0.000	11.000	17.000
	A12 Tom Crisp WayEB	585.000	12.000	0.000	695.000
	B1531 Waveney Dr	500.000	22.000	789.000	5.000

Turning Proportions (Veh) - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.00	0.00	0.37	0.63
	Manconochie Way	0.07	0.00	0.37	0.57
	A12 Tom Crisp WayEB	0.45	0.01	0.00	0.54
	B1531 Waveney Dr	0.38	0.02	0.60	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	1.000	1.000	1.044	1.029
	Manconochie Way	1.000	1.000	1.000	1.000
	A12 Tom Crisp WayEB	1.081	1.000	1.000	1.034
	B1531 Waveney Dr	1.047	1.000	1.040	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.0	0.0	3.4	2.2
	Manconochie Way	0.0	0.0	0.0	0.0
	A12 Tom Crisp WayEB	6.2	0.0	0.0	2.6
	B1531 Waveney Dr	3.6	0.0	3.1	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A12 Tom Crisp Way WB	0.42	4.54	0.73	A
Manconochie Way	0.05	5.18	0.05	A
A12 Tom Crisp WayEB	0.80	10.38	4.01	B
B1531 Waveney Dr	0.84	13.09	5.09	B

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	398.26	396.91	620.57	0.00	1572.15	0.253	0.34	3.061	A
Manconochie Way	22.59	22.49	991.24	0.00	1014.26	0.022	0.02	3.629	A
A12 Tom Crisp WayEB	972.68	968.29	267.09	0.00	1849.79	0.526	1.10	4.064	A
B1531 Waveney Dr	990.76	986.32	448.92	0.00	1875.67	0.528	1.11	4.028	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	475.56	475.04	742.49	0.00	1489.62	0.319	0.47	3.546	A
Manconochie Way	26.97	26.94	1186.14	0.00	894.06	0.030	0.03	4.151	A
A12 Tom Crisp WayEB	1161.48	1158.88	319.68	0.00	1815.19	0.640	1.75	5.463	A
B1531 Waveney Dr	1183.06	1180.09	537.28	0.00	1810.66	0.653	1.85	5.681	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	582.44	581.41	904.09	0.00	1380.24	0.422	0.72	4.501	A
Manconochie Way	33.03	32.97	1447.24	0.00	733.05	0.045	0.05	5.142	A
A12 Tom Crisp WayEB	1422.51	1413.91	391.23	0.00	1768.11	0.805	3.90	9.927	A
B1531 Waveney Dr	1448.95	1436.88	655.53	0.00	1723.66	0.841	4.87	12.074	B

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	582.44	582.41	911.09	0.00	1375.50	0.423	0.73	4.538	A
Manconochie Way	33.03	33.03	1454.98	0.00	728.27	0.045	0.05	5.177	A
A12 Tom Crisp WayEB	1422.51	1422.09	391.94	0.00	1767.65	0.805	4.01	10.383	B
B1531 Waveney Dr	1448.95	1448.06	659.31	0.00	1720.88	0.842	5.09	13.090	B

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	475.56	476.58	752.27	0.00	1483.00	0.321	0.47	3.579	A
Manconochie Way	26.97	27.03	1197.09	0.00	887.30	0.030	0.03	4.184	A
A12 Tom Crisp WayEB	1161.48	1170.27	320.77	0.00	1814.48	0.640	1.81	5.663	A
B1531 Waveney Dr	1183.06	1195.69	542.55	0.00	1806.78	0.655	1.93	6.008	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	398.26	398.79	625.37	0.00	1568.90	0.254	0.34	3.079	A
Manconochie Way	22.59	22.62	997.73	0.00	1010.26	0.022	0.02	3.647	A
A12 Tom Crisp WayEB	972.68	975.43	268.38	0.00	1848.94	0.526	1.12	4.133	A
B1531 Waveney Dr	990.76	993.95	452.23	0.00	1873.24	0.529	1.13	4.108	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
07:45-08:00	A12 Tom Crisp Way WB	398.26	1572.15	0.253	0.00	0.00	0.34	4.97	-	3.061
07:45-08:00	Manconochie Way	22.59	1014.26	0.022	0.00	0.00	0.02	0.33	-	3.629
07:45-08:00	A12 Tom Crisp WayEB	972.68	1849.79	0.526	0.00	0.00	1.10	15.93	-	4.064
07:45-08:00	B1531 Waveney Dr	990.76	1875.67	0.528	0.00	0.00	1.11	16.09	-	4.028
08:00-08:15	A12 Tom Crisp Way WB	475.56	1489.62	0.319	0.00	0.34	0.47	6.88	-	3.546
08:00-08:15	Manconochie Way	26.97	894.06	0.030	0.00	0.02	0.03	0.46	-	4.151
08:00-08:15	A12 Tom Crisp WayEB	1161.48	1815.19	0.640	0.00	1.10	1.75	25.24	-	5.463
08:00-08:15	B1531 Waveney Dr	1183.06	1810.66	0.653	0.00	1.11	1.85	26.66	-	5.681
08:15-08:30	A12 Tom Crisp Way WB	582.44	1380.24	0.422	0.00	0.47	0.72	10.60	-	4.501
08:15-08:30	Manconochie Way	33.03	733.05	0.045	0.00	0.03	0.05	0.69	-	5.142
08:15-08:30	A12 Tom Crisp WayEB	1422.51	1768.11	0.805	0.00	1.75	3.90	53.47	-	9.927
08:15-08:30	B1531 Waveney Dr	1448.95	1723.66	0.841	0.00	1.85	4.87	64.98	-	12.074
08:30-08:45	A12 Tom Crisp Way WB	582.44	1375.50	0.423	0.00	0.72	0.73	10.92	-	4.538
08:30-08:45	Manconochie Way	33.03	728.27	0.045	0.00	0.05	0.05	0.71	-	5.177
08:30-08:45	A12 Tom Crisp WayEB	1422.51	1767.65	0.805	0.00	3.90	4.01	59.46	-	10.383
08:30-08:45	B1531 Waveney Dr	1448.95	1720.88	0.842	0.00	4.87	5.09	75.04	-	13.090
08:45-09:00	A12 Tom Crisp Way WB	475.56	1483.00	0.321	0.00	0.73	0.47	7.27	-	3.579
08:45-09:00	Manconochie Way	26.97	887.30	0.030	0.00	0.05	0.03	0.48	-	4.184
08:45-09:00	A12 Tom Crisp WayEB	1161.48	1814.48	0.640	0.00	4.01	1.81	28.58	-	5.663
08:45-09:00	B1531 Waveney Dr	1183.06	1806.78	0.655	0.00	5.09	1.93	31.00	-	6.008
09:00-09:15	A12 Tom Crisp Way WB	398.26	1568.90	0.254	0.00	0.47	0.34	5.21	-	3.079
09:00-09:15	Manconochie Way	22.59	1010.26	0.022	0.00	0.03	0.02	0.35	-	3.647
09:00-09:15	A12 Tom Crisp WayEB	972.68	1848.94	0.526	0.00	1.81	1.12	17.31	-	4.133
09:00-09:15	B1531 Waveney Dr	990.76	1873.24	0.529	0.00	1.93	1.13	17.52	-	4.108

2037 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A12 Tom Crisp Way WB - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	B1531 Waveney Dr - 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
2037 DS, PM	2037 DS	PM		ONE HOUR	15:45	17:15	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			11.17	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
A12 Tom Crisp Way WB	1	A12 Tom Crisp Way WB	
Manconochie Way	2	Manconochie Way	
A12 Tom Crisp WayEB	3	A12 Tom Crisp WayEB	
B1531 Waveney Dr	4	B1531 Waveney Dr	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
A12 Tom Crisp Way WB	0.00	99999.00
Manconochie Way	0.00	99999.00
A12 Tom Crisp WayEB	0.00	99999.00
B1531 Waveney Dr	0.00	99999.00

Roundabout Geometry

Name	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
A12 Tom Crisp Way WB	6.20	6.90	39.10	14.70	50.00	27.50	
Manconochie Way	3.90	6.50	10.80	15.00	50.00	25.50	
A12 Tom Crisp WayEB	6.90	7.50	19.30	11.10	50.00	34.00	
B1531 Waveney Dr	6.20	8.10	49.70	19.70	50.00	41.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A12 Tom Crisp Way WB		(calculated)	(calculated)	0.674	2060.587
Manconochie Way		(calculated)	(calculated)	0.594	1625.577
A12 Tom Crisp WayEB		(calculated)	(calculated)	0.676	2136.281
B1531 Waveney Dr		(calculated)	(calculated)	0.711	2298.483

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	2.30				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A12 Tom Crisp Way WB	ONE HOUR	✓	1185.00	100.000
Manconochie Way	ONE HOUR	✓	31.00	100.000
A12 Tom Crisp WayEB	ONE HOUR	✓	964.00	100.000
B1531 Waveney Dr	ONE HOUR	✓	1048.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
15:45-16:00	A12 Tom Crisp Way WB	892.13	924.39		
15:45-16:00	Manconochie Way	23.34	23.34		
15:45-16:00	A12 Tom Crisp WayEB	725.75	760.33		
15:45-16:00	B1531 Waveney Dr	788.99	821.78		
16:00-16:15	A12 Tom Crisp Way WB	1065.29	1103.81		
16:00-16:15	Manconochie Way	27.87	27.87		
16:00-16:15	A12 Tom Crisp WayEB	866.62	907.90		
16:00-16:15	B1531 Waveney Dr	942.13	981.28		
16:15-16:30	A12 Tom Crisp Way WB	1304.71	1351.89		
16:15-16:30	Manconochie Way	34.13	34.13		
16:15-16:30	A12 Tom Crisp WayEB	1061.38	1111.95		
16:15-16:30	B1531 Waveney Dr	1153.87	1201.82		
16:30-16:45	A12 Tom Crisp Way WB	1304.71	1351.89		
16:30-16:45	Manconochie Way	34.13	34.13		
16:30-16:45	A12 Tom Crisp WayEB	1061.38	1111.95		
16:30-16:45	B1531 Waveney Dr	1153.87	1201.82		
16:45-17:00	A12 Tom Crisp Way WB	1065.29	1103.81		
16:45-17:00	Manconochie Way	27.87	27.87		
16:45-17:00	A12 Tom Crisp WayEB	866.62	907.90		
16:45-17:00	B1531 Waveney Dr	942.13	981.28		
17:00-17:15	A12 Tom Crisp Way WB	892.13	924.39		
17:00-17:15	Manconochie Way	23.34	23.34		
17:00-17:15	A12 Tom Crisp WayEB	725.75	760.33		
17:00-17:15	B1531 Waveney Dr	788.99	821.78		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.000	2.000	578.000	605.000
	Manconochie Way	1.000	0.000	17.000	13.000
	A12 Tom Crisp WayEB	288.000	4.000	0.000	672.000
	B1531 Waveney Dr	358.000	11.000	665.000	14.000

Turning Proportions (Veh) - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.00	0.00	0.49	0.51
	Manconochie Way	0.03	0.00	0.55	0.42
	A12 Tom Crisp WayEB	0.30	0.00	0.00	0.70
	B1531 Waveney Dr	0.34	0.01	0.63	0.01

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	1.000	1.000	1.044	1.029
	Manconochie Way	1.000	1.000	1.000	1.000
	A12 Tom Crisp WayEB	1.081	1.000	1.000	1.034
	B1531 Waveney Dr	1.047	1.000	1.040	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.0	0.0	3.4	2.2
	Manconochie Way	0.0	0.0	0.0	0.0
	A12 Tom Crisp WayEB	6.2	0.0	0.0	2.6
	B1531 Waveney Dr	3.6	0.0	3.1	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A12 Tom Crisp Way WB	0.89	20.64	7.10	C
Manconochie Way	0.09	10.95	0.10	B
A12 Tom Crisp WayEB	0.67	6.96	2.03	A
B1531 Waveney Dr	0.59	4.41	1.41	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	892.13	887.39	520.82	0.00	1636.70	0.545	1.18	4.776	A
Manconochie Way	23.34	23.21	1395.46	0.00	765.29	0.031	0.03	4.851	A
A12 Tom Crisp WayEB	725.75	722.87	474.05	0.00	1724.94	0.421	0.72	3.582	A
B1531 Waveney Dr	788.99	786.49	219.71	0.00	2044.99	0.386	0.62	2.854	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	1065.29	1061.74	623.23	0.00	1567.49	0.680	2.07	7.069	A
Manconochie Way	27.87	27.80	1669.71	0.00	596.22	0.047	0.05	6.333	A
A12 Tom Crisp WayEB	866.62	865.20	567.20	0.00	1663.20	0.521	1.08	4.503	A
B1531 Waveney Dr	942.13	941.13	262.97	0.00	2013.13	0.468	0.87	3.355	A

Main results: (16:15-16:30)

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	1304.71	1286.65	762.71	0.00	1473.22	0.886	6.59	17.803	C
Manconochie Way	34.13	33.93	2030.70	0.00	373.66	0.091	0.10	10.589	B
A12 Tom Crisp WayEB	1061.39	1057.74	687.61	0.00	1583.40	0.670	1.99	6.801	A
B1531 Waveney Dr	1153.87	1151.77	321.49	0.00	1970.04	0.586	1.40	4.388	A

Main results: (16:30-16:45)

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	1304.71	1302.67	764.08	0.00	1472.29	0.886	7.10	20.639	C
Manconochie Way	34.13	34.12	2048.03	0.00	362.98	0.094	0.10	10.946	B
A12 Tom Crisp WayEB	1061.39	1061.23	695.90	0.00	1577.90	0.673	2.03	6.963	A
B1531 Waveney Dr	1153.87	1153.83	322.55	0.00	1969.26	0.586	1.41	4.414	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	1065.29	1084.96	625.27	0.00	1566.10	0.680	2.18	7.773	A
Manconochie Way	27.87	28.08	1694.89	0.00	580.71	0.048	0.05	6.515	A
A12 Tom Crisp WayEB	866.62	870.28	579.22	0.00	1655.22	0.524	1.11	4.608	A
B1531 Waveney Dr	942.13	944.21	264.52	0.00	2011.99	0.468	0.89	3.377	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	892.13	895.99	523.15	0.00	1635.12	0.546	1.21	4.897	A
Manconochie Way	23.34	23.41	1406.33	0.00	758.59	0.031	0.03	4.898	A
A12 Tom Crisp WayEB	725.75	727.26	478.57	0.00	1721.94	0.421	0.73	3.626	A
B1531 Waveney Dr	788.99	790.01	221.05	0.00	2044.00	0.386	0.63	2.872	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
15:45-16:00	A12 Tom Crisp Way WB	892.13	1636.70	0.545	0.00	0.00	1.18	17.08	-	4.776
15:45-16:00	Manconochie Way	23.34	765.29	0.031	0.00	0.00	0.03	0.46	-	4.851
15:45-16:00	A12 Tom Crisp WayEB	725.75	1724.94	0.421	0.00	0.00	0.72	10.54	-	3.582
15:45-16:00	B1531 Waveney Dr	788.99	2044.99	0.386	0.00	0.00	0.62	9.17	-	2.854
16:00-16:15	A12 Tom Crisp Way WB	1065.29	1567.49	0.680	0.00	1.18	2.07	29.55	-	7.069
16:00-16:15	Manconochie Way	27.87	596.22	0.047	0.00	0.03	0.05	0.71	-	6.333
16:00-16:15	A12 Tom Crisp WayEB	866.62	1663.20	0.521	0.00	0.72	1.08	15.72	-	4.503
16:00-16:15	B1531 Waveney Dr	942.13	2013.13	0.468	0.00	0.62	0.87	12.85	-	3.355
16:15-16:30	A12 Tom Crisp Way WB	1304.71	1473.22	0.886	0.00	2.07	6.59	83.29	-	17.803
16:15-16:30	Manconochie Way	34.13	373.66	0.091	0.00	0.05	0.10	1.44	-	10.589
16:15-16:30	A12 Tom Crisp WayEB	1061.39	1583.40	0.670	0.00	1.08	1.99	28.38	-	6.801
16:15-16:30	B1531 Waveney Dr	1153.87	1970.04	0.586	0.00	0.87	1.40	20.34	-	4.388
16:30-16:45	A12 Tom Crisp Way WB	1304.71	1472.29	0.886	0.00	6.59	7.10	103.35	-	20.639
16:30-16:45	Manconochie Way	34.13	362.98	0.094	0.00	0.10	0.10	1.53	-	10.946
16:30-16:45	A12 Tom Crisp WayEB	1061.39	1577.90	0.673	0.00	1.99	2.03	30.20	-	6.963
16:30-16:45	B1531 Waveney Dr	1153.87	1969.26	0.586	0.00	1.40	1.41	21.05	-	4.414
16:45-17:00	A12 Tom Crisp Way WB	1065.29	1566.10	0.680	0.00	7.10	2.18	36.55	-	7.773
16:45-17:00	Manconochie Way	27.87	580.71	0.048	0.00	0.10	0.05	0.78	-	6.515
16:45-17:00	A12 Tom Crisp WayEB	866.62	1655.22	0.524	0.00	2.03	1.11	17.22	-	4.608
16:45-17:00	B1531 Waveney Dr	942.13	2011.99	0.468	0.00	1.41	0.89	13.62	-	3.377
17:00-17:15	A12 Tom Crisp Way WB	892.13	1635.12	0.546	0.00	2.18	1.21	18.88	-	4.897
17:00-17:15	Manconochie Way	23.34	758.59	0.031	0.00	0.05	0.03	0.49	-	4.898
17:00-17:15	A12 Tom Crisp WayEB	725.75	1721.94	0.421	0.00	1.11	0.73	11.25	-	3.626
17:00-17:15	B1531 Waveney Dr	788.99	2044.00	0.386	0.00	0.89	0.63	9.64	-	2.872

2016 DN, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A12 Tom Crisp Way WB - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	B1531 Waveney Dr - 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
2016 DN, AM	2016 DN	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			4.10	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
A12 Tom Crisp Way WB	1	A12 Tom Crisp Way WB	
Manconochie Way	2	Manconochie Way	
A12 Tom Crisp WayEB	3	A12 Tom Crisp WayEB	
B1531 Waveney Dr	4	B1531 Waveney Dr	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
A12 Tom Crisp Way WB	0.00	99999.00
Manconochie Way	0.00	99999.00
A12 Tom Crisp WayEB	0.00	99999.00
B1531 Waveney Dr	0.00	99999.00

Roundabout Geometry

Name	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
A12 Tom Crisp Way WB	6.20	6.90	39.10	14.70	50.00	27.50	
Manconochie Way	3.90	6.50	10.80	15.00	50.00	25.50	
A12 Tom Crisp WayEB	6.90	7.50	19.30	11.10	50.00	34.00	
B1531 Waveney Dr	6.20	8.10	49.70	19.70	50.00	41.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A12 Tom Crisp Way WB		(calculated)	(calculated)	0.674	2060.587
Manconochie Way		(calculated)	(calculated)	0.594	1625.577
A12 Tom Crisp WayEB		(calculated)	(calculated)	0.676	2136.281
B1531 Waveney Dr		(calculated)	(calculated)	0.711	2298.483

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	2.30				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A12 Tom Crisp Way WB	ONE HOUR	✓	589.00	100.000
Manconochie Way	ONE HOUR	✓	38.00	100.000
A12 Tom Crisp WayEB	ONE HOUR	✓	1014.00	100.000
B1531 Waveney Dr	ONE HOUR	✓	449.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A12 Tom Crisp Way WB	443.43	460.46		
07:45-08:00	Manconochie Way	28.61	28.61		
07:45-08:00	A12 Tom Crisp WayEB	763.39	820.40		
07:45-08:00	B1531 Waveney Dr	338.03	352.57		
08:00-08:15	A12 Tom Crisp Way WB	529.50	549.83		
08:00-08:15	Manconochie Way	34.16	34.16		
08:00-08:15	A12 Tom Crisp WayEB	911.57	979.64		
08:00-08:15	B1531 Waveney Dr	403.64	421.00		
08:15-08:30	A12 Tom Crisp Way WB	648.50	673.40		
08:15-08:30	Manconochie Way	41.84	41.84		
08:15-08:30	A12 Tom Crisp WayEB	1116.43	1199.81		
08:15-08:30	B1531 Waveney Dr	494.36	515.62		
08:30-08:45	A12 Tom Crisp Way WB	648.50	673.40		
08:30-08:45	Manconochie Way	41.84	41.84		
08:30-08:45	A12 Tom Crisp WayEB	1116.43	1199.81		
08:30-08:45	B1531 Waveney Dr	494.36	515.62		
08:45-09:00	A12 Tom Crisp Way WB	529.50	549.83		
08:45-09:00	Manconochie Way	34.16	34.16		
08:45-09:00	A12 Tom Crisp WayEB	911.57	979.64		
08:45-09:00	B1531 Waveney Dr	403.64	421.00		
09:00-09:15	A12 Tom Crisp Way WB	443.43	460.46		
09:00-09:15	Manconochie Way	28.61	28.61		
09:00-09:15	A12 Tom Crisp WayEB	763.39	820.40		
09:00-09:15	B1531 Waveney Dr	338.03	352.57		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.000	12.000	392.000	185.000
	Manconochie Way	2.000	0.000	23.000	13.000
	A12 Tom Crisp WayEB	919.000	46.000	0.000	49.000
	B1531 Waveney Dr	386.000	32.000	31.000	0.000

Turning Proportions (Veh) - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.00	0.02	0.67	0.31
	Manconochie Way	0.05	0.00	0.61	0.34
	A12 Tom Crisp WayEB	0.91	0.05	0.00	0.05
	B1531 Waveney Dr	0.86	0.07	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	1.000	1.000	1.044	1.029
	Manconochie Way	1.000	1.000	1.000	1.000
	A12 Tom Crisp WayEB	1.081	1.000	1.000	1.034
	B1531 Waveney Dr	1.047	1.000	1.040	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.0	0.0	3.4	2.2
	Manconochie Way	0.0	0.0	0.0	0.0
	A12 Tom Crisp WayEB	6.2	0.0	0.0	2.6
	B1531 Waveney Dr	3.6	0.0	3.1	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A12 Tom Crisp Way WB	0.34	2.86	0.51	A
Manconochie Way	0.03	3.07	0.04	A
A12 Tom Crisp WayEB	0.60	4.94	1.52	A
B1531 Waveney Dr	0.35	3.88	0.53	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	443.43	442.24	81.80	0.00	1930.67	0.230	0.30	2.416	A
Manconochie Way	28.61	28.52	456.50	0.00	1343.65	0.021	0.02	2.736	A
A12 Tom Crisp WayEB	763.39	760.70	150.16	0.00	1890.89	0.404	0.67	3.177	A
B1531 Waveney Dr	338.03	337.02	725.44	0.00	1671.54	0.202	0.25	2.696	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	529.50	529.17	97.89	0.00	1920.10	0.276	0.38	2.588	A
Manconochie Way	34.16	34.14	546.23	0.00	1288.23	0.027	0.03	2.870	A
A12 Tom Crisp WayEB	911.57	910.49	179.68	0.00	1871.83	0.487	0.94	3.742	A
B1531 Waveney Dr	403.64	403.27	868.29	0.00	1566.76	0.258	0.35	3.094	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	648.50	647.96	119.81	0.00	1905.71	0.340	0.51	2.860	A
Manconochie Way	41.84	41.80	668.85	0.00	1212.51	0.035	0.04	3.074	A
A12 Tom Crisp WayEB	1116.44	1114.16	220.02	0.00	1845.79	0.605	1.51	4.920	A
B1531 Waveney Dr	494.36	493.63	1062.52	0.00	1424.28	0.347	0.53	3.864	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	648.50	648.50	120.01	0.00	1905.57	0.340	0.51	2.863	A
Manconochie Way	41.84	41.84	669.42	0.00	1212.16	0.035	0.04	3.075	A
A12 Tom Crisp WayEB	1116.44	1116.40	220.20	0.00	1845.67	0.605	1.52	4.936	A
B1531 Waveney Dr	494.36	494.35	1064.65	0.00	1422.72	0.347	0.53	3.877	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	529.50	530.03	98.19	0.00	1919.90	0.276	0.38	2.590	A
Manconochie Way	34.16	34.19	547.15	0.00	1287.67	0.027	0.03	2.873	A
A12 Tom Crisp WayEB	911.57	913.82	179.97	0.00	1871.64	0.487	0.96	3.769	A
B1531 Waveney Dr	403.64	404.37	871.46	0.00	1564.43	0.258	0.35	3.106	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	443.43	443.76	82.16	0.00	1930.43	0.230	0.30	2.421	A
Manconochie Way	28.61	28.63	458.09	0.00	1342.67	0.021	0.02	2.741	A
A12 Tom Crisp WayEB	763.39	764.50	150.68	0.00	1890.55	0.404	0.68	3.199	A
B1531 Waveney Dr	338.03	338.41	729.06	0.00	1668.89	0.203	0.25	2.705	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
07:45-08:00	A12 Tom Crisp Way WB	443.43	1930.67	0.230	0.00	0.00	0.30	4.39	-	2.416
07:45-08:00	Manconochie Way	28.61	1343.65	0.021	0.00	0.00	0.02	0.32	-	2.736
07:45-08:00	A12 Tom Crisp WayEB	763.39	1890.89	0.404	0.00	0.00	0.67	9.86	-	3.177
07:45-08:00	B1531 Waveney Dr	338.03	1671.54	0.202	0.00	0.00	0.25	3.72	-	2.696
08:00-08:15	A12 Tom Crisp Way WB	529.50	1920.10	0.276	0.00	0.30	0.38	5.62	-	2.588
08:00-08:15	Manconochie Way	34.16	1288.23	0.027	0.00	0.02	0.03	0.40	-	2.870
08:00-08:15	A12 Tom Crisp WayEB	911.57	1871.83	0.487	0.00	0.67	0.94	13.82	-	3.742
08:00-08:15	B1531 Waveney Dr	403.64	1566.76	0.258	0.00	0.25	0.35	5.11	-	3.094
08:15-08:30	A12 Tom Crisp Way WB	648.50	1905.71	0.340	0.00	0.38	0.51	7.59	-	2.860
08:15-08:30	Manconochie Way	41.84	1212.51	0.035	0.00	0.03	0.04	0.53	-	3.074
08:15-08:30	A12 Tom Crisp WayEB	1116.44	1845.79	0.605	0.00	0.94	1.51	21.90	-	4.920
08:15-08:30	B1531 Waveney Dr	494.36	1424.28	0.347	0.00	0.35	0.53	7.77	-	3.864
08:30-08:45	A12 Tom Crisp Way WB	648.50	1905.57	0.340	0.00	0.51	0.51	7.71	-	2.863
08:30-08:45	Manconochie Way	41.84	1212.16	0.035	0.00	0.04	0.04	0.53	-	3.075
08:30-08:45	A12 Tom Crisp WayEB	1116.44	1845.67	0.605	0.00	1.51	1.52	22.75	-	4.936
08:30-08:45	B1531 Waveney Dr	494.36	1422.72	0.347	0.00	0.53	0.53	7.95	-	3.877
08:45-09:00	A12 Tom Crisp Way WB	529.50	1919.90	0.276	0.00	0.51	0.38	5.81	-	2.590
08:45-09:00	Manconochie Way	34.16	1287.67	0.027	0.00	0.04	0.03	0.41	-	2.873
08:45-09:00	A12 Tom Crisp WayEB	911.57	1871.64	0.487	0.00	1.52	0.96	14.73	-	3.769
08:45-09:00	B1531 Waveney Dr	403.64	1564.43	0.258	0.00	0.53	0.35	5.33	-	3.106
09:00-09:15	A12 Tom Crisp Way WB	443.43	1930.43	0.230	0.00	0.38	0.30	4.54	-	2.421
09:00-09:15	Manconochie Way	28.61	1342.67	0.021	0.00	0.03	0.02	0.33	-	2.741
09:00-09:15	A12 Tom Crisp WayEB	763.39	1890.55	0.404	0.00	0.96	0.68	10.41	-	3.199
09:00-09:15	B1531 Waveney Dr	338.03	1668.89	0.203	0.00	0.35	0.25	3.88	-	2.705

2016 DN, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A12 Tom Crisp Way WB - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	B1531 Waveney Dr - 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
2016 DN, PM	2016 DN	PM		ONE HOUR	15:45	17:15	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			5.22	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
A12 Tom Crisp Way WB	1	A12 Tom Crisp Way WB	
Manconochie Way	2	Manconochie Way	
A12 Tom Crisp WayEB	3	A12 Tom Crisp WayEB	
B1531 Waveney Dr	4	B1531 Waveney Dr	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
A12 Tom Crisp Way WB	0.00	99999.00
Manconochie Way	0.00	99999.00
A12 Tom Crisp WayEB	0.00	99999.00
B1531 Waveney Dr	0.00	99999.00

Roundabout Geometry

Name	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
A12 Tom Crisp Way WB	6.20	6.90	39.10	14.70	50.00	27.50	
Manconochie Way	3.90	6.50	10.80	15.00	50.00	25.50	
A12 Tom Crisp WayEB	6.90	7.50	19.30	11.10	50.00	34.00	
B1531 Waveney Dr	6.20	8.10	49.70	19.70	50.00	41.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A12 Tom Crisp Way WB		(calculated)	(calculated)	0.674	2060.587
Manconochie Way		(calculated)	(calculated)	0.594	1625.577
A12 Tom Crisp WayEB		(calculated)	(calculated)	0.676	2136.281
B1531 Waveney Dr		(calculated)	(calculated)	0.711	2298.483

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	2.30				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A12 Tom Crisp Way WB	ONE HOUR	✓	1277.00	100.000
Manconochie Way	ONE HOUR	✓	62.00	100.000
A12 Tom Crisp WayEB	ONE HOUR	✓	477.00	100.000
B1531 Waveney Dr	ONE HOUR	✓	370.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
15:45-16:00	A12 Tom Crisp Way WB	961.39	998.56		
15:45-16:00	Manconochie Way	46.68	46.68		
15:45-16:00	A12 Tom Crisp WayEB	359.11	387.45		
15:45-16:00	B1531 Waveney Dr	278.56	291.04		
16:00-16:15	A12 Tom Crisp Way WB	1148.00	1192.38		
16:00-16:15	Manconochie Way	55.74	55.74		
16:00-16:15	A12 Tom Crisp WayEB	428.81	462.66		
16:00-16:15	B1531 Waveney Dr	332.62	347.54		
16:15-16:30	A12 Tom Crisp Way WB	1406.00	1460.36		
16:15-16:30	Manconochie Way	68.26	68.26		
16:15-16:30	A12 Tom Crisp WayEB	525.19	566.64		
16:15-16:30	B1531 Waveney Dr	407.38	425.64		
16:30-16:45	A12 Tom Crisp Way WB	1406.00	1460.36		
16:30-16:45	Manconochie Way	68.26	68.26		
16:30-16:45	A12 Tom Crisp WayEB	525.19	566.64		
16:30-16:45	B1531 Waveney Dr	407.38	425.64		
16:45-17:00	A12 Tom Crisp Way WB	1148.00	1192.38		
16:45-17:00	Manconochie Way	55.74	55.74		
16:45-17:00	A12 Tom Crisp WayEB	428.81	462.66		
16:45-17:00	B1531 Waveney Dr	332.62	347.54		
17:00-17:15	A12 Tom Crisp Way WB	961.39	998.56		
17:00-17:15	Manconochie Way	46.68	46.68		
17:00-17:15	A12 Tom Crisp WayEB	359.11	387.45		
17:00-17:15	B1531 Waveney Dr	278.56	291.04		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.000	4.000	831.000	442.000
	Manconochie Way	6.000	0.000	35.000	21.000
	A12 Tom Crisp WayEB	465.000	7.000	0.000	5.000
	B1531 Waveney Dr	314.000	9.000	47.000	0.000

Turning Proportions (Veh) - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.00	0.00	0.65	0.35
	Manconochie Way	0.10	0.00	0.56	0.34
	A12 Tom Crisp WayEB	0.97	0.01	0.00	0.01
	B1531 Waveney Dr	0.85	0.02	0.13	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	1.000	1.000	1.044	1.029
	Manconochie Way	1.000	1.000	1.000	1.000
	A12 Tom Crisp WayEB	1.081	1.000	1.000	1.034
	B1531 Waveney Dr	1.047	1.000	1.040	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		A12 Tom Crisp Way WB	Manconochie Way	A12 Tom Crisp WayEB	B1531 Waveney Dr
From	A12 Tom Crisp Way WB	0.0	0.0	3.4	2.2
	Manconochie Way	0.0	0.0	0.0	0.0
	A12 Tom Crisp WayEB	6.2	0.0	0.0	2.6
	B1531 Waveney Dr	3.6	0.0	3.1	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
A12 Tom Crisp Way WB	0.73	6.77	2.61	A
Manconochie Way	0.09	5.45	0.10	A
A12 Tom Crisp WayEB	0.32	3.21	0.47	A
B1531 Waveney Dr	0.22	2.56	0.29	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	961.39	957.54	47.31	0.00	1952.25	0.492	0.96	3.606	A
Manconochie Way	46.68	46.48	989.84	0.00	1014.51	0.046	0.05	3.718	A
A12 Tom Crisp WayEB	359.11	358.08	351.67	0.00	1753.76	0.205	0.26	2.578	A
B1531 Waveney Dr	278.55	277.88	358.83	0.00	1936.64	0.144	0.17	2.169	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	1148.00	1146.16	56.60	0.00	1946.04	0.590	1.42	4.491	A
Manconochie Way	55.74	55.66	1184.80	0.00	894.15	0.062	0.07	4.293	A
A12 Tom Crisp WayEB	428.81	428.50	420.96	0.00	1709.18	0.251	0.33	2.811	A
B1531 Waveney Dr	332.62	332.44	429.40	0.00	1884.88	0.176	0.21	2.318	A

Main results: (16:15-16:30)

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	1406.01	1401.38	69.31	0.00	1937.55	0.726	2.58	6.658	A
Manconochie Way	68.26	68.12	1448.70	0.00	731.24	0.093	0.10	5.427	A
A12 Tom Crisp WayEB	525.19	524.66	514.72	0.00	1648.86	0.319	0.46	3.200	A
B1531 Waveney Dr	407.38	407.08	525.75	0.00	1814.21	0.225	0.29	2.558	A

Main results: (16:30-16:45)

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	1406.01	1405.87	69.36	0.00	1937.51	0.726	2.61	6.767	A
Manconochie Way	68.26	68.26	1453.21	0.00	728.45	0.094	0.10	5.452	A
A12 Tom Crisp WayEB	525.19	525.18	516.33	0.00	1647.82	0.319	0.47	3.205	A
B1531 Waveney Dr	407.38	407.37	526.28	0.00	1813.82	0.225	0.29	2.559	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	1148.00	1152.62	56.69	0.00	1945.99	0.590	1.46	4.565	A
Manconochie Way	55.74	55.88	1191.29	0.00	890.14	0.063	0.07	4.315	A
A12 Tom Crisp WayEB	428.81	429.33	423.28	0.00	1707.69	0.251	0.34	2.816	A
B1531 Waveney Dr	332.62	332.92	430.24	0.00	1884.26	0.177	0.22	2.320	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
A12 Tom Crisp Way WB	961.39	963.31	47.46	0.00	1952.15	0.492	0.98	3.649	A
Manconochie Way	46.68	46.75	995.69	0.00	1010.90	0.046	0.05	3.733	A
A12 Tom Crisp WayEB	359.11	359.42	353.78	0.00	1752.40	0.205	0.26	2.586	A
B1531 Waveney Dr	278.55	278.74	360.18	0.00	1935.65	0.144	0.17	2.172	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
15:45-16:00	A12 Tom Crisp Way WB	961.39	1952.25	0.492	0.00	0.00	0.96	14.02	-	3.606
15:45-16:00	Manconochie Way	46.68	1014.51	0.046	0.00	0.00	0.05	0.71	-	3.718
15:45-16:00	A12 Tom Crisp WayEB	359.11	1753.76	0.205	0.00	0.00	0.26	3.79	-	2.578
15:45-16:00	B1531 Waveney Dr	278.55	1936.64	0.144	0.00	0.00	0.17	2.48	-	2.169
16:00-16:15	A12 Tom Crisp Way WB	1148.00	1946.04	0.590	0.00	0.96	1.42	20.71	-	4.491
16:00-16:15	Manconochie Way	55.74	894.15	0.062	0.00	0.05	0.07	0.98	-	4.293
16:00-16:15	A12 Tom Crisp WayEB	428.81	1709.18	0.251	0.00	0.26	0.33	4.94	-	2.811
16:00-16:15	B1531 Waveney Dr	332.62	1884.88	0.176	0.00	0.17	0.21	3.17	-	2.318
16:15-16:30	A12 Tom Crisp Way WB	1406.01	1937.55	0.726	0.00	1.42	2.58	36.62	-	6.658
16:15-16:30	Manconochie Way	68.26	731.24	0.093	0.00	0.07	0.10	1.50	-	5.427
16:15-16:30	A12 Tom Crisp WayEB	525.19	1648.86	0.319	0.00	0.33	0.46	6.86	-	3.200
16:15-16:30	B1531 Waveney Dr	407.38	1814.21	0.225	0.00	0.21	0.29	4.28	-	2.558
16:30-16:45	A12 Tom Crisp Way WB	1406.01	1937.51	0.726	0.00	2.58	2.61	38.96	-	6.767
16:30-16:45	Manconochie Way	68.26	728.45	0.094	0.00	0.10	0.10	1.54	-	5.452
16:30-16:45	A12 Tom Crisp WayEB	525.19	1647.82	0.319	0.00	0.46	0.47	6.99	-	3.205
16:30-16:45	B1531 Waveney Dr	407.38	1813.82	0.225	0.00	0.29	0.29	4.33	-	2.559
16:45-17:00	A12 Tom Crisp Way WB	1148.00	1945.99	0.590	0.00	2.61	1.46	22.64	-	4.565
16:45-17:00	Manconochie Way	55.74	890.14	0.063	0.00	0.10	0.07	1.03	-	4.315
16:45-17:00	A12 Tom Crisp WayEB	428.81	1707.69	0.251	0.00	0.47	0.34	5.12	-	2.816
16:45-17:00	B1531 Waveney Dr	332.62	1884.26	0.177	0.00	0.29	0.22	3.26	-	2.320
17:00-17:15	A12 Tom Crisp Way WB	961.39	1952.15	0.492	0.00	1.46	0.98	15.03	-	3.649
17:00-17:15	Manconochie Way	46.68	1010.90	0.046	0.00	0.07	0.05	0.74	-	3.733
17:00-17:15	A12 Tom Crisp WayEB	359.11	1752.40	0.205	0.00	0.34	0.26	3.93	-	2.586
17:00-17:15	B1531 Waveney Dr	278.55	1935.65	0.144	0.00	0.22	0.17	2.55	-	2.172

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.6.541 [19821,26/11/2015]

For sales and distribution information, program advice and maintenance, contact TRL:
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Filename: 07 Victoria Rd-Waveney Dr-Kirkely Run v5.arc8
Path: L:\106xxx\1069948 Lowestoft Third Crossing\09 Documents\06_Modelling_Junction Modelling Mar 2018\07 Victoria Rd-Waveney Dr-Kirkley Run rdbt
Report generation date: 03/04/2018 12:41:08

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2016 Base							
Arm 1	0.31	6.49	0.24	A	2.28	16.49	0.70	C
Arm 2	1.05	12.22	0.51	B	0.92	13.40	0.48	B
Arm 3	0.95	7.29	0.49	A	0.50	5.22	0.34	A
	A1 - 2022 Do Minimum							
Arm 1	0.45	7.02	0.31	A	3.51	23.09	0.79	C
Arm 2	1.37	14.38	0.58	B	1.56	18.86	0.62	C
Arm 3	1.29	8.96	0.57	A	0.62	5.86	0.38	A
	A1 - 2022 Do Something							
Arm 1	0.91	8.81	0.48	A	83.54	380.50	1.19	F
Arm 2	3.91	32.10	0.81	D	1.89	23.40	0.66	C
Arm 3	1.99	13.88	0.67	B	0.63	6.32	0.39	A
	A1 - 2037 Do Minimum							
Arm 1	0.64	8.05	0.39	A	8.85	52.26	0.92	F
Arm 2	2.10	19.50	0.68	C	3.13	32.80	0.77	D
Arm 3	2.56	14.41	0.73	B	0.83	6.83	0.46	A
	A1 - 2037 Do Something							
Arm 1	1.37	11.12	0.58	B	251.41	1171.83	1.46	F
Arm 2	11.77	84.78	0.96	F	3.78	40.75	0.81	E
Arm 3	6.67	38.29	0.89	E	0.89	7.56	0.47	A

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

"D1 - 2016 Base, AM " model duration: 08:00 - 09:30
"D2 - 2016 Base, PM" model duration: 17:00 - 18:30
"D3 - 2022 Do Minimum, AM" model duration: 08:00 - 09:30
"D4 - 2022 Do Minimum, PM" model duration: 17:00 - 18:30
"D5 - 2022 Do Something, AM" model duration: 08:00 - 09:30
"D6 - 2022 Do Something, PM" model duration: 17:00 - 18:30
"D7 - 2037 Do Minimum, AM" model duration: 08:00 - 09:30
"D8 - 2037 Do Minimum, PM" model duration: 17:00 - 18:30
"D9 - 2037 Do Something, AM" model duration: 08:00 - 09:30
"D10 - 2037 Do Something, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.6.541 at 03/04/2018 12:41:05

File summary

Title	Victoria Rd-Waveney Dr-Kirkley Run
Location	Lowestoft
Site Number	
Date	13/02/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ecopp
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) - 2016 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
2016 Base, AM	2016 Base	AM		ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	8.75	A

Junction Network Options

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

Arms

Arms

Arm	Arm	Name	Description
1	1	B1531 Waveney Drive	
2	2	Kirkley Run	
3	3	B1531 Victoria 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

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	4.10	4.10	4.90	0.50	13.90	10.50	0.00	
2	3.50	3.50	4.10	1.70	15.20	13.30	0.00	
3	3.70	3.70	4.10	1.30	19.30	18.40	0.00	

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)	0.571	818.082
2		(calculated)	(calculated)	0.563	698.840
3		(calculated)	(calculated)	0.808	1078.374

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	✓	156.91	100.000
2	ONE HOUR	✓	283.56	100.000
3	ONE HOUR	✓	431.14	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	8.030	148.880
	2	123.625	0.000	159.936
	3	286.108	145.034	0.000

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

		To		
		1	2	3
From	1	0.00	0.05	0.95
	2	0.44	0.00	0.56
	3	0.66	0.34	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	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	0.24	6.49	0.31	A
2	0.51	12.22	1.05	B
3	0.49	7.29	0.95	A

Main Results for each time segment

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	118.13	117.39	108.55	0.00	756.15	0.156	0.18	5.630	A
2	213.48	211.49	111.39	0.00	636.09	0.336	0.50	8.439	A
3	324.59	322.69	92.20	0.00	1003.84	0.323	0.47	5.270	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	141.06	140.86	130.16	0.00	743.82	0.190	0.23	5.969	A
2	254.92	254.19	133.66	0.00	623.55	0.409	0.68	9.727	A
3	387.59	386.93	110.82	0.00	988.79	0.392	0.64	5.975	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	172.76	172.45	159.27	0.00	727.21	0.238	0.31	6.487	A
2	312.21	310.79	163.63	0.00	606.66	0.515	1.03	12.108	B
3	474.70	473.46	135.50	0.00	968.85	0.490	0.95	7.250	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	172.76	172.75	159.68	0.00	726.98	0.238	0.31	6.494	A
2	312.21	312.15	163.91	0.00	606.50	0.515	1.05	12.224	B
3	474.70	474.67	136.09	0.00	968.37	0.490	0.95	7.291	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	141.06	141.35	130.79	0.00	743.46	0.190	0.24	5.983	A
2	254.92	256.28	134.12	0.00	623.29	0.409	0.70	9.847	A
3	387.59	388.79	111.73	0.00	988.06	0.392	0.65	6.018	A

Main results: (09:15-09:30)

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	118.13	118.33	109.42	0.00	755.66	0.156	0.19	5.651	A
2	213.48	214.25	112.27	0.00	635.59	0.336	0.51	8.559	A
3	324.59	325.27	93.41	0.00	1002.87	0.324	0.48	5.317	A

(Default Analysis Set) - 2016 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
2016 Base, PM	2016 Base	PM		ONE HOUR	17:00	18:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	12.24	B

Junction Network Options

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

Arms

Arms

Arm	Arm	Name	Description
1	1	B1531 Waveney Drive	
2	2	Kirkley Run	
3	3	B1531 Victoria 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

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	4.10	4.10	4.90	0.50	13.90	10.50	0.00	
2	3.50	3.50	4.10	1.70	15.20	13.30	0.00	
3	3.70	3.70	4.10	1.30	19.30	18.40	0.00	

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)	0.571	818.082
2		(calculated)	(calculated)	0.563	698.840
3		(calculated)	(calculated)	0.808	1078.374

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	✓	462.95	100.000
2	ONE HOUR	✓	227.47	100.000
3	ONE HOUR	✓	317.50	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	172.548	290.400
	2	43.512	0.000	183.956
	3	172.799	144.702	0.000

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

		To		
		1	2	3
From	1	0.00	0.37	0.63
	2	0.19	0.00	0.81
	3	0.54	0.46	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	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	0.70	16.49	2.28	C
2	0.48	13.40	0.92	B
3	0.34	5.22	0.50	A

Main Results for each time segment

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	348.53	345.17	108.41	0.00	756.23	0.461	0.84	8.689	A
2	171.25	169.58	216.52	0.00	576.87	0.297	0.42	8.803	A
3	239.03	237.86	32.44	0.00	1052.15	0.227	0.29	4.414	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	416.18	414.59	129.94	0.00	743.95	0.559	1.24	10.875	B
2	204.49	203.84	260.07	0.00	552.34	0.370	0.58	10.310	B
3	285.43	285.11	38.99	0.00	1046.86	0.273	0.37	4.723	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	509.72	505.80	159.08	0.00	727.32	0.701	2.22	15.965	C
2	250.45	249.14	317.28	0.00	520.11	0.482	0.90	13.222	B
3	349.58	349.06	47.66	0.00	1039.85	0.336	0.50	5.208	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	509.72	509.48	159.32	0.00	727.19	0.701	2.28	16.485	C
2	250.45	250.39	319.59	0.00	518.81	0.483	0.92	13.403	B
3	349.58	349.57	47.90	0.00	1039.66	0.336	0.50	5.216	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	416.18	420.07	130.32	0.00	743.73	0.560	1.30	11.251	B
2	204.49	205.76	263.50	0.00	550.40	0.372	0.60	10.485	B
3	285.43	285.93	39.36	0.00	1046.56	0.273	0.38	4.737	A

Main results: (18:15-18:30)

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	348.53	350.27	109.09	0.00	755.84	0.461	0.87	8.913	A
2	171.25	171.94	219.72	0.00	575.07	0.298	0.43	8.946	A
3	239.03	239.36	32.89	0.00	1051.79	0.227	0.30	4.432	A

(Default Analysis Set) - 2022 Do Minimum, 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
2022 Do Minimum, AM	2022 Do Minimum	AM		ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	10.27	B

Junction Network Options

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

Arms

Arms

Arm	Arm	Name	Description
1	1	B1531 Waveney Drive	
2	2	Kirkley Run	
3	3	B1531 Victoria 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

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	4.10	4.10	4.90	0.50	13.90	10.50	0.00	
2	3.50	3.50	4.10	1.70	15.20	13.30	0.00	
3	3.70	3.70	4.10	1.30	19.30	18.40	0.00	

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)	0.571	818.082
2		(calculated)	(calculated)	0.563	698.840
3		(calculated)	(calculated)	0.808	1078.374

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	✓	211.00	100.000
2	ONE HOUR	✓	317.00	100.000
3	ONE HOUR	✓	475.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	50.000	161.000
	2	173.000	0.000	144.000
	3	359.000	116.000	0.000

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

		To		
		1	2	3
From	1	0.00	0.24	0.76
	2	0.55	0.00	0.45
	3	0.76	0.24	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	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	0.31	7.02	0.45	A
2	0.58	14.38	1.37	B
3	0.57	8.96	1.29	A

Main Results for each time segment

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	158.85	157.82	86.77	0.00	768.58	0.207	0.26	5.885	A
2	238.65	236.26	120.42	0.00	631.00	0.378	0.60	9.067	A
3	357.60	355.31	128.94	0.00	974.15	0.367	0.57	5.797	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	189.68	189.40	104.06	0.00	758.71	0.250	0.33	6.320	A
2	284.98	284.01	144.52	0.00	617.43	0.462	0.84	10.764	B
3	427.02	426.11	155.00	0.00	953.08	0.448	0.80	6.820	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	232.32	231.85	127.26	0.00	745.48	0.312	0.45	7.003	A
2	349.02	346.99	176.91	0.00	599.18	0.583	1.35	14.156	B
3	522.98	521.10	189.37	0.00	925.30	0.565	1.27	8.863	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	232.32	232.31	127.70	0.00	745.22	0.312	0.45	7.017	A
2	349.02	348.93	177.26	0.00	598.99	0.583	1.37	14.381	B
3	522.98	522.92	190.42	0.00	924.45	0.566	1.29	8.963	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	189.68	190.14	104.73	0.00	758.33	0.250	0.34	6.340	A
2	284.98	286.95	145.08	0.00	617.11	0.462	0.88	10.967	B
3	427.02	428.87	156.60	0.00	951.79	0.449	0.82	6.907	A

Main results: (09:15-09:30)

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	158.85	159.15	87.56	0.00	768.13	0.207	0.26	5.916	A
2	238.65	239.68	121.43	0.00	630.43	0.379	0.62	9.239	A
3	357.60	358.55	130.81	0.00	972.64	0.368	0.59	5.873	A

(Default Analysis Set) - 2022 Do Minimum, 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
2022 Do Minimum, PM	2022 Do Minimum	PM		ONE HOUR	17:00	18:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	16.85	C

Junction Network Options

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

Arms

Arms

Arm	Arm	Name	Description
1	1	B1531 Waveney Drive	
2	2	Kirkley Run	
3	3	B1531 Victoria 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

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	4.10	4.10	4.90	0.50	13.90	10.50	0.00	
2	3.50	3.50	4.10	1.70	15.20	13.30	0.00	
3	3.70	3.70	4.10	1.30	19.30	18.40	0.00	

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)	0.571	818.082
2		(calculated)	(calculated)	0.563	698.840
3		(calculated)	(calculated)	0.808	1078.374

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	✓	518.00	100.000
2	ONE HOUR	✓	278.00	100.000
3	ONE HOUR	✓	345.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	191.000	327.000
	2	95.000	0.000	183.000
	3	195.000	150.000	0.000

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

		To		
		1	2	3
From	1	0.00	0.37	0.63
	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	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	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	0.79	23.09	3.51	C
2	0.62	18.86	1.56	C
3	0.38	5.86	0.62	A

Main Results for each time segment

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	389.98	385.79	112.34	0.00	753.99	0.517	1.05	9.672	A
2	209.29	206.96	243.54	0.00	561.65	0.373	0.58	10.086	B
3	259.73	258.38	70.72	0.00	1021.21	0.254	0.34	4.710	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	465.67	463.34	134.67	0.00	741.25	0.628	1.63	12.840	B
2	249.92	248.82	292.49	0.00	534.07	0.468	0.86	12.569	B
3	310.15	309.74	85.03	0.00	1009.64	0.307	0.44	5.140	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	570.33	563.45	164.85	0.00	724.03	0.788	3.35	21.520	C
2	306.08	303.46	355.69	0.00	498.47	0.614	1.52	18.211	C
3	379.85	379.16	103.70	0.00	994.55	0.382	0.61	5.844	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	570.33	569.68	165.15	0.00	723.86	0.788	3.51	23.094	C
2	306.08	305.89	359.62	0.00	496.25	0.617	1.56	18.863	C
3	379.85	379.84	104.53	0.00	993.88	0.382	0.62	5.862	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	465.67	472.71	135.14	0.00	740.98	0.628	1.75	13.747	B
2	249.92	252.52	298.41	0.00	530.74	0.471	0.91	13.056	B
3	310.15	310.82	86.29	0.00	1008.62	0.308	0.45	5.165	A

Main results: (18:15-18:30)

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	389.98	392.61	113.11	0.00	753.55	0.518	1.10	10.047	B
2	209.29	210.51	247.84	0.00	559.22	0.374	0.61	10.359	B
3	259.73	260.15	71.94	0.00	1020.23	0.255	0.34	4.740	A

(Default Analysis Set) - 2022 Do Something, 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
2022 Do Something, AM	2022 Do Something	AM		ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	18.67	C

Junction Network Options

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

Arms

Arms

Arm	Arm	Name	Description
1	1	B1531 Waveney Drive	
2	2	Kirkley Run	
3	3	B1531 Victoria 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

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	4.10	4.10	4.90	0.50	13.90	10.50	0.00	
2	3.50	3.50	4.10	1.70	15.20	13.30	0.00	
3	3.70	3.70	4.10	1.30	19.30	18.40	0.00	

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)	0.571	818.082
2		(calculated)	(calculated)	0.563	698.840
3		(calculated)	(calculated)	0.808	1078.374

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	✓	339.00	100.000
2	ONE HOUR	✓	420.00	100.000
3	ONE HOUR	✓	480.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	133.000	206.000
	2	328.000	0.000	92.000
	3	422.000	58.000	0.000

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

		To		
		1	2	3
From	1	0.00	0.39	0.61
	2	0.78	0.00	0.22
	3	0.88	0.12	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	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	0.48	8.81	0.91	A
2	0.81	32.10	3.91	D
3	0.67	13.88	1.99	B

Main Results for each time segment

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	255.22	253.34	43.33	0.00	793.36	0.322	0.47	6.644	A
2	316.20	312.04	153.95	0.00	612.12	0.517	1.04	11.841	B
3	361.37	358.63	243.69	0.00	881.39	0.410	0.69	6.851	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	304.75	304.14	51.97	0.00	788.43	0.387	0.62	7.424	A
2	377.57	375.08	184.82	0.00	594.73	0.635	1.66	16.198	C
3	431.51	430.12	292.92	0.00	841.59	0.513	1.03	8.720	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	373.25	372.15	63.43	0.00	781.90	0.477	0.90	8.765	A
2	462.43	454.46	226.14	0.00	571.45	0.809	3.65	28.925	D
3	528.49	524.91	354.91	0.00	791.49	0.668	1.93	13.314	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	373.25	373.21	63.83	0.00	781.67	0.478	0.91	8.812	A
2	462.43	461.41	226.79	0.00	571.08	0.810	3.91	32.098	D
3	528.49	528.23	360.34	0.00	787.10	0.671	1.99	13.876	B

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	304.75	305.82	52.58	0.00	788.09	0.387	0.64	7.483	A
2	377.57	385.90	185.84	0.00	594.15	0.635	1.83	17.914	C
3	431.51	435.11	301.37	0.00	834.76	0.517	1.09	9.088	A

Main results: (09:15-09:30)

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	255.22	255.85	43.85	0.00	793.06	0.322	0.48	6.711	A
2	316.20	319.10	155.47	0.00	611.26	0.517	1.10	12.441	B
3	361.37	362.89	249.20	0.00	876.93	0.412	0.71	7.023	A

(Default Analysis Set) - 2022 Do Something, 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
2022 Do Something, PM	2022 Do Something	PM		ONE HOUR	17:00	18:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	225.48	F

Junction Network Options

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

Arms

Arms

Arm	Arm	Name	Description
1	1	B1531 Waveney Drive	
2	2	Kirkley Run	
3	3	B1531 Victoria 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

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	4.10	4.10	4.90	0.50	13.90	10.50	0.00	
2	3.50	3.50	4.10	1.70	15.20	13.30	0.00	
3	3.70	3.70	4.10	1.30	19.30	18.40	0.00	

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)	0.571	818.082
2		(calculated)	(calculated)	0.563	698.840
3		(calculated)	(calculated)	0.808	1078.374

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	✓	821.00	100.000
2	ONE HOUR	✓	273.00	100.000
3	ONE HOUR	✓	329.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	350.000	471.000
	2	165.000	0.000	108.000
	3	237.000	92.000	0.000

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

		To		
		1	2	3
From	1	0.00	0.43	0.57
	2	0.60	0.00	0.40
	3	0.72	0.28	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	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	1.19	380.50	83.54	F
2	0.66	23.40	1.89	C
3	0.39	6.32	0.63	A

Main Results for each time segment

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	618.09	604.24	68.89	0.00	778.78	0.794	3.46	19.339	C
2	205.53	202.83	346.65	0.00	503.56	0.408	0.67	11.868	B
3	247.69	246.34	122.59	0.00	979.28	0.253	0.34	4.903	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	738.06	711.59	82.59	0.00	770.96	0.957	10.08	46.662	E
2	245.42	243.88	408.23	0.00	468.87	0.523	1.06	15.887	C
3	295.76	295.34	147.40	0.00	959.23	0.308	0.44	5.419	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	903.94	754.75	101.09	0.00	760.41	1.189	47.38	151.461	F
2	300.58	297.53	432.99	0.00	454.92	0.661	1.82	22.426	C
3	362.24	361.49	179.83	0.00	933.01	0.388	0.63	6.291	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	903.94	759.29	101.29	0.00	760.29	1.189	83.54	319.682	F
2	300.58	300.30	435.60	0.00	453.45	0.663	1.89	23.396	C
3	362.24	362.22	181.50	0.00	931.66	0.389	0.63	6.321	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	738.06	761.66	82.91	0.00	770.78	0.958	77.64	380.496	F
2	245.42	248.07	436.96	0.00	452.69	0.542	1.23	17.816	C
3	295.76	296.49	149.93	0.00	957.18	0.309	0.45	5.454	A

Main results: (18:15-18:30)

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	618.09	768.60	69.38	0.00	778.50	0.794	40.01	278.398	F
2	205.53	207.00	440.94	0.00	450.45	0.456	0.86	14.879	B
3	247.69	248.12	125.11	0.00	977.24	0.253	0.34	4.941	A

(Default Analysis Set) - 2037 Do Minimum, 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
2037 Do Minimum, AM	2037 Do Minimum	AM		ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	14.55	B

Junction Network Options

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

Arms

Arms

Arm	Arm	Name	Description
1	1	B1531 Waveney Drive	
2	2	Kirkley Run	
3	3	B1531 Victoria 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

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	4.10	4.10	4.90	0.50	13.90	10.50	0.00	
2	3.50	3.50	4.10	1.70	15.20	13.30	0.00	
3	3.70	3.70	4.10	1.30	19.30	18.40	0.00	

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)	0.571	818.082
2		(calculated)	(calculated)	0.563	698.840
3		(calculated)	(calculated)	0.808	1078.374

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	✓	263.00	100.000
2	ONE HOUR	✓	362.00	100.000
3	ONE HOUR	✓	596.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	75.000	188.000
	2	195.000	0.000	167.000
	3	466.000	130.000	0.000

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

		To		
		1	2	3
From	1	0.00	0.29	0.71
	2	0.54	0.00	0.46
	3	0.78	0.22	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	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	0.39	8.05	0.64	A
2	0.68	19.50	2.10	C
3	0.73	14.41	2.56	B

Main Results for each time segment

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	198.00	196.61	97.12	0.00	762.67	0.260	0.35	6.344	A
2	272.53	269.45	140.54	0.00	619.67	0.440	0.77	10.193	B
3	448.70	445.25	145.15	0.00	961.05	0.467	0.86	6.935	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	236.43	236.01	116.48	0.00	751.63	0.315	0.45	6.975	A
2	325.43	323.96	168.70	0.00	603.80	0.539	1.14	12.795	B
3	535.79	534.02	174.51	0.00	937.31	0.572	1.31	8.886	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	289.57	288.83	142.10	0.00	737.01	0.393	0.64	8.018	A
2	398.57	394.96	206.47	0.00	582.53	0.684	2.04	18.825	C
3	656.21	651.47	212.75	0.00	906.40	0.724	2.49	13.865	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	289.57	289.55	143.07	0.00	736.46	0.393	0.64	8.055	A
2	398.57	398.32	206.98	0.00	582.24	0.685	2.10	19.501	C
3	656.21	655.91	214.57	0.00	904.93	0.725	2.56	14.413	B

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	236.43	237.15	117.91	0.00	750.81	0.315	0.46	7.020	A
2	325.43	329.01	169.52	0.00	603.35	0.539	1.21	13.286	B
3	535.79	540.55	177.23	0.00	935.11	0.573	1.37	9.232	A

Main results: (09:15-09:30)

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	198.00	198.44	98.29	0.00	762.01	0.260	0.35	6.394	A
2	272.53	274.15	141.85	0.00	618.93	0.440	0.80	10.491	B
3	448.70	450.62	147.68	0.00	959.00	0.468	0.89	7.109	A

(Default Analysis Set) - 2037 Do Minimum, 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
2037 Do Minimum, PM	2037 Do Minimum	PM		ONE HOUR	17:00	18:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	33.65	D

Junction Network Options

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

Arms

Arms

Arm	Arm	Name	Description
1	1	B1531 Waveney Drive	
2	2	Kirkley Run	
3	3	B1531 Victoria 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

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	4.10	4.10	4.90	0.50	13.90	10.50	0.00	
2	3.50	3.50	4.10	1.70	15.20	13.30	0.00	
3	3.70	3.70	4.10	1.30	19.30	18.40	0.00	

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)	0.571	818.082
2		(calculated)	(calculated)	0.563	698.840
3		(calculated)	(calculated)	0.808	1078.374

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	✓	594.00	100.000
2	ONE HOUR	✓	329.00	100.000
3	ONE HOUR	✓	402.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	220.000	374.000
	2	123.000	0.000	206.000
	3	228.000	174.000	0.000

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

		To		
		1	2	3
From	1	0.00	0.37	0.63
	2	0.37	0.00	0.63
	3	0.57	0.43	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	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	0.92	52.26	8.85	F
2	0.77	32.80	3.13	D
3	0.46	6.83	0.83	A

Main Results for each time segment

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	447.19	441.36	130.26	0.00	743.77	0.601	1.46	11.692	B
2	247.69	244.41	277.89	0.00	542.30	0.457	0.82	11.958	B
3	302.65	300.94	91.37	0.00	1004.51	0.301	0.43	5.104	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	533.99	529.59	156.18	0.00	728.98	0.733	2.56	17.654	C
2	295.76	293.77	333.44	0.00	511.00	0.579	1.32	16.415	C
3	361.39	360.82	109.83	0.00	989.60	0.365	0.57	5.721	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	654.01	634.14	191.13	0.00	709.04	0.922	7.53	40.115	E
2	362.24	356.04	399.27	0.00	473.92	0.764	2.87	29.089	D
3	442.61	441.58	133.11	0.00	970.78	0.456	0.83	6.788	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	654.01	648.71	191.56	0.00	708.79	0.923	8.85	52.265	F
2	362.24	361.19	408.45	0.00	468.75	0.773	3.13	32.804	D
3	442.61	442.58	135.04	0.00	969.22	0.457	0.83	6.835	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	533.99	557.59	156.86	0.00	728.59	0.733	2.95	23.423	C
2	295.76	302.26	351.08	0.00	501.07	0.590	1.51	18.648	C
3	361.39	362.39	113.00	0.00	987.03	0.366	0.58	5.774	A

Main results: (18:15-18:30)

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	447.19	452.76	131.25	0.00	743.20	0.602	1.56	12.622	B
2	247.69	250.22	285.07	0.00	538.25	0.460	0.87	12.606	B
3	302.65	303.24	93.55	0.00	1002.76	0.302	0.44	5.152	A

(Default Analysis Set) - 2037 Do Something, 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
2037 Do Something, AM	2037 Do Something	AM		ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	45.71	E

Junction Network Options

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

Arms

Arms

Arm	Arm	Name	Description
1	1	B1531 Waveney Drive	
2	2	Kirkley Run	
3	3	B1531 Victoria 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

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	4.10	4.10	4.90	0.50	13.90	10.50	0.00	
2	3.50	3.50	4.10	1.70	15.20	13.30	0.00	
3	3.70	3.70	4.10	1.30	19.30	18.40	0.00	

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)	0.571	818.082
2		(calculated)	(calculated)	0.563	698.840
3		(calculated)	(calculated)	0.808	1078.374

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	✓	409.00	100.000
2	ONE HOUR	✓	478.00	100.000
3	ONE HOUR	✓	610.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	163.000	246.000
	2	371.000	0.000	107.000
	3	539.000	71.000	0.000

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

		To		
		1	2	3
From	1	0.00	0.40	0.60
	2	0.78	0.00	0.22
	3	0.88	0.12	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	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	0.58	11.12	1.37	B
2	0.96	84.78	11.77	F
3	0.89	38.29	6.67	E

Main Results for each time segment

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	307.92	305.38	52.93	0.00	787.89	0.391	0.63	7.423	A
2	359.86	354.00	183.68	0.00	595.37	0.604	1.47	14.586	B
3	459.24	454.71	274.76	0.00	856.28	0.536	1.13	8.883	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	367.68	366.72	63.43	0.00	781.90	0.470	0.87	8.650	A
2	429.71	424.75	220.57	0.00	574.58	0.748	2.71	23.251	C
3	548.38	544.93	329.67	0.00	811.89	0.675	1.99	13.311	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	450.32	448.40	76.45	0.00	774.46	0.581	1.35	10.975	B
2	526.29	500.72	269.70	0.00	546.91	0.962	9.10	58.266	F
3	671.62	656.85	388.63	0.00	764.23	0.879	5.69	30.070	D

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	450.32	450.24	77.71	0.00	773.74	0.582	1.37	11.121	B
2	526.29	515.60	270.80	0.00	546.29	0.963	11.77	84.778	F
3	671.62	667.67	400.18	0.00	754.89	0.890	6.67	38.292	E

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	367.68	369.54	65.81	0.00	780.54	0.471	0.91	8.800	A
2	429.71	463.46	222.27	0.00	573.63	0.749	3.33	39.232	E
3	548.38	565.41	359.72	0.00	787.60	0.696	2.41	17.298	C

Main results: (09:15-09:30)

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	307.92	308.94	54.02	0.00	787.27	0.391	0.65	7.544	A
2	359.86	366.80	185.82	0.00	594.16	0.606	1.60	16.281	C
3	459.24	464.07	284.70	0.00	848.24	0.541	1.21	9.484	A

(Default Analysis Set) - 2037 Do Something, 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
2037 Do Something, PM	2037 Do Something	PM		ONE HOUR	17:00	18:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	691.34	F

Junction Network Options

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

Arms

Arms

Arm	Arm	Name	Description
1	1	B1531 Waveney Drive	
2	2	Kirkley Run	
3	3	B1531 Victoria 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

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	4.10	4.10	4.90	0.50	13.90	10.50	0.00	
2	3.50	3.50	4.10	1.70	15.20	13.30	0.00	
3	3.70	3.70	4.10	1.30	19.30	18.40	0.00	

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)	0.571	818.082
2		(calculated)	(calculated)	0.563	698.840
3		(calculated)	(calculated)	0.808	1078.374

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	✓	991.00	100.000
2	ONE HOUR	✓	322.00	100.000
3	ONE HOUR	✓	390.00	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	378.000	613.000
	2	195.000	0.000	127.000
	3	274.000	116.000	0.000

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

		To		
		1	2	3
From	1	0.00	0.38	0.62
	2	0.61	0.00	0.39
	3	0.70	0.30	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	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	1.46	1171.83	251.41	F
2	0.81	40.75	3.78	E
3	0.47	7.56	0.89	A

Main Results for each time segment

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	746.08	703.11	86.81	0.00	768.55	0.971	10.74	41.869	E
2	242.42	238.01	434.92	0.00	453.84	0.534	1.10	16.368	C
3	293.61	291.87	144.13	0.00	961.86	0.305	0.44	5.359	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	890.89	752.82	104.10	0.00	758.69	1.174	45.26	148.944	F
2	289.47	286.54	465.67	0.00	436.52	0.663	1.84	23.523	C
3	350.60	349.98	173.52	0.00	938.11	0.374	0.59	6.114	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	1091.11	745.05	127.37	0.00	745.41	1.464	131.78	437.125	F
2	354.53	347.84	460.87	0.00	439.22	0.807	3.51	36.775	E
3	429.40	428.23	210.65	0.00	908.10	0.473	0.88	7.484	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	1091.11	745.14	127.71	0.00	745.22	1.464	218.27	845.304	F
2	354.53	353.44	460.92	0.00	439.19	0.807	3.78	40.747	E
3	429.40	429.36	214.04	0.00	905.36	0.474	0.89	7.562	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	890.89	758.30	104.62	0.00	758.39	1.175	251.41	1118.551	F
2	289.47	296.04	469.06	0.00	434.60	0.666	2.14	27.063	D
3	350.60	351.75	179.28	0.00	933.46	0.376	0.61	6.202	A

Main results: (18:15-18:30)

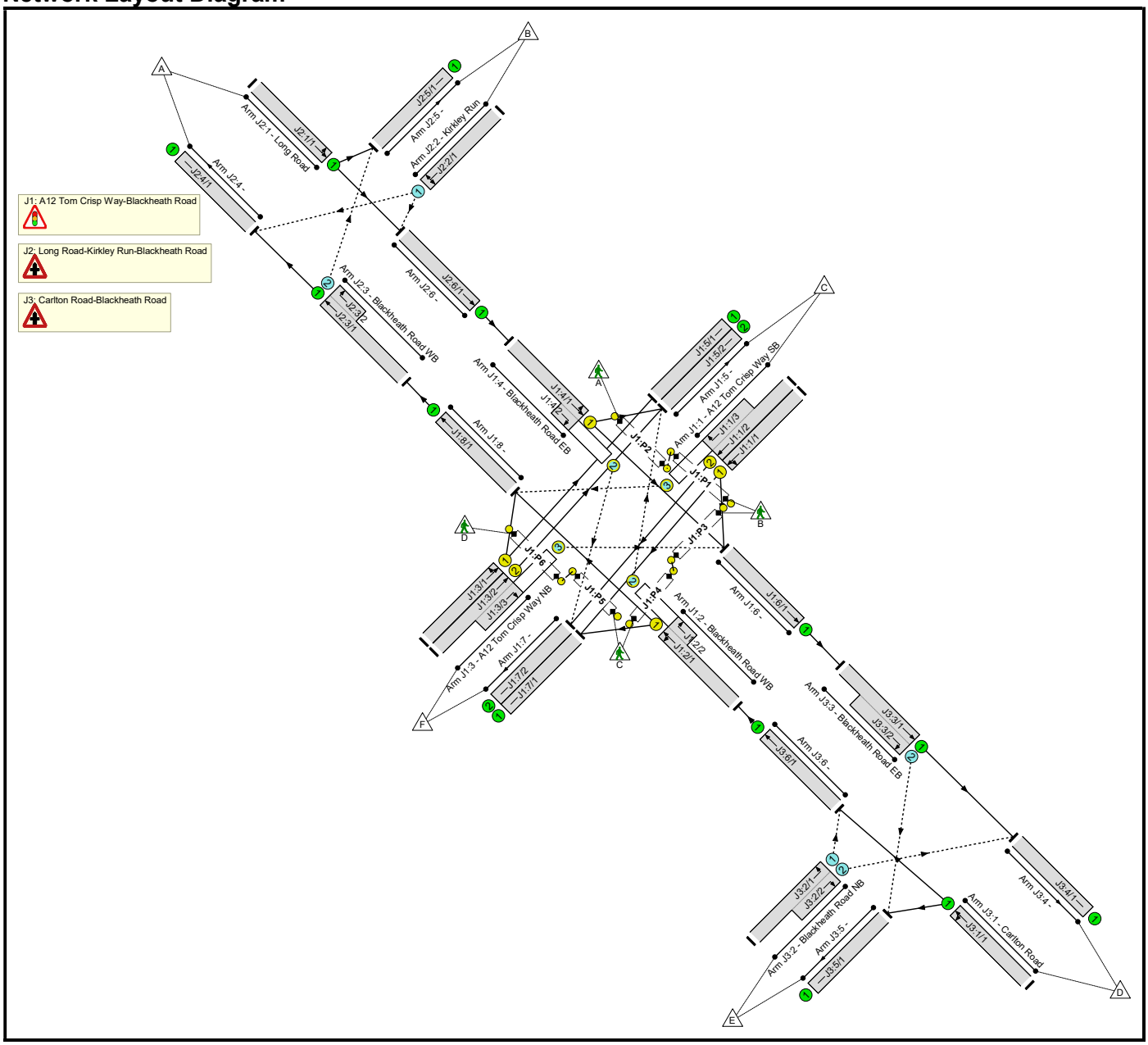
Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	746.08	765.10	87.52	0.00	768.15	0.971	246.66	1171.829	F
2	242.42	245.64	473.27	0.00	432.23	0.561	1.33	19.615	C
3	293.61	294.26	148.76	0.00	958.13	0.306	0.45	5.429	A

Full Input Data And Results

User and Project Details

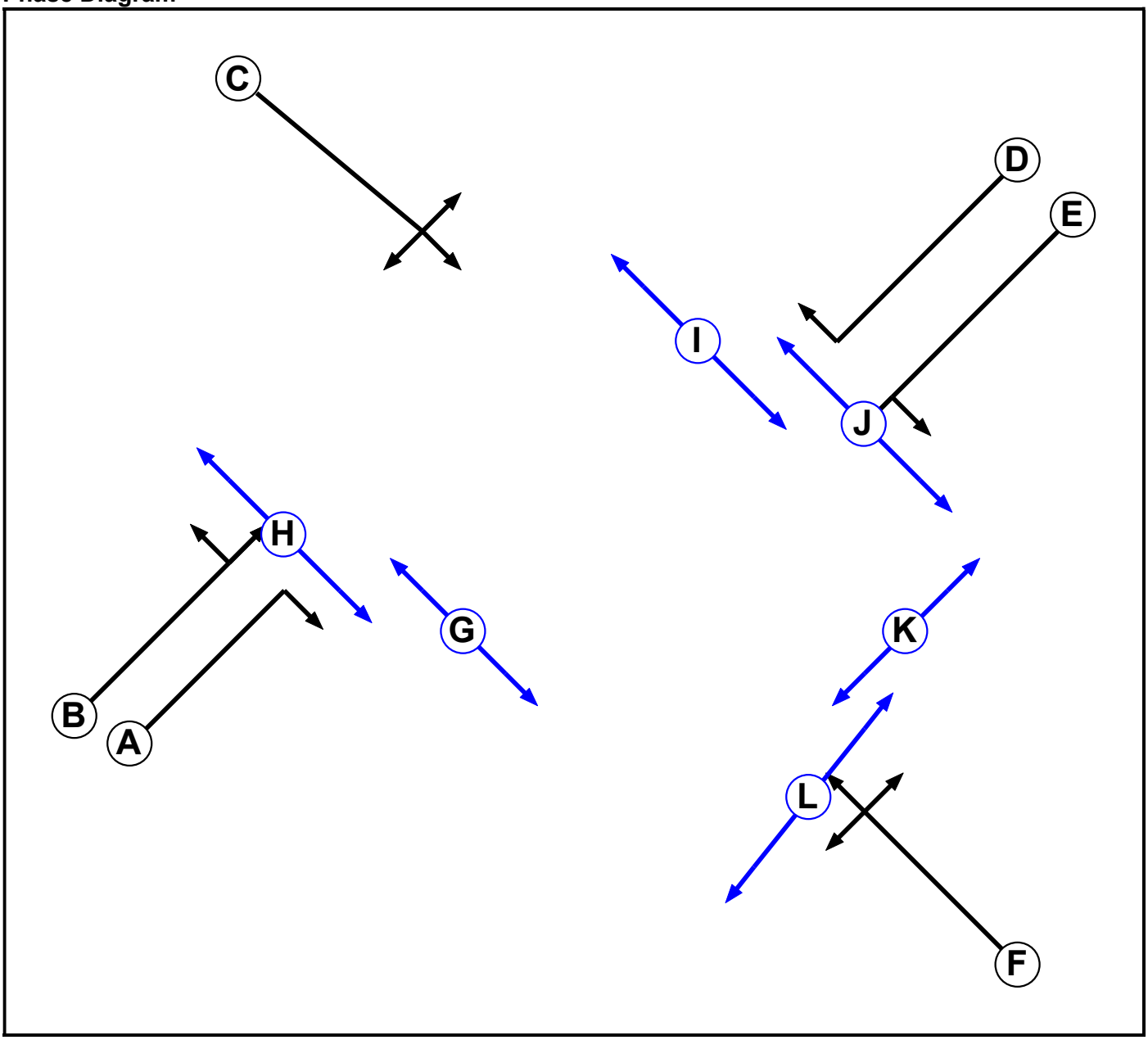
Project:	
Title:	
Location:	
Additional detail:	
File name:	08 A12 Tom Crisp Way-Blackheath Rd sig v4 - 2017-10-26.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

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	Traffic		7	7
F	Traffic		7	7
G	Pedestrian		5	5
H	Pedestrian		5	5
I	Pedestrian		5	5
J	Pedestrian		5	5
K	Pedestrian		5	5
L	Pedestrian		5	5

Phase Intergreens Matrix

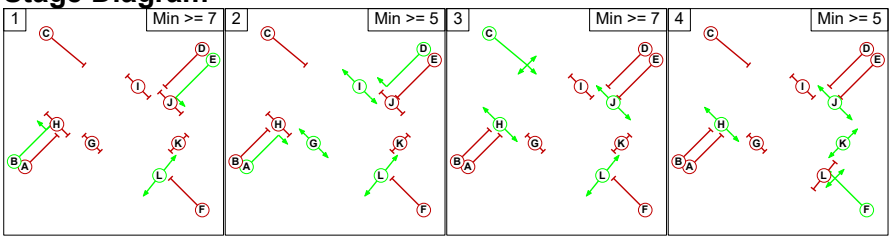
		Starting Phase											
		A	B	C	D	E	F	G	H	I	J	K	L
Terminating Phase	A		-	5	-	8	5	-	5	-	-	12	-
	B	-		8	5	-	5	-	5	9	-	-	-
	C	5	5		5	6	7	11	-	7	-	9	-
	D	-	8	7		-	5	-	-	-	5	-	-
	E	5	-	5	-		7	10	-	-	5	8	-
	F	5	7	10	5	5		8	-	12	-	-	5
	G	-	-	9	-	9	9		-	-	-	-	-
	H	13	13	-	-	-	-	-		-	-	-	-
	I	-	9	9	-	-	9	-	-		-	-	-
	J	-	-	-	13	13	-	-	-	-		-	-
	K	10	-	10	-	10	-	-	-	-	-		-
	L	-	-	-	-	-	8	-	-	-	-	-	

Phases in Stage

Stage No.	Phases in Stage
1	B E L
2	A D G I L
3	C H J L
4	F H J K

Full Input Data And Results

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	A	Gaining absolute	3	3
1	2	D	Gaining absolute	3	3

Prohibited Stage Change

		To Stage			
		1	2	3	4
From Stage	1		10	8	8
	2	9		9	12
	3	13	13		9
	4	13	13	10	

Full Input Data And Results

Give-Way Lane Input Data

Junction: J1: A12 Tom Crisp Way-Blackheath Road											
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)**
J1:1/3 (A12 Tom Crisp Way SB)	J1:8/1 (Right)	1439	0	J1:3/1	1.09	All	5.00	-	0.50	5	2.00
				J1:3/2	1.09	All					
J1:2/2 (Blackheath Road WB)	J1:5/2 (Right)	1439	0	J1:4/1	1.09	All	5.00	-	0.50	5	2.00
J1:3/3 (A12 Tom Crisp Way NB)	J1:6/1 (Right)	1439	0	J1:1/1	1.09	All	5.00	-	0.50	5	2.00
				J1:1/2	1.09	All					
J1:4/2 (Blackheath Road EB)	J1:7/2 (Right)	1439	0	J1:2/1	1.09	All	5.00	-	0.50	5	2.00

Junction: J2: Long Road-Kirkley Run-Blackheath Road											
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)**
J2:2/1 (Kirkley Run)	J2:4/1 (Right)	1439	0	J2:1/1	1.09	All	-	-	-	-	-
				J2:3/1	1.09	All					
	J2:6/1 (Left)	1439	0	J2:1/1	1.09	All					
				J2:3/1	1.09	All					
J2:3/2 (Blackheath Road WB)	J2:5/1 (Right)	1439	0	J2:1/1	1.09	All	-	-	-	-	-

Full Input Data And Results

Junction: J3: Carlton Road-Blackheath Road											
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)**
J3:2/1 (Blackheath Road NB)	J3:6/1 (Left)	1439	0	J3:1/1	1.09	All	-	-	-	-	-
J3:2/2 (Blackheath Road NB)	J3:4/1 (Right)	1439	0	J3:1/1	1.09	All	-	-	-	-	-
				J3:3/1	1.09	All					
J3:3/2 (Blackheath Road EB)	J3:5/1 (Right)	1439	0	J3:1/1	1.09	All	-	-	-	-	-

Full Input Data And Results

Lane Input Data

Junction: J1: A12 Tom Crisp Way-Blackheath Road												
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)**
J1:1/1 (A12 Tom Crisp Way SB)	U	E	2	3	60.0	Geom	-	3.40	0.00	Y	Arm J1:6 Left	13.70
											Arm J1:7 Ahead	Inf
J1:1/2 (A12 Tom Crisp Way SB)	U	E	2	3	18.1	Geom	-	3.20	0.00	Y	Arm J1:7 Ahead	Inf
J1:1/3 (A12 Tom Crisp Way SB)	O	D	2	3	6.3	Geom	-	3.30	0.00	Y	Arm J1:8 Right	17.00
J1:2/1 (Blackheath Road WB)	U	F	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J1:7 Left	Inf
											Arm J1:8 Ahead	15.70
J1:2/2 (Blackheath Road WB)	O	F	2	3	2.8	Geom	-	3.00	0.00	Y	Arm J1:5 Right	15.70
J1:3/1 (A12 Tom Crisp Way NB)	U	B	2	3	60.0	Geom	-	3.40	0.00	Y	Arm J1:5 Ahead	Inf
											Arm J1:8 Left	12.80
J1:3/2 (A12 Tom Crisp Way NB)	U	B	2	3	20.5	Geom	-	3.40	0.00	Y	Arm J1:5 Ahead	Inf
J1:3/3 (A12 Tom Crisp Way NB)	O	A	2	3	5.7	Geom	-	3.30	0.00	Y	Arm J1:6 Right	23.30
J1:4/1 (Blackheath Road EB)	U	C	2	3	60.0	Geom	-	3.60	0.00	Y	Arm J1:5 Left	9.40
											Arm J1:6 Ahead	Inf
J1:4/2 (Blackheath Road EB)	O	C	2	3	2.6	Geom	-	3.60	0.00	Y	Arm J1:7 Right	13.50
J1:5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:5/2	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:7/2	U		2	3	60.0	Inf	-	-	-	-	-	-

J1:8/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Junction: J2: Long Road-Kirkley Run-Blackheath Road

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)
J2:1/1 (Long Road)	U		2	3	60.0	Geom	-	3.25	0.00	Y	Arm J2:5 Left	Inf
											Arm J2:6 Ahead	Inf
J2:2/1 (Kirkley Run)	O		2	3	60.0	Geom	-	3.25	0.00	Y	Arm J2:4 Right	Inf
											Arm J2:6 Left	Inf
J2:3/1 (Blackheath Road WB)	U		2	3	60.0	Geom	-	3.25	0.00	Y	Arm J2:4 Ahead	Inf
J2:3/2 (Blackheath Road WB)	O		2	3	3.9	Geom	-	3.25	0.00	Y	Arm J2:5 Right	Inf
J2:4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:6/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Junction: J3: Carlton Road-Blackheath Road

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)
J3:1/1 (Carlton Road)	U		2	3	60.0	Geom	-	3.25	0.00	Y	Arm J3:5 Left	Inf
											Arm J3:6 Ahead	Inf
J3:2/1 (Blackheath Road NB)	O		2	3	60.0	Geom	-	3.25	0.00	Y	Arm J3:6 Left	Inf
J3:2/2 (Blackheath Road NB)	O		2	3	5.8	Geom	-	3.25	0.00	Y	Arm J3:4 Right	Inf
J3:3/1 (Blackheath Road EB)	U		2	3	60.0	Geom	-	3.25	0.00	Y	Arm J3:4 Ahead	Inf
J3:3/2 (Blackheath Road EB)	O		2	3	7.5	Geom	-	3.25	0.00	Y	Arm J3:5 Right	Inf
J3:4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J3:5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J3:6/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'Base 2016 AM'	08:00	09:00	01:00	
2: 'Base 2016 PM'	17:00	18:00	01:00	
3: '2022 DM AM'	08:00	09:00	01:00	
4: '2022 DM PM'	17:00	18:00	01:00	
5: '2022 DS AM'	08:00	09:00	01:00	
6: '2022 DS PM'	17:00	18:00	01:00	
7: '2037 DM AM'	08:00	09:00	01:00	
8: '2037 DM PM'	17:00	18:00	01:00	
9: '2037 DS AM'	08:00	09:00	01:00	
10: '2037 DS PM'	17:00	18:00	01:00	

Scenario 1: 'Base 2016 AM' (FG1: 'Base 2016 AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	15	33	42	11	14	115
	B	4	0	40	50	13	18	125
	C	26	51	0	42	8	319	446
	D	37	63	83	0	26	48	257
	E	18	32	40	10	0	21	121
	F	17	35	818	44	9	0	923
	Tot.	102	196	1014	188	67	420	1987

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: Base 2016 AM
Junction: J1: A12 Tom Crisp Way-Blackheath Road	
J1:1/1	249
J1:1/2 (with short)	197(In) 120(Out)
J1:1/3 (short)	77
J1:2/1 (with short)	342(In) 219(Out)
J1:2/2 (short)	123
J1:3/1	440
J1:3/2 (with short)	483(In) 430(Out)
J1:3/3 (short)	53
J1:4/1 (with short)	221(In) 189(Out)
J1:4/2 (short)	32
J1:5/1	388
J1:5/2	626
J1:6/1	219
J1:7/1	268
J1:7/2	152
J1:8/1	279
Junction: J2: Long Road-Kirkley Run-Blackheath Road	
J2:1/1	115
J2:2/1	125
J2:3/1 (with short)	279(In) 98(Out)
J2:3/2 (short)	181
J2:4/1	102
J2:5/1	196
J2:6/1	221
Junction: J3: Carlton Road-Blackheath Road	
J3:1/1	257
J3:2/1 (with short)	121(In) 111(Out)
J3:2/2 (short)	10
J3:3/1 (with short)	219(In) 178(Out)
J3:3/2 (short)	41
J3:4/1	188
J3:5/1	67

Full Input Data And Results

J3:6/1	342

Lane Saturation Flows

Junction: J1: A12 Tom Crisp Way-Blackheath Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (A12 Tom Crisp Way SB)	3.40	0.00	Y	Arm J1:6 Left	13.70	20.1 %	1913	1913
				Arm J1:7 Ahead	Inf	79.9 %		
J1:1/2 (A12 Tom Crisp Way SB)	3.20	0.00	Y	Arm J1:7 Ahead	Inf	100.0 %	1935	1935
J1:1/3 (A12 Tom Crisp Way SB)	3.30	0.00	Y	Arm J1:8 Right	17.00	100.0 %	1787	1787
J1:2/1 (Blackheath Road WB)	3.00	0.00	Y	Arm J1:7 Left	Inf	31.5 %	1797	1797
				Arm J1:8 Ahead	15.70	68.5 %		
J1:2/2 (Blackheath Road WB)	3.00	0.00	Y	Arm J1:5 Right	15.70	100.0 %	1748	1748
J1:3/1 (A12 Tom Crisp Way NB)	3.40	0.00	Y	Arm J1:5 Ahead	Inf	88.2 %	1928	1928
				Arm J1:8 Left	12.80	11.8 %		
J1:3/2 (A12 Tom Crisp Way NB)	3.40	0.00	Y	Arm J1:5 Ahead	Inf	100.0 %	1955	1955
J1:3/3 (A12 Tom Crisp Way NB)	3.30	0.00	Y	Arm J1:6 Right	23.30	100.0 %	1827	1827
J1:4/1 (Blackheath Road EB)	3.60	0.00	Y	Arm J1:5 Left	9.40	38.6 %	1860	1860
				Arm J1:6 Ahead	Inf	61.4 %		
J1:4/2 (Blackheath Road EB)	3.60	0.00	Y	Arm J1:7 Right	13.50	100.0 %	1778	1778
J1:5/1	Infinite Saturation Flow						Inf	Inf
J1:5/2	Infinite Saturation Flow						Inf	Inf
J1:6/1	Infinite Saturation Flow						Inf	Inf
J1:7/1	Infinite Saturation Flow						Inf	Inf
J1:7/2	Infinite Saturation Flow						Inf	Inf
J1:8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: Long Road-Kirkley Run-Blackheath Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Long Road)	3.25	0.00	Y	Arm J2:5 Left	Inf	13.0 %	1940	1940
				Arm J2:6 Ahead	Inf	87.0 %		
J2:2/1 (Kirkley Run)	3.25	0.00	Y	Arm J2:4 Right	Inf	3.2 %	1940	1940
				Arm J2:6 Left	Inf	96.8 %		
J2:3/1 (Blackheath Road WB)	3.25	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1940	1940
J2:3/2 (Blackheath Road WB)	3.25	0.00	Y	Arm J2:5 Right	Inf	100.0 %	1940	1940
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:5/1	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf

Junction: J3: Carlton Road-Blackheath Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J3:1/1 (Carlton Road)	3.25	0.00	Y	Arm J3:5 Left	Inf	10.1 %	1940	1940
				Arm J3:6 Ahead	Inf	89.9 %		
J3:2/1 (Blackheath Road NB)	3.25	0.00	Y	Arm J3:6 Left	Inf	100.0 %	1940	1940
J3:2/2 (Blackheath Road NB)	3.25	0.00	Y	Arm J3:4 Right	Inf	100.0 %	1940	1940
J3:3/1 (Blackheath Road EB)	3.25	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1940	1940
J3:3/2 (Blackheath Road EB)	3.25	0.00	Y	Arm J3:5 Right	Inf	100.0 %	1940	1940
J3:4/1	Infinite Saturation Flow						Inf	Inf
J3:5/1	Infinite Saturation Flow						Inf	Inf
J3:6/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: 'Base 2016 PM' (FG2: 'Base 2016 PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	8	13	42	17	21	101
	B	27	0	30	76	33	45	211
	C	40	49	0	93	38	692	912
	D	99	116	46	0	20	24	305
	E	27	32	8	5	0	3	75
	F	31	38	380	72	27	0	548
	Tot.	224	243	477	288	135	785	2152

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: Base 2016 PM
Junction: J1: A12 Tom Crisp Way-Blackheath Road	
J1:1/1	426
J1:1/2 (with short)	486(In) 397(Out)
J1:1/3 (short)	89
J1:2/1 (with short)	355(In) 301(Out)
J1:2/2 (short)	54
J1:3/1	274
J1:3/2 (with short)	274(In) 175(Out)
J1:3/3 (short)	99
J1:4/1 (with short)	277(In) 211(Out)
J1:4/2 (short)	66
J1:5/1	205
J1:5/2	272
J1:6/1	398
J1:7/1	322
J1:7/2	463
J1:8/1	432
Junction: J2: Long Road-Kirkley Run-Blackheath Road	
J2:1/1	101
J2:2/1	211
J2:3/1 (with short)	432(In) 197(Out)
J2:3/2 (short)	235
J2:4/1	224
J2:5/1	243
J2:6/1	277
Junction: J3: Carlton Road-Blackheath Road	
J3:1/1	305
J3:2/1 (with short)	75(In) 70(Out)
J3:2/2 (short)	5
J3:3/1 (with short)	398(In) 283(Out)
J3:3/2 (short)	115
J3:4/1	288
J3:5/1	135

Full Input Data And Results

J3:6/1	355

Lane Saturation Flows

Junction: J1: A12 Tom Crisp Way-Blackheath Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 Tom Crisp Way SB)	3.40	0.00	Y	Arm J1:6 Left	13.70	30.8 %	1891	1891
				Arm J1:7 Ahead	Inf	69.2 %		
J1:1/2 (A12 Tom Crisp Way SB)	3.20	0.00	Y	Arm J1:7 Ahead	Inf	100.0 %	1935	1935
J1:1/3 (A12 Tom Crisp Way SB)	3.30	0.00	Y	Arm J1:8 Right	17.00	100.0 %	1787	1787
J1:2/1 (Blackheath Road WB)	3.00	0.00	Y	Arm J1:7 Left	Inf	9.0 %	1762	1762
				Arm J1:8 Ahead	15.70	91.0 %		
J1:2/2 (Blackheath Road WB)	3.00	0.00	Y	Arm J1:5 Right	15.70	100.0 %	1748	1748
J1:3/1 (A12 Tom Crisp Way NB)	3.40	0.00	Y	Arm J1:5 Ahead	Inf	74.8 %	1899	1899
				Arm J1:8 Left	12.80	25.2 %		
J1:3/2 (A12 Tom Crisp Way NB)	3.40	0.00	Y	Arm J1:5 Ahead	Inf	100.0 %	1955	1955
J1:3/3 (A12 Tom Crisp Way NB)	3.30	0.00	Y	Arm J1:6 Right	23.30	100.0 %	1827	1827
J1:4/1 (Blackheath Road EB)	3.60	0.00	Y	Arm J1:5 Left	9.40	20.4 %	1913	1913
				Arm J1:6 Ahead	Inf	79.6 %		
J1:4/2 (Blackheath Road EB)	3.60	0.00	Y	Arm J1:7 Right	13.50	100.0 %	1778	1778
J1:5/1	Infinite Saturation Flow						Inf	Inf
J1:5/2	Infinite Saturation Flow						Inf	Inf
J1:6/1	Infinite Saturation Flow						Inf	Inf
J1:7/1	Infinite Saturation Flow						Inf	Inf
J1:7/2	Infinite Saturation Flow						Inf	Inf
J1:8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: Long Road-Kirkley Run-Blackheath Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Long Road)	3.25	0.00	Y	Arm J2:5 Left	Inf	7.9 %	1940	1940
				Arm J2:6 Ahead	Inf	92.1 %		
J2:2/1 (Kirkley Run)	3.25	0.00	Y	Arm J2:4 Right	Inf	12.8 %	1940	1940
				Arm J2:6 Left	Inf	87.2 %		
J2:3/1 (Blackheath Road WB)	3.25	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1940	1940
J2:3/2 (Blackheath Road WB)	3.25	0.00	Y	Arm J2:5 Right	Inf	100.0 %	1940	1940
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:5/1	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf

Junction: J3: Carlton Road-Blackheath Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J3:1/1 (Carlton Road)	3.25	0.00	Y	Arm J3:5 Left	Inf	6.6 %	1940	1940
				Arm J3:6 Ahead	Inf	93.4 %		
J3:2/1 (Blackheath Road NB)	3.25	0.00	Y	Arm J3:6 Left	Inf	100.0 %	1940	1940
J3:2/2 (Blackheath Road NB)	3.25	0.00	Y	Arm J3:4 Right	Inf	100.0 %	1940	1940
J3:3/1 (Blackheath Road EB)	3.25	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1940	1940
J3:3/2 (Blackheath Road EB)	3.25	0.00	Y	Arm J3:5 Right	Inf	100.0 %	1940	1940
J3:4/1	Infinite Saturation Flow						Inf	Inf
J3:5/1	Infinite Saturation Flow						Inf	Inf
J3:6/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2022 DM AM' (FG3: '2022 DM AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	13	17	33	12	17	92
	B	2	0	29	48	20	29	128
	C	14	42	0	48	16	355	475
	D	33	79	75	0	15	41	243
	E	14	36	31	5	0	15	101
	F	12	38	881	43	14	0	988
	Tot.	75	208	1033	177	77	457	2027

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2022 DM AM
Junction: J1: A12 Tom Crisp Way-Blackheath Road	
J1:1/1	207
J1:1/2 (with short)	268(In) 212(Out)
J1:1/3 (short)	56
J1:2/1 (with short)	324(In) 218(Out)
J1:2/2 (short)	106
J1:3/1	473
J1:3/2 (with short)	515(In) 458(Out)
J1:3/3 (short)	57
J1:4/1 (with short)	205(In) 159(Out)
J1:4/2 (short)	46
J1:5/1	423
J1:5/2	610
J1:6/1	234
J1:7/1	199
J1:7/2	258
J1:8/1	268
Junction: J2: Long Road-Kirkley Run-Blackheath Road	
J2:1/1	92
J2:2/1	128
J2:3/1 (with short)	268(In) 73(Out)
J2:3/2 (short)	195
J2:4/1	75
J2:5/1	208
J2:6/1	205
Junction: J3: Carlton Road-Blackheath Road	
J3:1/1	243
J3:2/1 (with short)	101(In) 96(Out)
J3:2/2 (short)	5
J3:3/1 (with short)	234(In) 172(Out)
J3:3/2 (short)	62
J3:4/1	177
J3:5/1	77

Full Input Data And Results

J3:6/1	324

Lane Saturation Flows

Junction: J1: A12 Tom Crisp Way-Blackheath Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 Tom Crisp Way SB)	3.40	0.00	Y	Arm J1:6 Left	13.70	30.9 %	1891	1891
				Arm J1:7 Ahead	Inf	69.1 %		
J1:1/2 (A12 Tom Crisp Way SB)	3.20	0.00	Y	Arm J1:7 Ahead	Inf	100.0 %	1935	1935
J1:1/3 (A12 Tom Crisp Way SB)	3.30	0.00	Y	Arm J1:8 Right	17.00	100.0 %	1787	1787
J1:2/1 (Blackheath Road WB)	3.00	0.00	Y	Arm J1:7 Left	Inf	25.7 %	1788	1788
				Arm J1:8 Ahead	15.70	74.3 %		
J1:2/2 (Blackheath Road WB)	3.00	0.00	Y	Arm J1:5 Right	15.70	100.0 %	1748	1748
J1:3/1 (A12 Tom Crisp Way NB)	3.40	0.00	Y	Arm J1:5 Ahead	Inf	89.4 %	1931	1931
				Arm J1:8 Left	12.80	10.6 %		
J1:3/2 (A12 Tom Crisp Way NB)	3.40	0.00	Y	Arm J1:5 Ahead	Inf	100.0 %	1955	1955
J1:3/3 (A12 Tom Crisp Way NB)	3.30	0.00	Y	Arm J1:6 Right	23.30	100.0 %	1827	1827
J1:4/1 (Blackheath Road EB)	3.60	0.00	Y	Arm J1:5 Left	9.40	28.9 %	1888	1888
				Arm J1:6 Ahead	Inf	71.1 %		
J1:4/2 (Blackheath Road EB)	3.60	0.00	Y	Arm J1:7 Right	13.50	100.0 %	1778	1778
J1:5/1	Infinite Saturation Flow						Inf	Inf
J1:5/2	Infinite Saturation Flow						Inf	Inf
J1:6/1	Infinite Saturation Flow						Inf	Inf
J1:7/1	Infinite Saturation Flow						Inf	Inf
J1:7/2	Infinite Saturation Flow						Inf	Inf
J1:8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: Long Road-Kirkley Run-Blackheath Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Long Road)	3.25	0.00	Y	Arm J2:5 Left	Inf	14.1 %	1940	1940
				Arm J2:6 Ahead	Inf	85.9 %		
J2:2/1 (Kirkley Run)	3.25	0.00	Y	Arm J2:4 Right	Inf	1.6 %	1940	1940
				Arm J2:6 Left	Inf	98.4 %		
J2:3/1 (Blackheath Road WB)	3.25	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1940	1940
J2:3/2 (Blackheath Road WB)	3.25	0.00	Y	Arm J2:5 Right	Inf	100.0 %	1940	1940
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:5/1	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf

Junction: J3: Carlton Road-Blackheath Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J3:1/1 (Carlton Road)	3.25	0.00	Y	Arm J3:5 Left	Inf	6.2 %	1940	1940
				Arm J3:6 Ahead	Inf	93.8 %		
J3:2/1 (Blackheath Road NB)	3.25	0.00	Y	Arm J3:6 Left	Inf	100.0 %	1940	1940
J3:2/2 (Blackheath Road NB)	3.25	0.00	Y	Arm J3:4 Right	Inf	100.0 %	1940	1940
J3:3/1 (Blackheath Road EB)	3.25	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1940	1940
J3:3/2 (Blackheath Road EB)	3.25	0.00	Y	Arm J3:5 Right	Inf	100.0 %	1940	1940
J3:4/1	Infinite Saturation Flow						Inf	Inf
J3:5/1	Infinite Saturation Flow						Inf	Inf
J3:6/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2022 DM PM' (FG4: '2022 DM PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	8	14	44	18	22	106
	B	29	0	31	79	35	48	222
	C	37	51	0	91	38	730	947
	D	96	121	50	0	22	24	313
	E	27	35	9	2	0	4	77
	F	30	42	397	75	30	0	574
	Tot.	219	257	501	291	143	828	2239

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2022 DM PM
Junction: J1: A12 Tom Crisp Way-Blackheath Road	
J1:1/1	445
J1:1/2 (with short)	502(In) 414(Out)
J1:1/3 (short)	88
J1:2/1 (with short)	366(In) 307(Out)
J1:2/2 (short)	59
J1:3/1	299
J1:3/2 (with short)	275(In) 170(Out)
J1:3/3 (short)	105
J1:4/1 (with short)	291(In) 221(Out)
J1:4/2 (short)	70
J1:5/1	227
J1:5/2	274
J1:6/1	410
J1:7/1	344
J1:7/2	484
J1:8/1	439
Junction: J2: Long Road-Kirkley Run-Blackheath Road	
J2:1/1	106
J2:2/1	222
J2:3/1 (with short)	439(In) 190(Out)
J2:3/2 (short)	249
J2:4/1	219
J2:5/1	257
J2:6/1	291
Junction: J3: Carlton Road-Blackheath Road	
J3:1/1	313
J3:2/1 (with short)	77(In) 75(Out)
J3:2/2 (short)	2
J3:3/1 (with short)	410(In) 289(Out)
J3:3/2 (short)	121
J3:4/1	291
J3:5/1	143

Full Input Data And Results

J3:6/1	366

Lane Saturation Flows

Junction: J1: A12 Tom Crisp Way-Blackheath Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (A12 Tom Crisp Way SB)	3.40	0.00	Y	Arm J1:6 Left	13.70	29.0 %	1895	1895
				Arm J1:7 Ahead	Inf	71.0 %		
J1:1/2 (A12 Tom Crisp Way SB)	3.20	0.00	Y	Arm J1:7 Ahead	Inf	100.0 %	1935	1935
J1:1/3 (A12 Tom Crisp Way SB)	3.30	0.00	Y	Arm J1:8 Right	17.00	100.0 %	1787	1787
J1:2/1 (Blackheath Road WB)	3.00	0.00	Y	Arm J1:7 Left	Inf	9.1 %	1762	1762
				Arm J1:8 Ahead	15.70	90.9 %		
J1:2/2 (Blackheath Road WB)	3.00	0.00	Y	Arm J1:5 Right	15.70	100.0 %	1748	1748
J1:3/1 (A12 Tom Crisp Way NB)	3.40	0.00	Y	Arm J1:5 Ahead	Inf	75.9 %	1901	1901
				Arm J1:8 Left	12.80	24.1 %		
J1:3/2 (A12 Tom Crisp Way NB)	3.40	0.00	Y	Arm J1:5 Ahead	Inf	100.0 %	1955	1955
J1:3/3 (A12 Tom Crisp Way NB)	3.30	0.00	Y	Arm J1:6 Right	23.30	100.0 %	1827	1827
J1:4/1 (Blackheath Road EB)	3.60	0.00	Y	Arm J1:5 Left	9.40	20.4 %	1913	1913
				Arm J1:6 Ahead	Inf	79.6 %		
J1:4/2 (Blackheath Road EB)	3.60	0.00	Y	Arm J1:7 Right	13.50	100.0 %	1778	1778
J1:5/1	Infinite Saturation Flow						Inf	Inf
J1:5/2	Infinite Saturation Flow						Inf	Inf
J1:6/1	Infinite Saturation Flow						Inf	Inf
J1:7/1	Infinite Saturation Flow						Inf	Inf
J1:7/2	Infinite Saturation Flow						Inf	Inf
J1:8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: Long Road-Kirkley Run-Blackheath Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Long Road)	3.25	0.00	Y	Arm J2:5 Left	Inf	7.5 %	1940	1940
				Arm J2:6 Ahead	Inf	92.5 %		
J2:2/1 (Kirkley Run)	3.25	0.00	Y	Arm J2:4 Right	Inf	13.1 %	1940	1940
				Arm J2:6 Left	Inf	86.9 %		
J2:3/1 (Blackheath Road WB)	3.25	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1940	1940
J2:3/2 (Blackheath Road WB)	3.25	0.00	Y	Arm J2:5 Right	Inf	100.0 %	1940	1940
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:5/1	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf

Junction: J3: Carlton Road-Blackheath Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J3:1/1 (Carlton Road)	3.25	0.00	Y	Arm J3:5 Left	Inf	7.0 %	1940	1940
				Arm J3:6 Ahead	Inf	93.0 %		
J3:2/1 (Blackheath Road NB)	3.25	0.00	Y	Arm J3:6 Left	Inf	100.0 %	1940	1940
J3:2/2 (Blackheath Road NB)	3.25	0.00	Y	Arm J3:4 Right	Inf	100.0 %	1940	1940
J3:3/1 (Blackheath Road EB)	3.25	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1940	1940
J3:3/2 (Blackheath Road EB)	3.25	0.00	Y	Arm J3:5 Right	Inf	100.0 %	1940	1940
J3:4/1	Infinite Saturation Flow						Inf	Inf
J3:5/1	Infinite Saturation Flow						Inf	Inf
J3:6/1	Infinite Saturation Flow						Inf	Inf

Scenario 5: '2022 DS AM' (FG5: '2022 DS AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	75	27	42	11	16	171
	B	10	0	22	37	9	13	91
	C	23	25	0	109	30	640	827
	D	34	38	107	0	27	48	254
	E	19	21	63	8	0	26	137
	F	4	5	1015	42	8	0	1074
	Tot.	90	164	1234	238	85	743	2554

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: 2022 DS AM
Junction: J1: A12 Tom Crisp Way-Blackheath Road	
J1:1/1	389
J1:1/2 (with short)	438(In) 390(Out)
J1:1/3 (short)	48
J1:2/1 (with short)	356(In) 186(Out)
J1:2/2 (short)	170
J1:3/1	521
J1:3/2 (with short)	553(In) 503(Out)
J1:3/3 (short)	50
J1:4/1 (with short)	177(In) 148(Out)
J1:4/2 (short)	29
J1:5/1	512
J1:5/2	722
J1:6/1	288
J1:7/1	324
J1:7/2	419
J1:8/1	169
Junction: J2: Long Road-Kirkley Run-Blackheath Road	
J2:1/1	171
J2:2/1	91
J2:3/1 (with short)	169(In) 80(Out)
J2:3/2 (short)	89
J2:4/1	90
J2:5/1	164
J2:6/1	177
Junction: J3: Carlton Road-Blackheath Road	
J3:1/1	254
J3:2/1 (with short)	137(In) 129(Out)
J3:2/2 (short)	8
J3:3/1 (with short)	288(In) 230(Out)
J3:3/2 (short)	58
J3:4/1	238
J3:5/1	85

Full Input Data And Results

J3:6/1	356

Lane Saturation Flows

Junction: J1: A12 Tom Crisp Way-Blackheath Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (A12 Tom Crisp Way SB)	3.40	0.00	Y	Arm J1:6 Left	13.70	35.7 %	1881	1881
				Arm J1:7 Ahead	Inf	64.3 %		
J1:1/2 (A12 Tom Crisp Way SB)	3.20	0.00	Y	Arm J1:7 Ahead	Inf	100.0 %	1935	1935
J1:1/3 (A12 Tom Crisp Way SB)	3.30	0.00	Y	Arm J1:8 Right	17.00	100.0 %	1787	1787
J1:2/1 (Blackheath Road WB)	3.00	0.00	Y	Arm J1:7 Left	Inf	39.8 %	1811	1811
				Arm J1:8 Ahead	15.70	60.2 %		
J1:2/2 (Blackheath Road WB)	3.00	0.00	Y	Arm J1:5 Right	15.70	100.0 %	1748	1748
J1:3/1 (A12 Tom Crisp Way NB)	3.40	0.00	Y	Arm J1:5 Ahead	Inf	98.3 %	1951	1951
				Arm J1:8 Left	12.80	1.7 %		
J1:3/2 (A12 Tom Crisp Way NB)	3.40	0.00	Y	Arm J1:5 Ahead	Inf	100.0 %	1955	1955
J1:3/3 (A12 Tom Crisp Way NB)	3.30	0.00	Y	Arm J1:6 Right	23.30	100.0 %	1827	1827
J1:4/1 (Blackheath Road EB)	3.60	0.00	Y	Arm J1:5 Left	9.40	33.1 %	1876	1876
				Arm J1:6 Ahead	Inf	66.9 %		
J1:4/2 (Blackheath Road EB)	3.60	0.00	Y	Arm J1:7 Right	13.50	100.0 %	1778	1778
J1:5/1	Infinite Saturation Flow						Inf	Inf
J1:5/2	Infinite Saturation Flow						Inf	Inf
J1:6/1	Infinite Saturation Flow						Inf	Inf
J1:7/1	Infinite Saturation Flow						Inf	Inf
J1:7/2	Infinite Saturation Flow						Inf	Inf
J1:8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: Long Road-Kirkley Run-Blackheath Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Long Road)	3.25	0.00	Y	Arm J2:5 Left	Inf	43.9 %	1940	1940
				Arm J2:6 Ahead	Inf	56.1 %		
J2:2/1 (Kirkley Run)	3.25	0.00	Y	Arm J2:4 Right	Inf	11.0 %	1940	1940
				Arm J2:6 Left	Inf	89.0 %		
J2:3/1 (Blackheath Road WB)	3.25	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1940	1940
J2:3/2 (Blackheath Road WB)	3.25	0.00	Y	Arm J2:5 Right	Inf	100.0 %	1940	1940
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:5/1	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf

Junction: J3: Carlton Road-Blackheath Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J3:1/1 (Carlton Road)	3.25	0.00	Y	Arm J3:5 Left	Inf	10.6 %	1940	1940
				Arm J3:6 Ahead	Inf	89.4 %		
J3:2/1 (Blackheath Road NB)	3.25	0.00	Y	Arm J3:6 Left	Inf	100.0 %	1940	1940
J3:2/2 (Blackheath Road NB)	3.25	0.00	Y	Arm J3:4 Right	Inf	100.0 %	1940	1940
J3:3/1 (Blackheath Road EB)	3.25	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1940	1940
J3:3/2 (Blackheath Road EB)	3.25	0.00	Y	Arm J3:5 Right	Inf	100.0 %	1940	1940
J3:4/1	Infinite Saturation Flow						Inf	Inf
J3:5/1	Infinite Saturation Flow						Inf	Inf
J3:6/1	Infinite Saturation Flow						Inf	Inf

Scenario 6: '2022 DS PM' (FG6: '2022 DS PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	21	18	51	20	3	113
	B	94	0	19	55	22	4	194
	C	26	33	0	139	61	920	1179
	D	81	96	123	0	21	25	346
	E	25	30	35	2	0	4	96
	F	26	32	602	73	28	0	761
	Tot.	252	212	797	320	152	956	2689

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 6: 2022 DS PM
Junction: J1: A12 Tom Crisp Way-Blackheath Road	
J1:1/1	568
J1:1/2 (with short)	611(In) 552(Out)
J1:1/3 (short)	59
J1:2/1 (with short)	419(In) 261(Out)
J1:2/2 (short)	158
J1:3/1	336
J1:3/2 (with short)	425(In) 324(Out)
J1:3/3 (short)	101
J1:4/1 (with short)	192(In) 185(Out)
J1:4/2 (short)	7
J1:5/1	278
J1:5/2	519
J1:6/1	449
J1:7/1	397
J1:7/2	559
J1:8/1	349
Junction: J2: Long Road-Kirkley Run-Blackheath Road	
J2:1/1	113
J2:2/1	194
J2:3/1 (with short)	349(In) 158(Out)
J2:3/2 (short)	191
J2:4/1	252
J2:5/1	212
J2:6/1	192
Junction: J3: Carlton Road-Blackheath Road	
J3:1/1	346
J3:2/1 (with short)	96(In) 94(Out)
J3:2/2 (short)	2
J3:3/1 (with short)	449(In) 318(Out)
J3:3/2 (short)	131
J3:4/1	320
J3:5/1	152

Full Input Data And Results

J3:6/1	419

Lane Saturation Flows

Junction: J1: A12 Tom Crisp Way-Blackheath Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 Tom Crisp Way SB)	3.40	0.00	Y	Arm J1:6 Left	13.70	35.2 %	1882	1882
				Arm J1:7 Ahead	Inf	64.8 %		
J1:1/2 (A12 Tom Crisp Way SB)	3.20	0.00	Y	Arm J1:7 Ahead	Inf	100.0 %	1935	1935
J1:1/3 (A12 Tom Crisp Way SB)	3.30	0.00	Y	Arm J1:8 Right	17.00	100.0 %	1787	1787
J1:2/1 (Blackheath Road WB)	3.00	0.00	Y	Arm J1:7 Left	Inf	11.1 %	1765	1765
				Arm J1:8 Ahead	15.70	88.9 %		
J1:2/2 (Blackheath Road WB)	3.00	0.00	Y	Arm J1:5 Right	15.70	100.0 %	1748	1748
J1:3/1 (A12 Tom Crisp Way NB)	3.40	0.00	Y	Arm J1:5 Ahead	Inf	82.7 %	1916	1916
				Arm J1:8 Left	12.80	17.3 %		
J1:3/2 (A12 Tom Crisp Way NB)	3.40	0.00	Y	Arm J1:5 Ahead	Inf	100.0 %	1955	1955
J1:3/3 (A12 Tom Crisp Way NB)	3.30	0.00	Y	Arm J1:6 Right	23.30	100.0 %	1827	1827
J1:4/1 (Blackheath Road EB)	3.60	0.00	Y	Arm J1:5 Left	9.40	20.0 %	1914	1914
				Arm J1:6 Ahead	Inf	80.0 %		
J1:4/2 (Blackheath Road EB)	3.60	0.00	Y	Arm J1:7 Right	13.50	100.0 %	1778	1778
J1:5/1	Infinite Saturation Flow						Inf	Inf
J1:5/2	Infinite Saturation Flow						Inf	Inf
J1:6/1	Infinite Saturation Flow						Inf	Inf
J1:7/1	Infinite Saturation Flow						Inf	Inf
J1:7/2	Infinite Saturation Flow						Inf	Inf
J1:8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: Long Road-Kirkley Run-Blackheath Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Long Road)	3.25	0.00	Y	Arm J2:5 Left	Inf	18.6 %	1940	1940
				Arm J2:6 Ahead	Inf	81.4 %		
J2:2/1 (Kirkley Run)	3.25	0.00	Y	Arm J2:4 Right	Inf	48.5 %	1940	1940
				Arm J2:6 Left	Inf	51.5 %		
J2:3/1 (Blackheath Road WB)	3.25	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1940	1940
J2:3/2 (Blackheath Road WB)	3.25	0.00	Y	Arm J2:5 Right	Inf	100.0 %	1940	1940
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:5/1	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf

Junction: J3: Carlton Road-Blackheath Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J3:1/1 (Carlton Road)	3.25	0.00	Y	Arm J3:5 Left	Inf	6.1 %	1940	1940
				Arm J3:6 Ahead	Inf	93.9 %		
J3:2/1 (Blackheath Road NB)	3.25	0.00	Y	Arm J3:6 Left	Inf	100.0 %	1940	1940
J3:2/2 (Blackheath Road NB)	3.25	0.00	Y	Arm J3:4 Right	Inf	100.0 %	1940	1940
J3:3/1 (Blackheath Road EB)	3.25	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1940	1940
J3:3/2 (Blackheath Road EB)	3.25	0.00	Y	Arm J3:5 Right	Inf	100.0 %	1940	1940
J3:4/1	Infinite Saturation Flow						Inf	Inf
J3:5/1	Infinite Saturation Flow						Inf	Inf
J3:6/1	Infinite Saturation Flow						Inf	Inf

Scenario 7: '2037 DM AM' (FG7: '2037 DM AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	22	32	57	14	22	147
	B	7	0	33	58	15	22	135
	C	25	54	0	55	11	412	557
	D	34	64	101	0	30	56	285
	E	17	33	51	9	0	26	136
	F	19	43	853	48	9	0	972
	Tot.	102	216	1070	227	79	538	2232

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 7: 2037 DM AM
Junction: J1: A12 Tom Crisp Way-Blackheath Road	
J1:1/1	237
J1:1/2 (with short)	320(In) 241(Out)
J1:1/3 (short)	79
J1:2/1 (with short)	382(In) 230(Out)
J1:2/2 (short)	152
J1:3/1	464
J1:3/2 (with short)	508(In) 451(Out)
J1:3/3 (short)	57
J1:4/1 (with short)	253(In) 209(Out)
J1:4/2 (short)	44
J1:5/1	402
J1:5/2	668
J1:6/1	267
J1:7/1	253
J1:7/2	285
J1:8/1	289
Junction: J2: Long Road-Kirkley Run-Blackheath Road	
J2:1/1	147
J2:2/1	135
J2:3/1 (with short)	289(In) 95(Out)
J2:3/2 (short)	194
J2:4/1	102
J2:5/1	216
J2:6/1	253
Junction: J3: Carlton Road-Blackheath Road	
J3:1/1	285
J3:2/1 (with short)	136(In) 127(Out)
J3:2/2 (short)	9
J3:3/1 (with short)	267(In) 218(Out)
J3:3/2 (short)	49
J3:4/1	227
J3:5/1	79

Full Input Data And Results

J3:6/1	382

Lane Saturation Flows

Junction: J1: A12 Tom Crisp Way-Blackheath Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 Tom Crisp Way SB)	3.40	0.00	Y	Arm J1:6 Left	13.70	27.8 %	1897	1897
				Arm J1:7 Ahead	Inf	72.2 %		
J1:1/2 (A12 Tom Crisp Way SB)	3.20	0.00	Y	Arm J1:7 Ahead	Inf	100.0 %	1935	1935
J1:1/3 (A12 Tom Crisp Way SB)	3.30	0.00	Y	Arm J1:8 Right	17.00	100.0 %	1787	1787
J1:2/1 (Blackheath Road WB)	3.00	0.00	Y	Arm J1:7 Left	Inf	35.7 %	1804	1804
				Arm J1:8 Ahead	15.70	64.3 %		
J1:2/2 (Blackheath Road WB)	3.00	0.00	Y	Arm J1:5 Right	15.70	100.0 %	1748	1748
J1:3/1 (A12 Tom Crisp Way NB)	3.40	0.00	Y	Arm J1:5 Ahead	Inf	86.6 %	1925	1925
				Arm J1:8 Left	12.80	13.4 %		
J1:3/2 (A12 Tom Crisp Way NB)	3.40	0.00	Y	Arm J1:5 Ahead	Inf	100.0 %	1955	1955
J1:3/3 (A12 Tom Crisp Way NB)	3.30	0.00	Y	Arm J1:6 Right	23.30	100.0 %	1827	1827
J1:4/1 (Blackheath Road EB)	3.60	0.00	Y	Arm J1:5 Left	9.40	31.1 %	1882	1882
				Arm J1:6 Ahead	Inf	68.9 %		
J1:4/2 (Blackheath Road EB)	3.60	0.00	Y	Arm J1:7 Right	13.50	100.0 %	1778	1778
J1:5/1	Infinite Saturation Flow						Inf	Inf
J1:5/2	Infinite Saturation Flow						Inf	Inf
J1:6/1	Infinite Saturation Flow						Inf	Inf
J1:7/1	Infinite Saturation Flow						Inf	Inf
J1:7/2	Infinite Saturation Flow						Inf	Inf
J1:8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: Long Road-Kirkley Run-Blackheath Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Long Road)	3.25	0.00	Y	Arm J2:5 Left	Inf	15.0 %	1940	1940
				Arm J2:6 Ahead	Inf	85.0 %		
J2:2/1 (Kirkley Run)	3.25	0.00	Y	Arm J2:4 Right	Inf	5.2 %	1940	1940
				Arm J2:6 Left	Inf	94.8 %		
J2:3/1 (Blackheath Road WB)	3.25	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1940	1940
J2:3/2 (Blackheath Road WB)	3.25	0.00	Y	Arm J2:5 Right	Inf	100.0 %	1940	1940
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:5/1	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf

Junction: J3: Carlton Road-Blackheath Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J3:1/1 (Carlton Road)	3.25	0.00	Y	Arm J3:5 Left	Inf	10.5 %	1940	1940
				Arm J3:6 Ahead	Inf	89.5 %		
J3:2/1 (Blackheath Road NB)	3.25	0.00	Y	Arm J3:6 Left	Inf	100.0 %	1940	1940
J3:2/2 (Blackheath Road NB)	3.25	0.00	Y	Arm J3:4 Right	Inf	100.0 %	1940	1940
J3:3/1 (Blackheath Road EB)	3.25	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1940	1940
J3:3/2 (Blackheath Road EB)	3.25	0.00	Y	Arm J3:5 Right	Inf	100.0 %	1940	1940
J3:4/1	Infinite Saturation Flow						Inf	Inf
J3:5/1	Infinite Saturation Flow						Inf	Inf
J3:6/1	Infinite Saturation Flow						Inf	Inf

Scenario 8: '2037 DM PM' (FG8: '2037 DM PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	10	10	18	56	6	100
	B	88	0	22	33	98	16	257
	C	37	54	0	19	69	841	1020
	D	94	124	102	0	24	25	369
	E	35	47	33	2	0	5	122
	F	31	46	399	27	88	0	591
	Tot.	285	281	566	99	335	893	2459

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 8: 2037 DM PM
Junction: J1: A12 Tom Crisp Way-Blackheath Road	
J1:1/1	486
J1:1/2 (with short)	534(In) 443(Out)
J1:1/3 (short)	91
J1:2/1 (with short)	465(In) 330(Out)
J1:2/2 (short)	135
J1:3/1	345
J1:3/2 (with short)	246(In) 131(Out)
J1:3/3 (short)	115
J1:4/1 (with short)	259(In) 237(Out)
J1:4/2 (short)	22
J1:5/1	268
J1:5/2	298
J1:6/1	408
J1:7/1	428
J1:7/2	465
J1:8/1	468
Junction: J2: Long Road-Kirkley Run-Blackheath Road	
J2:1/1	100
J2:2/1	257
J2:3/1 (with short)	468(In) 197(Out)
J2:3/2 (short)	271
J2:4/1	285
J2:5/1	281
J2:6/1	259
Junction: J3: Carlton Road-Blackheath Road	
J3:1/1	369
J3:2/1 (with short)	122(In) 120(Out)
J3:2/2 (short)	2
J3:3/1 (with short)	408(In) 97(Out)
J3:3/2 (short)	311
J3:4/1	99
J3:5/1	335

Full Input Data And Results

J3:6/1	465

Lane Saturation Flows

Junction: J1: A12 Tom Crisp Way-Blackheath Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (A12 Tom Crisp Way SB)	3.40	0.00	Y	Arm J1:6 Left	13.70	18.1 %	1917	1917
				Arm J1:7 Ahead	Inf	81.9 %		
J1:1/2 (A12 Tom Crisp Way SB)	3.20	0.00	Y	Arm J1:7 Ahead	Inf	100.0 %	1935	1935
J1:1/3 (A12 Tom Crisp Way SB)	3.30	0.00	Y	Arm J1:8 Right	17.00	100.0 %	1787	1787
J1:2/1 (Blackheath Road WB)	3.00	0.00	Y	Arm J1:7 Left	Inf	9.1 %	1762	1762
				Arm J1:8 Ahead	15.70	90.9 %		
J1:2/2 (Blackheath Road WB)	3.00	0.00	Y	Arm J1:5 Right	15.70	100.0 %	1748	1748
J1:3/1 (A12 Tom Crisp Way NB)	3.40	0.00	Y	Arm J1:5 Ahead	Inf	77.7 %	1905	1905
				Arm J1:8 Left	12.80	22.3 %		
J1:3/2 (A12 Tom Crisp Way NB)	3.40	0.00	Y	Arm J1:5 Ahead	Inf	100.0 %	1955	1955
J1:3/3 (A12 Tom Crisp Way NB)	3.30	0.00	Y	Arm J1:6 Right	23.30	100.0 %	1827	1827
J1:4/1 (Blackheath Road EB)	3.60	0.00	Y	Arm J1:5 Left	9.40	13.5 %	1933	1933
				Arm J1:6 Ahead	Inf	86.5 %		
J1:4/2 (Blackheath Road EB)	3.60	0.00	Y	Arm J1:7 Right	13.50	100.0 %	1778	1778
J1:5/1	Infinite Saturation Flow						Inf	Inf
J1:5/2	Infinite Saturation Flow						Inf	Inf
J1:6/1	Infinite Saturation Flow						Inf	Inf
J1:7/1	Infinite Saturation Flow						Inf	Inf
J1:7/2	Infinite Saturation Flow						Inf	Inf
J1:8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: Long Road-Kirkley Run-Blackheath Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Long Road)	3.25	0.00	Y	Arm J2:5 Left	Inf	10.0 %	1940	1940
				Arm J2:6 Ahead	Inf	90.0 %		
J2:2/1 (Kirkley Run)	3.25	0.00	Y	Arm J2:4 Right	Inf	34.2 %	1940	1940
				Arm J2:6 Left	Inf	65.8 %		
J2:3/1 (Blackheath Road WB)	3.25	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1940	1940
J2:3/2 (Blackheath Road WB)	3.25	0.00	Y	Arm J2:5 Right	Inf	100.0 %	1940	1940
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:5/1	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf

Junction: J3: Carlton Road-Blackheath Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J3:1/1 (Carlton Road)	3.25	0.00	Y	Arm J3:5 Left	Inf	6.5 %	1940	1940
				Arm J3:6 Ahead	Inf	93.5 %		
J3:2/1 (Blackheath Road NB)	3.25	0.00	Y	Arm J3:6 Left	Inf	100.0 %	1940	1940
J3:2/2 (Blackheath Road NB)	3.25	0.00	Y	Arm J3:4 Right	Inf	100.0 %	1940	1940
J3:3/1 (Blackheath Road EB)	3.25	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1940	1940
J3:3/2 (Blackheath Road EB)	3.25	0.00	Y	Arm J3:5 Right	Inf	100.0 %	1940	1940
J3:4/1	Infinite Saturation Flow						Inf	Inf
J3:5/1	Infinite Saturation Flow						Inf	Inf
J3:6/1	Infinite Saturation Flow						Inf	Inf

Scenario 9: '2037 DS AM' (FG9: '2037 DS AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	98	29	51	13	14	205
	B	19	0	21	40	10	10	100
	C	26	27	0	123	34	742	952
	D	40	41	120	0	30	56	287
	E	21	22	71	9	0	29	152
	F	0	0	1034	48	9	0	1091
	Tot.	106	188	1275	271	96	851	2787

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 9: 2037 DS AM
Junction: J1: A12 Tom Crisp Way-Blackheath Road	
J1:1/1	453
J1:1/2 (with short)	499(In) 446(Out)
J1:1/3 (short)	53
J1:2/1 (with short)	400(In) 209(Out)
J1:2/2 (short)	191
J1:3/1	529
J1:3/2 (with short)	562(In) 505(Out)
J1:3/3 (short)	57
J1:4/1 (with short)	188(In) 164(Out)
J1:4/2 (short)	24
J1:5/1	529
J1:5/2	746
J1:6/1	328
J1:7/1	381
J1:7/2	470
J1:8/1	177
Junction: J2: Long Road-Kirkley Run-Blackheath Road	
J2:1/1	205
J2:2/1	100
J2:3/1 (with short)	177(In) 87(Out)
J2:3/2 (short)	90
J2:4/1	106
J2:5/1	188
J2:6/1	188
Junction: J3: Carlton Road-Blackheath Road	
J3:1/1	287
J3:2/1 (with short)	152(In) 143(Out)
J3:2/2 (short)	9
J3:3/1 (with short)	328(In) 262(Out)
J3:3/2 (short)	66
J3:4/1	271
J3:5/1	96

Full Input Data And Results

J3:6/1	400

Lane Saturation Flows

Junction: J1: A12 Tom Crisp Way-Blackheath Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 Tom Crisp Way SB)	3.40	0.00	Y	Arm J1:6 Left	13.70	34.7 %	1884	1884
				Arm J1:7 Ahead	Inf	65.3 %		
J1:1/2 (A12 Tom Crisp Way SB)	3.20	0.00	Y	Arm J1:7 Ahead	Inf	100.0 %	1935	1935
J1:1/3 (A12 Tom Crisp Way SB)	3.30	0.00	Y	Arm J1:8 Right	17.00	100.0 %	1787	1787
J1:2/1 (Blackheath Road WB)	3.00	0.00	Y	Arm J1:7 Left	Inf	40.7 %	1812	1812
				Arm J1:8 Ahead	15.70	59.3 %		
J1:2/2 (Blackheath Road WB)	3.00	0.00	Y	Arm J1:5 Right	15.70	100.0 %	1748	1748
J1:3/1 (A12 Tom Crisp Way NB)	3.40	0.00	Y	Arm J1:5 Ahead	Inf	100.0 %	1955	1955
				Arm J1:8 Left	12.80	0.0 %		
J1:3/2 (A12 Tom Crisp Way NB)	3.40	0.00	Y	Arm J1:5 Ahead	Inf	100.0 %	1955	1955
J1:3/3 (A12 Tom Crisp Way NB)	3.30	0.00	Y	Arm J1:6 Right	23.30	100.0 %	1827	1827
J1:4/1 (Blackheath Road EB)	3.60	0.00	Y	Arm J1:5 Left	9.40	30.5 %	1883	1883
				Arm J1:6 Ahead	Inf	69.5 %		
J1:4/2 (Blackheath Road EB)	3.60	0.00	Y	Arm J1:7 Right	13.50	100.0 %	1778	1778
J1:5/1	Infinite Saturation Flow						Inf	Inf
J1:5/2	Infinite Saturation Flow						Inf	Inf
J1:6/1	Infinite Saturation Flow						Inf	Inf
J1:7/1	Infinite Saturation Flow						Inf	Inf
J1:7/2	Infinite Saturation Flow						Inf	Inf
J1:8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: Long Road-Kirkley Run-Blackheath Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Long Road)	3.25	0.00	Y	Arm J2:5 Left	Inf	47.8 %	1940	1940
				Arm J2:6 Ahead	Inf	52.2 %		
J2:2/1 (Kirkley Run)	3.25	0.00	Y	Arm J2:4 Right	Inf	19.0 %	1940	1940
				Arm J2:6 Left	Inf	81.0 %		
J2:3/1 (Blackheath Road WB)	3.25	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1940	1940
J2:3/2 (Blackheath Road WB)	3.25	0.00	Y	Arm J2:5 Right	Inf	100.0 %	1940	1940
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:5/1	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf

Junction: J3: Carlton Road-Blackheath Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J3:1/1 (Carlton Road)	3.25	0.00	Y	Arm J3:5 Left	Inf	10.5 %	1940	1940
				Arm J3:6 Ahead	Inf	89.5 %		
J3:2/1 (Blackheath Road NB)	3.25	0.00	Y	Arm J3:6 Left	Inf	100.0 %	1940	1940
J3:2/2 (Blackheath Road NB)	3.25	0.00	Y	Arm J3:4 Right	Inf	100.0 %	1940	1940
J3:3/1 (Blackheath Road EB)	3.25	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1940	1940
J3:3/2 (Blackheath Road EB)	3.25	0.00	Y	Arm J3:5 Right	Inf	100.0 %	1940	1940
J3:4/1	Infinite Saturation Flow						Inf	Inf
J3:5/1	Infinite Saturation Flow						Inf	Inf
J3:6/1	Infinite Saturation Flow						Inf	Inf

Scenario 10: '2037 DS PM' (FG10: '2037 DS PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	23	14	59	22	5	123
	B	102	0	16	67	24	6	215
	C	30	23	0	148	59	971	1231
	D	105	90	140	0	23	26	384
	E	34	29	43	2	0	5	113
	F	35	28	643	80	27	0	813
	Tot.	306	193	856	356	155	1013	2879

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 10: 2037 DS PM
Junction: J1: A12 Tom Crisp Way-Blackheath Road	
J1:1/1	596
J1:1/2 (with short)	635(In) 582(Out)
J1:1/3 (short)	53
J1:2/1 (with short)	472(In) 289(Out)
J1:2/2 (short)	183
J1:3/1	361
J1:3/2 (with short)	452(In) 345(Out)
J1:3/3 (short)	107
J1:4/1 (with short)	213(In) 202(Out)
J1:4/2 (short)	11
J1:5/1	298
J1:5/2	558
J1:6/1	486
J1:7/1	420
J1:7/2	593
J1:8/1	374
Junction: J2: Long Road-Kirkley Run-Blackheath Road	
J2:1/1	123
J2:2/1	215
J2:3/1 (with short)	374(In) 204(Out)
J2:3/2 (short)	170
J2:4/1	306
J2:5/1	193
J2:6/1	213
Junction: J3: Carlton Road-Blackheath Road	
J3:1/1	384
J3:2/1 (with short)	113(In) 111(Out)
J3:2/2 (short)	2
J3:3/1 (with short)	486(In) 354(Out)
J3:3/2 (short)	132
J3:4/1	356
J3:5/1	155

Full Input Data And Results

J3:6/1	472

Lane Saturation Flows

Junction: J1: A12 Tom Crisp Way-Blackheath Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (A12 Tom Crisp Way SB)	3.40	0.00	Y	Arm J1:6 Left	13.70	34.7 %	1883	1883
				Arm J1:7 Ahead	Inf	65.3 %		
J1:1/2 (A12 Tom Crisp Way SB)	3.20	0.00	Y	Arm J1:7 Ahead	Inf	100.0 %	1935	1935
J1:1/3 (A12 Tom Crisp Way SB)	3.30	0.00	Y	Arm J1:8 Right	17.00	100.0 %	1787	1787
J1:2/1 (Blackheath Road WB)	3.00	0.00	Y	Arm J1:7 Left	Inf	10.7 %	1765	1765
				Arm J1:8 Ahead	15.70	89.3 %		
J1:2/2 (Blackheath Road WB)	3.00	0.00	Y	Arm J1:5 Right	15.70	100.0 %	1748	1748
J1:3/1 (A12 Tom Crisp Way NB)	3.40	0.00	Y	Arm J1:5 Ahead	Inf	82.5 %	1916	1916
				Arm J1:8 Left	12.80	17.5 %		
J1:3/2 (A12 Tom Crisp Way NB)	3.40	0.00	Y	Arm J1:5 Ahead	Inf	100.0 %	1955	1955
J1:3/3 (A12 Tom Crisp Way NB)	3.30	0.00	Y	Arm J1:6 Right	23.30	100.0 %	1827	1827
J1:4/1 (Blackheath Road EB)	3.60	0.00	Y	Arm J1:5 Left	9.40	14.9 %	1929	1929
				Arm J1:6 Ahead	Inf	85.1 %		
J1:4/2 (Blackheath Road EB)	3.60	0.00	Y	Arm J1:7 Right	13.50	100.0 %	1778	1778
J1:5/1	Infinite Saturation Flow						Inf	Inf
J1:5/2	Infinite Saturation Flow						Inf	Inf
J1:6/1	Infinite Saturation Flow						Inf	Inf
J1:7/1	Infinite Saturation Flow						Inf	Inf
J1:7/2	Infinite Saturation Flow						Inf	Inf
J1:8/1	Infinite Saturation Flow						Inf	Inf

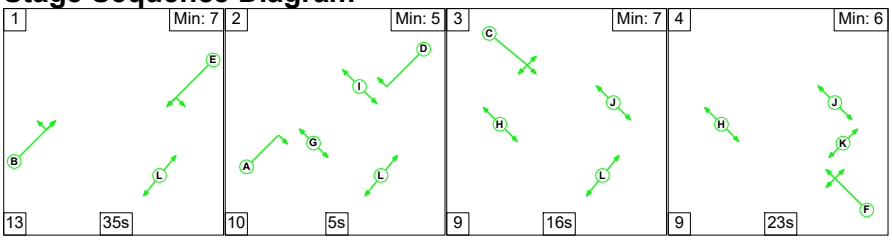
Full Input Data And Results

Junction: J2: Long Road-Kirkley Run-Blackheath Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Long Road)	3.25	0.00	Y	Arm J2:5 Left	Inf	18.7 %	1940	1940
				Arm J2:6 Ahead	Inf	81.3 %		
J2:2/1 (Kirkley Run)	3.25	0.00	Y	Arm J2:4 Right	Inf	47.4 %	1940	1940
				Arm J2:6 Left	Inf	52.6 %		
J2:3/1 (Blackheath Road WB)	3.25	0.00	Y	Arm J2:4 Ahead	Inf	100.0 %	1940	1940
J2:3/2 (Blackheath Road WB)	3.25	0.00	Y	Arm J2:5 Right	Inf	100.0 %	1940	1940
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:5/1	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf

Junction: J3: Carlton Road-Blackheath Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J3:1/1 (Carlton Road)	3.25	0.00	Y	Arm J3:5 Left	Inf	6.0 %	1940	1940
				Arm J3:6 Ahead	Inf	94.0 %		
J3:2/1 (Blackheath Road NB)	3.25	0.00	Y	Arm J3:6 Left	Inf	100.0 %	1940	1940
J3:2/2 (Blackheath Road NB)	3.25	0.00	Y	Arm J3:4 Right	Inf	100.0 %	1940	1940
J3:3/1 (Blackheath Road EB)	3.25	0.00	Y	Arm J3:4 Ahead	Inf	100.0 %	1940	1940
J3:3/2 (Blackheath Road EB)	3.25	0.00	Y	Arm J3:5 Right	Inf	100.0 %	1940	1940
J3:4/1	Infinite Saturation Flow						Inf	Inf
J3:5/1	Infinite Saturation Flow						Inf	Inf
J3:6/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: 'Base 2016 AM' (FG1: 'Base 2016 AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

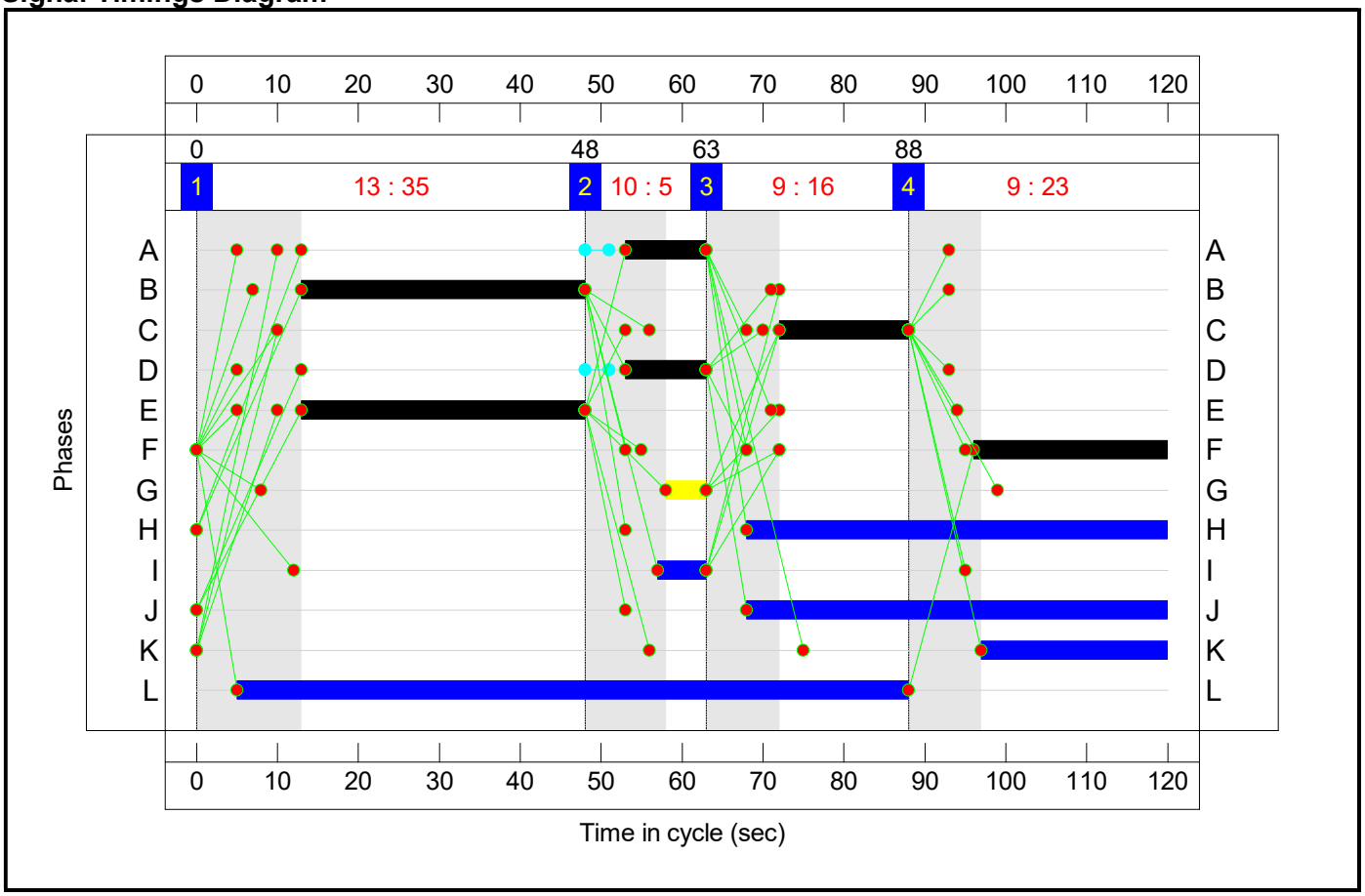


Stage Timings

Stage	1	2	3	4
Duration	35	5	16	23
Change Point	0	48	63	88

Full Input Data And Results

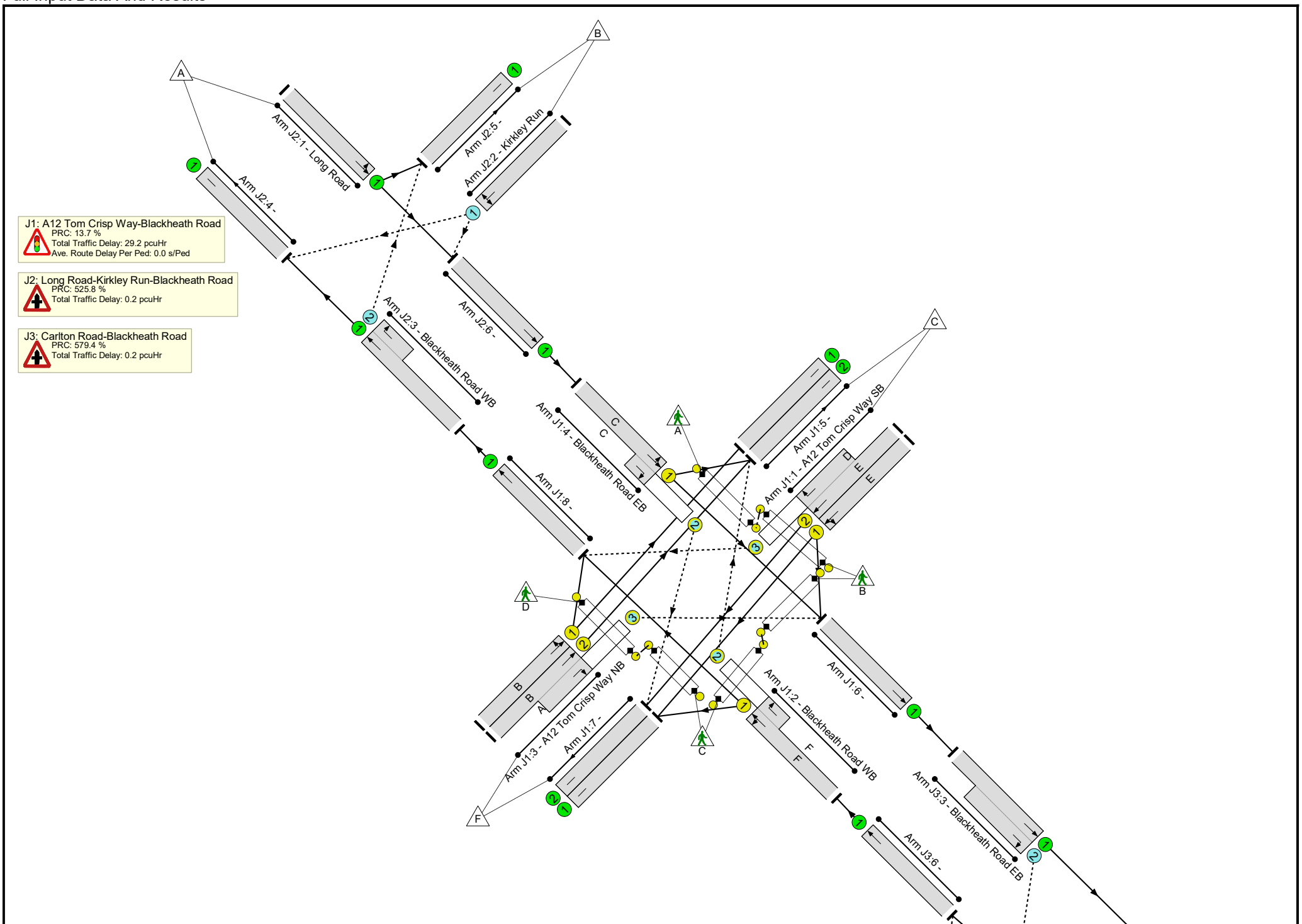
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



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**	-	-		-	-	-	-	-	-	**79.2%**
J1: A12 Tom Crisp Way-Blackheath Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**79.2%**
1/1	A12 Tom Crisp Way SB Left Ahead	U	N/A	N/A	E		1	35	-	249	1913	574	43.4%
1/2+1/3	A12 Tom Crisp Way SB Ahead Right	U+O	N/A	N/A	E D		1	35:10	-	197	1935:1787	255+164	47.0 : 47.0%
2/1+2/2	Blackheath Road WB Right Left Ahead	U+O	N/A	N/A	F		1	24	-	342	1797:1748	277+155	79.2 : 79.2%
3/1	A12 Tom Crisp Way NB Ahead Left	U	N/A	N/A	B		1	35	-	440	1928	578	76.1%
3/2+3/3	A12 Tom Crisp Way NB Ahead Right	U+O	N/A	N/A	B A		1	35:10	-	483	1955:1827	550+68	78.2 : 78.2%
4/1+4/2	Blackheath Road EB Left Ahead Right	U+O	N/A	N/A	C		1	16	-	221	1860:1778	242+41	78.2 : 78.2%
5/1		U	N/A	N/A	-		-	-	-	388	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	626	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	219	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	268	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	152	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	-		-	-	-	279	Inf	Inf	0.0%
Ped Link: P1	A12 Tom Crisp Way SB Ped	-	N/A	-	J		1	52	-	0	-	31200	0.0%
Ped Link: P2	A12 Tom Crisp Way NB Ped	-	N/A	-	I		1	6	-	0	-	3600	0.0%
Ped Link: P3	Blackheath Road EB Ped	-	N/A	-	K		1	23	-	0	-	13800	0.0%

Full Input Data And Results

Ped Link: P4	Blackheath Road WB Ped	-	N/A	-	L		1	83	-	0	-	49800	0.0%
Ped Link: P5	A12 Tom Crisp Way NB Ped	-	N/A	-	G		1	5	-	0	-	3000	0.0%
Ped Link: P6	A12 Tom Crisp Way SB Ped	-	N/A	-	H		1	52	-	0	-	31200	0.0%
J2: Long Road-Kirkley Run-Blackheath Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**14.4%**
1/1	Long Road Left Ahead	U	N/A	N/A	-		-	-	-	115	1940	1940	5.9%
2/1	Kirkley Run Right Left	O	N/A	N/A	-		-	-	-	125	1940	1207	10.4%
3/1+3/2	Blackheath Road WB Ahead Right	U+O	N/A	N/A	-		-	-	-	279	1940:1940	681+1259	14.4 : 14.4%
4/1		U	N/A	N/A	-		-	-	-	102	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	196	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	221	Inf	Inf	0.0%
J3: Carlton Road-Blackheath Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**13.2%**
1/1	Carlton Road Left Ahead	U	N/A	N/A	-		-	-	-	257	1940	1940	13.2%
2/1+2/2	Blackheath Road NB Right Left	O	N/A	N/A	-		-	-	-	121	1940:1940	1159+104	9.6 : 9.6%
3/1+3/2	Blackheath Road EB Ahead Right	U+O	N/A	N/A	-		-	-	-	219	1940:1940	1577+363	11.3 : 11.3%
4/1		U	N/A	N/A	-		-	-	-	188	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	67	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	342	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	**-**	**-**	**589**	**272**	**13**	**21.6**	**8.0**	**0.0**	**29.6**	**-**	**-**	**-**	**-**
J1: A12 Tom Crisp Way-Blackheath Road	**-**	**-**	**0**	**272**	**13**	**21.6**	**7.7**	**0.0**	**29.2**	**-**	**-**	**-**	**-**
1/1	249	249	-	-	-	2.3	0.4	-	2.7	39.3	6.6	0.4	7.0
1/2+1/3	197	197	0	74	3	2.2	0.4	0.0	2.6	47.4	3.0	0.4	3.4
2/1+2/2	342	342	0	118	5	4.1	1.8	0.0	6.0	62.7	9.1	1.8	10.9
3/1	440	440	-	-	-	4.7	1.6	-	6.2	50.8	13.2	1.6	14.8
3/2+3/3	483	483	0	51	2	5.3	1.7	0.0	7.0	52.3	13.8	1.7	15.5
4/1+4/2	221	221	0	30	2	3.0	1.7	0.0	4.7	76.8	6.6	1.7	8.3
5/1	388	388	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	626	626	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	219	219	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	268	268	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	152	152	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	279	279	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P5	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P6	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
J2: Long Road-Kirkley Run-Blackheath Road	**-**	**-**	**306**	**0**	**0**	**0.0**	**0.2**	**0.0**	**0.2**	**-**	**-**	**-**	**-**
1/1	115	115	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
2/1	125	125	125	0	0	0.0	0.1	-	0.1	1.7	0.0	0.1	0.1
3/1+3/2	279	279	181	0	0	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1

Full Input Data And Results

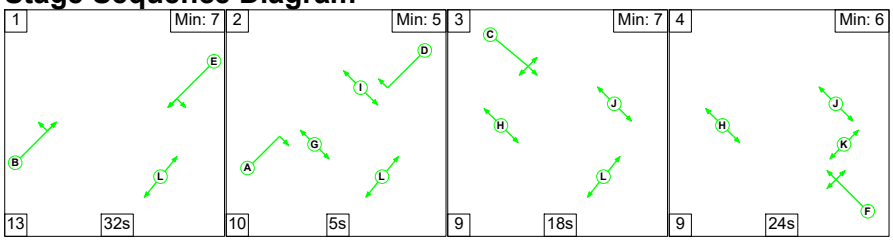
4/1	102	102	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	196	196	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	221	221	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J3: Carlton Road-Blackheath Road	**-**	**-**	**283**	**0**	**0**	**0.0**	**0.2**	**0.0**	**0.2**	**-**	**-**	**-**	**-**
1/1	257	257	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
2/1+2/2	121	121	242	0	0	0.0	0.1	-	0.1	1.6	0.0	0.1	0.1
3/1+3/2	219	219	41	0	0	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1
4/1	188	188	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	67	67	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	342	342	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%):	13.7	Total Delay for Signalled Lanes (pcuHr):	29.21	Cycle Time (s):	120
	PRC Over All Lanes (%):	13.7	Total Delay Over All Lanes(pcuHr):	29.58		

Full Input Data And Results

Scenario 2: 'Base 2016 PM' (FG2: 'Base 2016 PM', Plan 1: 'Network Control Plan 1')

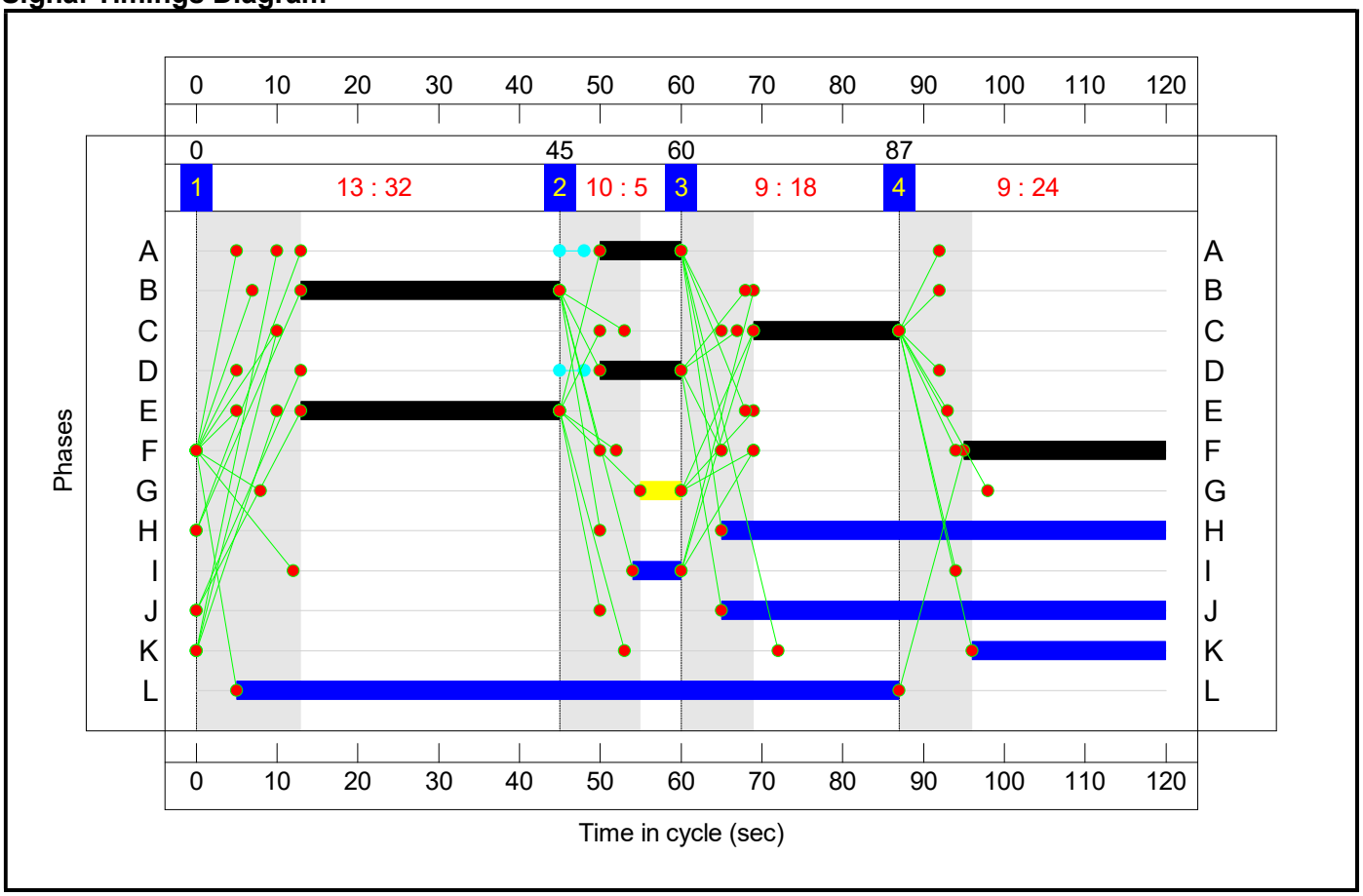
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	32	5	18	24
Change Point	0	45	60	87

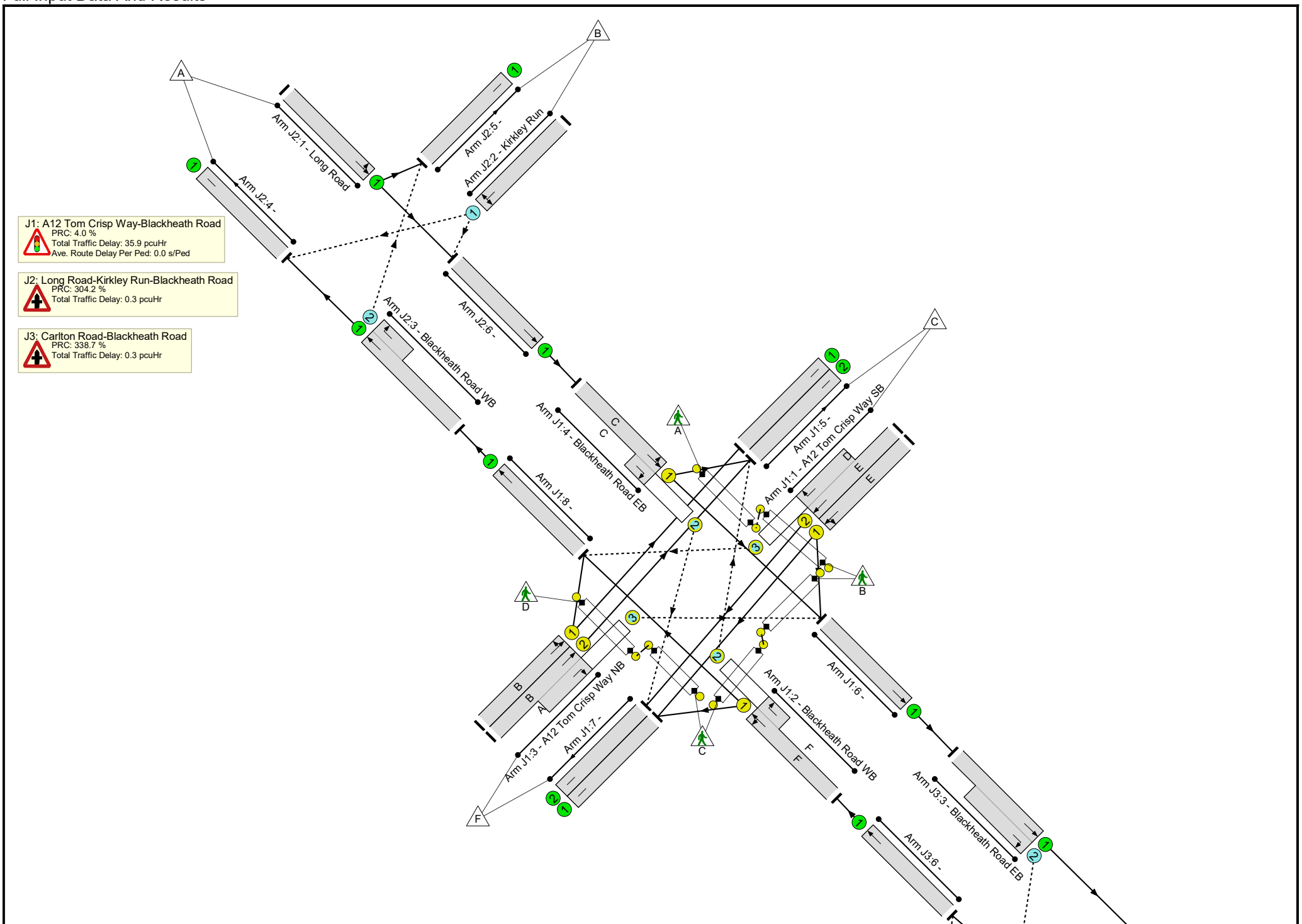
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



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**	-	-		-	-	-	-	-	-	**86.5%**
J1: A12 Tom Crisp Way-Blackheath Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**86.5%**
1/1	A12 Tom Crisp Way SB Left Ahead	U	N/A	N/A	E		1	32	-	426	1891	520	81.9%
1/2+1/3	A12 Tom Crisp Way SB Ahead Right	U+O	N/A	N/A	E D		1	32:10	-	486	1935:1787	471+106	84.3 : 84.3%
2/1+2/2	Blackheath Road WB Right Left Ahead	U+O	N/A	N/A	F		1	25	-	355	1762:1748	348+62	86.5 : 86.5%
3/1	A12 Tom Crisp Way NB Ahead Left	U	N/A	N/A	B		1	32	-	274	1899	522	52.5%
3/2+3/3	A12 Tom Crisp Way NB Ahead Right	U+O	N/A	N/A	B A		1	32:10	-	274	1955:1827	296+167	59.1 : 59.1%
4/1+4/2	Blackheath Road EB Left Ahead Right	U+O	N/A	N/A	C		1	18	-	277	1913:1778	251+78	84.2 : 84.2%
5/1		U	N/A	N/A	-		-	-	-	205	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	272	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	398	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	322	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	463	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	-		-	-	-	432	Inf	Inf	0.0%
Ped Link: P1	A12 Tom Crisp Way SB Ped	-	N/A	-	J		1	55	-	0	-	33000	0.0%
Ped Link: P2	A12 Tom Crisp Way NB Ped	-	N/A	-	I		1	6	-	0	-	3600	0.0%
Ped Link: P3	Blackheath Road EB Ped	-	N/A	-	K		1	24	-	0	-	14400	0.0%

Full Input Data And Results

Ped Link: P4	Blackheath Road WB Ped	-	N/A	-	L		1	82	-	0	-	49200	0.0%
Ped Link: P5	A12 Tom Crisp Way NB Ped	-	N/A	-	G		1	5	-	0	-	3000	0.0%
Ped Link: P6	A12 Tom Crisp Way SB Ped	-	N/A	-	H		1	55	-	0	-	33000	0.0%
J2: Long Road-Kirkley Run-Blackheath Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**22.3%**
1/1	Long Road Left Ahead	U	N/A	N/A	-		-	-	-	101	1940	1940	5.2%
2/1	Kirkley Run Right Left	O	N/A	N/A	-		-	-	-	211	1940	1114	18.9%
3/1+3/2	Blackheath Road WB Ahead Right	U+O	N/A	N/A	-		-	-	-	432	1940:1940	885+1055	22.3 : 22.3%
4/1		U	N/A	N/A	-		-	-	-	224	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	243	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	277	Inf	Inf	0.0%
J3: Carlton Road-Blackheath Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**20.5%**
1/1	Carlton Road Left Ahead	U	N/A	N/A	-		-	-	-	305	1940	1940	15.7%
2/1+2/2	Blackheath Road NB Right Left	O	N/A	N/A	-		-	-	-	75	1940:1940	1106+79	6.3 : 6.3%
3/1+3/2	Blackheath Road EB Ahead Right	U+O	N/A	N/A	-		-	-	-	398	1940:1940	1379+561	20.5 : 20.5%
4/1		U	N/A	N/A	-		-	-	-	288	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	135	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	355	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	**-**	**-**	**711**	**288**	**20**	**24.6**	**11.8**	**0.0**	**36.4**	**-**	**-**	**-**	**-**
J1: A12 Tom Crisp Way-Blackheath Road	**-**	**-**	**0**	**288**	**20**	**24.6**	**11.3**	**0.0**	**35.9**	**-**	**-**	**-**	**-**
1/1	426	426	-	-	-	4.8	2.2	-	7.0	59.0	13.3	2.2	15.4
1/2+1/3	486	486	0	85	4	5.7	2.5	0.0	8.2	61.1	13.7	2.5	16.2
2/1+2/2	355	355	0	51	3	4.4	2.9	0.0	7.3	74.0	10.8	2.9	13.7
3/1	274	274	-	-	-	2.8	0.5	-	3.4	44.1	7.7	0.5	8.2
3/2+3/3	274	274	0	91	8	3.1	0.7	0.0	3.8	50.5	4.6	0.7	5.3
4/1+4/2	277	277	0	60	6	3.7	2.4	0.0	6.1	79.9	8.1	2.4	10.5
5/1	205	205	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	272	272	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	398	398	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	322	322	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	463	463	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	432	432	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P5	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P6	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
J2: Long Road-Kirkley Run-Blackheath Road	**-**	**-**	**446**	**0**	**0**	**0.0**	**0.3**	**0.0**	**0.3**	**-**	**-**	**-**	**-**
1/1	101	101	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
2/1	211	211	211	0	0	0.0	0.1	-	0.1	2.0	0.0	0.1	0.1
3/1+3/2	432	432	235	0	0	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1

Full Input Data And Results

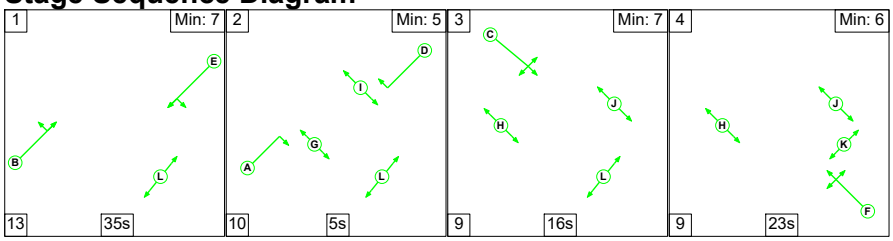
4/1	224	224	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	243	243	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	277	277	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J3: Carlton Road-Blackheath Road	**-**	**-**	**265**	**0**	**0**	**0.0**	**0.3**	**0.0**	**0.3**	**-**	**-**	**-**	**-**
1/1	305	305	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
2/1+2/2	75	75	150	0	0	0.0	0.0	-	0.0	1.6	0.0	0.0	0.0
3/1+3/2	398	398	115	0	0	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
4/1	288	288	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	135	135	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	355	355	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%):	4.0	Total Delay for Signalled Lanes (pcuHr):	35.87	Cycle Time (s):	120
	PRC Over All Lanes (%):	4.0	Total Delay Over All Lanes(pcuHr):	36.41		

Full Input Data And Results

Scenario 3: '2022 DM AM' (FG3: '2022 DM AM', Plan 1: 'Network Control Plan 1')

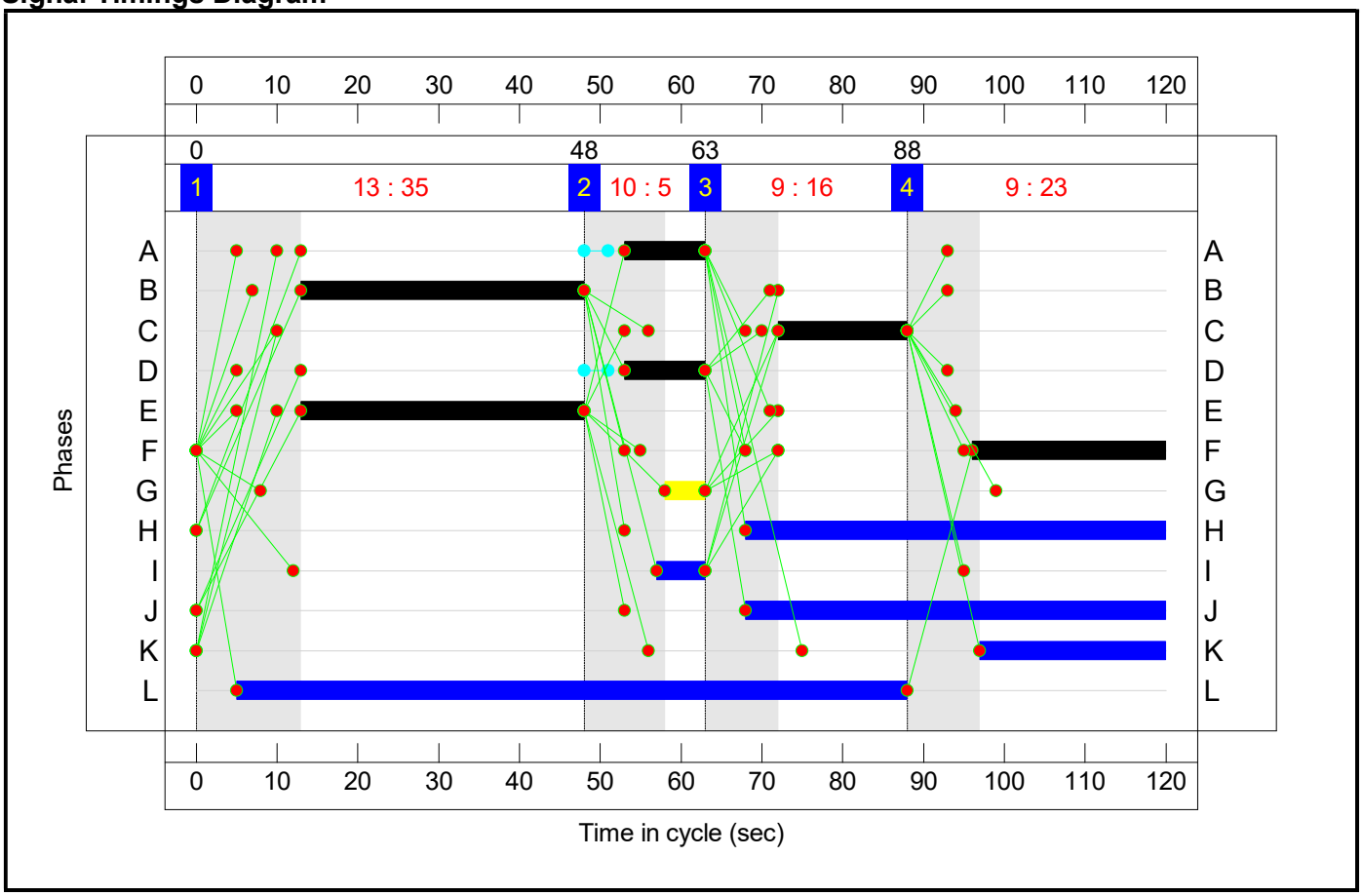
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	35	5	16	23
Change Point	0	48	63	88

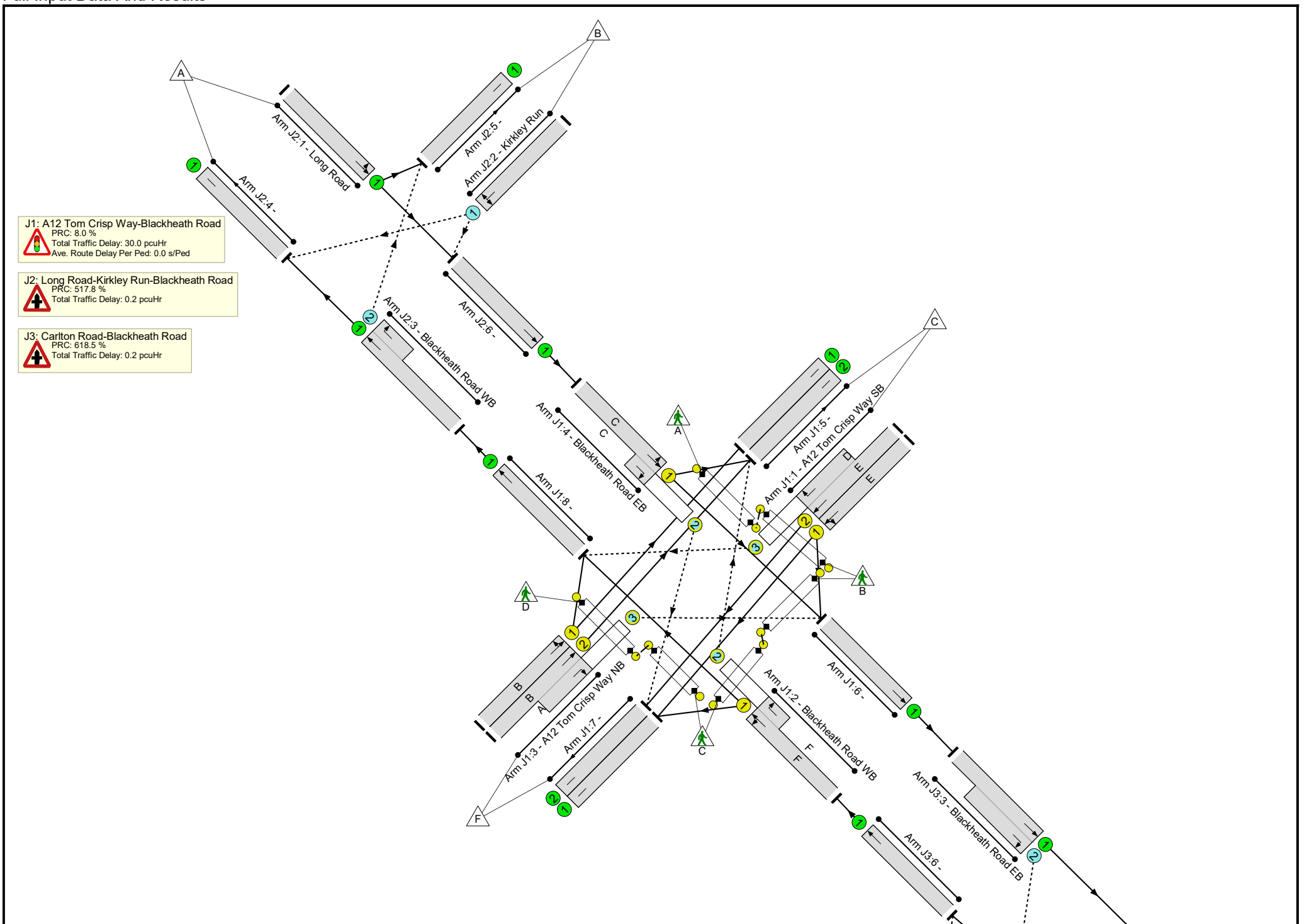
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



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**	-	-		-	-	-	-	-	-	**83.3%**
J1: A12 Tom Crisp Way-Blackheath Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**83.3%**
1/1	A12 Tom Crisp Way SB Left Ahead	U	N/A	N/A	E		1	35	-	207	1891	567	36.5%
1/2+1/3	A12 Tom Crisp Way SB Ahead Right	U+O	N/A	N/A	E D		1	35:10	-	268	1935:1787	499+132	42.5 : 42.5%
2/1+2/2	Blackheath Road WB Right Left Ahead	U+O	N/A	N/A	F		1	24	-	324	1788:1748	286+139	76.3 : 76.3%
3/1	A12 Tom Crisp Way NB Ahead Left	U	N/A	N/A	B		1	35	-	473	1931	579	81.7%
3/2+3/3	A12 Tom Crisp Way NB Ahead Right	U+O	N/A	N/A	B A		1	35:10	-	515	1955:1827	550+68	83.3 : 83.3%
4/1+4/2	Blackheath Road EB Left Ahead Right	U+O	N/A	N/A	C		1	16	-	205	1888:1778	228+66	69.7 : 69.7%
5/1		U	N/A	N/A	-		-	-	-	423	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	610	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	234	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	199	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	258	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	-		-	-	-	268	Inf	Inf	0.0%
Ped Link: P1	A12 Tom Crisp Way SB Ped	-	N/A	-	J		1	52	-	0	-	31200	0.0%
Ped Link: P2	A12 Tom Crisp Way NB Ped	-	N/A	-	I		1	6	-	0	-	3600	0.0%
Ped Link: P3	Blackheath Road EB Ped	-	N/A	-	K		1	23	-	0	-	13800	0.0%

Full Input Data And Results

Ped Link: P4	Blackheath Road WB Ped	-	N/A	-	L		1	83	-	0	-	49800	0.0%
Ped Link: P5	A12 Tom Crisp Way NB Ped	-	N/A	-	G		1	5	-	0	-	3000	0.0%
Ped Link: P6	A12 Tom Crisp Way SB Ped	-	N/A	-	H		1	52	-	0	-	31200	0.0%
J2: Long Road-Kirkley Run-Blackheath Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**14.6%**
1/1	Long Road Left Ahead	U	N/A	N/A	-		-	-	-	92	1940	1940	4.7%
2/1	Kirkley Run Right Left	O	N/A	N/A	-		-	-	-	128	1940	1259	10.2%
3/1+3/2	Blackheath Road WB Ahead Right	U+O	N/A	N/A	-		-	-	-	268	1940:1940	501+1339	14.6 : 14.6%
4/1		U	N/A	N/A	-		-	-	-	75	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	208	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	205	Inf	Inf	0.0%
J3: Carlton Road-Blackheath Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**12.5%**
1/1	Carlton Road Left Ahead	U	N/A	N/A	-		-	-	-	243	1940	1940	12.5%
2/1+2/2	Blackheath Road NB Right Left	O	N/A	N/A	-		-	-	-	101	1940:1940	1174+61	8.2 : 8.2%
3/1+3/2	Blackheath Road EB Ahead Right	U+O	N/A	N/A	-		-	-	-	234	1940:1940	1426+514	12.1 : 12.1%
4/1		U	N/A	N/A	-		-	-	-	177	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	77	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	324	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	**-**	**-**	**587**	**254**	**11**	**22.1**	**8.2**	**0.0**	**30.3**	**-**	**-**	**-**	**-**
J1: A12 Tom Crisp Way-Blackheath Road	**-**	**-**	**0**	**254**	**11**	**22.1**	**7.9**	**0.0**	**30.0**	**-**	**-**	**-**	**-**
1/1	207	207	-	-	-	1.9	0.3	-	2.2	38.0	5.4	0.3	5.7
1/2+1/3	268	268	0	54	2	2.7	0.4	0.0	3.1	41.8	5.5	0.4	5.9
2/1+2/2	324	324	0	102	4	3.9	1.6	0.0	5.5	60.6	8.6	1.6	10.2
3/1	473	473	-	-	-	5.1	2.1	-	7.3	55.2	14.6	2.1	16.7
3/2+3/3	515	515	0	55	2	5.7	2.4	0.0	8.1	56.7	15.2	2.4	17.6
4/1+4/2	205	205	0	44	2	2.7	1.1	0.0	3.9	68.0	5.7	1.1	6.8
5/1	423	423	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	610	610	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	234	234	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	199	199	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	258	258	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	268	268	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P5	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P6	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
J2: Long Road-Kirkley Run-Blackheath Road	**-**	**-**	**323**	**0**	**0**	**0.0**	**0.2**	**0.0**	**0.2**	**-**	**-**	**-**	**-**
1/1	92	92	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
2/1	128	128	128	0	0	0.0	0.1	-	0.1	1.6	0.0	0.1	0.1
3/1+3/2	268	268	195	0	0	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1

Full Input Data And Results

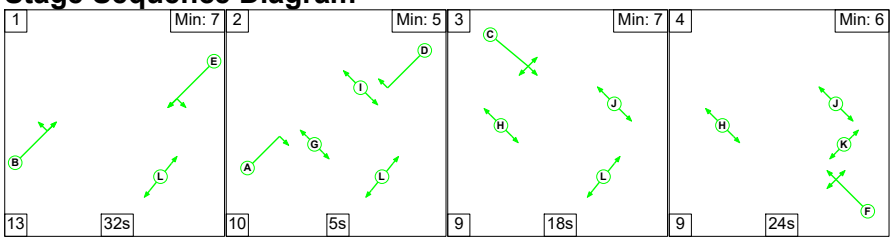
4/1	75	75	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	208	208	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	205	205	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J3: Carlton Road-Blackheath Road	**-**	**-**	**264**	**0**	**0**	**0.0**	**0.2**	**0.0**	**0.2**	**-**	**-**	**-**	**-**
1/1	243	243	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
2/1+2/2	101	101	202	0	0	0.0	0.0	-	0.0	1.6	0.0	0.0	0.0
3/1+3/2	234	234	62	0	0	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
4/1	177	177	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	77	77	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	324	324	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%):	8.0	Total Delay for Signalled Lanes (pcuHr):	29.98	Cycle Time (s): 120
	PRC Over All Lanes (%):	8.0	Total Delay Over All Lanes(pcuHr):	30.33	

Full Input Data And Results

Scenario 4: '2022 DM PM' (FG4: '2022 DM PM', Plan 1: 'Network Control Plan 1')

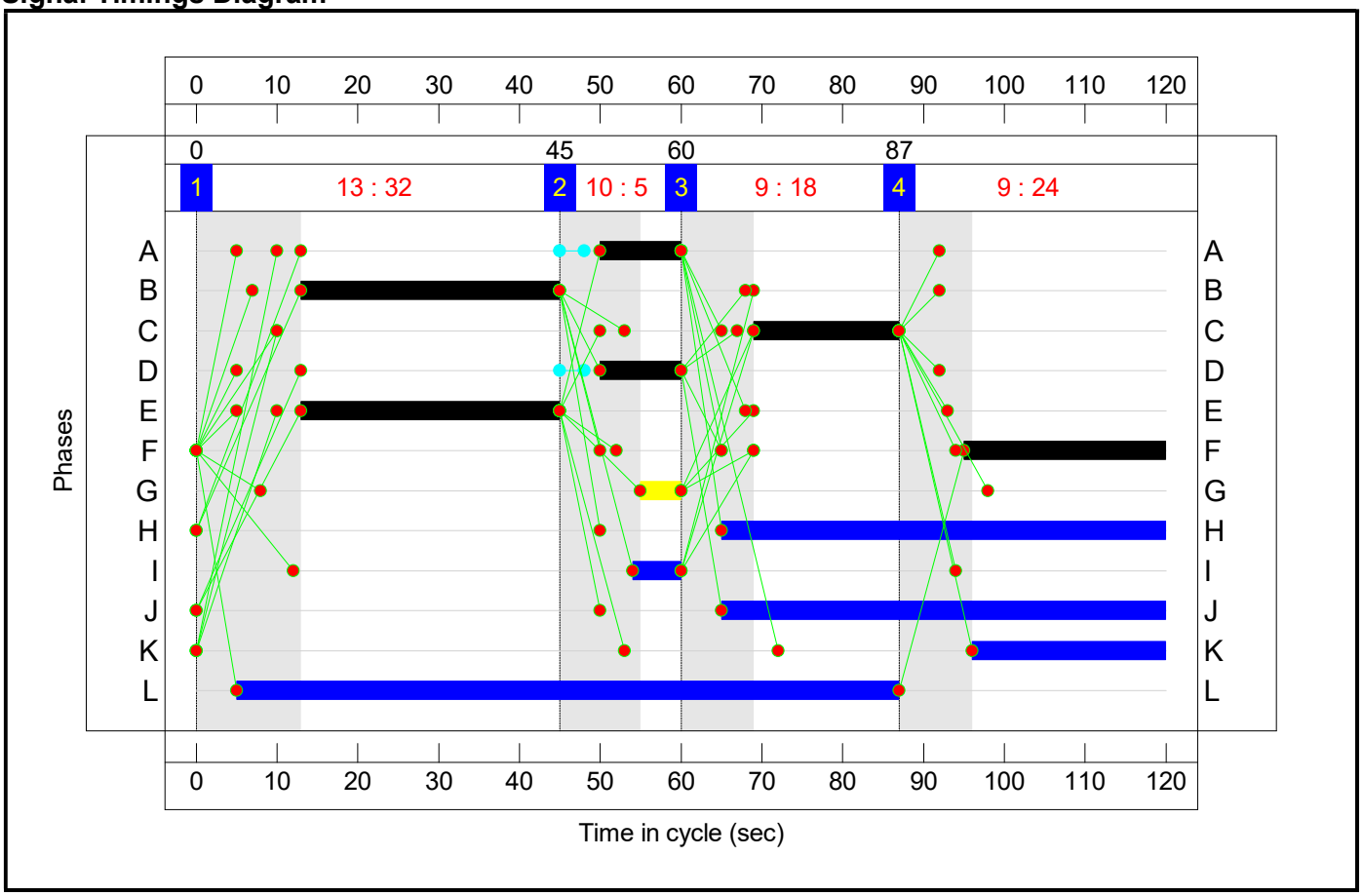
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	32	5	18	24
Change Point	0	45	60	87

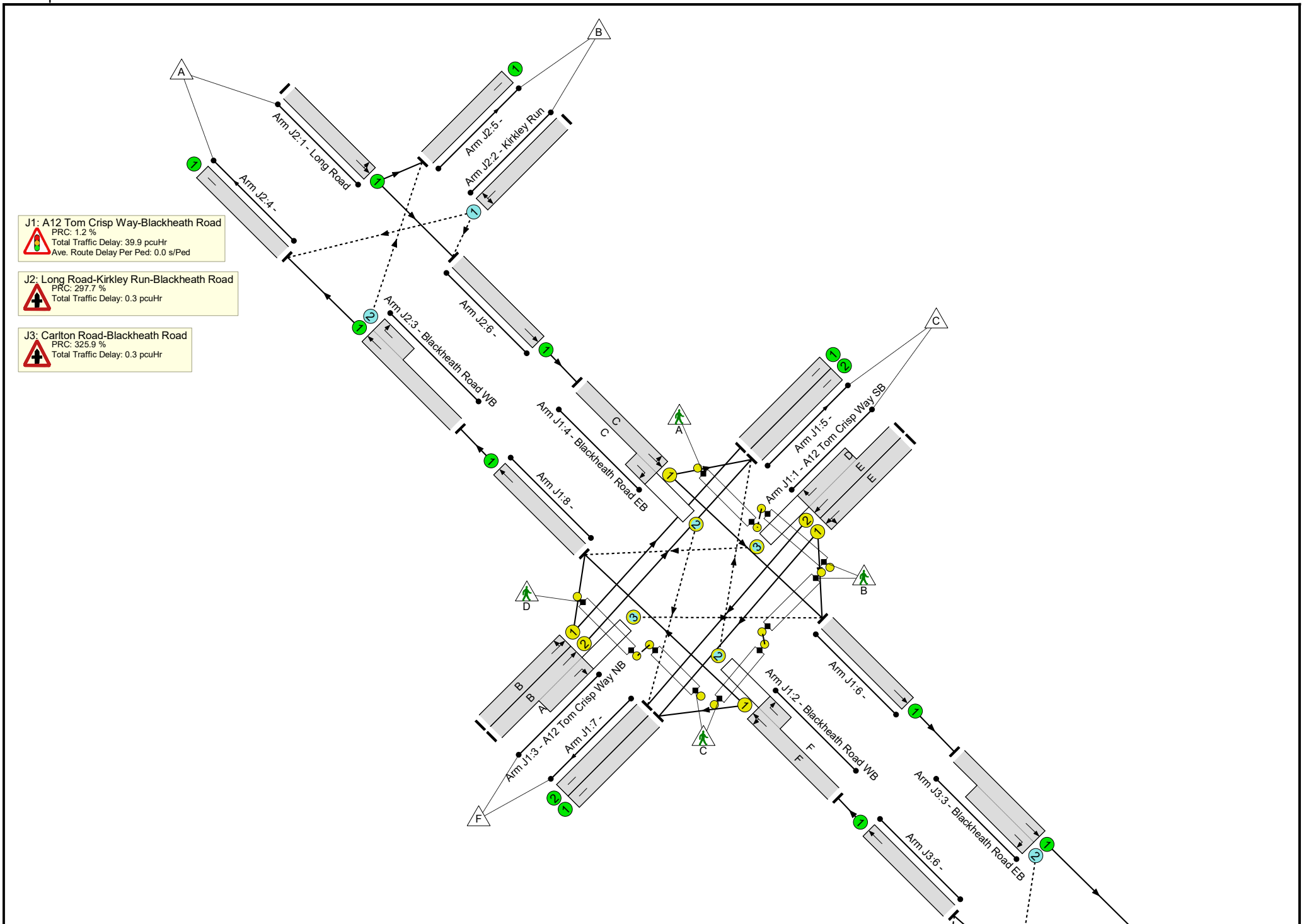
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



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**	-	-		-	-	-	-	-	-	**89.0%**
J1: A12 Tom Crisp Way-Blackheath Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**89.0%**
1/1	A12 Tom Crisp Way SB Left Ahead	U	N/A	N/A	E		1	32	-	445	1895	521	85.4%
1/2+1/3	A12 Tom Crisp Way SB Ahead Right	U+O	N/A	N/A	E D		1	32:10	-	502	1935:1787	474+101	87.3 : 87.3%
2/1+2/2	Blackheath Road WB Right Left Ahead	U+O	N/A	N/A	F		1	25	-	366	1762:1748	345+66	89.0 : 89.0%
3/1	A12 Tom Crisp Way NB Ahead Left	U	N/A	N/A	B		1	32	-	299	1901	523	57.2%
3/2+3/3	A12 Tom Crisp Way NB Ahead Right	U+O	N/A	N/A	B A		1	32:10	-	275	1955:1827	271+167	62.7 : 62.7%
4/1+4/2	Blackheath Road EB Left Ahead Right	U+O	N/A	N/A	C		1	18	-	291	1913:1778	250+79	88.4 : 88.4%
5/1		U	N/A	N/A	-		-	-	-	227	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	274	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	410	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	344	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	484	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	-		-	-	-	439	Inf	Inf	0.0%
Ped Link: P1	A12 Tom Crisp Way SB Ped	-	N/A	-	J		1	55	-	0	-	33000	0.0%
Ped Link: P2	A12 Tom Crisp Way NB Ped	-	N/A	-	I		1	6	-	0	-	3600	0.0%
Ped Link: P3	Blackheath Road EB Ped	-	N/A	-	K		1	24	-	0	-	14400	0.0%

Full Input Data And Results

Ped Link: P4	Blackheath Road WB Ped	-	N/A	-	L		1	82	-	0	-	49200	0.0%
Ped Link: P5	A12 Tom Crisp Way NB Ped	-	N/A	-	G		1	5	-	0	-	3000	0.0%
Ped Link: P6	A12 Tom Crisp Way SB Ped	-	N/A	-	H		1	55	-	0	-	33000	0.0%
J2: Long Road-Kirkley Run-Blackheath Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**22.6%**
1/1	Long Road Left Ahead	U	N/A	N/A	-		-	-	-	106	1940	1940	5.5%
2/1	Kirkley Run Right Left	O	N/A	N/A	-		-	-	-	222	1940	1116	19.9%
3/1+3/2	Blackheath Road WB Ahead Right	U+O	N/A	N/A	-		-	-	-	439	1940:1940	840+1100	22.6 : 22.6%
4/1		U	N/A	N/A	-		-	-	-	219	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	257	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	291	Inf	Inf	0.0%
J3: Carlton Road-Blackheath Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**21.1%**
1/1	Carlton Road Left Ahead	U	N/A	N/A	-		-	-	-	313	1940	1940	16.1%
2/1+2/2	Blackheath Road NB Right Left	O	N/A	N/A	-		-	-	-	77	1940:1940	1098+29	6.8 : 6.8%
3/1+3/2	Blackheath Road EB Ahead Right	U+O	N/A	N/A	-		-	-	-	410	1940:1940	1367+573	21.1 : 21.1%
4/1		U	N/A	N/A	-		-	-	-	291	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	143	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	366	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	**-**	**-**	**746**	**291**	**31**	**25.8**	**14.7**	**0.0**	**40.5**	**-**	**-**	**-**	**-**
J1: A12 Tom Crisp Way-Blackheath Road	**-**	**-**	**0**	**291**	**31**	**25.8**	**14.1**	**0.0**	**39.9**	**-**	**-**	**-**	**-**
1/1	445	445	-	-	-	5.1	2.7	-	7.8	63.3	14.0	2.7	16.7
1/2+1/3	502	502	0	84	4	5.9	3.2	0.0	9.1	65.4	14.4	3.2	17.6
2/1+2/2	366	366	0	55	4	4.6	3.5	0.0	8.1	79.2	11.3	3.5	14.7
3/1	299	299	-	-	-	3.1	0.7	-	3.8	45.4	8.6	0.7	9.2
3/2+3/3	275	275	0	91	14	3.2	0.8	0.0	4.0	52.3	4.5	0.8	5.3
4/1+4/2	291	291	0	60	10	3.9	3.2	0.0	7.2	88.8	8.6	3.2	11.9
5/1	227	227	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	274	274	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	410	410	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	344	344	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	484	484	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	439	439	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P5	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P6	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
J2: Long Road-Kirkley Run-Blackheath Road	**-**	**-**	**471**	**0**	**0**	**0.0**	**0.3**	**0.0**	**0.3**	**-**	**-**	**-**	**-**
1/1	106	106	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
2/1	222	222	222	0	0	0.0	0.1	-	0.1	2.0	0.0	0.1	0.1
3/1+3/2	439	439	249	0	0	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1

Full Input Data And Results

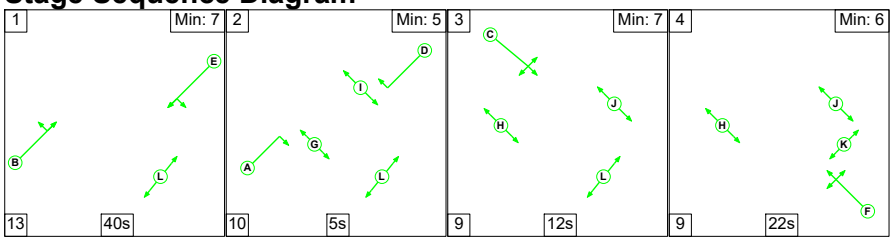
4/1	219	219	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	257	257	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	291	291	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J3: Carlton Road-Blackheath Road	**-**	**-**	**275**	**0**	**0**	**0.0**	**0.3**	**0.0**	**0.3**	**-**	**-**	**-**	**-**
1/1	313	313	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
2/1+2/2	77	77	154	0	0	0.0	0.0	-	0.0	1.7	0.0	0.0	0.0
3/1+3/2	410	410	121	0	0	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
4/1	291	291	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	143	143	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	366	366	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%):	1.2	Total Delay for Signalled Lanes (pcuHr):	39.94	Cycle Time (s):	120
	PRC Over All Lanes (%):	1.2	Total Delay Over All Lanes(pcuHr):	40.50		

Full Input Data And Results

Scenario 5: '2022 DS AM' (FG5: '2022 DS AM', Plan 1: 'Network Control Plan 1')

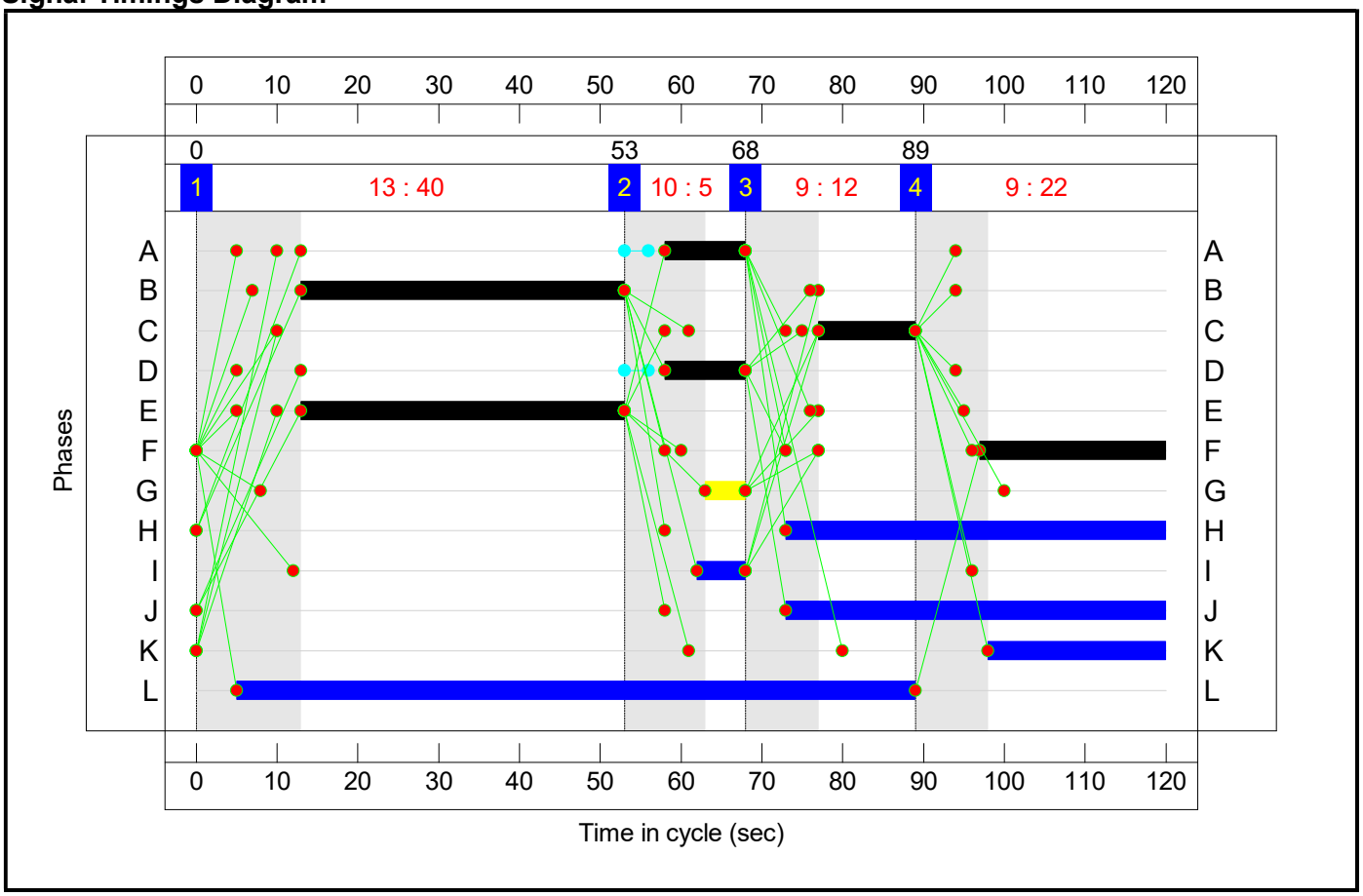
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	40	5	12	22
Change Point	0	53	68	89

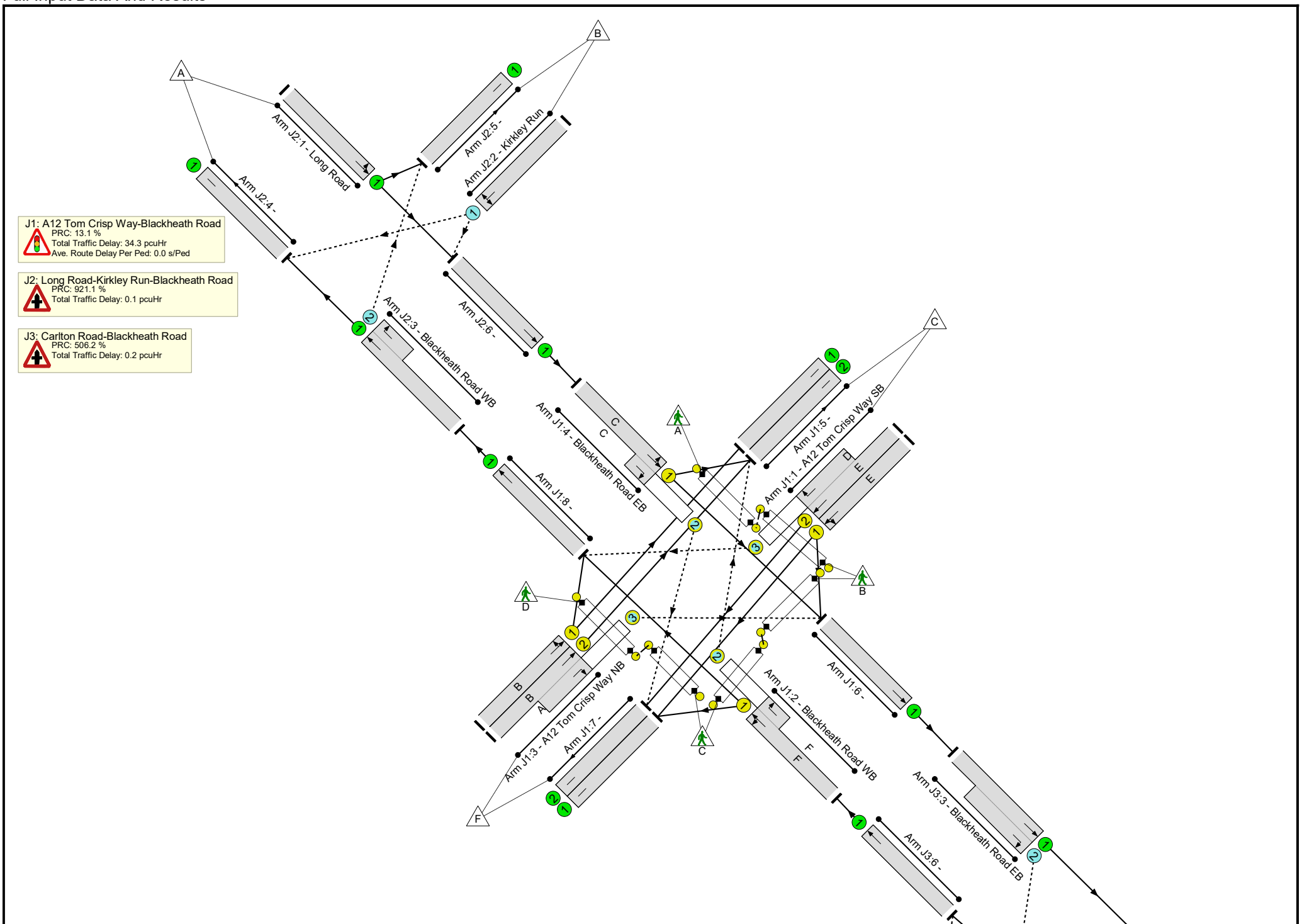
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



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**	-	-		-	-	-	-	-	-	**79.6%**
J1: A12 Tom Crisp Way-Blackheath Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**79.6%**
1/1	A12 Tom Crisp Way SB Left Ahead	U	N/A	N/A	E		1	40	-	389	1881	643	60.5%
1/2+1/3	A12 Tom Crisp Way SB Ahead Right	U+O	N/A	N/A	E D		1	40:10	-	438	1935:1787	612+75	63.7 : 63.7%
2/1+2/2	Blackheath Road WB Right Left Ahead	U+O	N/A	N/A	F		1	23	-	356	1811:1748	234+214	79.6 : 79.6%
3/1	A12 Tom Crisp Way NB Ahead Left	U	N/A	N/A	B		1	40	-	521	1951	667	78.2%
3/2+3/3	A12 Tom Crisp Way NB Ahead Right	U+O	N/A	N/A	B A		1	40:10	-	553	1955:1827	632+63	79.6 : 79.6%
4/1+4/2	Blackheath Road EB Left Ahead Right	U+O	N/A	N/A	C		1	12	-	177	1876:1778	187+37	79.0 : 79.0%
5/1		U	N/A	N/A	-		-	-	-	512	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	722	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	288	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	324	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	419	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	-		-	-	-	169	Inf	Inf	0.0%
Ped Link: P1	A12 Tom Crisp Way SB Ped	-	N/A	-	J		1	47	-	0	-	28200	0.0%
Ped Link: P2	A12 Tom Crisp Way NB Ped	-	N/A	-	I		1	6	-	0	-	3600	0.0%
Ped Link: P3	Blackheath Road EB Ped	-	N/A	-	K		1	22	-	0	-	13200	0.0%

Full Input Data And Results

Ped Link: P4	Blackheath Road WB Ped	-	N/A	-	L		1	84	-	0	-	50400	0.0%
Ped Link: P5	A12 Tom Crisp Way NB Ped	-	N/A	-	G		1	5	-	0	-	3000	0.0%
Ped Link: P6	A12 Tom Crisp Way SB Ped	-	N/A	-	H		1	47	-	0	-	28200	0.0%
J2: Long Road-Kirkley Run-Blackheath Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**8.8%**
1/1	Long Road Left Ahead	U	N/A	N/A	-		-	-	-	171	1940	1940	8.8%
2/1	Kirkley Run Right Left	O	N/A	N/A	-		-	-	-	91	1940	1165	7.8%
3/1+3/2	Blackheath Road WB Ahead Right	U+O	N/A	N/A	-		-	-	-	169	1940:1940	918+1022	8.7 : 8.7%
4/1		U	N/A	N/A	-		-	-	-	90	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	164	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	177	Inf	Inf	0.0%
J3: Carlton Road-Blackheath Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**14.8%**
1/1	Carlton Road Left Ahead	U	N/A	N/A	-		-	-	-	254	1940	1940	13.1%
2/1+2/2	Blackheath Road NB Right Left	O	N/A	N/A	-		-	-	-	137	1940:1940	1162+72	11.1 : 11.1%
3/1+3/2	Blackheath Road EB Ahead Right	U+O	N/A	N/A	-		-	-	-	288	1940:1940	1549+391	14.8 : 14.8%
4/1		U	N/A	N/A	-		-	-	-	238	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	85	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	356	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	**-**	**-**	**512**	**281**	**16**	**25.4**	**9.3**	**0.0**	**34.6**	**-**	**-**	**-**	**-**
J1: A12 Tom Crisp Way-Blackheath Road	**-**	**-**	**0**	**281**	**16**	**25.4**	**8.9**	**0.0**	**34.3**	**-**	**-**	**-**	**-**
1/1	389	389	-	-	-	3.5	0.8	-	4.3	39.8	10.7	0.8	11.5
1/2+1/3	438	438	0	46	2	4.2	0.9	0.0	5.1	41.8	11.3	0.9	12.1
2/1+2/2	356	356	0	163	7	4.3	1.9	0.0	6.2	62.5	8.5	1.9	10.4
3/1	521	521	-	-	-	5.1	1.7	-	6.9	47.6	15.5	1.7	17.2
3/2+3/3	553	553	0	48	2	5.6	1.9	0.0	7.5	48.9	15.9	1.9	17.8
4/1+4/2	177	177	0	24	5	2.5	1.7	0.0	4.3	87.2	5.2	1.7	6.9
5/1	512	512	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	722	722	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	288	288	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	324	324	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	419	419	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	169	169	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P5	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P6	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
J2: Long Road-Kirkley Run-Blackheath Road	**-**	**-**	**180**	**0**	**0**	**0.0**	**0.1**	**0.0**	**0.1**	**-**	**-**	**-**	**-**
1/1	171	171	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
2/1	91	91	91	0	0	0.0	0.0	-	0.0	1.7	0.0	0.0	0.0
3/1+3/2	169	169	89	0	0	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0

Full Input Data And Results

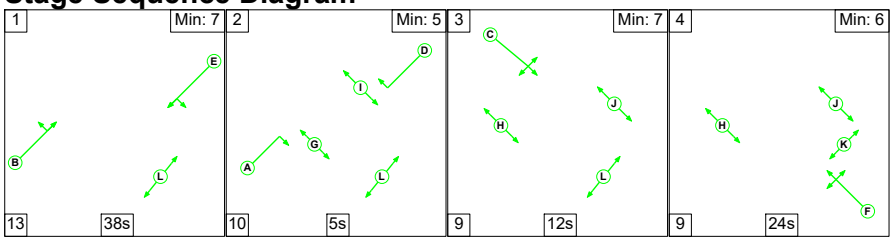
4/1	90	90	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	164	164	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	177	177	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J3: Carlton Road-Blackheath Road	**-**	**-**	**332**	**0**	**0**	**0.0**	**0.2**	**0.0**	**0.2**	**-**	**-**	**-**	**-**
1/1	254	254	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
2/1+2/2	137	137	274	0	0	0.0	0.1	-	0.1	1.6	0.0	0.1	0.1
3/1+3/2	288	288	58	0	0	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
4/1	238	238	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	85	85	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	356	356	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%):	13.1	Total Delay for Signalled Lanes (pcuHr):	34.26	Cycle Time (s):	120
	PRC Over All Lanes (%):	13.1	Total Delay Over All Lanes(pcuHr):	34.63		

Full Input Data And Results

Scenario 6: '2022 DS PM' (FG6: '2022 DS PM', Plan 1: 'Network Control Plan 1')

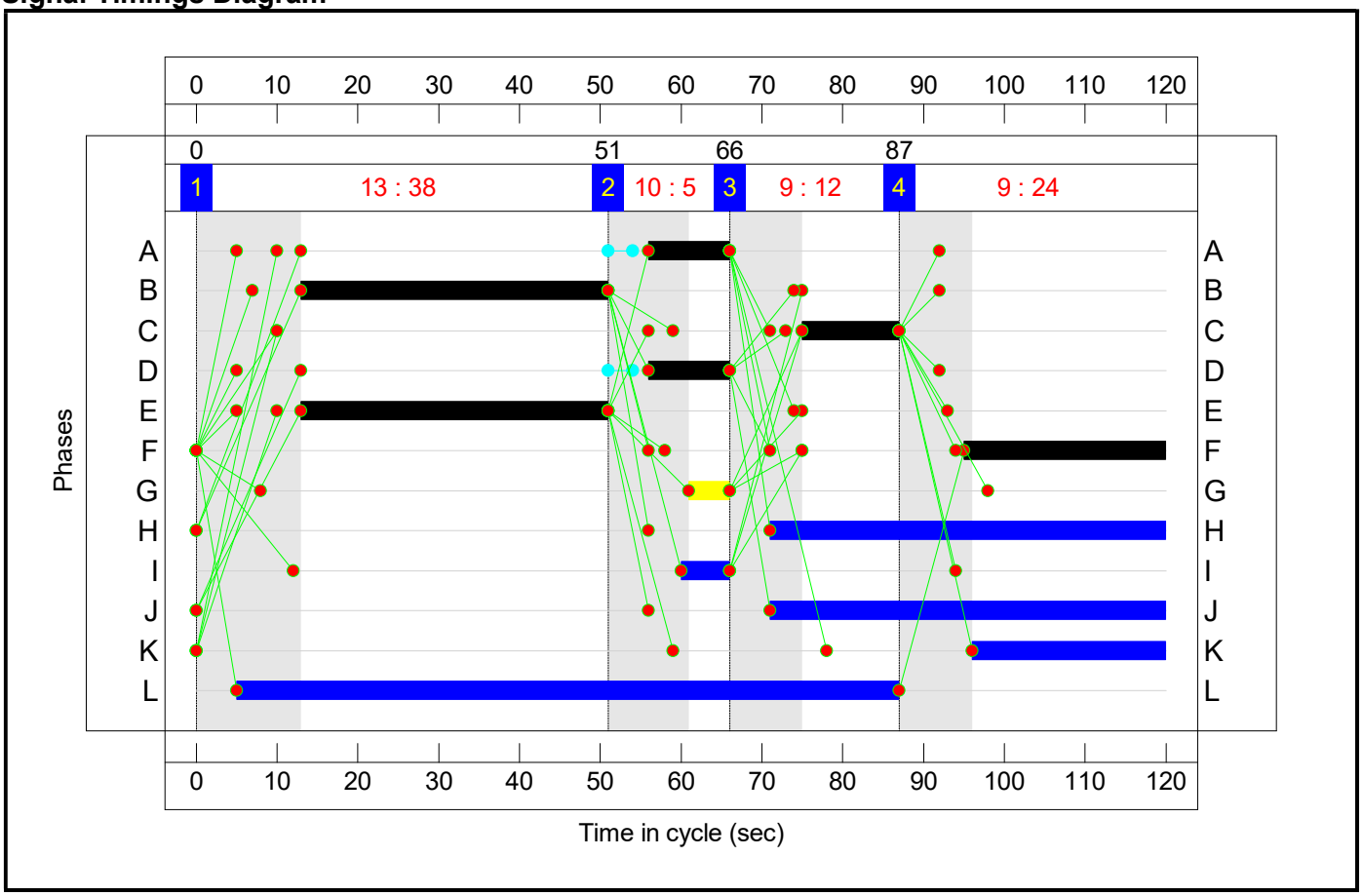
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	38	5	12	24
Change Point	0	51	66	87

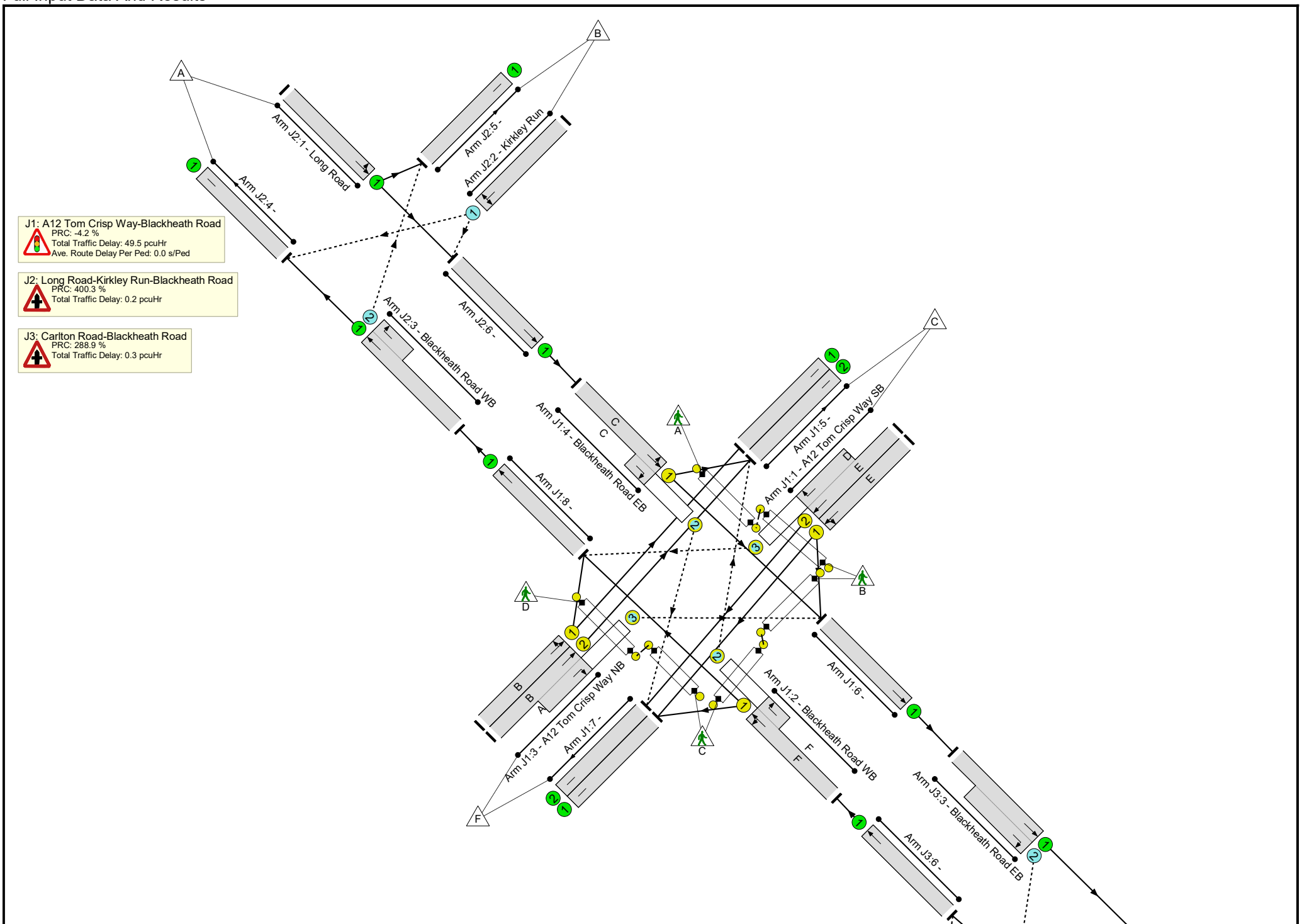
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



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**	-	-		-	-	-	-	-	-	**93.8%**
J1: A12 Tom Crisp Way-Blackheath Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**93.8%**
1/1	A12 Tom Crisp Way SB Left Ahead	U	N/A	N/A	E		1	38	-	568	1882	612	92.9%
1/2+1/3	A12 Tom Crisp Way SB Ahead Right	U+O	N/A	N/A	E D		1	38:10	-	611	1935:1787	590+63	93.6 : 93.6%
2/1+2/2	Blackheath Road WB Right Left Ahead	U+O	N/A	N/A	F		1	25	-	419	1765:1748	278+168	93.8 : 93.8%
3/1	A12 Tom Crisp Way NB Ahead Left	U	N/A	N/A	B		1	38	-	336	1916	623	54.0%
3/2+3/3	A12 Tom Crisp Way NB Ahead Right	U+O	N/A	N/A	B A		1	38:10	-	425	1955:1827	530+167	61.2 : 60.3%
4/1+4/2	Blackheath Road EB Left Ahead Right	U+O	N/A	N/A	C		1	12	-	192	1914:1778	207+8	89.4 : 89.4%
5/1		U	N/A	N/A	-		-	-	-	278	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	519	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	449	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	397	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	559	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	-		-	-	-	349	Inf	Inf	0.0%
Ped Link: P1	A12 Tom Crisp Way SB Ped	-	N/A	-	J		1	49	-	0	-	29400	0.0%
Ped Link: P2	A12 Tom Crisp Way NB Ped	-	N/A	-	I		1	6	-	0	-	3600	0.0%
Ped Link: P3	Blackheath Road EB Ped	-	N/A	-	K		1	24	-	0	-	14400	0.0%

Full Input Data And Results

Ped Link: P4	Blackheath Road WB Ped	-	N/A	-	L		1	82	-	0	-	49200	0.0%
Ped Link: P5	A12 Tom Crisp Way NB Ped	-	N/A	-	G		1	5	-	0	-	3000	0.0%
Ped Link: P6	A12 Tom Crisp Way SB Ped	-	N/A	-	H		1	49	-	0	-	29400	0.0%
J2: Long Road-Kirkley Run-Blackheath Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**18.0%**
1/1	Long Road Left Ahead	U	N/A	N/A	-		-	-	-	113	1940	1940	5.8%
2/1	Kirkley Run Right Left	O	N/A	N/A	-		-	-	-	194	1940	1144	17.0%
3/1+3/2	Blackheath Road WB Ahead Right	U+O	N/A	N/A	-		-	-	-	349	1940:1940	878+1062	18.0 : 18.0%
4/1		U	N/A	N/A	-		-	-	-	252	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	212	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	192	Inf	Inf	0.0%
J3: Carlton Road-Blackheath Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**23.1%**
1/1	Carlton Road Left Ahead	U	N/A	N/A	-		-	-	-	346	1940	1940	17.8%
2/1+2/2	Blackheath Road NB Right Left	O	N/A	N/A	-		-	-	-	96	1940:1940	1062+23	8.9 : 8.9%
3/1+3/2	Blackheath Road EB Ahead Right	U+O	N/A	N/A	-		-	-	-	449	1940:1940	1374+566	23.1 : 23.1%
4/1		U	N/A	N/A	-		-	-	-	320	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	152	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	419	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	**-**	**-**	**708**	**294**	**31**	**28.5**	**21.6**	**0.0**	**50.1**	**-**	**-**	**-**	**-**
J1: A12 Tom Crisp Way-Blackheath Road	**-**	**-**	**0**	**294**	**31**	**28.5**	**21.1**	**0.0**	**49.5**	**-**	**-**	**-**	**-**
1/1	568	568	-	-	-	6.2	5.2	-	11.4	72.4	18.3	5.2	23.5
1/2+1/3	611	611	0	57	2	6.8	5.7	0.0	12.5	73.8	19.0	5.7	24.8
2/1+2/2	419	419	0	141	17	5.2	5.4	0.0	10.6	91.2	11.9	5.4	17.3
3/1	336	336	-	-	-	3.1	0.6	-	3.7	39.4	9.1	0.6	9.7
3/2+3/3	425	425	0	91	10	4.4	0.8	0.0	5.2	44.1	9.8	0.8	10.6
4/1+4/2	192	192	0	5	2	2.8	3.3	0.0	6.1	114.3	6.2	3.3	9.5
5/1	278	278	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	519	519	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	449	449	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	397	397	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	559	559	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	349	349	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P5	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P6	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
J2: Long Road-Kirkley Run-Blackheath Road	**-**	**-**	**385**	**0**	**0**	**0.0**	**0.2**	**0.0**	**0.2**	**-**	**-**	**-**	**-**
1/1	113	113	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
2/1	194	194	194	0	0	0.0	0.1	-	0.1	1.9	0.0	0.1	0.1
3/1+3/2	349	349	191	0	0	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1

Full Input Data And Results

4/1	252	252	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	212	212	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	192	192	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J3: Carlton Road-Blackheath Road	**-**	**-**	**323**	**0**	**0**	**0.0**	**0.3**	**0.0**	**0.3**	**-**	**-**	**-**	**-**
1/1	346	346	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
2/1+2/2	96	96	192	0	0	0.0	0.0	-	0.0	1.8	0.0	0.0	0.0
3/1+3/2	449	449	131	0	0	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
4/1	320	320	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	152	152	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	419	419	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1

PRC for Signalled Lanes (%): -4.2
PRC Over All Lanes (%): -4.2

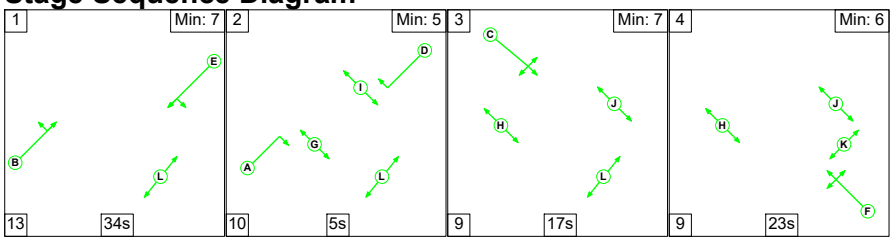
Total Delay for Signalled Lanes (pcuHr): 49.54
Total Delay Over All Lanes(pcuHr): 50.09

Cycle Time (s): 120

Full Input Data And Results

Scenario 7: '2037 DM AM' (FG7: '2037 DM AM', Plan 1: 'Network Control Plan 1')

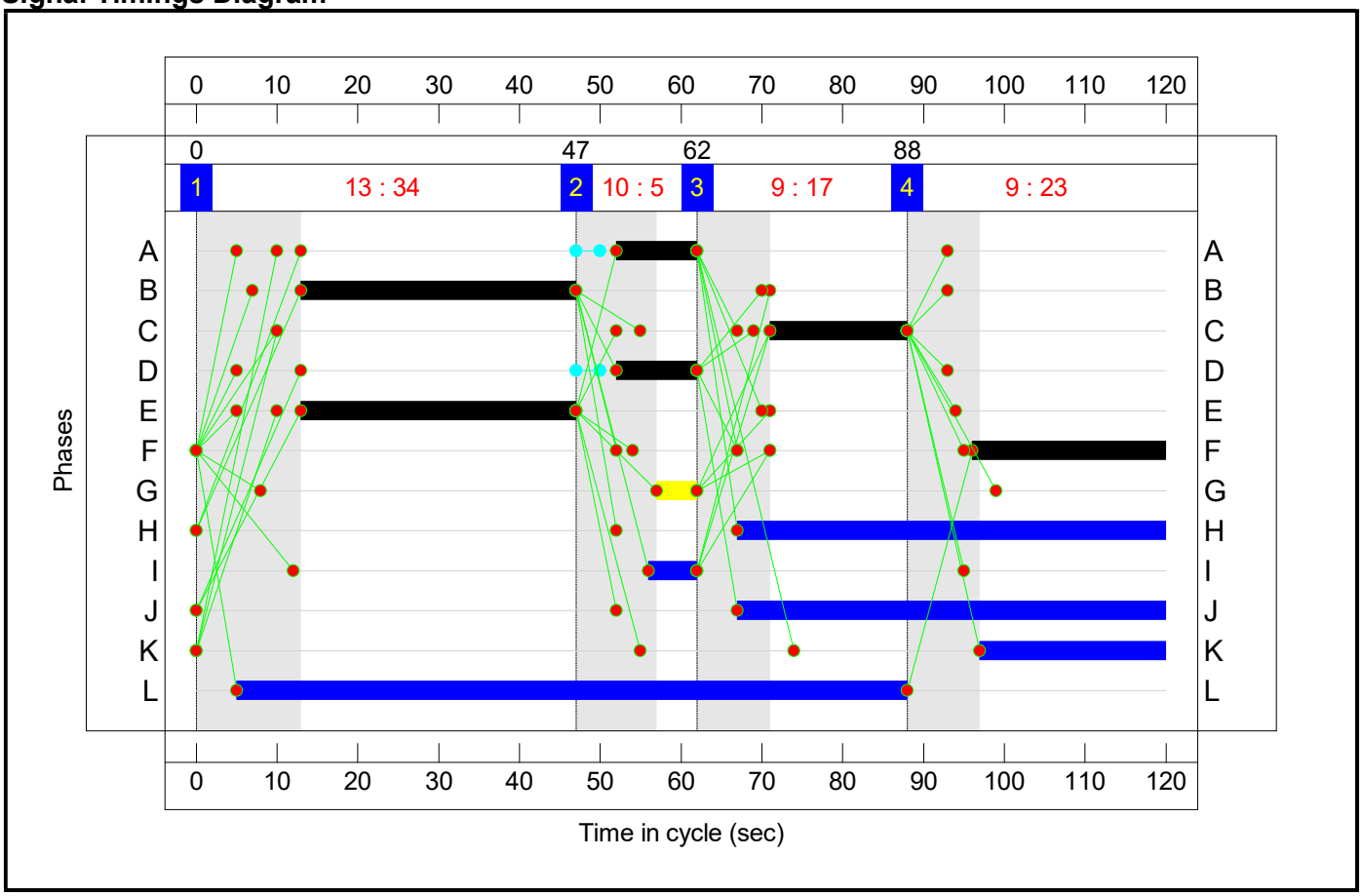
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	34	5	17	23
Change Point	0	47	62	88

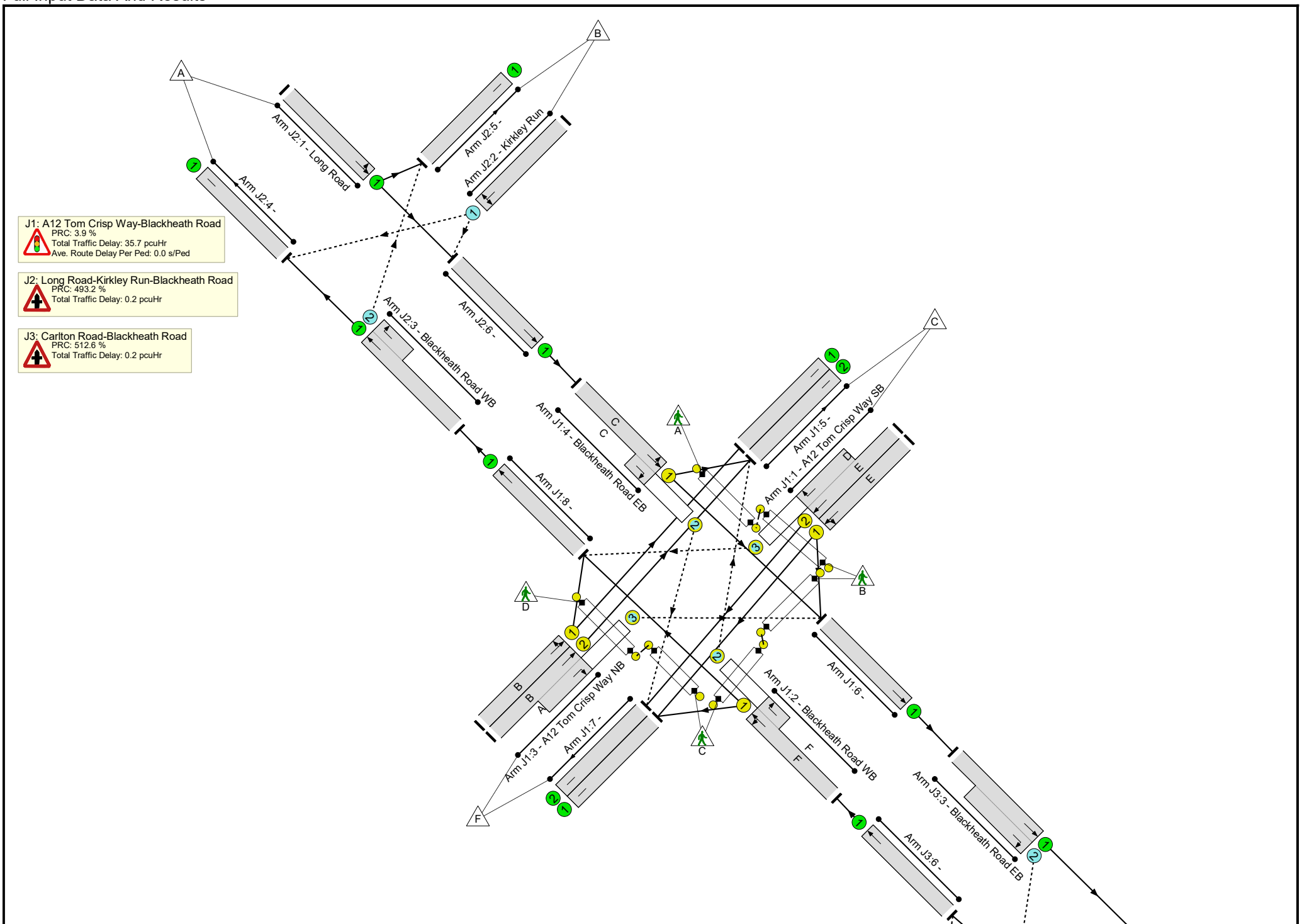
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



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**	-	-		-	-	-	-	-	-	**86.7%**
J1: A12 Tom Crisp Way-Blackheath Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**86.7%**
1/1	A12 Tom Crisp Way SB Left Ahead	U	N/A	N/A	E		1	34	-	237	1897	553	42.8%
1/2+1/3	A12 Tom Crisp Way SB Ahead Right	U+O	N/A	N/A	E D		1	34:10	-	320	1935:1787	472+164	51.1 : 48.2%
2/1+2/2	Blackheath Road WB Right Left Ahead	U+O	N/A	N/A	F		1	24	-	382	1804:1748	265+175	86.7 : 86.7%
3/1	A12 Tom Crisp Way NB Ahead Left	U	N/A	N/A	B		1	34	-	464	1925	561	82.6%
3/2+3/3	A12 Tom Crisp Way NB Ahead Right	U+O	N/A	N/A	B A		1	34:10	-	508	1955:1827	534+68	84.4 : 84.4%
4/1+4/2	Blackheath Road EB Left Ahead Right	U+O	N/A	N/A	C		1	17	-	253	1882:1778	250+53	83.4 : 83.4%
5/1		U	N/A	N/A	-		-	-	-	402	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	668	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	267	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	253	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	285	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	-		-	-	-	289	Inf	Inf	0.0%
Ped Link: P1	A12 Tom Crisp Way SB Ped	-	N/A	-	J		1	53	-	0	-	31800	0.0%
Ped Link: P2	A12 Tom Crisp Way NB Ped	-	N/A	-	I		1	6	-	0	-	3600	0.0%
Ped Link: P3	Blackheath Road EB Ped	-	N/A	-	K		1	23	-	0	-	13800	0.0%

Full Input Data And Results

Ped Link: P4	Blackheath Road WB Ped	-	N/A	-	L		1	83	-	0	-	49800	0.0%
Ped Link: P5	A12 Tom Crisp Way NB Ped	-	N/A	-	G		1	5	-	0	-	3000	0.0%
Ped Link: P6	A12 Tom Crisp Way SB Ped	-	N/A	-	H		1	53	-	0	-	31800	0.0%
J2: Long Road-Kirkley Run-Blackheath Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**15.2%**
1/1	Long Road Left Ahead	U	N/A	N/A	-		-	-	-	147	1940	1940	7.6%
2/1	Kirkley Run Right Left	O	N/A	N/A	-		-	-	-	135	1940	1175	11.5%
3/1+3/2	Blackheath Road WB Ahead Right	U+O	N/A	N/A	-		-	-	-	289	1940:1940	638+1279	14.9 : 15.2%
4/1		U	N/A	N/A	-		-	-	-	102	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	216	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	253	Inf	Inf	0.0%
J3: Carlton Road-Blackheath Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**14.7%**
1/1	Carlton Road Left Ahead	U	N/A	N/A	-		-	-	-	285	1940	1940	14.7%
2/1+2/2	Blackheath Road NB Right Left	O	N/A	N/A	-		-	-	-	136	1940:1940	1128+80	11.3 : 11.3%
3/1+3/2	Blackheath Road EB Ahead Right	U+O	N/A	N/A	-		-	-	-	267	1940:1940	1584+356	13.8 : 13.8%
4/1		U	N/A	N/A	-		-	-	-	227	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	79	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	382	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	**-**	**-**	**650**	**315**	**17**	**24.7**	**11.4**	**0.0**	**36.1**	**-**	**-**	**-**	**-**
J1: A12 Tom Crisp Way-Blackheath Road	**-**	**-**	**0**	**315**	**17**	**24.7**	**11.0**	**0.0**	**35.7**	**-**	**-**	**-**	**-**
1/1	237	237	-	-	-	2.3	0.4	-	2.6	40.1	6.4	0.4	6.8
1/2+1/3	320	320	0	76	3	3.4	0.5	0.0	3.9	44.4	6.5	0.5	7.0
2/1+2/2	382	382	0	146	6	4.7	3.0	0.0	7.6	72.0	10.2	3.0	13.2
3/1	464	464	-	-	-	5.1	2.3	-	7.4	57.3	14.3	2.3	16.6
3/2+3/3	508	508	0	55	2	5.7	2.6	0.0	8.3	58.8	15.1	2.6	17.6
4/1+4/2	253	253	0	39	5	3.4	2.3	0.0	5.7	81.8	7.6	2.3	9.9
5/1	402	402	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	668	668	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	267	267	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	253	253	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	285	285	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	289	289	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P5	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P6	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
J2: Long Road-Kirkley Run-Blackheath Road	**-**	**-**	**329**	**0**	**0**	**0.0**	**0.2**	**0.0**	**0.2**	**-**	**-**	**-**	**-**
1/1	147	147	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
2/1	135	135	135	0	0	0.0	0.1	-	0.1	1.7	0.0	0.1	0.1
3/1+3/2	289	289	194	0	0	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1

Full Input Data And Results

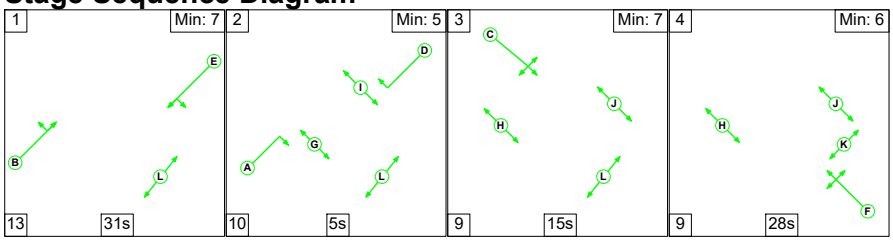
4/1	102	102	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	216	216	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	253	253	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J3: Carlton Road-Blackheath Road	**-**	**-**	**321**	**0**	**0**	**0.0**	**0.2**	**0.0**	**0.2**	**-**	**-**	**-**	**-**
1/1	285	285	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
2/1+2/2	136	136	272	0	0	0.0	0.1	-	0.1	1.7	0.0	0.1	0.1
3/1+3/2	267	267	49	0	0	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
4/1	227	227	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	79	79	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	382	382	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%):	3.9	Total Delay for Signalled Lanes (pcuHr):	35.65	Cycle Time (s): 120
	PRC Over All Lanes (%):	3.9	Total Delay Over All Lanes(pcuHr):	36.08	

Full Input Data And Results

Scenario 8: '2037 DM PM' (FG8: '2037 DM PM', Plan 1: 'Network Control Plan 1')

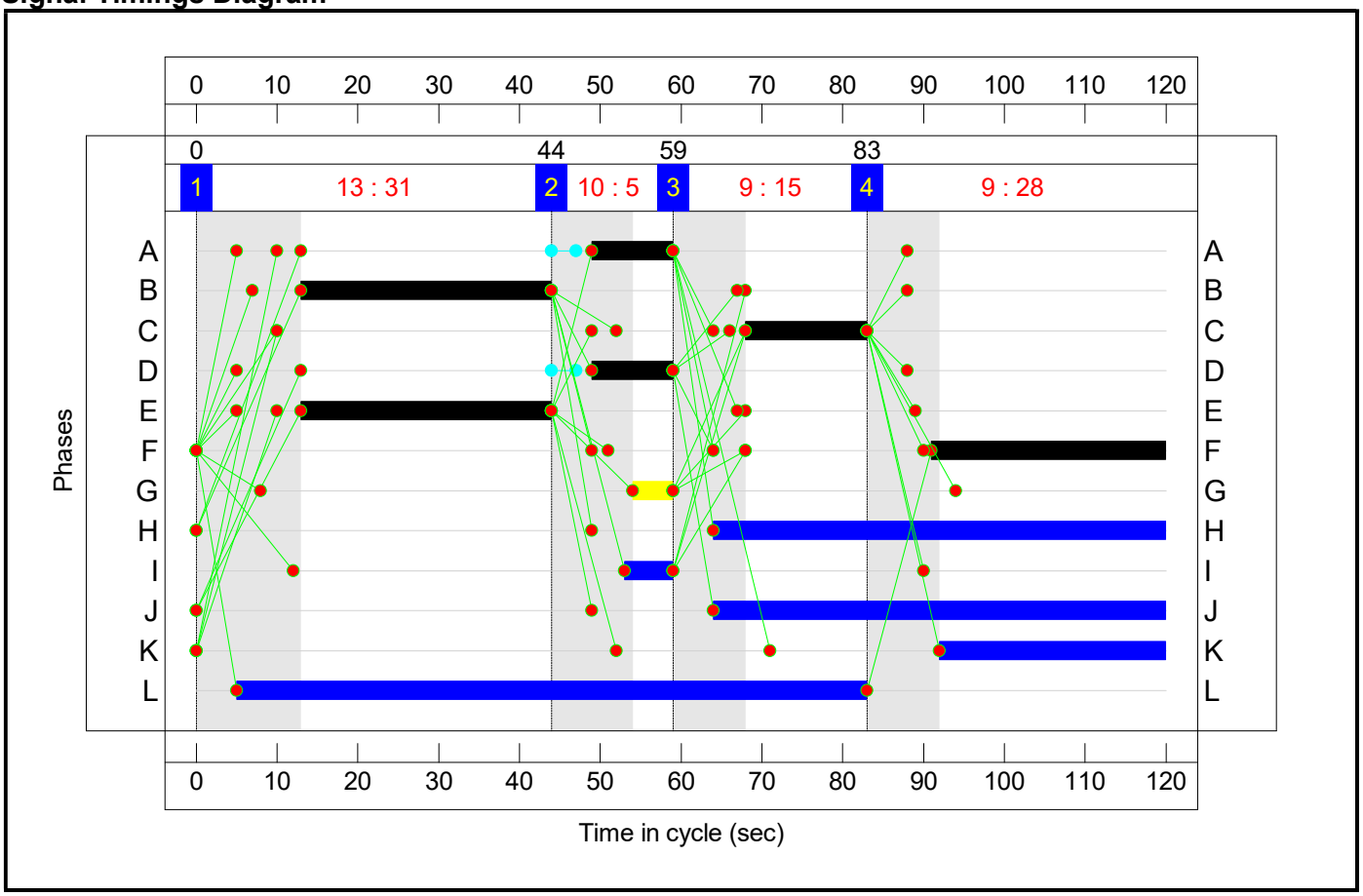
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	31	5	15	28
Change Point	0	44	59	83

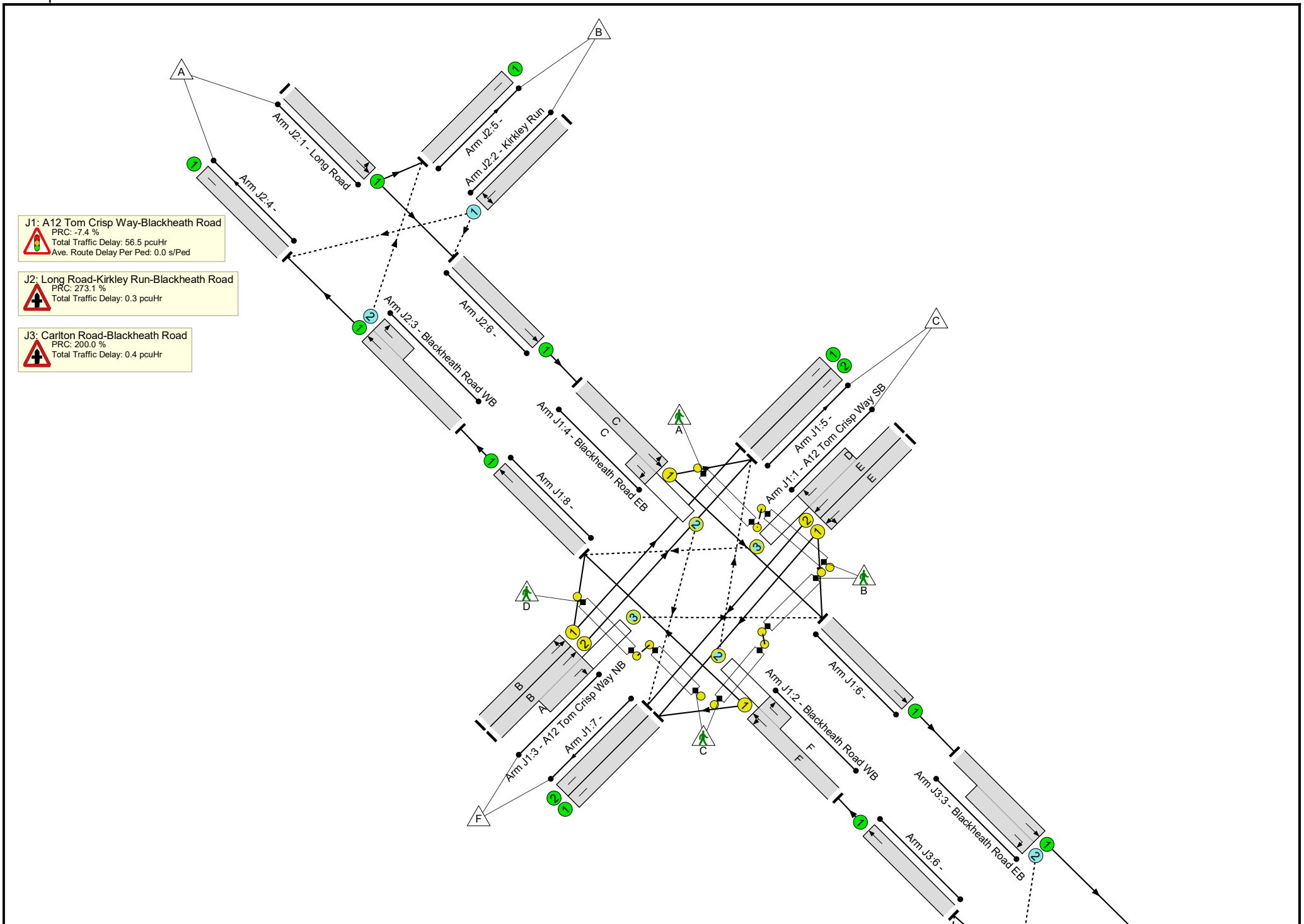
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



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**	-	-		-	-	-	-	-	-	**96.7%**
J1: A12 Tom Crisp Way-Blackheath Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**96.7%**
1/1	A12 Tom Crisp Way SB Left Ahead	U	N/A	N/A	E		1	31	-	486	1917	511	95.1%
1/2+1/3	A12 Tom Crisp Way SB Ahead Right	U+O	N/A	N/A	E D		1	31:10	-	534	1935:1787	463+95	95.8 : 95.8%
2/1+2/2	Blackheath Road WB Right Left Ahead	U+O	N/A	N/A	F		1	29	-	465	1762:1748	347+142	95.2 : 95.2%
3/1	A12 Tom Crisp Way NB Ahead Left	U	N/A	N/A	B		1	31	-	345	1905	508	67.9%
3/2+3/3	A12 Tom Crisp Way NB Ahead Right	U+O	N/A	N/A	B A		1	31:10	-	246	1955:1827	191+167	68.7 : 68.7%
4/1+4/2	Blackheath Road EB Left Ahead Right	U+O	N/A	N/A	C		1	15	-	259	1933:1778	245+23	96.7 : 96.7%
5/1		U	N/A	N/A	-		-	-	-	268	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	298	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	408	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	428	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	465	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	-		-	-	-	468	Inf	Inf	0.0%
Ped Link: P1	A12 Tom Crisp Way SB Ped	-	N/A	-	J		1	56	-	0	-	33600	0.0%
Ped Link: P2	A12 Tom Crisp Way NB Ped	-	N/A	-	I		1	6	-	0	-	3600	0.0%
Ped Link: P3	Blackheath Road EB Ped	-	N/A	-	K		1	28	-	0	-	16800	0.0%

Full Input Data And Results

Ped Link: P4	Blackheath Road WB Ped	-	N/A	-	L		1	78	-	0	-	46800	0.0%
Ped Link: P5	A12 Tom Crisp Way NB Ped	-	N/A	-	G		1	5	-	0	-	3000	0.0%
Ped Link: P6	A12 Tom Crisp Way SB Ped	-	N/A	-	H		1	56	-	0	-	33600	0.0%
J2: Long Road-Kirkley Run-Blackheath Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**24.1%**
1/1	Long Road Left Ahead	U	N/A	N/A	-		-	-	-	100	1940	1940	5.2%
2/1	Kirkley Run Right Left	O	N/A	N/A	-		-	-	-	257	1940	1115	23.0%
3/1+3/2	Blackheath Road WB Ahead Right	U+O	N/A	N/A	-		-	-	-	468	1940:1940	817+1123	24.1 : 24.1%
4/1		U	N/A	N/A	-		-	-	-	285	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	281	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	259	Inf	Inf	0.0%
J3: Carlton Road-Blackheath Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**30.0%**
1/1	Carlton Road Left Ahead	U	N/A	N/A	-		-	-	-	369	1940	1940	19.0%
2/1+2/2	Blackheath Road NB Right Left	O	N/A	N/A	-		-	-	-	122	1940:1940	1037+17	11.6 : 11.6%
3/1+3/2	Blackheath Road EB Ahead Right	U+O	N/A	N/A	-		-	-	-	408	1940:1940	323+1037	30.0 : 30.0%
4/1		U	N/A	N/A	-		-	-	-	99	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	335	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	465	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	**-**	**-**	**1083**	**315**	**48**	**28.4**	**28.9**	**0.0**	**57.2**	**-**	**-**	**-**	**-**
J1: A12 Tom Crisp Way-Blackheath Road	**-**	**-**	**0**	**315**	**48**	**28.4**	**28.1**	**0.0**	**56.5**	**-**	**-**	**-**	**-**
1/1	486	486	-	-	-	5.8	6.4	-	12.2	90.6	15.8	6.4	22.2
1/2+1/3	534	534	0	87	4	6.5	7.1	0.0	13.6	91.8	16.1	7.1	23.1
2/1+2/2	465	465	0	121	14	5.6	6.4	0.0	12.0	92.7	14.0	6.4	20.4
3/1	345	345	-	-	-	3.8	1.0	-	4.8	50.3	10.3	1.0	11.3
3/2+3/3	246	246	0	91	24	2.9	1.1	0.0	4.0	58.9	3.7	1.1	4.8
4/1+4/2	259	259	0	16	6	3.7	6.1	0.0	9.8	136.6	8.3	6.1	14.4
5/1	268	268	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	298	298	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	408	408	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	428	428	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	465	465	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	468	468	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P5	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P6	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
J2: Long Road-Kirkley Run-Blackheath Road	**-**	**-**	**528**	**0**	**0**	**0.0**	**0.3**	**0.0**	**0.3**	**-**	**-**	**-**	**-**
1/1	100	100	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
2/1	257	257	257	0	0	0.0	0.1	-	0.1	2.1	0.0	0.1	0.1
3/1+3/2	468	468	271	0	0	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2

Full Input Data And Results

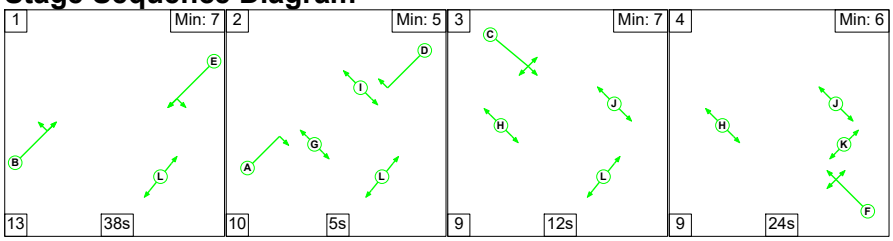
4/1	285	285	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	281	281	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	259	259	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J3: Carlton Road-Blackheath Road	**-**	**-**	**555**	**0**	**0**	**0.0**	**0.4**	**0.0**	**0.4**	**-**	**-**	**-**	**-**
1/1	369	369	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
2/1+2/2	122	122	244	0	0	0.0	0.1	-	0.1	1.9	0.0	0.1	0.1
3/1+3/2	408	408	311	0	0	0.0	0.2	-	0.2	1.9	0.0	0.2	0.2
4/1	99	99	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	335	335	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	465	465	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%):	-7.4	Total Delay for Signalled Lanes (pcuHr):	56.50	Cycle Time (s):	120
	PRC Over All Lanes (%):	-7.4	Total Delay Over All Lanes(pcuHr):	57.23		

Full Input Data And Results

Scenario 9: '2037 DS AM' (FG9: '2037 DS AM', Plan 1: 'Network Control Plan 1')

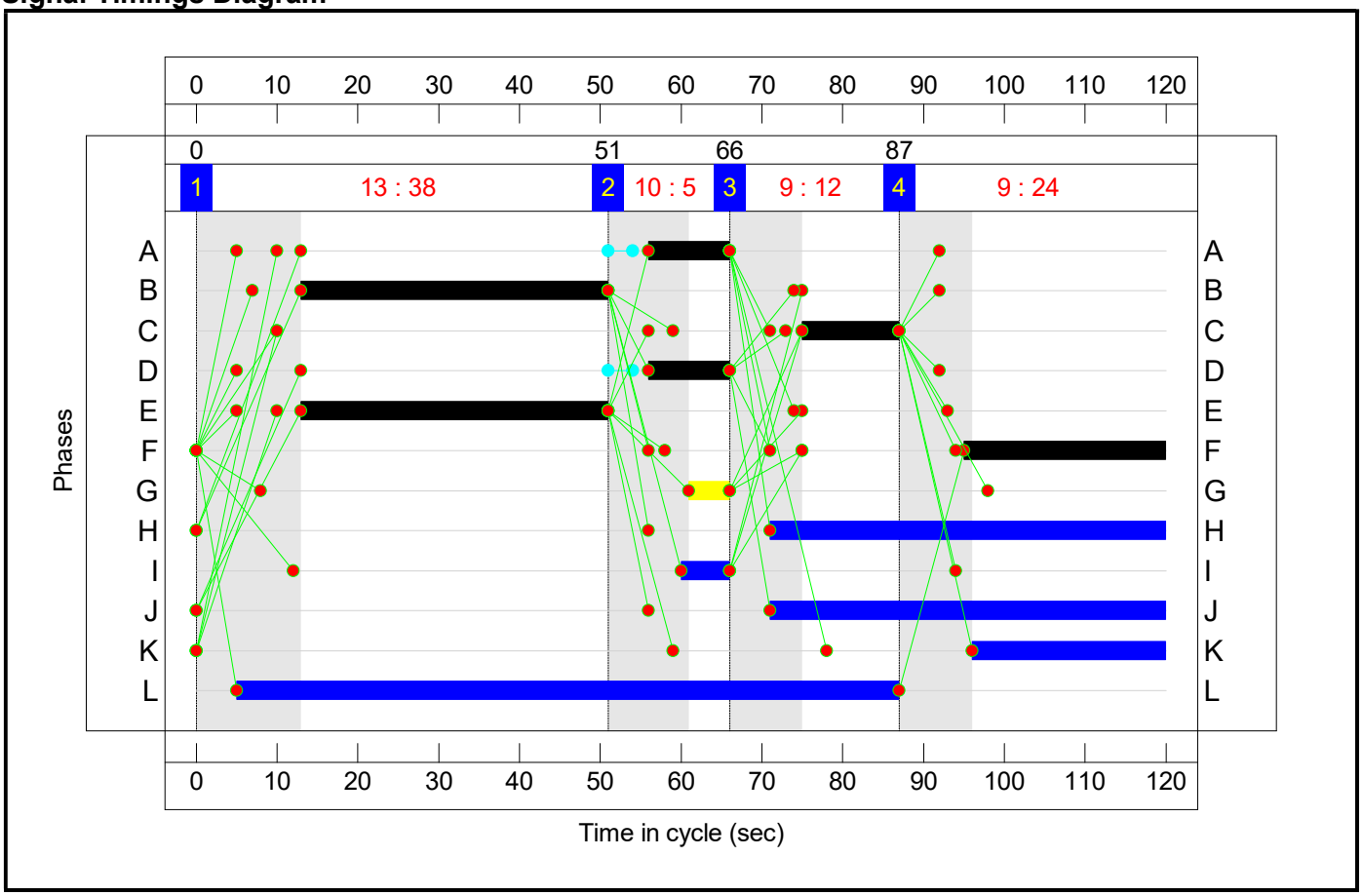
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	38	5	12	24
Change Point	0	51	66	87

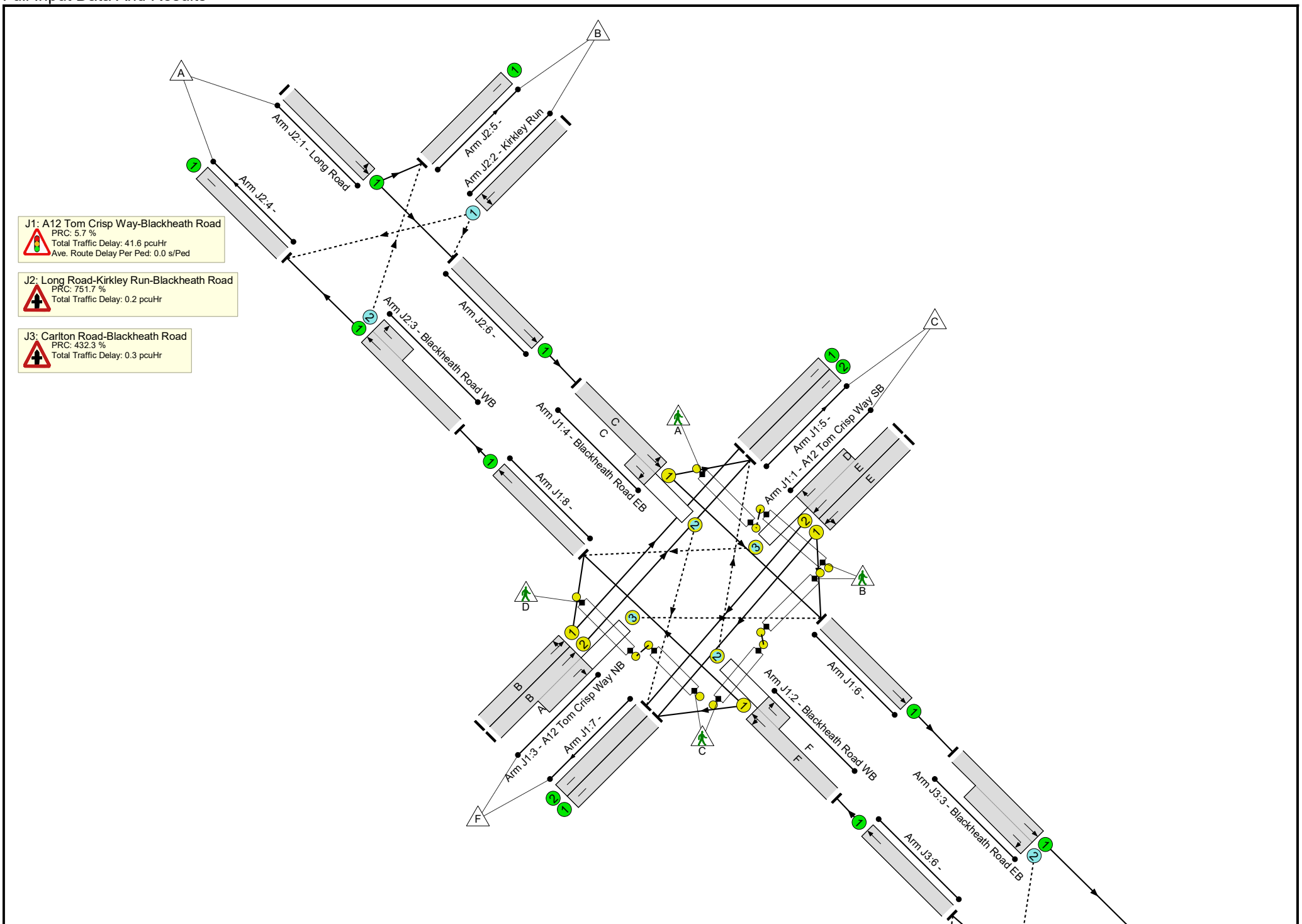
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



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**	-	-		-	-	-	-	-	-	**85.2%**
J1: A12 Tom Crisp Way-Blackheath Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**85.2%**
1/1	A12 Tom Crisp Way SB Left Ahead	U	N/A	N/A	E		1	38	-	453	1884	612	74.0%
1/2+1/3	A12 Tom Crisp Way SB Ahead Right	U+O	N/A	N/A	E D		1	38:10	-	499	1935:1787	585+70	76.2 : 76.2%
2/1+2/2	Blackheath Road WB Right Left Ahead	U+O	N/A	N/A	F		1	25	-	400	1812:1748	249+228	83.8 : 83.8%
3/1	A12 Tom Crisp Way NB Ahead Left	U	N/A	N/A	B		1	38	-	529	1955	635	83.3%
3/2+3/3	A12 Tom Crisp Way NB Ahead Right	U+O	N/A	N/A	B A		1	38:10	-	562	1955:1827	597+67	84.6 : 84.6%
4/1+4/2	Blackheath Road EB Left Ahead Right	U+O	N/A	N/A	C		1	12	-	188	1883:1778	193+28	85.2 : 85.2%
5/1		U	N/A	N/A	-		-	-	-	529	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	746	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	328	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	381	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	470	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	-		-	-	-	177	Inf	Inf	0.0%
Ped Link: P1	A12 Tom Crisp Way SB Ped	-	N/A	-	J		1	49	-	0	-	29400	0.0%
Ped Link: P2	A12 Tom Crisp Way NB Ped	-	N/A	-	I		1	6	-	0	-	3600	0.0%
Ped Link: P3	Blackheath Road EB Ped	-	N/A	-	K		1	24	-	0	-	14400	0.0%

Full Input Data And Results

Ped Link: P4	Blackheath Road WB Ped	-	N/A	-	L		1	82	-	0	-	49200	0.0%
Ped Link: P5	A12 Tom Crisp Way NB Ped	-	N/A	-	G		1	5	-	0	-	3000	0.0%
Ped Link: P6	A12 Tom Crisp Way SB Ped	-	N/A	-	H		1	49	-	0	-	29400	0.0%
J2: Long Road-Kirkley Run-Blackheath Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**10.6%**
1/1	Long Road Left Ahead	U	N/A	N/A	-		-	-	-	205	1940	1940	10.6%
2/1	Kirkley Run Right Left	O	N/A	N/A	-		-	-	-	100	1940	1121	8.9%
3/1+3/2	Blackheath Road WB Ahead Right	U+O	N/A	N/A	-		-	-	-	177	1940:1940	954+986	9.1 : 9.1%
4/1		U	N/A	N/A	-		-	-	-	106	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	188	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	188	Inf	Inf	0.0%
J3: Carlton Road-Blackheath Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**16.9%**
1/1	Carlton Road Left Ahead	U	N/A	N/A	-		-	-	-	287	1940	1940	14.8%
2/1+2/2	Blackheath Road NB Right Left	O	N/A	N/A	-		-	-	-	152	1940:1940	1126+71	12.7 : 12.7%
3/1+3/2	Blackheath Road EB Ahead Right	U+O	N/A	N/A	-		-	-	-	328	1940:1940	1550+390	16.9 : 16.9%
4/1		U	N/A	N/A	-		-	-	-	271	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	96	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	400	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	**-**	**-**	**560**	**307**	**18**	**28.7**	**13.3**	**0.0**	**42.0**	**-**	**-**	**-**	**-**
J1: A12 Tom Crisp Way-Blackheath Road	**-**	**-**	**0**	**307**	**18**	**28.7**	**12.9**	**0.0**	**41.6**	**-**	**-**	**-**	**-**
1/1	453	453	-	-	-	4.5	1.4	-	5.9	47.1	13.3	1.4	14.7
1/2+1/3	499	499	0	51	2	5.2	1.6	0.0	6.7	48.7	13.9	1.6	15.5
2/1+2/2	400	400	0	183	8	4.8	2.4	0.0	7.2	64.8	10.0	2.4	12.4
3/1	529	529	-	-	-	5.5	2.4	-	7.9	53.7	16.3	2.4	18.7
3/2+3/3	562	562	0	55	2	6.0	2.6	0.0	8.6	55.2	16.7	2.6	19.3
4/1+4/2	188	188	0	18	6	2.7	2.5	0.0	5.2	99.9	5.7	2.5	8.2
5/1	529	529	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	746	746	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	328	328	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	381	381	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	470	470	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	177	177	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P5	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P6	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
J2: Long Road-Kirkley Run-Blackheath Road	**-**	**-**	**190**	**0**	**0**	**0.0**	**0.2**	**0.0**	**0.2**	**-**	**-**	**-**	**-**
1/1	205	205	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1
2/1	100	100	100	0	0	0.0	0.0	-	0.0	1.8	0.0	0.0	0.0
3/1+3/2	177	177	90	0	0	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1

Full Input Data And Results

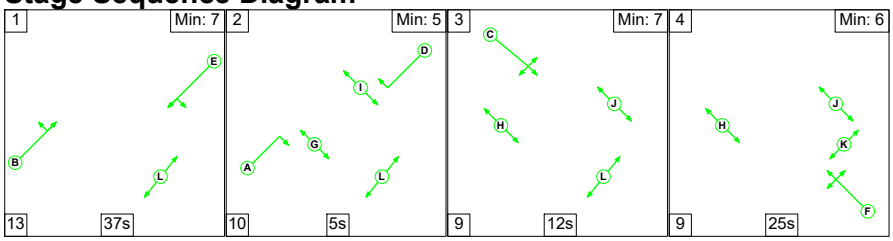
4/1	106	106	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	188	188	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	188	188	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J3: Carlton Road-Blackheath Road	**-**	**-**	**370**	**0**	**0**	**0.0**	**0.3**	**0.0**	**0.3**	**-**	**-**	**-**	**-**
1/1	287	287	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
2/1+2/2	152	152	304	0	0	0.0	0.1	-	0.1	1.7	0.0	0.1	0.1
3/1+3/2	328	328	66	0	0	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
4/1	271	271	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	96	96	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	400	400	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%):	5.7	Total Delay for Signalled Lanes (pcuHr):	41.60	Cycle Time (s):	120
	PRC Over All Lanes (%):	5.7	Total Delay Over All Lanes(pcuHr):	42.02		

Full Input Data And Results

Scenario 10: '2037 DS PM' (FG10: '2037 DS PM', Plan 1: 'Network Control Plan 1')

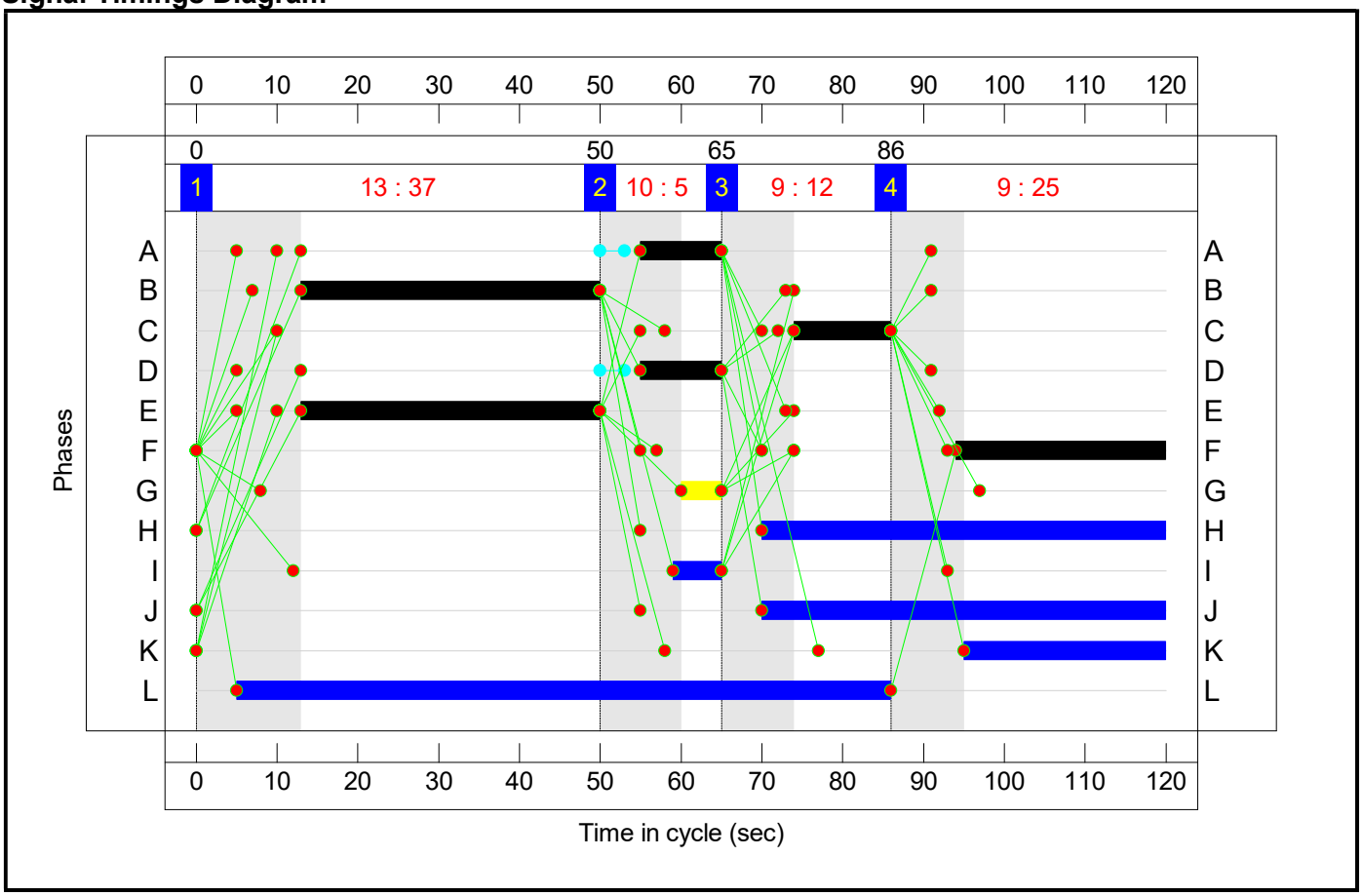
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	37	5	12	25
Change Point	0	50	65	86

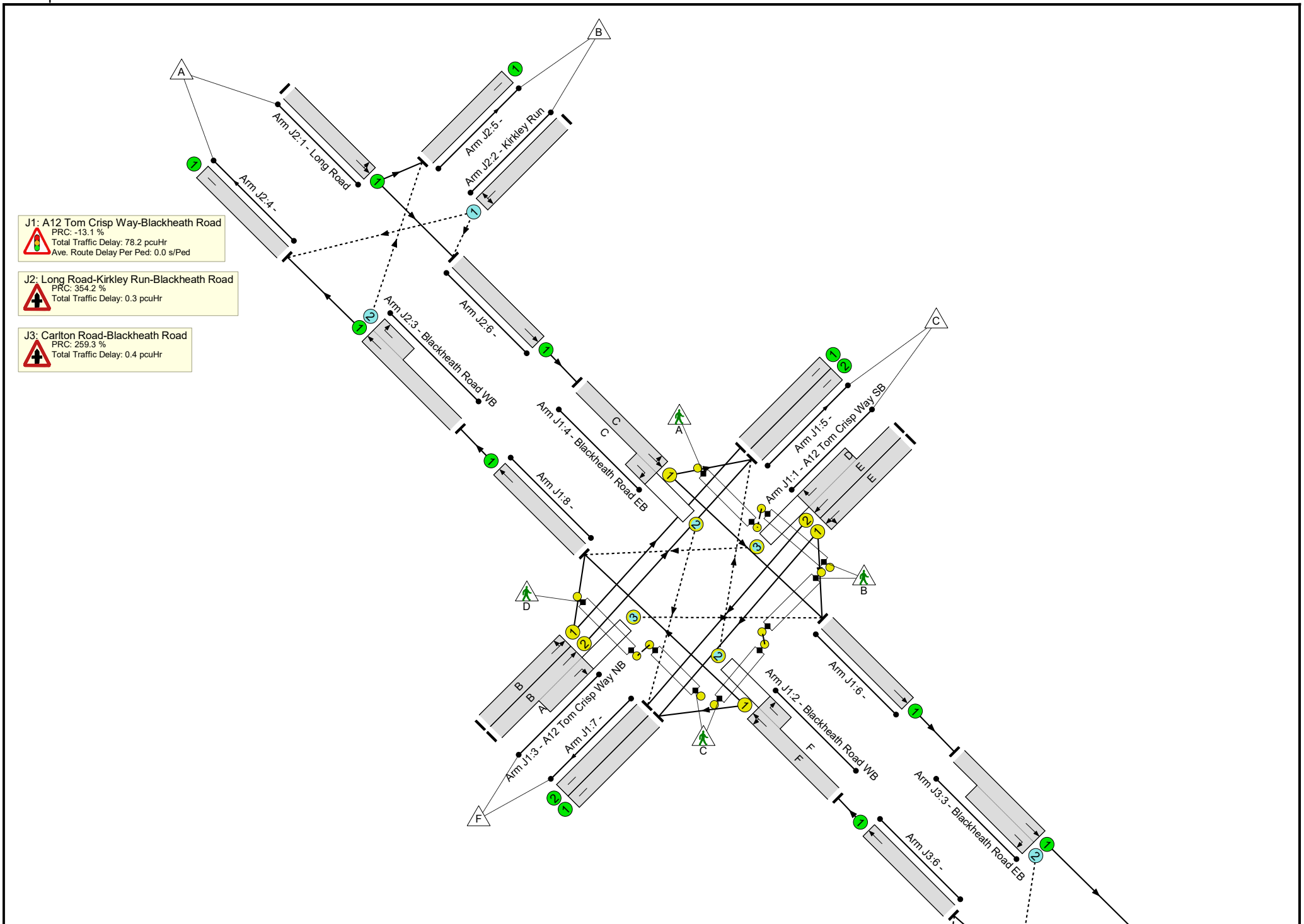
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



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**	-	-		-	-	-	-	-	-	**101.8%**
J1: A12 Tom Crisp Way-Blackheath Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**101.8%**
1/1	A12 Tom Crisp Way SB Left Ahead	U	N/A	N/A	E		1	37	-	596	1883	596	100.0%
1/2+1/3	A12 Tom Crisp Way SB Ahead Right	U+O	N/A	N/A	E D		1	37:10	-	635	1935:1787	581+53	100.1 : 100.1%
2/1+2/2	Blackheath Road WB Right Left Ahead	U+O	N/A	N/A	F		1	26	-	472	1765:1748	284+180	101.8 : 101.8%
3/1	A12 Tom Crisp Way NB Ahead Left	U	N/A	N/A	B		1	37	-	361	1916	607	59.5%
3/2+3/3	A12 Tom Crisp Way NB Ahead Right	U+O	N/A	N/A	B A		1	37:10	-	452	1955:1827	518+167	66.6 : 63.9%
4/1+4/2	Blackheath Road EB Left Ahead Right	U+O	N/A	N/A	C		1	12	-	213	1929:1778	206+11	98.2 : 98.2%
5/1		U	N/A	N/A	-		-	-	-	298	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	558	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	486	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	420	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	593	Inf	Inf	0.0%
8/1	Ahead	U	N/A	N/A	-		-	-	-	374	Inf	Inf	0.0%
Ped Link: P1	A12 Tom Crisp Way SB Ped	-	N/A	-	J		1	50	-	0	-	30000	0.0%
Ped Link: P2	A12 Tom Crisp Way NB Ped	-	N/A	-	I		1	6	-	0	-	3600	0.0%
Ped Link: P3	Blackheath Road EB Ped	-	N/A	-	K		1	25	-	0	-	15000	0.0%

Full Input Data And Results

Ped Link: P4	Blackheath Road WB Ped	-	N/A	-	L		1	81	-	0	-	48600	0.0%
Ped Link: P5	A12 Tom Crisp Way NB Ped	-	N/A	-	G		1	5	-	0	-	3000	0.0%
Ped Link: P6	A12 Tom Crisp Way SB Ped	-	N/A	-	H		1	50	-	0	-	30000	0.0%
J2: Long Road-Kirkley Run-Blackheath Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**19.8%**
1/1	Long Road Left Ahead	U	N/A	N/A	-		-	-	-	123	1940	1940	6.3%
2/1	Kirkley Run Right Left	O	N/A	N/A	-		-	-	-	215	1940	1085	19.8%
3/1+3/2	Blackheath Road WB Ahead Right	U+O	N/A	N/A	-		-	-	-	374	1940:1940	1058+882	19.1 : 19.0%
4/1		U	N/A	N/A	-		-	-	-	306	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	193	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	213	Inf	Inf	0.0%
J3: Carlton Road-Blackheath Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**25.1%**
1/1	Carlton Road Left Ahead	U	N/A	N/A	-		-	-	-	384	1940	1940	19.8%
2/1+2/2	Blackheath Road NB Right Left	O	N/A	N/A	-		-	-	-	113	1940:1940	1020+18	10.9 : 10.9%
3/1+3/2	Blackheath Road EB Ahead Right	U+O	N/A	N/A	-		-	-	-	486	1940:1940	1413+527	25.1 : 25.1%
4/1		U	N/A	N/A	-		-	-	-	356	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	155	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	472	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	**-**	**-**	**741**	**301**	**50**	**32.1**	**46.8**	**0.0**	**78.8**	**-**	**-**	**-**	**-**
J1: A12 Tom Crisp Way-Blackheath Road	**-**	**-**	**0**	**301**	**50**	**32.1**	**46.1**	**0.0**	**78.2**	**-**	**-**	**-**	**-**
1/1	596	596	-	-	-	6.8	12.1	-	18.9	114.3	19.7	12.1	31.8
1/2+1/3	635	634	0	51	2	7.4	12.8	0.0	20.2	114.4	20.6	12.8	33.4
2/1+2/2	472	464	0	151	28	6.5	13.1	0.0	19.6	149.2	14.4	13.1	27.5
3/1	361	361	-	-	-	3.5	0.7	-	4.2	41.8	10.1	0.7	10.9
3/2+3/3	452	452	0	91	16	4.8	1.0	0.0	5.8	46.2	10.9	1.0	11.9
4/1+4/2	213	213	0	7	4	3.2	6.4	0.0	9.5	161.2	6.9	6.4	13.3
5/1	298	298	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	555	555	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	486	486	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	419	419	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	592	592	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	370	370	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P5	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P6	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
J2: Long Road-Kirkley Run-Blackheath Road	**-**	**-**	**383**	**0**	**0**	**0.0**	**0.3**	**0.0**	**0.3**	**-**	**-**	**-**	**-**
1/1	123	123	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
2/1	215	215	215	0	0	0.0	0.1	-	0.1	2.1	0.0	0.1	0.1
3/1+3/2	370	370	168	0	0	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1

Full Input Data And Results

4/1	304	304	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	191	191	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	213	213	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J3: Carlton Road-Blackheath Road	**-**	**-**	**358**	**0**	**0**	**0.0**	**0.4**	**0.0**	**0.4**	**-**	**-**	**-**	**-**
1/1	384	384	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
2/1+2/2	113	113	226	0	0	0.0	0.1	-	0.1	1.9	0.0	0.1	0.1
3/1+3/2	486	486	132	0	0	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
4/1	356	356	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	155	155	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	472	472	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1

PRC for Signalled Lanes (%): -13.1
PRC Over All Lanes (%): -13.1

Total Delay for Signalled Lanes (pcuHr): 78.20
Total Delay Over All Lanes(pcuHr): 78.82

Cycle Time (s): 120

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.6.541 [19821,26/11/2015]

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: 09 A12 Tom Crisp Way-Bloodmoor Rd rdbts v8 2018-11-13.arc8
Path: L:\106xxx\1069948 Lowestoft Third Crossing\09 Documents\06_Modelling_November 2018
Report generation date: 14/12/2018 12:17:16

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2016 Base							
Junction 1 - Arm 1	0.40	2.88	0.29	A	1.15	4.55	0.54	A
Junction 1 - Arm 2	0.65	7.08	0.40	A	1.21	13.01	0.55	B
Junction 1 - Arm 3	0.92	4.14	0.48	A	2.18	8.34	0.69	A
Junction 1 - Arm 4	0.98	7.92	0.50	A	0.61	8.02	0.38	A
Junction 1 - Arm 5	1.63	8.95	0.62	A	1.27	7.46	0.56	A
Junction 1 - Arm 6	2.14	9.67	0.69	A	1.40	6.59	0.59	A
Junction 2 - Arm 1	1.86	9.59	0.65	A	1.68	9.19	0.63	A
Junction 2 - Arm 2	0.20	6.52	0.17	A	0.20	6.30	0.16	A
Junction 2 - Arm 3	0.56	2.75	0.36	A	0.78	3.13	0.44	A
	A1 - 2022 Do Minimum							
Junction 1 - Arm 1	0.41	3.00	0.29	A	1.41	5.34	0.59	A
Junction 1 - Arm 2	0.77	7.72	0.44	A	1.80	18.63	0.65	C
Junction 1 - Arm 3	1.37	5.12	0.58	A	2.88	10.40	0.75	B
Junction 1 - Arm 4	1.35	10.23	0.58	B	0.67	8.79	0.41	A
Junction 1 - Arm 5	2.20	11.70	0.69	B	1.46	8.22	0.60	A
Junction 1 - Arm 6	2.95	12.82	0.75	B	2.01	8.42	0.67	A
Junction 2 - Arm 1	2.85	13.11	0.75	B	2.62	12.47	0.73	B
Junction 2 - Arm 2	0.14	6.61	0.12	A	0.24	7.11	0.20	A
Junction 2 - Arm 3	0.64	2.90	0.39	A	0.82	3.22	0.45	A
	A1 - 2022 Do Something							
Junction 1 - Arm 1	0.95	3.86	0.49	A	2.30	7.17	0.70	A
Junction 1 - Arm 2	0.87	8.98	0.47	A	1.61	19.42	0.63	C
Junction 1 - Arm 3	1.54	5.57	0.61	A	3.46	11.90	0.78	B

Junction 1 - Arm 4	1.53	11.53	0.61	B	0.72	9.19	0.42	A
Junction 1 - Arm 5	1.75	10.19	0.64	B	1.69	9.07	0.63	A
Junction 1 - Arm 6	1.41	8.38	0.59	A	2.41	10.87	0.71	B
Junction 2 - Arm 1	1.08	7.21	0.52	A	1.91	9.85	0.66	A
Junction 2 - Arm 2	0.14	5.41	0.13	A	0.29	6.92	0.23	A
Junction 2 - Arm 3	0.41	2.49	0.29	A	0.48	2.62	0.32	A
	A1 - 2037 Do Minimum							
Junction 1 - Arm 1	0.56	3.42	0.36	A	2.23	7.79	0.69	A
Junction 1 - Arm 2	1.20	10.52	0.55	B	1.65	22.41	0.63	C
Junction 1 - Arm 3	2.18	7.07	0.69	A	4.19	14.57	0.81	B
Junction 1 - Arm 4	2.55	17.90	0.73	C	0.92	10.83	0.48	B
Junction 1 - Arm 5	2.76	15.45	0.74	C	2.24	11.09	0.70	B
Junction 1 - Arm 6	4.24	17.90	0.82	C	4.47	16.15	0.83	C
Junction 2 - Arm 1	3.79	16.46	0.80	C	4.88	20.75	0.84	C
Junction 2 - Arm 2	0.16	7.01	0.14	A	0.47	9.27	0.32	A
Junction 2 - Arm 3	0.79	3.17	0.44	A	0.89	3.36	0.47	A
	A1 - 2037 Do Something							
Junction 1 - Arm 1	1.23	4.53	0.55	A	3.27	9.79	0.77	A
Junction 1 - Arm 2	1.36	12.43	0.58	B	1.53	21.97	0.61	C
Junction 1 - Arm 3	2.38	7.58	0.71	A	4.54	15.20	0.83	C
Junction 1 - Arm 4	2.87	20.07	0.75	C	0.92	10.58	0.48	B
Junction 1 - Arm 5	2.73	15.41	0.74	C	2.54	12.26	0.72	B
Junction 1 - Arm 6	1.89	10.80	0.66	B	4.01	16.87	0.81	C
Junction 2 - Arm 1	1.41	8.48	0.59	A	2.62	12.40	0.73	B
Junction 2 - Arm 2	0.18	5.84	0.16	A	0.42	7.94	0.30	A
Junction 2 - Arm 3	0.51	2.71	0.34	A	0.52	2.72	0.34	A

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

"D1 - 2016 Base, AM " model duration: 08:00 - 09:30
"D2 - 2016 Base, PM" model duration: 17:00 - 18:30
"D3 - 2022 Do Minimum, AM" model duration: 08:00 - 09:30
"D4 - 2022 Do Minimum, PM" model duration: 17:00 - 18:30
"D5 - 2022 Do Something, AM" model duration: 08:00 - 09:30
"D6 - 2022 Do Something, PM" model duration: 17:00 - 18:30
"D7 - 2037 Do Minimum, AM" model duration: 08:00 - 09:30
"D8 - 2037 Do Minimum, PM" model duration: 17:00 - 18:30
"D9 - 2037 Do Something, AM" model duration: 08:00 - 09:30
"D10 - 2037 Do Something, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.6.541 at 14/12/2018 12:17:04

File summary

Title	A12 Tom Chris Way-Bloodmoor Rd-A1145-Castleton Av
Location	Lowestoft
Site Number	
Date	17/02/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ecopp
Description	J1 - Survey Flows J2 - Still SATURN flows as no MCC data available

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) - 2016 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Junction 1 - Arm 2 - 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2016 Base, AM	2016 Base	AM		Varies by Arm	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	1	(untitled)	Roundabout	1,2,3,4,5,6				6.88	A
2	2	(untitled)	Roundabout	1,2,3				6.13	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Arm	Name	Description
1	1	1	A12 Tom Crisp Way	
1	2	2	B1384 Stadbroke Road	
1	3	3	A12 Bloodmoor Road	
1	4	4	Ribblesdale	
1	5	5	A1145 Castleton Avenue	
1	6	6	A1177 Bloodmoor Road	
2	1	1	A1117 Elm Tree Road	
2	2	2	Long Road NE	
2	3	3	A1117 Bloodmoor Road	

Capacity Options

Junction	Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	1	0.00	99999.00		0.00
1	2	0.00	99999.00		0.00
1	3	0.00	99999.00		0.00
1	4	0.00	99999.00		0.00
1	5	0.00	99999.00		0.00
1	6	0.00	99999.00		0.00
2	1	0.00	99999.00		0.00
2	2	0.00	99999.00		0.00
2	3	0.00	99999.00		0.00

Roundabout Geometry

Junction	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	1	9.00	9.20	4.50	14.60	70.10	64.00	
1	2	3.50	5.10	30.10	59.50	70.10	54.00	
1	3	7.00	8.90	21.80	9.20	70.10	71.00	
1	4	4.40	7.00	7.30	18.60	70.10	53.00	
1	5	4.80	6.80	29.70	16.40	70.10	56.00	
1	6	6.00	7.00	23.50	14.10	70.10	56.00	
2	1	3.50	3.50	0.00	15.20	14.60	14.00	
2	2	3.30	3.30	0.00	15.10	14.60	12.00	
2	3	5.60	6.40	8.80	25.10	14.60	8.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1	1		(calculated)	(calculated)	0.583	2401.783
1	2		(calculated)	(calculated)	0.446	1399.878
1	3		(calculated)	(calculated)	0.514	2057.760
1	4		(calculated)	(calculated)	0.463	1559.329
1	5		(calculated)	(calculated)	0.490	1755.805
1	6		(calculated)	(calculated)	0.503	1853.949
2	1		(calculated)	(calculated)	0.555	1103.003
2	2		(calculated)	(calculated)	0.545	1046.487
2	3		(calculated)	(calculated)	0.765	2047.168

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

Junction	Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	1	ONE HOUR	✓	454.92	100.000
1	2	ONE HOUR	✓	302.51	100.000
1	3	ONE HOUR	✓	725.67	100.000
1	4	ONE HOUR	✓	406.86	100.000
1	5	ONE HOUR	✓	603.97	100.000
1	6	Linked Arm		N/A	
2	1	ONE HOUR	✓	642.50	100.000
2	2	ONE HOUR	✓	102.46	100.000
2	3	Linked Arm		N/A	

Linked Arm Data

Junction	Arm	From Junction ID	From Arm ID	Link Type	Flow Source	Uniform Flow (PCU/hr)	Flow Multiplier (%)	Internal Storage Space (PCU)
1	6	2	3	Queue limited	Normal	0.00	100.00	28.00
2	3	1	6	Queue limited	Normal	0.00	100.00	28.00

Turning Proportions

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

		To					
		1	2	3	4	5	6
From	1	0.000	16.455	152.572	25.506	222.382	38.002
	2	59.290	0.000	21.618	8.974	72.006	140.617
	3	304.641	30.660	0.000	24.883	67.775	297.714
	4	146.005	38.500	48.889	0.000	0.000	173.463
	5	350.438	105.283	127.534	0.000	0.000	20.711
	6	72.505	141.777	400.437	67.666	55.095	0.000

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

		To					
		1	2	3	4	5	6
From	1	0.00	0.04	0.34	0.06	0.49	0.08
	2	0.20	0.00	0.07	0.03	0.24	0.46
	3	0.42	0.04	0.00	0.03	0.09	0.41
	4	0.36	0.09	0.12	0.00	0.00	0.43
	5	0.58	0.17	0.21	0.00	0.00	0.03
	6	0.10	0.19	0.54	0.09	0.07	0.00

Turning Counts / Proportions (PCU/hr) - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.000	6.496	636.006
	2	1.046	0.000	101.414
	3	637.018	33.489	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.00	0.01	0.99
	2	0.01	0.00	0.99
	3	0.95	0.05	0.00

Vehicle Mix

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

		To					
		1	2	3	4	5	6
From	1	1.000	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000	1.000
	6	1.000	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To					
		1	2	3	4	5	6
From	1	0.0	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0	0.0
	6	0.0	0.0	0.0	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 2 (for whole period)

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

Heavy Vehicle Percentages - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	1	0.29	2.88	0.40	A	417.44	626.16	26.64	2.55	0.30	26.64	2.55
1	2	0.40	7.08	0.65	A	277.58	416.38	39.88	5.75	0.44	39.88	5.75
1	3	0.48	4.14	0.92	A	665.89	998.83	58.22	3.50	0.65	58.22	3.50
1	4	0.50	7.92	0.98	A	373.34	560.01	56.67	6.07	0.63	56.68	6.07
1	5	0.62	8.95	1.63	A	554.21	831.32	88.77	6.41	0.99	88.77	6.41
1	6	0.69	9.67	2.14	A	676.06	1014.10	112.00	6.63	1.24	112.01	6.63
2	1	0.65	9.59	1.86	A	589.57	884.36	111.85	7.59	1.24	111.87	7.59
2	2	0.17	6.52	0.20	A	94.02	141.03	13.57	5.77	0.15	13.57	5.77
2	3	0.36	2.75	0.56	A	614.92	922.39	39.04	2.54	0.43	39.04	2.54

Main Results for each time segment

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	342.49	85.62	341.64	698.95	757.96	0.00	1959.88	1606.61	0.175	0.00	0.21	2.223	A
1	2	227.74	56.94	226.60	248.64	850.97	0.00	1020.45	293.53	0.223	0.00	0.29	4.528	A
1	3	546.32	136.58	544.58	561.07	516.50	0.00	1792.38	1313.59	0.305	0.00	0.44	2.881	A
1	4	306.30	76.58	304.79	94.93	966.15	0.00	1111.85	389.14	0.275	0.00	0.38	4.452	A
1	5	454.70	113.67	452.53	312.82	958.12	0.00	1286.45	843.08	0.353	0.00	0.54	4.305	A
1	6	551.61	137.90	549.03	502.76	907.89	0.00	1397.31	997.95	0.395	0.00	0.65	4.231	A
2	1	483.71	120.93	480.55	477.20	25.05	0.00	1089.10	677.26	0.444	0.00	0.79	5.885	A
2	2	77.14	19.28	76.71	29.90	475.69	0.00	787.07	409.30	0.098	0.00	0.11	5.064	A
2	3	502.76	125.69	501.46	551.61	0.78	0.00	2046.57	2043.97	0.246	0.00	0.32	2.327	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	408.96	102.24	408.69	837.09	909.95	0.00	1871.27	1606.61	0.219	0.21	0.28	2.461	A
1	2	271.95	67.99	271.48	298.20	1020.44	0.00	944.88	293.53	0.288	0.29	0.40	5.342	A
1	3	652.36	163.09	651.72	673.13	618.79	0.00	1739.82	1313.59	0.375	0.44	0.60	3.307	A
1	4	365.76	91.44	365.06	113.88	1156.64	0.00	1023.62	389.14	0.357	0.38	0.55	5.461	A
1	5	542.95	135.74	541.82	374.58	1147.12	0.00	1193.87	843.08	0.455	0.54	0.83	5.512	A
1	6	661.49	165.37	660.03	601.94	1087.00	0.00	1307.22	997.95	0.506	0.65	1.01	5.550	A
2	1	577.60	144.40	576.29	572.47	30.05	0.00	1086.33	739.79	0.532	0.79	1.12	7.039	A
2	2	92.11	23.03	91.97	35.87	570.46	0.00	735.39	346.77	0.125	0.11	0.14	5.593	A
2	3	601.94	150.48	601.58	661.49	0.94	0.00	2046.45	2044.46	0.294	0.32	0.42	2.491	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	500.87	125.22	500.40	1023.26	1110.17	0.00	1754.54	1606.61	0.285	0.28	0.40	2.870	A
1	2	333.06	83.27	332.09	364.08	1246.48	0.00	844.10	293.53	0.395	0.40	0.64	7.018	A
1	3	798.98	199.74	797.72	821.81	756.76	0.00	1668.93	1313.59	0.479	0.60	0.91	4.126	A
1	4	447.96	111.99	446.29	139.08	1415.40	0.00	903.77	389.14	0.496	0.55	0.97	7.840	A
1	5	664.98	166.24	661.85	458.27	1403.42	0.00	1068.31	843.08	0.622	0.83	1.61	8.789	A
1	6	808.85	202.21	804.58	736.42	1328.85	0.00	1185.58	997.95	0.682	1.01	2.08	9.344	A
2	1	707.41	176.85	704.55	700.24	36.75	0.00	1082.61	757.28	0.653	1.12	1.83	9.450	A
2	2	112.81	28.20	112.57	43.88	697.43	0.00	666.15	329.28	0.169	0.14	0.20	6.500	A
2	3	736.42	184.10	735.84	808.85	1.15	0.00	2046.29	2044.60	0.360	0.42	0.56	2.745	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	500.87	125.22	500.87	1026.99	1118.03	0.00	1749.96	1606.61	0.286	0.40	0.40	2.881	A
1	2	333.06	83.27	333.04	366.18	1252.72	0.00	841.31	293.53	0.396	0.64	0.65	7.082	A
1	3	798.98	199.74	798.96	826.66	759.10	0.00	1667.73	1313.59	0.479	0.91	0.92	4.143	A
1	4	447.96	111.99	447.92	139.82	1418.23	0.00	902.46	389.14	0.496	0.97	0.98	7.918	A
1	5	664.98	166.24	664.88	459.37	1406.79	0.00	1066.66	843.08	0.623	1.61	1.63	8.954	A
1	6	811.81	202.95	811.56	738.20	1333.47	0.00	1183.26	997.95	0.686	2.08	2.14	9.672	A
2	1	707.41	176.85	707.30	702.47	36.87	0.00	1082.54	757.28	0.653	1.83	1.86	9.586	A
2	2	112.81	28.20	112.81	44.02	700.15	0.00	664.67	329.28	0.170	0.20	0.20	6.522	A
2	3	738.20	184.55	738.19	811.81	1.15	0.00	2046.29	2044.60	0.361	0.56	0.56	2.751	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	408.96	102.24	409.43	842.49	921.43	0.00	1864.58	1606.61	0.219	0.40	0.28	2.476	A
1	2	271.95	67.99	272.91	301.25	1029.61	0.00	940.79	293.53	0.289	0.65	0.41	5.397	A
1	3	652.36	163.09	653.61	680.23	622.29	0.00	1738.02	1313.59	0.375	0.92	0.60	3.322	A
1	4	365.76	91.44	367.41	114.96	1160.93	0.00	1021.63	389.14	0.358	0.98	0.56	5.515	A
1	5	542.95	135.74	546.10	376.23	1152.11	0.00	1191.42	843.08	0.456	1.63	0.85	5.604	A
1	6	665.94	166.49	670.28	604.58	1093.63	0.00	1303.89	997.95	0.511	2.14	1.06	5.721	A
2	1	577.60	144.40	580.41	575.87	30.22	0.00	1086.23	739.79	0.532	1.86	1.15	7.158	A
2	2	92.11	23.03	92.34	36.09	574.54	0.00	733.17	346.77	0.126	0.20	0.14	5.621	A
2	3	604.58	151.15	605.15	665.94	0.94	0.00	2046.45	2044.46	0.295	0.56	0.42	2.498	A

Main results: (09:15-09:30)

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	342.49	85.62	342.76	703.92	768.13	0.00	1953.96	1606.61	0.175	0.28	0.21	2.236	A
1	2	227.74	56.94	228.22	251.34	859.54	0.00	1016.62	293.53	0.224	0.41	0.29	4.570	A
1	3	546.32	136.58	546.98	567.53	520.24	0.00	1790.46	1313.59	0.305	0.60	0.44	2.898	A
1	4	306.30	76.58	307.02	95.96	971.25	0.00	1109.48	389.14	0.276	0.56	0.38	4.491	A
1	5	454.70	113.67	455.87	314.67	963.60	0.00	1283.76	843.08	0.354	0.85	0.55	4.354	A
1	6	556.68	139.17	558.22	505.65	913.83	0.00	1394.32	997.95	0.399	1.06	0.67	4.315	A
2	1	483.71	120.93	485.09	481.53	25.27	0.00	1088.98	725.49	0.444	1.15	0.81	5.974	A
2	2	77.14	19.28	77.28	30.18	480.19	0.00	784.62	361.07	0.098	0.14	0.11	5.089	A
2	3	505.65	126.41	506.02	556.68	0.79	0.00	2046.56	2044.35	0.247	0.42	0.33	2.338	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	3.12	0.21	2.223	A	A
1	2	4.17	0.28	4.528	A	A
1	3	6.42	0.43	2.881	A	A
1	4	5.51	0.37	4.452	A	A
1	5	7.91	0.53	4.305	A	A
1	6	9.43	0.63	4.231	A	A
2	1	11.38	0.76	5.885	A	A
2	2	1.58	0.11	5.064	A	A
2	3	4.79	0.32	2.327	A	A

Queueing Delay results: (08:15-08:30)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	4.13	0.28	2.461	A	A
1	2	5.88	0.39	5.342	A	A
1	3	8.79	0.59	3.307	A	A
1	4	8.06	0.54	5.461	A	A
1	5	12.03	0.80	5.512	A	A
1	6	14.71	0.98	5.550	A	A
2	1	16.19	1.08	7.039	A	A
2	2	2.09	0.14	5.593	A	A
2	3	6.15	0.41	2.491	A	A

Queueing Delay results: (08:30-08:45)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	5.88	0.39	2.870	A	A
1	2	9.35	0.62	7.018	A	A
1	3	13.33	0.89	4.126	A	A
1	4	13.91	0.93	7.840	A	A
1	5	22.83	1.52	8.789	A	A
1	6	29.26	1.95	9.344	A	A
2	1	26.01	1.73	9.450	A	A
2	2	2.96	0.20	6.500	A	A
2	3	8.27	0.55	2.745	A	A

Queueing Delay results: (08:45-09:00)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	5.99	0.40	2.881	A	A
1	2	9.72	0.65	7.082	A	A
1	3	13.70	0.91	4.143	A	A
1	4	14.59	0.97	7.918	A	A
1	5	24.35	1.62	8.954	A	A
1	6	31.80	2.12	9.672	A	A
2	1	27.71	1.85	9.586	A	A
2	2	3.04	0.20	6.522	A	A
2	3	8.42	0.56	2.751	A	A

Queueing Delay results: (09:00-09:15)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	4.29	0.29	2.476	A	A
1	2	6.32	0.42	5.397	A	A
1	3	9.25	0.62	3.322	A	A
1	4	8.71	0.58	5.515	A	A
1	5	13.16	0.88	5.604	A	A
1	6	16.50	1.10	5.721	A	A
2	1	18.05	1.20	7.158	A	A
2	2	2.22	0.15	5.621	A	A
2	3	6.40	0.43	2.498	A	A

Queueing Delay results: (09:15-09:30)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	3.23	0.22	2.236	A	A
1	2	4.45	0.30	4.570	A	A
1	3	6.72	0.45	2.898	A	A
1	4	5.89	0.39	4.491	A	A
1	5	8.49	0.57	4.354	A	A
1	6	10.31	0.69	4.315	A	A
2	1	12.50	0.83	5.974	A	A
2	2	1.68	0.11	5.089	A	A
2	3	5.00	0.33	2.338	A	A

(Default Analysis Set) - 2016 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Junction 1 - Arm 2 - 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2016 Base, PM	2016 Base	PM		Varies by Arm	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	1	(untitled)	Roundabout	1,2,3,4,5,6				7.34	A
2	2	(untitled)	Roundabout	1,2,3				5.76	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Arm	Name	Description
1	**1**	1	A12 Tom Crisp Way	
1	**2**	2	B1384 Stadbroke Road	
1	**3**	3	A12 Bloodmoor Road	
1	**4**	4	Ribblesdale	
1	**5**	5	A1145 Castleton Avenue	
1	**6**	6	A1177 Bloodmoor Road	
2	**1**	1	A1117 Elm Tree Road	
2	**2**	2	Long Road NE	
2	**3**	3	A1117 Bloodmoor Road	

Capacity Options

Junction	Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	**1**	0.00	99999.00		0.00
1	**2**	0.00	99999.00		0.00
1	**3**	0.00	99999.00		0.00
1	**4**	0.00	99999.00		0.00
1	**5**	0.00	99999.00		0.00
1	**6**	0.00	99999.00		0.00
2	**1**	0.00	99999.00		0.00
2	**2**	0.00	99999.00		0.00
2	**3**	0.00	99999.00		0.00

Roundabout Geometry

Junction	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	**1**	9.00	9.20	4.50	14.60	70.10	64.00	
1	**2**	3.50	5.10	30.10	59.50	70.10	54.00	
1	**3**	7.00	8.90	21.80	9.20	70.10	71.00	
1	**4**	4.40	7.00	7.30	18.60	70.10	53.00	
1	**5**	4.80	6.80	29.70	16.40	70.10	56.00	
1	**6**	6.00	7.00	23.50	14.10	70.10	56.00	
2	**1**	3.50	3.50	0.00	15.20	14.60	14.00	
2	**2**	3.30	3.30	0.00	15.10	14.60	12.00	
2	**3**	5.60	6.40	8.80	25.10	14.60	8.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1	1		(calculated)	(calculated)	0.583	2401.783
1	2		(calculated)	(calculated)	0.446	1399.878
1	3		(calculated)	(calculated)	0.514	2057.760
1	4		(calculated)	(calculated)	0.463	1559.329
1	5		(calculated)	(calculated)	0.490	1755.805
1	6		(calculated)	(calculated)	0.503	1853.949
2	1		(calculated)	(calculated)	0.555	1103.003
2	2		(calculated)	(calculated)	0.545	1046.487
2	3		(calculated)	(calculated)	0.765	2047.168

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

Junction	Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	1	ONE HOUR	✓	833.14	100.000
1	2	ONE HOUR	✓	308.98	100.000
1	3	ONE HOUR	✓	867.16	100.000
1	4	ONE HOUR	✓	249.00	100.000
1	5	ONE HOUR	✓	561.06	100.000
1	6	Linked Arm		N/A	
2	1	ONE HOUR	✓	605.71	100.000
2	2	ONE HOUR	✓	102.27	100.000
2	3	Linked Arm		N/A	

Linked Arm Data

Junction	Arm	From Junction ID	From Arm ID	Link Type	Flow Source	Uniform Flow (PCU/hr)	Flow Multiplier (%)	Internal Storage Space (PCU)
1	6	2	3	Queue limited	Normal	0.00	100.00	28.00
2	3	1	6	Queue limited	Normal	0.00	100.00	28.00

Turning Proportions

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

		To					
		1	2	3	4	5	6
From	1	0.000	15.222	124.178	173.242	467.419	53.076
	2	100.927	0.000	35.016	24.606	67.339	81.096
	3	217.340	32.233	0.000	51.944	83.446	482.195
	4	43.737	14.073	45.330	0.000	0.000	145.856
	5	210.997	155.674	141.751	0.000	0.000	52.635
	6	13.916	99.527	370.813	164.256	55.668	0.000

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

		To					
		1	2	3	4	5	6
From	1	0.00	0.02	0.15	0.21	0.56	0.06
	2	0.33	0.00	0.11	0.08	0.22	0.26
	3	0.25	0.04	0.00	0.06	0.10	0.56
	4	0.18	0.06	0.18	0.00	0.00	0.59
	5	0.38	0.28	0.25	0.00	0.00	0.09
	6	0.02	0.14	0.53	0.23	0.08	0.00

Turning Counts / Proportions (PCU/hr) - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.000	1.998	603.713
	2	1.741	0.000	100.525
	3	741.571	73.435	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.00	0.00	1.00
	2	0.02	0.00	0.98
	3	0.91	0.09	0.00

Vehicle Mix

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

		To					
		1	2	3	4	5	6
From	1	1.000	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000	1.000
	6	1.000	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To					
		1	2	3	4	5	6
From	1	0.0	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0	0.0
	6	0.0	0.0	0.0	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 2 (for whole period)

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

Heavy Vehicle Percentages - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	1	0.54	4.55	1.15	A	764.50	1146.75	69.01	3.61	0.77	69.01	3.61
1	2	0.55	13.01	1.21	B	283.53	425.29	63.06	8.90	0.70	63.06	8.90
1	3	0.69	8.34	2.18	A	795.72	1193.58	115.63	5.81	1.28	115.64	5.81
1	4	0.38	8.02	0.61	A	228.48	342.73	35.06	6.14	0.39	35.07	6.14
1	5	0.56	7.46	1.27	A	514.84	772.25	72.40	5.62	0.80	72.40	5.63
1	6	0.59	6.59	1.40	A	645.65	968.48	81.63	5.06	0.91	81.64	5.06
2	1	0.63	9.19	1.68	A	555.81	833.72	102.33	7.36	1.14	102.34	7.37
2	2	0.16	6.30	0.20	A	93.84	140.76	13.18	5.62	0.15	13.18	5.62
2	3	0.44	3.13	0.78	A	747.26	1120.89	52.58	2.81	0.58	52.58	2.81

Main Results for each time segment

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	627.23	156.81	625.31	439.72	805.89	0.00	1931.94	1381.71	0.325	0.00	0.48	2.752	A
1	2	232.62	58.15	231.17	236.96	1194.24	0.00	867.39	230.31	0.268	0.00	0.36	5.646	A
1	3	652.84	163.21	650.11	535.89	889.52	0.00	1600.71	1181.14	0.408	0.00	0.68	3.776	A
1	4	187.46	46.86	186.53	309.77	1229.86	0.00	989.71	517.95	0.189	0.00	0.23	4.478	A
1	5	422.39	105.60	420.50	505.24	911.15	0.00	1309.46	904.22	0.323	0.00	0.47	4.042	A
1	6	526.86	131.71	524.68	610.72	720.93	0.00	1491.34	1125.09	0.353	0.00	0.54	3.717	A
2	1	456.01	114.00	453.09	555.45	54.88	0.00	1072.55	745.49	0.425	0.00	0.73	5.785	A
2	2	76.99	19.25	76.57	56.37	451.59	0.00	800.22	463.14	0.096	0.00	0.11	4.973	A
2	3	610.72	152.68	609.03	526.86	1.30	0.00	2046.17	2041.14	0.298	0.00	0.42	2.501	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	748.97	187.24	748.15	526.53	967.44	0.00	1837.76	1381.71	0.408	0.48	0.68	3.303	A
1	2	277.77	69.44	276.96	284.07	1431.52	0.00	761.59	230.31	0.365	0.36	0.57	7.416	A
1	3	779.56	194.89	778.07	642.93	1065.54	0.00	1510.27	1181.14	0.516	0.68	1.06	4.906	A
1	4	223.84	55.96	223.41	371.37	1472.24	0.00	877.44	517.95	0.255	0.23	0.34	5.500	A
1	5	504.38	126.09	503.48	604.84	1090.82	0.00	1221.44	904.22	0.413	0.47	0.70	5.008	A
1	6	631.79	157.95	630.78	731.11	863.19	0.00	1419.79	1125.09	0.445	0.54	0.79	4.557	A
2	1	544.52	136.13	543.34	666.33	65.83	0.00	1066.47	820.69	0.511	0.73	1.03	6.866	A
2	2	91.94	22.98	91.80	67.62	541.54	0.00	751.16	386.90	0.122	0.11	0.14	5.458	A
2	3	731.11	182.78	730.59	631.79	1.56	0.00	2045.97	2042.13	0.357	0.42	0.55	2.735	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	917.30	229.32	915.47	643.20	1181.86	0.00	1712.75	1381.71	0.536	0.68	1.14	4.505	A
1	2	340.20	85.05	337.74	347.15	1750.18	0.00	619.51	230.31	0.549	0.57	1.18	12.666	B
1	3	954.76	238.69	950.42	785.59	1302.33	0.00	1388.61	1181.14	0.688	1.06	2.14	8.135	A
1	4	274.15	68.54	273.12	453.87	1798.88	0.00	726.16	517.95	0.378	0.34	0.60	7.928	A
1	5	617.73	154.43	615.52	739.57	1332.43	0.00	1103.09	904.22	0.560	0.70	1.25	7.349	A
1	6	772.64	193.16	770.30	893.19	1054.77	0.00	1323.43	1125.09	0.584	0.79	1.38	6.481	A
2	1	666.90	166.73	664.37	813.83	80.40	0.00	1058.38	839.81	0.630	1.03	1.66	9.076	A
2	2	112.60	28.15	112.37	82.59	662.18	0.00	685.37	367.51	0.164	0.14	0.19	6.278	A
2	3	893.19	223.30	892.32	772.64	1.91	0.00	2045.70	2042.38	0.437	0.55	0.77	3.120	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	917.30	229.32	917.26	646.10	1188.18	0.00	1709.06	1381.71	0.537	1.14	1.15	4.546	A
1	2	340.20	85.05	340.09	348.68	1756.76	0.00	616.57	230.31	0.552	1.18	1.21	13.009	B
1	3	954.76	238.69	954.60	789.42	1307.43	0.00	1385.99	1181.14	0.689	2.14	2.18	8.338	A
1	4	274.15	68.54	274.12	455.82	1806.21	0.00	722.76	517.95	0.379	0.60	0.61	8.022	A
1	5	617.73	154.43	617.67	741.87	1338.46	0.00	1100.13	904.22	0.562	1.25	1.27	7.458	A
1	6	775.29	193.82	775.19	897.03	1059.09	0.00	1321.26	1125.09	0.587	1.38	1.40	6.590	A
2	1	666.90	166.73	666.81	818.10	80.82	0.00	1058.15	839.81	0.630	1.66	1.68	9.193	A
2	2	112.60	28.15	112.59	83.02	664.61	0.00	684.05	367.51	0.165	0.19	0.20	6.299	A
2	3	897.03	224.26	897.00	775.29	1.92	0.00	2045.70	2042.38	0.439	0.77	0.78	3.133	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	748.97	187.24	750.79	530.65	976.85	0.00	1832.27	1381.71	0.409	1.15	0.70	3.336	A
1	2	277.77	69.44	280.26	286.32	1441.33	0.00	757.22	230.31	0.367	1.21	0.59	7.588	A
1	3	779.56	194.89	783.94	648.62	1072.96	0.00	1506.46	1181.14	0.517	2.18	1.08	5.011	A
1	4	223.84	55.96	224.88	374.25	1482.65	0.00	872.62	517.95	0.257	0.61	0.35	5.568	A
1	5	504.38	126.09	506.59	608.18	1099.35	0.00	1217.27	904.22	0.414	1.27	0.71	5.082	A
1	6	635.79	158.95	638.12	736.56	869.38	0.00	1416.68	1125.09	0.449	1.40	0.82	4.639	A
2	1	544.52	136.13	547.01	672.53	66.44	0.00	1066.13	820.69	0.511	1.68	1.06	6.966	A
2	2	91.94	22.98	92.16	68.25	545.20	0.00	749.17	386.90	0.123	0.20	0.14	5.482	A
2	3	736.56	184.14	737.41	635.79	1.57	0.00	2045.97	2042.13	0.360	0.78	0.57	2.754	A

Main results: (18:15-18:30)

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	627.23	156.81	628.07	443.01	815.65	0.00	1926.25	1381.71	0.326	0.70	0.49	2.774	A
1	2	232.62	58.15	233.48	239.16	1204.57	0.00	862.79	230.31	0.270	0.59	0.37	5.727	A
1	3	652.84	163.21	654.39	541.70	896.34	0.00	1597.21	1181.14	0.409	1.08	0.70	3.826	A
1	4	187.46	46.86	187.90	312.63	1238.11	0.00	985.89	517.95	0.190	0.35	0.24	4.515	A
1	5	422.39	105.60	423.33	508.33	917.68	0.00	1306.26	904.22	0.323	0.71	0.48	4.081	A
1	6	531.56	132.89	532.61	614.96	726.05	0.00	1488.77	1125.09	0.357	0.82	0.56	3.768	A
2	1	456.01	114.00	457.26	561.35	55.46	0.00	1072.22	805.09	0.425	1.06	0.75	5.867	A
2	2	76.99	19.25	77.12	56.97	455.75	0.00	797.95	402.71	0.096	0.14	0.11	4.994	A
2	3	614.96	153.74	615.49	531.56	1.31	0.00	2046.16	2041.92	0.301	0.57	0.43	2.518	A

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	7.04	0.47	2.752	A	A
1	2	5.28	0.35	5.646	A	A
1	3	9.98	0.67	3.776	A	A
1	4	3.40	0.23	4.478	A	A
1	5	6.91	0.46	4.042	A	A
1	6	7.94	0.53	3.717	A	A
2	1	10.56	0.70	5.785	A	A
2	2	1.55	0.10	4.973	A	A
2	3	6.25	0.42	2.501	A	A

Queueing Delay results: (17:15-17:30)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	10.07	0.67	3.303	A	A
1	2	8.24	0.55	7.416	A	A
1	3	15.38	1.03	4.906	A	A
1	4	4.98	0.33	5.500	A	A
1	5	10.20	0.68	5.008	A	A
1	6	11.63	0.78	4.557	A	A
2	1	14.92	0.99	6.866	A	A
2	2	2.04	0.14	5.458	A	A
2	3	8.19	0.55	2.735	A	A

Queueing Delay results: (17:30-17:45)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	16.62	1.11	4.505	A	A
1	2	16.64	1.11	12.666	B	B
1	3	30.24	2.02	8.135	A	A
1	4	8.65	0.58	7.928	A	A
1	5	17.96	1.20	7.349	A	A
1	6	19.87	1.32	6.481	A	A
2	1	23.66	1.58	9.076	A	A
2	2	2.86	0.19	6.278	A	A
2	3	11.35	0.76	3.120	A	A

Queueing Delay results: (17:45-18:00)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	17.21	1.15	4.546	A	A
1	2	17.98	1.20	13.009	B	B
1	3	32.46	2.16	8.338	A	A
1	4	9.05	0.60	8.022	A	A
1	5	18.91	1.26	7.458	A	A
1	6	20.94	1.40	6.590	A	A
2	1	25.10	1.67	9.193	A	A
2	2	2.94	0.20	6.299	A	A
2	3	11.63	0.78	3.133	A	A

Queueing Delay results: (18:00-18:15)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	10.67	0.71	3.336	A	A
1	2	9.18	0.61	7.588	A	A
1	3	16.87	1.12	5.011	A	A
1	4	5.37	0.36	5.568	A	A
1	5	11.05	0.74	5.082	A	A
1	6	12.70	0.85	4.639	A	A
2	1	16.54	1.10	6.966	A	A
2	2	2.16	0.14	5.482	A	A
2	3	8.61	0.57	2.754	A	A

Queueing Delay results: (18:15-18:30)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	7.39	0.49	2.774	A	A
1	2	5.74	0.38	5.727	A	A
1	3	10.69	0.71	3.826	A	A
1	4	3.62	0.24	4.515	A	A
1	5	7.37	0.49	4.081	A	A
1	6	8.56	0.57	3.768	A	A
2	1	11.56	0.77	5.867	A	A
2	2	1.64	0.11	4.994	A	A
2	3	6.56	0.44	2.518	A	A

(Default Analysis Set) - 2022 Do Minimum, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Junction 1 - Arm 2 - 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2022 Do Minimum, AM	2022 Do Minimum	AM		Varies by Arm	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	1	(untitled)	Roundabout	1,2,3,4,5,6				8.61	A
2	2	(untitled)	Roundabout	1,2,3				7.95	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Arm	Name	Description
1	**1**	1	A12 Tom Crisp Way	
1	**2**	2	B1384 Stadbroke Road	
1	**3**	3	A12 Bloodmoor Road	
1	**4**	4	Ribblesdale	
1	**5**	5	A1145 Castleton Avenue	
1	**6**	6	A1177 Bloodmoor Road	
2	**1**	1	A1117 Elm Tree Road	
2	**2**	2	Long Road NE	
2	**3**	3	A1117 Bloodmoor Road	

Capacity Options

Junction	Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	**1**	0.00	99999.00		0.00
1	**2**	0.00	99999.00		0.00
1	**3**	0.00	99999.00		0.00
1	**4**	0.00	99999.00		0.00
1	**5**	0.00	99999.00		0.00
1	**6**	0.00	99999.00		0.00
2	**1**	0.00	99999.00		0.00
2	**2**	0.00	99999.00		0.00
2	**3**	0.00	99999.00		0.00

Roundabout Geometry

Junction	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	**1**	9.00	9.20	4.50	14.60	70.10	64.00	
1	**2**	3.50	5.10	30.10	59.50	70.10	54.00	
1	**3**	7.00	8.90	21.80	9.20	70.10	71.00	
1	**4**	4.40	7.00	7.30	18.60	70.10	53.00	
1	**5**	4.80	6.80	29.70	16.40	70.10	56.00	
1	**6**	6.00	7.00	23.50	14.10	70.10	56.00	
2	**1**	3.50	3.50	0.00	15.20	14.60	14.00	
2	**2**	3.30	3.30	0.00	15.10	14.60	12.00	
2	**3**	5.60	6.40	8.80	25.10	14.60	8.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1	1		(calculated)	(calculated)	0.583	2401.783
1	2		(calculated)	(calculated)	0.446	1399.878
1	3		(calculated)	(calculated)	0.514	2057.760
1	4		(calculated)	(calculated)	0.463	1559.329
1	5		(calculated)	(calculated)	0.490	1755.805
1	6		(calculated)	(calculated)	0.503	1853.949
2	1		(calculated)	(calculated)	0.555	1103.003
2	2		(calculated)	(calculated)	0.545	1046.487
2	3		(calculated)	(calculated)	0.765	2047.168

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

Junction	Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	1	ONE HOUR	✓	451.08	100.000
1	2	ONE HOUR	✓	327.35	100.000
1	3	ONE HOUR	✓	882.87	100.000
1	4	ONE HOUR	✓	436.93	100.000
1	5	ONE HOUR	✓	626.99	100.000
1	6	Linked Arm		N/A	
2	1	ONE HOUR	✓	728.17	100.000
2	2	ONE HOUR	✓	68.24	100.000
2	3	Linked Arm		N/A	

Linked Arm Data

Junction	Arm	From Junction ID	From Arm ID	Link Type	Flow Source	Uniform Flow (PCU/hr)	Flow Multiplier (%)	Internal Storage Space (PCU)
1	6	2	3	Queue limited	Normal	0.00	100.00	28.00
2	3	1	6	Queue limited	Normal	0.00	100.00	28.00

Turning Proportions

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

		To					
		1	2	3	4	5	6
From	1	0.000	39.529	135.599	35.133	217.233	23.589
	2	70.789	0.000	20.365	13.056	88.369	134.772
	3	377.719	18.083	0.000	21.716	120.958	344.395
	4	150.012	47.338	65.512	0.000	0.000	174.072
	5	349.919	111.780	116.302	0.000	0.000	48.989
	6	32.968	165.202	481.855	64.040	29.048	0.000

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

		To					
		1	2	3	4	5	6
From	1	0.00	0.09	0.30	0.08	0.48	0.05
	2	0.22	0.00	0.06	0.04	0.27	0.41
	3	0.43	0.02	0.00	0.02	0.14	0.39
	4	0.34	0.11	0.15	0.00	0.00	0.40
	5	0.56	0.18	0.19	0.00	0.00	0.08
	6	0.04	0.21	0.62	0.08	0.04	0.00

Turning Counts / Proportions (PCU/hr) - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.000	16.677	711.488
	2	6.604	0.000	61.632
	3	680.435	45.381	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.00	0.02	0.98
	2	0.10	0.00	0.90
	3	0.94	0.06	0.00

Vehicle Mix

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

		To					
		1	2	3	4	5	6
From	1	1.000	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000	1.000
	6	1.000	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To					
		1	2	3	4	5	6
From	1	0.0	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0	0.0
	6	0.0	0.0	0.0	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 2 (for whole period)

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

Heavy Vehicle Percentages - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	1	0.29	3.00	0.41	A	413.92	620.88	27.25	2.63	0.30	27.25	2.63
1	2	0.44	7.72	0.77	A	300.38	450.57	45.97	6.12	0.51	45.97	6.12
1	3	0.58	5.12	1.37	A	810.14	1215.20	82.95	4.10	0.92	82.95	4.10
1	4	0.58	10.23	1.35	B	400.94	601.41	73.03	7.29	0.81	73.04	7.29
1	5	0.69	11.70	2.20	B	575.34	863.01	110.78	7.70	1.23	110.79	7.70
1	6	0.75	12.82	2.95	B	708.71	1063.06	141.64	7.99	1.57	141.65	7.99
2	1	0.75	13.11	2.85	B	668.18	1002.27	157.91	9.45	1.75	157.94	9.45
2	2	0.12	6.61	0.14	A	62.61	93.92	9.14	5.84	0.10	9.14	5.84
2	3	0.39	2.90	0.64	A	665.62	998.43	44.02	2.65	0.49	44.02	2.65

Main Results for each time segment

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	339.60	84.90	338.74	735.30	819.30	0.00	1924.13	1587.34	0.177	0.00	0.21	2.269	A
1	2	246.45	61.61	245.17	285.27	872.77	0.00	1010.73	326.44	0.244	0.00	0.32	4.695	A
1	3	664.67	166.17	662.34	611.57	506.37	0.00	1797.58	1340.15	0.370	0.00	0.58	3.164	A
1	4	328.95	82.24	327.17	100.08	1068.63	0.00	1064.38	408.37	0.309	0.00	0.44	4.871	A
1	5	472.03	118.01	469.59	341.66	1054.14	0.00	1239.41	864.27	0.381	0.00	0.61	4.661	A
1	6	577.85	144.46	574.92	544.05	979.68	0.00	1361.20	991.95	0.425	0.00	0.73	4.562	A
2	1	548.20	137.05	544.17	513.62	33.93	0.00	1084.17	703.39	0.506	0.00	1.01	6.618	A
2	2	51.37	12.84	51.08	46.39	531.71	0.00	756.53	423.45	0.068	0.00	0.07	5.100	A
2	3	544.05	136.01	542.61	577.85	4.94	0.00	2043.39	2015.81	0.266	0.00	0.36	2.396	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	405.51	101.38	405.23	880.44	983.63	0.00	1828.31	1587.34	0.222	0.21	0.28	2.529	A
1	2	294.28	73.57	293.74	342.12	1046.75	0.00	933.15	326.44	0.315	0.32	0.46	5.625	A
1	3	793.68	198.42	792.71	733.90	606.59	0.00	1746.09	1340.15	0.455	0.58	0.83	3.773	A
1	4	392.80	98.20	391.86	120.03	1279.27	0.00	966.82	408.37	0.406	0.44	0.68	6.251	A
1	5	563.65	140.91	562.21	409.02	1262.11	0.00	1137.53	864.27	0.496	0.61	0.97	6.242	A
1	6	693.00	173.25	691.14	651.39	1172.94	0.00	1264.00	991.95	0.548	0.73	1.20	6.264	A
2	1	654.61	163.65	652.62	616.20	40.70	0.00	1080.41	788.85	0.606	1.01	1.50	8.374	A
2	2	61.34	15.34	61.25	55.65	637.68	0.00	698.74	331.00	0.088	0.07	0.10	5.647	A
2	3	651.39	162.85	650.97	693.00	5.93	0.00	2042.63	2022.66	0.319	0.36	0.47	2.587	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	496.65	124.16	496.15	1075.37	1196.72	0.00	1704.09	1587.34	0.291	0.28	0.41	2.978	A
1	2	360.42	90.10	359.23	416.84	1276.03	0.00	830.92	326.44	0.434	0.46	0.75	7.611	A
1	3	972.06	243.01	969.92	893.75	741.50	0.00	1676.77	1340.15	0.580	0.83	1.36	5.078	A
1	4	481.07	120.27	478.47	146.38	1565.04	0.00	834.46	408.37	0.577	0.68	1.33	10.039	B
1	5	690.33	172.58	685.63	500.34	1543.17	0.00	999.85	864.27	0.690	0.97	2.14	11.291	B
1	6	846.08	211.52	839.67	796.38	1432.42	0.00	1133.49	991.95	0.746	1.20	2.80	11.999	B
2	1	801.73	200.43	796.61	753.21	49.75	0.00	1075.39	808.98	0.746	1.50	2.78	12.678	B
2	2	75.13	18.78	74.97	68.00	778.37	0.00	622.01	309.23	0.121	0.10	0.14	6.579	A
2	3	796.38	199.10	795.70	846.08	7.26	0.00	2041.62	2024.27	0.390	0.47	0.64	2.888	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	496.65	124.16	496.64	1080.34	1209.28	0.00	1696.76	1587.34	0.293	0.41	0.41	2.999	A
1	2	360.42	90.10	360.38	420.28	1285.63	0.00	826.64	326.44	0.436	0.75	0.77	7.719	A
1	3	972.06	243.01	972.01	901.84	744.17	0.00	1675.40	1340.15	0.580	1.36	1.37	5.117	A
1	4	481.07	120.27	480.99	147.40	1568.78	0.00	832.73	408.37	0.578	1.33	1.35	10.228	B
1	5	690.33	172.58	690.11	501.58	1548.19	0.00	997.39	864.27	0.692	2.14	2.20	11.695	B
1	6	850.94	212.74	850.36	799.05	1439.25	0.00	1130.05	991.95	0.753	2.80	2.95	12.817	B
2	1	801.73	200.43	801.44	756.35	49.96	0.00	1075.28	808.97	0.746	2.78	2.85	13.114	B
2	2	75.13	18.78	75.13	68.31	783.09	0.00	619.44	309.23	0.121	0.14	0.14	6.613	A
2	3	799.05	199.76	799.03	850.94	7.27	0.00	2041.60	2024.27	0.391	0.64	0.64	2.896	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	405.51	101.38	406.01	887.50	1001.92	0.00	1817.66	1587.34	0.223	0.41	0.29	2.552	A
1	2	294.28	73.57	295.47	347.10	1060.83	0.00	926.88	326.44	0.318	0.77	0.47	5.711	A
1	3	793.68	198.42	795.80	745.72	610.58	0.00	1744.04	1340.15	0.455	1.37	0.84	3.804	A
1	4	392.80	98.20	395.41	121.53	1284.85	0.00	964.24	408.37	0.407	1.35	0.70	6.356	A
1	5	563.65	140.91	568.44	410.88	1269.38	0.00	1133.97	864.27	0.497	2.20	1.00	6.419	A
1	6	700.16	175.04	706.85	655.25	1182.57	0.00	1259.15	991.95	0.556	2.95	1.27	6.594	A
2	1	654.61	163.65	659.72	620.86	41.01	0.00	1080.24	788.84	0.606	2.85	1.57	8.663	A
2	2	61.34	15.34	61.50	56.12	644.61	0.00	694.96	331.00	0.088	0.14	0.10	5.686	A
2	3	655.25	163.81	655.92	700.16	5.95	0.00	2042.61	2022.66	0.321	0.64	0.47	2.596	A

Main results: (09:15-09:30)

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	339.60	84.90	339.89	740.77	832.37	0.00	1916.50	1587.34	0.177	0.29	0.22	2.285	A
1	2	246.45	61.61	247.02	288.86	883.40	0.00	1005.99	326.44	0.245	0.47	0.33	4.748	A
1	3	664.67	166.17	665.67	620.24	510.17	0.00	1795.63	1340.15	0.370	0.84	0.59	3.188	A
1	4	328.95	82.24	329.92	101.26	1074.58	0.00	1061.63	408.37	0.310	0.70	0.45	4.926	A
1	5	472.03	118.01	473.55	343.59	1060.91	0.00	1236.10	864.27	0.382	1.00	0.62	4.731	A
1	6	584.22	146.06	586.26	547.58	986.87	0.00	1357.58	991.95	0.430	1.27	0.76	4.681	A
2	1	548.20	137.05	550.34	518.72	34.26	0.00	1083.99	772.29	0.506	1.57	1.04	6.774	A
2	2	51.37	12.84	51.47	46.87	537.74	0.00	753.24	348.92	0.068	0.10	0.07	5.132	A
2	3	547.58	136.89	548.01	584.22	4.98	0.00	2043.36	2021.33	0.268	0.47	0.37	2.409	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	3.16	0.21	2.269	A	A
1	2	4.67	0.31	4.695	A	A
1	3	8.55	0.57	3.164	A	A
1	4	6.46	0.43	4.871	A	A
1	5	8.87	0.59	4.661	A	A
1	6	10.62	0.71	4.562	A	A
2	1	14.42	0.96	6.618	A	A
2	2	1.06	0.07	5.100	A	A
2	3	5.33	0.36	2.396	A	A

Queueing Delay results: (08:15-08:30)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	4.21	0.28	2.529	A	A
1	2	6.69	0.45	5.625	A	A
1	3	12.15	0.81	3.773	A	A
1	4	9.85	0.66	6.251	A	A
1	5	14.06	0.94	6.242	A	A
1	6	17.29	1.15	6.264	A	A
2	1	21.57	1.44	8.374	A	A
2	2	1.41	0.09	5.647	A	A
2	3	6.90	0.46	2.587	A	A

Queueing Delay results: (08:30-08:45)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	6.05	0.40	2.978	A	A
1	2	10.92	0.73	7.611	A	A
1	3	19.75	1.32	5.078	A	A
1	4	18.83	1.26	10.039	B	B
1	5	29.85	1.99	11.291	B	B
1	6	38.44	2.56	11.999	B	B
2	1	38.45	2.56	12.678	B	B
2	2	2.00	0.13	6.579	A	A
2	3	9.39	0.63	2.888	A	A

Queueing Delay results: (08:45-09:00)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	6.17	0.41	2.999	A	A
1	2	11.43	0.76	7.719	A	A
1	3	20.52	1.37	5.117	A	A
1	4	20.11	1.34	10.228	B	B
1	5	32.67	2.18	11.695	B	B
1	6	43.40	2.89	12.817	B	B
2	1	42.36	2.82	13.114	B	B
2	2	2.05	0.14	6.613	A	A
2	3	9.59	0.64	2.896	A	A

Queueing Delay results: (09:00-09:15)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	4.38	0.29	2.552	A	A
1	2	7.25	0.48	5.711	A	A
1	3	12.95	0.86	3.804	A	A
1	4	10.83	0.72	6.356	A	A
1	5	15.73	1.05	6.419	A	A
1	6	20.12	1.34	6.594	A	A
2	1	24.94	1.66	8.663	A	A
2	2	1.49	0.10	5.686	A	A
2	3	7.22	0.48	2.596	A	A

Queueing Delay results: (09:15-09:30)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	3.28	0.22	2.285	A	A
1	2	5.01	0.33	4.748	A	A
1	3	9.03	0.60	3.188	A	A
1	4	6.96	0.46	4.926	A	A
1	5	9.60	0.64	4.731	A	A
1	6	11.77	0.78	4.681	A	A
2	1	16.17	1.08	6.774	A	A
2	2	1.12	0.07	5.132	A	A
2	3	5.58	0.37	2.409	A	A

(Default Analysis Set) - 2022 Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Junction 1 - Arm 2 - 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2022 Do Minimum, PM	2022 Do Minimum	PM		Varies by Arm	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	1	(untitled)	Roundabout	1,2,3,4,5,6				9.07	A
2	2	(untitled)	Roundabout	1,2,3				7.42	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Arm	Name	Description
1	**1**	1	A12 Tom Crisp Way	
1	**2**	2	B1384 Stadbroke Road	
1	**3**	3	A12 Bloodmoor Road	
1	**4**	4	Ribblesdale	
1	**5**	5	A1145 Castleton Avenue	
1	**6**	6	A1177 Bloodmoor Road	
2	**1**	1	A1117 Elm Tree Road	
2	**2**	2	Long Road NE	
2	**3**	3	A1117 Bloodmoor Road	

Capacity Options

Junction	Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	**1**	0.00	99999.00		0.00
1	**2**	0.00	99999.00		0.00
1	**3**	0.00	99999.00		0.00
1	**4**	0.00	99999.00		0.00
1	**5**	0.00	99999.00		0.00
1	**6**	0.00	99999.00		0.00
2	**1**	0.00	99999.00		0.00
2	**2**	0.00	99999.00		0.00
2	**3**	0.00	99999.00		0.00

Roundabout Geometry

Junction	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	**1**	9.00	9.20	4.50	14.60	70.10	64.00	
1	**2**	3.50	5.10	30.10	59.50	70.10	54.00	
1	**3**	7.00	8.90	21.80	9.20	70.10	71.00	
1	**4**	4.40	7.00	7.30	18.60	70.10	53.00	
1	**5**	4.80	6.80	29.70	16.40	70.10	56.00	
1	**6**	6.00	7.00	23.50	14.10	70.10	56.00	
2	**1**	3.50	3.50	0.00	15.20	14.60	14.00	
2	**2**	3.30	3.30	0.00	15.10	14.60	12.00	
2	**3**	5.60	6.40	8.80	25.10	14.60	8.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1	1		(calculated)	(calculated)	0.583	2401.783
1	2		(calculated)	(calculated)	0.446	1399.878
1	3		(calculated)	(calculated)	0.514	2057.760
1	4		(calculated)	(calculated)	0.463	1559.329
1	5		(calculated)	(calculated)	0.490	1755.805
1	6		(calculated)	(calculated)	0.503	1853.949
2	1		(calculated)	(calculated)	0.555	1103.003
2	2		(calculated)	(calculated)	0.545	1046.487
2	3		(calculated)	(calculated)	0.765	2047.168

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

Junction	Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	1	ONE HOUR	✓	872.32	100.000
1	2	ONE HOUR	✓	325.01	100.000
1	3	ONE HOUR	✓	926.16	100.000
1	4	ONE HOUR	✓	253.18	100.000
1	5	ONE HOUR	✓	588.29	100.000
1	6	Linked Arm		N/A	
2	1	ONE HOUR	✓	700.66	100.000
2	2	ONE HOUR	✓	112.76	100.000
2	3	Linked Arm		N/A	

Linked Arm Data

Junction	Arm	From Junction ID	From Arm ID	Link Type	Flow Source	Uniform Flow (PCU/hr)	Flow Multiplier (%)	Internal Storage Space (PCU)
1	6	2	3	Queue limited	Normal	0.00	100.00	28.00
2	3	1	6	Queue limited	Normal	0.00	100.00	28.00

Turning Proportions

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

		To					
		1	2	3	4	5	6
From	1	0.000	17.858	132.337	176.186	493.017	52.920
	2	35.586	0.000	28.548	33.090	95.409	132.382
	3	263.290	23.905	0.000	70.855	85.073	483.042
	4	58.818	19.879	60.595	0.000	0.000	113.892
	5	225.370	150.912	157.868	0.000	0.000	54.139
	6	12.196	124.569	451.483	162.382	44.555	0.000

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

		To					
		1	2	3	4	5	6
From	1	0.00	0.02	0.15	0.20	0.57	0.06
	2	0.11	0.00	0.09	0.10	0.29	0.41
	3	0.28	0.03	0.00	0.08	0.09	0.52
	4	0.23	0.08	0.24	0.00	0.00	0.45
	5	0.38	0.26	0.27	0.00	0.00	0.09
	6	0.02	0.16	0.57	0.20	0.06	0.00

Turning Counts / Proportions (PCU/hr) - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.000	7.069	693.594
	2	11.094	0.000	101.666
	3	764.667	71.709	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.00	0.01	0.99
	2	0.10	0.00	0.90
	3	0.91	0.09	0.00

Vehicle Mix

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

		To					
		1	2	3	4	5	6
From	1	1.000	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000	1.000
	6	1.000	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To					
		1	2	3	4	5	6
From	1	0.0	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0	0.0
	6	0.0	0.0	0.0	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 2 (for whole period)

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

Heavy Vehicle Percentages - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	1	0.59	5.34	1.41	A	800.45	1200.68	81.24	4.06	0.90	81.25	4.06
1	2	0.65	18.63	1.80	C	298.24	447.36	84.47	11.33	0.94	84.47	11.33
1	3	0.75	10.40	2.88	B	849.87	1274.80	143.54	6.76	1.59	143.55	6.76
1	4	0.41	8.79	0.67	A	232.33	348.49	38.08	6.56	0.42	38.08	6.56
1	5	0.60	8.22	1.46	A	539.82	809.74	81.37	6.03	0.90	81.37	6.03
1	6	0.67	8.42	2.01	A	729.02	1093.53	109.45	6.01	1.22	109.46	6.01
2	1	0.73	12.47	2.62	B	642.94	964.41	146.87	9.14	1.63	146.90	9.14
2	2	0.20	7.11	0.24	A	103.47	155.21	15.98	6.18	0.18	15.98	6.18
2	3	0.45	3.22	0.82	A	766.95	1150.43	55.14	2.88	0.61	55.14	2.88

Main Results for each time segment

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	656.73	164.18	654.59	445.95	892.32	0.00	1881.55	1381.82	0.349	0.00	0.53	2.929	A
1	2	244.69	61.17	243.01	252.00	1294.91	0.00	822.50	228.49	0.297	0.00	0.42	6.195	A
1	3	697.27	174.32	694.15	620.36	917.57	0.00	1586.31	1216.71	0.440	0.00	0.78	4.022	A
1	4	190.61	47.65	189.63	330.91	1280.81	0.00	966.11	524.23	0.197	0.00	0.24	4.630	A
1	5	442.89	110.72	440.84	538.22	932.22	0.00	1299.14	904.41	0.341	0.00	0.51	4.184	A
1	6	594.49	148.62	591.82	626.60	746.46	0.00	1478.50	1093.51	0.402	0.00	0.67	4.048	A
2	1	527.50	131.87	523.68	579.57	53.57	0.00	1073.27	763.07	0.491	0.00	0.95	6.507	A
2	2	84.89	21.22	84.40	58.86	518.40	0.00	763.78	457.44	0.111	0.00	0.12	5.296	A
2	3	626.60	156.65	624.84	594.49	8.30	0.00	2040.81	2012.73	0.307	0.00	0.44	2.539	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	784.20	196.05	783.19	533.92	1071.33	0.00	1777.19	1381.82	0.441	0.53	0.78	3.618	A
1	2	292.18	73.05	291.09	302.18	1552.34	0.00	707.72	228.49	0.413	0.42	0.69	8.619	A
1	3	832.60	208.15	830.74	744.39	1099.04	0.00	1493.06	1216.71	0.558	0.78	1.24	5.420	A
1	4	227.61	56.90	227.13	396.68	1533.10	0.00	849.26	524.23	0.268	0.24	0.36	5.783	A
1	5	528.86	132.21	527.84	644.27	1115.96	0.00	1209.13	904.41	0.437	0.51	0.77	5.277	A
1	6	712.96	178.24	711.55	750.10	893.69	0.00	1404.45	1093.51	0.508	0.67	1.02	5.185	A
2	1	629.88	157.47	628.05	695.24	64.26	0.00	1067.34	840.43	0.590	0.95	1.41	8.160	A
2	2	101.37	25.34	101.20	70.60	621.72	0.00	707.44	372.50	0.143	0.12	0.17	5.936	A
2	3	750.10	187.52	749.55	712.96	9.96	0.00	2039.55	2019.13	0.368	0.44	0.58	2.789	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	960.44	240.11	958.00	651.74	1306.70	0.00	1639.96	1381.82	0.586	0.78	1.39	5.260	A
1	2	357.85	89.46	353.71	368.86	1895.84	0.00	554.56	228.49	0.645	0.69	1.73	17.573	C
1	3	1019.73	254.93	1013.49	908.22	1341.34	0.00	1368.57	1216.71	0.745	1.24	2.80	9.966	A
1	4	278.76	69.69	277.56	484.10	1870.73	0.00	692.88	524.23	0.402	0.36	0.66	8.643	A
1	5	647.72	161.93	645.05	786.95	1361.34	0.00	1088.93	904.41	0.595	0.77	1.44	8.061	A
1	6	870.78	217.70	867.05	915.00	1091.39	0.00	1305.01	1093.51	0.667	1.02	1.95	8.151	A
2	1	771.44	192.86	766.86	847.89	78.37	0.00	1059.51	859.53	0.728	1.41	2.56	12.110	B
2	2	124.15	31.04	123.85	86.11	759.12	0.00	632.51	351.53	0.196	0.17	0.24	7.072	A
2	3	915.00	228.75	914.07	870.78	12.19	0.00	2037.84	2020.71	0.449	0.58	0.81	3.200	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	960.44	240.11	960.36	655.21	1316.51	0.00	1634.24	1381.82	0.588	1.39	1.41	5.342	A
1	2	357.85	89.46	357.55	371.08	1905.80	0.00	550.12	228.49	0.650	1.73	1.80	18.629	C
1	3	1019.73	254.93	1019.40	914.46	1348.89	0.00	1364.69	1216.71	0.747	2.80	2.88	10.402	B
1	4	278.76	69.69	278.71	487.06	1881.23	0.00	688.02	524.23	0.405	0.66	0.67	8.794	A
1	5	647.72	161.93	647.62	790.41	1369.53	0.00	1084.91	904.41	0.597	1.44	1.46	8.225	A
1	6	875.36	218.84	875.11	920.54	1096.61	0.00	1302.39	1093.51	0.672	1.95	2.01	8.416	A
2	1	771.44	192.86	771.21	853.79	78.92	0.00	1059.20	859.53	0.728	2.56	2.62	12.470	B
2	2	124.15	31.04	124.14	86.70	763.43	0.00	630.16	351.53	0.197	0.24	0.24	7.113	A
2	3	920.54	230.14	920.50	875.36	12.21	0.00	2037.82	2020.71	0.452	0.81	0.82	3.221	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	784.20	196.05	786.64	538.85	1085.77	0.00	1768.77	1381.82	0.443	1.41	0.80	3.673	A
1	2	292.18	73.05	296.48	305.42	1567.00	0.00	701.19	228.49	0.417	1.80	0.73	8.987	A
1	3	832.60	208.15	838.99	753.56	1109.91	0.00	1487.48	1216.71	0.560	2.88	1.29	5.604	A
1	4	227.61	56.90	228.81	400.99	1547.90	0.00	842.40	524.23	0.270	0.67	0.37	5.880	A
1	5	528.86	132.21	531.54	649.23	1127.49	0.00	1203.48	904.41	0.439	1.46	0.79	5.378	A
1	6	719.72	179.93	723.49	757.90	901.13	0.00	1400.71	1093.51	0.514	2.01	1.07	5.344	A
2	1	629.88	157.47	634.45	703.75	65.06	0.00	1066.90	840.43	0.590	2.62	1.47	8.410	A
2	2	101.37	25.34	101.67	71.46	628.05	0.00	703.98	372.50	0.144	0.24	0.17	5.981	A
2	3	757.90	189.47	758.80	719.72	10.00	0.00	2039.51	2019.13	0.372	0.82	0.59	2.814	A

Main results: (18:15-18:30)

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	656.73	164.18	657.77	449.42	904.91	0.00	1874.21	1381.82	0.350	0.80	0.54	2.963	A
1	2	244.69	61.17	245.86	254.77	1307.91	0.00	816.71	228.49	0.300	0.73	0.43	6.321	A
1	3	697.27	174.32	699.24	628.25	925.53	0.00	1582.21	1216.71	0.441	1.29	0.79	4.087	A
1	4	190.61	47.65	191.11	334.38	1290.40	0.00	961.67	524.23	0.198	0.37	0.25	4.674	A
1	5	442.89	110.72	443.97	541.91	939.60	0.00	1295.53	904.41	0.342	0.79	0.52	4.232	A
1	6	600.82	150.20	602.33	631.56	752.00	0.00	1475.71	1093.51	0.407	1.07	0.69	4.128	A
2	1	527.50	131.87	529.46	586.31	54.20	0.00	1072.92	824.64	0.492	1.47	0.98	6.650	A
2	2	84.89	21.22	85.06	59.54	524.12	0.00	760.66	389.84	0.112	0.17	0.13	5.329	A
2	3	631.56	157.89	632.14	600.82	8.37	0.00	2040.76	2017.82	0.309	0.59	0.45	2.558	A

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	7.84	0.52	2.929	A	A
1	2	6.07	0.40	6.195	A	A
1	3	11.33	0.76	4.022	A	A
1	4	3.57	0.24	4.630	A	A
1	5	7.50	0.50	4.184	A	A
1	6	9.73	0.65	4.048	A	A
2	1	13.66	0.91	6.507	A	A
2	2	1.81	0.12	5.296	A	A
2	3	6.50	0.43	2.539	A	A

Queueing Delay results: (17:15-17:30)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	11.52	0.77	3.618	A	A
1	2	9.99	0.67	8.619	A	A
1	3	18.05	1.20	5.420	A	A
1	4	5.32	0.35	5.783	A	A
1	5	11.24	0.75	5.277	A	A
1	6	14.85	0.99	5.185	A	A
2	1	20.27	1.35	8.160	A	A
2	2	2.44	0.16	5.936	A	A
2	3	8.56	0.57	2.789	A	A

Queueing Delay results: (17:30-17:45)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	20.17	1.34	5.260	A	A
1	2	23.59	1.57	17.573	C	B
1	3	38.88	2.59	9.966	A	A
1	4	9.55	0.64	8.643	A	A
1	5	20.52	1.37	8.061	A	A
1	6	27.70	1.85	8.151	A	A
2	1	35.53	2.37	12.110	B	B
2	2	3.54	0.24	7.072	A	A
2	3	11.92	0.79	3.200	A	A

Queueing Delay results: (17:45-18:00)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	21.10	1.41	5.342	A	A
1	2	26.59	1.77	18.629	C	B
1	3	42.81	2.85	10.402	B	B
1	4	10.05	0.67	8.794	A	A
1	5	21.80	1.45	8.225	A	A
1	6	29.89	1.99	8.416	A	A
2	1	38.88	2.59	12.470	B	B
2	2	3.65	0.24	7.113	A	A
2	3	12.25	0.82	3.221	A	A

Queueing Delay results: (18:00-18:15)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	12.34	0.82	3.673	A	A
1	2	11.54	0.77	8.987	A	A
1	3	20.24	1.35	5.604	A	A
1	4	5.77	0.38	5.880	A	A
1	5	12.29	0.82	5.378	A	A
1	6	16.64	1.11	5.344	A	A
2	1	23.28	1.55	8.410	A	A
2	2	2.60	0.17	5.981	A	A
2	3	9.06	0.60	2.814	A	A

Queueing Delay results: (18:15-18:30)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	8.28	0.55	2.963	A	A
1	2	6.68	0.45	6.321	A	A
1	3	12.23	0.82	4.087	A	A
1	4	3.81	0.25	4.674	A	A
1	5	8.03	0.54	4.232	A	A
1	6	10.64	0.71	4.128	A	A
2	1	15.25	1.02	6.650	A	A
2	2	1.93	0.13	5.329	A	A
2	3	6.84	0.46	2.558	A	A

(Default Analysis Set) - 2022 Do Something, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Junction 1 - Arm 2 - 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relat
2022 Do Something, AM	2022 Do Something	AM		Varies by Arm	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	1	(untitled)	Roundabout	1,2,3,4,5,6				7.38	A
2	2	(untitled)	Roundabout	1,2,3				4.80	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Arm	Name	Description
1	**1**	1	A12 Tom Crisp Way	
1	**2**	2	B1384 Stadbroke Road	
1	**3**	3	A12 Bloodmoor Road	
1	**4**	4	Ribblesdale	
1	**5**	5	A1145 Castleton Avenue	
1	**6**	6	A1177 Bloodmoor Road	
2	**1**	1	A1117 Elm Tree Road	
2	**2**	2	Long Road NE	
2	**3**	3	A1117 Bloodmoor Road	

Capacity Options

Junction	Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	**1**	0.00	99999.00		0.00
1	**2**	0.00	99999.00		0.00
1	**3**	0.00	99999.00		0.00
1	**4**	0.00	99999.00		0.00
1	**5**	0.00	99999.00		0.00
1	**6**	0.00	99999.00		0.00
2	**1**	0.00	99999.00		0.00
2	**2**	0.00	99999.00		0.00
2	**3**	0.00	99999.00		0.00

Roundabout Geometry

Junction	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	**1**	9.00	9.20	4.50	14.60	70.10	64.00	
1	**2**	3.50	5.10	30.10	59.50	70.10	54.00	
1	**3**	7.00	8.90	21.80	9.20	70.10	71.00	
1	**4**	4.40	7.00	7.30	18.60	70.10	53.00	
1	**5**	4.80	6.80	29.70	16.40	70.10	56.00	
1	**6**	6.00	7.00	23.50	14.10	70.10	56.00	
2	**1**	3.50	3.50	0.00	15.20	14.60	14.00	
2	**2**	3.30	3.30	0.00	15.10	14.60	12.00	
2	**3**	5.60	6.40	8.80	25.10	14.60	8.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1	1		(calculated)	(calculated)	0.583	2401.783
1	2		(calculated)	(calculated)	0.446	1399.878
1	3		(calculated)	(calculated)	0.514	2057.760
1	4		(calculated)	(calculated)	0.463	1559.329
1	5		(calculated)	(calculated)	0.490	1755.805
1	6		(calculated)	(calculated)	0.503	1853.949
2	1		(calculated)	(calculated)	0.555	1103.003
2	2		(calculated)	(calculated)	0.545	1046.487
2	3		(calculated)	(calculated)	0.765	2047.168

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	Factor for a HV (PCU)	Default Turning Proportions	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

Junction	Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	1	ONE HOUR	✓	807.08	100.000
1	2	ONE HOUR	✓	318.23	100.000
1	3	ONE HOUR	✓	911.61	100.000
1	4	ONE HOUR	✓	441.99	100.000
1	5	ONE HOUR	✓	571.98	100.000
1	6	Linked Arm		N/A	
2	1	ONE HOUR	✓	496.11	100.000
2	2	ONE HOUR	✓	86.40	100.000
2	3	Linked Arm		N/A	

Linked Arm Data

Junction	Arm	From Junction ID	From Arm ID	Link Type	Flow Source	Uniform Flow (PCU/hr)	Flow Multiplier (%)	Internal Storage Space (PCU)
1	6	2	3	Queue limited	Normal	0.00	100.00	28.00
2	3	1	6	Queue limited	Normal	0.00	100.00	28.00

Turning Proportions

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

		To					
		1	2	3	4	5	6
From	1	0.000	78.915	399.001	59.072	248.121	21.970
	2	95.783	0.000	19.847	12.566	86.897	103.139
	3	516.470	16.856	0.000	20.547	120.173	237.566
	4	201.896	46.809	62.813	0.000	0.000	130.474
	5	298.396	112.256	114.051	0.000	0.000	47.276
	6	3.922	136.209	322.994	48.683	45.112	0.000

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

		To					
		1	2	3	4	5	6
From	1	0.00	0.10	0.49	0.07	0.31	0.03
	2	0.30	0.00	0.06	0.04	0.27	0.32
	3	0.57	0.02	0.00	0.02	0.13	0.26
	4	0.46	0.11	0.14	0.00	0.00	0.30
	5	0.52	0.20	0.20	0.00	0.00	0.08
	6	0.01	0.24	0.58	0.09	0.08	0.00

Turning Counts / Proportions (PCU/hr) - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.000	19.114	476.996
	2	6.479	0.000	79.925
	3	446.467	93.958	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.00	0.04	0.96
	2	0.07	0.00	0.93
	3	0.83	0.17	0.00

Vehicle Mix

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

		To					
		1	2	3	4	5	6
From	1	1.000	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000	1.000
	6	1.000	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To					
		1	2	3	4	5	6
From	1	0.0	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0	0.0
	6	0.0	0.0	0.0	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 2 (for whole period)

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

Heavy Vehicle Percentages - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	1	0.49	3.86	0.95	A	740.59	1110.88	59.19	3.20	0.66	59.19	3.20
1	2	0.47	8.98	0.87	A	292.02	438.02	49.97	6.84	0.56	49.97	6.84
1	3	0.61	5.57	1.54	A	836.51	1254.77	91.16	4.36	1.01	91.17	4.36
1	4	0.61	11.53	1.53	B	405.58	608.37	80.29	7.92	0.89	80.29	7.92
1	5	0.64	10.19	1.75	B	524.86	787.29	91.99	7.01	1.02	92.00	7.01
1	6	0.59	8.38	1.41	A	510.64	765.96	76.78	6.01	0.85	76.78	6.01
2	1	0.52	7.21	1.08	A	455.24	682.86	69.96	6.15	0.78	69.97	6.15
2	2	0.13	5.41	0.14	A	79.29	118.93	9.87	4.98	0.11	9.87	4.98
2	3	0.29	2.49	0.41	A	495.59	743.38	29.00	2.34	0.32	29.00	2.34

Main Results for each time segment

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	607.61	151.90	605.88	836.73	676.36	0.00	2007.46	1650.61	0.303	0.00	0.43	2.565	A
1	2	239.58	59.90	238.26	292.53	989.71	0.00	958.59	356.06	0.250	0.00	0.33	4.988	A
1	3	686.31	171.58	683.81	687.56	540.41	0.00	1780.09	1467.64	0.386	0.00	0.62	3.277	A
1	4	332.75	83.19	330.89	105.45	1118.77	0.00	1041.16	459.43	0.320	0.00	0.47	5.055	A
1	5	430.62	107.65	428.48	375.09	1074.57	0.00	1229.40	791.73	0.350	0.00	0.53	4.483	A
1	6	416.91	104.23	415.04	405.01	1098.04	0.00	1301.67	840.02	0.320	0.00	0.47	4.052	A
2	1	373.50	93.37	371.35	338.63	70.24	0.00	1064.02	560.89	0.351	0.00	0.54	5.182	A
2	2	65.05	16.26	64.72	84.55	357.05	0.00	851.78	414.88	0.076	0.00	0.08	4.571	A
2	3	405.01	101.25	404.02	416.91	4.85	0.00	2043.45	2023.37	0.198	0.00	0.25	2.195	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	725.55	181.39	724.88	1001.77	811.76	0.00	1928.52	1650.61	0.376	0.43	0.60	2.989	A
1	2	286.08	71.52	285.47	350.68	1185.96	0.00	871.08	356.06	0.328	0.33	0.48	6.141	A
1	3	819.52	204.88	818.43	824.11	647.32	0.00	1725.16	1467.64	0.475	0.62	0.90	3.965	A
1	4	397.34	99.34	396.31	126.38	1339.37	0.00	938.99	459.43	0.423	0.47	0.72	6.622	A
1	5	514.20	128.55	513.01	449.10	1286.57	0.00	1125.55	791.73	0.457	0.53	0.83	5.868	A
1	6	499.86	124.96	498.87	484.92	1314.66	0.00	1192.71	840.02	0.419	0.47	0.71	5.181	A
2	1	445.99	111.50	445.25	406.22	84.26	0.00	1056.24	622.94	0.422	0.54	0.72	5.884	A
2	2	77.68	19.42	77.58	101.42	428.09	0.00	813.03	350.38	0.096	0.08	0.11	4.895	A
2	3	484.92	121.23	484.67	499.86	5.82	0.00	2042.72	2027.07	0.237	0.25	0.31	2.310	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	888.61	222.15	887.24	1224.08	990.94	0.00	1824.05	1650.61	0.487	0.60	0.94	3.837	A
1	2	350.38	87.60	348.90	428.33	1449.86	0.00	753.42	356.06	0.465	0.48	0.85	8.867	A
1	3	1003.70	250.93	1001.19	1007.19	791.57	0.00	1651.04	1467.64	0.608	0.90	1.53	5.519	A
1	4	486.64	121.66	483.53	154.52	1638.24	0.00	800.56	459.43	0.608	0.72	1.50	11.245	B
1	5	629.76	157.44	626.21	549.35	1572.41	0.00	985.53	791.73	0.639	0.83	1.72	9.922	A
1	6	611.69	152.92	609.03	592.63	1605.99	0.00	1046.18	840.02	0.585	0.71	1.38	8.186	A
2	1	546.23	136.56	544.82	496.40	102.97	0.00	1045.86	636.37	0.522	0.72	1.08	7.165	A
2	2	95.13	23.78	94.98	123.96	523.82	0.00	760.82	336.42	0.125	0.11	0.14	5.405	A
2	3	592.63	148.16	592.24	611.69	7.12	0.00	2041.72	2027.87	0.290	0.31	0.41	2.483	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	888.61	222.15	888.58	1229.08	997.04	0.00	1820.50	1650.61	0.488	0.94	0.95	3.862	A
1	2	350.38	87.60	350.33	430.46	1455.16	0.00	751.05	356.06	0.467	0.85	0.87	8.980	A
1	3	1003.70	250.93	1003.65	1011.36	794.13	0.00	1649.73	1467.64	0.608	1.53	1.54	5.571	A
1	4	486.64	121.66	486.52	155.08	1642.70	0.00	798.49	459.43	0.609	1.50	1.53	11.527	B
1	5	629.76	157.44	629.62	550.80	1578.42	0.00	982.58	791.73	0.641	1.72	1.75	10.188	B
1	6	613.14	153.29	613.02	594.94	1613.10	0.00	1042.61	840.02	0.588	1.38	1.41	8.375	A
2	1	546.23	136.56	546.19	498.63	103.43	0.00	1045.60	636.37	0.522	1.08	1.08	7.208	A
2	2	95.13	23.78	95.13	124.48	525.15	0.00	760.10	336.42	0.125	0.14	0.14	5.413	A
2	3	594.94	148.74	594.93	613.14	7.13	0.00	2041.71	2027.87	0.291	0.41	0.41	2.487	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	725.55	181.39	726.91	1008.88	820.63	0.00	1923.35	1650.61	0.377	0.95	0.61	3.014	A
1	2	286.08	71.52	287.56	353.77	1193.77	0.00	867.60	356.06	0.330	0.87	0.50	6.223	A
1	3	819.52	204.88	822.03	830.22	651.11	0.00	1723.21	1467.64	0.476	1.54	0.91	4.007	A
1	4	397.34	99.34	400.49	127.21	1345.92	0.00	935.95	459.43	0.425	1.53	0.75	6.760	A
1	5	514.20	128.55	517.79	451.25	1295.16	0.00	1121.35	791.73	0.459	1.75	0.86	5.998	A
1	6	502.12	125.53	504.80	488.22	1324.72	0.00	1187.65	840.02	0.423	1.41	0.74	5.293	A
2	1	445.99	111.50	447.37	409.49	84.95	0.00	1055.86	622.94	0.422	1.08	0.74	5.931	A
2	2	77.68	19.42	77.82	102.18	430.14	0.00	811.92	350.38	0.096	0.14	0.11	4.904	A
2	3	488.22	122.06	488.60	502.12	5.84	0.00	2042.70	2027.07	0.239	0.41	0.32	2.318	A

Main results: (09:15-09:30)

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	607.61	151.90	608.30	842.53	684.55	0.00	2002.68	1650.61	0.303	0.61	0.44	2.584	A
1	2	239.58	59.90	240.22	295.30	997.55	0.00	955.09	356.06	0.251	0.50	0.34	5.039	A
1	3	686.31	171.58	687.44	693.51	544.26	0.00	1778.11	1467.64	0.386	0.91	0.63	3.303	A
1	4	332.75	83.19	333.84	106.32	1125.38	0.00	1038.10	459.43	0.321	0.75	0.48	5.121	A
1	5	430.62	107.65	431.86	377.34	1081.88	0.00	1225.82	791.73	0.351	0.86	0.55	4.540	A
1	6	420.11	105.03	421.14	407.80	1105.94	0.00	1297.70	840.02	0.324	0.74	0.48	4.113	A
2	1	373.50	93.37	374.27	342.00	70.95	0.00	1063.63	612.16	0.351	0.74	0.55	5.229	A
2	2	65.05	16.26	65.14	85.37	359.85	0.00	850.25	361.59	0.077	0.11	0.08	4.587	A
2	3	407.80	101.95	408.06	420.11	4.88	0.00	2043.43	2026.42	0.200	0.32	0.25	2.203	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	6.37	0.42	2.565	A	A
1	2	4.82	0.32	4.988	A	A
1	3	9.14	0.61	3.277	A	A
1	4	6.77	0.45	5.055	A	A
1	5	7.79	0.52	4.483	A	A
1	6	6.84	0.46	4.052	A	A
2	1	7.78	0.52	5.182	A	A
2	2	1.20	0.08	4.571	A	A
2	3	3.64	0.24	2.195	A	A

Queueing Delay results: (08:15-08:30)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	8.86	0.59	2.989	A	A
1	2	7.08	0.47	6.141	A	A
1	3	13.16	0.88	3.965	A	A
1	4	10.53	0.70	6.622	A	A
1	5	12.10	0.81	5.868	A	A
1	6	10.44	0.70	5.181	A	A
2	1	10.57	0.70	5.884	A	A
2	2	1.55	0.10	4.895	A	A
2	3	4.60	0.31	2.310	A	A

Queueing Delay results: (08:30-08:45)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	13.80	0.92	3.837	A	A
1	2	12.27	0.82	8.867	A	A
1	3	22.06	1.47	5.519	A	A
1	4	21.15	1.41	11.245	B	B
1	5	24.23	1.62	9.922	A	A
1	6	19.68	1.31	8.186	A	A
2	1	15.57	1.04	7.165	A	A
2	2	2.09	0.14	5.405	A	A
2	3	6.04	0.40	2.483	A	A

Queueing Delay results: (08:45-09:00)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	14.20	0.95	3.862	A	A
1	2	12.92	0.86	8.980	A	A
1	3	23.03	1.54	5.571	A	A
1	4	22.83	1.52	11.527	B	B
1	5	26.12	1.74	10.188	B	B
1	6	20.96	1.40	8.375	A	A
2	1	16.22	1.08	7.208	A	A
2	2	2.13	0.14	5.413	A	A
2	3	6.14	0.41	2.487	A	A

Queueing Delay results: (09:00-09:15)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	9.31	0.62	3.014	A	A
1	2	7.70	0.51	6.223	A	A
1	3	14.10	0.94	4.007	A	A
1	4	11.67	0.78	6.760	A	A
1	5	13.37	0.89	5.998	A	A
1	6	11.47	0.76	5.293	A	A
2	1	11.43	0.76	5.931	A	A
2	2	1.63	0.11	4.904	A	A
2	3	4.78	0.32	2.318	A	A

Queueing Delay results: (09:15-09:30)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	6.66	0.44	2.584	A	A
1	2	5.18	0.35	5.039	A	A
1	3	9.67	0.64	3.303	A	A
1	4	7.32	0.49	5.121	A	A
1	5	8.39	0.56	4.540	A	A
1	6	7.39	0.49	4.113	A	A
2	1	8.39	0.56	5.229	A	A
2	2	1.27	0.08	4.587	A	A
2	3	3.79	0.25	2.203	A	A

(Default Analysis Set) - 2022 Do Something, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Junction 1 - Arm 2 - 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relat
2022 Do Something, PM	2022 Do Something	PM		Varies by Arm	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	1	(untitled)	Roundabout	1,2,3,4,5,6				10.34	B
2	2	(untitled)	Roundabout	1,2,3				6.43	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Arm	Name	Description
1	**1**	1	A12 Tom Crisp Way	
1	**2**	2	B1384 Stadbroke Road	
1	**3**	3	A12 Bloodmoor Road	
1	**4**	4	Ribblesdale	
1	**5**	5	A1145 Castleton Avenue	
1	**6**	6	A1177 Bloodmoor Road	
2	**1**	1	A1117 Elm Tree Road	
2	**2**	2	Long Road NE	
2	**3**	3	A1117 Bloodmoor Road	

Capacity Options

Junction	Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	**1**	0.00	99999.00		0.00
1	**2**	0.00	99999.00		0.00
1	**3**	0.00	99999.00		0.00
1	**4**	0.00	99999.00		0.00
1	**5**	0.00	99999.00		0.00
1	**6**	0.00	99999.00		0.00
2	**1**	0.00	99999.00		0.00
2	**2**	0.00	99999.00		0.00
2	**3**	0.00	99999.00		0.00

Roundabout Geometry

Junction	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	**1**	9.00	9.20	4.50	14.60	70.10	64.00	
1	**2**	3.50	5.10	30.10	59.50	70.10	54.00	
1	**3**	7.00	8.90	21.80	9.20	70.10	71.00	
1	**4**	4.40	7.00	7.30	18.60	70.10	53.00	
1	**5**	4.80	6.80	29.70	16.40	70.10	56.00	
1	**6**	6.00	7.00	23.50	14.10	70.10	56.00	
2	**1**	3.50	3.50	0.00	15.20	14.60	14.00	
2	**2**	3.30	3.30	0.00	15.10	14.60	12.00	
2	**3**	5.60	6.40	8.80	25.10	14.60	8.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1	1		(calculated)	(calculated)	0.583	2401.783
1	2		(calculated)	(calculated)	0.446	1399.878
1	3		(calculated)	(calculated)	0.514	2057.760
1	4		(calculated)	(calculated)	0.463	1559.329
1	5		(calculated)	(calculated)	0.490	1755.805
1	6		(calculated)	(calculated)	0.503	1853.949
2	1		(calculated)	(calculated)	0.555	1103.003
2	2		(calculated)	(calculated)	0.545	1046.487
2	3		(calculated)	(calculated)	0.765	2047.168

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

Junction	Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	1	ONE HOUR	✓	1065.36	100.000
1	2	ONE HOUR	✓	279.74	100.000
1	3	ONE HOUR	✓	974.83	100.000
1	4	ONE HOUR	✓	257.66	100.000
1	5	ONE HOUR	✓	617.76	100.000
1	6	Linked Arm		N/A	
2	1	ONE HOUR	✓	641.70	100.000
2	2	ONE HOUR	✓	139.58	100.000
2	3	Linked Arm		N/A	

Linked Arm Data

Junction	Arm	From Junction ID	From Arm ID	Link Type	Flow Source	Uniform Flow (PCU/hr)	Flow Multiplier (%)	Internal Storage Space (PCU)
1	6	2	3	Queue limited	Normal	0.00	100.00	28.00
2	3	1	6	Queue limited	Normal	0.00	100.00	28.00

Turning Proportions

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

		To					
		1	2	3	4	5	6
From	1	0.000	42.570	264.355	206.026	516.694	35.710
	2	60.346	0.000	12.253	29.279	88.568	89.296
	3	438.115	23.218	0.000	72.355	85.804	355.339
	4	94.824	19.281	58.072	0.000	0.000	85.485
	5	284.175	149.682	153.404	0.000	0.000	30.502
	6	9.690	115.605	431.524	141.866	41.263	0.000

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

		To					
		1	2	3	4	5	6
From	1	0.00	0.04	0.25	0.19	0.48	0.03
	2	0.22	0.00	0.04	0.10	0.32	0.32
	3	0.45	0.02	0.00	0.07	0.09	0.36
	4	0.37	0.07	0.23	0.00	0.00	0.33
	5	0.46	0.24	0.25	0.00	0.00	0.05
	6	0.01	0.16	0.58	0.19	0.06	0.00

Turning Counts / Proportions (PCU/hr) - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.000	20.693	621.009
	2	20.629	0.000	118.952
	3	544.541	51.791	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.00	0.03	0.97
	2	0.15	0.00	0.85
	3	0.91	0.09	0.00

Vehicle Mix

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

		To					
		1	2	3	4	5	6
From	1	1.000	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000	1.000
	6	1.000	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To					
		1	2	3	4	5	6
From	1	0.0	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0	0.0
	6	0.0	0.0	0.0	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 2 (for whole period)

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

Heavy Vehicle Percentages - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	1	0.70	7.17	2.30	A	977.59	1466.38	122.17	5.00	1.36	122.18	5.00
1	2	0.63	19.42	1.61	C	256.70	385.04	74.87	11.67	0.83	74.88	11.67
1	3	0.78	11.90	3.46	B	894.52	1341.78	165.18	7.39	1.84	165.20	7.39
1	4	0.42	9.19	0.72	A	236.44	354.65	39.98	6.76	0.44	39.98	6.76
1	5	0.63	9.07	1.69	A	566.87	850.31	91.45	6.45	1.02	91.45	6.45
1	6	0.71	10.87	2.41	B	678.39	1017.58	121.60	7.17	1.35	121.62	7.17
2	1	0.66	9.85	1.91	A	588.84	883.26	113.97	7.74	1.27	113.99	7.74
2	2	0.23	6.92	0.29	A	128.08	192.12	19.36	6.05	0.22	19.36	6.05
2	3	0.32	2.62	0.48	A	546.82	820.23	33.36	2.44	0.37	33.36	2.44

Main Results for each time segment

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	802.06	200.51	799.17	664.58	846.00	0.00	1908.56	1506.60	0.420	0.00	0.72	3.237	A
1	2	210.60	52.65	209.15	261.97	1383.20	0.00	783.14	261.44	0.269	0.00	0.36	6.257	A
1	3	733.90	183.48	730.51	687.11	905.24	0.00	1592.64	1260.73	0.461	0.00	0.85	4.160	A
1	4	193.98	48.50	192.97	336.26	1299.49	0.00	957.46	529.96	0.203	0.00	0.25	4.703	A
1	5	465.08	116.27	462.86	548.83	943.63	0.00	1293.55	885.55	0.360	0.00	0.56	4.322	A
1	6	553.48	138.37	550.79	446.71	959.78	0.00	1371.21	923.96	0.404	0.00	0.67	4.374	A
2	1	483.11	120.78	479.92	422.33	38.70	0.00	1081.52	663.36	0.447	0.00	0.80	5.954	A
2	2	105.08	26.27	104.48	54.17	464.44	0.00	793.21	424.93	0.132	0.00	0.15	5.222	A
2	3	446.71	111.68	445.59	553.48	15.44	0.00	2035.35	1999.12	0.219	0.00	0.28	2.263	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	957.73	239.43	956.16	795.60	1015.58	0.00	1809.69	1506.60	0.529	0.72	1.11	4.210	A
1	2	251.48	62.87	250.52	314.05	1657.69	0.00	660.75	261.44	0.381	0.36	0.61	8.754	A
1	3	876.35	219.09	874.21	824.09	1084.11	0.00	1500.73	1260.73	0.584	0.85	1.38	5.726	A
1	4	231.63	57.91	231.13	402.96	1555.36	0.00	838.95	529.96	0.276	0.25	0.38	5.917	A
1	5	555.36	138.84	554.19	656.92	1129.57	0.00	1202.46	885.55	0.462	0.56	0.85	5.543	A
1	6	663.74	165.93	662.14	534.73	1149.03	0.00	1276.02	923.96	0.520	0.67	1.07	5.849	A
2	1	576.88	144.22	575.53	506.53	46.41	0.00	1077.24	718.86	0.536	0.80	1.13	7.158	A
2	2	125.48	31.37	125.28	64.97	556.97	0.00	742.75	361.91	0.169	0.15	0.20	5.829	A
2	3	534.73	133.68	534.42	663.74	18.52	0.00	2033.00	2006.24	0.263	0.28	0.36	2.402	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	1172.98	293.24	1168.40	970.39	1238.26	0.00	1679.87	1506.60	0.698	1.11	2.26	6.976	A
1	2	308.00	77.00	304.25	383.23	2023.43	0.00	497.67	261.44	0.619	0.61	1.54	18.272	C
1	3	1073.31	268.33	1065.51	1005.36	1322.32	0.00	1378.34	1260.73	0.779	1.38	3.33	11.236	B
1	4	283.69	70.92	282.39	491.52	1896.32	0.00	681.03	529.96	0.417	0.38	0.70	9.001	A
1	5	680.17	170.04	676.95	801.76	1376.95	0.00	1081.28	885.55	0.629	0.85	1.65	8.834	A
1	6	811.53	202.88	806.54	651.79	1402.11	0.00	1148.73	923.96	0.706	1.07	2.32	10.371	B
2	1	706.53	176.63	703.55	617.42	56.57	0.00	1071.61	732.93	0.659	1.13	1.88	9.700	A
2	2	153.68	38.42	153.32	79.26	680.86	0.00	675.18	345.94	0.228	0.20	0.29	6.894	A
2	3	651.79	162.95	651.33	811.53	22.66	0.00	2029.83	2008.05	0.321	0.36	0.47	2.611	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	1172.98	293.24	1172.79	976.39	1247.91	0.00	1674.24	1506.60	0.701	2.26	2.30	7.172	A
1	2	308.00	77.00	307.71	385.62	2035.08	0.00	492.48	261.44	0.625	1.54	1.61	19.419	C
1	3	1073.31	268.33	1072.82	1012.13	1330.66	0.00	1374.05	1260.73	0.781	3.33	3.46	11.904	B
1	4	283.69	70.92	283.63	494.75	1908.73	0.00	675.28	529.96	0.420	0.70	0.72	9.189	A
1	5	680.17	170.04	680.03	806.06	1386.31	0.00	1076.69	885.55	0.632	1.65	1.69	9.067	A
1	6	814.60	203.65	814.24	656.27	1410.07	0.00	1144.73	923.96	0.712	2.32	2.41	10.867	B
2	1	706.53	176.63	706.41	621.97	57.00	0.00	1071.37	732.93	0.659	1.88	1.91	9.855	A
2	2	153.68	38.42	153.67	79.77	683.63	0.00	673.67	345.94	0.228	0.29	0.29	6.922	A
2	3	656.27	164.07	656.25	814.60	22.71	0.00	2029.79	2008.05	0.323	0.47	0.48	2.620	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	957.73	239.43	962.36	804.08	1029.71	0.00	1801.45	1506.60	0.532	2.30	1.15	4.315	A
1	2	251.48	62.87	255.40	317.52	1674.56	0.00	653.23	261.44	0.385	1.61	0.64	9.136	A
1	3	876.35	219.09	884.42	833.96	1096.00	0.00	1494.62	1260.73	0.586	3.46	1.44	5.977	A
1	4	231.63	57.91	232.94	407.60	1572.81	0.00	830.86	529.96	0.279	0.72	0.39	6.033	A
1	5	555.36	138.84	558.60	663.01	1142.75	0.00	1196.01	885.55	0.464	1.69	0.88	5.677	A
1	6	668.35	167.09	673.47	541.03	1160.32	0.00	1270.34	923.96	0.526	2.41	1.13	6.083	A
2	1	576.88	144.22	579.81	513.05	47.03	0.00	1076.90	718.86	0.536	1.91	1.17	7.286	A
2	2	125.48	31.37	125.83	65.72	561.11	0.00	740.49	361.91	0.169	0.29	0.21	5.859	A
2	3	541.03	135.26	541.48	668.35	18.60	0.00	2032.94	2006.24	0.266	0.48	0.36	2.415	A

Main results: (18:15-18:30)

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	802.06	200.51	803.71	669.95	857.73	0.00	1901.72	1506.60	0.422	1.15	0.73	3.285	A
1	2	210.60	52.65	211.65	264.74	1396.69	0.00	777.12	261.44	0.271	0.64	0.38	6.379	A
1	3	733.90	183.48	736.20	695.12	913.22	0.00	1588.54	1260.73	0.462	1.44	0.87	4.236	A
1	4	193.98	48.50	194.51	339.65	1309.76	0.00	952.70	529.96	0.204	0.39	0.26	4.751	A
1	5	465.08	116.27	466.32	552.85	951.42	0.00	1289.73	885.55	0.361	0.88	0.57	4.378	A
1	6	558.63	139.66	560.35	450.41	967.33	0.00	1367.41	923.96	0.409	1.13	0.70	4.471	A
2	1	483.11	120.78	484.53	427.14	39.15	0.00	1081.28	707.27	0.447	1.17	0.82	6.048	A
2	2	105.08	26.27	105.29	54.77	468.91	0.00	790.77	375.07	0.133	0.21	0.15	5.252	A
2	3	450.41	112.60	450.73	558.63	15.56	0.00	2035.26	2004.76	0.221	0.36	0.29	2.273	A

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	10.54	0.70	3.237	A	A
1	2	5.28	0.35	6.257	A	A
1	3	12.32	0.82	4.160	A	A
1	4	3.69	0.25	4.703	A	A
1	5	8.12	0.54	4.322	A	A
1	6	9.77	0.65	4.374	A	A
2	1	11.49	0.77	5.954	A	A
2	2	2.21	0.15	5.222	A	A
2	3	4.14	0.28	2.263	A	A

Queueing Delay results: (17:15-17:30)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	16.26	1.08	4.210	A	A
1	2	8.74	0.58	8.754	A	A
1	3	20.00	1.33	5.726	A	A
1	4	5.53	0.37	5.917	A	A
1	5	12.37	0.82	5.543	A	A
1	6	15.52	1.03	5.849	A	A
2	1	16.43	1.10	7.158	A	A
2	2	2.97	0.20	5.829	A	A
2	3	5.27	0.35	2.402	A	A

Queueing Delay results: (17:30-17:45)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	32.03	2.14	6.976	A	A
1	2	21.11	1.41	18.272	C	B
1	3	45.59	3.04	11.236	B	B
1	4	10.10	0.67	9.001	A	A
1	5	23.45	1.56	8.834	A	A
1	6	32.31	2.15	10.371	B	B
2	1	26.62	1.77	9.700	A	A
2	2	4.27	0.28	6.894	A	A
2	3	6.97	0.46	2.611	A	A

Queueing Delay results: (17:45-18:00)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	34.31	2.29	7.172	A	A
1	2	23.83	1.59	19.419	C	B
1	3	51.14	3.41	11.904	B	B
1	4	10.67	0.71	9.189	A	A
1	5	25.13	1.68	9.067	A	A
1	6	35.62	2.37	10.867	B	B
2	1	28.43	1.90	9.855	A	A
2	2	4.40	0.29	6.922	A	A
2	3	7.12	0.47	2.620	A	A

Queueing Delay results: (18:00-18:15)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	17.78	1.19	4.315	A	A
1	2	10.10	0.67	9.136	A	A
1	3	22.78	1.52	5.977	A	A
1	4	6.04	0.40	6.033	A	A
1	5	13.64	0.91	5.677	A	A
1	6	17.65	1.18	6.083	A	A
2	1	18.36	1.22	7.286	A	A
2	2	3.16	0.21	5.859	A	A
2	3	5.53	0.37	2.415	A	A

Queueing Delay results: (18:15-18:30)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	11.25	0.75	3.285	A	A
1	2	5.81	0.39	6.379	A	A
1	3	13.36	0.89	4.236	A	A
1	4	3.95	0.26	4.751	A	A
1	5	8.73	0.58	4.378	A	A
1	6	10.73	0.72	4.471	A	A
2	1	12.64	0.84	6.048	A	A
2	2	2.36	0.16	5.252	A	A
2	3	4.32	0.29	2.273	A	A

(Default Analysis Set) - 2037 Do Minimum, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Junction 1 - Arm 2 - 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2037 Do Minimum, AM	2037 Do Minimum	AM		Varies by Arm	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	1	(untitled)	Roundabout	1,2,3,4,5,6				11.86	B
2	2	(untitled)	Roundabout	1,2,3				9.54	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Arm	Name	Description
1	**1**	1	A12 Tom Crisp Way	
1	**2**	2	B1384 Stadbroke Road	
1	**3**	3	A12 Bloodmoor Road	
1	**4**	4	Ribblesdale	
1	**5**	5	A1145 Castleton Avenue	
1	**6**	6	A1177 Bloodmoor Road	
2	**1**	1	A1117 Elm Tree Road	
2	**2**	2	Long Road NE	
2	**3**	3	A1117 Bloodmoor Road	

Capacity Options

Junction	Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	**1**	0.00	99999.00		0.00
1	**2**	0.00	99999.00		0.00
1	**3**	0.00	99999.00		0.00
1	**4**	0.00	99999.00		0.00
1	**5**	0.00	99999.00		0.00
1	**6**	0.00	99999.00		0.00
2	**1**	0.00	99999.00		0.00
2	**2**	0.00	99999.00		0.00
2	**3**	0.00	99999.00		0.00

Roundabout Geometry

Junction	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	**1**	9.00	9.20	4.50	14.60	70.10	64.00	
1	**2**	3.50	5.10	30.10	59.50	70.10	54.00	
1	**3**	7.00	8.90	21.80	9.20	70.10	71.00	
1	**4**	4.40	7.00	7.30	18.60	70.10	53.00	
1	**5**	4.80	6.80	29.70	16.40	70.10	56.00	
1	**6**	6.00	7.00	23.50	14.10	70.10	56.00	
2	**1**	3.50	3.50	0.00	15.20	14.60	14.00	
2	**2**	3.30	3.30	0.00	15.10	14.60	12.00	
2	**3**	5.60	6.40	8.80	25.10	14.60	8.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1	1		(calculated)	(calculated)	0.583	2401.783
1	2		(calculated)	(calculated)	0.446	1399.878
1	3		(calculated)	(calculated)	0.514	2057.760
1	4		(calculated)	(calculated)	0.463	1559.329
1	5		(calculated)	(calculated)	0.490	1755.805
1	6		(calculated)	(calculated)	0.503	1853.949
2	1		(calculated)	(calculated)	0.555	1103.003
2	2		(calculated)	(calculated)	0.545	1046.487
2	3		(calculated)	(calculated)	0.765	2047.168

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

Junction	Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	1	ONE HOUR	✓	537.38	100.000
1	2	ONE HOUR	✓	380.22	100.000
1	3	ONE HOUR	✓	1021.69	100.000
1	4	ONE HOUR	✓	480.25	100.000
1	5	ONE HOUR	✓	602.12	100.000
1	6	Linked Arm		N/A	
2	1	ONE HOUR	✓	777.19	100.000
2	2	ONE HOUR	✓	74.35	100.000
2	3	Linked Arm		N/A	

Linked Arm Data

Junction	Arm	From Junction ID	From Arm ID	Link Type	Flow Source	Uniform Flow (PCU/hr)	Flow Multiplier (%)	Internal Storage Space (PCU)
1	6	2	3	Queue limited	Normal	0.00	100.00	28.00
2	3	1	6	Queue limited	Normal	0.00	100.00	28.00

Turning Proportions

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

		To					
		1	2	3	4	5	6
From	1	0.000	45.631	181.772	40.664	241.243	28.074
	2	80.260	0.000	23.202	14.734	103.456	158.569
	3	426.227	14.657	0.000	24.821	146.334	409.648
	4	161.209	51.706	70.119	0.000	0.000	197.212
	5	310.857	132.639	135.944	0.000	0.000	22.677
	6	31.168	172.848	523.136	61.686	21.188	0.000

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

		To					
		1	2	3	4	5	6
From	1	0.00	0.08	0.34	0.08	0.45	0.05
	2	0.21	0.00	0.06	0.04	0.27	0.42
	3	0.42	0.01	0.00	0.02	0.14	0.40
	4	0.34	0.11	0.15	0.00	0.00	0.41
	5	0.52	0.22	0.23	0.00	0.00	0.04
	6	0.04	0.21	0.65	0.08	0.03	0.00

Turning Counts / Proportions (PCU/hr) - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.000	25.500	751.690
	2	16.000	0.000	58.346
	3	766.000	50.200	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.00	0.03	0.97
	2	0.22	0.00	0.78
	3	0.94	0.06	0.00

Vehicle Mix

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

		To					
		1	2	3	4	5	6
From	1	1.000	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000	1.000
	6	1.000	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To					
		1	2	3	4	5	6
From	1	0.0	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0	0.0
	6	0.0	0.0	0.0	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 2 (for whole period)

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

Heavy Vehicle Percentages - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	1	0.36	3.42	0.56	A	493.11	739.67	35.95	2.92	0.40	35.95	2.92
1	2	0.55	10.52	1.20	B	348.90	523.34	66.63	7.64	0.74	66.64	7.64
1	3	0.69	7.07	2.18	A	937.52	1406.28	121.15	5.17	1.35	121.16	5.17
1	4	0.73	17.90	2.55	C	440.68	661.02	117.24	10.64	1.30	117.25	10.64
1	5	0.74	15.45	2.76	C	552.51	828.77	128.08	9.27	1.42	128.09	9.27
1	6	0.82	17.90	4.24	C	742.49	1113.73	183.63	9.89	2.04	183.65	9.89
2	1	0.80	16.46	3.79	C	713.16	1069.74	196.25	11.01	2.18	196.29	11.01
2	2	0.14	7.01	0.16	A	68.22	102.33	10.42	6.11	0.12	10.42	6.11
2	3	0.44	3.17	0.79	A	748.43	1122.64	53.14	2.84	0.59	53.14	2.84

Main Results for each time segment

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	404.57	101.14	403.48	756.18	881.87	0.00	1887.64	1556.34	0.214	0.00	0.27	2.425	A
1	2	286.25	71.56	284.58	311.66	973.70	0.00	965.72	323.95	0.296	0.00	0.42	5.272	A
1	3	769.18	192.29	766.12	696.75	561.53	0.00	1769.24	1388.43	0.435	0.00	0.76	3.579	A
1	4	361.55	90.39	359.29	106.00	1221.65	0.00	993.51	423.63	0.364	0.00	0.57	5.655	A
1	5	453.31	113.33	450.80	384.04	1196.90	0.00	1169.48	842.56	0.388	0.00	0.63	4.992	A
1	6	605.11	151.28	601.81	611.46	1036.24	0.00	1332.75	984.81	0.454	0.00	0.82	4.904	A
2	1	585.11	146.28	580.48	584.22	37.50	0.00	1082.19	741.50	0.541	0.00	1.16	7.111	A
2	2	55.97	13.99	55.65	56.55	561.44	0.00	740.31	440.47	0.076	0.00	0.08	5.255	A
2	3	611.46	152.86	609.75	605.11	11.98	0.00	2038.01	1974.64	0.300	0.00	0.43	2.517	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	483.10	120.77	482.71	905.36	1058.49	0.00	1784.67	1556.34	0.271	0.27	0.37	2.765	A
1	2	341.81	85.45	340.97	373.68	1167.51	0.00	879.31	323.95	0.389	0.42	0.63	6.675	A
1	3	918.48	229.62	916.95	835.87	672.60	0.00	1712.17	1388.43	0.536	0.76	1.15	4.519	A
1	4	431.73	107.93	430.23	127.10	1462.46	0.00	881.98	423.63	0.490	0.57	0.94	7.942	A
1	5	541.29	135.32	539.64	459.72	1432.96	0.00	1053.84	842.56	0.514	0.63	1.04	6.978	A
1	6	725.67	181.42	723.31	732.07	1240.53	0.00	1230.00	984.81	0.590	0.82	1.41	7.073	A
2	1	698.68	174.67	696.14	700.91	44.99	0.00	1078.03	827.15	0.648	1.16	1.79	9.363	A
2	2	66.84	16.71	66.73	67.83	673.30	0.00	679.31	334.92	0.098	0.08	0.11	5.877	A
2	3	732.07	183.02	731.54	725.67	14.36	0.00	2036.18	1992.02	0.360	0.43	0.56	2.757	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	591.67	147.92	590.93	1103.59	1282.57	0.00	1654.03	1556.34	0.358	0.37	0.55	3.385	A
1	2	418.63	104.66	416.45	453.81	1419.69	0.00	766.87	323.95	0.546	0.63	1.17	10.210	B
1	3	1124.90	281.22	1120.88	1014.75	821.40	0.00	1635.72	1388.43	0.688	1.15	2.15	6.939	A
1	4	528.76	132.19	522.75	154.69	1787.58	0.00	731.39	423.63	0.723	0.94	2.45	16.792	C
1	5	662.94	165.74	656.53	562.02	1748.31	0.00	899.36	842.56	0.737	1.04	2.64	14.459	B
1	6	884.54	221.13	874.68	893.36	1511.48	0.00	1093.72	984.81	0.809	1.41	3.88	15.773	C
2	1	855.70	213.93	848.28	855.16	54.89	0.00	1072.54	846.21	0.798	1.79	3.65	15.546	C
2	2	81.86	20.46	81.66	82.72	820.45	0.00	599.06	311.42	0.137	0.11	0.16	6.956	A
2	3	893.36	223.34	892.48	884.54	17.57	0.00	2033.72	1995.89	0.439	0.56	0.78	3.154	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	591.67	147.92	591.64	1111.18	1301.28	0.00	1643.12	1556.34	0.360	0.55	0.56	3.422	A
1	2	418.63	104.66	418.50	459.07	1433.85	0.00	760.55	323.95	0.550	1.17	1.20	10.517	B
1	3	1124.90	281.22	1124.77	1027.07	825.29	0.00	1633.72	1388.43	0.689	2.15	2.18	7.068	A
1	4	528.76	132.19	528.35	156.08	1793.98	0.00	728.43	423.63	0.726	2.45	2.55	17.904	C
1	5	662.94	165.74	662.47	563.85	1758.48	0.00	894.38	842.56	0.741	2.64	2.76	15.451	C
1	6	891.32	222.83	889.85	898.34	1522.61	0.00	1088.12	984.81	0.819	3.88	4.24	17.903	C
2	1	855.70	213.93	855.15	860.67	55.25	0.00	1072.34	846.21	0.798	3.65	3.79	16.461	C
2	2	81.86	20.46	81.85	83.31	827.09	0.00	595.44	311.43	0.137	0.16	0.16	7.008	A
2	3	898.34	224.58	898.30	891.32	17.61	0.00	2033.69	1995.89	0.442	0.78	0.79	3.170	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	483.10	120.77	483.83	916.12	1086.52	0.00	1768.33	1556.34	0.273	0.56	0.38	2.803	A
1	2	341.81	85.45	344.01	381.47	1188.88	0.00	869.78	323.95	0.393	1.20	0.66	6.877	A
1	3	918.48	229.62	922.51	854.41	678.47	0.00	1709.15	1388.43	0.537	2.18	1.17	4.600	A
1	4	431.73	107.93	437.99	129.20	1471.78	0.00	877.66	423.63	0.492	2.55	0.99	8.301	A
1	5	541.29	135.32	547.99	462.46	1447.31	0.00	1046.81	842.56	0.517	2.76	1.09	7.312	A
1	6	735.66	183.92	746.47	739.12	1256.18	0.00	1222.13	984.81	0.602	4.24	1.54	7.733	A
2	1	698.68	174.67	706.23	708.89	45.51	0.00	1077.74	827.15	0.648	3.79	1.90	9.879	A
2	2	66.84	16.71	67.03	68.68	683.06	0.00	673.99	334.92	0.099	0.16	0.11	5.932	A
2	3	739.12	184.78	739.98	735.66	14.42	0.00	2036.13	1992.02	0.363	0.79	0.57	2.778	A

Main results: (09:15-09:30)

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	404.57	101.14	404.98	762.70	897.85	0.00	1878.33	1556.34	0.215	0.38	0.28	2.445	A
1	2	286.25	71.56	287.16	316.10	986.72	0.00	959.92	323.95	0.298	0.66	0.43	5.359	A
1	3	769.18	192.29	770.77	707.69	566.19	0.00	1766.84	1388.43	0.435	1.17	0.78	3.619	A
1	4	361.55	90.39	363.17	107.36	1229.61	0.00	989.82	423.63	0.365	0.99	0.58	5.758	A
1	5	453.31	113.33	455.09	386.43	1206.35	0.00	1164.85	842.56	0.389	1.09	0.64	5.086	A
1	6	612.63	153.16	615.34	616.23	1045.20	0.00	1328.24	984.81	0.461	1.54	0.86	5.070	A
2	1	585.11	146.28	587.90	590.92	37.93	0.00	1081.95	811.31	0.541	1.90	1.20	7.326	A
2	2	55.97	13.99	56.08	57.22	568.61	0.00	736.40	354.43	0.076	0.11	0.08	5.294	A
2	3	616.23	154.06	616.78	612.63	12.07	0.00	2037.93	1988.81	0.302	0.57	0.44	2.535	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	4.01	0.27	2.425	A	A
1	2	6.07	0.40	5.272	A	A
1	3	11.15	0.74	3.579	A	A
1	4	8.20	0.55	5.655	A	A
1	5	9.10	0.61	4.992	A	A
1	6	11.92	0.79	4.904	A	A
2	1	16.48	1.10	7.111	A	A
2	2	1.19	0.08	5.255	A	A
2	3	6.29	0.42	2.517	A	A

Queueing Delay results: (08:15-08:30)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	5.47	0.36	2.765	A	A
1	2	9.15	0.61	6.675	A	A
1	3	16.71	1.11	4.519	A	A
1	4	13.59	0.91	7.942	A	A
1	5	15.02	1.00	6.978	A	A
1	6	20.29	1.35	7.073	A	A
2	1	25.51	1.70	9.363	A	A
2	2	1.59	0.11	5.877	A	A
2	3	8.26	0.55	2.757	A	A

Queueing Delay results: (08:30-08:45)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	8.16	0.54	3.385	A	A
1	2	16.69	1.11	10.210	B	B
1	3	30.60	2.04	6.939	A	A
1	4	33.06	2.20	16.792	C	B
1	5	35.95	2.40	14.459	B	B
1	6	51.38	3.43	15.773	C	B
2	1	49.17	3.28	15.546	C	B
2	2	2.30	0.15	6.956	A	A
2	3	11.47	0.76	3.154	A	A

Queueing Delay results: (08:45-09:00)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	8.38	0.56	3.422	A	A
1	2	17.91	1.19	10.517	B	B
1	3	32.55	2.17	7.068	A	A
1	4	37.65	2.51	17.904	C	B
1	5	40.77	2.72	15.451	C	B
1	6	61.65	4.11	17.903	C	B
2	1	55.95	3.73	16.461	C	B
2	2	2.37	0.16	7.008	A	A
2	3	11.77	0.78	3.170	A	A

Queueing Delay results: (09:00-09:15)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	5.75	0.38	2.803	A	A
1	2	10.21	0.68	6.877	A	A
1	3	18.22	1.21	4.600	A	A
1	4	15.73	1.05	8.301	A	A
1	5	17.31	1.15	7.312	A	A
1	6	24.98	1.67	7.733	A	A
2	1	30.40	2.03	9.879	A	A
2	2	1.70	0.11	5.932	A	A
2	3	8.73	0.58	2.778	A	A

Queueing Delay results: (09:15-09:30)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	4.18	0.28	2.445	A	A
1	2	6.60	0.44	5.359	A	A
1	3	11.91	0.79	3.619	A	A
1	4	8.99	0.60	5.758	A	A
1	5	9.93	0.66	5.086	A	A
1	6	13.40	0.89	5.070	A	A
2	1	18.74	1.25	7.326	A	A
2	2	1.27	0.08	5.294	A	A
2	3	6.62	0.44	2.535	A	A

(Default Analysis Set) - 2037 Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Junction 1 - Arm 2 - 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2037 Do Minimum, PM	2037 Do Minimum	PM		Varies by Arm	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	1	(untitled)	Roundabout	1,2,3,4,5,6				13.00	B
2	2	(untitled)	Roundabout	1,2,3				11.47	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Arm	Name	Description
1	**1**	1	A12 Tom Crisp Way	
1	**2**	2	B1384 Stadbroke Road	
1	**3**	3	A12 Bloodmoor Road	
1	**4**	4	Ribblesdale	
1	**5**	5	A1145 Castleton Avenue	
1	**6**	6	A1177 Bloodmoor Road	
2	**1**	1	A1117 Elm Tree Road	
2	**2**	2	Long Road NE	
2	**3**	3	A1117 Bloodmoor Road	

Capacity Options

Junction	Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	**1**	0.00	99999.00		0.00
1	**2**	0.00	99999.00		0.00
1	**3**	0.00	99999.00		0.00
1	**4**	0.00	99999.00		0.00
1	**5**	0.00	99999.00		0.00
1	**6**	0.00	99999.00		0.00
2	**1**	0.00	99999.00		0.00
2	**2**	0.00	99999.00		0.00
2	**3**	0.00	99999.00		0.00

Roundabout Geometry

Junction	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	**1**	9.00	9.20	4.50	14.60	70.10	64.00	
1	**2**	3.50	5.10	30.10	59.50	70.10	54.00	
1	**3**	7.00	8.90	21.80	9.20	70.10	71.00	
1	**4**	4.40	7.00	7.30	18.60	70.10	53.00	
1	**5**	4.80	6.80	29.70	16.40	70.10	56.00	
1	**6**	6.00	7.00	23.50	14.10	70.10	56.00	
2	**1**	3.50	3.50	0.00	15.20	14.60	14.00	
2	**2**	3.30	3.30	0.00	15.10	14.60	12.00	
2	**3**	5.60	6.40	8.80	25.10	14.60	8.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1	1		(calculated)	(calculated)	0.583	2401.783
1	2		(calculated)	(calculated)	0.446	1399.878
1	3		(calculated)	(calculated)	0.514	2057.760
1	4		(calculated)	(calculated)	0.463	1559.329
1	5		(calculated)	(calculated)	0.490	1755.805
1	6		(calculated)	(calculated)	0.503	1853.949
2	1		(calculated)	(calculated)	0.555	1103.003
2	2		(calculated)	(calculated)	0.545	1046.487
2	3		(calculated)	(calculated)	0.765	2047.168

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

Junction	Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	1	ONE HOUR	✓	951.88	100.000
1	2	ONE HOUR	✓	249.81	100.000
1	3	ONE HOUR	✓	972.93	100.000
1	4	ONE HOUR	✓	282.42	100.000
1	5	ONE HOUR	✓	673.40	100.000
1	6	Linked Arm		N/A	
2	1	ONE HOUR	✓	804.24	100.000
2	2	ONE HOUR	✓	166.82	100.000
2	3	Linked Arm		N/A	

Linked Arm Data

Junction	Arm	From Junction ID	From Arm ID	Link Type	Flow Source	Uniform Flow (PCU/hr)	Flow Multiplier (%)	Internal Storage Space (PCU)
1	6	2	3	Queue limited	Normal	0.00	100.00	28.00
2	3	1	6	Queue limited	Normal	0.00	100.00	28.00

Turning Proportions

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

		To					
		1	2	3	4	5	6
From	1	0.000	15.125	129.439	192.456	554.648	60.214
	2	20.122	0.000	0.004	29.657	84.796	115.233
	3	270.265	25.471	0.000	75.385	94.135	507.677
	4	64.908	22.162	66.947	0.000	0.000	128.403
	5	261.831	170.366	176.731	0.000	0.000	64.475
	6	12.703	142.835	532.323	190.821	65.382	0.000

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

		To					
		1	2	3	4	5	6
From	1	0.00	0.02	0.14	0.20	0.58	0.06
	2	0.08	0.00	0.00	0.12	0.34	0.46
	3	0.28	0.03	0.00	0.08	0.10	0.52
	4	0.23	0.08	0.24	0.00	0.00	0.45
	5	0.39	0.25	0.26	0.00	0.00	0.10
	6	0.01	0.15	0.56	0.20	0.07	0.00

Turning Counts / Proportions (PCU/hr) - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.000	12.746	791.489
	2	14.229	0.000	152.593
	3	786.884	77.039	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.00	0.02	0.98
	2	0.09	0.00	0.91
	3	0.91	0.09	0.00

Vehicle Mix

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

		To					
		1	2	3	4	5	6
From	1	1.000	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000	1.000
	6	1.000	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To					
		1	2	3	4	5	6
From	1	0.0	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0	0.0
	6	0.0	0.0	0.0	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 2 (for whole period)

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

Heavy Vehicle Percentages - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	1	0.69	7.79	2.23	A	873.46	1310.20	115.50	5.29	1.28	115.51	5.29
1	2	0.63	22.41	1.65	C	229.23	343.85	73.28	12.79	0.81	73.29	12.79
1	3	0.81	14.57	4.19	B	892.78	1339.17	188.08	8.43	2.09	188.09	8.43
1	4	0.48	10.83	0.92	B	259.15	388.73	49.16	7.59	0.55	49.16	7.59
1	5	0.70	11.09	2.24	B	617.93	926.89	114.39	7.40	1.27	114.40	7.41
1	6	0.83	16.15	4.47	C	865.31	1297.96	199.38	9.22	2.22	199.40	9.22
2	1	0.84	20.75	4.88	C	737.98	1106.97	236.02	12.79	2.62	236.07	12.80
2	2	0.32	9.27	0.47	A	153.08	229.62	28.87	7.55	0.32	28.88	7.55
2	3	0.47	3.36	0.89	A	803.25	1204.88	59.66	2.97	0.66	59.67	2.97

Main Results for each time segment

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	716.63	179.16	713.99	471.68	1037.56	0.00	1796.88	1377.76	0.399	0.00	0.66	3.316	A
1	2	188.07	47.02	186.73	280.72	1470.83	0.00	744.07	222.39	0.253	0.00	0.34	6.443	A
1	3	732.48	183.12	728.94	674.98	982.58	0.00	1552.90	1189.26	0.472	0.00	0.88	4.351	A
1	4	212.62	53.16	211.45	364.74	1346.78	0.00	935.55	512.83	0.227	0.00	0.29	4.963	A
1	5	506.97	126.74	504.39	598.51	959.72	0.00	1285.66	921.78	0.394	0.00	0.65	4.593	A
1	6	704.97	176.24	701.21	656.09	808.02	0.00	1447.54	1103.21	0.487	0.00	0.94	4.800	A
2	1	605.47	151.37	600.36	606.51	58.34	0.00	1070.63	767.51	0.566	0.00	1.28	7.573	A
2	2	125.59	31.40	124.76	67.85	590.85	0.00	724.27	461.16	0.173	0.00	0.21	5.996	A
2	3	656.09	164.02	654.20	704.97	10.64	0.00	2039.03	2017.07	0.322	0.00	0.47	2.596	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	855.72	213.93	854.23	564.66	1245.44	0.00	1675.68	1377.76	0.511	0.66	1.03	4.374	A
1	2	224.58	56.14	223.64	336.57	1763.10	0.00	613.75	222.39	0.366	0.34	0.57	9.206	A
1	3	874.65	218.66	872.24	809.89	1176.85	0.00	1453.08	1189.26	0.602	0.88	1.49	6.171	A
1	4	253.89	63.47	253.26	437.19	1611.90	0.00	812.76	512.83	0.312	0.29	0.45	6.428	A
1	5	605.38	151.34	603.89	716.42	1148.74	0.00	1193.07	921.78	0.507	0.65	1.02	6.096	A
1	6	845.37	211.34	842.77	785.30	967.33	0.00	1367.41	1103.21	0.618	0.94	1.59	6.827	A
2	1	722.99	180.75	719.90	727.48	69.97	0.00	1064.17	847.87	0.679	1.28	2.05	10.361	B
2	2	149.97	37.49	149.64	81.38	708.49	0.00	660.12	374.70	0.227	0.21	0.29	7.047	A
2	3	785.30	196.32	784.69	845.37	12.76	0.00	2037.40	2022.72	0.385	0.47	0.62	2.872	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	1048.04	262.01	1043.55	687.90	1510.14	0.00	1521.35	1377.76	0.689	1.03	2.16	7.465	A
1	2	275.05	68.76	271.16	409.17	2144.52	0.00	443.68	222.39	0.620	0.57	1.54	20.428	C
1	3	1071.22	267.81	1061.29	983.00	1432.69	0.00	1321.63	1189.26	0.811	1.49	3.97	13.347	B
1	4	310.95	77.74	309.16	531.33	1962.65	0.00	650.31	512.83	0.478	0.45	0.90	10.497	B
1	5	741.43	185.36	736.82	873.34	1398.47	0.00	1070.73	921.78	0.692	1.02	2.17	10.636	B
1	6	1028.72	257.18	1018.74	955.98	1179.31	0.00	1260.79	1103.21	0.816	1.59	4.08	14.314	B
2	1	885.48	221.37	875.20	885.41	85.16	0.00	1055.74	866.18	0.839	2.05	4.62	18.921	C
2	2	183.67	45.92	183.00	99.03	861.33	0.00	576.77	355.00	0.318	0.29	0.46	9.127	A
2	3	955.98	239.00	954.96	1028.72	15.61	0.00	2035.23	2024.00	0.470	0.62	0.88	3.329	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	1048.04	262.01	1047.75	693.01	1531.02	0.00	1509.18	1377.76	0.694	2.16	2.23	7.792	A
1	2	275.05	68.76	274.59	413.44	2165.33	0.00	434.40	222.39	0.633	1.54	1.65	22.407	C
1	3	1071.22	267.81	1070.36	995.32	1444.60	0.00	1315.51	1189.26	0.814	3.97	4.19	14.568	B
1	4	310.95	77.74	310.85	536.95	1978.01	0.00	643.19	512.83	0.483	0.90	0.92	10.826	B
1	5	741.43	185.36	741.16	879.08	1409.77	0.00	1065.20	921.78	0.696	2.17	2.24	11.088	B
1	6	1038.39	259.60	1036.85	963.75	1187.19	0.00	1256.83	1103.21	0.826	4.08	4.47	16.152	C
2	1	885.48	221.37	884.43	893.41	85.94	0.00	1055.31	866.18	0.839	4.62	4.88	20.746	C
2	2	183.67	45.92	183.64	99.95	870.41	0.00	571.82	355.00	0.321	0.46	0.47	9.272	A
2	3	963.75	240.94	963.69	1038.39	15.66	0.00	2035.18	2024.00	0.474	0.88	0.89	3.359	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	855.72	213.93	860.33	572.00	1277.36	0.00	1657.07	1377.76	0.516	2.23	1.08	4.543	A
1	2	224.58	56.14	228.76	343.00	1794.69	0.00	599.66	222.39	0.375	1.65	0.61	9.812	A
1	3	874.65	218.66	885.13	828.71	1194.74	0.00	1443.89	1189.26	0.606	4.19	1.56	6.558	A
1	4	253.89	63.47	255.71	445.69	1634.18	0.00	802.44	512.83	0.316	0.92	0.47	6.605	A
1	5	605.38	151.34	610.09	724.90	1164.99	0.00	1185.11	921.78	0.511	2.24	1.06	6.310	A
1	6	859.88	214.97	870.76	796.48	978.60	0.00	1361.74	1103.21	0.631	4.47	1.75	7.487	A
2	1	722.99	180.75	733.72	739.21	71.11	0.00	1063.53	847.87	0.680	4.88	2.20	11.248	B
2	2	149.97	37.49	150.64	82.74	722.09	0.00	652.70	374.70	0.230	0.47	0.30	7.179	A
2	3	796.48	199.12	797.48	859.88	12.85	0.00	2037.34	2022.72	0.391	0.89	0.65	2.905	A

Main results: (18:15-18:30)

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	716.63	179.16	718.24	475.85	1056.57	0.00	1785.79	1377.76	0.401	1.08	0.67	3.376	A
1	2	188.07	47.02	189.12	284.62	1490.19	0.00	735.43	222.39	0.256	0.61	0.35	6.601	A
1	3	732.48	183.12	735.10	686.30	993.01	0.00	1547.54	1189.26	0.473	1.56	0.91	4.444	A
1	4	212.62	53.16	213.30	369.66	1358.45	0.00	930.15	512.83	0.229	0.47	0.30	5.026	A
1	5	506.97	126.74	508.57	603.52	968.22	0.00	1281.50	921.78	0.396	1.06	0.66	4.668	A
1	6	714.50	178.63	717.54	661.92	814.87	0.00	1444.09	1103.21	0.495	1.75	0.99	4.976	A
2	1	605.47	151.37	608.95	614.23	59.08	0.00	1070.21	832.51	0.566	2.20	1.33	7.863	A
2	2	125.59	31.40	125.94	68.73	599.30	0.00	719.67	391.22	0.175	0.30	0.21	6.066	A
2	3	661.92	165.48	662.57	714.50	10.74	0.00	2038.95	2021.64	0.325	0.65	0.48	2.616	A

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	9.65	0.64	3.316	A	A
1	2	4.85	0.32	6.443	A	A
1	3	12.84	0.86	4.351	A	A
1	4	4.26	0.28	4.963	A	A
1	5	9.39	0.63	4.593	A	A
1	6	13.59	0.91	4.800	A	A
2	1	18.11	1.21	7.573	A	A
2	2	3.03	0.20	5.996	A	A
2	3	6.96	0.46	2.596	A	A

Queueing Delay results: (17:15-17:30)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	15.09	1.01	4.374	A	A
1	2	8.20	0.55	9.206	A	A
1	3	21.43	1.43	6.171	A	A
1	4	6.56	0.44	6.428	A	A
1	5	14.75	0.98	6.096	A	A
1	6	22.81	1.52	6.827	A	A
2	1	28.96	1.93	10.361	B	B
2	2	4.26	0.28	7.047	A	A
2	3	9.22	0.61	2.872	A	A

Queueing Delay results: (17:30-17:45)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	30.56	2.04	7.465	A	A
1	2	20.91	1.39	20.428	C	C
1	3	53.18	3.55	13.347	B	B
1	4	12.78	0.85	10.497	B	B
1	5	30.29	2.02	10.636	B	B
1	6	54.46	3.63	14.314	B	B
2	1	60.51	4.03	18.921	C	B
2	2	6.67	0.44	9.127	A	A
2	3	12.94	0.86	3.329	A	A

Queueing Delay results: (17:45-18:00)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	33.10	2.21	7.792	A	A
1	2	24.22	1.61	22.407	C	C
1	3	61.55	4.10	14.568	B	B
1	4	13.70	0.91	10.826	B	B
1	5	33.19	2.21	11.088	B	B
1	6	64.95	4.33	16.152	C	B
2	1	71.62	4.77	20.746	C	C
2	2	6.99	0.47	9.272	A	A
2	3	13.36	0.89	3.359	A	A

Queueing Delay results: (18:00-18:15)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	16.76	1.12	4.543	A	A
1	2	9.73	0.65	9.812	A	A
1	3	25.06	1.67	6.558	A	A
1	4	7.27	0.48	6.605	A	A
1	5	16.60	1.11	6.310	A	A
1	6	28.22	1.88	7.487	A	A
2	1	35.94	2.40	11.248	B	B
2	2	4.66	0.31	7.179	A	A
2	3	9.85	0.66	2.905	A	A

Queueing Delay results: (18:15-18:30)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	10.34	0.69	3.376	A	A
1	2	5.37	0.36	6.601	A	A
1	3	14.02	0.93	4.444	A	A
1	4	4.58	0.31	5.026	A	A
1	5	10.17	0.68	4.668	A	A
1	6	15.35	1.02	4.976	A	A
2	1	20.88	1.39	7.863	A	A
2	2	3.27	0.22	6.066	A	A
2	3	7.35	0.49	2.616	A	A

(Default Analysis Set) - 2037 Do Something, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Junction 1 - Arm 2 - 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relat
2037 Do Something, AM	2037 Do Something	AM		Varies by Arm	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	1	(untitled)	Roundabout	1,2,3,4,5,6				10.53	B
2	2	(untitled)	Roundabout	1,2,3				5.46	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Arm	Name	Description
1	**1**	1	A12 Tom Crisp Way	
1	**2**	2	B1384 Stadbroke Road	
1	**3**	3	A12 Bloodmoor Road	
1	**4**	4	Ribblesdale	
1	**5**	5	A1145 Castleton Avenue	
1	**6**	6	A1177 Bloodmoor Road	
2	**1**	1	A1117 Elm Tree Road	
2	**2**	2	Long Road NE	
2	**3**	3	A1117 Bloodmoor Road	

Capacity Options

Junction	Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	**1**	0.00	99999.00		0.00
1	**2**	0.00	99999.00		0.00
1	**3**	0.00	99999.00		0.00
1	**4**	0.00	99999.00		0.00
1	**5**	0.00	99999.00		0.00
1	**6**	0.00	99999.00		0.00
2	**1**	0.00	99999.00		0.00
2	**2**	0.00	99999.00		0.00
2	**3**	0.00	99999.00		0.00

Roundabout Geometry

Junction	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	**1**	9.00	9.20	4.50	14.60	70.10	64.00	
1	**2**	3.50	5.10	30.10	59.50	70.10	54.00	
1	**3**	7.00	8.90	21.80	9.20	70.10	71.00	
1	**4**	4.40	7.00	7.30	18.60	70.10	53.00	
1	**5**	4.80	6.80	29.70	16.40	70.10	56.00	
1	**6**	6.00	7.00	23.50	14.10	70.10	56.00	
2	**1**	3.50	3.50	0.00	15.20	14.60	14.00	
2	**2**	3.30	3.30	0.00	15.10	14.60	12.00	
2	**3**	5.60	6.40	8.80	25.10	14.60	8.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1	1		(calculated)	(calculated)	0.583	2401.783
1	2		(calculated)	(calculated)	0.446	1399.878
1	3		(calculated)	(calculated)	0.514	2057.760
1	4		(calculated)	(calculated)	0.463	1559.329
1	5		(calculated)	(calculated)	0.490	1755.805
1	6		(calculated)	(calculated)	0.503	1853.949
2	1		(calculated)	(calculated)	0.555	1103.003
2	2		(calculated)	(calculated)	0.545	1046.487
2	3		(calculated)	(calculated)	0.765	2047.168

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

Junction	Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	1	ONE HOUR	✓	889.68	100.000
1	2	ONE HOUR	✓	363.82	100.000
1	3	ONE HOUR	✓	1039.53	100.000
1	4	ONE HOUR	✓	485.28	100.000
1	5	ONE HOUR	✓	596.58	100.000
1	6	Linked Arm		N/A	
2	1	ONE HOUR	✓	550.54	100.000
2	2	ONE HOUR	✓	103.89	100.000
2	3	Linked Arm		N/A	

Linked Arm Data

Junction	Arm	From Junction ID	From Arm ID	Link Type	Flow Source	Uniform Flow (PCU/hr)	Flow Multiplier (%)	Internal Storage Space (PCU)
1	6	2	3	Queue limited	Normal	0.00	100.00	28.00
2	3	1	6	Queue limited	Normal	0.00	100.00	28.00

Turning Proportions

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

		To					
		1	2	3	4	5	6
From	1	0.000	78.386	445.842	67.611	275.502	22.344
	2	104.985	0.000	21.352	14.073	99.130	124.283
	3	579.165	10.675	0.000	23.612	144.853	281.221
	4	218.610	51.012	68.191	0.000	0.000	147.471
	5	288.943	131.751	133.461	0.000	0.000	42.423
	6	0.000	150.225	365.422	48.454	20.075	0.000

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

		To					
		1	2	3	4	5	6
From	1	0.00	0.09	0.50	0.08	0.31	0.03
	2	0.29	0.00	0.06	0.04	0.27	0.34
	3	0.56	0.01	0.00	0.02	0.14	0.27
	4	0.45	0.11	0.14	0.00	0.00	0.30
	5	0.48	0.22	0.22	0.00	0.00	0.07
	6	0.00	0.26	0.63	0.08	0.03	0.00

Turning Counts / Proportions (PCU/hr) - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.000	25.203	525.336
	2	45.052	0.000	58.841
	3	499.356	118.386	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.00	0.05	0.95
	2	0.43	0.00	0.57
	3	0.81	0.19	0.00

Vehicle Mix

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

		To					
		1	2	3	4	5	6
From	1	1.000	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000	1.000
	6	1.000	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To					
		1	2	3	4	5	6
From	1	0.0	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0	0.0
	6	0.0	0.0	0.0	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 2 (for whole period)

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

Heavy Vehicle Percentages - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	1	0.55	4.53	1.23	A	816.39	1224.58	73.48	3.60	0.82	73.49	3.60
1	2	0.58	12.43	1.36	B	333.85	500.78	71.78	8.60	0.80	71.79	8.60
1	3	0.71	7.58	2.38	A	953.89	1430.83	129.50	5.43	1.44	129.51	5.43
1	4	0.75	20.07	2.87	C	445.30	667.96	127.56	11.46	1.42	127.57	11.46
1	5	0.74	15.41	2.73	C	547.43	821.14	126.60	9.25	1.41	126.61	9.25
1	6	0.66	10.80	1.89	B	535.59	803.39	95.84	7.16	1.06	95.85	7.16
2	1	0.59	8.48	1.41	A	505.18	757.78	87.64	6.94	0.97	87.65	6.94
2	2	0.16	5.84	0.18	A	95.33	143.00	12.61	5.29	0.14	12.61	5.29
2	3	0.34	2.71	0.51	A	566.45	849.67	35.48	2.51	0.39	35.48	2.51

Main Results for each time segment

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	669.80	167.45	667.76	892.66	730.73	0.00	1975.76	1629.15	0.339	0.00	0.51	2.749	A
1	2	273.91	68.48	272.22	315.50	1082.99	0.00	916.99	349.65	0.299	0.00	0.42	5.568	A
1	3	782.61	195.65	779.43	773.64	581.57	0.00	1758.95	1493.83	0.445	0.00	0.80	3.663	A
1	4	365.35	91.34	363.00	115.06	1245.93	0.00	982.26	470.92	0.372	0.00	0.59	5.791	A
1	5	449.13	112.28	446.65	404.51	1204.43	0.00	1165.79	783.95	0.385	0.00	0.62	4.989	A
1	6	437.12	109.28	435.00	462.69	1188.39	0.00	1256.23	845.73	0.348	0.00	0.53	4.372	A
2	1	414.47	103.62	411.91	406.80	88.44	0.00	1053.92	681.36	0.393	0.00	0.64	5.585	A
2	2	78.22	19.55	77.80	107.30	393.05	0.00	832.14	491.56	0.094	0.00	0.10	4.770	A
2	3	462.69	115.67	461.51	437.12	33.74	0.00	2021.35	1884.08	0.229	0.00	0.30	2.307	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	799.81	199.95	798.94	1068.61	876.93	0.00	1890.52	1629.15	0.423	0.51	0.73	3.294	A
1	2	327.07	81.77	326.15	378.20	1297.66	0.00	821.28	349.65	0.398	0.42	0.65	7.257	A
1	3	934.51	233.63	932.87	927.28	696.52	0.00	1699.88	1493.83	0.550	0.80	1.21	4.683	A
1	4	436.26	109.07	434.64	137.89	1491.50	0.00	868.53	470.92	0.502	0.59	0.99	8.266	A
1	5	536.31	134.08	534.68	484.22	1441.92	0.00	1049.45	783.95	0.511	0.62	1.03	6.970	A
1	6	524.15	131.04	522.89	553.95	1422.65	0.00	1138.40	845.73	0.460	0.53	0.84	5.837	A
2	1	494.92	123.73	493.93	487.97	106.10	0.00	1044.12	739.67	0.474	0.64	0.89	6.531	A
2	2	93.40	23.35	93.28	128.71	471.32	0.00	789.46	393.32	0.118	0.10	0.13	5.171	A
2	3	553.95	138.49	553.62	524.15	40.45	0.00	2016.22	1916.67	0.275	0.30	0.38	2.461	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	979.56	244.89	977.63	1302.59	1067.67	0.00	1779.32	1629.15	0.551	0.73	1.21	4.479	A
1	2	400.58	100.14	397.88	460.81	1584.49	0.00	693.38	349.65	0.578	0.65	1.33	12.073	B
1	3	1144.54	286.13	1140.01	1131.51	850.87	0.00	1620.58	1493.83	0.706	1.21	2.34	7.422	A
1	4	534.31	133.58	527.34	168.43	1822.44	0.00	715.25	470.92	0.747	0.99	2.73	18.516	C
1	5	656.84	164.21	650.53	591.90	1757.89	0.00	894.67	783.95	0.734	1.03	2.61	14.388	B
1	6	641.14	160.29	637.24	675.39	1733.03	0.00	982.29	845.73	0.653	0.84	1.82	10.317	B
2	1	606.15	151.54	604.13	595.06	129.34	0.00	1031.22	750.73	0.588	0.89	1.40	8.387	A
2	2	114.39	28.60	114.19	156.99	576.47	0.00	732.11	374.69	0.156	0.13	0.18	5.824	A
2	3	675.39	168.85	674.88	641.14	49.52	0.00	2009.28	1922.85	0.336	0.38	0.50	2.698	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	979.56	244.89	979.51	1311.48	1077.49	0.00	1773.60	1629.15	0.552	1.21	1.23	4.533	A
1	2	400.58	100.14	400.45	464.42	1592.57	0.00	689.78	349.65	0.581	1.33	1.36	12.430	B
1	3	1144.54	286.13	1144.39	1138.31	854.71	0.00	1618.60	1493.83	0.707	2.34	2.38	7.584	A
1	4	534.31	133.58	533.75	169.24	1829.85	0.00	711.81	470.92	0.751	2.73	2.87	20.068	C
1	5	656.84	164.21	656.36	593.98	1769.62	0.00	888.92	783.95	0.739	2.61	2.73	15.407	C
1	6	643.13	160.78	642.84	679.85	1746.12	0.00	975.70	845.73	0.659	1.82	1.89	10.796	B
2	1	606.15	151.54	606.09	599.15	130.29	0.00	1030.69	750.73	0.588	1.40	1.41	8.476	A
2	2	114.39	28.60	114.38	158.03	578.34	0.00	731.09	374.69	0.156	0.18	0.18	5.836	A
2	3	679.85	169.96	679.83	643.13	49.60	0.00	2009.22	1922.85	0.338	0.50	0.51	2.707	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	799.81	199.95	801.73	1081.14	891.15	0.00	1882.23	1629.15	0.425	1.23	0.74	3.339	A
1	2	327.07	81.77	329.80	383.41	1309.47	0.00	816.01	349.65	0.401	1.36	0.68	7.443	A
1	3	934.51	233.63	939.07	937.19	702.08	0.00	1697.02	1493.83	0.551	2.38	1.24	4.777	A
1	4	436.26	109.07	443.59	139.07	1502.08	0.00	863.63	470.92	0.505	2.87	1.04	8.715	A
1	5	536.31	134.08	542.91	487.23	1458.44	0.00	1041.36	783.95	0.515	2.73	1.08	7.313	A
1	6	527.17	131.79	531.19	560.25	1441.10	0.00	1129.12	845.73	0.467	1.89	0.89	6.059	A
2	1	494.92	123.73	496.91	493.86	107.46	0.00	1043.36	739.67	0.474	1.41	0.91	6.611	A
2	2	93.40	23.35	93.59	130.21	474.16	0.00	787.91	393.32	0.119	0.18	0.14	5.185	A
2	3	560.25	140.06	560.74	527.17	40.59	0.00	2016.11	1916.67	0.278	0.51	0.39	2.475	A

Main results: (09:15-09:30)

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	669.80	167.45	670.71	900.06	740.89	0.00	1969.84	1629.15	0.340	0.74	0.52	2.772	A
1	2	273.91	68.48	274.89	319.03	1092.56	0.00	912.73	349.65	0.300	0.68	0.43	5.654	A
1	3	782.61	195.65	784.33	781.31	586.14	0.00	1756.60	1493.83	0.446	1.24	0.81	3.708	A
1	4	365.35	91.34	367.10	116.10	1254.37	0.00	978.36	470.92	0.373	1.04	0.60	5.905	A
1	5	449.13	112.28	450.90	407.08	1214.39	0.00	1160.91	783.95	0.387	1.08	0.64	5.082	A
1	6	440.86	110.21	442.21	466.55	1198.74	0.00	1251.02	845.73	0.352	0.89	0.55	4.459	A
2	1	414.47	103.62	415.51	411.39	89.48	0.00	1053.34	730.58	0.393	0.91	0.66	5.655	A
2	2	78.22	19.55	78.34	108.50	396.49	0.00	830.27	408.63	0.094	0.14	0.10	4.789	A
2	3	466.55	116.64	466.89	440.86	33.97	0.00	2021.18	1911.59	0.231	0.39	0.30	2.316	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Junction	Arm	Queueing Total Delay	Queueing Rate Of Delay (PCU-	Average Delay Per Arriving	Unsignalised Level Of	Signalised Level Of
1	1	7.51	0.50	2.749	A	A
1	2	6.13	0.41	5.568	A	A
1	3	11.61	0.77	3.663	A	A
1	4	8.48	0.57	5.791	A	A
1	5	9.01	0.60	4.989	A	A
1	6	7.72	0.51	4.372	A	A
2	1	9.28	0.62	5.585	A	A
2	2	1.51	0.10	4.770	A	A
2	3	4.37	0.29	2.307	A	A

Queueing Delay results: (08:15-08:30)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	10.73	0.72	3.294	A	A
1	2	9.49	0.63	7.257	A	A
1	3	17.59	1.17	4.683	A	A
1	4	14.26	0.95	8.266	A	A
1	5	14.87	0.99	6.970	A	A
1	6	12.27	0.82	5.837	A	A
2	1	12.94	0.86	6.531	A	A
2	2	1.97	0.13	5.171	A	A
2	3	5.60	0.37	2.461	A	A

Queueing Delay results: (08:30-08:45)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	17.64	1.18	4.479	A	A
1	2	18.68	1.25	12.073	B	B
1	3	33.14	2.21	7.422	A	A
1	4	36.47	2.43	18.516	C	B
1	5	35.48	2.37	14.388	B	B
1	6	25.56	1.70	10.317	B	B
2	1	20.01	1.33	8.387	A	A
2	2	2.70	0.18	5.824	A	A
2	3	7.46	0.50	2.698	A	A

Queueing Delay results: (08:45-09:00)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	18.31	1.22	4.533	A	A
1	2	20.21	1.35	12.430	B	B
1	3	35.46	2.36	7.584	A	A
1	4	42.28	2.82	20.068	C	C
1	5	40.25	2.68	15.407	C	B
1	6	28.00	1.87	10.796	B	B
2	1	21.08	1.41	8.476	A	A
2	2	2.77	0.18	5.836	A	A
2	3	7.62	0.51	2.707	A	A

Queueing Delay results: (09:00-09:15)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	11.41	0.76	3.339	A	A
1	2	10.60	0.71	7.443	A	A
1	3	19.28	1.29	4.777	A	A
1	4	16.74	1.12	8.715	A	A
1	5	17.15	1.14	7.313	A	A
1	6	13.86	0.92	6.059	A	A
2	1	14.22	0.95	6.611	A	A
2	2	2.07	0.14	5.185	A	A
2	3	5.87	0.39	2.475	A	A

Queueing Delay results: (09:15-09:30)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	7.89	0.53	2.772	A	A
1	2	6.67	0.44	5.654	A	A
1	3	12.43	0.83	3.708	A	A
1	4	9.33	0.62	5.905	A	A
1	5	9.84	0.66	5.082	A	A
1	6	8.43	0.56	4.459	A	A
2	1	10.10	0.67	5.655	A	A
2	2	1.60	0.11	4.789	A	A
2	3	4.57	0.30	2.316	A	A

(Default Analysis Set) - 2037 Do Something, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Junction 1 - Arm 2 - 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relat
2037 Do Something, PM	2037 Do Something	PM		Varies by Arm	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	1	(untitled)	Roundabout	1,2,3,4,5,6				13.64	B
2	2	(untitled)	Roundabout	1,2,3				7.84	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Arm	Name	Description
1	**1**	1	A12 Tom Crisp Way	
1	**2**	2	B1384 Stadbroke Road	
1	**3**	3	A12 Bloodmoor Road	
1	**4**	4	Ribblesdale	
1	**5**	5	A1145 Castleton Avenue	
1	**6**	6	A1177 Bloodmoor Road	
2	**1**	1	A1117 Elm Tree Road	
2	**2**	2	Long Road NE	
2	**3**	3	A1117 Bloodmoor Road	

Capacity Options

Junction	Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	**1**	0.00	99999.00		0.00
1	**2**	0.00	99999.00		0.00
1	**3**	0.00	99999.00		0.00
1	**4**	0.00	99999.00		0.00
1	**5**	0.00	99999.00		0.00
1	**6**	0.00	99999.00		0.00
2	**1**	0.00	99999.00		0.00
2	**2**	0.00	99999.00		0.00
2	**3**	0.00	99999.00		0.00

Roundabout Geometry

Junction	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	**1**	9.00	9.20	4.50	14.60	70.10	64.00	
1	**2**	3.50	5.10	30.10	59.50	70.10	54.00	
1	**3**	7.00	8.90	21.80	9.20	70.10	71.00	
1	**4**	4.40	7.00	7.30	18.60	70.10	53.00	
1	**5**	4.80	6.80	29.70	16.40	70.10	56.00	
1	**6**	6.00	7.00	23.50	14.10	70.10	56.00	
2	**1**	3.50	3.50	0.00	15.20	14.60	14.00	
2	**2**	3.30	3.30	0.00	15.10	14.60	12.00	
2	**3**	5.60	6.40	8.80	25.10	14.60	8.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1	1		(calculated)	(calculated)	0.583	2401.783
1	2		(calculated)	(calculated)	0.446	1399.878
1	3		(calculated)	(calculated)	0.514	2057.760
1	4		(calculated)	(calculated)	0.463	1559.329
1	5		(calculated)	(calculated)	0.490	1755.805
1	6		(calculated)	(calculated)	0.503	1853.949
2	1		(calculated)	(calculated)	0.555	1103.003
2	2		(calculated)	(calculated)	0.545	1046.487
2	3		(calculated)	(calculated)	0.765	2047.168

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

Junction	Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	1	ONE HOUR	✓	1117.07	100.000
1	2	ONE HOUR	✓	235.28	100.000
1	3	ONE HOUR	✓	1014.01	100.000
1	4	ONE HOUR	✓	286.77	100.000
1	5	ONE HOUR	✓	693.54	100.000
1	6	Linked Arm		N/A	
2	1	ONE HOUR	✓	704.79	100.000
2	2	ONE HOUR	✓	173.63	100.000
2	3	Linked Arm		N/A	

Linked Arm Data

Junction	Arm	From Junction ID	From Arm ID	Link Type	Flow Source	Uniform Flow (PCU/hr)	Flow Multiplier (%)	Internal Storage Space (PCU)
1	6	2	3	Queue limited	Normal	0.00	100.00	28.00
2	3	1	6	Queue limited	Normal	0.00	100.00	28.00

Turning Proportions

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

		To					
		1	2	3	4	5	6
From	1	0.000	40.456	259.837	232.658	548.119	36.004
	2	40.327	0.000	0.003	28.526	79.192	87.228
	3	455.307	23.960	0.000	73.686	92.375	368.678
	4	106.051	21.437	65.007	0.000	0.000	94.276
	5	305.633	168.927	174.361	0.000	0.000	44.614
	6	6.367	124.888	477.943	157.726	42.381	0.000

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

		To					
		1	2	3	4	5	6
From	1	0.00	0.04	0.23	0.21	0.49	0.03
	2	0.17	0.00	0.00	0.12	0.34	0.37
	3	0.45	0.02	0.00	0.07	0.09	0.36
	4	0.37	0.07	0.23	0.00	0.00	0.33
	5	0.44	0.24	0.25	0.00	0.00	0.06
	6	0.01	0.15	0.59	0.19	0.05	0.00

Turning Counts / Proportions (PCU/hr) - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.000	34.876	669.910
	2	34.242	0.000	139.392
	3	562.309	61.735	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.00	0.05	0.95
	2	0.20	0.00	0.80
	3	0.90	0.10	0.00

Vehicle Mix

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

		To					
		1	2	3	4	5	6
From	1	1.000	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000	1.000
	6	1.000	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To					
		1	2	3	4	5	6
From	1	0.0	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0	0.0
	6	0.0	0.0	0.0	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 2 (for whole period)

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

Heavy Vehicle Percentages - Junction 2 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	1	0.77	9.79	3.27	A	1025.05	1537.57	158.12	6.17	1.76	158.13	6.17
1	2	0.61	21.97	1.53	C	215.89	323.84	68.28	12.65	0.76	68.28	12.65
1	3	0.83	15.20	4.54	C	930.47	1395.70	201.34	8.66	2.24	201.35	8.66
1	4	0.48	10.58	0.92	B	263.15	394.72	49.11	7.46	0.55	49.11	7.47
1	5	0.72	12.26	2.54	B	636.40	954.60	126.00	7.92	1.40	126.01	7.92
1	6	0.81	16.87	4.01	C	741.90	1112.84	177.03	9.54	1.97	177.04	9.55
2	1	0.73	12.40	2.62	B	646.72	970.08	147.31	9.11	1.64	147.34	9.11
2	2	0.30	7.94	0.42	A	159.33	238.99	26.76	6.72	0.30	26.76	6.72
2	3	0.34	2.72	0.52	A	578.41	867.61	36.34	2.51	0.40	36.34	2.51

Main Results for each time segment

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	840.99	210.25	837.70	684.28	936.78	0.00	1855.63	1492.34	0.453	0.00	0.82	3.524	A
1	2	177.13	44.28	175.87	283.71	1490.77	0.00	735.17	255.17	0.241	0.00	0.31	6.422	A
1	3	763.40	190.85	759.68	729.48	937.16	0.00	1576.24	1247.19	0.484	0.00	0.93	4.388	A
1	4	215.90	53.97	214.72	368.27	1328.56	0.00	943.99	535.70	0.229	0.00	0.29	4.928	A
1	5	522.13	130.53	519.40	570.95	972.33	0.00	1279.49	891.15	0.408	0.00	0.68	4.719	A
1	6	605.00	151.25	601.74	472.41	1019.32	0.00	1341.26	935.21	0.451	0.00	0.81	4.847	A
2	1	530.60	132.65	526.77	450.20	46.61	0.00	1077.13	690.56	0.493	0.00	0.96	6.498	A
2	2	130.72	32.68	129.91	72.68	500.70	0.00	773.43	446.66	0.169	0.00	0.20	5.587	A
2	3	472.41	118.10	471.20	605.00	25.62	0.00	2027.57	1979.77	0.233	0.00	0.30	2.313	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	1004.23	251.06	1002.17	819.09	1124.39	0.00	1746.25	1492.34	0.575	0.82	1.34	4.824	A
1	2	211.51	52.88	210.64	340.07	1786.49	0.00	603.32	255.17	0.351	0.31	0.53	9.148	A
1	3	911.57	227.89	909.00	874.89	1122.24	0.00	1481.14	1247.19	0.615	0.93	1.57	6.263	A
1	4	257.80	64.45	257.17	441.28	1589.96	0.00	822.92	535.70	0.313	0.29	0.45	6.357	A
1	5	623.47	155.87	621.84	683.32	1163.81	0.00	1185.69	891.15	0.526	0.68	1.09	6.367	A
1	6	725.57	181.39	723.29	565.44	1220.20	0.00	1240.22	935.21	0.585	0.81	1.38	6.934	A
2	1	633.59	158.40	631.76	539.93	55.90	0.00	1071.98	750.22	0.591	0.96	1.42	8.142	A
2	2	156.09	39.02	155.80	87.17	600.49	0.00	719.01	376.02	0.217	0.20	0.27	6.389	A
2	3	565.44	141.36	565.11	725.57	30.72	0.00	2023.66	1990.43	0.279	0.30	0.39	2.468	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	1229.92	307.48	1222.71	997.33	1366.08	0.00	1605.34	1492.34	0.766	1.34	3.14	9.238	A
1	2	259.04	64.76	255.43	413.87	2174.92	0.00	430.12	255.17	0.602	0.53	1.43	20.210	C
1	3	1116.44	279.11	1105.56	1064.08	1366.28	0.00	1355.75	1247.19	0.823	1.57	4.29	13.825	B
1	4	315.74	78.94	313.99	536.87	1934.96	0.00	663.13	535.70	0.476	0.45	0.89	10.259	B
1	5	763.60	190.90	758.18	832.57	1416.38	0.00	1061.96	891.15	0.719	1.09	2.45	11.647	B
1	6	886.25	221.56	876.93	688.07	1486.49	0.00	1106.29	935.21	0.801	1.38	3.72	15.119	C
2	1	775.98	194.00	771.40	657.13	68.02	0.00	1065.25	763.94	0.728	1.42	2.56	12.060	B
2	2	191.17	47.79	190.61	106.19	733.23	0.00	646.63	359.77	0.296	0.27	0.41	7.885	A
2	3	688.07	172.02	687.56	886.25	37.59	0.00	2018.41	1992.88	0.341	0.39	0.51	2.705	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	1229.92	307.48	1229.41	1005.27	1381.94	0.00	1596.10	1492.34	0.771	3.14	3.27	9.788	A
1	2	259.04	64.76	258.66	417.67	2193.69	0.00	421.76	255.17	0.614	1.43	1.53	21.973	C
1	3	1116.44	279.11	1115.45	1074.80	1377.55	0.00	1349.96	1247.19	0.827	4.29	4.54	15.203	C
1	4	315.74	78.94	315.64	541.86	1951.14	0.00	655.64	535.70	0.482	0.89	0.92	10.582	B
1	5	763.60	190.90	763.24	838.51	1428.27	0.00	1056.14	891.15	0.723	2.45	2.54	12.257	B
1	6	890.82	222.70	889.64	693.95	1497.56	0.00	1100.72	935.21	0.809	3.72	4.01	16.867	C
2	1	775.98	194.00	775.74	662.97	68.65	0.00	1064.90	763.94	0.729	2.56	2.62	12.402	B
2	2	191.17	47.79	191.16	107.04	737.36	0.00	644.38	359.77	0.297	0.41	0.42	7.943	A
2	3	693.95	173.49	693.92	890.82	37.70	0.00	2018.32	1992.88	0.344	0.51	0.52	2.717	A

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

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	1004.23	251.06	1011.71	830.47	1147.99	0.00	1732.49	1492.34	0.580	3.27	1.40	5.044	A
1	2	211.51	52.88	215.36	345.64	1814.05	0.00	591.03	255.17	0.358	1.53	0.57	9.677	A
1	3	911.57	227.89	923.12	890.75	1138.66	0.00	1472.70	1247.19	0.619	4.54	1.65	6.684	A
1	4	257.80	64.45	259.58	448.59	1613.19	0.00	812.16	535.70	0.317	0.92	0.47	6.534	A
1	5	623.47	155.87	629.06	691.88	1180.89	0.00	1177.32	891.15	0.530	2.54	1.14	6.632	A
1	6	732.33	183.08	742.39	573.89	1236.06	0.00	1232.25	935.21	0.594	4.01	1.49	7.496	A
2	1	633.59	158.40	638.16	548.46	56.82	0.00	1071.47	750.22	0.591	2.62	1.48	8.393	A
2	2	156.09	39.02	156.64	88.40	606.58	0.00	715.70	376.02	0.218	0.42	0.28	6.447	A
2	3	573.89	143.47	574.39	732.33	30.89	0.00	2023.53	1990.43	0.284	0.52	0.40	2.486	A

Main results: (18:15-18:30)

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1	840.99	210.25	843.21	690.36	951.85	0.00	1846.84	1492.34	0.455	1.40	0.84	3.593	A
1	2	177.13	44.28	178.09	287.19	1507.88	0.00	727.55	255.17	0.243	0.57	0.32	6.565	A
1	3	763.40	190.85	766.20	739.53	946.44	0.00	1571.47	1247.19	0.486	1.65	0.95	4.485	A
1	4	215.90	53.97	216.57	372.55	1340.09	0.00	938.65	535.70	0.230	0.47	0.30	4.989	A
1	5	522.13	130.53	523.90	575.64	981.02	0.00	1275.23	891.15	0.409	1.14	0.70	4.804	A
1	6	611.40	152.85	613.97	476.68	1028.24	0.00	1336.77	935.21	0.457	1.49	0.85	4.997	A
2	1	530.60	132.65	532.57	455.69	47.19	0.00	1076.81	738.80	0.493	1.48	0.99	6.637	A
2	2	130.72	32.68	131.02	73.55	506.22	0.00	770.43	389.55	0.170	0.28	0.21	5.632	A
2	3	476.68	119.17	477.04	611.40	25.84	0.00	2027.40	1988.39	0.235	0.40	0.31	2.323	A

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	12.01	0.80	3.524	A	A
1	2	4.56	0.30	6.422	A	A
1	3	13.49	0.90	4.388	A	A
1	4	4.29	0.29	4.928	A	A
1	5	9.92	0.66	4.719	A	A
1	6	11.79	0.79	4.847	A	A
2	1	13.72	0.91	6.498	A	A
2	2	2.94	0.20	5.587	A	A
2	3	4.47	0.30	2.313	A	A

Queueing Delay results: (17:15-17:30)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	19.42	1.29	4.824	A	A
1	2	7.68	0.51	9.148	A	A
1	3	22.64	1.51	6.263	A	A
1	4	6.59	0.44	6.357	A	A
1	5	15.82	1.05	6.367	A	A
1	6	19.91	1.33	6.934	A	A
2	1	20.35	1.36	8.142	A	A
2	2	4.03	0.27	6.389	A	A
2	3	5.73	0.38	2.468	A	A

Queueing Delay results: (17:30-17:45)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	43.49	2.90	9.238	A	A
1	2	19.53	1.30	20.210	C	C
1	3	57.12	3.81	13.825	B	B
1	4	12.70	0.85	10.259	B	B
1	5	33.87	2.26	11.647	B	B
1	6	49.55	3.30	15.119	C	B
2	1	35.60	2.37	12.060	B	B
2	2	6.03	0.40	7.885	A	A
2	3	7.62	0.51	2.705	A	A

Queueing Delay results: (17:45-18:00)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	48.31	3.22	9.788	A	A
1	2	22.45	1.50	21.973	C	C
1	3	66.70	4.45	15.203	C	B
1	4	13.60	0.91	10.582	B	B
1	5	37.58	2.51	12.257	B	B
1	6	58.53	3.90	16.867	C	B
2	1	38.96	2.60	12.402	B	B
2	2	6.26	0.42	7.943	A	A
2	3	7.80	0.52	2.717	A	A

Queueing Delay results: (18:00-18:15)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	21.94	1.46	5.044	A	A
1	2	9.03	0.60	9.677	A	A
1	3	26.64	1.78	6.684	A	A
1	4	7.30	0.49	6.534	A	A
1	5	18.00	1.20	6.632	A	A
1	6	24.06	1.60	7.496	A	A
2	1	23.37	1.56	8.393	A	A
2	2	4.34	0.29	6.447	A	A
2	3	6.04	0.40	2.486	A	A

Queueing Delay results: (18:15-18:30)

Junction	Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1	12.95	0.86	3.593	A	A
1	2	5.03	0.34	6.565	A	A
1	3	14.75	0.98	4.485	A	A
1	4	4.62	0.31	4.989	A	A
1	5	10.79	0.72	4.804	A	A
1	6	13.18	0.88	4.997	A	A
2	1	15.32	1.02	6.637	A	A
2	2	3.16	0.21	5.632	A	A
2	3	4.68	0.31	2.323	A	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.6.541 [19821,26/11/2015]

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Filename: 10 Bridge Rd-Saltwater Way-Victora Rd v5 2017-10-24.arc8
Path: L:\106xxx\1069948 Lowestoft Third Crossing\09 Documents\06_Modelling_Junction Modelling Sep 2017_Junction Modelling\10 Bridge Rd-Saltwater Way-Victoria Rd rdbt
Report generation date: 03/04/2018 09:45:26

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2016 Base							
Arm 1	0.82	2.60	0.45	A	1.07	2.94	0.52	A
Arm 2	4.11	29.32	0.82	D	7.50	56.87	0.91	F
Arm 3	4.07	17.87	0.81	C	5.97	24.03	0.87	C
	A1 - 2022 Do Minimum							
Arm 1	1.06	2.92	0.51	A	1.46	3.48	0.59	A
Arm 2	14.42	90.34	0.98	F	121.04	646.72	1.48	F
Arm 3	8.00	33.21	0.91	D	5.08	20.90	0.84	C
	A1 - 2022 Do Something							
Arm 1	0.52	2.17	0.34	A	0.87	2.67	0.47	A
Arm 2	0.46	6.74	0.31	A	1.25	14.08	0.56	B
Arm 3	1.94	8.20	0.66	A	2.40	10.19	0.71	B
	A1 - 2037 Do Minimum							
Arm 1	1.32	3.31	0.57	A	1.89	4.09	0.66	A
Arm 2	71.52	347.66	1.23	F	249.89	1544.85	1.95	F
Arm 3	30.88	105.58	1.03	F	4.49	17.97	0.83	C
	A1 - 2037 Do Something							
Arm 1	0.63	2.33	0.39	A	1.03	2.89	0.51	A
Arm 2	0.64	8.06	0.39	A	3.81	33.25	0.81	D
Arm 3	3.64	13.39	0.79	B	3.71	15.53	0.80	C

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

"D1 - 2016 Base, AM " model duration: 08:00 - 09:30
"D2 - 2016 Base, PM" model duration: 08:00 - 09:30
"D3 - 2022 Do Minimum, AM" model duration: 08:00 - 09:30
"D4 - 2022 Do Minimum, PM" model duration: 08:00 - 09:30
"D5 - 2022 Do Something, AM" model duration: 08:00 - 09:30
"D6 - 2022 Do Something, PM" model duration: 08:00 - 09:30
"D7 - 2037 Do Minimum, AM" model duration: 08:00 - 09:30
"D8 - 2037 Do Minimum, PM" model duration: 08:00 - 09:30
"D9 - 2037 Do Something, AM" model duration: 08:00 - 09:30
"D10 - 2037 Do Something, PM" model duration: 08:00 - 09:30

Run using Junctions 8.0.6.541 at 03/04/2018 09:45:22

File summary

Title	Bridge Rd-Saltwater Way-Victoria Rd
Location	Lowestoft
Site Number	
Date	13/02/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ecopp
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) - 2016 Base, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2016 Base, AM	2016 Base	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				13.38	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1117 Saltwater Way	
2	2	B1531 Victoria Way	
3	3	A1117 Bridge Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00

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	7.40	8.70	2.30	43.60	35.70	12.00	
2	4.40	8.10	7.80	17.30	35.70	17.50	
3	6.60	8.10	4.40	54.70	35.70	9.50	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
1	None			
2	Percentage			68.00
3	Direct		-969.10	

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)	0.859	2594.311
2		(calculated)	(calculated)	0.690	1252.567
3		(calculated)	(calculated)	0.832	1474.565

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	✓	1037.39	100.000
2	ONE HOUR	✓	483.15	100.000
3	ONE HOUR	✓	774.79	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	245.762	791.630
	2	462.990	0.000	20.162
	3	700.218	74.569	0.000

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

		To		
		1	2	3
From	1	0.00	0.24	0.76
	2	0.96	0.00	0.04
	3	0.90	0.10	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.45	2.60	0.82	A	951.93	1427.89	55.20	2.32	0.61	55.20	2.32
2	0.82	29.32	4.11	D	443.35	665.02	173.07	15.62	1.92	173.10	15.62
3	0.81	17.87	4.07	C	710.96	1066.44	189.01	10.63	2.10	189.03	10.64

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	781.00	195.25	779.24	869.40	55.77	0.00	2546.42	2472.46	0.307	0.00	0.44	2.035	A
2	363.74	90.94	360.74	240.38	594.63	0.00	842.20	0.00	0.432	0.00	0.75	7.432	A
3	583.30	145.82	579.48	609.69	345.69	0.00	1186.88	1474.56	0.491	0.00	0.95	5.891	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	932.59	233.15	932.04	1041.39	66.80	0.00	2536.96	2472.46	0.368	0.44	0.58	2.243	A
2	434.34	108.59	432.17	287.60	711.24	0.00	761.73	0.00	0.570	0.75	1.29	10.851	B
3	696.52	174.13	694.05	729.27	414.14	0.00	1129.92	1474.56	0.616	0.95	1.57	8.212	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1142.19	285.55	1141.22	1262.85	81.24	0.00	2524.56	2472.46	0.452	0.58	0.82	2.601	A
2	531.96	132.99	521.75	351.60	870.86	0.00	651.57	0.00	0.816	1.29	3.84	25.932	D
3	853.06	213.26	844.11	892.63	499.98	0.00	1058.48	1474.56	0.806	1.57	3.81	16.155	C

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1142.19	285.55	1142.18	1278.74	82.00	0.00	2523.90	2472.46	0.453	0.82	0.82	2.604	A
2	531.96	132.99	530.88	352.59	871.59	0.00	651.06	0.00	0.817	3.84	4.11	29.321	D
3	853.06	213.26	852.02	893.75	508.73	0.00	1051.20	1474.56	0.812	3.81	4.07	17.871	C

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	932.59	233.15	933.56	1064.83	67.95	0.00	2535.97	2472.46	0.368	0.82	0.58	2.249	A
2	434.34	108.59	445.33	289.11	712.39	0.00	760.93	0.00	0.571	4.11	1.37	11.781	B
3	696.52	174.13	706.03	730.98	426.75	0.00	1119.43	1474.56	0.622	4.07	1.69	8.899	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	781.00	195.25	781.56	880.54	56.41	0.00	2545.88	2472.46	0.307	0.58	0.44	2.042	A
2	363.74	90.94	366.12	241.56	596.41	0.00	840.97	0.00	0.433	1.37	0.77	7.617	A
3	583.30	145.82	586.11	611.69	350.84	0.00	1182.59	1474.56	0.493	1.69	0.99	6.065	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	6.51	0.43	2.035	A	A
2	10.73	0.72	7.432	A	A
3	13.72	0.91	5.891	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	8.58	0.57	2.243	A	A
2	18.35	1.22	10.851	B	B
3	22.46	1.50	8.212	A	A

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	12.13	0.81	2.601	A	A
2	49.02	3.27	25.932	D	C
3	50.68	3.38	16.155	C	B

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	12.35	0.82	2.604	A	A
2	60.07	4.00	29.321	D	C
3	59.52	3.97	17.871	C	B

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	8.88	0.59	2.249	A	A
2	22.83	1.52	11.781	B	B
3	27.27	1.82	8.899	A	A

Queueing Delay results: (09:15-09:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	6.74	0.45	2.042	A	A
2	12.09	0.81	7.617	A	A
3	15.35	1.02	6.065	A	A

(Default Analysis Set) - 2016 Base, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2016 Base, PM	2016 Base	PM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				20.11	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1117 Saltwater Way	
2	2	B1531 Victoria Way	
3	3	A1117 Bridge Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00

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	7.40	8.70	2.30	43.60	35.70	12.00	
2	4.40	8.10	7.80	17.30	35.70	17.50	
3	6.60	8.10	4.40	54.70	35.70	9.50	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
1	None			
2	Percentage			68.00
3	Direct		-969.10	

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)	0.859	2594.311
2		(calculated)	(calculated)	0.690	1252.567
3		(calculated)	(calculated)	0.832	1474.565

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	✓	1190.42	100.000
2	ONE HOUR	✓	463.89	100.000
3	ONE HOUR	✓	859.93	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	281.442	908.980
	2	424.644	0.000	39.241
	3	794.606	65.328	0.000

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

		To		
		1	2	3
From	1	0.00	0.24	0.76
	2	0.92	0.00	0.08
	3	0.92	0.08	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.52	2.94	1.07	A	1092.35	1638.53	69.70	2.55	0.77	69.70	2.55
2	0.91	56.87	7.50	F	425.67	638.50	254.18	23.89	2.82	254.21	23.89
3	0.87	24.03	5.97	C	789.09	1183.64	252.62	12.81	2.81	252.65	12.81

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	896.21	224.05	894.06	910.82	48.84	0.00	2552.38	2498.13	0.351	0.00	0.54	2.168	A
2	349.24	87.31	346.06	260.21	682.68	0.00	781.44	0.00	0.447	0.00	0.79	8.210	A
3	647.40	161.85	642.88	711.95	316.78	0.00	1210.94	1474.56	0.535	0.00	1.13	6.290	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1070.16	267.54	1069.43	1090.56	58.48	0.00	2544.10	2498.13	0.421	0.54	0.72	2.440	A
2	417.02	104.26	414.28	311.32	816.59	0.00	689.02	0.00	0.605	0.79	1.48	12.973	B
3	773.06	193.27	769.81	851.64	379.23	0.00	1158.97	1474.56	0.667	1.13	1.95	9.173	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1310.68	327.67	1309.31	1312.09	70.90	0.00	2533.43	2498.13	0.517	0.72	1.06	2.938	A
2	510.75	127.69	491.24	380.45	999.76	0.00	562.61	0.00	0.908	1.48	6.36	42.362	E
3	946.80	236.70	933.30	1041.32	449.68	0.00	1100.34	1474.56	0.860	1.95	5.32	20.099	C

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1310.68	327.67	1310.66	1335.82	71.73	0.00	2532.72	2498.13	0.518	1.06	1.07	2.945	A
2	510.75	127.69	506.17	381.60	1000.79	0.00	561.90	0.00	0.909	6.36	7.50	56.871	F
3	946.80	236.70	944.19	1043.61	463.35	0.00	1088.96	1474.56	0.869	5.32	5.97	24.028	C

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1070.16	267.54	1071.52	1131.70	59.88	0.00	2542.90	2498.13	0.421	1.07	0.73	2.450	A
2	417.02	104.26	440.63	313.21	818.19	0.00	687.92	0.00	0.606	7.50	1.60	15.850	C
3	773.06	193.27	788.22	855.46	403.36	0.00	1138.89	1474.56	0.679	5.97	2.18	10.681	B

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	896.21	224.05	896.96	924.48	49.49	0.00	2551.82	2498.13	0.351	0.73	0.54	2.177	A
2	349.24	87.31	352.34	261.55	684.90	0.00	779.91	0.00	0.448	1.60	0.82	8.480	A
3	647.40	161.85	651.43	714.70	322.53	0.00	1206.15	1474.56	0.537	2.18	1.18	6.537	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	7.95	0.53	2.168	A	A
2	11.33	0.76	8.210	A	A
3	16.20	1.08	6.290	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	10.69	0.71	2.440	A	A
2	20.79	1.39	12.973	B	B
3	27.57	1.84	9.173	A	A

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	15.66	1.04	2.938	A	A
2	73.10	4.87	42.362	E	D
3	68.09	4.54	20.099	C	C

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	16.01	1.07	2.945	A	A
2	105.12	7.01	56.871	F	E
3	85.80	5.72	24.028	C	C

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	11.13	0.74	2.450	A	A
2	30.88	2.06	15.850	C	B
3	36.55	2.44	10.681	B	B

Queueing Delay results: (09:15-09:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	8.26	0.55	2.177	A	A
2	12.96	0.86	8.480	A	A
3	18.42	1.23	6.537	A	A

(Default Analysis Set) - 2022 Do Minimum, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2022 Do Minimum, AM	2022 Do Minimum	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				31.15	D

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1117 Saltwater Way	
2	2	B1531 Victoria Way	
3	3	A1117 Bridge Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00

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	7.40	8.70	2.30	43.60	35.70	12.00	
2	4.40	8.10	7.80	17.30	35.70	17.50	
3	6.60	8.10	4.40	54.70	35.70	9.50	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
1	None			
2	Percentage			68.00
3	Direct		-969.10	

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)	0.859	2594.311
2		(calculated)	(calculated)	0.690	1252.567
3		(calculated)	(calculated)	0.832	1474.565

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	✓	1186.02	100.000
2	ONE HOUR	✓	536.30	100.000
3	ONE HOUR	✓	840.39	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	328.417	857.600
	2	509.735	0.000	26.569
	3	778.700	61.688	0.000

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

		To		
		1	2	3
From	1	0.00	0.28	0.72
	2	0.95	0.00	0.05
	3	0.93	0.07	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.51	2.92	1.06	A	1088.31	1632.46	69.07	2.54	0.77	69.08	2.54
2	0.98	90.34	14.42	F	492.12	738.18	414.74	33.71	4.61	414.78	33.71
3	0.91	33.21	8.00	D	771.15	1156.73	306.66	15.91	3.41	306.70	15.91

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	892.90	223.22	890.75	961.89	46.09	0.00	2554.73	2501.59	0.350	0.00	0.54	2.160	A
2	403.76	100.94	399.84	292.75	644.10	0.00	808.06	4.23	0.500	0.00	0.98	8.738	A
3	632.69	158.17	627.95	663.91	380.03	0.00	1158.30	1471.22	0.546	0.00	1.18	6.730	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1066.20	266.55	1065.48	1151.13	55.18	0.00	2546.94	2501.59	0.419	0.54	0.72	2.428	A
2	482.13	120.53	478.33	350.21	770.44	0.00	720.87	4.23	0.669	0.98	1.93	14.615	B
3	755.49	188.87	751.66	794.14	454.64	0.00	1096.22	1471.22	0.689	1.18	2.14	10.331	B

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1305.83	326.46	1304.48	1368.92	66.60	0.00	2537.13	2501.59	0.515	0.72	1.05	2.918	A
2	590.48	147.62	555.81	427.82	943.26	0.00	601.60	4.23	0.982	1.93	10.60	56.699	F
3	925.28	231.32	907.24	970.80	528.28	0.00	1034.93	1471.22	0.894	2.14	6.65	25.247	D

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1305.83	326.46	1305.81	1399.05	67.52	0.00	2536.33	2501.59	0.515	1.05	1.06	2.924	A
2	590.48	147.62	575.16	429.11	944.22	0.00	600.94	4.23	0.983	10.60	14.42	90.343	F
3	925.28	231.32	919.91	972.72	546.67	0.00	1019.63	1471.22	0.907	6.65	8.00	33.215	D

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1066.20	266.55	1067.54	1224.79	57.03	0.00	2545.35	2501.59	0.419	1.06	0.72	2.439	A
2	482.13	120.53	531.24	352.64	771.93	0.00	719.84	4.23	0.670	14.42	2.15	23.658	C
3	755.49	188.87	776.89	798.25	504.92	0.00	1054.37	1471.22	0.717	8.00	2.65	13.878	B

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	892.90	223.22	893.63	979.49	46.85	0.00	2554.08	2501.59	0.350	0.72	0.54	2.170	A
2	403.76	100.94	408.26	294.31	646.18	0.00	806.63	4.23	0.501	2.15	1.02	9.136	A
3	632.69	158.17	638.31	666.41	388.04	0.00	1151.64	1471.22	0.549	2.65	1.24	7.086	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	7.90	0.53	2.160	A	A
2	13.88	0.93	8.738	A	A
3	16.89	1.13	6.730	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	10.60	0.71	2.428	A	A
2	26.70	1.78	14.615	B	B
3	30.09	2.01	10.331	B	B

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	15.50	1.03	2.918	A	A
2	110.46	7.36	56.699	F	E
3	81.66	5.44	25.247	D	C

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	15.84	1.06	2.924	A	A
2	189.71	12.65	90.343	F	F
3	111.81	7.45	33.215	D	C

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	11.04	0.74	2.439	A	A
2	57.78	3.85	23.658	C	C
3	46.65	3.11	13.878	B	B

Queueing Delay results: (09:15-09:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	8.20	0.55	2.170	A	A
2	16.20	1.08	9.136	A	A
3	19.56	1.30	7.086	A	A

(Default Analysis Set) - 2022 Do Minimum, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2022 Do Minimum, PM	2022 Do Minimum	PM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				153.08	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1117 Saltwater Way	
2	2	B1531 Victoria Way	
3	3	A1117 Bridge Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00

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	7.40	8.70	2.30	43.60	35.70	12.00	
2	4.40	8.10	7.80	17.30	35.70	17.50	
3	6.60	8.10	4.40	54.70	35.70	9.50	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
1	None			
2	Percentage			68.00
3	Direct		-969.10	

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)	0.859	2594.311
2		(calculated)	(calculated)	0.690	1252.567
3		(calculated)	(calculated)	0.832	1474.565

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	✓	1373.67	100.000
2	ONE HOUR	✓	638.72	100.000
3	ONE HOUR	✓	830.75	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	352.427	1021.244
	2	630.823	0.000	7.901
	3	779.298	51.449	0.000

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

		To		
		1	2	3
From	1	0.00	0.26	0.74
	2	0.99	0.00	0.01
	3	0.94	0.06	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.59	3.48	1.46	A	1260.50	1890.76	91.41	2.90	1.02	91.41	2.90
2	1.48	646.72	121.04	F	586.10	879.16	5015.36	342.28	55.73	5131.46	350.21
3	0.84	20.90	5.08	C	762.31	1143.46	290.60	15.25	3.23	290.81	15.26

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1034.17	258.54	1031.47	1049.14	38.40	0.00	2561.34	2515.90	0.404	0.00	0.67	2.349	A
2	480.86	120.22	473.29	303.04	766.84	0.00	723.36	0.00	0.665	0.00	1.89	14.007	B
3	625.43	156.36	620.10	772.70	467.44	0.00	1085.56	1474.56	0.576	0.00	1.33	7.650	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1234.90	308.73	1233.88	1241.14	45.94	0.00	2554.87	2515.90	0.483	0.67	0.93	2.721	A
2	574.20	143.55	552.13	362.50	917.32	0.00	619.51	0.00	0.927	1.89	7.41	43.716	E
3	746.82	186.71	741.78	924.15	545.31	0.00	1020.76	1474.56	0.732	1.33	2.59	12.676	B

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1512.44	378.11	1510.36	1319.40	56.10	0.00	2546.14	2515.90	0.594	0.93	1.45	3.468	A
2	703.25	175.81	475.54	443.60	1122.87	0.00	477.66	0.00	1.472	7.41	64.34	287.902	F
3	914.67	228.67	905.85	1128.75	469.66	0.00	1083.72	1474.56	0.844	2.59	4.80	19.279	C

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1512.44	378.11	1512.41	1327.52	56.58	0.00	2545.73	2515.90	0.594	1.45	1.46	3.483	A
2	703.25	175.81	476.43	444.60	1124.39	0.00	476.60	0.00	1.476	64.34	121.04	638.604	F
3	914.67	228.67	913.57	1130.28	470.53	0.00	1082.99	1474.56	0.845	4.80	5.08	20.903	C

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1234.90	308.73	1236.96	1311.57	46.63	0.00	2554.27	2515.90	0.483	1.46	0.94	2.738	A
2	574.20	143.55	612.86	363.98	919.61	0.00	617.93	0.00	0.929	121.04	111.38	646.720	F
3	746.82	186.71	752.91	927.19	605.28	0.00	970.85	1474.56	0.769	5.08	3.55	16.978	C

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1034.17	258.54	1035.22	1296.81	38.99	0.00	2560.83	2515.90	0.404	0.94	0.68	2.362	A
2	480.86	120.22	715.02	304.59	769.62	0.00	721.44	0.00	0.667	111.38	52.84	416.099	F
3	625.43	156.36	629.63	778.47	706.17	0.00	886.89	1474.56	0.705	3.55	2.50	14.227	B

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	9.92	0.66	2.349	A	A
2	25.71	1.71	14.007	B	B
3	18.87	1.26	7.650	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	13.72	0.91	2.721	A	A
2	84.21	5.61	43.716	E	D
3	35.86	2.39	12.676	B	B

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	21.19	1.41	3.468	A	A
2	540.31	36.02	287.902	F	F
3	63.69	4.25	19.279	C	B

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	21.81	1.45	3.483	A	A
2	1390.40	92.69	638.604	F	F
3	74.46	4.96	20.903	C	C

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	14.41	0.96	2.738	A	A
2	1743.13	116.21	646.720	F	F
3	57.62	3.84	16.978	C	B

Queueing Delay results: (09:15-09:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	10.36	0.69	2.362	A	A
2	1231.60	82.11	416.099	F	F
3	40.11	2.67	14.227	B	B

(Default Analysis Set) - 2022 Do Something, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relati
2022 Do Something, AM	2022 Do Something	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				5.37	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1117 Saltwater Way	
2	2	B1531 Victoria Way	
3	3	A1117 Bridge Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00

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	7.40	8.70	2.30	43.60	35.70	12.00	
2	4.40	8.10	7.80	17.30	35.70	17.50	
3	6.60	8.10	4.40	54.70	35.70	9.50	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
1	None			
2	Percentage			68.00
3	Direct		-969.10	

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)	0.859	2594.311
2		(calculated)	(calculated)	0.690	1252.567
3		(calculated)	(calculated)	0.832	1474.565

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	✓	787.39	100.000
2	ONE HOUR	✓	223.01	100.000
3	ONE HOUR	✓	784.71	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	164.945	622.448
	2	187.401	0.000	35.611
	3	711.394	73.320	0.000

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

		To		
		1	2	3
From	1	0.00	0.21	0.79
	2	0.84	0.00	0.16
	3	0.91	0.09	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.34	2.17	0.52	A	722.53	1083.79	36.24	2.01	0.40	36.24	2.01
2	0.31	6.74	0.46	A	204.64	306.96	29.12	5.69	0.32	29.13	5.69
3	0.66	8.20	1.94	A	720.07	1080.10	113.14	6.29	1.26	113.16	6.29

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	592.79	148.20	591.58	673.16	54.91	0.00	2547.16	2476.01	0.233	0.00	0.30	1.841	A
2	167.89	41.97	167.02	178.84	467.66	0.00	929.83	0.00	0.181	0.00	0.22	4.715	A
3	590.77	147.69	587.72	494.32	140.35	0.00	1357.77	1474.56	0.435	0.00	0.76	4.656	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	707.85	176.96	707.52	806.48	65.78	0.00	2537.83	2476.01	0.279	0.30	0.39	1.966	A
2	200.48	50.12	200.16	214.00	559.31	0.00	866.58	0.00	0.231	0.22	0.30	5.399	A
3	705.44	176.36	704.07	591.27	168.20	0.00	1334.59	1474.56	0.529	0.76	1.11	5.696	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	866.94	216.73	866.40	986.13	80.42	0.00	2525.26	2476.01	0.343	0.39	0.52	2.170	A
2	245.54	61.39	244.92	261.92	684.90	0.00	779.90	0.00	0.315	0.30	0.45	6.719	A
3	863.99	216.00	860.74	724.01	205.81	0.00	1303.29	1474.56	0.663	1.11	1.92	8.074	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	866.94	216.73	866.93	989.49	80.72	0.00	2525.01	2476.01	0.343	0.52	0.52	2.170	A
2	245.54	61.39	245.53	262.32	685.33	0.00	779.61	0.00	0.315	0.45	0.46	6.739	A
3	863.99	216.00	863.88	724.53	206.32	0.00	1302.86	1474.56	0.663	1.92	1.94	8.196	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	707.85	176.96	708.39	811.43	66.21	0.00	2537.46	2476.01	0.279	0.52	0.39	1.968	A
2	200.48	50.12	201.10	214.61	559.99	0.00	866.11	0.00	0.231	0.46	0.30	5.417	A
3	705.44	176.36	708.66	592.10	168.99	0.00	1333.93	1474.56	0.529	1.94	1.14	5.788	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	592.79	148.20	593.13	678.24	55.33	0.00	2546.80	2476.01	0.233	0.39	0.30	1.844	A
2	167.89	41.97	168.22	179.58	468.88	0.00	928.99	0.00	0.181	0.30	0.22	4.735	A
3	590.77	147.69	592.21	495.74	141.36	0.00	1356.93	1474.56	0.435	1.14	0.78	4.717	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	4.48	0.30	1.841	A	A
2	3.20	0.21	4.715	A	A
3	11.08	0.74	4.656	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	5.73	0.38	1.966	A	A
2	4.39	0.29	5.399	A	A
3	16.10	1.07	5.696	A	A

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	7.72	0.51	2.170	A	A
2	6.63	0.44	6.719	A	A
3	27.28	1.82	8.074	A	A

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	7.82	0.52	2.170	A	A
2	6.84	0.46	6.739	A	A
3	28.99	1.93	8.196	A	A

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	5.89	0.39	1.968	A	A
2	4.67	0.31	5.417	A	A
3	17.72	1.18	5.788	A	A

Queueing Delay results: (09:15-09:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	4.61	0.31	1.844	A	A
2	3.40	0.23	4.735	A	A
3	11.98	0.80	4.717	A	A

(Default Analysis Set) - 2022 Do Something, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relati
2022 Do Something, PM	2022 Do Something	PM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				6.98	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1117 Saltwater Way	
2	2	B1531 Victoria Way	
3	3	A1117 Bridge Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00

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	7.40	8.70	2.30	43.60	35.70	12.00	
2	4.40	8.10	7.80	17.30	35.70	17.50	
3	6.60	8.10	4.40	54.70	35.70	9.50	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
1	None			
2	Percentage			68.00
3	Direct		-969.10	

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)	0.859	2594.311
2		(calculated)	(calculated)	0.690	1252.567
3		(calculated)	(calculated)	0.832	1474.565

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	✓	1072.94	100.000
2	ONE HOUR	✓	295.96	100.000
3	ONE HOUR	✓	783.47	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	189.381	883.563
	2	283.314	0.000	12.642
	3	714.836	68.632	0.000

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

		To		
		1	2	3
From	1	0.00	0.18	0.82
	2	0.96	0.00	0.04
	3	0.91	0.09	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.47	2.67	0.87	A	984.55	1476.83	58.20	2.36	0.65	58.20	2.36
2	0.56	14.08	1.25	B	271.57	407.36	65.96	9.71	0.73	65.96	9.72
3	0.71	10.19	2.40	B	718.92	1078.39	131.69	7.33	1.46	131.71	7.33

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	807.77	201.94	805.92	746.97	51.38	0.00	2550.19	2483.40	0.317	0.00	0.46	2.062	A
2	222.81	55.70	221.27	193.63	663.67	0.00	794.55	0.00	0.280	0.00	0.39	6.263	A
3	589.84	147.46	586.54	673.12	211.82	0.00	1298.29	1474.56	0.454	0.00	0.82	5.035	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	964.55	241.14	963.97	894.98	61.55	0.00	2541.46	2483.40	0.380	0.46	0.61	2.282	A
2	266.06	66.51	265.21	231.70	793.82	0.00	704.74	0.00	0.378	0.39	0.60	8.175	A
3	704.32	176.08	702.66	805.15	253.88	0.00	1263.28	1474.56	0.558	0.82	1.24	6.402	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1181.33	295.33	1180.29	1092.52	75.18	0.00	2529.76	2483.40	0.467	0.61	0.87	2.664	A
2	325.85	81.46	323.32	283.50	971.96	0.00	581.80	0.00	0.560	0.60	1.23	13.792	B
3	862.61	215.65	858.19	985.77	309.51	0.00	1216.99	1474.56	0.709	1.24	2.35	9.910	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1181.33	295.33	1181.32	1098.71	75.55	0.00	2529.44	2483.40	0.467	0.87	0.87	2.669	A
2	325.85	81.46	325.76	284.06	972.81	0.00	581.21	0.00	0.561	1.23	1.25	14.080	B
3	862.61	215.65	862.41	986.73	311.85	0.00	1215.04	1474.56	0.710	2.35	2.40	10.194	B

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	964.55	241.14	965.59	903.82	62.09	0.00	2541.00	2483.40	0.380	0.87	0.61	2.286	A
2	266.06	66.51	268.61	232.52	795.16	0.00	703.81	0.00	0.378	1.25	0.62	8.320	A
3	704.32	176.08	708.77	806.63	257.13	0.00	1260.58	1474.56	0.559	2.40	1.29	6.577	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	807.77	201.94	808.37	753.93	51.82	0.00	2549.81	2483.40	0.317	0.61	0.47	2.069	A
2	222.81	55.70	223.70	194.51	665.68	0.00	793.17	0.00	0.281	0.62	0.39	6.330	A
3	589.84	147.46	591.61	675.24	214.14	0.00	1296.35	1474.56	0.455	1.29	0.84	5.122	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	6.82	0.45	2.062	A	A
2	5.59	0.37	6.263	A	A
3	11.93	0.80	5.035	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	9.02	0.60	2.282	A	A
2	8.67	0.58	8.175	A	A
3	17.96	1.20	6.402	A	A

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	12.85	0.86	2.664	A	A
2	17.27	1.15	13.792	B	B
3	32.92	2.19	9.910	A	A

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	13.09	0.87	2.669	A	A
2	18.67	1.24	14.080	B	B
3	35.69	2.38	10.194	B	B

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	9.35	0.62	2.286	A	A
2	9.67	0.64	8.320	A	A
3	20.17	1.34	6.577	A	A

Queueing Delay results: (09:15-09:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	7.06	0.47	2.069	A	A
2	6.09	0.41	6.330	A	A
3	13.03	0.87	5.122	A	A

(Default Analysis Set) - 2037 Do Minimum, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2037 Do Minimum, AM	2037 Do Minimum	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				111.94	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1117 Saltwater Way	
2	2	B1531 Victoria Way	
3	3	A1117 Bridge Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00

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	7.40	8.70	2.30	43.60	35.70	12.00	
2	4.40	8.10	7.80	17.30	35.70	17.50	
3	6.60	8.10	4.40	54.70	35.70	9.50	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
1	None			
2	Percentage			68.00
3	Direct		-969.10	

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)	0.859	2594.311
2		(calculated)	(calculated)	0.690	1252.567
3		(calculated)	(calculated)	0.832	1474.565

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	✓	1310.13	100.000
2	ONE HOUR	✓	629.61	100.000
3	ONE HOUR	✓	957.02	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	401.325	908.800
	2	606.442	0.000	23.169
	3	884.353	72.663	0.000

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

		To		
		1	2	3
From	1	0.00	0.31	0.69
	2	0.96	0.00	0.04
	3	0.92	0.08	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.57	3.31	1.32	A	1202.19	1803.29	84.06	2.80	0.93	84.06	2.80
2	1.23	347.66	71.52	F	577.74	866.61	2292.44	158.72	25.47	2292.55	158.72
3	1.03	105.58	30.88	F	878.17	1317.26	1128.87	51.42	12.54	1129.19	51.43

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	986.33	246.58	983.82	1109.77	54.14	0.00	2547.82	2501.07	0.387	0.00	0.63	2.297	A
2	474.00	118.50	468.03	355.51	682.45	0.00	781.60	55.26	0.606	0.00	1.49	11.280	B
3	720.49	180.12	713.11	699.67	450.81	0.00	1099.40	1430.27	0.655	0.00	1.85	9.153	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1177.78	294.44	1176.85	1320.69	64.51	0.00	2538.92	2501.08	0.464	0.63	0.86	2.642	A
2	566.01	141.50	556.07	425.01	816.35	0.00	689.19	55.26	0.821	1.49	3.98	25.343	D
3	860.34	215.08	849.59	836.81	535.61	0.00	1028.83	1430.27	0.836	1.85	4.53	19.026	C

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1442.48	360.62	1440.65	1451.52	75.33	0.00	2529.63	2501.08	0.570	0.86	1.32	3.300	A
2	693.21	173.30	555.11	516.64	999.35	0.00	562.90	55.26	1.232	3.98	38.50	154.665	F
3	1053.69	263.42	992.17	1019.77	534.68	0.00	1029.60	1430.27	1.023	4.53	19.91	57.338	F

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1442.48	360.62	1442.45	1473.67	76.67	0.00	2528.48	2501.08	0.570	1.32	1.32	3.314	A
2	693.21	173.30	561.15	518.53	1000.59	0.00	562.04	55.26	1.233	38.50	71.52	347.660	F
3	1053.69	263.42	1009.84	1021.24	540.50	0.00	1024.76	1430.27	1.028	19.91	30.88	102.486	F

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1177.78	294.44	1179.58	1494.27	69.09	0.00	2534.99	2501.08	0.465	1.32	0.87	2.659	A
2	566.01	141.50	678.40	430.42	818.24	0.00	687.88	55.26	0.823	71.52	43.42	303.228	F
3	860.34	215.08	909.93	843.20	653.43	0.00	930.78	1430.27	0.924	30.88	18.48	105.581	F

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	986.33	246.58	987.28	1339.62	59.33	0.00	2543.37	2501.07	0.388	0.87	0.64	2.316	A
2	474.00	118.50	641.07	361.76	684.85	0.00	779.94	55.26	0.608	43.42	1.65	62.015	F
3	720.49	180.12	781.48	708.44	617.48	0.00	960.70	1430.27	0.750	18.48	3.23	25.811	D

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	9.27	0.62	2.297	A	A
2	20.70	1.38	11.280	B	B
3	25.72	1.71	9.153	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	12.70	0.85	2.642	A	A
2	50.98	3.40	25.343	D	C
3	59.13	3.94	19.026	C	B

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	19.27	1.28	3.300	A	A
2	326.00	21.73	154.665	F	F
3	199.82	13.32	57.338	F	E

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	19.80	1.32	3.314	A	A
2	825.47	55.03	347.660	F	F
3	383.43	25.56	102.486	F	F

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	13.34	0.89	2.659	A	A
2	862.05	57.47	303.228	F	F
3	373.00	24.87	105.581	F	F

Queueing Delay results: (09:15-09:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	9.68	0.65	2.316	A	A
2	207.23	13.82	62.015	F	E
3	87.76	5.85	25.811	D	C

(Default Analysis Set) - 2037 Do Minimum, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2037 Do Minimum, PM	2037 Do Minimum	PM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				373.40	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1117 Saltwater Way	
2	2	B1531 Victoria Way	
3	3	A1117 Bridge Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00

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	7.40	8.70	2.30	43.60	35.70	12.00	
2	4.40	8.10	7.80	17.30	35.70	17.50	
3	6.00	8.10	4.40	54.70	35.70	9.50	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
1	None			
2	Percentage			68.00
3	Direct		-969.10	

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)	0.859	2594.311
2		(calculated)	(calculated)	0.690	1252.567
3		(calculated)	(calculated)	0.832	1474.565

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	✓	1518.49	100.000
2	ONE HOUR	✓	735.88	100.000
3	ONE HOUR	✓	847.61	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	417.187	1101.307
	2	730.581	0.000	5.304
	3	802.223	45.386	0.000

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

		To		
		1	2	3
From	1	0.00	0.27	0.73
	2	0.99	0.00	0.01
	3	0.95	0.05	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.66	4.09	1.89	A	1393.40	2090.09	113.94	3.27	1.27	113.95	3.27
2	1.95	1544.85	249.89	F	675.26	1012.89	11233.70	665.44	124.82	13353.42	791.01
3	0.83	17.97	4.49	C	777.78	1166.67	278.66	14.33	3.10	278.85	14.34

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1143.20	285.80	1140.00	1133.00	33.83	0.00	2565.26	2526.52	0.446	0.00	0.80	2.521	A
2	554.01	138.50	538.94	347.03	826.80	0.00	681.98	0.00	0.812	0.00	3.77	23.206	C
3	638.12	159.53	631.77	830.69	535.06	0.00	1029.29	1474.56	0.620	0.00	1.59	8.920	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1365.09	341.27	1363.75	1270.84	40.53	0.00	2559.51	2526.52	0.533	0.80	1.13	3.008	A
2	661.55	165.39	558.51	415.20	989.08	0.00	569.98	0.00	1.161	3.77	29.53	131.927	F
3	761.98	190.50	756.88	993.11	554.49	0.00	1013.12	1474.56	0.752	1.59	2.87	13.771	B

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1671.89	417.97	1668.93	1291.76	49.66	0.00	2551.67	2526.52	0.655	1.13	1.88	4.064	A
2	810.22	202.56	417.03	508.18	1210.41	0.00	417.24	0.00	1.942	29.53	127.82	690.223	F
3	933.24	233.31	927.40	1213.42	414.02	0.00	1130.01	1474.56	0.826	2.87	4.32	17.218	C

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1671.89	417.97	1671.84	1295.39	49.94	0.00	2551.43	2526.52	0.655	1.88	1.89	4.092	A
2	810.22	202.56	415.75	509.25	1212.53	0.00	415.78	0.00	1.949	127.82	226.44	1544.852	F
3	933.24	233.31	932.58	1215.52	412.75	0.00	1131.07	1474.56	0.825	4.32	4.49	17.965	C

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1365.09	341.27	1368.04	1289.32	41.05	0.00	2559.06	2526.52	0.533	1.89	1.15	3.029	A
2	661.55	165.39	567.77	416.91	992.19	0.00	567.84	0.00	1.165	226.44	249.89	1416.494	F
3	761.98	190.50	766.70	996.28	563.68	0.00	1005.47	1474.56	0.758	4.49	3.31	15.388	C

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1143.20	285.80	1144.57	1279.50	34.36	0.00	2564.81	2526.52	0.446	1.15	0.81	2.536	A
2	554.01	138.50	676.98	348.82	830.12	0.00	679.69	0.00	0.815	249.89	219.15	1247.543	F
3	638.12	159.53	641.76	835.00	672.10	0.00	915.24	1474.56	0.697	3.31	2.40	13.346	B

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	11.75	0.78	2.521	A	A
2	47.17	3.14	23.206	C	C
3	22.27	1.48	8.920	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	16.68	1.11	3.008	A	A
2	258.99	17.27	131.927	F	F
3	39.48	2.63	13.771	B	B

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	27.23	1.82	4.064	A	A
2	1180.30	78.69	690.223	F	F
3	59.17	3.94	17.218	C	B

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	28.26	1.88	4.092	A	A
2	2657.02	177.13	1544.852	F	F
3	66.33	4.42	17.965	C	B

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	17.69	1.18	3.029	A	A
2	3572.48	238.17	1416.494	F	F
3	53.15	3.54	15.388	C	B

Queueing Delay results: (09:15-09:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	12.33	0.82	2.536	A	A
2	3517.74	234.52	1247.543	F	F
3	38.27	2.55	13.346	B	B

(Default Analysis Set) - 2037 Do Something, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relati
2037 Do Something, AM	2037 Do Something	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				7.97	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1117 Saltwater Way	
2	2	B1531 Victoria Way	
3	3	A1117 Bridge Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00

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	7.40	8.70	2.30	43.60	35.70	12.00	
2	4.40	8.10	7.80	17.30	35.70	17.50	
3	6.60	8.10	4.40	54.70	35.70	9.50	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
1	None			
2	Percentage			68.00
3	Direct		-969.10	

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)	0.859	2594.311
2		(calculated)	(calculated)	0.690	1252.567
3		(calculated)	(calculated)	0.832	1474.565

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	✓	883.27	100.000
2	ONE HOUR	✓	262.40	100.000
3	ONE HOUR	✓	912.89	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	202.495	680.771
	2	220.908	0.000	41.489
	3	828.178	84.709	0.000

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

		To		
		1	2	3
From	1	0.00	0.23	0.77
	2	0.84	0.00	0.16
	3	0.91	0.09	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.39	2.33	0.63	A	810.50	1215.75	43.09	2.13	0.48	43.09	2.13
2	0.39	8.06	0.64	A	240.78	361.17	39.21	6.51	0.44	39.21	6.51
3	0.79	13.39	3.64	B	837.68	1256.52	184.47	8.81	2.05	184.50	8.81

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	664.97	166.24	663.55	785.08	63.39	0.00	2539.89	2476.83	0.262	0.00	0.35	1.918	A
2	197.55	49.39	196.43	215.51	511.43	0.00	899.62	0.00	0.220	0.00	0.28	5.111	A
3	687.27	171.82	683.09	542.49	165.37	0.00	1336.94	1474.56	0.514	0.00	1.04	5.471	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	794.04	198.51	793.63	940.55	75.93	0.00	2529.12	2476.83	0.314	0.35	0.46	2.074	A
2	235.89	58.97	235.43	257.87	611.68	0.00	830.43	0.00	0.284	0.28	0.39	6.050	A
3	820.67	205.17	818.27	648.91	198.21	0.00	1309.62	1474.56	0.627	1.04	1.64	7.289	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	972.49	243.12	971.81	1147.42	92.57	0.00	2514.83	2476.83	0.387	0.46	0.63	2.331	A
2	288.90	72.23	287.93	315.36	749.01	0.00	735.66	0.00	0.393	0.39	0.64	8.023	A
3	1005.11	251.28	997.59	794.54	242.40	0.00	1272.84	1474.56	0.790	1.64	3.52	12.739	B

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	972.49	243.12	972.49	1154.64	93.22	0.00	2514.27	2476.83	0.387	0.63	0.63	2.334	A
2	288.90	72.23	288.89	316.17	749.54	0.00	735.30	0.00	0.393	0.64	0.64	8.064	A
3	1005.11	251.28	1004.65	795.21	243.21	0.00	1272.17	1474.56	0.790	3.52	3.64	13.395	B

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	794.04	198.51	794.72	950.88	76.86	0.00	2528.31	2476.83	0.314	0.63	0.46	2.078	A
2	235.89	58.97	236.86	259.06	612.52	0.00	829.85	0.00	0.284	0.64	0.40	6.080	A
3	820.67	205.17	828.34	649.97	199.41	0.00	1308.62	1474.56	0.627	3.64	1.72	7.610	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	664.97	166.24	665.38	792.54	64.01	0.00	2539.35	2476.83	0.262	0.46	0.36	1.921	A
2	197.55	49.39	198.01	216.56	512.84	0.00	898.65	0.00	0.220	0.40	0.28	5.141	A
3	687.27	171.82	689.85	544.15	166.71	0.00	1335.83	1474.56	0.514	1.72	1.07	5.596	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	5.23	0.35	1.918	A	A
2	4.07	0.27	5.111	A	A
3	15.04	1.00	5.471	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	6.77	0.45	2.074	A	A
2	5.76	0.38	6.050	A	A
3	23.60	1.57	7.289	A	A

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	9.29	0.62	2.331	A	A
2	9.23	0.62	8.023	A	A
3	47.96	3.20	12.739	B	B

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	9.43	0.63	2.334	A	A
2	9.61	0.64	8.064	A	A
3	53.88	3.59	13.395	B	B

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	6.98	0.47	2.078	A	A
2	6.19	0.41	6.080	A	A
3	27.33	1.82	7.610	A	A

Queueing Delay results: (09:15-09:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	5.39	0.36	1.921	A	A
2	4.35	0.29	5.141	A	A
3	16.67	1.11	5.596	A	A

(Default Analysis Set) - 2037 Do Something, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relati
2037 Do Something, PM	2037 Do Something	PM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				12.28	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1117 Saltwater Way	
2	2	B1531 Victoria Way	
3	3	A1117 Bridge Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00

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	7.40	8.70	2.30	43.60	35.70	12.00	
2	4.40	8.10	7.80	17.30	35.70	17.50	
3	6.60	8.10	4.40	54.70	35.70	9.50	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
1	None			
2	Percentage			68.00
3	Direct		-969.10	

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)	0.859	2594.311
2		(calculated)	(calculated)	0.690	1252.567
3		(calculated)	(calculated)	0.832	1474.565

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	✓	1164.56	100.000
2	ONE HOUR	✓	396.10	100.000
3	ONE HOUR	✓	809.85	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	227.805	936.759
	2	386.886	0.000	9.218
	3	739.968	69.879	0.000

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

		To		
		1	2	3
From	1	0.00	0.20	0.80
	2	0.98	0.00	0.02
	3	0.91	0.09	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.51	2.89	1.03	A	1068.62	1602.94	67.16	2.51	0.75	67.16	2.51
2	0.81	33.25	3.81	D	363.47	545.21	154.68	17.02	1.72	154.70	17.02
3	0.80	15.53	3.71	C	743.13	1114.70	180.17	9.70	2.00	180.20	9.70

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	876.75	219.19	874.66	842.38	52.28	0.00	2549.43	2485.06	0.344	0.00	0.52	2.146	A
2	298.21	74.55	295.70	223.37	703.56	0.00	767.03	0.00	0.389	0.00	0.63	7.599	A
3	609.70	152.42	605.84	710.44	288.82	0.00	1234.21	1474.56	0.494	0.00	0.96	5.696	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1046.92	261.73	1046.22	1009.02	62.62	0.00	2540.55	2485.06	0.412	0.52	0.70	2.407	A
2	356.09	89.02	354.20	267.27	841.56	0.00	671.79	0.00	0.530	0.63	1.10	11.269	B
3	728.04	182.01	725.68	849.81	345.96	0.00	1186.66	1474.56	0.614	0.96	1.55	7.769	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1282.21	320.55	1280.91	1223.98	76.26	0.00	2528.83	2485.06	0.507	0.70	1.02	2.882	A
2	436.12	109.03	426.34	326.83	1030.35	0.00	541.50	0.00	0.805	1.10	3.54	29.119	D
3	891.66	222.91	883.83	1040.27	416.42	0.00	1128.02	1474.56	0.790	1.55	3.51	14.298	B

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1282.21	320.55	1282.20	1238.90	76.87	0.00	2528.31	2485.06	0.507	1.02	1.03	2.888	A
2	436.12	109.03	435.04	327.68	1031.38	0.00	540.79	0.00	0.806	3.54	3.81	33.248	D
3	891.66	222.91	890.86	1041.50	424.92	0.00	1120.95	1474.56	0.795	3.51	3.71	15.527	C

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	1046.92	261.73	1048.20	1030.88	63.53	0.00	2539.76	2485.06	0.412	1.03	0.70	2.417	A
2	356.09	89.02	366.69	268.57	843.16	0.00	670.69	0.00	0.531	3.81	1.16	12.233	B
3	728.04	182.01	736.25	851.69	358.16	0.00	1176.50	1474.56	0.619	3.71	1.66	8.324	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	876.75	219.19	877.46	852.80	52.84	0.00	2548.94	2485.06	0.344	0.70	0.53	2.156	A
2	298.21	74.55	300.27	224.48	705.82	0.00	765.47	0.00	0.390	1.16	0.65	7.772	A
3	609.70	152.42	612.36	712.80	293.28	0.00	1230.50	1474.56	0.495	1.66	0.99	5.850	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	7.71	0.51	2.146	A	A
2	9.00	0.60	7.599	A	A
3	13.88	0.93	5.696	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	10.32	0.69	2.407	A	A
2	15.64	1.04	11.269	B	B
3	22.27	1.48	7.769	A	A

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	15.04	1.00	2.882	A	A
2	44.84	2.99	29.119	D	C
3	47.41	3.16	14.298	B	B

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	15.36	1.02	2.888	A	A
2	55.57	3.70	33.248	D	C
3	54.56	3.64	15.527	C	B

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	10.74	0.72	2.417	A	A
2	19.53	1.30	12.233	B	B
3	26.59	1.77	8.324	A	A

Queueing Delay results: (09:15-09:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	7.99	0.53	2.156	A	A
2	10.10	0.67	7.772	A	A
3	15.46	1.03	5.850	A	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.6.541 [19821,26/11/2015]

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: 11 Normanston Dr-Gorleston Rd v4 2017-10-24.arc8
Path: L:\106xxx\1069948 Lowestoft Third Crossing\09 Documents\06_Modelling_Junction Modelling Sep 2017_Junction Modelling\11 Normanston Dr-Gorleston Rd rdbt
Report generation date: 03/04/2018 09:50:07

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2016 Base							
Arm 1	8.79	61.50	0.93	F	32.44	226.14	1.12	F
Arm 2	1.64	4.86	0.62	A	1.75	4.97	0.64	A
Arm 3	1.15	5.93	0.54	A	1.69	6.49	0.63	A
	A1 - 2022 Do Minimum							
Arm 1	23.65	165.31	1.06	F	58.95	450.55	1.33	F
Arm 2	1.92	5.31	0.66	A	2.63	6.56	0.73	A
Arm 3	2.46	10.18	0.72	B	3.00	10.65	0.75	B
	A1 - 2022 Do Something							
Arm 1	1.48	12.68	0.60	B	18.39	132.26	1.02	F
Arm 2	0.82	3.32	0.45	A	1.09	3.89	0.52	A
Arm 3	0.58	3.70	0.37	A	1.05	4.50	0.51	A
	A1 - 2037 Do Minimum							
Arm 1	31.33	218.32	1.12	F	79.79	684.29	1.56	F
Arm 2	2.51	6.35	0.72	A	3.23	7.70	0.77	A
Arm 3	5.53	22.17	0.86	C	5.83	19.42	0.86	C
	A1 - 2037 Do Something							
Arm 1	2.39	18.80	0.71	C	32.22	228.99	1.12	F
Arm 2	1.13	3.90	0.53	A	1.43	4.50	0.59	A
Arm 3	0.86	4.62	0.46	A	1.43	5.50	0.59	A

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

"D1 - 2016 Base, AM " model duration: 08:00 - 09:30
"D2 - 2016 Base, PM" model duration: 17:00 - 18:30
"D3 - 2022 Do Minimum, AM" model duration: 08:00 - 09:30
"D4 - 2022 Do Minimum, PM" model duration: 17:00 - 18:30
"D5 - 2022 Do Something, AM" model duration: 08:00 - 09:30
"D6 - 2022 Do Something, PM" model duration: 17:00 - 18:30
"D7 - 2037 Do Minimum, AM" model duration: 08:00 - 09:30
"D8 - 2037 Do Minimum, PM" model duration: 17:00 - 18:30
"D9 - 2037 Do Something, AM" model duration: 08:00 - 09:30
"D10 - 2037 Do Something, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.6.541 at 03/04/2018 09:50:03

File summary

Title	A1117 Normanston Dr/B1375 Gorleston Rd
Location	Lowestoft
Site Number	
Date	13/02/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ecopp
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) - 2016 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2016 Base, AM	2016 Base	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				17.77	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1117 Normanston Drive	
2	2	A1117 Bridge Road	
3	3	B1375 Gorleston Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00

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	4.40	6.80	17.40	999.00	38.10	23.00	
2	3.90	7.00	31.40	172.20	38.10	25.00	
3	5.10	7.00	8.60	28.40	38.10	17.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
1	Direct		-922.34	
2	None			
3	None			

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)	0.722	1048.079
2		(calculated)	(calculated)	0.727	2010.306
3		(calculated)	(calculated)	0.723	1994.714

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	✓	501.12	100.000
2	ONE HOUR	✓	1112.73	100.000
3	ONE HOUR	✓	638.80	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	444.145	56.977
	2	859.723	0.000	253.005
	3	69.111	569.688	0.000

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

		To		
		1	2	3
From	1	0.00	0.89	0.11
	2	0.77	0.00	0.23
	3	0.11	0.89	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.93	61.50	8.79	F	459.84	689.76	303.74	26.42	3.37	303.79	26.43
2	0.62	4.86	1.64	A	1021.06	1531.59	101.13	3.96	1.12	101.14	3.96
3	0.54	5.93	1.15	A	586.17	879.26	67.56	4.61	0.75	67.56	4.61

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	377.27	94.32	373.19	696.82	427.26	0.00	739.44	472.83	0.510	0.00	1.02	9.726	A
2	837.72	209.43	834.80	758.02	42.43	0.00	1979.47	1971.23	0.423	0.00	0.73	3.137	A
3	480.92	120.23	479.09	232.24	644.99	0.00	1528.13	892.96	0.315	0.00	0.46	3.426	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	450.50	112.62	447.04	834.02	511.41	0.00	678.66	472.83	0.664	1.02	1.88	15.312	C
2	1000.32	250.08	999.16	907.62	50.83	0.00	1973.36	1971.23	0.507	0.73	1.02	3.690	A
3	574.27	143.57	573.45	278.01	771.98	0.00	1436.27	892.96	0.400	0.46	0.66	4.169	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	551.75	137.94	530.25	1020.57	625.53	0.00	596.22	472.83	0.925	1.88	7.26	44.667	E
2	1225.14	306.28	1222.69	1095.49	60.29	0.00	1966.49	1971.23	0.623	1.02	1.63	4.825	A
3	703.33	175.83	701.41	338.30	944.69	0.00	1311.33	892.96	0.536	0.66	1.14	5.883	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	551.75	137.94	545.61	1022.62	627.20	0.00	595.01	472.83	0.927	7.26	8.79	61.499	F
2	1225.14	306.28	1225.08	1110.78	62.04	0.00	1965.22	1971.23	0.623	1.63	1.64	4.863	A
3	703.33	175.83	703.29	340.59	946.53	0.00	1309.99	892.96	0.537	1.14	1.15	5.933	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	450.50	112.62	477.26	837.08	513.84	0.00	676.90	472.83	0.666	8.79	2.10	20.175	C
2	1000.32	250.08	1002.73	936.84	54.26	0.00	1970.87	1971.23	0.508	1.64	1.04	3.726	A
3	574.27	143.57	576.18	282.26	774.74	0.00	1434.27	892.96	0.400	1.15	0.67	4.205	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	377.27	94.32	381.39	700.29	429.64	0.00	737.72	472.83	0.511	2.10	1.07	10.214	B
2	837.72	209.43	838.92	767.66	43.36	0.00	1978.79	1971.23	0.423	1.04	0.74	3.163	A
3	480.92	120.23	481.76	234.11	648.17	0.00	1525.83	892.96	0.315	0.67	0.46	3.450	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	14.37	0.96	9.726	A	A
2	10.68	0.71	3.137	A	A
3	6.70	0.45	3.426	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	26.12	1.74	15.312	C	B
2	14.96	1.00	3.690	A	A
3	9.71	0.65	4.169	A	A

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	82.54	5.50	44.667	E	D
2	23.62	1.57	4.825	A	A
3	16.52	1.10	5.883	A	A

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	121.77	8.12	61.499	F	E
2	24.57	1.64	4.863	A	A
3	17.20	1.15	5.933	A	A

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	41.97	2.80	20.175	C	C
2	16.00	1.07	3.726	A	A
3	10.36	0.69	4.205	A	A

Queueing Delay results: (09:15-09:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	16.97	1.13	10.214	B	B
2	11.29	0.75	3.163	A	A
3	7.07	0.47	3.450	A	A

(Default Analysis Set) - 2016 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2016 Base, PM	2016 Base	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				44.89	E

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1117 Normanston Drive	
2	2	A1117 Bridge Road	
3	3	B1375 Gorleston Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00

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	4.40	6.80	17.40	999.00	38.10	23.00	
2	3.90	7.00	31.40	172.20	38.10	25.00	
3	5.10	7.00	8.60	28.40	38.10	17.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
1	Direct		-922.34	
2	None			
3	None			

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)	0.722	1048.079
2		(calculated)	(calculated)	0.727	2010.306
3		(calculated)	(calculated)	0.723	1994.714

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	✓	437.03	100.000
2	ONE HOUR	✓	1159.63	100.000
3	ONE HOUR	✓	857.51	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	424.820	12.210
	2	623.365	0.000	536.264
	3	80.404	777.107	0.000

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

		To		
		1	2	3
From	1	0.00	0.97	0.03
	2	0.54	0.00	0.46
	3	0.09	0.91	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	1.12	226.14	32.44	F	401.03	601.54	863.09	86.09	9.59	863.16	86.09
2	0.64	4.97	1.75	A	1064.10	1596.14	107.09	4.03	1.19	107.10	4.03
3	0.63	6.49	1.69	A	786.87	1180.30	96.67	4.91	1.07	96.68	4.91

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	329.02	82.25	324.72	527.95	582.75	0.00	627.13	252.73	0.525	0.00	1.07	11.747	B
2	873.03	218.26	869.96	898.40	9.07	0.00	2003.71	2005.17	0.436	0.00	0.77	3.168	A
3	645.58	161.39	643.04	411.38	467.65	0.00	1656.41	1214.97	0.390	0.00	0.63	3.543	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	392.88	98.22	387.62	631.90	697.52	0.00	544.22	252.73	0.722	1.07	2.39	22.268	C
2	1042.48	260.62	1041.24	1074.31	10.83	0.00	2002.44	2005.17	0.521	0.77	1.08	3.740	A
3	770.89	192.72	769.69	492.35	559.73	0.00	1589.81	1214.97	0.485	0.63	0.93	4.383	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	481.18	120.29	415.78	773.17	852.94	0.00	431.95	252.73	1.114	2.39	18.74	112.853	F
2	1276.77	319.19	1274.14	1257.10	11.62	0.00	2001.86	2005.17	0.638	1.08	1.74	4.929	A
3	944.14	236.03	941.19	600.84	684.92	0.00	1499.24	1214.97	0.630	0.93	1.67	6.416	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	481.18	120.29	426.38	774.83	855.55	0.00	430.07	252.73	1.119	18.74	32.44	226.144	F
2	1276.77	319.19	1276.72	1270.02	11.91	0.00	2001.65	2005.17	0.638	1.74	1.75	4.965	A
3	944.14	236.03	944.07	602.33	686.31	0.00	1498.24	1214.97	0.630	1.67	1.69	6.493	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	392.88	98.22	508.90	634.35	701.27	0.00	541.51	252.73	0.726	32.44	3.43	123.096	F
2	1042.48	260.62	1045.08	1195.95	14.22	0.00	1999.97	2005.17	0.521	1.75	1.10	3.782	A
3	770.89	192.72	773.83	497.51	561.79	0.00	1588.31	1214.97	0.485	1.69	0.95	4.437	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	329.02	82.25	338.18	530.64	586.16	0.00	624.66	252.73	0.527	3.43	1.14	12.945	B
2	873.03	218.26	874.31	914.89	9.45	0.00	2003.44	2005.17	0.436	1.10	0.78	3.191	A
3	645.58	161.39	646.81	413.77	469.99	0.00	1654.72	1214.97	0.390	0.95	0.64	3.575	A

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	14.99	1.00	11.747	B	B
2	11.23	0.75	3.168	A	A
3	9.28	0.62	3.543	A	A

Queueing Delay results: (17:15-17:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	31.99	2.13	22.268	C	C
2	15.79	1.05	3.740	A	A
3	13.65	0.91	4.383	A	A

Queueing Delay results: (17:30-17:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	169.64	11.31	112.853	F	F
2	25.11	1.67	4.929	A	A
3	23.96	1.60	6.416	A	A

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	384.82	25.65	226.144	F	F
2	26.15	1.74	4.965	A	A
3	25.20	1.68	6.493	A	A

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	242.58	16.17	123.096	F	F
2	16.92	1.13	3.782	A	A
3	14.72	0.98	4.437	A	A

Queueing Delay results: (18:15-18:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	19.07	1.27	12.945	B	B
2	11.89	0.79	3.191	A	A
3	9.86	0.66	3.575	A	A

(Default Analysis Set) - 2022 Do Minimum, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2022 Do Minimum, AM	2022 Do Minimum	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				36.16	E

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1117 Normanston Drive	
2	2	A1117 Bridge Road	
3	3	B1375 Gorleston Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00

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	4.40	6.80	17.40	999.00	38.10	23.00	
2	3.90	7.00	31.40	172.20	38.10	25.00	
3	5.10	7.00	8.60	28.40	38.10	17.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
1	Direct		-922.34	
2	None			
3	None			

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)	0.722	1048.079
2		(calculated)	(calculated)	0.727	2010.306
3		(calculated)	(calculated)	0.723	1994.714

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	✓	446.78	100.000
2	ONE HOUR	✓	1191.99	100.000
3	ONE HOUR	✓	805.49	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	419.563	27.212
	2	948.078	0.000	243.910
	3	70.047	735.442	0.000

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

		To		
		1	2	3
From	1	0.00	0.94	0.06
	2	0.80	0.00	0.20
	3	0.09	0.91	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	1.06	165.31	23.65	F	409.97	614.95	624.30	60.91	6.94	624.36	60.92
2	0.66	5.31	1.92	A	1093.79	1640.68	115.70	4.23	1.29	115.71	4.23
3	0.72	10.18	2.46	B	739.13	1108.70	124.58	6.74	1.38	124.59	6.74

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	336.36	84.09	332.17	763.68	551.16	0.00	649.94	487.18	0.518	0.00	1.05	11.190	B
2	897.39	224.35	894.14	863.11	20.23	0.00	1995.60	1988.74	0.450	0.00	0.81	3.259	A
3	606.41	151.60	603.66	203.20	711.18	0.00	1480.25	850.44	0.410	0.00	0.69	4.095	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	401.64	100.41	397.01	914.05	659.67	0.00	571.56	487.18	0.703	1.05	2.20	20.102	C
2	1071.57	267.89	1070.21	1032.50	24.18	0.00	1992.73	1988.74	0.538	0.81	1.15	3.897	A
3	724.12	181.03	722.50	243.17	851.22	0.00	1378.94	850.44	0.525	0.69	1.09	5.471	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	491.91	122.98	442.57	1118.13	804.92	0.00	466.64	487.18	1.054	2.20	14.54	88.429	F
2	1312.40	328.10	1309.40	1220.53	26.96	0.00	1990.71	1988.74	0.659	1.15	1.90	5.261	A
3	886.86	221.71	881.58	294.89	1041.47	0.00	1241.32	850.44	0.714	1.09	2.41	9.866	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	491.91	122.98	455.47	1120.90	809.55	0.00	463.30	487.18	1.062	14.54	23.65	165.307	F
2	1312.40	328.10	1312.34	1237.27	27.74	0.00	1990.14	1988.74	0.659	1.90	1.92	5.311	A
3	886.86	221.71	886.65	296.28	1043.80	0.00	1239.63	850.44	0.715	2.41	2.46	10.182	B

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	401.64	100.41	485.19	918.10	666.04	0.00	566.96	487.18	0.708	23.65	2.76	67.578	F
2	1071.57	267.89	1074.53	1121.67	29.55	0.00	1988.83	1988.74	0.539	1.92	1.18	3.949	A
3	724.12	181.03	729.47	249.43	854.66	0.00	1376.45	850.44	0.526	2.46	1.12	5.610	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	336.36	84.09	342.96	767.78	555.22	0.00	647.01	487.18	0.520	2.76	1.11	12.085	B
2	897.39	224.35	898.82	877.29	20.89	0.00	1995.12	1988.74	0.450	1.18	0.82	3.289	A
3	606.41	151.60	608.10	204.81	714.90	0.00	1477.56	850.44	0.410	1.12	0.70	4.148	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	14.64	0.98	11.190	B	B
2	11.87	0.79	3.259	A	A
3	10.03	0.67	4.095	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	29.84	1.99	20.102	C	C
2	16.88	1.13	3.897	A	A
3	15.87	1.06	5.471	A	A

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	138.71	9.25	88.429	F	F
2	27.44	1.83	5.261	A	A
3	33.64	2.24	9.866	A	A

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	287.97	19.20	165.307	F	F
2	28.70	1.91	5.311	A	A
3	36.65	2.44	10.182	B	B

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	135.07	9.00	67.578	F	E
2	18.21	1.21	3.949	A	A
3	17.60	1.17	5.610	A	A

Queueing Delay results: (09:15-09:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	18.07	1.20	12.085	B	B
2	12.60	0.84	3.289	A	A
3	10.79	0.72	4.148	A	A

(Default Analysis Set) - 2022 Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2022 Do Minimum, PM	2022 Do Minimum	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				75.86	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1117 Normanston Drive	
2	2	A1117 Bridge Road	
3	3	B1375 Gorleston Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00

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	4.40	6.80	17.40	999.00	38.10	23.00	
2	3.90	7.00	31.40	172.20	38.10	25.00	
3	5.10	7.00	8.60	28.40	38.10	17.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
1	Direct		-922.34	
2	None			
3	None			

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)	0.722	1048.079
2		(calculated)	(calculated)	0.727	2010.306
3		(calculated)	(calculated)	0.723	1994.714

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	✓	408.62	100.000
2	ONE HOUR	✓	1325.60	100.000
3	ONE HOUR	✓	939.38	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	404.304	4.318
	2	782.978	0.000	542.620
	3	48.000	891.380	0.000

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

		To		
		1	2	3
From	1	0.00	0.99	0.01
	2	0.59	0.00	0.41
	3	0.05	0.95	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	1.33	450.55	58.95	F	374.96	562.44	1886.16	201.21	20.96	1886.25	201.22
2	0.73	6.56	2.63	A	1216.39	1824.59	149.78	4.93	1.66	149.79	4.93
3	0.75	10.65	3.00	B	861.99	1292.99	149.39	6.93	1.66	149.40	6.93

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	307.63	76.91	303.02	623.12	667.99	0.00	565.55	268.98	0.544	0.00	1.15	13.490	B
2	997.98	249.49	994.06	967.81	3.20	0.00	2007.98	2008.24	0.497	0.00	0.98	3.538	A
3	707.21	176.80	703.96	410.11	587.15	0.00	1569.97	1136.63	0.450	0.00	0.81	4.143	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	367.34	91.84	359.61	745.84	799.49	0.00	470.56	268.98	0.781	1.15	3.09	30.532	D
2	1191.69	297.92	1189.83	1155.30	3.80	0.00	2007.54	2008.24	0.594	0.98	1.44	4.393	A
3	844.48	211.12	842.55	490.85	702.79	0.00	1486.32	1136.63	0.568	0.81	1.30	5.575	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	449.90	112.48	337.66	911.87	975.27	0.00	343.59	268.98	1.309	3.09	31.15	205.694	F
2	1459.51	364.88	1454.90	1309.36	3.57	0.00	2007.71	2008.24	0.727	1.44	2.60	6.458	A
3	1034.28	258.57	1027.79	599.12	859.35	0.00	1373.06	1136.63	0.753	1.30	2.92	10.237	B

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	449.90	112.48	338.72	914.83	981.14	0.00	339.34	268.98	1.326	31.15	58.95	450.553	F
2	1459.51	364.88	1459.38	1316.28	3.58	0.00	2007.70	2008.24	0.727	2.60	2.63	6.561	A
3	1034.28	258.57	1033.98	600.96	862.00	0.00	1371.14	1136.63	0.754	2.92	3.00	10.652	B

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	367.34	91.84	456.94	750.09	807.62	0.00	464.69	268.98	0.791	58.95	36.55	369.283	F
2	1191.69	297.92	1196.28	1259.73	4.83	0.00	2006.80	2008.24	0.594	2.63	1.48	4.467	A
3	844.48	211.12	851.11	494.51	706.60	0.00	1483.56	1136.63	0.569	3.00	1.34	5.751	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	307.63	76.91	448.63	626.85	673.02	0.00	561.92	268.98	0.547	36.55	1.30	75.230	F
2	997.98	249.49	999.91	1116.91	4.74	0.00	2006.86	2008.24	0.497	1.48	1.00	3.581	A
3	707.21	176.80	709.26	414.04	590.61	0.00	1567.47	1136.63	0.451	1.34	0.83	4.204	A

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	15.97	1.06	13.490	B	B
2	14.28	0.95	3.538	A	A
3	11.82	0.79	4.143	A	A

Queueing Delay results: (17:15-17:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	39.61	2.64	30.532	D	C
2	21.03	1.40	4.393	A	A
3	18.80	1.25	5.575	A	A

Queueing Delay results: (17:30-17:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	262.48	17.50	205.694	F	F
2	36.92	2.46	6.458	A	A
3	40.40	2.69	10.237	B	B

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	675.94	45.06	450.553	F	F
2	39.23	2.62	6.561	A	A
3	44.50	2.97	10.652	B	B

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	716.19	47.75	369.283	F	F
2	23.00	1.53	4.467	A	A
3	21.08	1.41	5.751	A	A

Queueing Delay results: (18:15-18:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	175.98	11.73	75.230	F	E
2	15.32	1.02	3.581	A	A
3	12.77	0.85	4.204	A	A

(Default Analysis Set) - 2022 Do Something, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relati
2022 Do Something, AM	2022 Do Something	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				5.56	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1117 Normanston Drive	
2	2	A1117 Bridge Road	
3	3	B1375 Gorleston Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00

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	4.40	6.80	17.40	999.00	38.10	23.00	
2	3.90	7.00	31.40	172.20	38.10	25.00	
3	5.10	7.00	8.60	28.40	38.10	17.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
1	Direct		-922.34	
2	None			
3	None			

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)	0.722	1048.079
2		(calculated)	(calculated)	0.727	2010.306
3		(calculated)	(calculated)	0.723	1994.714

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	✓	386.68	100.000
2	ONE HOUR	✓	806.77	100.000
3	ONE HOUR	✓	512.88	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	337.519	49.163
	2	575.543	0.000	231.224
	3	86.999	425.885	0.000

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

		To		
		1	2	3
From	1	0.00	0.87	0.13
	2	0.71	0.00	0.29
	3	0.17	0.83	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.60	12.68	1.48	B	354.83	532.24	83.74	9.44	0.93	83.75	9.44
2	0.45	3.32	0.82	A	740.30	1110.46	54.84	2.96	0.61	54.84	2.96
3	0.37	3.70	0.58	A	470.63	705.95	38.04	3.23	0.42	38.04	3.23

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	291.11	72.78	288.93	497.34	319.64	0.00	817.18	460.71	0.356	0.00	0.55	6.788	A
2	607.38	151.84	605.62	571.84	36.73	0.00	1983.61	1967.73	0.306	0.00	0.44	2.609	A
3	386.13	96.53	384.94	210.31	432.04	0.00	1682.17	979.23	0.230	0.00	0.30	2.772	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	347.62	86.90	346.58	595.15	382.53	0.00	771.75	460.71	0.450	0.55	0.81	8.446	A
2	725.27	181.32	724.72	685.05	44.06	0.00	1978.28	1967.73	0.367	0.44	0.58	2.870	A
3	461.07	115.27	460.68	251.77	517.01	0.00	1620.71	979.23	0.284	0.30	0.40	3.103	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	425.75	106.44	423.17	728.67	468.31	0.00	709.79	460.71	0.600	0.81	1.45	12.447	B
2	888.27	222.07	887.31	837.67	53.80	0.00	1971.20	1967.73	0.451	0.58	0.81	3.318	A
3	564.70	141.17	563.97	308.11	633.00	0.00	1536.80	979.23	0.367	0.40	0.58	3.699	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	425.75	106.44	425.65	729.46	468.90	0.00	709.36	460.71	0.600	1.45	1.48	12.677	B
2	888.27	222.07	888.26	840.43	54.12	0.00	1970.97	1967.73	0.451	0.81	0.82	3.324	A
3	564.70	141.17	564.69	308.70	633.68	0.00	1536.31	979.23	0.368	0.58	0.58	3.704	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	347.62	86.90	350.18	596.41	383.46	0.00	771.08	460.71	0.451	1.48	0.83	8.605	A
2	725.27	181.32	726.21	689.12	44.52	0.00	1977.95	1967.73	0.367	0.82	0.58	2.877	A
3	461.07	115.27	461.79	252.66	518.07	0.00	1619.94	979.23	0.285	0.58	0.40	3.112	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	291.11	72.78	292.21	499.26	320.96	0.00	816.23	460.71	0.357	0.83	0.56	6.883	A
2	607.38	151.84	607.93	576.02	37.15	0.00	1983.30	1967.73	0.306	0.58	0.44	2.620	A
3	386.13	96.53	386.53	211.39	433.69	0.00	1680.98	979.23	0.230	0.40	0.30	2.783	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	7.88	0.53	6.788	A	A
2	6.47	0.43	2.609	A	A
3	4.37	0.29	2.772	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	11.66	0.78	8.446	A	A
2	8.51	0.57	2.870	A	A
3	5.85	0.39	3.103	A	A

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	20.43	1.36	12.447	B	B
2	11.99	0.80	3.318	A	A
3	8.49	0.57	3.699	A	A

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	21.98	1.47	12.677	B	B
2	12.25	0.82	3.324	A	A
3	8.68	0.58	3.704	A	A

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	13.10	0.87	8.605	A	A
2	8.88	0.59	2.877	A	A
3	6.10	0.41	3.112	A	A

Queueing Delay results: (09:15-09:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	8.68	0.58	6.883	A	A
2	6.74	0.45	2.620	A	A
3	4.55	0.30	2.783	A	A

(Default Analysis Set) - 2022 Do Something, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relati
2022 Do Something, PM	2022 Do Something	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				31.00	D

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1117 Normanston Drive	
2	2	A1117 Bridge Road	
3	3	B1375 Gorleston Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00

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	4.40	6.80	17.40	999.00	38.10	23.00	
2	3.90	7.00	31.40	172.20	38.10	25.00	
3	5.10	7.00	8.60	28.40	38.10	17.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
1	Direct		-922.34	
2	None			
3	None			

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)	0.722	1048.079
2		(calculated)	(calculated)	0.727	2010.306
3		(calculated)	(calculated)	0.723	1994.714

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	✓	449.08	100.000
2	ONE HOUR	✓	925.48	100.000
3	ONE HOUR	✓	768.66	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	363.586	85.497
	2	437.271	0.000	488.206
	3	58.273	710.389	0.000

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

		To		
		1	2	3
From	1	0.00	0.81	0.19
	2	0.47	0.00	0.53
	3	0.08	0.92	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	1.02	132.26	18.39	F	412.09	618.13	501.92	48.72	5.58	501.98	48.73
2	0.52	3.89	1.09	A	849.23	1273.85	71.13	3.35	0.79	71.14	3.35
3	0.51	4.50	1.05	A	705.34	1058.01	66.11	3.75	0.73	66.12	3.75

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	338.09	84.52	334.03	371.89	533.01	0.00	663.05	169.77	0.510	0.00	1.02	10.812	B
2	696.75	174.19	694.56	803.45	63.59	0.00	1964.08	1986.82	0.355	0.00	0.55	2.831	A
3	578.69	144.67	576.74	429.99	328.17	0.00	1757.32	1315.63	0.329	0.00	0.49	3.044	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	403.72	100.93	399.51	445.07	637.94	0.00	587.26	169.77	0.687	1.02	2.07	18.759	C
2	831.98	208.00	831.23	961.39	76.06	0.00	1955.02	1986.82	0.426	0.55	0.74	3.202	A
3	691.01	172.75	690.27	514.55	392.74	0.00	1710.61	1315.63	0.404	0.49	0.67	3.527	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	494.45	123.61	453.59	544.83	780.77	0.00	484.08	169.77	1.021	2.07	12.28	76.314	F
2	1018.97	254.74	1017.56	1148.01	86.36	0.00	1947.54	1986.81	0.523	0.74	1.09	3.866	A
3	846.31	211.58	844.82	623.14	480.78	0.00	1646.92	1315.63	0.514	0.67	1.05	4.480	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	494.45	123.61	469.99	545.59	782.13	0.00	483.10	169.77	1.024	12.28	18.39	132.261	F
2	1018.97	254.74	1018.94	1162.65	89.48	0.00	1945.27	1986.81	0.524	1.09	1.09	3.886	A
3	846.31	211.58	846.29	626.99	481.43	0.00	1646.45	1315.63	0.514	1.05	1.05	4.498	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	403.72	100.93	467.59	446.24	639.99	0.00	585.77	169.77	0.689	18.39	2.43	43.262	E
2	831.98	208.00	833.36	1018.56	89.02	0.00	1945.60	1986.82	0.428	1.09	0.75	3.239	A
3	691.01	172.75	692.49	528.63	393.75	0.00	1709.88	1315.63	0.404	1.05	0.68	3.545	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	338.09	84.52	343.51	373.50	535.52	0.00	661.24	169.77	0.511	2.43	1.07	11.513	B
2	696.75	174.19	697.54	813.63	65.40	0.00	1962.77	1986.82	0.355	0.75	0.55	2.846	A
3	578.69	144.67	579.44	433.37	329.58	0.00	1756.30	1315.63	0.329	0.68	0.49	3.060	A

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	14.25	0.95	10.812	B	B
2	8.04	0.54	2.831	A	A
3	7.17	0.48	3.044	A	A

Queueing Delay results: (17:15-17:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	28.19	1.88	18.759	C	B
2	10.85	0.72	3.202	A	A
3	9.91	0.66	3.527	A	A

Queueing Delay results: (17:30-17:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	121.60	8.11	76.314	F	E
2	15.93	1.06	3.866	A	A
3	15.28	1.02	4.480	A	A

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	231.90	15.46	132.261	F	F
2	16.38	1.09	3.886	A	A
3	15.75	1.05	4.498	A	A

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	88.73	5.92	43.262	E	D
2	11.51	0.77	3.239	A	A
3	10.47	0.70	3.545	A	A

Queueing Delay results: (18:15-18:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	17.25	1.15	11.513	B	B
2	8.43	0.56	2.846	A	A
3	7.53	0.50	3.060	A	A

(Default Analysis Set) - 2037 Do Minimum, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2037 Do Minimum, AM	2037 Do Minimum	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				47.12	E

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1117 Normanston Drive	
2	2	A1117 Bridge Road	
3	3	B1375 Gorleston Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00

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	4.40	6.80	17.40	999.00	38.10	23.00	
2	3.90	7.00	31.40	172.20	38.10	25.00	
3	5.10	7.00	8.60	28.40	38.10	17.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
1	Direct		-922.34	
2	None			
3	None			

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)	0.722	1048.079
2		(calculated)	(calculated)	0.727	2010.306
3		(calculated)	(calculated)	0.723	1994.714

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	✓	436.26	100.000
2	ONE HOUR	✓	1306.82	100.000
3	ONE HOUR	✓	858.63	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	428.469	7.788
	2	1120.186	0.000	186.633
	3	79.024	779.601	0.000

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

		To		
		1	2	3
From	1	0.00	0.98	0.02
	2	0.86	0.00	0.14
	3	0.09	0.91	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	1.12	218.32	31.33	F	400.32	600.48	837.09	83.64	9.30	837.15	83.65
2	0.72	6.35	2.51	A	1199.16	1798.74	144.36	4.82	1.60	144.37	4.82
3	0.86	22.17	5.53	C	787.89	1181.83	220.99	11.22	2.46	221.01	11.22

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	328.44	82.11	324.15	899.24	583.79	0.00	626.38	554.46	0.524	0.00	1.07	11.754	B
2	983.84	245.96	980.02	902.15	5.79	0.00	2006.10	2003.11	0.490	0.00	0.96	3.495	A
3	646.42	161.60	642.96	145.75	840.06	0.00	1387.01	752.61	0.466	0.00	0.86	4.816	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	392.19	98.05	386.93	1076.30	698.44	0.00	543.56	554.46	0.722	1.07	2.39	22.265	C
2	1174.80	293.70	1173.03	1078.46	6.91	0.00	2005.29	2003.11	0.586	0.96	1.40	4.315	A
3	771.89	192.97	769.23	174.43	1005.50	0.00	1267.33	752.61	0.609	0.86	1.53	7.188	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	480.33	120.08	419.76	1315.31	845.23	0.00	437.52	554.46	1.098	2.39	17.53	106.856	F
2	1438.84	359.71	1434.50	1257.50	7.49	0.00	2004.86	2003.11	0.718	1.40	2.48	6.264	A
3	945.36	236.34	930.91	212.36	1229.63	0.00	1105.20	752.61	0.855	1.53	5.14	19.260	C

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	480.33	120.08	425.11	1320.11	856.93	0.00	429.07	554.46	1.119	17.53	31.33	218.315	F
2	1438.84	359.71	1438.72	1274.45	7.59	0.00	2004.79	2003.11	0.718	2.48	2.51	6.355	A
3	945.36	236.34	943.79	213.06	1233.25	0.00	1102.58	752.61	0.857	5.14	5.53	22.168	C

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	392.19	98.05	502.47	1083.21	715.12	0.00	531.50	554.46	0.738	31.33	3.76	125.349	F
2	1174.80	293.70	1179.12	1208.63	8.97	0.00	2003.79	2003.11	0.586	2.51	1.43	4.389	A
3	771.89	192.97	787.61	177.36	1010.72	0.00	1263.56	752.61	0.611	5.53	1.60	7.805	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	328.44	82.11	338.87	904.68	589.53	0.00	622.23	554.46	0.528	3.76	1.15	13.145	B
2	983.84	245.96	985.70	922.35	6.05	0.00	2005.91	2003.11	0.490	1.43	0.97	3.536	A
3	646.42	161.60	649.29	146.82	844.92	0.00	1383.50	752.61	0.467	1.60	0.89	4.923	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	14.97	1.00	11.754	B	B
2	13.92	0.93	3.495	A	A
3	12.51	0.83	4.816	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	31.94	2.13	22.265	C	C
2	20.40	1.36	4.315	A	A
3	21.89	1.46	7.188	A	A

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	160.87	10.72	106.856	F	F
2	35.38	2.36	6.264	A	A
3	65.57	4.37	19.260	C	B

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	367.53	24.50	218.315	F	F
2	37.50	2.50	6.355	A	A
3	80.66	5.38	22.168	C	C

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	242.36	16.16	125.349	F	F
2	22.26	1.48	4.389	A	A
3	26.64	1.78	7.805	A	A

Queueing Delay results: (09:15-09:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	19.41	1.29	13.145	B	B
2	14.90	0.99	3.536	A	A
3	13.72	0.92	4.923	A	A

(Default Analysis Set) - 2037 Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relations
2037 Do Minimum, PM	2037 Do Minimum	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				105.58	F

Junction Network Options

Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1117 Normanston Drive	
2	2	A1117 Bridge Road	
3	3	B1375 Gorleston Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00

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	4.40	6.80	17.40	999.00	38.10	23.00	
2	3.90	7.00	31.40	172.20	38.10	25.00	
3	5.10	7.00	8.60	28.40	38.10	17.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
1	Direct		-922.34	
2	None			
3	None			

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)	0.722	1048.079
2		(calculated)	(calculated)	0.727	2010.306
3		(calculated)	(calculated)	0.723	1994.714

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	✓	389.18	100.000
2	ONE HOUR	✓	1394.86	100.000
3	ONE HOUR	✓	1029.58	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	373.782	15.400
	2	854.979	0.000	539.876
	3	54.930	974.654	0.000

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

		To		
		1	2	3
From	1	0.00	0.96	0.04
	2	0.61	0.00	0.39
	3	0.05	0.95	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	1.56	684.29	79.79	F	357.12	535.68	3026.66	339.01	33.63	3037.46	340.22
2	0.77	7.70	3.23	A	1279.94	1919.92	176.73	5.52	1.96	176.74	5.52
3	0.86	19.42	5.83	C	944.76	1417.15	241.92	10.24	2.69	241.94	10.24

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	293.00	73.25	288.05	682.13	729.93	0.00	520.81	291.06	0.563	0.00	1.24	15.166	C
2	1050.12	262.53	1045.75	1006.58	11.40	0.00	2002.02	2001.94	0.525	0.00	1.09	3.748	A
3	775.13	193.78	771.07	416.15	640.99	0.00	1531.02	1107.04	0.506	0.00	1.01	4.713	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	349.87	87.47	338.67	816.45	873.36	0.00	417.20	291.06	0.839	1.24	4.04	41.119	E
2	1253.95	313.49	1251.69	1198.63	13.40	0.00	2000.57	2001.94	0.627	1.09	1.66	4.793	A
3	925.58	231.39	922.58	497.87	767.23	0.00	1439.70	1107.04	0.643	1.01	1.76	6.922	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	428.50	107.12	280.22	997.30	1059.16	0.00	282.99	291.07	1.514	4.04	41.10	317.243	F
2	1535.76	383.94	1529.67	1328.29	11.09	0.00	2002.25	2001.94	0.767	1.66	3.18	7.521	A
3	1133.59	283.40	1118.85	603.14	937.61	0.00	1316.44	1107.04	0.861	1.76	5.45	17.084	C

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	428.50	107.12	273.74	1001.62	1071.67	0.00	273.95	291.07	1.564	41.10	79.79	684.290	F
2	1535.76	383.94	1535.55	1334.58	10.83	0.00	2002.43	2001.94	0.767	3.18	3.23	7.701	A
3	1133.59	283.40	1132.07	605.17	941.22	0.00	1313.83	1107.04	0.863	5.45	5.83	19.422	C

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	349.87	87.47	399.27	822.58	891.26	0.00	404.27	291.06	0.865	79.79	67.44	614.394	F
2	1253.95	313.49	1260.05	1274.72	15.80	0.00	1998.82	2001.94	0.627	3.23	1.71	4.912	A
3	925.58	231.39	941.49	503.50	772.35	0.00	1436.00	1107.04	0.645	5.83	1.85	7.506	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	293.00	73.25	508.27	686.64	736.85	0.00	515.81	291.06	0.568	67.44	13.62	293.988	F
2	1050.12	262.53	1052.47	1225.01	20.11	0.00	1995.69	2001.94	0.526	1.71	1.12	3.828	A
3	775.13	193.78	778.38	427.47	645.11	0.00	1528.04	1107.04	0.507	1.85	1.04	4.824	A

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	16.97	1.13	15.166	C	B
2	15.89	1.06	3.748	A	A
3	14.67	0.98	4.713	A	A

Queueing Delay results: (17:15-17:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	49.10	3.27	41.119	E	D
2	24.04	1.60	4.793	A	A
3	25.24	1.68	6.922	A	A

Queueing Delay results: (17:30-17:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	341.47	22.76	317.243	F	F
2	44.67	2.98	7.521	A	A
3	70.11	4.67	17.084	C	B

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	906.82	60.45	684.290	F	F
2	48.19	3.21	7.701	A	A
3	85.17	5.68	19.422	C	B

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1104.28	73.62	614.394	F	F
2	26.68	1.78	4.912	A	A
3	30.58	2.04	7.506	A	A

Queueing Delay results: (18:15-18:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	608.01	40.53	293.988	F	F
2	17.26	1.15	3.828	A	A
3	16.14	1.08	4.824	A	A

(Default Analysis Set) - 2037 Do Something, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relati
2037 Do Something, AM	2037 Do Something	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				7.34	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1117 Normanston Drive	
2	2	A1117 Bridge Road	
3	3	B1375 Gorleston Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00

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	4.40	6.80	17.40	999.00	38.10	23.00	
2	3.90	7.00	31.40	172.20	38.10	25.00	
3	5.10	7.00	8.60	28.40	38.10	17.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
1	Direct		-922.34	
2	None			
3	None			

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)	0.722	1048.079
2		(calculated)	(calculated)	0.727	2010.306
3		(calculated)	(calculated)	0.723	1994.714

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	428.40	100.000
2	ONE HOUR	✓	947.10	100.000
3	ONE HOUR	✓	609.53	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	371.685	56.718
	2	683.700	0.000	263.403
	3	124.064	485.470	0.000

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

		To		
		1	2	3
From	1	0.00	0.87	0.13
	2	0.72	0.00	0.28
	3	0.20	0.80	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	0.71	18.80	2.39	C	393.11	589.67	121.41	12.35	1.35	121.43	12.36
2	0.53	3.90	1.13	A	869.08	1303.62	72.91	3.36	0.81	72.92	3.36
3	0.46	4.62	0.86	A	559.32	838.98	53.54	3.83	0.59	53.54	3.83

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	322.52	80.63	319.77	606.19	364.24	0.00	784.97	490.27	0.411	0.00	0.69	7.694	A
2	713.03	178.26	710.79	641.68	42.34	0.00	1979.54	1963.13	0.360	0.00	0.56	2.832	A
3	458.89	114.72	457.32	240.02	513.11	0.00	1623.53	969.55	0.283	0.00	0.39	3.083	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	385.13	96.28	383.55	725.48	435.95	0.00	733.17	490.27	0.525	0.69	1.08	10.250	B
2	851.43	212.86	850.65	768.72	50.78	0.00	1973.40	1963.13	0.431	0.56	0.75	3.205	A
3	547.96	136.99	547.35	287.36	614.07	0.00	1550.49	969.55	0.353	0.39	0.54	3.587	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	471.68	117.92	466.75	888.06	533.53	0.00	662.68	490.27	0.712	1.08	2.31	17.932	C
2	1042.78	260.70	1041.32	938.48	61.79	0.00	1965.39	1963.13	0.531	0.75	1.12	3.889	A
3	671.11	167.78	669.87	351.40	751.71	0.00	1450.93	969.55	0.463	0.54	0.85	4.601	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	471.68	117.92	471.37	889.34	534.50	0.00	661.98	490.27	0.713	2.31	2.39	18.804	C
2	1042.78	260.70	1042.76	943.46	62.41	0.00	1964.95	1963.13	0.531	1.12	1.13	3.903	A
3	671.11	167.78	671.09	352.41	752.75	0.00	1450.17	969.55	0.463	0.85	0.86	4.620	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	385.13	96.28	390.15	727.46	437.40	0.00	732.12	490.27	0.526	2.39	1.14	10.675	B
2	851.43	212.86	852.87	775.90	51.65	0.00	1972.76	1963.13	0.432	1.13	0.76	3.220	A
3	547.96	136.99	549.18	288.85	615.68	0.00	1549.33	969.55	0.354	0.86	0.55	3.605	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	322.52	80.63	324.23	608.82	365.98	0.00	783.71	490.27	0.412	1.14	0.71	7.863	A
2	713.03	178.26	713.82	647.28	42.93	0.00	1979.11	1963.13	0.360	0.76	0.57	2.846	A
3	458.89	114.72	459.51	241.45	515.30	0.00	1621.95	969.55	0.283	0.55	0.40	3.097	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	9.84	0.66	7.694	A	A
2	8.23	0.55	2.832	A	A
3	5.76	0.38	3.083	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	15.48	1.03	10.250	B	B
2	11.12	0.74	3.205	A	A
3	8.00	0.53	3.587	A	A

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	31.45	2.10	17.932	C	B
2	16.39	1.09	3.889	A	A
3	12.46	0.83	4.601	A	A

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	35.42	2.36	18.804	C	B
2	16.85	1.12	3.903	A	A
3	12.83	0.86	4.620	A	A

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	18.15	1.21	10.675	B	B
2	11.70	0.78	3.220	A	A
3	8.44	0.56	3.605	A	A

Queueing Delay results: (09:15-09:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	11.06	0.74	7.863	A	A
2	8.63	0.58	2.846	A	A
3	6.04	0.40	3.097	A	A

(Default Analysis Set) - 2037 Do Something, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relati
2037 Do Something, PM	2037 Do Something	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3				46.13	E

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1117 Normanston Drive	
2	2	A1117 Bridge Road	
3	3	B1375 Gorleston Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00

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	4.40	6.80	17.40	999.00	38.10	23.00	
2	3.90	7.00	31.40	172.20	38.10	25.00	
3	5.10	7.00	8.60	28.40	38.10	17.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
1	Direct		-922.34	
2	None			
3	None			

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)	0.722	1048.079
2		(calculated)	(calculated)	0.727	2010.306
3		(calculated)	(calculated)	0.723	1994.714

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	428.74	100.000
2	ONE HOUR	✓	1048.32	100.000
3	ONE HOUR	✓	855.39	100.000

Turning Proportions

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

		To		
		1	2	3
From	1	0.000	348.576	80.168
	2	499.725	0.000	548.598
	3	67.318	788.074	0.000

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

		To		
		1	2	3
From	1	0.00	0.81	0.19
	2	0.48	0.00	0.52
	3	0.08	0.92	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
1	1.12	228.99	32.22	F	393.42	590.14	854.01	86.83	9.49	854.07	86.83
2	0.59	4.50	1.43	A	961.96	1442.94	90.39	3.76	1.00	90.40	3.76
3	0.59	5.50	1.43	A	784.92	1177.38	85.40	4.35	0.95	85.40	4.35

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	322.78	80.70	318.57	425.44	591.12	0.00	621.08	176.42	0.520	0.00	1.05	11.744	B
2	789.23	197.31	786.57	850.12	59.57	0.00	1967.01	1986.33	0.401	0.00	0.67	3.043	A
3	643.98	161.00	641.61	471.19	374.95	0.00	1723.48	1309.75	0.374	0.00	0.59	3.321	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	385.43	96.36	380.27	509.19	707.53	0.00	536.99	176.42	0.718	1.05	2.34	22.263	C
2	942.42	235.61	941.40	1016.69	71.10	0.00	1958.63	1986.33	0.481	0.67	0.92	3.536	A
3	768.98	192.24	767.97	563.75	448.76	0.00	1670.08	1309.75	0.460	0.59	0.85	3.987	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	472.06	118.01	406.88	623.19	865.59	0.00	422.81	176.42	1.116	2.34	18.64	114.430	F
2	1154.22	288.56	1152.21	1196.39	76.08	0.00	1955.01	1986.33	0.590	0.92	1.42	4.474	A
3	941.80	235.45	939.53	679.04	549.25	0.00	1597.39	1309.75	0.590	0.85	1.42	5.454	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	472.06	118.01	417.71	624.30	867.64	0.00	421.33	176.42	1.120	18.64	32.22	228.994	F
2	1154.22	288.56	1154.18	1207.25	78.10	0.00	1953.54	1986.33	0.591	1.42	1.43	4.503	A
3	941.80	235.45	941.76	682.10	550.19	0.00	1596.71	1309.75	0.590	1.42	1.43	5.496	A

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

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	385.43	96.36	501.04	510.86	710.55	0.00	534.81	176.42	0.721	32.22	3.32	122.657	F
2	942.42	235.61	944.36	1117.90	93.69	0.00	1942.21	1986.33	0.485	1.43	0.95	3.613	A
3	768.98	192.24	771.24	587.88	450.17	0.00	1669.06	1309.75	0.461	1.43	0.86	4.019	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
1	322.78	80.70	331.59	427.51	594.26	0.00	618.81	176.42	0.522	3.32	1.12	12.897	B
2	789.23	197.31	790.33	863.85	62.00	0.00	1965.24	1986.33	0.402	0.95	0.67	3.066	A
3	643.98	161.00	645.03	475.59	376.74	0.00	1722.18	1309.75	0.374	0.86	0.60	3.347	A

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	14.71	0.98	11.744	B	B
2	9.77	0.65	3.043	A	A
3	8.69	0.58	3.321	A	A

Queueing Delay results: (17:15-17:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	31.40	2.09	22.263	C	C
2	13.53	0.90	3.536	A	A
3	12.42	0.83	3.987	A	A

Queueing Delay results: (17:30-17:45)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	168.44	11.23	114.430	F	F
2	20.73	1.38	4.474	A	A
3	20.49	1.37	5.454	A	A

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	382.42	25.49	228.994	F	F
2	21.46	1.43	4.503	A	A
3	21.34	1.42	5.496	A	A

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	238.41	15.89	122.657	F	F
2	14.60	0.97	3.613	A	A
3	13.27	0.88	4.019	A	A

Queueing Delay results: (18:15-18:30)

Arm	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	18.63	1.24	12.897	B	B
2	10.31	0.69	3.066	A	A
3	9.19	0.61	3.347	A	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.6.541 [19821,26/11/2015]

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: 12 Peto Way-Barnards Way rdbt ARC v3 2018-1-30 unmitigated new SAT (no TEMPRO) v6.arc8
Path: L:\106xxx\1069948 Lowestoft Third Crossing\09 Documents\06_Modelling_Junction Modelling Sep 2017_Junction Modelling\12 Peto Way-Denmark Road-Barnards Way rdbt
Report generation date: 03/04/2018 15:52:59

Summary of junction performance

	AM				PM				Sat			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	DM - 2016 DN											
Peto Way	0.32	2.53	0.24	A	0.34	2.55	0.25	A	0.20	3.36	0.17	A
Bamards Way	0.08	3.33	0.08	A	0.15	3.68	0.13	A	1.82	9.28	0.65	A
North Quay Retail Park	0.10	3.28	0.09	A	0.42	4.26	0.30	A	1.75	9.56	0.64	A
Denmark Rd	0.36	3.29	0.26	A	0.53	4.07	0.35	A	0.56	5.70	0.36	A
Development access	0.03	1.94	0.03	A	0.04	2.16	0.04	A	0.64	3.17	0.39	A
	DM - 2022 DM											
Peto Way	0.38	2.73	0.28	A	0.35	2.64	0.26	A	0.20	3.29	0.17	A
Bamards Way	0.11	3.55	0.10	A	0.16	3.93	0.14	A	1.72	8.77	0.63	A
North Quay Retail Park	0.11	3.45	0.10	A	0.48	4.55	0.33	A	1.91	10.31	0.66	B
Denmark Rd	0.53	3.68	0.35	A	0.78	4.61	0.44	A	0.57	5.87	0.37	A
Development access	0.04	2.01	0.04	A	0.04	2.26	0.04	A	0.64	3.11	0.39	A
	DM - 2022 DS											
Peto Way	1.42	5.02	0.59	A	0.96	3.94	0.49	A	0.21	3.57	0.18	A
Bamards Way	0.16	5.15	0.14	A	0.22	5.20	0.18	A	2.06	10.56	0.68	B
North Quay Retail Park	0.19	5.07	0.16	A	0.75	6.70	0.43	A	9.49	38.61	0.92	E
Denmark Rd	1.78	6.66	0.64	A	3.17	10.53	0.76	B	0.75	7.72	0.43	A
Development access	0.05	2.39	0.04	A	0.06	2.70	0.05	A	0.86	3.54	0.46	A
	DM - 2037 DM											
Peto Way	0.49	2.98	0.33	A	0.41	2.78	0.29	A	0.20	3.32	0.17	A
Bamards Way	0.15	3.85	0.13	A	0.19	4.16	0.16	A	1.75	8.96	0.64	A
North Quay Retail Park	0.14	3.67	0.12	A	0.59	4.99	0.37	A	2.15	11.19	0.69	B
Denmark Rd	0.69	4.14	0.41	A	1.09	5.53	0.52	A	0.59	6.02	0.37	A
Development access	0.05	2.11	0.04	A	0.05	2.41	0.05	A	0.66	3.16	0.40	A
	DM - 2037 DS											
Peto Way	2.18	6.71	0.69	A	1.28	4.60	0.56	A	0.22	3.64	0.18	A
Bamards Way	0.24	6.21	0.19	A	0.27	5.88	0.22	A	2.17	11.13	0.69	B
North Quay Retail Park	0.25	5.97	0.20	A	1.05	8.29	0.51	A	17.79	65.61	0.98	F
Denmark Rd	2.99	9.74	0.75	A	6.03	18.53	0.87	C	0.79	8.18	0.45	A
Development access	0.06	2.60	0.06	A	0.07	2.96	0.07	A	0.92	3.65	0.48	A

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

"D2 - 2022 DM, AM " model duration: 07:45 - 09:15
"D3 - 2022 DM, PM" model duration: 15:45 - 17:15
"D4 - 2037 DM, AM" model duration: 07:45 - 09:15
"D5 - 2037 DM, PM" model duration: 15:45 - 17:15
"D6 - 2022 DS, AM" model duration: 07:45 - 09:15
"D7 - 2022 DS, PM" model duration: 15:45 - 17:15
"D8 - 2037 DS, AM" model duration: 07:45 - 09:15
"D9 - 2037 DS, PM" model duration: 15:45 - 17:15
"D10 - 2016 DN, AM" model duration: 07:45 - 09:15
"D11 - 2016 DN, PM" model duration: 15:45 - 17:15
"D12 - 2016 DN, Sat" model duration: 11:30 - 13:00
"D13 - 2022 DM, Sat" model duration: 11:30 - 13:00
"D14 - 2037 DM, Sat" model duration: 11:30 - 13:00
"D15 - 2022 DS, Sat" model duration: 11:30 - 13:00
"D16 - 2037 DS, Sat" model duration: 11:30 - 13:00

Run using Junctions 8.0.6.541 at 03/04/2018 15:52:45

File summary

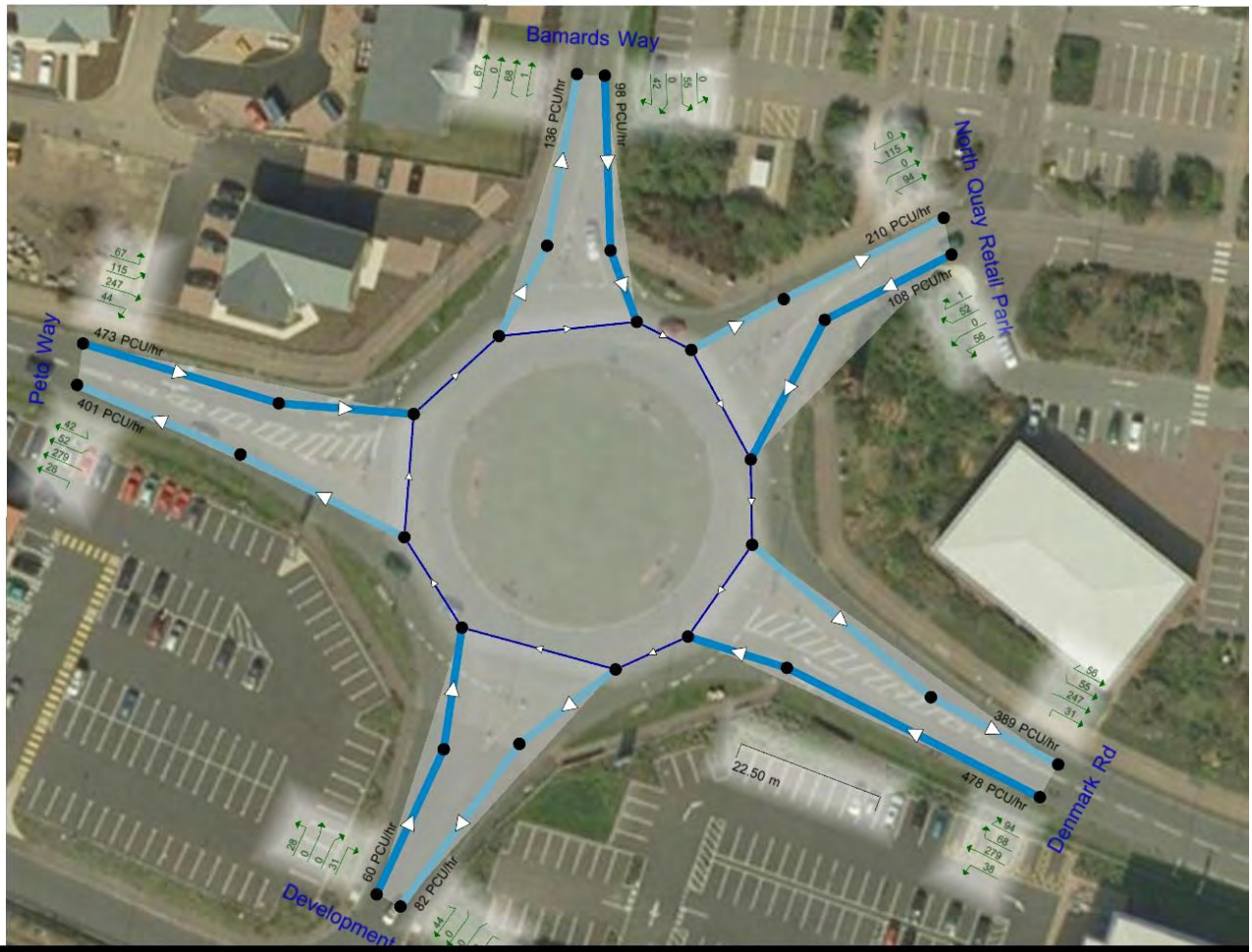
Title	(untitled)
Location	
Site Number	
Date	23/06/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JMThomps
Description	

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	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of ARCADY.

DM - 2022 DM, 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
DM	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
2022 DM, AM	2022 DM	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	Petro Way/Denmark Rd	Roundabout	1,2,3,4,5			3.20	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Peto Way	1	Peto Way	
Bamards Way	2	Bamards Way	
North Quay Retail Park	3	North Quay Retail Park	
Denmark Rd	4	Denmark Rd	
Development access	5	Development access	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Peto Way	0.00	99999.00
Bamards Way	0.00	99999.00
North Quay Retail Park	0.00	99999.00
Denmark Rd	0.00	99999.00
Development access	0.00	99999.00

Roundabout Geometry

Name	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
Peto Way	3.70	7.90	26.60	20.90	60.00	22.50	
Bamards Way	3.70	5.50	9.40	12.30	60.00	30.00	
North Quay Retail Park	3.40	4.70	14.50	27.80	60.00	20.00	
Denmark Rd	3.70	6.60	7.90	28.00	60.00	18.50	
Development access	4.30	10.40	17.30	25.50	60.00	23.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Peto Way		(calculated)	(calculated)	0.620	2021.854
Bamards Way		(calculated)	(calculated)	0.500	1414.605
North Quay Retail Park		(calculated)	(calculated)	0.518	1400.988
Denmark Rd		(calculated)	(calculated)	0.555	1607.329
Development access		(calculated)	(calculated)	0.660	2243.205

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	2.30				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
Peto Way	ONE HOUR	✓	455.52	100.000
Bamards Way	ONE HOUR	✓	98.01	100.000
North Quay Retail Park	ONE HOUR	✓	108.21	100.000
Denmark Rd	ONE HOUR	✓	469.36	100.000
Development access	ONE HOUR	✓	59.65	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	Peto Way	342.94	356.42		
07:45-08:00	Bamards Way	73.79	73.81		
07:45-08:00	North Quay Retail Park	81.47	81.47		
07:45-08:00	Denmark Rd	353.36	360.22		
07:45-08:00	Development access	44.91	44.91		
08:00-08:15	Peto Way	409.50	425.60		
08:00-08:15	Bamards Way	88.11	88.14		
08:00-08:15	North Quay Retail Park	97.28	97.28		
08:00-08:15	Denmark Rd	421.95	430.14		
08:00-08:15	Development access	53.63	53.63		
08:15-08:30	Peto Way	501.54	521.25		
08:15-08:30	Bamards Way	107.91	107.95		
08:15-08:30	North Quay Retail Park	119.15	119.15		

08:15-08:30	Denmark Rd	516.78	526.81		
08:15-08:30	Development access	65.68	65.68		
08:30-08:45	Peto Way	501.54	521.25		
08:30-08:45	Bamards Way	107.91	107.95		
08:30-08:45	North Quay Retail Park	119.15	119.15		
08:30-08:45	Denmark Rd	516.78	526.81		
08:30-08:45	Development access	65.68	65.68		
08:45-09:00	Peto Way	409.50	425.60		
08:45-09:00	Bamards Way	88.11	88.14		
08:45-09:00	North Quay Retail Park	97.28	97.28		
08:45-09:00	Denmark Rd	421.95	430.14		
08:45-09:00	Development access	53.63	53.63		
09:00-09:15	Peto Way	342.94	356.42		
09:00-09:15	Bamards Way	73.79	73.81		
09:00-09:15	North Quay Retail Park	81.47	81.47		
09:00-09:15	Denmark Rd	353.36	360.22		
09:00-09:15	Development access	44.91	44.91		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.000	67.031	115.183	229.588	43.717
	Bamards Way	42.310	0.000	0.345	55.068	0.285
	North Quay Retail Park	51.843	0.565	0.000	55.602	0.203
	Denmark Rd	269.703	67.970	93.880	0.000	37.807
	Development access	28.221	0.325	0.252	30.854	0.000

Turning Proportions (Veh) - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.00	0.15	0.25	0.50	0.10
	Bamards Way	0.43	0.00	0.00	0.56	0.00
	North Quay Retail Park	0.48	0.01	0.00	0.51	0.00
	Denmark Rd	0.57	0.14	0.20	0.00	0.08
	Development access	0.47	0.01	0.00	0.52	0.00

Vehicle Mix

Average PCU Per Vehicle - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	1.000	1.000	1.000	1.078	1.000
	Bamards Way	1.001	1.000	1.000	1.000	1.000
	North Quay Retail Park	1.000	1.000	1.000	1.000	1.000
	Denmark Rd	1.034	1.000	1.000	1.000	1.000
	Development access	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.0	0.0	0.0	6.0	0.0
	Bamards Way	0.1	0.0	0.0	0.0	0.0
	North Quay Retail Park	0.0	0.0	0.0	0.0	0.0
	Denmark Rd	2.6	0.0	0.0	0.0	0.0
	Development access	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
Peto Way	0.28	2.73	0.38	A
Bamards Way	0.10	3.55	0.11	A
North Quay Retail Park	0.10	3.45	0.11	A
Denmark Rd	0.35	3.68	0.53	A
Development access	0.04	2.01	0.04	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	342.94	342.04	145.47	0.00	1858.57	0.185	0.23	2.372	A
Bamards Way	73.79	73.53	385.51	0.00	1214.88	0.061	0.06	3.154	A
North Quay Retail Park	81.47	81.19	301.67	0.00	1237.76	0.066	0.07	3.112	A
Denmark Rd	353.36	352.15	104.25	0.00	1519.92	0.232	0.30	3.080	A
Development access	44.91	44.82	394.85	0.00	1978.13	0.023	0.02	1.861	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	409.50	409.27	174.14	0.00	1841.47	0.222	0.28	2.513	A
Bamards Way	88.11	88.04	461.32	0.00	1175.71	0.075	0.08	3.309	A
North Quay Retail Park	97.28	97.21	361.01	0.00	1205.65	0.081	0.09	3.247	A
Denmark Rd	421.95	421.61	124.80	0.00	1508.73	0.280	0.39	3.311	A
Development access	53.63	53.60	472.74	0.00	1925.84	0.028	0.03	1.922	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	501.54	501.16	213.22	0.00	1818.14	0.276	0.38	2.733	A
Bamards Way	107.91	107.81	564.89	0.00	1122.18	0.096	0.11	3.548	A
North Quay Retail Park	119.15	119.04	442.07	0.00	1161.79	0.103	0.11	3.451	A
Denmark Rd	516.78	516.22	152.83	0.00	1493.47	0.346	0.53	3.682	A
Development access	65.68	65.65	578.83	0.00	1854.62	0.035	0.04	2.012	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	501.54	501.53	213.43	0.00	1818.02	0.276	0.38	2.734	A
Bamards Way	107.91	107.91	565.34	0.00	1121.95	0.096	0.11	3.549	A
North Quay Retail Park	119.15	119.14	442.41	0.00	1161.61	0.103	0.11	3.452	A
Denmark Rd	516.78	516.77	152.96	0.00	1493.39	0.346	0.53	3.685	A
Development access	65.68	65.68	579.43	0.00	1854.22	0.035	0.04	2.012	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	409.50	409.88	174.47	0.00	1841.27	0.222	0.29	2.517	A
Bamards Way	88.11	88.21	462.05	0.00	1175.33	0.075	0.08	3.310	A
North Quay Retail Park	97.28	97.39	361.57	0.00	1205.35	0.081	0.09	3.251	A
Denmark Rd	421.95	422.49	125.02	0.00	1508.61	0.280	0.39	3.318	A
Development access	53.63	53.66	473.70	0.00	1925.19	0.028	0.03	1.923	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	342.94	343.18	146.07	0.00	1858.21	0.185	0.23	2.376	A
Bamards Way	73.79	73.85	386.86	0.00	1214.19	0.061	0.06	3.156	A
North Quay Retail Park	81.47	81.54	302.73	0.00	1237.18	0.066	0.07	3.117	A
Denmark Rd	353.36	353.70	104.67	0.00	1519.69	0.233	0.30	3.090	A
Development access	44.91	44.93	396.58	0.00	1976.97	0.023	0.02	1.862	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
07:45-08:00	Peto Way	342.94	1858.57	0.185	0.00	0.00	0.23	3.33	-	2.372
07:45-08:00	Bamards Way	73.79	1214.88	0.061	0.00	0.00	0.06	0.95	-	3.154
07:45-08:00	North Quay Retail Park	81.47	1237.76	0.066	0.00	0.00	0.07	1.04	-	3.112
07:45-08:00	Denmark Rd	353.36	1519.92	0.232	0.00	0.00	0.30	4.44	-	3.080
07:45-08:00	Development access	44.91	1978.13	0.023	0.00	0.00	0.02	0.34	-	1.861
08:00-08:15	Peto Way	409.50	1841.47	0.222	0.00	0.23	0.28	4.23	-	2.513
08:00-08:15	Bamards Way	88.11	1175.71	0.075	0.00	0.06	0.08	1.20	-	3.309
08:00-08:15	North Quay Retail Park	97.28	1205.65	0.081	0.00	0.07	0.09	1.30	-	3.247
08:00-08:15	Denmark Rd	421.95	1508.73	0.280	0.00	0.30	0.39	5.71	-	3.311
08:00-08:15	Development access	53.63	1925.84	0.028	0.00	0.02	0.03	0.43	-	1.922
08:15-08:30	Peto Way	501.54	1818.14	0.276	0.00	0.28	0.38	5.62	-	2.733
08:15-08:30	Bamards Way	107.91	1122.18	0.096	0.00	0.08	0.11	1.57	-	3.548
08:15-08:30	North Quay Retail Park	119.15	1161.79	0.103	0.00	0.09	0.11	1.68	-	3.451
08:15-08:30	Denmark Rd	516.78	1493.47	0.346	0.00	0.39	0.53	7.75	-	3.682
08:15-08:30	Development access	65.68	1854.62	0.035	0.00	0.03	0.04	0.54	-	2.012
08:30-08:45	Peto Way	501.54	1818.02	0.276	0.00	0.38	0.38	5.70	-	2.734
08:30-08:45	Bamards Way	107.91	1121.95	0.096	0.00	0.11	0.11	1.59	-	3.549
08:30-08:45	North Quay Retail Park	119.15	1161.61	0.103	0.00	0.11	0.11	1.71	-	3.452
08:30-08:45	Denmark Rd	516.78	1493.39	0.346	0.00	0.53	0.53	7.90	-	3.685
08:30-08:45	Development access	65.68	1854.22	0.035	0.00	0.04	0.04	0.55	-	2.012
08:45-09:00	Peto Way	409.50	1841.27	0.222	0.00	0.38	0.29	4.36	-	2.517
08:45-09:00	Bamards Way	88.11	1175.33	0.075	0.00	0.11	0.08	1.24	-	3.310
08:45-09:00	North Quay Retail Park	97.28	1205.35	0.081	0.00	0.11	0.09	1.34	-	3.251
08:45-09:00	Denmark Rd	421.95	1508.61	0.280	0.00	0.53	0.39	5.95	-	3.318
08:45-09:00	Development access	53.63	1925.19	0.028	0.00	0.04	0.03	0.43	-	1.923
09:00-09:15	Peto Way	342.94	1858.21	0.185	0.00	0.29	0.23	3.44	-	2.376

09:00-09:15	Bamards Way	73.79	1214.19	0.061	0.00	0.08	0.06	0.99	-	3.156
09:00-09:15	North Quay Retail Park	81.47	1237.18	0.066	0.00	0.09	0.07	1.07	-	3.117
09:00-09:15	Denmark Rd	353.36	1519.69	0.233	0.00	0.39	0.30	4.63	-	3.090
09:00-09:15	Development access	44.91	1976.97	0.023	0.00	0.03	0.02	0.35	-	1.862

DM - 2022 DM, 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
DM	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
2022 DM, PM	2022 DM	PM		ONE HOUR	15:45	17:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Petro Way/Denmark Rd	Roundabout	1,2,3,4,5			3.87	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Peto Way	1	Peto Way	
Bamards Way	2	Bamards Way	
North Quay Retail Park	3	North Quay Retail Park	
Denmark Rd	4	Denmark Rd	
Development access	5	Development access	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Peto Way	0.00	99999.00
Bamards Way	0.00	99999.00
North Quay Retail Park	0.00	99999.00
Denmark Rd	0.00	99999.00
Development access	0.00	99999.00

Roundabout Geometry

Name	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
Peto Way	3.70	7.90	26.60	20.90	60.00	22.50	
Bamards Way	3.70	5.50	9.40	12.30	60.00	30.00	
North Quay Retail Park	3.40	4.70	14.50	27.80	60.00	20.00	
Denmark Rd	3.70	6.60	7.90	28.00	60.00	18.50	
Development access	4.30	10.40	17.30	25.50	60.00	23.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Peto Way		(calculated)	(calculated)	0.620	2021.854
Bamards Way		(calculated)	(calculated)	0.500	1414.605
North Quay Retail Park		(calculated)	(calculated)	0.518	1400.988
Denmark Rd		(calculated)	(calculated)	0.555	1607.329
Development access		(calculated)	(calculated)	0.660	2243.205

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	2.30				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
Peto Way	ONE HOUR	✓	432.48	100.000
Bamards Way	ONE HOUR	✓	131.97	100.000
North Quay Retail Park	ONE HOUR	✓	347.50	100.000
Denmark Rd	ONE HOUR	✓	554.79	100.000
Development access	ONE HOUR	✓	64.05	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
15:45-16:00	Peto Way	325.59	331.34		
15:45-16:00	Bamards Way	99.35	101.72		
15:45-16:00	North Quay Retail Park	261.62	261.62		
15:45-16:00	Denmark Rd	417.68	417.68		
15:45-16:00	Development access	48.22	48.22		
16:00-16:15	Peto Way	388.79	395.65		
16:00-16:15	Bamards Way	118.64	121.47		
16:00-16:15	North Quay Retail Park	312.40	312.40		
16:00-16:15	Denmark Rd	498.75	498.75		
16:00-16:15	Development access	57.58	57.58		
16:15-16:30	Peto Way	476.16	484.58		
16:15-16:30	Bamards Way	145.30	148.76		
16:15-16:30	North Quay Retail Park	382.61	382.61		
16:15-16:30	Denmark Rd	610.84	610.84		
16:15-16:30	Development access	70.52	70.52		
16:30-16:45	Peto Way	476.16	484.58		
16:30-16:45	Bamards Way	145.30	148.76		
16:30-16:45	North Quay Retail Park	382.61	382.61		
16:30-16:45	Denmark Rd	610.84	610.84		
16:30-16:45	Development access	70.52	70.52		
16:45-17:00	Peto Way	388.79	395.65		
16:45-17:00	Bamards Way	118.64	121.47		
16:45-17:00	North Quay Retail Park	312.40	312.40		
16:45-17:00	Denmark Rd	498.75	498.75		
16:45-17:00	Development access	57.58	57.58		
17:00-17:15	Peto Way	325.59	331.34		

17:00-17:15	Bamards Way	99.35	101.72		
17:00-17:15	North Quay Retail Park	261.62	261.62		
17:00-17:15	Denmark Rd	417.68	417.68		
17:00-17:15	Development access	48.22	48.22		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.000	30.659	168.270	178.058	55.488
	Bamards Way	71.218	0.000	1.517	58.716	0.516
	North Quay Retail Park	220.549	0.485	0.000	125.657	0.811
	Denmark Rd	307.172	30.526	163.032	0.000	54.061
	Development access	40.366	0.093	0.414	23.175	0.000

Turning Proportions (Veh) - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.00	0.07	0.39	0.41	0.13
	Bamards Way	0.54	0.00	0.01	0.44	0.00
	North Quay Retail Park	0.63	0.00	0.00	0.36	0.00
	Denmark Rd	0.55	0.06	0.29	0.00	0.10
	Development access	0.63	0.00	0.01	0.36	0.00

Vehicle Mix

Average PCU Per Vehicle - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	1.000	1.000	1.000	1.043	1.000
	Bamards Way	1.044	1.000	1.000	1.000	1.000
	North Quay Retail Park	1.000	1.000	1.000	1.000	1.000
	Denmark Rd	1.000	1.000	1.000	1.000	1.000
	Development access	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.0	0.0	0.0	3.3	0.0
	Bamards Way	3.4	0.0	0.0	0.0	0.0
	North Quay Retail Park	0.0	0.0	0.0	0.0	0.0
	Denmark Rd	0.0	0.0	0.0	0.0	0.0
	Development access	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
Peto Way	0.26	2.64	0.35	A
Bamards Way	0.14	3.93	0.16	A
North Quay Retail Park	0.33	4.55	0.48	A
Denmark Rd	0.44	4.61	0.78	A
Development access	0.04	2.26	0.04	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	325.59	324.76	163.32	0.00	1887.23	0.173	0.21	2.303	A
Bamards Way	99.35	98.98	441.72	0.00	1163.32	0.085	0.09	3.382	A
North Quay Retail Park	261.62	260.56	290.63	0.00	1246.26	0.210	0.26	3.649	A
Denmark Rd	417.68	416.08	261.81	0.00	1460.68	0.286	0.40	3.442	A
Development access	48.22	48.11	594.69	0.00	1849.24	0.026	0.03	1.998	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	388.79	388.57	195.53	0.00	1867.60	0.208	0.26	2.433	A
Bamards Way	118.64	118.54	528.63	0.00	1120.37	0.106	0.12	3.592	A
North Quay Retail Park	312.40	312.08	347.83	0.00	1215.80	0.257	0.34	3.983	A
Denmark Rd	498.75	498.21	313.52	0.00	1431.71	0.348	0.53	3.855	A
Development access	57.58	57.55	712.14	0.00	1771.43	0.033	0.03	2.100	A

Main results: (16:15-16:30)

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	476.17	475.82	239.36	0.00	1840.89	0.259	0.35	2.637	A
Bamards Way	145.30	145.14	647.27	0.00	1061.73	0.137	0.16	3.928	A
North Quay Retail Park	382.61	382.06	425.93	0.00	1174.23	0.326	0.48	4.541	A
Denmark Rd	610.84	609.86	383.85	0.00	1392.31	0.439	0.77	4.595	A
Development access	70.52	70.48	871.78	0.00	1665.67	0.042	0.04	2.256	A

Main results: (16:30-16:45)

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	476.17	476.16	239.71	0.00	1840.67	0.259	0.35	2.637	A
Bamards Way	145.30	145.30	647.88	0.00	1061.43	0.137	0.16	3.929	A
North Quay Retail Park	382.61	382.60	426.28	0.00	1174.04	0.326	0.48	4.548	A
Denmark Rd	610.84	610.82	384.32	0.00	1392.05	0.439	0.78	4.607	A
Development access	70.52	70.52	873.07	0.00	1664.81	0.042	0.04	2.257	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	388.79	389.13	196.08	0.00	1867.27	0.208	0.26	2.435	A
Bamards Way	118.64	118.79	529.60	0.00	1119.89	0.106	0.12	3.595	A
North Quay Retail Park	312.40	312.93	348.41	0.00	1215.50	0.257	0.35	3.990	A
Denmark Rd	498.75	499.71	314.27	0.00	1431.29	0.348	0.54	3.869	A
Development access	57.58	57.62	714.16	0.00	1770.09	0.033	0.03	2.103	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	325.59	325.81	164.11	0.00	1886.75	0.173	0.21	2.306	A
Bamards Way	99.35	99.45	443.38	0.00	1162.51	0.085	0.09	3.385	A
North Quay Retail Park	261.62	261.94	291.71	0.00	1245.68	0.210	0.27	3.662	A
Denmark Rd	417.68	418.22	263.08	0.00	1459.96	0.286	0.40	3.456	A
Development access	48.22	48.25	597.75	0.00	1847.21	0.026	0.03	2.000	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
15:45-16:00	Peto Way	325.59	1887.23	0.173	0.00	0.00	0.21	3.07	-	2.303
15:45-16:00	Bamards Way	99.35	1163.32	0.085	0.00	0.00	0.09	1.37	-	3.382
15:45-16:00	North Quay Retail Park	261.62	1246.26	0.210	0.00	0.00	0.26	3.88	-	3.649
15:45-16:00	Denmark Rd	417.68	1460.68	0.286	0.00	0.00	0.40	5.84	-	3.442
15:45-16:00	Development access	48.22	1849.24	0.026	0.00	0.00	0.03	0.40	-	1.998
16:00-16:15	Peto Way	388.79	1867.60	0.208	0.00	0.21	0.26	3.89	-	2.433
16:00-16:15	Bamards Way	118.64	1120.37	0.106	0.00	0.09	0.12	1.75	-	3.592
16:00-16:15	North Quay Retail Park	312.40	1215.80	0.257	0.00	0.26	0.34	5.07	-	3.983

16:00-16:15	Denmark Rd	498.75	1431.71	0.348	0.00	0.40	0.53	7.83	-	3.855
16:00-16:15	Development access	57.58	1771.43	0.033	0.00	0.03	0.03	0.50	-	2.100
16:15-16:30	Peto Way	476.17	1840.89	0.259	0.00	0.26	0.35	5.15	-	2.637
16:15-16:30	Bamards Way	145.30	1061.73	0.137	0.00	0.12	0.16	2.33	-	3.928
16:15-16:30	North Quay Retail Park	382.61	1174.23	0.326	0.00	0.34	0.48	7.05	-	4.541
16:15-16:30	Denmark Rd	610.84	1392.31	0.439	0.00	0.53	0.77	11.34	-	4.595
16:15-16:30	Development access	70.52	1665.67	0.042	0.00	0.03	0.04	0.66	-	2.256
16:30-16:45	Peto Way	476.17	1840.67	0.259	0.00	0.35	0.35	5.22	-	2.637
16:30-16:45	Bamards Way	145.30	1061.43	0.137	0.00	0.16	0.16	2.37	-	3.929
16:30-16:45	North Quay Retail Park	382.61	1174.04	0.326	0.00	0.48	0.48	7.21	-	4.548
16:30-16:45	Denmark Rd	610.84	1392.05	0.439	0.00	0.77	0.78	11.65	-	4.607
16:30-16:45	Development access	70.52	1664.81	0.042	0.00	0.04	0.04	0.66	-	2.257
16:45-17:00	Peto Way	388.79	1867.27	0.208	0.00	0.35	0.26	4.01	-	2.435
16:45-17:00	Bamards Way	118.64	1119.89	0.106	0.00	0.16	0.12	1.81	-	3.595
16:45-17:00	North Quay Retail Park	312.40	1215.50	0.257	0.00	0.48	0.35	5.32	-	3.990
16:45-17:00	Denmark Rd	498.75	1431.29	0.348	0.00	0.78	0.54	8.24	-	3.869
16:45-17:00	Development access	57.58	1770.09	0.033	0.00	0.04	0.03	0.51	-	2.103
17:00-17:15	Peto Way	325.59	1886.75	0.173	0.00	0.26	0.21	3.17	-	2.306
17:00-17:15	Bamards Way	99.35	1162.51	0.085	0.00	0.12	0.09	1.43	-	3.385
17:00-17:15	North Quay Retail Park	261.62	1245.68	0.210	0.00	0.35	0.27	4.07	-	3.662
17:00-17:15	Denmark Rd	417.68	1459.96	0.286	0.00	0.54	0.40	6.15	-	3.456
17:00-17:15	Development access	48.22	1847.21	0.026	0.00	0.03	0.03	0.41	-	2.000

DM - 2037 DM, 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
DM	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
2037 DM, AM	2037 DM	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	Petro Way/Denmark Rd	Roundabout	1,2,3,4,5			3.52	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Peto Way	1	Peto Way	
Bamards Way	2	Bamards Way	
North Quay Retail Park	3	North Quay Retail Park	
Denmark Rd	4	Denmark Rd	
Development access	5	Development access	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Peto Way	0.00	99999.00
Bamards Way	0.00	99999.00
North Quay Retail Park	0.00	99999.00
Denmark Rd	0.00	99999.00
Development access	0.00	99999.00

Roundabout Geometry

Name	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
Peto Way	3.70	7.90	26.60	20.90	60.00	22.50	
Bamards Way	3.70	5.50	9.40	12.30	60.00	30.00	
North Quay Retail Park	3.40	4.70	14.50	27.80	60.00	20.00	
Denmark Rd	3.70	6.60	7.90	28.00	60.00	18.50	
Development access	4.30	10.40	17.30	25.50	60.00	23.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Peto Way		(calculated)	(calculated)	0.620	2021.854
Bamards Way		(calculated)	(calculated)	0.500	1414.605
North Quay Retail Park		(calculated)	(calculated)	0.518	1400.988
Denmark Rd		(calculated)	(calculated)	0.555	1607.329
Development access		(calculated)	(calculated)	0.660	2243.205

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	2.30				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
Peto Way	ONE HOUR	✓	540.44	100.000
Bamards Way	ONE HOUR	✓	124.17	100.000
North Quay Retail Park	ONE HOUR	✓	121.97	100.000
Denmark Rd	ONE HOUR	✓	548.01	100.000
Development access	ONE HOUR	✓	70.20	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	Peto Way	406.87	423.43		
07:45-08:00	Bamards Way	93.49	93.75		
07:45-08:00	North Quay Retail Park	91.82	91.82		
07:45-08:00	Denmark Rd	412.57	420.88		
07:45-08:00	Development access	52.85	52.85		
08:00-08:15	Peto Way	485.84	505.62		
08:00-08:15	Bamards Way	111.63	111.95		

08:00-08:15	**North Quay Retail Park**	109.65	109.65		
08:00-08:15	**Denmark Rd**	492.65	502.57		
08:00-08:15	**Development access**	63.10	63.10		
08:15-08:30	**Peto Way**	595.03	619.25		
08:15-08:30	**Bamards Way**	136.72	137.11		
08:15-08:30	**North Quay Retail Park**	134.29	134.29		
08:15-08:30	**Denmark Rd**	603.38	615.53		
08:15-08:30	**Development access**	77.29	77.29		
08:30-08:45	**Peto Way**	595.03	619.25		
08:30-08:45	**Bamards Way**	136.72	137.11		
08:30-08:45	**North Quay Retail Park**	134.29	134.29		
08:30-08:45	**Denmark Rd**	603.38	615.53		
08:30-08:45	**Development access**	77.29	77.29		
08:45-09:00	**Peto Way**	485.84	505.62		
08:45-09:00	**Bamards Way**	111.63	111.95		
08:45-09:00	**North Quay Retail Park**	109.65	109.65		
08:45-09:00	**Denmark Rd**	492.65	502.57		
08:45-09:00	**Development access**	63.10	63.10		
09:00-09:15	**Peto Way**	406.87	423.43		
09:00-09:15	**Bamards Way**	93.49	93.75		
09:00-09:15	**North Quay Retail Park**	91.82	91.82		
09:00-09:15	**Denmark Rd**	412.57	420.88		
09:00-09:15	**Development access**	52.85	52.85		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.000	80.622	138.034	268.571	53.209
	Bamards Way	54.704	0.000	0.421	68.679	0.370
	North Quay Retail Park	62.181	0.639	0.000	58.919	0.229
	Denmark Rd	326.495	76.473	101.977	0.000	43.070
	Development access	34.611	0.390	0.283	34.912	0.000

Turning Proportions (Veh) - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.00	0.15	0.26	0.50	0.10
	Bamards Way	0.44	0.00	0.00	0.55	0.00
	North Quay Retail Park	0.51	0.01	0.00	0.48	0.00
	Denmark Rd	0.60	0.14	0.19	0.00	0.08
	Development access	0.49	0.01	0.00	0.50	0.00

Vehicle Mix

Average PCU Per Vehicle - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	1.000	1.000	1.000	1.082	1.000
	Bamards Way	1.007	1.000	1.000	1.000	1.000
	North Quay Retail Park	1.000	1.000	1.000	1.000	1.000
	Denmark Rd	1.034	1.000	1.000	1.000	1.000
	Development access	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.0	0.0	0.0	6.3	0.0
	Bamards Way	0.5	0.0	0.0	0.0	0.0
	North Quay Retail Park	0.0	0.0	0.0	0.0	0.0
	Denmark Rd	2.6	0.0	0.0	0.0	0.0
	Development access	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
Peto Way	0.33	2.98	0.49	A
Bamards Way	0.13	3.85	0.15	A
North Quay Retail Park	0.12	3.67	0.14	A
Denmark Rd	0.41	4.14	0.69	A
Development access	0.04	2.11	0.05	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	406.87	405.74	161.07	0.00	1846.79	0.220	0.28	2.498	A
Bamards Way	93.49	93.14	448.15	0.00	1179.10	0.079	0.09	3.315	A
North Quay Retail Park	91.82	91.50	360.64	0.00	1205.50	0.076	0.08	3.231	A
Denmark Rd	412.57	411.07	128.56	0.00	1505.49	0.274	0.38	3.285	A
Development access	52.85	52.73	466.92	0.00	1929.46	0.027	0.03	1.917	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	485.84	485.53	192.82	0.00	1827.87	0.266	0.36	2.681	A
Bamards Way	111.63	111.54	536.31	0.00	1133.57	0.098	0.11	3.521	A
North Quay Retail Park	109.65	109.56	431.62	0.00	1167.03	0.094	0.10	3.403	A
Denmark Rd	492.65	492.19	153.91	0.00	1491.67	0.330	0.49	3.599	A
Development access	63.10	63.08	559.08	0.00	1867.54	0.034	0.03	1.994	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	595.03	594.51	236.08	0.00	1802.09	0.330	0.49	2.979	A
Bamards Way	136.72	136.57	656.68	0.00	1071.39	0.128	0.15	3.851	A
North Quay Retail Park	134.29	134.16	528.51	0.00	1114.51	0.120	0.14	3.671	A
Denmark Rd	603.37	602.58	188.45	0.00	1472.83	0.410	0.69	4.133	A
Development access	77.29	77.25	684.49	0.00	1783.27	0.043	0.05	2.109	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	595.03	595.03	236.36	0.00	1801.92	0.330	0.49	2.982	A
Bamards Way	136.72	136.72	657.28	0.00	1071.08	0.128	0.15	3.852	A
North Quay Retail Park	134.29	134.29	528.98	0.00	1114.25	0.121	0.14	3.672	A
Denmark Rd	603.37	603.36	188.64	0.00	1472.73	0.410	0.69	4.140	A
Development access	77.29	77.29	685.34	0.00	1782.70	0.043	0.05	2.110	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	485.84	486.35	193.26	0.00	1827.61	0.266	0.36	2.686	A
Bamards Way	111.63	111.78	537.28	0.00	1133.07	0.099	0.11	3.524	A
North Quay Retail Park	109.65	109.78	432.38	0.00	1166.61	0.094	0.10	3.405	A
Denmark Rd	492.65	493.43	154.21	0.00	1491.51	0.330	0.50	3.608	A
Development access	63.10	63.15	560.44	0.00	1866.63	0.034	0.04	1.997	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	406.87	407.19	161.78	0.00	1846.37	0.220	0.28	2.501	A
Bamards Way	93.49	93.58	449.82	0.00	1178.24	0.079	0.09	3.318	A
North Quay Retail Park	91.82	91.91	362.00	0.00	1204.76	0.076	0.08	3.234	A
Denmark Rd	412.57	413.04	129.10	0.00	1505.19	0.274	0.38	3.296	A
Development access	52.85	52.87	469.14	0.00	1927.97	0.027	0.03	1.921	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
07:45-08:00	Peto Way	406.87	1846.79	0.220	0.00	0.00	0.28	4.15	-	2.498
07:45-08:00	Bamards Way	93.49	1179.10	0.079	0.00	0.00	0.09	1.26	-	3.315
07:45-08:00	North Quay Retail Park	91.82	1205.50	0.076	0.00	0.00	0.08	1.21	-	3.231
07:45-08:00	Denmark Rd	412.57	1505.49	0.274	0.00	0.00	0.38	5.52	-	3.285
07:45-08:00	Development access	52.85	1929.46	0.027	0.00	0.00	0.03	0.42	-	1.917
08:00-08:15	Peto Way	485.84	1827.87	0.266	0.00	0.28	0.36	5.34	-	2.681
08:00-08:15	Bamards Way	111.63	1133.57	0.098	0.00	0.09	0.11	1.61	-	3.521
08:00-08:15	North Quay Retail Park	109.65	1167.03	0.094	0.00	0.08	0.10	1.53	-	3.403

08:00-08:15	Denmark Rd	492.65	1491.67	0.330	0.00	0.38	0.49	7.23	-	3.599
08:00-08:15	Development access	63.10	1867.54	0.034	0.00	0.03	0.03	0.52	-	1.994
08:15-08:30	Peto Way	595.03	1802.09	0.330	0.00	0.36	0.49	7.25	-	2.979
08:15-08:30	Bamards Way	136.72	1071.39	0.128	0.00	0.11	0.15	2.15	-	3.851
08:15-08:30	North Quay Retail Park	134.29	1114.51	0.120	0.00	0.10	0.14	2.02	-	3.671
08:15-08:30	Denmark Rd	603.37	1472.83	0.410	0.00	0.49	0.69	10.11	-	4.133
08:15-08:30	Development access	77.29	1783.27	0.043	0.00	0.03	0.05	0.67	-	2.109
08:30-08:45	Peto Way	595.03	1801.92	0.330	0.00	0.49	0.49	7.37	-	2.982
08:30-08:45	Bamards Way	136.72	1071.08	0.128	0.00	0.15	0.15	2.19	-	3.852
08:30-08:45	North Quay Retail Park	134.29	1114.25	0.121	0.00	0.14	0.14	2.05	-	3.672
08:30-08:45	Denmark Rd	603.37	1472.73	0.410	0.00	0.69	0.69	10.35	-	4.140
08:30-08:45	Development access	77.29	1782.70	0.043	0.00	0.05	0.05	0.68	-	2.110
08:45-09:00	Peto Way	485.84	1827.61	0.266	0.00	0.49	0.36	5.53	-	2.686
08:45-09:00	Bamards Way	111.63	1133.07	0.099	0.00	0.15	0.11	1.67	-	3.524
08:45-09:00	North Quay Retail Park	109.65	1166.61	0.094	0.00	0.14	0.10	1.58	-	3.405
08:45-09:00	Denmark Rd	492.65	1491.51	0.330	0.00	0.69	0.50	7.58	-	3.608
08:45-09:00	Development access	63.10	1866.63	0.034	0.00	0.05	0.04	0.53	-	1.997
09:00-09:15	Peto Way	406.87	1846.37	0.220	0.00	0.36	0.28	4.31	-	2.501
09:00-09:15	Bamards Way	93.49	1178.24	0.079	0.00	0.11	0.09	1.31	-	3.318
09:00-09:15	North Quay Retail Park	91.82	1204.76	0.076	0.00	0.10	0.08	1.26	-	3.234
09:00-09:15	Denmark Rd	412.57	1505.19	0.274	0.00	0.50	0.38	5.78	-	3.296
09:00-09:15	Development access	52.85	1927.97	0.027	0.00	0.04	0.03	0.43	-	1.921

DM - 2037 DM, 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
DM	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
2037 DM, PM	2037 DM	PM		ONE HOUR	15:45	17:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Petro Way/Denmark Rd	Roundabout	1,2,3,4,5			4.39	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Peto Way	1	Peto Way	
Bamards Way	2	Bamards Way	
North Quay Retail Park	3	North Quay Retail Park	
Denmark Rd	4	Denmark Rd	
Development access	5	Development access	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Peto Way	0.00	99999.00
Bamards Way	0.00	99999.00
North Quay Retail Park	0.00	99999.00
Denmark Rd	0.00	99999.00
Development access	0.00	99999.00

Roundabout Geometry

Name	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
Peto Way	3.70	7.90	26.60	20.90	60.00	22.50	
Bamards Way	3.70	5.50	9.40	12.30	60.00	30.00	
North Quay Retail Park	3.40	4.70	14.50	27.80	60.00	20.00	
Denmark Rd	3.70	6.60	7.90	28.00	60.00	18.50	
Development access	4.30	10.40	17.30	25.50	60.00	23.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Peto Way		(calculated)	(calculated)	0.620	2021.854
Bamards Way		(calculated)	(calculated)	0.500	1414.605
North Quay Retail Park		(calculated)	(calculated)	0.518	1400.988
Denmark Rd		(calculated)	(calculated)	0.555	1607.329
Development access		(calculated)	(calculated)	0.660	2243.205

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	2.30				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
Peto Way	ONE HOUR	✓	482.81	100.000
Bamards Way	ONE HOUR	✓	146.99	100.000
North Quay Retail Park	ONE HOUR	✓	390.65	100.000
Denmark Rd	ONE HOUR	✓	645.29	100.000
Development access	ONE HOUR	✓	73.28	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
15:45-16:00	Peto Way	363.48	369.72		
15:45-16:00	Bamards Way	110.66	113.35		
15:45-16:00	North Quay Retail Park	294.10	294.10		
15:45-16:00	Denmark Rd	485.81	485.81		
15:45-16:00	Development access	55.17	55.17		
16:00-16:15	Peto Way	434.04	441.48		
16:00-16:15	Bamards Way	132.14	135.35		

16:00-16:15	**North Quay Retail Park**	351.19	351.19		
16:00-16:15	**Denmark Rd**	580.10	580.10		
16:00-16:15	**Development access**	65.88	65.88		
16:15-16:30	**Peto Way**	531.58	540.71		
16:15-16:30	**Bamards Way**	161.84	165.77		
16:15-16:30	**North Quay Retail Park**	430.11	430.11		
16:15-16:30	**Denmark Rd**	710.48	710.48		
16:15-16:30	**Development access**	80.68	80.68		
16:30-16:45	**Peto Way**	531.58	540.71		
16:30-16:45	**Bamards Way**	161.84	165.77		
16:30-16:45	**North Quay Retail Park**	430.11	430.11		
16:30-16:45	**Denmark Rd**	710.48	710.48		
16:30-16:45	**Development access**	80.68	80.68		
16:45-17:00	**Peto Way**	434.04	441.48		
16:45-17:00	**Bamards Way**	132.14	135.35		
16:45-17:00	**North Quay Retail Park**	351.19	351.19		
16:45-17:00	**Denmark Rd**	580.10	580.10		
16:45-17:00	**Development access**	65.88	65.88		
17:00-17:15	**Peto Way**	363.48	369.72		
17:00-17:15	**Bamards Way**	110.66	113.35		
17:00-17:15	**North Quay Retail Park**	294.10	294.10		
17:00-17:15	**Denmark Rd**	485.81	485.81		
17:00-17:15	**Development access**	55.17	55.17		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.000	35.892	191.135	193.148	62.635
	Bamards Way	80.781	0.000	1.657	63.992	0.563
	North Quay Retail Park	253.951	0.542	0.000	135.276	0.881
	Denmark Rd	374.351	34.614	177.353	0.000	58.972
	Development access	47.382	0.106	0.454	25.340	0.000

Turning Proportions (Veh) - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.00	0.07	0.40	0.40	0.13
	Bamards Way	0.55	0.00	0.01	0.44	0.00
	North Quay Retail Park	0.65	0.00	0.00	0.35	0.00
	Denmark Rd	0.58	0.05	0.27	0.00	0.09
	Development access	0.65	0.00	0.01	0.35	0.00

Vehicle Mix

Average PCU Per Vehicle - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	1.000	1.000	1.000	1.043	1.000
	Bamards Way	1.044	1.000	1.000	1.000	1.000
	North Quay Retail Park	1.000	1.000	1.000	1.000	1.000
	Denmark Rd	1.000	1.000	1.000	1.000	1.000
	Development access	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.0	0.0	0.0	3.3	0.0
	Bamards Way	3.4	0.0	0.0	0.0	0.0
	North Quay Retail Park	0.0	0.0	0.0	0.0	0.0
	Denmark Rd	0.0	0.0	0.0	0.0	0.0
	Development access	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
Peto Way	0.29	2.78	0.41	A
Bamards Way	0.16	4.16	0.19	A
North Quay Retail Park	0.37	4.99	0.59	A
Denmark Rd	0.52	5.53	1.09	A
Development access	0.05	2.41	0.05	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	363.49	362.53	178.77	0.00	1878.74	0.193	0.24	2.373	A
Bamards Way	110.66	110.24	487.92	0.00	1140.06	0.097	0.11	3.493	A
North Quay Retail Park	294.10	292.85	320.09	0.00	1230.59	0.239	0.31	3.834	A
Denmark Rd	485.81	483.78	299.48	0.00	1439.59	0.337	0.51	3.758	A
Development access	55.17	55.04	690.93	0.00	1785.52	0.031	0.03	2.080	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	434.04	433.78	214.06	0.00	1857.22	0.234	0.30	2.529	A
Bamards Way	132.14	132.02	583.93	0.00	1092.63	0.121	0.14	3.747	A
North Quay Retail Park	351.19	350.79	383.11	0.00	1197.04	0.293	0.41	4.252	A
Denmark Rd	580.10	579.34	358.65	0.00	1406.45	0.412	0.70	4.349	A
Development access	65.88	65.84	827.47	0.00	1695.07	0.039	0.04	2.209	A

Main results: (16:15-16:30)

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	531.58	531.17	261.97	0.00	1828.01	0.291	0.41	2.776	A
Bamards Way	161.84	161.65	714.91	0.00	1027.94	0.157	0.19	4.154	A
North Quay Retail Park	430.11	429.40	469.11	0.00	1151.25	0.374	0.59	4.981	A
Denmark Rd	710.48	708.95	439.07	0.00	1361.41	0.522	1.08	5.504	A
Development access	80.68	80.63	1012.73	0.00	1572.35	0.051	0.05	2.412	A

Main results: (16:30-16:45)

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	531.58	531.58	262.48	0.00	1827.70	0.291	0.41	2.776	A
Bamards Way	161.84	161.84	715.72	0.00	1027.54	0.158	0.19	4.158	A
North Quay Retail Park	430.11	430.10	469.54	0.00	1151.03	0.374	0.59	4.993	A
Denmark Rd	710.48	710.45	439.69	0.00	1361.06	0.522	1.09	5.532	A
Development access	80.68	80.68	1014.66	0.00	1571.08	0.051	0.05	2.415	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	434.04	434.45	214.84	0.00	1856.75	0.234	0.31	2.533	A
Bamards Way	132.14	132.34	585.21	0.00	1092.00	0.121	0.14	3.754	A
North Quay Retail Park	351.19	351.89	383.81	0.00	1196.67	0.293	0.42	4.266	A
Denmark Rd	580.10	581.61	359.63	0.00	1405.90	0.413	0.71	4.376	A
Development access	65.88	65.93	830.43	0.00	1693.12	0.039	0.04	2.213	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	363.49	363.75	179.76	0.00	1878.14	0.194	0.24	2.377	A
Bamards Way	110.66	110.78	489.87	0.00	1139.09	0.097	0.11	3.503	A
North Quay Retail Park	294.10	294.51	321.33	0.00	1229.92	0.239	0.32	3.851	A
Denmark Rd	485.81	486.59	301.02	0.00	1438.73	0.338	0.51	3.786	A
Development access	55.17	55.20	694.87	0.00	1782.92	0.031	0.03	2.083	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
15:45-16:00	Peto Way	363.49	1878.74	0.193	0.00	0.00	0.24	3.53	-	2.373
15:45-16:00	Bamards Way	110.66	1140.06	0.097	0.00	0.00	0.11	1.58	-	3.493
15:45-16:00	North Quay Retail Park	294.10	1230.59	0.239	0.00	0.00	0.31	4.58	-	3.834
15:45-16:00	Denmark Rd	485.81	1439.59	0.337	0.00	0.00	0.51	7.40	-	3.758
15:45-16:00	Development access	55.17	1785.52	0.031	0.00	0.00	0.03	0.47	-	2.080
16:00-16:15	Peto Way	434.04	1857.22	0.234	0.00	0.24	0.30	4.51	-	2.529
16:00-16:15	Bamards Way	132.14	1092.63	0.121	0.00	0.11	0.14	2.03	-	3.747
16:00-16:15	North Quay Retail Park	351.19	1197.04	0.293	0.00	0.31	0.41	6.08	-	4.252

16:00-16:15	Denmark Rd	580.10	1406.45	0.412	0.00	0.51	0.70	10.22	-	4.349
16:00-16:15	Development access	65.88	1695.07	0.039	0.00	0.03	0.04	0.60	-	2.209
16:15-16:30	Peto Way	531.58	1828.01	0.291	0.00	0.30	0.41	6.04	-	2.776
16:15-16:30	Bamards Way	161.84	1027.94	0.157	0.00	0.14	0.19	2.74	-	4.154
16:15-16:30	North Quay Retail Park	430.11	1151.25	0.374	0.00	0.41	0.59	8.66	-	4.981
16:15-16:30	Denmark Rd	710.48	1361.41	0.522	0.00	0.70	1.08	15.67	-	5.504
16:15-16:30	Development access	80.68	1572.35	0.051	0.00	0.04	0.05	0.80	-	2.412
16:30-16:45	Peto Way	531.58	1827.70	0.291	0.00	0.41	0.41	6.13	-	2.776
16:30-16:45	Bamards Way	161.84	1027.54	0.158	0.00	0.19	0.19	2.79	-	4.158
16:30-16:45	North Quay Retail Park	430.11	1151.03	0.374	0.00	0.59	0.59	8.89	-	4.993
16:30-16:45	Denmark Rd	710.48	1361.06	0.522	0.00	1.08	1.09	16.23	-	5.532
16:30-16:45	Development access	80.68	1571.08	0.051	0.00	0.05	0.05	0.81	-	2.415
16:45-17:00	Peto Way	434.04	1856.75	0.234	0.00	0.41	0.31	4.65	-	2.533
16:45-17:00	Bamards Way	132.14	1092.00	0.121	0.00	0.19	0.14	2.11	-	3.754
16:45-17:00	North Quay Retail Park	351.19	1196.67	0.293	0.00	0.59	0.42	6.40	-	4.266
16:45-17:00	Denmark Rd	580.10	1405.90	0.413	0.00	1.09	0.71	10.90	-	4.376
16:45-17:00	Development access	65.88	1693.12	0.039	0.00	0.05	0.04	0.61	-	2.213
17:00-17:15	Peto Way	363.49	1878.14	0.194	0.00	0.31	0.24	3.65	-	2.377
17:00-17:15	Bamards Way	110.66	1139.09	0.097	0.00	0.14	0.11	1.64	-	3.503
17:00-17:15	North Quay Retail Park	294.10	1229.92	0.239	0.00	0.42	0.32	4.82	-	3.851
17:00-17:15	Denmark Rd	485.81	1438.73	0.338	0.00	0.71	0.51	7.85	-	3.786
17:00-17:15	Development access	55.17	1782.92	0.031	0.00	0.04	0.03	0.48	-	2.083

DM - 2022 DS, 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
DM	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
2022 DS, AM	2022 DS	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	Petro Way/Denmark Rd	Roundabout	1,2,3,4,5			5.63	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Peto Way	1	Peto Way	
Bamards Way	2	Bamards Way	
North Quay Retail Park	3	North Quay Retail Park	
Denmark Rd	4	Denmark Rd	
Development access	5	Development access	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Peto Way	0.00	99999.00
Bamards Way	0.00	99999.00
North Quay Retail Park	0.00	99999.00
Denmark Rd	0.00	99999.00
Development access	0.00	99999.00

Roundabout Geometry

Name	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
Peto Way	3.70	7.90	26.60	20.90	60.00	22.50	
Bamards Way	3.70	5.50	9.40	12.30	60.00	30.00	
North Quay Retail Park	3.40	4.70	14.50	27.80	60.00	20.00	
Denmark Rd	3.70	6.60	7.90	28.00	60.00	18.50	
Development access	4.30	10.40	17.30	25.50	60.00	23.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Peto Way		(calculated)	(calculated)	0.620	2021.854
Bamards Way		(calculated)	(calculated)	0.500	1414.605
North Quay Retail Park		(calculated)	(calculated)	0.518	1400.988
Denmark Rd		(calculated)	(calculated)	0.555	1607.329
Development access		(calculated)	(calculated)	0.660	2243.205

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	2.30				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
Peto Way	ONE HOUR	✓	933.35	100.000
Bamards Way	ONE HOUR	✓	100.53	100.000
North Quay Retail Park	ONE HOUR	✓	120.70	100.000
Denmark Rd	ONE HOUR	✓	880.96	100.000
Development access	ONE HOUR	✓	62.69	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	Peto Way	702.68	746.11		
07:45-08:00	Bamards Way	75.68	75.70		
07:45-08:00	North Quay Retail Park	90.87	90.87		
07:45-08:00	Denmark Rd	663.23	679.24		
07:45-08:00	Development access	47.20	47.20		
08:00-08:15	Peto Way	839.06	890.93		
08:00-08:15	Bamards Way	90.37	90.39		

08:00-08:15	**North Quay Retail Park**	108.50	108.50		
08:00-08:15	**Denmark Rd**	791.96	811.08		
08:00-08:15	**Development access**	56.36	56.36		
08:15-08:30	**Peto Way**	1027.64	1091.16		
08:15-08:30	**Bamards Way**	110.69	110.71		
08:15-08:30	**North Quay Retail Park**	132.89	132.89		
08:15-08:30	**Denmark Rd**	969.95	993.36		
08:15-08:30	**Development access**	69.03	69.03		
08:30-08:45	**Peto Way**	1027.64	1091.16		
08:30-08:45	**Bamards Way**	110.69	110.71		
08:30-08:45	**North Quay Retail Park**	132.89	132.89		
08:30-08:45	**Denmark Rd**	969.95	993.36		
08:30-08:45	**Development access**	69.03	69.03		
08:45-09:00	**Peto Way**	839.06	890.93		
08:45-09:00	**Bamards Way**	90.37	90.39		
08:45-09:00	**North Quay Retail Park**	108.50	108.50		
08:45-09:00	**Denmark Rd**	791.96	811.08		
08:45-09:00	**Development access**	56.36	56.36		
09:00-09:15	**Peto Way**	702.68	746.11		
09:00-09:15	**Bamards Way**	75.68	75.70		
09:00-09:15	**North Quay Retail Park**	90.87	90.87		
09:00-09:15	**Denmark Rd**	663.23	679.24		
09:00-09:15	**Development access**	47.20	47.20		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.000	58.978	97.314	739.680	37.380
	Bamards Way	25.709	0.000	0.302	74.247	0.273
	North Quay Retail Park	35.798	0.526	0.000	84.205	0.167
	Denmark Rd	629.059	79.036	125.283	0.000	47.578
	Development access	19.227	0.314	0.218	42.934	0.000

Turning Proportions (Veh) - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.00	0.06	0.10	0.79	0.04
	Bamards Way	0.26	0.00	0.00	0.74	0.00
	North Quay Retail Park	0.30	0.00	0.00	0.70	0.00
	Denmark Rd	0.71	0.09	0.14	0.00	0.05
	Development access	0.31	0.01	0.00	0.68	0.00

Vehicle Mix

Average PCU Per Vehicle - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	1.000	1.000	1.000	1.078	1.000
	Bamards Way	1.001	1.000	1.000	1.000	1.000
	North Quay Retail Park	1.000	1.000	1.000	1.000	1.000
	Denmark Rd	1.034	1.000	1.000	1.000	1.000
	Development access	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.0	0.0	0.0	6.0	0.0
	Bamards Way	0.1	0.0	0.0	0.0	0.0
	North Quay Retail Park	0.0	0.0	0.0	0.0	0.0
	Denmark Rd	2.6	0.0	0.0	0.0	0.0
	Development access	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
Peto Way	0.59	5.02	1.42	A
Bamards Way	0.14	5.15	0.16	A
North Quay Retail Park	0.16	5.07	0.19	A
Denmark Rd	0.64	6.66	1.78	A
Development access	0.04	2.39	0.05	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	702.68	700.12	186.16	0.00	1795.42	0.391	0.64	3.280	A
Bamards Way	75.68	75.36	782.18	0.00	1002.03	0.076	0.08	3.884	A
North Quay Retail Park	90.87	90.48	690.26	0.00	1021.03	0.089	0.10	3.866	A
Denmark Rd	663.23	660.19	74.87	0.00	1528.85	0.434	0.76	4.130	A
Development access	47.20	47.09	671.03	0.00	1789.89	0.026	0.03	2.065	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	839.07	838.06	222.91	0.00	1773.95	0.473	0.89	3.842	A
Bamards Way	90.37	90.27	936.32	0.00	920.78	0.098	0.11	4.334	A
North Quay Retail Park	108.50	108.38	826.29	0.00	946.16	0.115	0.13	4.297	A
Denmark Rd	791.96	790.70	89.66	0.00	1520.83	0.521	1.07	4.923	A
Development access	56.36	56.33	803.70	0.00	1700.27	0.033	0.03	2.189	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	1027.64	1025.55	272.73	0.00	1744.86	0.589	1.41	4.991	A
Bamards Way	110.69	110.49	1145.77	0.00	810.38	0.137	0.16	5.142	A
North Quay Retail Park	132.89	132.66	1011.22	0.00	844.37	0.157	0.19	5.057	A
Denmark Rd	969.95	967.20	109.74	0.00	1509.95	0.642	1.76	6.598	A
Development access	69.03	68.98	983.15	0.00	1579.05	0.044	0.05	2.383	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	1027.64	1027.60	273.38	0.00	1744.48	0.589	1.42	5.021	A
Bamards Way	110.69	110.68	1148.10	0.00	809.15	0.137	0.16	5.153	A
North Quay Retail Park	132.89	132.88	1013.15	0.00	843.31	0.158	0.19	5.066	A
Denmark Rd	969.95	969.88	109.94	0.00	1509.84	0.642	1.78	6.664	A
Development access	69.03	69.03	985.80	0.00	1577.26	0.044	0.05	2.386	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	839.07	841.14	223.89	0.00	1773.38	0.473	0.91	3.871	A
Bamards Way	90.37	90.57	939.83	0.00	918.94	0.098	0.11	4.348	A
North Quay Retail Park	108.50	108.73	829.21	0.00	944.55	0.115	0.13	4.309	A
Denmark Rd	791.96	794.68	89.97	0.00	1520.67	0.521	1.10	4.978	A
Development access	56.36	56.41	807.64	0.00	1697.61	0.033	0.03	2.193	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	702.68	703.71	187.27	0.00	1794.77	0.392	0.65	3.301	A
Bamards Way	75.68	75.79	786.25	0.00	999.89	0.076	0.08	3.897	A
North Quay Retail Park	90.87	90.99	693.78	0.00	1019.10	0.089	0.10	3.880	A
Denmark Rd	663.23	664.53	75.28	0.00	1528.63	0.434	0.77	4.173	A
Development access	47.20	47.23	675.41	0.00	1786.93	0.026	0.03	2.069	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
07:45-08:00	Peto Way	702.68	1795.42	0.391	0.00	0.00	0.64	9.36	-	3.280
07:45-08:00	Bamards Way	75.68	1002.03	0.076	0.00	0.00	0.08	1.20	-	3.884
07:45-08:00	North Quay Retail Park	90.87	1021.03	0.089	0.00	0.00	0.10	1.43	-	3.866
07:45-08:00	Denmark Rd	663.23	1528.85	0.434	0.00	0.00	0.76	11.06	-	4.130
07:45-08:00	Development access	47.20	1789.89	0.026	0.00	0.00	0.03	0.40	-	2.065
08:00-08:15	Peto Way	839.07	1773.95	0.473	0.00	0.64	0.89	13.07	-	3.842
08:00-08:15	Bamards Way	90.37	920.78	0.098	0.00	0.08	0.11	1.60	-	4.334
08:00-08:15	North Quay Retail Park	108.50	946.16	0.115	0.00	0.10	0.13	1.90	-	4.297

08:00-08:15	Denmark Rd	791.96	1520.83	0.521	0.00	0.76	1.07	15.69	-	4.923
08:00-08:15	Development access	56.36	1700.27	0.033	0.00	0.03	0.03	0.51	-	2.189
08:15-08:30	Peto Way	1027.64	1744.86	0.589	0.00	0.89	1.41	20.52	-	4.991
08:15-08:30	Bamards Way	110.69	810.38	0.137	0.00	0.11	0.16	2.31	-	5.142
08:15-08:30	North Quay Retail Park	132.89	844.37	0.157	0.00	0.13	0.19	2.73	-	5.057
08:15-08:30	Denmark Rd	969.95	1509.95	0.642	0.00	1.07	1.76	25.29	-	6.598
08:15-08:30	Development access	69.03	1579.05	0.044	0.00	0.03	0.05	0.68	-	2.383
08:30-08:45	Peto Way	1027.64	1744.48	0.589	0.00	1.41	1.42	21.30	-	5.021
08:30-08:45	Bamards Way	110.69	809.15	0.137	0.00	0.16	0.16	2.36	-	5.153
08:30-08:45	North Quay Retail Park	132.89	843.31	0.158	0.00	0.19	0.19	2.79	-	5.066
08:30-08:45	Denmark Rd	969.95	1509.84	0.642	0.00	1.76	1.78	26.57	-	6.664
08:30-08:45	Development access	69.03	1577.26	0.044	0.00	0.05	0.05	0.68	-	2.386
08:45-09:00	Peto Way	839.07	1773.38	0.473	0.00	1.42	0.91	13.93	-	3.871
08:45-09:00	Bamards Way	90.37	918.94	0.098	0.00	0.16	0.11	1.67	-	4.348
08:45-09:00	North Quay Retail Park	108.50	944.55	0.115	0.00	0.19	0.13	1.99	-	4.309
08:45-09:00	Denmark Rd	791.96	1520.67	0.521	0.00	1.78	1.10	17.04	-	4.978
08:45-09:00	Development access	56.36	1697.61	0.033	0.00	0.05	0.03	0.52	-	2.193
09:00-09:15	Peto Way	702.68	1794.77	0.392	0.00	0.91	0.65	9.90	-	3.301
09:00-09:15	Bamards Way	75.68	999.89	0.076	0.00	0.11	0.08	1.25	-	3.897
09:00-09:15	North Quay Retail Park	90.87	1019.10	0.089	0.00	0.13	0.10	1.50	-	3.880
09:00-09:15	Denmark Rd	663.23	1528.63	0.434	0.00	1.10	0.77	11.87	-	4.173
09:00-09:15	Development access	47.20	1786.93	0.026	0.00	0.03	0.03	0.41	-	2.069

DM - 2022 DS, 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
DM	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
2022 DS, PM	2022 DS	PM		ONE HOUR	15:45	17:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Petro Way/Denmark Rd	Roundabout	1,2,3,4,5			7.16	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Peto Way	1	Peto Way	
Bamards Way	2	Bamards Way	
North Quay Retail Park	3	North Quay Retail Park	
Denmark Rd	4	Denmark Rd	
Development access	5	Development access	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Peto Way	0.00	99999.00
Bamards Way	0.00	99999.00
North Quay Retail Park	0.00	99999.00
Denmark Rd	0.00	99999.00
Development access	0.00	99999.00

Roundabout Geometry

Name	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
Peto Way	3.70	7.90	26.60	20.90	60.00	22.50	
Bamards Way	3.70	5.50	9.40	12.30	60.00	30.00	
North Quay Retail Park	3.40	4.70	14.50	27.80	60.00	20.00	
Denmark Rd	3.70	6.60	7.90	28.00	60.00	18.50	
Development access	4.30	10.40	17.30	25.50	60.00	23.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Peto Way		(calculated)	(calculated)	0.620	2021.854
Bamards Way		(calculated)	(calculated)	0.500	1414.605
North Quay Retail Park		(calculated)	(calculated)	0.518	1400.988
Denmark Rd		(calculated)	(calculated)	0.555	1607.329
Development access		(calculated)	(calculated)	0.660	2243.205

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	2.30				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
Peto Way	ONE HOUR	✓	799.48	100.000
Bamards Way	ONE HOUR	✓	136.44	100.000
North Quay Retail Park	ONE HOUR	✓	368.39	100.000
Denmark Rd	ONE HOUR	✓	1005.73	100.000
Development access	ONE HOUR	✓	68.96	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
15:45-16:00	Peto Way	601.89	619.53		
15:45-16:00	Bamards Way	102.72	104.37		
15:45-16:00	North Quay Retail Park	277.34	277.34		
15:45-16:00	Denmark Rd	757.17	757.17		
15:45-16:00	Development access	51.92	51.92		
16:00-16:15	Peto Way	718.72	739.78		
16:00-16:15	Bamards Way	122.65	124.62		

16:00-16:15	**North Quay Retail Park**	331.18	331.18		
16:00-16:15	**Denmark Rd**	904.13	904.13		
16:00-16:15	**Development access**	62.00	62.00		
16:15-16:30	**Peto Way**	880.25	906.04		
16:15-16:30	**Bamards Way**	150.22	152.63		
16:15-16:30	**North Quay Retail Park**	405.61	405.61		
16:15-16:30	**Denmark Rd**	1107.33	1107.33		
16:15-16:30	**Development access**	75.93	75.93		
16:30-16:45	**Peto Way**	880.25	906.04		
16:30-16:45	**Bamards Way**	150.22	152.63		
16:30-16:45	**North Quay Retail Park**	405.61	405.61		
16:30-16:45	**Denmark Rd**	1107.33	1107.33		
16:30-16:45	**Development access**	75.93	75.93		
16:45-17:00	**Peto Way**	718.72	739.78		
16:45-17:00	**Bamards Way**	122.65	124.62		
16:45-17:00	**North Quay Retail Park**	331.18	331.18		
16:45-17:00	**Denmark Rd**	904.13	904.13		
16:45-17:00	**Development access**	62.00	62.00		
17:00-17:15	**Peto Way**	601.89	619.53		
17:00-17:15	**Bamards Way**	102.72	104.37		
17:00-17:15	**North Quay Retail Park**	277.34	277.34		
17:00-17:15	**Denmark Rd**	757.17	757.17		
17:00-17:15	**Development access**	51.92	51.92		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.000	31.541	166.968	546.082	54.891
	Bamards Way	49.548	0.000	1.462	84.927	0.501
	North Quay Retail Park	151.911	0.437	0.000	215.274	0.768
	Denmark Rd	730.260	32.928	183.014	0.000	59.531
	Development access	26.806	0.080	0.372	41.706	0.000

Turning Proportions (Veh) - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.00	0.04	0.21	0.68	0.07
	Bamards Way	0.36	0.00	0.01	0.62	0.00
	North Quay Retail Park	0.41	0.00	0.00	0.58	0.00
	Denmark Rd	0.73	0.03	0.18	0.00	0.06
	Development access	0.39	0.00	0.01	0.60	0.00

Vehicle Mix

Average PCU Per Vehicle - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	1.000	1.000	1.000	1.043	1.000
	Bamards Way	1.044	1.000	1.000	1.000	1.000
	North Quay Retail Park	1.000	1.000	1.000	1.000	1.000
	Denmark Rd	1.000	1.000	1.000	1.000	1.000
	Development access	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.0	0.0	0.0	3.3	0.0
	Bamards Way	3.4	0.0	0.0	0.0	0.0
	North Quay Retail Park	0.0	0.0	0.0	0.0	0.0
	Denmark Rd	0.0	0.0	0.0	0.0	0.0
	Development access	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
Peto Way	0.49	3.94	0.96	A
Bamards Way	0.18	5.20	0.22	A
North Quay Retail Park	0.43	6.70	0.75	A
Denmark Rd	0.76	10.53	3.17	B
Development access	0.05	2.70	0.06	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	601.89	599.97	193.69	0.00	1847.59	0.326	0.48	2.882	A
Bamards Way	102.72	102.27	744.95	0.00	1017.34	0.101	0.11	3.932	A
North Quay Retail Park	277.34	275.99	583.50	0.00	1088.81	0.255	0.34	4.422	A
Denmark Rd	757.17	753.13	193.42	0.00	1499.04	0.505	1.01	4.800	A
Development access	51.92	51.79	859.82	0.00	1674.76	0.031	0.03	2.217	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	718.72	718.06	231.93	0.00	1824.55	0.394	0.65	3.252	A
Bamards Way	122.65	122.51	891.66	0.00	943.50	0.130	0.15	4.385	A
North Quay Retail Park	331.18	330.65	698.43	0.00	1027.31	0.322	0.47	5.164	A
Denmark Rd	904.13	901.97	231.67	0.00	1477.63	0.612	1.55	6.229	A
Development access	62.00	61.96	1029.81	0.00	1562.38	0.040	0.04	2.398	A

Main results: (16:15-16:30)

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	880.25	879.01	283.28	0.00	1793.60	0.491	0.96	3.932	A
Bamards Way	150.22	149.95	1090.99	0.00	843.18	0.178	0.22	5.193	A
North Quay Retail Park	405.61	404.51	854.98	0.00	943.55	0.430	0.74	6.665	A
Denmark Rd	1107.33	1101.13	283.49	0.00	1448.62	0.764	3.10	10.179	B
Development access	75.93	75.87	1257.70	0.00	1411.71	0.054	0.06	2.694	A

Main results: (16:30-16:45)

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	880.25	880.23	284.59	0.00	1792.82	0.491	0.96	3.944	A
Bamards Way	150.22	150.22	1093.28	0.00	842.04	0.178	0.22	5.203	A
North Quay Retail Park	405.61	405.58	856.20	0.00	942.90	0.430	0.75	6.699	A
Denmark Rd	1107.33	1107.05	284.11	0.00	1448.27	0.765	3.17	10.525	B
Development access	75.93	75.93	1263.80	0.00	1407.68	0.054	0.06	2.702	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	718.72	719.94	233.80	0.00	1823.42	0.394	0.65	3.265	A
Bamards Way	122.65	122.92	895.07	0.00	941.80	0.130	0.15	4.397	A
North Quay Retail Park	331.18	332.25	700.31	0.00	1026.31	0.323	0.48	5.196	A
Denmark Rd	904.13	910.39	232.62	0.00	1477.10	0.612	1.61	6.420	A
Development access	62.00	62.06	1038.55	0.00	1556.61	0.040	0.04	2.408	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	601.89	602.57	195.16	0.00	1846.71	0.326	0.49	2.894	A
Bamards Way	102.72	102.87	748.70	0.00	1015.46	0.101	0.11	3.945	A
North Quay Retail Park	277.34	277.89	586.14	0.00	1087.39	0.255	0.34	4.451	A
Denmark Rd	757.17	759.46	194.61	0.00	1498.38	0.505	1.03	4.888	A
Development access	51.92	51.96	866.79	0.00	1670.16	0.031	0.03	2.224	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
15:45-16:00	Peto Way	601.89	1847.59	0.326	0.00	0.00	0.48	7.07	-	2.882
15:45-16:00	Bamards Way	102.72	1017.34	0.101	0.00	0.00	0.11	1.64	-	3.932
15:45-16:00	North Quay Retail Park	277.34	1088.81	0.255	0.00	0.00	0.34	4.96	-	4.422
15:45-16:00	Denmark Rd	757.17	1499.04	0.505	0.00	0.00	1.01	14.59	-	4.800
15:45-16:00	Development access	51.92	1674.76	0.031	0.00	0.00	0.03	0.47	-	2.217
16:00-16:15	Peto Way	718.72	1824.55	0.394	0.00	0.48	0.65	9.53	-	3.252
16:00-16:15	Bamards Way	122.65	943.50	0.130	0.00	0.11	0.15	2.19	-	4.385
16:00-16:15	North Quay Retail Park	331.18	1027.31	0.322	0.00	0.34	0.47	6.92	-	5.164

16:00-16:15	Denmark Rd	904.13	1477.63	0.612	0.00	1.01	1.55	22.37	-	6.229
16:00-16:15	Development access	62.00	1562.38	0.040	0.00	0.03	0.04	0.61	-	2.398
16:15-16:30	Peto Way	880.25	1793.60	0.491	0.00	0.65	0.96	14.00	-	3.932
16:15-16:30	Bamards Way	150.22	843.18	0.178	0.00	0.15	0.22	3.16	-	5.193
16:15-16:30	North Quay Retail Park	405.61	943.55	0.430	0.00	0.47	0.74	10.81	-	6.665
16:15-16:30	Denmark Rd	1107.33	1448.62	0.764	0.00	1.55	3.10	42.97	-	10.179
16:15-16:30	Development access	75.93	1411.71	0.054	0.00	0.04	0.06	0.84	-	2.694
16:30-16:45	Peto Way	880.25	1792.82	0.491	0.00	0.96	0.96	14.38	-	3.944
16:30-16:45	Bamards Way	150.22	842.04	0.178	0.00	0.22	0.22	3.24	-	5.203
16:30-16:45	North Quay Retail Park	405.61	942.90	0.430	0.00	0.74	0.75	11.22	-	6.699
16:30-16:45	Denmark Rd	1107.33	1448.27	0.765	0.00	3.10	3.17	47.14	-	10.525
16:30-16:45	Development access	75.93	1407.68	0.054	0.00	0.06	0.06	0.85	-	2.702
16:45-17:00	Peto Way	718.72	1823.42	0.394	0.00	0.96	0.65	10.01	-	3.265
16:45-17:00	Bamards Way	122.65	941.80	0.130	0.00	0.22	0.15	2.30	-	4.397
16:45-17:00	North Quay Retail Park	331.18	1026.31	0.323	0.00	0.75	0.48	7.40	-	5.196
16:45-17:00	Denmark Rd	904.13	1477.10	0.612	0.00	3.17	1.61	25.27	-	6.420
16:45-17:00	Development access	62.00	1556.61	0.040	0.00	0.06	0.04	0.63	-	2.408
17:00-17:15	Peto Way	601.89	1846.71	0.326	0.00	0.65	0.49	7.40	-	2.894
17:00-17:15	Bamards Way	102.72	1015.46	0.101	0.00	0.15	0.11	1.72	-	3.945
17:00-17:15	North Quay Retail Park	277.34	1087.39	0.255	0.00	0.48	0.34	5.28	-	4.451
17:00-17:15	Denmark Rd	757.17	1498.38	0.505	0.00	1.61	1.03	15.97	-	4.888
17:00-17:15	Development access	51.92	1670.16	0.031	0.00	0.04	0.03	0.49	-	2.224

DM - 2037 DS, 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
DM	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
2037 DS, AM	2037 DS	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	Petro Way/Denmark Rd	Roundabout	1,2,3,4,5			7.78	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Peto Way	1	Peto Way	
Bamards Way	2	Bamards Way	
North Quay Retail Park	3	North Quay Retail Park	
Denmark Rd	4	Denmark Rd	
Development access	5	Development access	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Peto Way	0.00	99999.00
Bamards Way	0.00	99999.00
North Quay Retail Park	0.00	99999.00
Denmark Rd	0.00	99999.00
Development access	0.00	99999.00

Roundabout Geometry

Name	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
Peto Way	3.70	7.90	26.60	20.90	60.00	22.50	
Bamards Way	3.70	5.50	9.40	12.30	60.00	30.00	
North Quay Retail Park	3.40	4.70	14.50	27.80	60.00	20.00	
Denmark Rd	3.70	6.60	7.90	28.00	60.00	18.50	
Development access	4.30	10.40	17.30	25.50	60.00	23.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Peto Way		(calculated)	(calculated)	0.620	2021.854
Bamards Way		(calculated)	(calculated)	0.500	1414.605
North Quay Retail Park		(calculated)	(calculated)	0.518	1400.988
Denmark Rd		(calculated)	(calculated)	0.555	1607.329
Development access		(calculated)	(calculated)	0.660	2243.205

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	2.30				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
Peto Way	ONE HOUR	✓	1077.36	100.000
Bamards Way	ONE HOUR	✓	127.42	100.000
North Quay Retail Park	ONE HOUR	✓	137.80	100.000
Denmark Rd	ONE HOUR	✓	1022.07	100.000
Development access	ONE HOUR	✓	74.07	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	Peto Way	811.09	863.02		
07:45-08:00	Bamards Way	95.93	96.10		
07:45-08:00	North Quay Retail Park	103.74	103.74		
07:45-08:00	Denmark Rd	769.47	788.37		
07:45-08:00	Development access	55.77	55.77		
08:00-08:15	Peto Way	968.52	1030.53		
08:00-08:15	Bamards Way	114.55	114.75		

08:00-08:15	**North Quay Retail Park**	123.88	123.88		
08:00-08:15	**Denmark Rd**	918.82	941.39		
08:00-08:15	**Development access**	66.59	66.59		
08:15-08:30	**Peto Way**	1186.19	1262.13		
08:15-08:30	**Bamards Way**	140.29	140.54		
08:15-08:30	**North Quay Retail Park**	151.72	151.72		
08:15-08:30	**Denmark Rd**	1125.32	1152.96		
08:15-08:30	**Development access**	81.55	81.55		
08:30-08:45	**Peto Way**	1186.19	1262.13		
08:30-08:45	**Bamards Way**	140.29	140.54		
08:30-08:45	**North Quay Retail Park**	151.72	151.72		
08:30-08:45	**Denmark Rd**	1125.32	1152.96		
08:30-08:45	**Development access**	81.55	81.55		
08:45-09:00	**Peto Way**	968.52	1030.53		
08:45-09:00	**Bamards Way**	114.55	114.75		
08:45-09:00	**North Quay Retail Park**	123.88	123.88		
08:45-09:00	**Denmark Rd**	918.82	941.39		
08:45-09:00	**Development access**	66.59	66.59		
09:00-09:15	**Peto Way**	811.09	863.02		
09:00-09:15	**Bamards Way**	95.93	96.10		
09:00-09:15	**North Quay Retail Park**	103.74	103.74		
09:00-09:15	**Denmark Rd**	769.47	788.37		
09:00-09:15	**Development access**	55.77	55.77		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.000	71.550	117.641	842.177	45.989
	Bamards Way	34.468	0.000	0.366	92.229	0.354
	North Quay Retail Park	43.542	0.589	0.000	93.482	0.183
	Denmark Rd	742.720	88.774	136.651	0.000	53.924
	Development access	23.572	0.375	0.240	49.884	0.000

Turning Proportions (Veh) - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.00	0.07	0.11	0.78	0.04
	Bamards Way	0.27	0.00	0.00	0.72	0.00
	North Quay Retail Park	0.32	0.00	0.00	0.68	0.00
	Denmark Rd	0.73	0.09	0.13	0.00	0.05
	Development access	0.32	0.01	0.00	0.67	0.00

Vehicle Mix

Average PCU Per Vehicle - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	1.000	1.000	1.000	1.082	1.000
	Bamards Way	1.007	1.000	1.000	1.000	1.000
	North Quay Retail Park	1.000	1.000	1.000	1.000	1.000
	Denmark Rd	1.034	1.000	1.000	1.000	1.000
	Development access	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.0	0.0	0.0	6.3	0.0
	Bamards Way	0.5	0.0	0.0	0.0	0.0
	North Quay Retail Park	0.0	0.0	0.0	0.0	0.0
	Denmark Rd	2.6	0.0	0.0	0.0	0.0
	Development access	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
Peto Way	0.69	6.71	2.18	A
Bamards Way	0.19	6.21	0.24	A
North Quay Retail Park	0.20	5.97	0.25	A
Denmark Rd	0.75	9.74	2.99	A
Development access	0.06	2.60	0.06	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	811.09	807.77	207.18	0.00	1779.44	0.456	0.83	3.693	A
Bamards Way	95.93	95.47	894.10	0.00	940.45	0.102	0.11	4.259	A
North Quay Retail Park	103.74	103.26	798.58	0.00	960.48	0.108	0.12	4.198	A
Denmark Rd	769.47	765.40	93.78	0.00	1517.89	0.507	1.02	4.758	A
Development access	55.77	55.63	783.91	0.00	1713.42	0.033	0.03	2.171	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	968.52	966.98	248.10	0.00	1755.59	0.552	1.22	4.555	A
Bamards Way	114.55	114.38	1070.36	0.00	847.46	0.135	0.16	4.909	A
North Quay Retail Park	123.88	123.70	956.04	0.00	873.63	0.142	0.16	4.799	A
Denmark Rd	918.82	916.75	112.32	0.00	1507.83	0.609	1.53	6.068	A
Development access	66.59	66.55	938.94	0.00	1608.64	0.041	0.04	2.334	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	1186.19	1182.43	303.17	0.00	1723.49	0.688	2.16	6.607	A
Bamards Way	140.29	139.95	1308.76	0.00	721.70	0.194	0.24	6.186	A
North Quay Retail Park	151.72	151.38	1169.21	0.00	756.04	0.201	0.25	5.951	A
Denmark Rd	1125.32	1119.74	137.41	0.00	1494.22	0.753	2.93	9.472	A
Development access	81.55	81.49	1147.01	0.00	1468.03	0.056	0.06	2.595	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	1186.19	1186.09	304.39	0.00	1722.77	0.689	2.18	6.705	A
Bamards Way	140.29	140.28	1312.92	0.00	719.50	0.195	0.24	6.214	A
North Quay Retail Park	151.72	151.71	1172.60	0.00	754.17	0.201	0.25	5.974	A
Denmark Rd	1125.32	1125.09	137.76	0.00	1494.02	0.753	2.99	9.740	A
Development access	81.55	81.55	1152.26	0.00	1464.48	0.056	0.06	2.602	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	968.52	972.28	249.86	0.00	1754.56	0.552	1.25	4.623	A
Bamards Way	114.55	114.88	1076.40	0.00	844.28	0.136	0.16	4.937	A
North Quay Retail Park	123.88	124.21	960.98	0.00	870.90	0.142	0.17	4.824	A
Denmark Rd	918.82	924.42	112.85	0.00	1507.55	0.609	1.59	6.230	A
Development access	66.59	66.65	946.51	0.00	1603.53	0.042	0.04	2.343	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	811.09	812.70	208.68	0.00	1778.56	0.456	0.84	3.732	A
Bamards Way	95.93	96.10	899.66	0.00	937.52	0.102	0.11	4.279	A
North Quay Retail Park	103.74	103.92	803.39	0.00	957.83	0.108	0.12	4.218	A
Denmark Rd	769.47	771.66	94.38	0.00	1517.57	0.507	1.04	4.841	A
Development access	55.77	55.80	790.22	0.00	1709.15	0.033	0.03	2.177	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
07:45-08:00	Peto Way	811.09	1779.44	0.456	0.00	0.00	0.83	12.12	-	3.693
07:45-08:00	Bamards Way	95.93	940.45	0.102	0.00	0.00	0.11	1.66	-	4.259
07:45-08:00	North Quay Retail Park	103.74	960.48	0.108	0.00	0.00	0.12	1.77	-	4.198
07:45-08:00	Denmark Rd	769.47	1517.89	0.507	0.00	0.00	1.02	14.71	-	4.758
07:45-08:00	Development access	55.77	1713.42	0.033	0.00	0.00	0.03	0.50	-	2.171
08:00-08:15	Peto Way	968.52	1755.59	0.552	0.00	0.83	1.22	17.75	-	4.555
08:00-08:15	Bamards Way	114.55	847.46	0.135	0.00	0.11	0.16	2.29	-	4.909
08:00-08:15	North Quay Retail Park	123.88	873.63	0.142	0.00	0.12	0.16	2.42	-	4.799

08:00-08:15	Denmark Rd	918.82	1507.83	0.609	0.00	1.02	1.53	22.17	-	6.068
08:00-08:15	Development access	66.59	1608.64	0.041	0.00	0.03	0.04	0.64	-	2.334
08:15-08:30	Peto Way	1186.19	1723.49	0.688	0.00	1.22	2.16	30.80	-	6.607
08:15-08:30	Bamards Way	140.29	721.70	0.194	0.00	0.16	0.24	3.50	-	6.186
08:15-08:30	North Quay Retail Park	151.72	756.04	0.201	0.00	0.16	0.25	3.65	-	5.951
08:15-08:30	Denmark Rd	1125.32	1494.22	0.753	0.00	1.53	2.93	40.87	-	9.472
08:15-08:30	Development access	81.55	1468.03	0.056	0.00	0.04	0.06	0.87	-	2.595
08:30-08:45	Peto Way	1186.19	1722.77	0.689	0.00	2.16	2.18	32.61	-	6.705
08:30-08:45	Bamards Way	140.29	719.50	0.195	0.00	0.24	0.24	3.61	-	6.214
08:30-08:45	North Quay Retail Park	151.72	754.17	0.201	0.00	0.25	0.25	3.75	-	5.974
08:30-08:45	Denmark Rd	1125.32	1494.02	0.753	0.00	2.93	2.99	44.47	-	9.740
08:30-08:45	Development access	81.55	1464.48	0.056	0.00	0.06	0.06	0.88	-	2.602
08:45-09:00	Peto Way	968.52	1754.56	0.552	0.00	2.18	1.25	19.34	-	4.623
08:45-09:00	Bamards Way	114.55	844.28	0.136	0.00	0.24	0.16	2.42	-	4.937
08:45-09:00	North Quay Retail Park	123.88	870.90	0.142	0.00	0.25	0.17	2.56	-	4.824
08:45-09:00	Denmark Rd	918.82	1507.55	0.609	0.00	2.99	1.59	24.93	-	6.230
08:45-09:00	Development access	66.59	1603.53	0.042	0.00	0.06	0.04	0.66	-	2.343
09:00-09:15	Peto Way	811.09	1778.56	0.456	0.00	1.25	0.84	12.97	-	3.732
09:00-09:15	Bamards Way	95.93	937.52	0.102	0.00	0.16	0.11	1.75	-	4.279
09:00-09:15	North Quay Retail Park	103.74	957.83	0.108	0.00	0.17	0.12	1.86	-	4.218
09:00-09:15	Denmark Rd	769.47	1517.57	0.507	0.00	1.59	1.04	16.07	-	4.841
09:00-09:15	Development access	55.77	1709.15	0.033	0.00	0.04	0.03	0.51	-	2.177

DM - 2037 DS, 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
DM	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
2037 DS, PM	2037 DS	PM		ONE HOUR	15:45	17:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Petro Way/Denmark Rd	Roundabout	1,2,3,4,5			10.92	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Peto Way	1	Peto Way	
Bamards Way	2	Bamards Way	
North Quay Retail Park	3	North Quay Retail Park	
Denmark Rd	4	Denmark Rd	
Development access	5	Development access	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Peto Way	0.00	99999.00
Bamards Way	0.00	99999.00
North Quay Retail Park	0.00	99999.00
Denmark Rd	0.00	99999.00
Development access	0.00	99999.00

Roundabout Geometry

Name	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
Peto Way	3.70	7.90	26.60	20.90	60.00	22.50	
Bamards Way	3.70	5.50	9.40	12.30	60.00	30.00	
North Quay Retail Park	3.40	4.70	14.50	27.80	60.00	20.00	
Denmark Rd	3.70	6.60	7.90	28.00	60.00	18.50	
Development access	4.30	10.40	17.30	25.50	60.00	23.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Peto Way		(calculated)	(calculated)	0.620	2021.854
Bamards Way		(calculated)	(calculated)	0.500	1414.605
North Quay Retail Park		(calculated)	(calculated)	0.518	1400.988
Denmark Rd		(calculated)	(calculated)	0.555	1607.329
Development access		(calculated)	(calculated)	0.660	2243.205

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	2.30				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
Peto Way	ONE HOUR	✓	917.92	100.000
Bamards Way	ONE HOUR	✓	152.53	100.000
North Quay Retail Park	ONE HOUR	✓	416.70	100.000
Denmark Rd	ONE HOUR	✓	1114.79	100.000
Development access	ONE HOUR	✓	79.42	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
15:45-16:00	Peto Way	691.06	710.28		
15:45-16:00	Bamards Way	114.83	116.76		
15:45-16:00	North Quay Retail Park	313.71	313.71		
15:45-16:00	Denmark Rd	839.27	839.27		
15:45-16:00	Development access	59.79	59.79		
16:00-16:15	Peto Way	825.19	848.15		
16:00-16:15	Bamards Way	137.12	139.42		

16:00-16:15	**North Quay Retail Park**	374.60	374.60		
16:00-16:15	**Denmark Rd**	1002.18	1002.18		
16:00-16:15	**Development access**	71.40	71.40		
16:15-16:30	**Peto Way**	1010.64	1038.77		
16:15-16:30	**Bamards Way**	167.94	170.75		
16:15-16:30	**North Quay Retail Park**	458.79	458.79		
16:15-16:30	**Denmark Rd**	1227.41	1227.41		
16:15-16:30	**Development access**	87.44	87.44		
16:30-16:45	**Peto Way**	1010.64	1038.77		
16:30-16:45	**Bamards Way**	167.94	170.75		
16:30-16:45	**North Quay Retail Park**	458.79	458.79		
16:30-16:45	**Denmark Rd**	1227.41	1227.41		
16:30-16:45	**Development access**	87.44	87.44		
16:45-17:00	**Peto Way**	825.19	848.15		
16:45-17:00	**Bamards Way**	137.12	139.42		
16:45-17:00	**North Quay Retail Park**	374.60	374.60		
16:45-17:00	**Denmark Rd**	1002.18	1002.18		
16:45-17:00	**Development access**	71.40	71.40		
17:00-17:15	**Peto Way**	691.06	710.28		
17:00-17:15	**Bamards Way**	114.83	116.76		
17:00-17:15	**North Quay Retail Park**	313.71	313.71		
17:00-17:15	**Denmark Rd**	839.27	839.27		
17:00-17:15	**Development access**	59.79	59.79		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.000	39.894	212.339	595.372	70.311
	Bamards Way	57.735	0.000	1.590	92.665	0.543
	North Quay Retail Park	179.215	0.485	0.000	236.168	0.829
	Denmark Rd	843.915	34.586	179.017	0.000	57.274
	Development access	32.363	0.090	0.403	46.565	0.000

Turning Proportions (Veh) - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.00	0.04	0.23	0.65	0.08
	Bamards Way	0.38	0.00	0.01	0.61	0.00
	North Quay Retail Park	0.43	0.00	0.00	0.57	0.00
	Denmark Rd	0.76	0.03	0.16	0.00	0.05
	Development access	0.41	0.00	0.01	0.59	0.00

Vehicle Mix

Average PCU Per Vehicle - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	1.000	1.000	1.000	1.043	1.000
	Bamards Way	1.044	1.000	1.000	1.000	1.000
	North Quay Retail Park	1.000	1.000	1.000	1.000	1.000
	Denmark Rd	1.000	1.000	1.000	1.000	1.000
	Development access	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.0	0.0	0.0	3.3	0.0
	Bamards Way	3.4	0.0	0.0	0.0	0.0
	North Quay Retail Park	0.0	0.0	0.0	0.0	0.0
	Denmark Rd	0.0	0.0	0.0	0.0	0.0
	Development access	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
Peto Way	0.56	4.60	1.28	A
Bamards Way	0.22	5.88	0.27	A
North Quay Retail Park	0.51	8.29	1.05	A
Denmark Rd	0.87	18.53	6.03	C
Development access	0.07	2.96	0.07	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	691.05	688.68	195.52	0.00	1849.13	0.374	0.59	3.095	A
Bamards Way	114.83	114.30	827.96	0.00	975.09	0.118	0.13	4.179	A
North Quay Retail Park	313.71	312.03	647.52	0.00	1054.68	0.297	0.42	4.837	A
Denmark Rd	839.27	834.09	231.61	0.00	1477.69	0.568	1.30	5.550	A
Development access	59.79	59.64	969.07	0.00	1602.50	0.037	0.04	2.333	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	825.18	824.28	234.07	0.00	1825.87	0.452	0.82	3.590	A
Bamards Way	137.12	136.93	991.03	0.00	893.12	0.154	0.18	4.759	A
North Quay Retail Park	374.60	373.86	775.12	0.00	986.44	0.380	0.61	5.869	A
Denmark Rd	1002.18	998.69	277.43	0.00	1452.05	0.690	2.17	7.878	A
Development access	71.40	71.35	1160.44	0.00	1475.97	0.048	0.05	2.562	A

Main results: (16:15-16:30)

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	1010.64	1008.82	284.78	0.00	1795.27	0.563	1.27	4.568	A
Bamards Way	167.94	167.58	1211.49	0.00	782.27	0.215	0.27	5.852	A
North Quay Retail Park	458.79	457.07	948.66	0.00	893.63	0.513	1.04	8.214	A
Denmark Rd	1227.41	1213.34	339.32	0.00	1417.40	0.866	5.69	16.595	C
Development access	87.44	87.36	1411.54	0.00	1309.94	0.067	0.07	2.944	A

Main results: (16:30-16:45)

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	1010.64	1010.60	287.26	0.00	1793.77	0.563	1.28	4.596	A
Bamards Way	167.94	167.93	1215.27	0.00	780.39	0.215	0.27	5.877	A
North Quay Retail Park	458.79	458.75	950.35	0.00	892.72	0.514	1.05	8.294	A
Denmark Rd	1227.41	1226.02	340.32	0.00	1416.84	0.866	6.03	18.530	C
Development access	87.44	87.44	1424.43	0.00	1301.43	0.067	0.07	2.964	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	825.18	826.98	237.68	0.00	1823.69	0.452	0.83	3.617	A
Bamards Way	137.12	137.48	996.65	0.00	890.32	0.154	0.18	4.783	A
North Quay Retail Park	374.60	376.31	777.70	0.00	985.06	0.380	0.62	5.931	A
Denmark Rd	1002.18	1017.13	278.90	0.00	1451.22	0.691	2.29	8.563	A
Development access	71.40	71.48	1179.20	0.00	1463.58	0.049	0.05	2.587	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	691.05	691.98	197.37	0.00	1848.01	0.374	0.60	3.118	A
Bamards Way	114.83	115.03	832.69	0.00	972.73	0.118	0.13	4.197	A
North Quay Retail Park	313.71	314.48	650.75	0.00	1052.96	0.298	0.43	4.881	A
Denmark Rd	839.27	843.11	233.20	0.00	1476.80	0.568	1.34	5.714	A
Development access	59.79	59.84	978.95	0.00	1595.96	0.037	0.04	2.343	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
15:45-16:00	Peto Way	691.05	1849.13	0.374	0.00	0.00	0.59	8.70	-	3.095
15:45-16:00	Bamards Way	114.83	975.09	0.118	0.00	0.00	0.13	1.95	-	4.179
15:45-16:00	North Quay Retail Park	313.71	1054.68	0.297	0.00	0.00	0.42	6.12	-	4.837
15:45-16:00	Denmark Rd	839.27	1477.69	0.568	0.00	0.00	1.30	18.58	-	5.550
15:45-16:00	Development access	59.79	1602.50	0.037	0.00	0.00	0.04	0.57	-	2.333
16:00-16:15	Peto Way	825.18	1825.87	0.452	0.00	0.59	0.82	12.04	-	3.590
16:00-16:15	Bamards Way	137.12	893.12	0.154	0.00	0.13	0.18	2.66	-	4.759
16:00-16:15	North Quay Retail Park	374.60	986.44	0.380	0.00	0.42	0.61	8.85	-	5.869

16:00-16:15	Denmark Rd	1002.18	1452.05	0.690	0.00	1.30	2.17	30.83	-	7.878
16:00-16:15	Development access	71.40	1475.97	0.048	0.00	0.04	0.05	0.75	-	2.562
16:15-16:30	Peto Way	1010.64	1795.27	0.563	0.00	0.82	1.27	18.55	-	4.568
16:15-16:30	Bamards Way	167.94	782.27	0.215	0.00	0.18	0.27	3.97	-	5.852
16:15-16:30	North Quay Retail Park	458.79	893.63	0.513	0.00	0.61	1.04	14.89	-	8.214
16:15-16:30	Denmark Rd	1227.41	1417.40	0.866	0.00	2.17	5.69	73.65	-	16.595
16:15-16:30	Development access	87.44	1309.94	0.067	0.00	0.05	0.07	1.06	-	2.944
16:30-16:45	Peto Way	1010.64	1793.77	0.563	0.00	1.27	1.28	19.19	-	4.596
16:30-16:45	Bamards Way	167.94	780.39	0.215	0.00	0.27	0.27	4.08	-	5.877
16:30-16:45	North Quay Retail Park	458.79	892.72	0.514	0.00	1.04	1.05	15.64	-	8.294
16:30-16:45	Denmark Rd	1227.41	1416.84	0.866	0.00	5.69	6.03	88.40	-	18.530
16:30-16:45	Development access	87.44	1301.43	0.067	0.00	0.07	0.07	1.08	-	2.964
16:45-17:00	Peto Way	825.18	1823.69	0.452	0.00	1.28	0.83	12.78	-	3.617
16:45-17:00	Bamards Way	137.12	890.32	0.154	0.00	0.27	0.18	2.81	-	4.783
16:45-17:00	North Quay Retail Park	374.60	985.06	0.380	0.00	1.05	0.62	9.61	-	5.931
16:45-17:00	Denmark Rd	1002.18	1451.22	0.691	0.00	6.03	2.29	37.76	-	8.563
16:45-17:00	Development access	71.40	1463.58	0.049	0.00	0.07	0.05	0.78	-	2.587
17:00-17:15	Peto Way	691.05	1848.01	0.374	0.00	0.83	0.60	9.17	-	3.118
17:00-17:15	Bamards Way	114.83	972.73	0.118	0.00	0.18	0.13	2.05	-	4.197
17:00-17:15	North Quay Retail Park	313.71	1052.96	0.298	0.00	0.62	0.43	6.57	-	4.881
17:00-17:15	Denmark Rd	839.27	1476.80	0.568	0.00	2.29	1.34	20.84	-	5.714
17:00-17:15	Development access	59.79	1595.96	0.037	0.00	0.05	0.04	0.59	-	2.343

DM - 2016 DN, 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
DM	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
2016 DN, AM	2016 DN	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	Petro Way/Denmark Rd	Roundabout	1,2,3,4,5			2.91	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Peto Way	1	Peto Way	
Bamards Way	2	Bamards Way	
North Quay Retail Park	3	North Quay Retail Park	
Denmark Rd	4	Denmark Rd	
Development access	5	Development access	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Peto Way	0.00	99999.00
Bamards Way	0.00	99999.00
North Quay Retail Park	0.00	99999.00
Denmark Rd	0.00	99999.00
Development access	0.00	99999.00

Roundabout Geometry

Name	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
Peto Way	3.70	7.90	26.60	20.90	60.00	22.50	
Bamards Way	3.70	5.50	9.40	12.30	60.00	30.00	
North Quay Retail Park	3.40	4.70	14.50	27.80	60.00	20.00	
Denmark Rd	3.70	6.60	7.90	28.00	60.00	18.50	
Development access	4.30	10.40	17.30	25.50	60.00	23.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Peto Way		(calculated)	(calculated)	0.620	2021.854
Bamards Way		(calculated)	(calculated)	0.500	1414.605
North Quay Retail Park		(calculated)	(calculated)	0.518	1400.988
Denmark Rd		(calculated)	(calculated)	0.555	1607.329
Development access		(calculated)	(calculated)	0.660	2243.205

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
Peto Way	ONE HOUR	✓	417.20	100.000
Bamards Way	ONE HOUR	✓	83.02	100.000
North Quay Retail Park	ONE HOUR	✓	100.03	100.000
Denmark Rd	ONE HOUR	✓	356.37	100.000
Development access	ONE HOUR	✓	52.98	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	Peto Way	314.09	322.30		
07:45-08:00	Bamards Way	62.50	62.52		
07:45-08:00	North Quay Retail Park	75.31	75.31		
07:45-08:00	Denmark Rd	268.29	272.56		
07:45-08:00	Development access	39.88	39.88		
08:00-08:15	Peto Way	375.05	384.86		
08:00-08:15	Bamards Way	74.63	74.66		

08:00-08:15	North Quay Retail Park	89.92	89.92		
08:00-08:15	Denmark Rd	320.37	325.47		
08:00-08:15	Development access	47.62	47.62		
08:15-08:30	Peto Way	459.34	471.35		
08:15-08:30	Bamards Way	91.40	91.44		
08:15-08:30	North Quay Retail Park	110.13	110.13		
08:15-08:30	Denmark Rd	392.37	398.62		
08:15-08:30	Development access	58.33	58.33		
08:30-08:45	Peto Way	459.34	471.35		
08:30-08:45	Bamards Way	91.40	91.44		
08:30-08:45	North Quay Retail Park	110.13	110.13		
08:30-08:45	Denmark Rd	392.37	398.62		
08:30-08:45	Development access	58.33	58.33		
08:45-09:00	Peto Way	375.05	384.86		
08:45-09:00	Bamards Way	74.63	74.66		
08:45-09:00	North Quay Retail Park	89.92	89.92		
08:45-09:00	Denmark Rd	320.37	325.47		
08:45-09:00	Development access	47.62	47.62		
09:00-09:15	Peto Way	314.09	322.30		
09:00-09:15	Bamards Way	62.50	62.52		
09:00-09:15	North Quay Retail Park	75.31	75.31		
09:00-09:15	Denmark Rd	268.29	272.56		
09:00-09:15	Development access	39.88	39.88		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.000	61.883	128.096	181.826	45.391
	Bamards Way	51.639	0.000	0.053	31.098	0.228
	North Quay Retail Park	62.511	1.032	0.000	36.215	0.269
	Denmark Rd	218.311	59.124	54.847	0.000	24.085
	Development access	33.538	1.007	0.056	18.376	0.000

Turning Proportions (Veh) - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.00	0.15	0.31	0.44	0.11
	Bamards Way	0.62	0.00	0.00	0.37	0.00
	North Quay Retail Park	0.62	0.01	0.00	0.36	0.00
	Denmark Rd	0.61	0.17	0.15	0.00	0.07
	Development access	0.63	0.02	0.00	0.35	0.00

Vehicle Mix

Average PCU Per Vehicle - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	1.000	1.000	1.000	1.060	1.000
	Bamards Way	1.001	1.000	1.000	1.000	1.000
	North Quay Retail Park	1.000	1.000	1.000	1.000	1.000
	Denmark Rd	1.026	1.000	1.000	1.000	1.000
	Development access	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.0	0.0	0.0	6.0	0.0
	Bamards Way	0.1	0.0	0.0	0.0	0.0
	North Quay Retail Park	0.0	0.0	0.0	0.0	0.0
	Denmark Rd	2.6	0.0	0.0	0.0	0.0
	Development access	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
Peto Way	0.24	2.53	0.32	A
Bamards Way	0.08	3.33	0.08	A
North Quay Retail Park	0.09	3.28	0.10	A
Denmark Rd	0.26	3.29	0.36	A
Development access	0.03	1.94	0.03	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	314.09	313.30	100.91	0.00	1909.34	0.165	0.20	2.254	A
Bamards Way	62.50	62.29	321.84	0.00	1249.27	0.050	0.05	3.032	A
North Quay Retail Park	75.31	75.05	246.69	0.00	1268.96	0.059	0.06	3.015	A
Denmark Rd	268.29	267.43	120.89	0.00	1516.06	0.177	0.21	2.882	A
Development access	39.88	39.80	335.79	0.00	2018.81	0.020	0.02	1.818	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	375.05	374.85	120.78	0.00	1897.33	0.198	0.25	2.364	A
Bamards Way	74.63	74.58	385.09	0.00	1216.88	0.061	0.07	3.150	A
North Quay Retail Park	89.92	89.86	295.20	0.00	1242.99	0.072	0.08	3.121	A
Denmark Rd	320.37	320.14	144.71	0.00	1503.04	0.213	0.27	3.043	A
Development access	47.62	47.61	401.99	0.00	1974.57	0.024	0.02	1.867	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	459.34	459.04	147.90	0.00	1880.94	0.244	0.32	2.531	A
Bamards Way	91.40	91.33	471.57	0.00	1172.60	0.078	0.08	3.328	A
North Quay Retail Park	110.13	110.04	361.50	0.00	1207.51	0.091	0.10	3.279	A
Denmark Rd	392.37	392.02	177.20	0.00	1485.28	0.264	0.36	3.293	A
Development access	58.33	58.30	492.24	0.00	1914.26	0.030	0.03	1.939	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	459.34	459.34	148.02	0.00	1880.86	0.244	0.32	2.532	A
Bamards Way	91.40	91.40	471.89	0.00	1172.43	0.078	0.08	3.329	A
North Quay Retail Park	110.13	110.13	361.75	0.00	1207.38	0.091	0.10	3.280	A
Denmark Rd	392.37	392.36	177.34	0.00	1485.20	0.264	0.36	3.293	A
Development access	58.33	58.33	492.66	0.00	1913.97	0.030	0.03	1.939	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	375.05	375.35	120.98	0.00	1897.21	0.198	0.25	2.365	A
Bamards Way	74.63	74.71	385.62	0.00	1216.61	0.061	0.07	3.154	A
North Quay Retail Park	89.92	90.01	295.61	0.00	1242.77	0.072	0.08	3.124	A
Denmark Rd	320.37	320.71	144.93	0.00	1502.91	0.213	0.27	3.045	A
Development access	47.62	47.65	402.69	0.00	1974.10	0.024	0.02	1.870	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	314.09	314.29	101.29	0.00	1909.11	0.165	0.20	2.258	A
Bamards Way	62.50	62.55	322.88	0.00	1248.74	0.050	0.05	3.034	A
North Quay Retail Park	75.31	75.37	247.52	0.00	1268.51	0.059	0.06	3.016	A
Denmark Rd	268.29	268.52	121.35	0.00	1515.80	0.177	0.22	2.888	A
Development access	39.88	39.90	337.15	0.00	2017.89	0.020	0.02	1.819	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
07:45-08:00	Peto Way	314.09	1909.34	0.165	0.00	0.00	0.20	2.90	-	2.254
07:45-08:00	Bamards Way	62.50	1249.27	0.050	0.00	0.00	0.05	0.77	-	3.032
07:45-08:00	North Quay Retail Park	75.31	1268.96	0.059	0.00	0.00	0.06	0.93	-	3.015
07:45-08:00	Denmark Rd	268.29	1516.06	0.177	0.00	0.00	0.21	3.16	-	2.882
07:45-08:00	Development access	39.88	2018.81	0.020	0.00	0.00	0.02	0.30	-	1.818
08:00-08:15	Peto Way	375.05	1897.33	0.198	0.00	0.20	0.25	3.65	-	2.364
08:00-08:15	Bamards Way	74.63	1216.88	0.061	0.00	0.05	0.07	0.97	-	3.150
08:00-08:15	North Quay Retail Park	89.92	1242.99	0.072	0.00	0.06	0.08	1.15	-	3.121

08:00-08:15	Denmark Rd	320.37	1503.04	0.213	0.00	0.21	0.27	4.00	-	3.043
08:00-08:15	Development access	47.62	1974.57	0.024	0.00	0.02	0.02	0.37	-	1.867
08:15-08:30	Peto Way	459.34	1880.94	0.244	0.00	0.25	0.32	4.77	-	2.531
08:15-08:30	Bamards Way	91.40	1172.60	0.078	0.00	0.07	0.08	1.25	-	3.328
08:15-08:30	North Quay Retail Park	110.13	1207.51	0.091	0.00	0.08	0.10	1.48	-	3.279
08:15-08:30	Denmark Rd	392.37	1485.28	0.264	0.00	0.27	0.36	5.28	-	3.293
08:15-08:30	Development access	58.33	1914.26	0.030	0.00	0.02	0.03	0.47	-	1.939
08:30-08:45	Peto Way	459.34	1880.86	0.244	0.00	0.32	0.32	4.83	-	2.532
08:30-08:45	Bamards Way	91.40	1172.43	0.078	0.00	0.08	0.08	1.26	-	3.329
08:30-08:45	North Quay Retail Park	110.13	1207.38	0.091	0.00	0.10	0.10	1.50	-	3.280
08:30-08:45	Denmark Rd	392.37	1485.20	0.264	0.00	0.36	0.36	5.37	-	3.293
08:30-08:45	Development access	58.33	1913.97	0.030	0.00	0.03	0.03	0.47	-	1.939
08:45-09:00	Peto Way	375.05	1897.21	0.198	0.00	0.32	0.25	3.75	-	2.365
08:45-09:00	Bamards Way	74.63	1216.61	0.061	0.00	0.08	0.07	1.00	-	3.154
08:45-09:00	North Quay Retail Park	89.92	1242.77	0.072	0.00	0.10	0.08	1.19	-	3.124
08:45-09:00	Denmark Rd	320.37	1502.91	0.213	0.00	0.36	0.27	4.14	-	3.045
08:45-09:00	Development access	47.62	1974.10	0.024	0.00	0.03	0.02	0.37	-	1.870
09:00-09:15	Peto Way	314.09	1909.11	0.165	0.00	0.25	0.20	2.99	-	2.258
09:00-09:15	Bamards Way	62.50	1248.74	0.050	0.00	0.07	0.05	0.80	-	3.034
09:00-09:15	North Quay Retail Park	75.31	1268.51	0.059	0.00	0.08	0.06	0.96	-	3.016
09:00-09:15	Denmark Rd	268.29	1515.80	0.177	0.00	0.27	0.22	3.28	-	2.888
09:00-09:15	Development access	39.88	2017.89	0.020	0.00	0.02	0.02	0.31	-	1.819

DM - 2016 DN, 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
DM	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
2016 DN, PM	2016 DN	PM		ONE HOUR	15:45	17:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Petro Way/Denmark Rd	Roundabout	1,2,3,4,5			3.51	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Peto Way	1	Peto Way	
Bamards Way	2	Bamards Way	
North Quay Retail Park	3	North Quay Retail Park	
Denmark Rd	4	Denmark Rd	
Development access	5	Development access	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Peto Way	0.00	99999.00
Bamards Way	0.00	99999.00
North Quay Retail Park	0.00	99999.00
Denmark Rd	0.00	99999.00
Development access	0.00	99999.00

Roundabout Geometry

Name	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
Peto Way	3.70	7.90	26.60	20.90	60.00	22.50	
Bamards Way	3.70	5.50	9.40	12.30	60.00	30.00	
North Quay Retail Park	3.40	4.70	14.50	27.80	60.00	20.00	
Denmark Rd	3.70	6.60	7.90	28.00	60.00	18.50	
Development access	4.30	10.40	17.30	25.50	60.00	23.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Peto Way		(calculated)	(calculated)	0.620	2021.854
Bamards Way		(calculated)	(calculated)	0.500	1414.605
North Quay Retail Park		(calculated)	(calculated)	0.518	1400.988
Denmark Rd		(calculated)	(calculated)	0.555	1607.329
Development access		(calculated)	(calculated)	0.660	2243.205

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
Peto Way	ONE HOUR	✓	434.43	100.000
Bamards Way	ONE HOUR	✓	133.39	100.000
North Quay Retail Park	ONE HOUR	✓	323.43	100.000
Denmark Rd	ONE HOUR	✓	427.57	100.000
Development access	ONE HOUR	✓	59.12	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
15:45-16:00	Peto Way	327.06	332.89		
15:45-16:00	Bamards Way	100.42	100.46		
15:45-16:00	North Quay Retail Park	243.50	243.50		
15:45-16:00	Denmark Rd	321.89	327.06		
15:45-16:00	Development access	44.51	44.51		
16:00-16:15	Peto Way	390.55	397.51		
16:00-16:15	Bamards Way	119.91	119.96		

16:00-16:15	**North Quay Retail Park**	290.76	290.76		
16:00-16:15	**Denmark Rd**	384.37	390.54		
16:00-16:15	**Development access**	53.15	53.15		
16:15-16:30	**Peto Way**	478.32	486.85		
16:15-16:30	**Bamards Way**	146.86	146.92		
16:15-16:30	**North Quay Retail Park**	356.11	356.11		
16:15-16:30	**Denmark Rd**	470.76	478.31		
16:15-16:30	**Development access**	65.09	65.09		
16:30-16:45	**Peto Way**	478.32	486.85		
16:30-16:45	**Bamards Way**	146.86	146.92		
16:30-16:45	**North Quay Retail Park**	356.11	356.11		
16:30-16:45	**Denmark Rd**	470.76	478.31		
16:30-16:45	**Development access**	65.09	65.09		
16:45-17:00	**Peto Way**	390.55	397.51		
16:45-17:00	**Bamards Way**	119.91	119.96		
16:45-17:00	**North Quay Retail Park**	290.76	290.76		
16:45-17:00	**Denmark Rd**	384.37	390.54		
16:45-17:00	**Development access**	53.15	53.15		
17:00-17:15	**Peto Way**	327.06	332.89		
17:00-17:15	**Bamards Way**	100.42	100.46		
17:00-17:15	**North Quay Retail Park**	243.50	243.50		
17:00-17:15	**Denmark Rd**	321.89	327.06		
17:00-17:15	**Development access**	44.51	44.51		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.000	24.496	218.316	129.058	62.563
	Bamards Way	86.141	0.000	0.410	46.704	0.131
	North Quay Retail Park	225.739	0.817	0.000	96.006	0.873
	Denmark Rd	263.710	31.519	92.175	0.000	40.161
	Development access	41.311	0.076	0.152	17.583	0.000

Turning Proportions (Veh) - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.00	0.06	0.50	0.30	0.14
	Bamards Way	0.65	0.00	0.00	0.35	0.00
	North Quay Retail Park	0.70	0.00	0.00	0.30	0.00
	Denmark Rd	0.62	0.07	0.22	0.00	0.09
	Development access	0.70	0.00	0.00	0.30	0.00

Vehicle Mix

Average PCU Per Vehicle - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	1.000	1.000	1.000	1.060	1.000
	Bamards Way	1.001	1.000	1.000	1.000	1.000
	North Quay Retail Park	1.000	1.000	1.000	1.000	1.000
	Denmark Rd	1.026	1.000	1.000	1.000	1.000
	Development access	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.0	0.0	0.0	6.0	0.0
	Bamards Way	0.1	0.0	0.0	0.0	0.0
	North Quay Retail Park	0.0	0.0	0.0	0.0	0.0
	Denmark Rd	2.6	0.0	0.0	0.0	0.0
	Development access	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
Peto Way	0.25	2.55	0.34	A
Bamards Way	0.13	3.68	0.15	A
North Quay Retail Park	0.30	4.26	0.42	A
Denmark Rd	0.35	4.07	0.53	A
Development access	0.04	2.16	0.04	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	327.07	326.25	106.78	0.00	1921.39	0.170	0.20	2.255	A
Bamards Way	100.42	100.06	390.32	0.00	1216.23	0.083	0.09	3.225	A
North Quay Retail Park	243.50	242.55	256.86	0.00	1264.91	0.193	0.24	3.518	A
Denmark Rd	321.89	320.73	282.25	0.00	1427.72	0.225	0.29	3.249	A
Development access	44.51	44.41	525.13	0.00	1893.28	0.024	0.02	1.946	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	390.55	390.34	127.84	0.00	1908.56	0.205	0.26	2.371	A
Bamards Way	119.91	119.82	467.05	0.00	1177.34	0.102	0.11	3.403	A
North Quay Retail Park	290.76	290.49	307.42	0.00	1238.13	0.235	0.31	3.799	A
Denmark Rd	384.37	384.02	337.97	0.00	1397.27	0.275	0.38	3.553	A
Development access	53.15	53.13	628.81	0.00	1824.19	0.029	0.03	2.032	A

Main results: (16:15-16:30)

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	478.32	478.00	156.51	0.00	1891.08	0.253	0.34	2.547	A
Bamards Way	146.86	146.71	571.92	0.00	1124.20	0.131	0.15	3.682	A
North Quay Retail Park	356.11	355.65	376.45	0.00	1201.56	0.296	0.42	4.254	A
Denmark Rd	470.76	470.15	413.81	0.00	1355.83	0.347	0.53	4.062	A
Development access	65.09	65.06	769.86	0.00	1730.19	0.038	0.04	2.161	A

Main results: (16:30-16:45)

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	478.32	478.32	156.70	0.00	1890.97	0.253	0.34	2.547	A
Bamards Way	146.86	146.86	572.36	0.00	1123.97	0.131	0.15	3.683	A
North Quay Retail Park	356.11	356.10	376.74	0.00	1201.40	0.296	0.42	4.258	A
Denmark Rd	470.76	470.75	414.27	0.00	1355.58	0.347	0.53	4.068	A
Development access	65.09	65.09	770.81	0.00	1729.56	0.038	0.04	2.162	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	390.55	390.87	128.13	0.00	1908.38	0.205	0.26	2.374	A
Bamards Way	119.91	120.06	467.77	0.00	1176.98	0.102	0.11	3.405	A
North Quay Retail Park	290.76	291.20	307.91	0.00	1237.87	0.235	0.31	3.806	A
Denmark Rd	384.37	384.96	338.70	0.00	1396.87	0.275	0.38	3.561	A
Development access	53.15	53.19	630.32	0.00	1823.18	0.029	0.03	2.033	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	327.07	327.28	107.26	0.00	1921.10	0.170	0.21	2.260	A
Bamards Way	100.42	100.51	391.65	0.00	1215.56	0.083	0.09	3.228	A
North Quay Retail Park	243.50	243.77	257.80	0.00	1264.41	0.193	0.24	3.530	A
Denmark Rd	321.89	322.25	283.55	0.00	1427.01	0.226	0.29	3.258	A
Development access	44.51	44.53	527.65	0.00	1891.59	0.024	0.02	1.950	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
15:45-16:00	Peto Way	327.07	1921.39	0.170	0.00	0.00	0.20	3.02	-	2.255
15:45-16:00	Bamards Way	100.42	1216.23	0.083	0.00	0.00	0.09	1.32	-	3.225
15:45-16:00	North Quay Retail Park	243.50	1264.91	0.193	0.00	0.00	0.24	3.49	-	3.518
15:45-16:00	Denmark Rd	321.89	1427.72	0.225	0.00	0.00	0.29	4.26	-	3.249
15:45-16:00	Development access	44.51	1893.28	0.024	0.00	0.00	0.02	0.36	-	1.946
16:00-16:15	Peto Way	390.55	1908.56	0.205	0.00	0.20	0.26	3.81	-	2.371
16:00-16:15	Bamards Way	119.91	1177.34	0.102	0.00	0.09	0.11	1.67	-	3.403
16:00-16:15	North Quay Retail Park	290.76	1238.13	0.235	0.00	0.24	0.31	4.51	-	3.799

16:00-16:15	Denmark Rd	384.37	1397.27	0.275	0.00	0.29	0.38	5.57	-	3.553
16:00-16:15	Development access	53.15	1824.19	0.029	0.00	0.02	0.03	0.45	-	2.032
16:15-16:30	Peto Way	478.32	1891.08	0.253	0.00	0.26	0.34	5.00	-	2.547
16:15-16:30	Bamards Way	146.86	1124.20	0.131	0.00	0.11	0.15	2.21	-	3.682
16:15-16:30	North Quay Retail Park	356.11	1201.56	0.296	0.00	0.31	0.42	6.16	-	4.254
16:15-16:30	Denmark Rd	470.76	1355.83	0.347	0.00	0.38	0.53	7.77	-	4.062
16:15-16:30	Development access	65.09	1730.19	0.038	0.00	0.03	0.04	0.58	-	2.161
16:30-16:45	Peto Way	478.32	1890.97	0.253	0.00	0.34	0.34	5.07	-	2.547
16:30-16:45	Bamards Way	146.86	1123.97	0.131	0.00	0.15	0.15	2.25	-	3.683
16:30-16:45	North Quay Retail Park	356.11	1201.40	0.296	0.00	0.42	0.42	6.29	-	4.258
16:30-16:45	Denmark Rd	470.76	1355.58	0.347	0.00	0.53	0.53	7.94	-	4.068
16:30-16:45	Development access	65.09	1729.56	0.038	0.00	0.04	0.04	0.59	-	2.162
16:45-17:00	Peto Way	390.55	1908.38	0.205	0.00	0.34	0.26	3.92	-	2.374
16:45-17:00	Bamards Way	119.91	1176.98	0.102	0.00	0.15	0.11	1.73	-	3.405
16:45-17:00	North Quay Retail Park	290.76	1237.87	0.235	0.00	0.42	0.31	4.71	-	3.806
16:45-17:00	Denmark Rd	384.37	1396.87	0.275	0.00	0.53	0.38	5.83	-	3.561
16:45-17:00	Development access	53.15	1823.18	0.029	0.00	0.04	0.03	0.46	-	2.033
17:00-17:15	Peto Way	327.07	1921.10	0.170	0.00	0.26	0.21	3.12	-	2.260
17:00-17:15	Bamards Way	100.42	1215.56	0.083	0.00	0.11	0.09	1.37	-	3.228
17:00-17:15	North Quay Retail Park	243.50	1264.41	0.193	0.00	0.31	0.24	3.65	-	3.530
17:00-17:15	Denmark Rd	321.89	1427.01	0.226	0.00	0.38	0.29	4.45	-	3.258
17:00-17:15	Development access	44.51	1891.59	0.024	0.00	0.03	0.02	0.37	-	1.950

DM - 2016 DN, Sat

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Profile Type	D12 - 2016 DN, Sat	'Turning counts vary over time' option has been selected but all arms use ONE HOUR profile types. Are you sure this is correct?

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
DM	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
2016 DN, Sat	2016 DN	Sat		ONE HOUR	11:30	13:00	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Petro Way/Denmark Rd	Roundabout	1,2,3,4,5			6.74	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Peto Way	1	Peto Way	
Bamards Way	2	Bamards Way	
North Quay Retail Park	3	North Quay Retail Park	
Denmark Rd	4	Denmark Rd	
Development access	5	Development access	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Peto Way	0.00	99999.00
Bamards Way	0.00	99999.00
North Quay Retail Park	0.00	99999.00
Denmark Rd	0.00	99999.00
Development access	0.00	99999.00

Roundabout Geometry

Name	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
Peto Way	3.70	7.90	26.60	20.90	60.00	22.50	
Bamards Way	3.70	5.50	9.40	12.30	60.00	30.00	
North Quay Retail Park	3.40	4.70	14.50	27.80	60.00	20.00	
Denmark Rd	3.70	6.60	7.90	28.00	60.00	18.50	
Development access	4.30	10.40	17.30	25.50	60.00	23.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Peto Way		(calculated)	(calculated)	0.620	2021.854
Bamards Way		(calculated)	(calculated)	0.500	1414.605
North Quay Retail Park		(calculated)	(calculated)	0.518	1400.988
Denmark Rd		(calculated)	(calculated)	0.555	1607.329
Development access		(calculated)	(calculated)	0.660	2243.205

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
Peto Way	ONE HOUR	✓	196.90	100.000
Bamards Way	ONE HOUR	✓	648.80	100.000
North Quay Retail Park	ONE HOUR	✓	605.00	100.000
Denmark Rd	ONE HOUR	✓	321.70	100.000
Development access	ONE HOUR	✓	661.90	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
11:30-11:45	Peto Way	148.24	148.60		
11:30-11:45	Bamards Way	488.45	488.46		
11:30-11:45	North Quay Retail Park	455.48	455.48		
11:30-11:45	Denmark Rd	242.19	242.22		
11:30-11:45	Development access	498.31	498.31		
11:45-12:00	Peto Way	177.01	177.33		
11:45-12:00	Bamards Way	583.26	583.27		

11:45-12:00	North Quay Retail Park	543.88	543.88		
11:45-12:00	Denmark Rd	289.20	289.20		
11:45-12:00	Development access	595.03	595.03		
12:00-12:15	Peto Way	216.79	217.26		
12:00-12:15	Bamards Way	714.34	714.35		
12:00-12:15	North Quay Retail Park	666.12	666.12		
12:00-12:15	Denmark Rd	354.20	354.20		
12:00-12:15	Development access	728.77	728.77		
12:15-12:30	Peto Way	216.79	217.12		
12:15-12:30	Bamards Way	714.34	714.36		
12:15-12:30	North Quay Retail Park	666.12	666.12		
12:15-12:30	Denmark Rd	354.20	354.20		
12:15-12:30	Development access	728.77	728.77		
12:30-12:45	Peto Way	177.01	177.92		
12:30-12:45	Bamards Way	583.26	583.27		
12:30-12:45	North Quay Retail Park	543.88	543.88		
12:30-12:45	Denmark Rd	289.20	289.32		
12:30-12:45	Development access	595.03	595.03		
12:45-13:00	Peto Way	148.24	148.59		
12:45-13:00	Bamards Way	488.45	488.46		
12:45-13:00	North Quay Retail Park	455.48	455.48		
12:45-13:00	Denmark Rd	242.19	242.19		
12:45-13:00	Development access	498.31	498.31		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Petro Way/ Denmark Rd - (11:30-11:45)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.000	22.000	38.900	8.000	128.000
	Bamards Way	19.000	0.000	243.400	16.000	370.400
	North Quay Retail Park	18.200	302.000	0.000	85.000	199.800
	Denmark Rd	1.200	48.200	94.200	0.000	178.100
	Development access	73.500	338.400	133.600	116.400	0.000

Turning Proportions (Veh) - Petro Way/ Denmark Rd - (11:30-11:45)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.00	0.11	0.20	0.04	0.65
	Bamards Way	0.03	0.00	0.38	0.02	0.57
	North Quay Retail Park	0.03	0.50	0.00	0.14	0.33
	Denmark Rd	0.00	0.15	0.29	0.00	0.55
	Development access	0.11	0.51	0.20	0.18	0.00

Turning Counts / Proportions (Veh/hr) - Petro Way/ Denmark Rd - (11:45-12:00)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.000	3.000	12.000	2.000	49.000
	Bamards Way	6.000	0.000	57.000	2.000	98.000
	North Quay Retail Park	4.000	83.000	0.000	22.000	55.000
	Denmark Rd	0.000	11.000	41.000	0.000	53.000
	Development access	19.000	101.000	39.000	23.000	0.000

Turning Proportions (Veh) - Petro Way/ Denmark Rd - (11:45-12:00)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.00	0.05	0.18	0.03	0.74
	Bamards Way	0.04	0.00	0.35	0.01	0.60
	North Quay Retail Park	0.02	0.51	0.00	0.13	0.34
	Denmark Rd	0.00	0.10	0.39	0.00	0.50
	Development access	0.10	0.55	0.21	0.13	0.00

Turning Counts / Proportions (Veh/hr) - Petro Way/ Denmark Rd - (12:00-12:15)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.000	4.000	11.000	2.000	39.000
	Bamards Way	5.000	0.000	76.000	6.000	94.000
	North Quay Retail Park	4.000	83.000	0.000	19.000	49.000
	Denmark Rd	0.000	12.000	30.000	0.000	38.000
	Development access	20.000	76.000	39.000	30.000	0.000

Turning Proportions (Veh) - Petro Way/ Denmark Rd - (12:00-12:15)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.00	0.07	0.20	0.04	0.70
	Bamards Way	0.03	0.00	0.42	0.03	0.52
	North Quay Retail Park	0.03	0.54	0.00	0.12	0.32
	Denmark Rd	0.00	0.15	0.38	0.00	0.48
	Development access	0.12	0.46	0.24	0.18	0.00

Turning Counts / Proportions (Veh/hr) - Petro Way/ Denmark Rd - (12:15-12:30)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.000	10.000	13.000	1.000	16.000
	Bamards Way	5.000	0.000	67.000	4.000	85.000
	North Quay Retail Park	7.000	71.000	0.000	25.000	49.000
	Denmark Rd	0.000	12.000	14.000	0.000	49.000
	Development access	23.000	82.000	29.000	30.000	0.000

Turning Proportions (Veh) - Petro Way/ Denmark Rd - (12:15-12:30)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.00	0.25	0.33	0.03	0.40
	Bamards Way	0.03	0.00	0.42	0.02	0.53
	North Quay Retail Park	0.05	0.47	0.00	0.16	0.32
	Denmark Rd	0.00	0.16	0.19	0.00	0.65
	Development access	0.14	0.50	0.18	0.18	0.00

Turning Counts / Proportions (Veh/hr) - Petro Way/ Denmark Rd - (12:30-12:45)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.000	5.000	3.000	3.000	24.000
	Bamards Way	3.000	0.000	43.000	4.000	93.000
	North Quay Retail Park	3.000	65.000	0.000	20.000	46.000
	Denmark Rd	1.000	13.000	9.000	0.000	38.000
	Development access	12.000	79.000	28.000	33.000	0.000

Turning Proportions (Veh) - Petro Way/ Denmark Rd - (12:30-12:45)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.00	0.14	0.09	0.09	0.69
	Bamards Way	0.02	0.00	0.30	0.03	0.65
	North Quay Retail Park	0.02	0.49	0.00	0.15	0.34
	Denmark Rd	0.02	0.21	0.15	0.00	0.62
	Development access	0.08	0.52	0.18	0.22	0.00

Turning Counts / Proportions (Veh/hr) - Petro Way/ Denmark Rd - (12:45-13:00)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.000	4.000	4.000	1.000	16.000
	Bamards Way	4.000	0.000	54.000	6.000	90.000
	North Quay Retail Park	5.000	61.000	0.000	25.000	51.000
	Denmark Rd	0.000	8.000	33.000	0.000	39.000
	Development access	13.000	92.000	34.000	31.000	0.000

Turning Proportions (Veh) - Petro Way/ Denmark Rd - (12:45-13:00)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.00	0.16	0.16	0.04	0.64
	Bamards Way	0.03	0.00	0.35	0.04	0.58
	North Quay Retail Park	0.04	0.43	0.00	0.18	0.36
	Denmark Rd	0.00	0.10	0.41	0.00	0.49
	Development access	0.08	0.54	0.20	0.18	0.00

Vehicle Mix

Average PCU Per Vehicle - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	1.000	1.000	1.000	1.060	1.000
	Bamards Way	1.001	1.000	1.000	1.000	1.000
	North Quay Retail Park	1.000	1.000	1.000	1.000	1.000
	Denmark Rd	1.026	1.000	1.000	1.000	1.000
	Development access	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.0	0.0	0.0	6.0	0.0
	Bamards Way	0.1	0.0	0.0	0.0	0.0
	North Quay Retail Park	0.0	0.0	0.0	0.0	0.0
	Denmark Rd	2.6	0.0	0.0	0.0	0.0
	Development access	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
Peto Way	0.17	3.36	0.20	A
Bamards Way	0.65	9.28	1.82	A
North Quay Retail Park	0.64	9.56	1.75	A
Denmark Rd	0.36	5.70	0.56	A
Development access	0.39	3.17	0.64	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	148.24	147.81	774.61	0.00	1537.68	0.096	0.11	2.590	A
Bamards Way	488.45	485.80	389.63	0.00	1219.75	0.400	0.66	4.887	A
North Quay Retail Park	455.48	452.86	493.05	0.00	1145.42	0.398	0.65	5.178	A
Denmark Rd	242.19	241.16	776.90	0.00	1175.92	0.206	0.26	3.847	A
Development access	498.31	496.99	361.55	0.00	2004.61	0.249	0.33	2.385	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	177.01	176.87	950.06	0.00	1430.02	0.124	0.14	2.872	A
Bamards Way	583.26	582.00	484.06	0.00	1172.60	0.497	0.98	6.081	A
North Quay Retail Park	543.88	542.61	590.25	0.00	1095.09	0.497	0.97	6.502	A
Denmark Rd	289.20	288.76	972.31	0.00	1067.55	0.271	0.37	4.621	A
Development access	595.03	594.60	452.20	0.00	1944.81	0.306	0.44	2.666	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	216.79	216.55	1180.19	0.00	1287.13	0.168	0.20	3.362	A
Bamards Way	714.34	710.96	637.94	0.00	1095.65	0.652	1.82	9.276	A
North Quay Retail Park	666.12	663.02	703.54	0.00	1036.34	0.643	1.75	9.563	A
Denmark Rd	354.20	353.45	1121.76	0.00	984.59	0.360	0.56	5.696	A
Development access	728.77	727.96	577.22	0.00	1862.32	0.391	0.64	3.172	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	216.79	216.84	1061.66	0.00	1361.36	0.159	0.19	3.147	A
Bamards Way	714.34	715.21	491.69	0.00	1168.78	0.611	1.60	7.954	A
North Quay Retail Park	666.12	666.36	643.28	0.00	1067.62	0.624	1.69	8.982	A
Denmark Rd	354.20	354.30	1043.75	0.00	1027.90	0.345	0.53	5.347	A
Development access	728.77	728.87	487.69	0.00	1921.39	0.379	0.61	3.020	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	177.01	177.21	917.94	0.00	1445.12	0.122	0.14	2.841	A
Bamards Way	583.26	585.83	433.64	0.00	1197.50	0.487	0.96	5.911	A
North Quay Retail Park	543.88	546.28	674.63	0.00	1051.08	0.517	1.09	7.164	A
Denmark Rd	289.20	289.82	978.50	0.00	1063.67	0.272	0.38	4.655	A
Development access	595.03	595.76	398.82	0.00	1979.95	0.301	0.43	2.601	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	148.24	148.37	781.33	0.00	1533.57	0.097	0.11	2.598	A
Bamards Way	488.45	489.55	415.06	0.00	1207.05	0.405	0.69	5.026	A
North Quay Retail Park	455.48	457.13	510.03	0.00	1136.63	0.401	0.68	5.310	A
Denmark Rd	242.19	242.66	770.80	0.00	1179.42	0.205	0.26	3.846	A
Development access	498.31	498.72	349.51	0.00	2012.57	0.248	0.33	2.380	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
11:30-11:45	Peto Way	148.24	1537.68	0.096	0.00	0.00	0.11	1.57	-	2.590
11:30-11:45	Bamards Way	488.45	1219.75	0.400	0.00	0.00	0.66	9.61	-	4.887
11:30-11:45	North Quay Retail Park	455.48	1145.42	0.398	0.00	0.00	0.65	9.48	-	5.178
11:30-11:45	Denmark Rd	242.19	1175.92	0.206	0.00	0.00	0.26	3.78	-	3.847
11:30-11:45	Development access	498.31	2004.61	0.249	0.00	0.00	0.33	4.87	-	2.385
11:45-12:00	Peto Way	177.01	1430.02	0.124	0.00	0.11	0.14	2.09	-	2.872
11:45-12:00	Bamards Way	583.26	1172.60	0.497	0.00	0.66	0.98	14.20	-	6.081
11:45-12:00	North Quay Retail Park	543.88	1095.09	0.497	0.00	0.65	0.97	14.12	-	6.502
11:45-12:00	Denmark Rd	289.20	1067.55	0.271	0.00	0.26	0.37	5.42	-	4.621
11:45-12:00	Development access	595.03	1944.81	0.306	0.00	0.33	0.44	6.50	-	2.666
12:00-12:15	Peto Way	216.79	1287.13	0.168	0.00	0.14	0.20	2.98	-	3.362
12:00-12:15	Bamards Way	714.34	1095.65	0.652	0.00	0.98	1.82	25.76	-	9.276
12:00-12:15	North Quay Retail Park	666.12	1036.34	0.643	0.00	0.97	1.75	24.77	-	9.563
12:00-12:15	Denmark Rd	354.20	984.59	0.360	0.00	0.37	0.56	8.13	-	5.696

12:00-12:15	Development access	728.77	1862.32	0.391	0.00	0.44	0.64	9.42	-	3.172
12:15-12:30	Peto Way	216.79	1361.36	0.159	0.00	0.20	0.19	2.87	-	3.147
12:15-12:30	Bamards Way	714.34	1168.78	0.611	0.00	1.82	1.60	24.68	-	7.954
12:15-12:30	North Quay Retail Park	666.12	1067.62	0.624	0.00	1.75	1.69	25.62	-	8.982
12:15-12:30	Denmark Rd	354.20	1027.90	0.345	0.00	0.56	0.53	8.03	-	5.347
12:15-12:30	Development access	728.77	1921.39	0.379	0.00	0.64	0.61	9.28	-	3.020
12:30-12:45	Peto Way	177.01	1445.12	0.122	0.00	0.19	0.14	2.13	-	2.841
12:30-12:45	Bamards Way	583.26	1197.50	0.487	0.00	1.60	0.96	14.95	-	5.911
12:30-12:45	North Quay Retail Park	543.88	1051.08	0.517	0.00	1.69	1.09	17.01	-	7.164
12:30-12:45	Denmark Rd	289.20	1063.67	0.272	0.00	0.53	0.38	5.76	-	4.655
12:30-12:45	Development access	595.03	1979.95	0.301	0.00	0.61	0.43	6.57	-	2.601
12:45-13:00	Peto Way	148.24	1533.57	0.097	0.00	0.14	0.11	1.63	-	2.598
12:45-13:00	Bamards Way	488.45	1207.05	0.405	0.00	0.96	0.69	10.56	-	5.026
12:45-13:00	North Quay Retail Park	455.48	1136.63	0.401	0.00	1.09	0.68	10.43	-	5.310
12:45-13:00	Denmark Rd	242.19	1179.42	0.205	0.00	0.38	0.26	3.97	-	3.846
12:45-13:00	Development access	498.31	2012.57	0.248	0.00	0.43	0.33	5.01	-	2.380

DM - 2022 DM, Sat

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
DM	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
2022 DM, Sat	2022 DM	Sat		ONE HOUR	11:30	13:00	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Petro Way/Denmark Rd	Roundabout	1,2,3,4,5			6.79	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Peto Way	1	Peto Way	
Bamards Way	2	Bamards Way	
North Quay Retail Park	3	North Quay Retail Park	
Denmark Rd	4	Denmark Rd	
Development access	5	Development access	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Peto Way	0.00	99999.00
Bamards Way	0.00	99999.00
North Quay Retail Park	0.00	99999.00
Denmark Rd	0.00	99999.00
Development access	0.00	99999.00

Roundabout Geometry

Name	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
Peto Way	3.70	7.90	26.60	20.90	60.00	22.50	
Bamards Way	3.70	5.50	9.40	12.30	60.00	30.00	
North Quay Retail Park	3.40	4.70	14.50	27.80	60.00	20.00	
Denmark Rd	3.70	6.60	7.90	28.00	60.00	18.50	
Development access	4.30	10.40	17.30	25.50	60.00	23.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Peto Way		(calculated)	(calculated)	0.620	2021.854
Bamards Way		(calculated)	(calculated)	0.500	1414.605
North Quay Retail Park		(calculated)	(calculated)	0.518	1400.988
Denmark Rd		(calculated)	(calculated)	0.555	1607.329
Development access		(calculated)	(calculated)	0.660	2243.205

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	2.30				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
Peto Way	ONE HOUR	✓	197.00	100.000
Bamards Way	ONE HOUR	✓	648.00	100.000
North Quay Retail Park	ONE HOUR	✓	615.00	100.000
Denmark Rd	ONE HOUR	✓	321.00	100.000
Development access	ONE HOUR	✓	669.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
11:30-11:45	**Peto Way**	148.31	148.57		
11:30-11:45	**Bamards Way**	487.85	488.48		
11:30-11:45	**North Quay Retail Park**	463.00	463.00		
11:30-11:45	**Denmark Rd**	241.67	241.67		
11:30-11:45	**Development access**	503.66	503.66		
11:45-12:00	**Peto Way**	177.10	177.41		
11:45-12:00	**Bamards Way**	582.54	583.29		
11:45-12:00	**North Quay Retail Park**	552.87	552.87		
11:45-12:00	**Denmark Rd**	288.57	288.57		
11:45-12:00	**Development access**	601.42	601.42		
12:00-12:15	**Peto Way**	216.90	217.28		
12:00-12:15	**Bamards Way**	713.46	714.39		
12:00-12:15	**North Quay Retail Park**	677.13	677.13		
12:00-12:15	**Denmark Rd**	353.43	353.43		

12:00-12:15	Development access	736.58	736.58		
12:15-12:30	Peto Way	216.90	217.28		
12:15-12:30	Bamards Way	713.46	714.39		
12:15-12:30	North Quay Retail Park	677.13	677.13		
12:15-12:30	Denmark Rd	353.43	353.43		
12:15-12:30	Development access	736.58	736.58		
12:30-12:45	Peto Way	177.10	177.41		
12:30-12:45	Bamards Way	582.54	583.29		
12:30-12:45	North Quay Retail Park	552.87	552.87		
12:30-12:45	Denmark Rd	288.57	288.57		
12:30-12:45	Development access	601.42	601.42		
12:45-13:00	Peto Way	148.31	148.57		
12:45-13:00	Bamards Way	487.85	488.48		
12:45-13:00	North Quay Retail Park	463.00	463.00		
12:45-13:00	Denmark Rd	241.67	241.67		
12:45-13:00	Development access	503.66	503.66		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.000	22.000	39.000	8.000	128.000
	Bamards Way	19.000	0.000	243.000	16.000	370.000
	North Quay Retail Park	18.000	302.000	0.000	85.000	210.000
	Denmark Rd	1.000	48.000	94.000	0.000	178.000
	Development access	74.000	338.000	141.000	116.000	0.000

Turning Proportions (Veh) - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.00	0.11	0.20	0.04	0.65
	Bamards Way	0.03	0.00	0.38	0.02	0.57
	North Quay Retail Park	0.03	0.49	0.00	0.14	0.34
	Denmark Rd	0.00	0.15	0.29	0.00	0.55
	Development access	0.11	0.51	0.21	0.17	0.00

Vehicle Mix

Average PCU Per Vehicle - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	1.000	1.000	1.000	1.043	1.000
	Bamards Way	1.044	1.000	1.000	1.000	1.000
	North Quay Retail Park	1.000	1.000	1.000	1.000	1.000
	Denmark Rd	1.000	1.000	1.000	1.000	1.000
	Development access	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.0	0.0	0.0	3.3	0.0
	Bamards Way	3.4	0.0	0.0	0.0	0.0
	North Quay Retail Park	0.0	0.0	0.0	0.0	0.0
	Denmark Rd	0.0	0.0	0.0	0.0	0.0
	Development access	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
Peto Way	0.17	3.29	0.20	A
Bamards Way	0.63	8.77	1.72	A
North Quay Retail Park	0.66	10.31	1.91	B
Denmark Rd	0.37	5.87	0.57	A
Development access	0.39	3.11	0.64	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	148.31	147.89	779.25	0.00	1535.88	0.097	0.11	2.593	A
Bamards Way	487.85	485.19	394.81	0.00	1215.66	0.401	0.66	4.911	A
North Quay Retail Park	463.00	460.32	492.44	0.00	1145.47	0.404	0.67	5.235	A
Denmark Rd	241.67	240.63	784.05	0.00	1171.72	0.206	0.26	3.862	A
Development access	503.66	502.32	360.94	0.00	2004.62	0.251	0.33	2.394	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	177.10	176.97	932.82	0.00	1440.80	0.123	0.14	2.848	A
Bamards Way	582.54	581.32	472.46	0.00	1176.89	0.495	0.97	6.032	A
North Quay Retail Park	552.87	551.54	589.71	0.00	1094.99	0.505	1.01	6.608	A
Denmark Rd	288.57	288.17	939.27	0.00	1085.49	0.266	0.36	4.513	A
Development access	601.42	600.99	432.40	0.00	1957.39	0.307	0.44	2.654	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	216.90	216.67	1141.20	0.00	1311.79	0.165	0.20	3.287	A
Bamards Way	713.46	710.55	578.40	0.00	1124.01	0.635	1.69	8.652	A
North Quay Retail Park	677.13	673.64	721.26	0.00	1026.73	0.660	1.88	10.095	B
Denmark Rd	353.43	352.59	1147.87	0.00	969.59	0.365	0.57	5.828	A
Development access	736.58	735.82	528.42	0.00	1893.91	0.389	0.63	3.107	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	216.90	216.90	1143.88	0.00	1310.13	0.166	0.20	3.292	A
Bamards Way	713.46	713.37	579.13	0.00	1123.64	0.635	1.72	8.769	A
North Quay Retail Park	677.13	676.99	723.31	0.00	1025.67	0.660	1.91	10.314	B
Denmark Rd	353.43	353.41	1152.60	0.00	966.96	0.366	0.57	5.867	A
Development access	736.58	736.57	530.61	0.00	1892.47	0.389	0.64	3.113	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	177.10	177.33	936.79	0.00	1438.34	0.123	0.14	2.854	A
Bamards Way	582.54	585.43	473.60	0.00	1176.33	0.495	0.99	6.123	A
North Quay Retail Park	552.87	556.36	592.73	0.00	1093.43	0.506	1.04	6.744	A
Denmark Rd	288.57	289.40	946.12	0.00	1081.68	0.267	0.37	4.548	A
Development access	601.42	602.17	435.58	0.00	1955.29	0.308	0.45	2.663	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	148.31	148.45	783.48	0.00	1533.27	0.097	0.11	2.601	A
Bamards Way	487.85	489.11	396.41	0.00	1214.86	0.402	0.68	4.970	A
North Quay Retail Park	463.00	464.41	495.58	0.00	1143.83	0.405	0.69	5.309	A
Denmark Rd	241.67	242.08	790.30	0.00	1168.25	0.207	0.26	3.888	A
Development access	503.66	504.09	363.83	0.00	2002.71	0.251	0.34	2.402	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
11:30-11:45	Peto Way	148.31	1535.88	0.097	0.00	0.00	0.11	1.57	-	2.593
11:30-11:45	Bamards Way	487.85	1215.66	0.401	0.00	0.00	0.66	9.64	-	4.911
11:30-11:45	North Quay Retail Park	463.00	1145.47	0.404	0.00	0.00	0.67	9.73	-	5.235
11:30-11:45	Denmark Rd	241.67	1171.72	0.206	0.00	0.00	0.26	3.79	-	3.862
11:30-11:45	Development access	503.66	2004.62	0.251	0.00	0.00	0.33	4.93	-	2.394
11:45-12:00	Peto Way	177.10	1440.80	0.123	0.00	0.11	0.14	2.07	-	2.848
11:45-12:00	Bamards Way	582.54	1176.89	0.495	0.00	0.66	0.97	14.07	-	6.032
11:45-12:00	North Quay Retail Park	552.87	1094.99	0.505	0.00	0.67	1.01	14.58	-	6.608
11:45-12:00	Denmark Rd	288.57	1085.49	0.266	0.00	0.26	0.36	5.29	-	4.513
11:45-12:00	Development access	601.42	1957.39	0.307	0.00	0.33	0.44	6.54	-	2.654
12:00-12:15	Peto Way	216.90	1311.79	0.165	0.00	0.14	0.20	2.92	-	3.287
12:00-12:15	Bamards Way	713.46	1124.01	0.635	0.00	0.97	1.69	24.11	-	8.652
12:00-12:15	North Quay Retail Park	677.13	1026.73	0.660	0.00	1.01	1.88	26.45	-	10.095
12:00-12:15	Denmark Rd	353.43	969.59	0.365	0.00	0.36	0.57	8.29	-	5.828
12:00-12:15	Development access	736.58	1893.91	0.389	0.00	0.44	0.63	9.33	-	3.107
12:15-12:30	Peto Way	216.90	1310.13	0.166	0.00	0.20	0.20	2.97	-	3.292
12:15-12:30	Bamards Way	713.46	1123.64	0.635	0.00	1.69	1.72	25.62	-	8.769
12:15-12:30	North Quay Retail Park	677.13	1025.67	0.660	0.00	1.88	1.91	28.46	-	10.314
12:15-12:30	Denmark Rd	353.43	966.96	0.366	0.00	0.57	0.57	8.56	-	5.867
12:15-12:30	Development access	736.58	1892.47	0.389	0.00	0.63	0.64	9.52	-	3.113
12:30-12:45	Peto Way	177.10	1438.34	0.123	0.00	0.20	0.14	2.14	-	2.854
12:30-12:45	Bamards Way	582.54	1176.33	0.495	0.00	1.72	0.99	15.48	-	6.123
12:30-12:45	North Quay Retail Park	552.87	1093.43	0.506	0.00	1.91	1.04	16.24	-	6.744
12:30-12:45	Denmark Rd	288.57	1081.68	0.267	0.00	0.57	0.37	5.62	-	4.548
12:30-12:45	Development access	601.42	1955.29	0.308	0.00	0.64	0.45	6.79	-	2.663
12:45-13:00	Peto Way	148.31	1533.27	0.097	0.00	0.14	0.11	1.63	-	2.601

12:45-13:00	Bamards Way	487.85	1214.86	0.402	0.00	0.99	0.68	10.43	-	4.970
12:45-13:00	North Quay Retail Park	463.00	1143.83	0.405	0.00	1.04	0.69	10.60	-	5.309
12:45-13:00	Denmark Rd	241.67	1168.25	0.207	0.00	0.37	0.26	4.00	-	3.888
12:45-13:00	Development access	503.66	2002.71	0.251	0.00	0.45	0.34	5.12	-	2.402

DM - 2037 DM, Sat

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
DM	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
2037 DM, Sat	2037 DM	Sat		ONE HOUR	11:30	13:00	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Petro Way/Denmark Rd	Roundabout	1,2,3,4,5			7.11	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Peto Way	1	Peto Way	
Bamards Way	2	Bamards Way	
North Quay Retail Park	3	North Quay Retail Park	
Denmark Rd	4	Denmark Rd	
Development access	5	Development access	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Peto Way	0.00	99999.00
Bamards Way	0.00	99999.00
North Quay Retail Park	0.00	99999.00
Denmark Rd	0.00	99999.00
Development access	0.00	99999.00

Roundabout Geometry

Name	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
Peto Way	3.70	7.90	26.60	20.90	60.00	22.50	
Bamards Way	3.70	5.50	9.40	12.30	60.00	30.00	
North Quay Retail Park	3.40	4.70	14.50	27.80	60.00	20.00	
Denmark Rd	3.70	6.60	7.90	28.00	60.00	18.50	
Development access	4.30	10.40	17.30	25.50	60.00	23.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Peto Way		(calculated)	(calculated)	0.620	2021.854
Bamards Way		(calculated)	(calculated)	0.500	1414.605
North Quay Retail Park		(calculated)	(calculated)	0.518	1400.988
Denmark Rd		(calculated)	(calculated)	0.555	1607.329
Development access		(calculated)	(calculated)	0.660	2243.205

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	2.30				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
Peto Way	ONE HOUR	✓	197.00	100.000
Bamards Way	ONE HOUR	✓	648.00	100.000
North Quay Retail Park	ONE HOUR	✓	640.00	100.000
Denmark Rd	ONE HOUR	✓	321.00	100.000
Development access	ONE HOUR	✓	685.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
11:30-11:45	Peto Way	148.31	148.57		
11:30-11:45	Bamards Way	487.85	488.48		
11:30-11:45	North Quay Retail Park	481.83	481.83		
11:30-11:45	Denmark Rd	241.67	241.67		
11:30-11:45	Development access	515.70	515.70		
11:45-12:00	Peto Way	177.10	177.41		
11:45-12:00	Bamards Way	582.54	583.29		
11:45-12:00	North Quay Retail Park	575.35	575.35		
11:45-12:00	Denmark Rd	288.57	288.57		
11:45-12:00	Development access	615.80	615.80		
12:00-12:15	Peto Way	216.90	217.28		
12:00-12:15	Bamards Way	713.46	714.39		
12:00-12:15	North Quay Retail Park	704.65	704.65		
12:00-12:15	Denmark Rd	353.43	353.43		
12:00-12:15	Development access	754.20	754.20		
12:15-12:30	Peto Way	216.90	217.28		
12:15-12:30	Bamards Way	713.46	714.39		
12:15-12:30	North Quay Retail Park	704.65	704.65		
12:15-12:30	Denmark Rd	353.43	353.43		
12:15-12:30	Development access	754.20	754.20		
12:30-12:45	Peto Way	177.10	177.41		
12:30-12:45	Bamards Way	582.54	583.29		
12:30-12:45	North Quay Retail Park	575.35	575.35		
12:30-12:45	Denmark Rd	288.57	288.57		
12:30-12:45	Development access	615.80	615.80		
12:45-13:00	Peto Way	148.31	148.57		

12:45-13:00	Bamards Way	487.85	488.48		
12:45-13:00	North Quay Retail Park	481.83	481.83		
12:45-13:00	Denmark Rd	241.67	241.67		
12:45-13:00	Development access	515.70	515.70		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.000	22.000	39.000	8.000	128.000
	Bamards Way	19.000	0.000	243.000	16.000	370.000
	North Quay Retail Park	18.000	302.000	0.000	85.000	235.000
	Denmark Rd	1.000	48.000	94.000	0.000	178.000
	Development access	74.000	338.000	157.000	116.000	0.000

Turning Proportions (Veh) - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.00	0.11	0.20	0.04	0.65
	Bamards Way	0.03	0.00	0.38	0.02	0.57
	North Quay Retail Park	0.03	0.47	0.00	0.13	0.37
	Denmark Rd	0.00	0.15	0.29	0.00	0.55
	Development access	0.11	0.49	0.23	0.17	0.00

Vehicle Mix

Average PCU Per Vehicle - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	1.000	1.000	1.000	1.043	1.000
	Bamards Way	1.044	1.000	1.000	1.000	1.000
	North Quay Retail Park	1.000	1.000	1.000	1.000	1.000
	Denmark Rd	1.000	1.000	1.000	1.000	1.000
	Development access	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.0	0.0	0.0	3.3	0.0
	Bamards Way	3.4	0.0	0.0	0.0	0.0
	North Quay Retail Park	0.0	0.0	0.0	0.0	0.0
	Denmark Rd	0.0	0.0	0.0	0.0	0.0
	Development access	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
Peto Way	0.17	3.32	0.20	A
Bamards Way	0.64	8.96	1.75	A
North Quay Retail Park	0.69	11.19	2.15	B
Denmark Rd	0.37	6.02	0.59	A
Development access	0.40	3.16	0.66	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	148.31	147.88	791.21	0.00	1528.48	0.097	0.11	2.607	A
Bamards Way	487.85	485.17	406.81	0.00	1209.67	0.403	0.67	4.951	A
North Quay Retail Park	481.83	478.95	492.42	0.00	1145.48	0.421	0.72	5.379	A
Denmark Rd	241.67	240.62	802.68	0.00	1161.38	0.208	0.26	3.906	A
Development access	515.70	514.32	360.89	0.00	2004.65	0.257	0.35	2.413	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	177.10	176.97	947.14	0.00	1431.94	0.124	0.14	2.868	A
Bamards Way	582.54	581.30	486.83	0.00	1169.73	0.498	0.98	6.106	A
North Quay Retail Park	575.35	573.86	589.69	0.00	1095.00	0.525	1.09	6.888	A
Denmark Rd	288.57	288.16	961.59	0.00	1073.10	0.269	0.37	4.584	A
Development access	615.80	615.35	432.34	0.00	1957.42	0.315	0.46	2.682	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	216.90	216.67	1158.56	0.00	1301.04	0.167	0.20	3.319	A
Bamards Way	713.46	710.46	595.97	0.00	1115.24	0.640	1.73	8.828	A
North Quay Retail Park	704.65	700.58	721.20	0.00	1026.77	0.686	2.11	10.900	B
Denmark Rd	353.43	352.56	1174.81	0.00	954.64	0.370	0.58	5.970	A
Development access	754.20	753.40	528.18	0.00	1894.07	0.398	0.66	3.155	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	216.90	216.90	1161.48	0.00	1299.23	0.167	0.20	3.325	A
Bamards Way	713.46	713.36	596.74	0.00	1114.85	0.640	1.75	8.961	A
North Quay Retail Park	704.65	704.48	723.31	0.00	1025.67	0.687	2.15	11.191	B
Denmark Rd	353.43	353.41	1180.09	0.00	951.70	0.371	0.59	6.016	A
Development access	754.20	754.19	530.59	0.00	1892.48	0.399	0.66	3.161	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	177.10	177.33	951.44	0.00	1429.27	0.124	0.14	2.877	A
Bamards Way	582.54	585.52	488.02	0.00	1169.13	0.498	1.01	6.198	A
North Quay Retail Park	575.35	579.44	592.79	0.00	1093.39	0.526	1.13	7.060	A
Denmark Rd	288.57	289.43	969.20	0.00	1068.87	0.270	0.37	4.623	A
Development access	615.80	616.60	435.83	0.00	1955.12	0.315	0.46	2.692	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	148.31	148.45	795.60	0.00	1525.76	0.097	0.11	2.613	A
Bamards Way	487.85	489.14	408.47	0.00	1208.84	0.404	0.68	5.010	A
North Quay Retail Park	481.83	483.40	495.60	0.00	1143.82	0.421	0.74	5.465	A
Denmark Rd	241.67	242.09	809.29	0.00	1157.71	0.209	0.27	3.933	A
Development access	515.70	516.16	363.89	0.00	2002.67	0.258	0.35	2.422	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
11:30-11:45	Peto Way	148.31	1528.48	0.097	0.00	0.00	0.11	1.58	-	2.607
11:30-11:45	Bamards Way	487.85	1209.67	0.403	0.00	0.00	0.67	9.71	-	4.951
11:30-11:45	North Quay Retail Park	481.83	1145.48	0.421	0.00	0.00	0.72	10.40	-	5.379
11:30-11:45	Denmark Rd	241.67	1161.38	0.208	0.00	0.00	0.26	3.83	-	3.906
11:30-11:45	Development access	515.70	2004.65	0.257	0.00	0.00	0.35	5.09	-	2.413
11:45-12:00	Peto Way	177.10	1431.94	0.124	0.00	0.11	0.14	2.08	-	2.868
11:45-12:00	Bamards Way	582.54	1169.73	0.498	0.00	0.67	0.98	14.24	-	6.106
11:45-12:00	North Quay Retail Park	575.35	1095.00	0.525	0.00	0.72	1.09	15.78	-	6.888

11:45-12:00	Denmark Rd	288.57	1073.10	0.269	0.00	0.26	0.37	5.37	-	4.584
11:45-12:00	Development access	615.80	1957.42	0.315	0.00	0.35	0.46	6.76	-	2.682
12:00-12:15	Peto Way	216.90	1301.04	0.167	0.00	0.14	0.20	2.95	-	3.319
12:00-12:15	Bamards Way	713.46	1115.24	0.640	0.00	0.98	1.73	24.58	-	8.828
12:00-12:15	North Quay Retail Park	704.65	1026.77	0.686	0.00	1.09	2.11	29.51	-	10.900
12:00-12:15	Denmark Rd	353.43	954.64	0.370	0.00	0.37	0.58	8.48	-	5.970
12:00-12:15	Development access	754.20	1894.07	0.398	0.00	0.46	0.66	9.69	-	3.155
12:15-12:30	Peto Way	216.90	1299.23	0.167	0.00	0.20	0.20	2.99	-	3.325
12:15-12:30	Bamards Way	713.46	1114.85	0.640	0.00	1.73	1.75	26.16	-	8.961
12:15-12:30	North Quay Retail Park	704.65	1025.67	0.687	0.00	2.11	2.15	32.02	-	11.191
12:15-12:30	Denmark Rd	353.43	951.70	0.371	0.00	0.58	0.59	8.78	-	6.016
12:15-12:30	Development access	754.20	1892.48	0.399	0.00	0.66	0.66	9.89	-	3.161
12:30-12:45	Peto Way	177.10	1429.27	0.124	0.00	0.20	0.14	2.16	-	2.877
12:30-12:45	Bamards Way	582.54	1169.13	0.498	0.00	1.75	1.01	15.69	-	6.198
12:30-12:45	North Quay Retail Park	575.35	1093.39	0.526	0.00	2.15	1.13	17.70	-	7.060
12:30-12:45	Denmark Rd	288.57	1068.87	0.270	0.00	0.59	0.37	5.72	-	4.623
12:30-12:45	Development access	615.80	1955.12	0.315	0.00	0.66	0.46	7.03	-	2.692
12:45-13:00	Peto Way	148.31	1525.76	0.097	0.00	0.14	0.11	1.64	-	2.613
12:45-13:00	Bamards Way	487.85	1208.84	0.404	0.00	1.01	0.68	10.52	-	5.010
12:45-13:00	North Quay Retail Park	481.83	1143.82	0.421	0.00	1.13	0.74	11.36	-	5.465
12:45-13:00	Denmark Rd	241.67	1157.71	0.209	0.00	0.37	0.27	4.05	-	3.933
12:45-13:00	Development access	515.70	2002.67	0.258	0.00	0.46	0.35	5.29	-	2.422

DM - 2022 DS, Sat

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
DM	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
2022 DS, Sat	2022 DS	Sat		ONE HOUR	11:30	13:00	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Petro Way/Denmark Rd	Roundabout	1,2,3,4,5			16.31	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Peto Way	1	Peto Way	
Bamards Way	2	Bamards Way	
North Quay Retail Park	3	North Quay Retail Park	
Denmark Rd	4	Denmark Rd	
Development access	5	Development access	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Peto Way	0.00	99999.00
Bamards Way	0.00	99999.00
North Quay Retail Park	0.00	99999.00
Denmark Rd	0.00	99999.00
Development access	0.00	99999.00

Roundabout Geometry

Name	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
Peto Way	3.70	7.90	26.60	20.90	60.00	22.50	
Bamards Way	3.70	5.50	9.40	12.30	60.00	30.00	
North Quay Retail Park	3.40	4.70	14.50	27.80	60.00	20.00	
Denmark Rd	3.70	6.60	7.90	28.00	60.00	18.50	
Development access	4.30	10.40	17.30	25.50	60.00	23.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Peto Way		(calculated)	(calculated)	0.620	2021.854
Bamards Way		(calculated)	(calculated)	0.500	1414.605
North Quay Retail Park		(calculated)	(calculated)	0.518	1400.988
Denmark Rd		(calculated)	(calculated)	0.555	1607.329
Development access		(calculated)	(calculated)	0.660	2243.205

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	2.30				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
Peto Way	ONE HOUR	✓	197.00	100.000
Bamards Way	ONE HOUR	✓	648.00	100.000
North Quay Retail Park	ONE HOUR	✓	860.00	100.000
Denmark Rd	ONE HOUR	✓	321.00	100.000
Development access	ONE HOUR	✓	796.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
11:30-11:45	Peto Way	148.31	148.57		
11:30-11:45	Bamards Way	487.85	488.48		
11:30-11:45	North Quay Retail Park	647.45	647.45		
11:30-11:45	Denmark Rd	241.67	241.67		
11:30-11:45	Development access	599.27	599.27		
11:45-12:00	Peto Way	177.10	177.41		
11:45-12:00	Bamards Way	582.54	583.29		

11:45-12:00	**North Quay Retail Park**	773.12	773.12		
11:45-12:00	**Denmark Rd**	288.57	288.57		
11:45-12:00	**Development access**	715.59	715.59		
12:00-12:15	**Peto Way**	216.90	217.28		
12:00-12:15	**Bamards Way**	713.46	714.39		
12:00-12:15	**North Quay Retail Park**	946.88	946.88		
12:00-12:15	**Denmark Rd**	353.43	353.43		
12:00-12:15	**Development access**	876.41	876.41		
12:15-12:30	**Peto Way**	216.90	217.28		
12:15-12:30	**Bamards Way**	713.46	714.39		
12:15-12:30	**North Quay Retail Park**	946.88	946.88		
12:15-12:30	**Denmark Rd**	353.43	353.43		
12:15-12:30	**Development access**	876.41	876.41		
12:30-12:45	**Peto Way**	177.10	177.41		
12:30-12:45	**Bamards Way**	582.54	583.29		
12:30-12:45	**North Quay Retail Park**	773.12	773.12		
12:30-12:45	**Denmark Rd**	288.57	288.57		
12:30-12:45	**Development access**	715.59	715.59		
12:45-13:00	**Peto Way**	148.31	148.57		
12:45-13:00	**Bamards Way**	487.85	488.48		
12:45-13:00	**North Quay Retail Park**	647.45	647.45		
12:45-13:00	**Denmark Rd**	241.67	241.67		
12:45-13:00	**Development access**	599.27	599.27		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.000	22.000	39.000	8.000	128.000
	Bamards Way	19.000	0.000	243.000	16.000	370.000
	North Quay Retail Park	18.000	302.000	0.000	85.000	455.000
	Denmark Rd	1.000	48.000	94.000	0.000	178.000
	Development access	74.000	338.000	268.000	116.000	0.000

Turning Proportions (Veh) - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.00	0.11	0.20	0.04	0.65
	Bamards Way	0.03	0.00	0.38	0.02	0.57
	North Quay Retail Park	0.02	0.35	0.00	0.10	0.53
	Denmark Rd	0.00	0.15	0.29	0.00	0.55
	Development access	0.09	0.42	0.34	0.15	0.00

Vehicle Mix

Average PCU Per Vehicle - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	1.000	1.000	1.000	1.043	1.000
	Bamards Way	1.044	1.000	1.000	1.000	1.000
	North Quay Retail Park	1.000	1.000	1.000	1.000	1.000
	Denmark Rd	1.000	1.000	1.000	1.000	1.000
	Development access	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.0	0.0	0.0	3.3	0.0
	Bamards Way	3.4	0.0	0.0	0.0	0.0
	North Quay Retail Park	0.0	0.0	0.0	0.0	0.0
	Denmark Rd	0.0	0.0	0.0	0.0	0.0
	Development access	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
Peto Way	0.18	3.57	0.21	A
Bamards Way	0.68	10.56	2.06	B
North Quay Retail Park	0.92	38.61	9.49	E
Denmark Rd	0.43	7.72	0.75	A
Development access	0.46	3.54	0.86	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	148.31	147.87	873.98	0.00	1477.23	0.100	0.11	2.708	A
Bamards Way	487.85	485.01	490.06	0.00	1168.14	0.418	0.71	5.249	A
North Quay Retail Park	647.45	642.35	492.29	0.00	1145.54	0.565	1.28	7.085	A
Denmark Rd	241.67	240.51	966.09	0.00	1070.66	0.226	0.29	4.330	A
Development access	599.27	597.57	360.38	0.00	2004.99	0.299	0.42	2.554	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	177.10	176.95	1045.98	0.00	1370.74	0.129	0.15	3.015	A
Bamards Way	582.54	581.11	586.46	0.00	1120.02	0.520	1.07	6.663	A
North Quay Retail Park	773.12	768.99	589.55	0.00	1095.08	0.706	2.31	10.901	B
Denmark Rd	288.57	288.04	1156.81	0.00	964.72	0.299	0.42	5.315	A
Development access	715.59	714.99	431.49	0.00	1957.98	0.365	0.57	2.894	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	216.90	216.64	1273.97	0.00	1229.59	0.176	0.21	3.554	A
Bamards Way	713.46	709.64	717.83	0.00	1054.44	0.677	2.02	10.326	B
North Quay Retail Park	946.88	923.33	720.64	0.00	1027.05	0.922	8.20	29.656	D
Denmark Rd	353.43	352.20	1398.84	0.00	830.27	0.426	0.73	7.510	A
Development access	876.41	875.30	521.27	0.00	1898.63	0.462	0.85	3.515	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	216.90	216.90	1281.91	0.00	1224.67	0.177	0.21	3.571	A
Bamards Way	713.46	713.31	718.92	0.00	1053.89	0.677	2.06	10.557	B
North Quay Retail Park	946.88	941.70	723.27	0.00	1025.69	0.923	9.49	38.608	E
Denmark Rd	353.43	353.35	1417.76	0.00	819.76	0.431	0.75	7.716	A
Development access	876.41	876.39	528.73	0.00	1893.71	0.463	0.86	3.537	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	177.10	177.36	1059.54	0.00	1362.35	0.130	0.15	3.037	A
Bamards Way	582.54	586.36	588.15	0.00	1119.17	0.521	1.10	6.803	A
North Quay Retail Park	773.12	801.00	593.36	0.00	1093.10	0.707	2.52	13.401	B
Denmark Rd	288.57	289.80	1189.07	0.00	946.81	0.305	0.44	5.489	A
Development access	715.59	716.69	444.34	0.00	1949.50	0.367	0.58	2.922	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	148.31	148.46	880.32	0.00	1473.31	0.101	0.11	2.717	A
Bamards Way	487.85	489.35	492.21	0.00	1167.06	0.418	0.73	5.323	A
North Quay Retail Park	647.45	652.22	495.76	0.00	1143.74	0.566	1.33	7.392	A
Denmark Rd	241.67	242.25	977.99	0.00	1064.06	0.227	0.30	4.385	A
Development access	599.27	599.89	364.95	0.00	2001.97	0.299	0.43	2.570	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
11:30-11:45	Peto Way	148.31	1477.23	0.100	0.00	0.00	0.11	1.64	-	2.708
11:30-11:45	Bamards Way	487.85	1168.14	0.418	0.00	0.00	0.71	10.28	-	5.249
11:30-11:45	North Quay Retail Park	647.45	1145.54	0.565	0.00	0.00	1.28	18.15	-	7.085
11:30-11:45	Denmark Rd	241.67	1070.66	0.226	0.00	0.00	0.29	4.24	-	4.330
11:30-11:45	Development access	599.27	2004.99	0.299	0.00	0.00	0.42	6.26	-	2.554
11:45-12:00	Peto Way	177.10	1370.74	0.129	0.00	0.11	0.15	2.19	-	3.015
11:45-12:00	Bamards Way	582.54	1120.02	0.520	0.00	0.71	1.07	15.47	-	6.663
11:45-12:00	North Quay Retail Park	773.12	1095.08	0.706	0.00	1.28	2.31	32.33	-	10.901

11:45-12:00	Denmark Rd	288.57	964.72	0.299	0.00	0.29	0.42	6.20	-	5.315
11:45-12:00	Development access	715.59	1957.98	0.365	0.00	0.42	0.57	8.47	-	2.894
12:00-12:15	Peto Way	216.90	1229.59	0.176	0.00	0.15	0.21	3.15	-	3.554
12:00-12:15	Bamards Way	713.46	1054.44	0.677	0.00	1.07	2.02	28.42	-	10.326
12:00-12:15	North Quay Retail Park	946.88	1027.05	0.922	0.00	2.31	8.20	96.63	-	29.656
12:00-12:15	Denmark Rd	353.43	830.27	0.426	0.00	0.42	0.73	10.57	-	7.510
12:00-12:15	Development access	876.41	1898.63	0.462	0.00	0.57	0.85	12.50	-	3.515
12:15-12:30	Peto Way	216.90	1224.67	0.177	0.00	0.21	0.21	3.21	-	3.571
12:15-12:30	Bamards Way	713.46	1053.89	0.677	0.00	2.02	2.06	30.67	-	10.557
12:15-12:30	North Quay Retail Park	946.88	1025.69	0.923	0.00	8.20	9.49	134.06	-	38.608
12:15-12:30	Denmark Rd	353.43	819.76	0.431	0.00	0.73	0.75	11.16	-	7.716
12:15-12:30	Development access	876.41	1893.71	0.463	0.00	0.85	0.86	12.83	-	3.537
12:30-12:45	Peto Way	177.10	1362.35	0.130	0.00	0.21	0.15	2.28	-	3.037
12:30-12:45	Bamards Way	582.54	1119.17	0.521	0.00	2.06	1.10	17.26	-	6.803
12:30-12:45	North Quay Retail Park	773.12	1093.10	0.707	0.00	9.49	2.52	46.70	-	13.401
12:30-12:45	Denmark Rd	288.57	946.81	0.305	0.00	0.75	0.44	6.83	-	5.489
12:30-12:45	Development access	715.59	1949.50	0.367	0.00	0.86	0.58	8.90	-	2.922
12:45-13:00	Peto Way	148.31	1473.31	0.101	0.00	0.15	0.11	1.71	-	2.717
12:45-13:00	Bamards Way	487.85	1167.06	0.418	0.00	1.10	0.73	11.20	-	5.323
12:45-13:00	North Quay Retail Park	647.45	1143.74	0.566	0.00	2.52	1.33	20.91	-	7.392
12:45-13:00	Denmark Rd	241.67	1064.06	0.227	0.00	0.44	0.30	4.53	-	4.385
12:45-13:00	Development access	599.27	2001.97	0.299	0.00	0.58	0.43	6.53	-	2.570

DM - 2037 DS, Sat

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
DM	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
2037 DS, Sat	2037 DS	Sat		ONE HOUR	11:30	13:00	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Petro Way/Denmark Rd	Roundabout	1,2,3,4,5			25.29	D

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Peto Way	1	Peto Way	
Bamards Way	2	Bamards Way	
North Quay Retail Park	3	North Quay Retail Park	
Denmark Rd	4	Denmark Rd	
Development access	5	Development access	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Peto Way	0.00	99999.00
Bamards Way	0.00	99999.00
North Quay Retail Park	0.00	99999.00
Denmark Rd	0.00	99999.00
Development access	0.00	99999.00

Roundabout Geometry

Name	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
Peto Way	3.70	7.90	26.60	20.90	60.00	22.50	
Bamards Way	3.70	5.50	9.40	12.30	60.00	30.00	
North Quay Retail Park	3.40	4.70	14.50	27.80	60.00	20.00	
Denmark Rd	3.70	6.60	7.90	28.00	60.00	18.50	
Development access	4.30	10.40	17.30	25.50	60.00	23.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Peto Way		(calculated)	(calculated)	0.620	2021.854
Bamards Way		(calculated)	(calculated)	0.500	1414.605
North Quay Retail Park		(calculated)	(calculated)	0.518	1400.988
Denmark Rd		(calculated)	(calculated)	0.555	1607.329
Development access		(calculated)	(calculated)	0.660	2243.205

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	2.30				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
Peto Way	ONE HOUR	✓	197.00	100.000
Bamards Way	ONE HOUR	✓	648.00	100.000
North Quay Retail Park	ONE HOUR	✓	914.00	100.000
Denmark Rd	ONE HOUR	✓	321.00	100.000
Development access	ONE HOUR	✓	828.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
11:30-11:45	Peto Way	148.31	148.57		
11:30-11:45	Bamards Way	487.85	488.48		
11:30-11:45	North Quay Retail Park	688.11	688.11		
11:30-11:45	Denmark Rd	241.67	241.67		
11:30-11:45	Development access	623.36	623.36		
11:45-12:00	Peto Way	177.10	177.41		
11:45-12:00	Bamards Way	582.54	583.29		

11:45-12:00	North Quay Retail Park	821.67	821.67		
11:45-12:00	Denmark Rd	288.57	288.57		
11:45-12:00	Development access	744.36	744.36		
12:00-12:15	Peto Way	216.90	217.28		
12:00-12:15	Bamards Way	713.46	714.39		
12:00-12:15	North Quay Retail Park	1006.33	1006.33		
12:00-12:15	Denmark Rd	353.43	353.43		
12:00-12:15	Development access	911.64	911.64		
12:15-12:30	Peto Way	216.90	217.28		
12:15-12:30	Bamards Way	713.46	714.39		
12:15-12:30	North Quay Retail Park	1006.33	1006.33		
12:15-12:30	Denmark Rd	353.43	353.43		
12:15-12:30	Development access	911.64	911.64		
12:30-12:45	Peto Way	177.10	177.41		
12:30-12:45	Bamards Way	582.54	583.29		
12:30-12:45	North Quay Retail Park	821.67	821.67		
12:30-12:45	Denmark Rd	288.57	288.57		
12:30-12:45	Development access	744.36	744.36		
12:45-13:00	Peto Way	148.31	148.57		
12:45-13:00	Bamards Way	487.85	488.48		
12:45-13:00	North Quay Retail Park	688.11	688.11		
12:45-13:00	Denmark Rd	241.67	241.67		
12:45-13:00	Development access	623.36	623.36		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.000	22.000	39.000	8.000	128.000
	Bamards Way	19.000	0.000	243.000	16.000	370.000
	North Quay Retail Park	18.000	302.000	0.000	85.000	509.000
	Denmark Rd	1.000	48.000	94.000	0.000	178.000
	Development access	74.000	338.000	300.000	116.000	0.000

Turning Proportions (Veh) - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.00	0.11	0.20	0.04	0.65
	Bamards Way	0.03	0.00	0.38	0.02	0.57
	North Quay Retail Park	0.02	0.33	0.00	0.09	0.56
	Denmark Rd	0.00	0.15	0.29	0.00	0.55
	Development access	0.09	0.41	0.36	0.14	0.00

Vehicle Mix

Average PCU Per Vehicle - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	1.000	1.000	1.000	1.043	1.000
	Bamards Way	1.044	1.000	1.000	1.000	1.000
	North Quay Retail Park	1.000	1.000	1.000	1.000	1.000
	Denmark Rd	1.000	1.000	1.000	1.000	1.000
	Development access	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Petro Way/ Denmark Rd (for whole period)

		To				
		Peto Way	Bamards Way	North Quay Retail Park	Denmark Rd	Development access
From	Peto Way	0.0	0.0	0.0	3.3	0.0
	Bamards Way	3.4	0.0	0.0	0.0	0.0
	North Quay Retail Park	0.0	0.0	0.0	0.0	0.0
	Denmark Rd	0.0	0.0	0.0	0.0	0.0
	Development access	0.0	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
Peto Way	0.18	3.64	0.22	A
Bamards Way	0.69	11.13	2.17	B
North Quay Retail Park	0.98	65.61	17.79	F
Denmark Rd	0.45	8.18	0.79	A
Development access	0.48	3.65	0.92	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	148.31	147.86	897.81	0.00	1462.48	0.101	0.11	2.738	A
Bamards Way	487.85	484.96	514.05	0.00	1156.17	0.422	0.72	5.341	A
North Quay Retail Park	688.11	682.22	492.26	0.00	1145.56	0.601	1.47	7.678	A
Denmark Rd	241.67	240.48	1005.98	0.00	1048.53	0.230	0.30	4.449	A
Development access	623.36	621.56	360.20	0.00	2005.11	0.311	0.45	2.598	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	177.10	176.95	1074.32	0.00	1353.20	0.131	0.15	3.060	A
Bamards Way	582.54	581.04	615.18	0.00	1105.69	0.527	1.10	6.842	A
North Quay Retail Park	821.67	816.16	589.50	0.00	1095.10	0.750	2.85	12.655	B
Denmark Rd	288.57	288.00	1204.03	0.00	938.50	0.307	0.44	5.529	A
Development access	744.36	743.71	431.08	0.00	1958.26	0.380	0.61	2.962	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	216.90	216.63	1303.50	0.00	1211.30	0.179	0.22	3.619	A
Bamards Way	713.46	709.34	752.97	0.00	1036.91	0.688	2.13	10.853	B
North Quay Retail Park	1006.33	964.46	720.44	0.00	1027.16	0.980	13.32	41.960	E
Denmark Rd	353.43	352.12	1441.35	0.00	806.67	0.438	0.77	7.897	A
Development access	911.64	910.43	515.33	0.00	1902.56	0.479	0.91	3.623	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	216.90	216.90	1313.04	0.00	1205.39	0.180	0.22	3.640	A
Bamards Way	713.46	713.29	754.15	0.00	1036.32	0.688	2.17	11.130	B
North Quay Retail Park	1006.33	988.46	723.26	0.00	1025.69	0.981	17.79	65.612	F
Denmark Rd	353.43	353.32	1465.66	0.00	793.17	0.446	0.79	8.181	A
Development access	911.64	911.61	524.38	0.00	1896.58	0.481	0.92	3.654	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	177.10	177.36	1097.86	0.00	1338.62	0.132	0.15	3.100	A
Bamards Way	582.54	586.67	617.01	0.00	1104.78	0.527	1.13	7.004	A
North Quay Retail Park	821.67	879.88	593.56	0.00	1092.99	0.752	3.23	20.943	C
Denmark Rd	288.57	289.86	1265.48	0.00	904.39	0.319	0.47	5.869	A
Development access	744.36	745.54	454.38	0.00	1942.87	0.383	0.62	3.011	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Peto Way	148.31	148.47	905.07	0.00	1457.98	0.102	0.11	2.751	A
Bamards Way	487.85	489.42	516.38	0.00	1155.00	0.422	0.74	5.423	A
North Quay Retail Park	688.11	694.87	495.81	0.00	1143.71	0.602	1.54	8.138	A
Denmark Rd	241.67	242.34	1020.52	0.00	1040.45	0.232	0.30	4.514	A
Development access	623.36	624.04	365.59	0.00	2001.55	0.311	0.45	2.616	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
11:30-11:45	Peto Way	148.31	1462.48	0.101	0.00	0.00	0.11	1.66	-	2.738
11:30-11:45	Bamards Way	487.85	1156.17	0.422	0.00	0.00	0.72	10.45	-	5.341
11:30-11:45	North Quay Retail Park	688.11	1145.56	0.601	0.00	0.00	1.47	20.81	-	7.678
11:30-11:45	Denmark Rd	241.67	1048.53	0.230	0.00	0.00	0.30	4.35	-	4.449
11:30-11:45	Development access	623.36	2005.11	0.311	0.00	0.00	0.45	6.62	-	2.598
11:45-12:00	Peto Way	177.10	1353.20	0.131	0.00	0.11	0.15	2.22	-	3.060
11:45-12:00	Bamards Way	582.54	1105.69	0.527	0.00	0.72	1.10	15.87	-	6.842
11:45-12:00	North Quay Retail Park	821.67	1095.10	0.750	0.00	1.47	2.85	39.28	-	12.655

11:45-12:00	Denmark Rd	288.57	938.50	0.307	0.00	0.30	0.44	6.45	-	5.529
11:45-12:00	Development access	744.36	1958.26	0.380	0.00	0.45	0.61	9.01	-	2.962
12:00-12:15	Peto Way	216.90	1211.30	0.179	0.00	0.15	0.22	3.21	-	3.619
12:00-12:15	Bamards Way	713.46	1036.91	0.688	0.00	1.10	2.13	29.75	-	10.853
12:00-12:15	North Quay Retail Park	1006.33	1027.16	0.980	0.00	2.85	13.32	141.83	-	41.960
12:00-12:15	Denmark Rd	353.43	806.67	0.438	0.00	0.44	0.77	11.09	-	7.897
12:00-12:15	Development access	911.64	1902.56	0.479	0.00	0.61	0.91	13.40	-	3.623
12:15-12:30	Peto Way	216.90	1205.39	0.180	0.00	0.22	0.22	3.27	-	3.640
12:15-12:30	Bamards Way	713.46	1036.32	0.688	0.00	2.13	2.17	32.26	-	11.130
12:15-12:30	North Quay Retail Park	1006.33	1025.69	0.981	0.00	13.32	17.79	235.92	-	65.612
12:15-12:30	Denmark Rd	353.43	793.17	0.446	0.00	0.77	0.79	11.80	-	8.181
12:15-12:30	Development access	911.64	1896.58	0.481	0.00	0.91	0.92	13.77	-	3.654
12:30-12:45	Peto Way	177.10	1338.62	0.132	0.00	0.22	0.15	2.33	-	3.100
12:30-12:45	Bamards Way	582.54	1104.78	0.527	0.00	2.17	1.13	17.78	-	7.004
12:30-12:45	North Quay Retail Park	821.67	1092.99	0.752	0.00	17.79	3.23	81.06	-	20.943
12:30-12:45	Denmark Rd	288.57	904.39	0.319	0.00	0.79	0.47	7.31	-	5.869
12:30-12:45	Development access	744.36	1942.87	0.383	0.00	0.92	0.62	9.54	-	3.011
12:45-13:00	Peto Way	148.31	1457.98	0.102	0.00	0.15	0.11	1.73	-	2.751
12:45-13:00	Bamards Way	487.85	1155.00	0.422	0.00	1.13	0.74	11.42	-	5.423
12:45-13:00	North Quay Retail Park	688.11	1143.71	0.602	0.00	3.23	1.54	24.54	-	8.138
12:45-13:00	Denmark Rd	241.67	1040.45	0.232	0.00	0.47	0.30	4.67	-	4.514
12:45-13:00	Development access	623.36	2001.55	0.311	0.00	0.62	0.45	6.91	-	2.616

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.6.541 [19821,26/11/2015]

Filename: 13 Denmark Road-Rotterdam Road rdbt DM v3 new saturday 2018-02-01.arc8
Path: L:\106xxx\1069948 Lowestoft Third Crossing\09 Documents\06_Modelling_Junction Modelling Sep 2017_Junction Modelling\13 Denmark Road-Rotterdam Road rdbt
Report generation date: 03/04/2018 10:43:42

Summary of junction performance

	AM				PM				Sat			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	DM - 2016 DN											
Denmark Rd WB	0.08	2.45	0.08	A	0.11	2.53	0.10	A	0.16	2.71	0.14	A
Denmark Rd EB	0.23	2.47	0.19	A	0.29	2.56	0.22	A	0.44	2.99	0.30	A
Rotterdam Rd	0.25	3.02	0.20	A	0.27	3.04	0.21	A	0.62	3.93	0.38	A
	DM - 2022 DM											
Denmark Rd WB	0.12	2.55	0.10	A	0.16	2.71	0.14	A	0.18	2.82	0.15	A
Denmark Rd EB	0.30	2.65	0.23	A	0.40	2.93	0.28	A	0.49	3.20	0.33	A
Rotterdam Rd	0.38	3.32	0.27	A	0.40	3.36	0.28	A	0.67	4.06	0.40	A
	DM - 2037 DM											
Denmark Rd WB	0.20	2.89	0.16	A	0.14	2.68	0.12	A	0.21	2.91	0.17	A
Denmark Rd EB	0.50	3.23	0.33	A	0.39	2.95	0.28	A	0.60	3.49	0.38	A
Rotterdam Rd	0.45	3.53	0.31	A	0.47	3.54	0.32	A	0.81	4.43	0.45	A

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

"D1 - 2022 DM, AM " model duration: 07:45 - 09:15
"D2 - 2022 DM, PM" model duration: 15:45 - 17:15
"D3 - 2037 DM, AM" model duration: 07:45 - 09:15
"D4 - 2037 DM, PM" model duration: 15:45 - 17:15
"D5 - 2016 DN, AM" model duration: 07:45 - 09:15
"D6 - 2016 DN, PM" model duration: 15:45 - 17:15
"D7 - 2016 DN, Sat" model duration: 11:30 - 13:00
"D8 - 2022 DM, Sat" model duration: 11:30 - 13:00
"D9 - 2037 DM, Sat" model duration: 11:30 - 13:00

Run using Junctions 8.0.6.541 at 03/04/2018 10:43:38

File summary

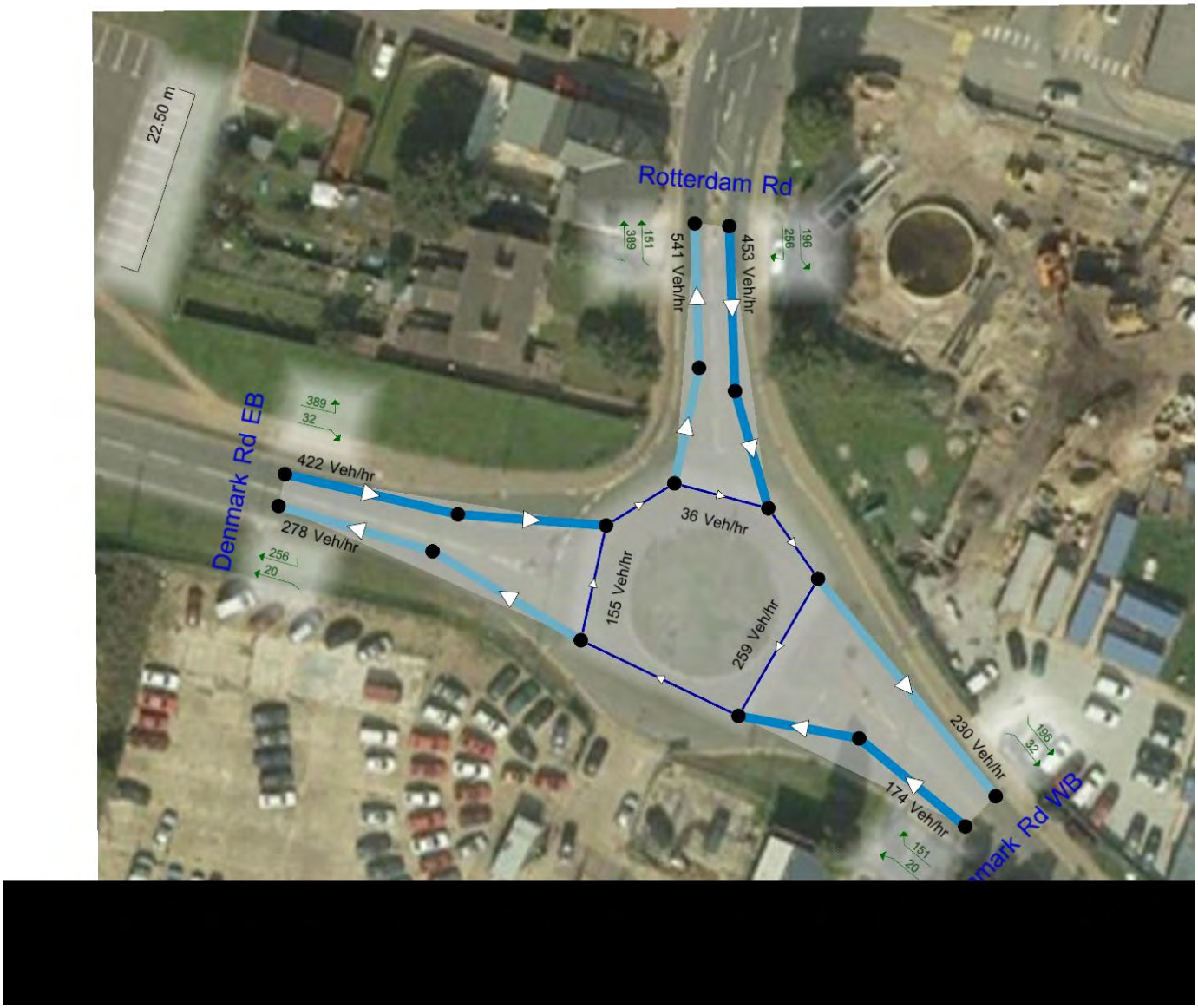
Title	(untitled)
Location	
Site Number	
Date	24/06/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JMThomps
Description	

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	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of ARCADY.

DM - 2022 DM, 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
DM	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
2022 DM, AM	2022 DM	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	Denmark Rd/Rotterdam Rd	Roundabout	1,2,3			2.91	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Denmark Rd WB	1	Denmark Rd WB	
Denmark Rd EB	2	Denmark Rd EB	
Rotterdam Rd	3	Rotterdam Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Denmark Rd WB	0.00	99999.00
Denmark Rd EB	0.00	99999.00
Rotterdam Rd	0.00	99999.00

Roundabout Geometry

Name	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
Denmark Rd WB	3.50	9.10	15.70	22.50	34.00	46.00	
Denmark Rd EB	4.00	7.30	14.10	40.90	34.00	22.50	
Rotterdam Rd	3.60	4.80	20.90	18.70	34.00	5.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Denmark Rd WB		(calculated)	(calculated)	0.650	1760.074
Denmark Rd EB		(calculated)	(calculated)	0.704	1874.712
Rotterdam Rd		(calculated)	(calculated)	0.640	1512.060

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	2.30				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
Denmark Rd WB	ONE HOUR	✓	148.28	100.000
Denmark Rd EB	ONE HOUR	✓	374.03	100.000
Rotterdam Rd	ONE HOUR	✓	371.11	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	Denmark Rd WB	111.64	112.40		
07:45-08:00	Denmark Rd EB	281.59	283.57		
07:45-08:00	Rotterdam Rd	279.39	279.39		
08:00-08:15	Denmark Rd WB	133.30	134.22		
08:00-08:15	Denmark Rd EB	336.24	338.61		
08:00-08:15	Rotterdam Rd	333.62	333.62		
08:15-08:30	Denmark Rd WB	163.26	164.38		
08:15-08:30	Denmark Rd EB	411.81	414.71		
08:15-08:30	Rotterdam Rd	408.60	408.60		
08:30-08:45	Denmark Rd WB	163.26	164.38		
08:30-08:45	Denmark Rd EB	411.81	414.71		
08:30-08:45	Rotterdam Rd	408.60	408.60		
08:45-09:00	Denmark Rd WB	133.30	134.22		
08:45-09:00	Denmark Rd EB	336.24	338.61		
08:45-09:00	Rotterdam Rd	333.62	333.62		
09:00-09:15	Denmark Rd WB	111.64	112.40		
09:00-09:15	Denmark Rd EB	281.59	283.57		
09:00-09:15	Rotterdam Rd	279.39	279.39		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	0.000	26.969	121.314
	Denmark Rd EB	25.983	0.000	348.046
	Rotterdam Rd	127.363	243.749	0.000

Turning Proportions (Veh) - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	0.00	0.18	0.82
	Denmark Rd EB	0.07	0.00	0.93
	Rotterdam Rd	0.34	0.66	0.00

Vehicle Mix

Average PCU Per Vehicle - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	1.000	1.038	1.000
	Denmark Rd EB	1.066	1.000	1.003
	Rotterdam Rd	1.000	1.000	1.000

Heavy Vehicle Percentages - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	0.0	2.9	0.0
	Denmark Rd EB	5.1	0.0	0.2
	Rotterdam Rd	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
Denmark Rd WB	0.10	2.55	0.12	A
Denmark Rd EB	0.23	2.65	0.30	A
Rotterdam Rd	0.27	3.32	0.38	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	111.63	111.34	182.91	0.00	1630.03	0.068	0.07	2.370	A
Denmark Rd EB	281.59	280.85	91.09	0.00	1797.92	0.157	0.19	2.371	A
Rotterdam Rd	279.39	278.48	19.51	0.00	1498.75	0.186	0.23	2.949	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	133.30	133.24	218.97	0.00	1606.75	0.083	0.09	2.442	A
Denmark Rd EB	336.24	336.06	109.00	0.00	1785.39	0.188	0.23	2.483	A
Rotterdam Rd	333.62	333.39	23.35	0.00	1496.13	0.223	0.29	3.096	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	163.26	163.16	268.14	0.00	1575.02	0.104	0.12	2.549	A
Denmark Rd EB	411.81	411.53	133.49	0.00	1768.27	0.233	0.30	2.653	A
Rotterdam Rd	408.60	408.25	28.59	0.00	1492.55	0.274	0.38	3.320	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	163.26	163.26	268.37	0.00	1574.87	0.104	0.12	2.549	A
Denmark Rd EB	411.81	411.81	133.57	0.00	1768.22	0.233	0.30	2.653	A
Rotterdam Rd	408.60	408.60	28.61	0.00	1492.54	0.274	0.38	3.320	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	133.30	133.40	219.36	0.00	1606.50	0.083	0.09	2.445	A
Denmark Rd EB	336.24	336.52	109.14	0.00	1785.30	0.188	0.23	2.486	A
Rotterdam Rd	333.62	333.97	23.38	0.00	1496.11	0.223	0.29	3.100	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	111.63	111.70	183.66	0.00	1629.54	0.069	0.07	2.371	A
Denmark Rd EB	281.59	281.77	91.39	0.00	1797.71	0.157	0.19	2.374	A
Rotterdam Rd	279.39	279.63	19.57	0.00	1498.70	0.186	0.23	2.952	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
07:45-08:00	Denmark Rd WB	111.63	1630.03	0.068	0.00	0.00	0.07	1.08	-	2.370
07:45-08:00	Denmark Rd EB	281.59	1797.92	0.157	0.00	0.00	0.19	2.74	-	2.371
07:45-08:00	Rotterdam Rd	279.39	1498.75	0.186	0.00	0.00	0.23	3.36	-	2.949
08:00-08:15	Denmark Rd WB	133.30	1606.75	0.083	0.00	0.07	0.09	1.34	-	2.442
08:00-08:15	Denmark Rd EB	336.24	1785.39	0.188	0.00	0.19	0.23	3.43	-	2.483
08:00-08:15	Rotterdam Rd	333.62	1496.13	0.223	0.00	0.23	0.29	4.23	-	3.096
08:15-08:30	Denmark Rd WB	163.26	1575.02	0.104	0.00	0.09	0.12	1.71	-	2.549
08:15-08:30	Denmark Rd EB	411.81	1768.27	0.233	0.00	0.23	0.30	4.48	-	2.653
08:15-08:30	Rotterdam Rd	408.60	1492.55	0.274	0.00	0.29	0.38	5.54	-	3.320
08:30-08:45	Denmark Rd WB	163.26	1574.87	0.104	0.00	0.12	0.12	1.73	-	2.549
08:30-08:45	Denmark Rd EB	411.81	1768.22	0.233	0.00	0.30	0.30	4.54	-	2.653
08:30-08:45	Rotterdam Rd	408.60	1492.54	0.274	0.00	0.38	0.38	5.63	-	3.320
08:45-09:00	Denmark Rd WB	133.30	1606.50	0.083	0.00	0.12	0.09	1.38	-	2.445
08:45-09:00	Denmark Rd EB	336.24	1785.30	0.188	0.00	0.30	0.23	3.53	-	2.486
08:45-09:00	Rotterdam Rd	333.62	1496.11	0.223	0.00	0.38	0.29	4.39	-	3.100
09:00-09:15	Denmark Rd WB	111.63	1629.54	0.069	0.00	0.09	0.07	1.12	-	2.371
09:00-09:15	Denmark Rd EB	281.59	1797.71	0.157	0.00	0.23	0.19	2.82	-	2.374
09:00-09:15	Rotterdam Rd	279.39	1498.70	0.186	0.00	0.29	0.23	3.49	-	2.952

DM - 2022 DM, 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
DM	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
2022 DM, PM	2022 DM	PM		ONE HOUR	15:45	17:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Denmark Rd/Rotterdam Rd	Roundabout	1,2,3			3.05	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Denmark Rd WB	1	Denmark Rd WB	
Denmark Rd EB	2	Denmark Rd EB	
Rotterdam Rd	3	Rotterdam Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Denmark Rd WB	0.00	99999.00
Denmark Rd EB	0.00	99999.00
Rotterdam Rd	0.00	99999.00

Roundabout Geometry

Name	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
Denmark Rd WB	3.50	9.10	15.70	22.50	34.00	46.00	
Denmark Rd EB	4.00	7.30	14.10	40.90	34.00	22.50	
Rotterdam Rd	3.60	4.80	20.90	18.70	34.00	5.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Denmark Rd WB		(calculated)	(calculated)	0.650	1760.074
Denmark Rd EB		(calculated)	(calculated)	0.704	1874.712
Rotterdam Rd		(calculated)	(calculated)	0.640	1512.060

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
Denmark Rd WB	ONE HOUR	✓	194.16	100.000
Denmark Rd EB	ONE HOUR	✓	443.65	100.000
Rotterdam Rd	ONE HOUR	✓	385.61	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
15:45-16:00	Denmark Rd WB	146.17	149.19		
15:45-16:00	Denmark Rd EB	334.00	343.99		
15:45-16:00	Rotterdam Rd	290.30	290.30		
16:00-16:15	Denmark Rd WB	174.55	178.14		
16:00-16:15	Denmark Rd EB	398.83	410.76		
16:00-16:15	Rotterdam Rd	346.65	346.65		
16:15-16:30	Denmark Rd WB	213.78	218.18		
16:15-16:30	Denmark Rd EB	488.47	503.07		
16:15-16:30	Rotterdam Rd	424.56	424.56		
16:30-16:45	Denmark Rd WB	213.78	218.18		
16:30-16:45	Denmark Rd EB	488.47	503.07		
16:30-16:45	Rotterdam Rd	424.56	424.56		
16:45-17:00	Denmark Rd WB	174.55	178.14		
16:45-17:00	Denmark Rd EB	398.83	410.76		
16:45-17:00	Rotterdam Rd	346.65	346.65		
17:00-17:15	Denmark Rd WB	146.17	149.19		
17:00-17:15	Denmark Rd EB	334.00	343.99		
17:00-17:15	Rotterdam Rd	290.30	290.30		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	0.000	61.018	133.143
	Denmark Rd EB	22.003	0.000	421.648
	Rotterdam Rd	126.721	258.884	0.000

Turning Proportions (Veh) - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	0.00	0.31	0.69
	Denmark Rd EB	0.05	0.00	0.95
	Rotterdam Rd	0.33	0.67	0.00

Vehicle Mix

Average PCU Per Vehicle - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	1.000	1.011	1.025
	Denmark Rd EB	1.028	1.000	1.030
	Rotterdam Rd	1.000	1.000	1.000

Heavy Vehicle Percentages - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	0.0	1.1	2.5
	Denmark Rd EB	2.8	0.0	3.0
	Rotterdam Rd	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
Denmark Rd WB	0.14	2.71	0.16	A
Denmark Rd EB	0.28	2.93	0.40	A
Rotterdam Rd	0.28	3.36	0.40	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	146.17	145.77	194.26	0.00	1600.86	0.091	0.10	2.474	A
Denmark Rd EB	334.00	333.06	99.96	0.00	1750.22	0.191	0.24	2.539	A
Rotterdam Rd	290.30	289.35	16.52	0.00	1501.19	0.193	0.24	2.966	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	174.55	174.45	232.57	0.00	1576.46	0.111	0.12	2.567	A
Denmark Rd EB	398.83	398.59	119.63	0.00	1736.44	0.230	0.30	2.690	A
Rotterdam Rd	346.65	346.41	19.77	0.00	1499.05	0.231	0.30	3.123	A

Main results: (16:15-16:30)

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	213.78	213.63	284.78	0.00	1543.22	0.139	0.16	2.707	A
Denmark Rd EB	488.47	488.07	146.49	0.00	1717.61	0.284	0.40	2.928	A
Rotterdam Rd	424.56	424.18	24.21	0.00	1496.13	0.284	0.39	3.358	A

Main results: (16:30-16:45)

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	213.78	213.77	285.03	0.00	1543.06	0.139	0.16	2.707	A
Denmark Rd EB	488.47	488.47	146.59	0.00	1717.54	0.284	0.40	2.928	A
Rotterdam Rd	424.56	424.56	24.23	0.00	1496.12	0.284	0.40	3.358	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	174.55	174.69	232.98	0.00	1576.20	0.111	0.12	2.570	A
Denmark Rd EB	398.83	399.22	119.79	0.00	1736.32	0.230	0.30	2.692	A
Rotterdam Rd	346.65	347.02	19.80	0.00	1499.03	0.231	0.30	3.127	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	146.17	146.27	195.07	0.00	1600.34	0.091	0.10	2.477	A
Denmark Rd EB	334.00	334.25	100.30	0.00	1749.98	0.191	0.24	2.542	A
Rotterdam Rd	290.30	290.55	16.58	0.00	1501.15	0.193	0.24	2.973	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
15:45-16:00	Denmark Rd WB	146.17	1600.86	0.091	0.00	0.00	0.10	1.48	-	2.474
15:45-16:00	Denmark Rd EB	334.00	1750.22	0.191	0.00	0.00	0.24	3.47	-	2.539
15:45-16:00	Rotterdam Rd	290.30	1501.19	0.193	0.00	0.00	0.24	3.52	-	2.966
16:00-16:15	Denmark Rd WB	174.55	1576.46	0.111	0.00	0.10	0.12	1.84	-	2.567
16:00-16:15	Denmark Rd EB	398.83	1736.44	0.230	0.00	0.24	0.30	4.40	-	2.690
16:00-16:15	Rotterdam Rd	346.65	1499.05	0.231	0.00	0.24	0.30	4.43	-	3.123
16:15-16:30	Denmark Rd WB	213.78	1543.22	0.139	0.00	0.12	0.16	2.38	-	2.707
16:15-16:30	Denmark Rd EB	488.47	1717.61	0.284	0.00	0.30	0.40	5.85	-	2.928
16:15-16:30	Rotterdam Rd	424.56	1496.13	0.284	0.00	0.30	0.39	5.82	-	3.358
16:30-16:45	Denmark Rd WB	213.78	1543.06	0.139	0.00	0.16	0.16	2.41	-	2.707
16:30-16:45	Denmark Rd EB	488.47	1717.54	0.284	0.00	0.40	0.40	5.94	-	2.928
16:30-16:45	Rotterdam Rd	424.56	1496.12	0.284	0.00	0.39	0.40	5.92	-	3.358
16:45-17:00	Denmark Rd WB	174.55	1576.20	0.111	0.00	0.16	0.12	1.89	-	2.570
16:45-17:00	Denmark Rd EB	398.83	1736.32	0.230	0.00	0.40	0.30	4.55	-	2.692
16:45-17:00	Rotterdam Rd	346.65	1499.03	0.231	0.00	0.40	0.30	4.60	-	3.127
17:00-17:15	Denmark Rd WB	146.17	1600.34	0.091	0.00	0.12	0.10	1.53	-	2.477
17:00-17:15	Denmark Rd EB	334.00	1749.98	0.191	0.00	0.30	0.24	3.59	-	2.542
17:00-17:15	Rotterdam Rd	290.30	1501.15	0.193	0.00	0.30	0.24	3.66	-	2.973

DM - 2037 DM, 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
DM	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
2037 DM, AM	2037 DM	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	Denmark Rd/Rotterdam Rd	Roundabout	1,2,3			3.27	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Denmark Rd WB	1	Denmark Rd WB	
Denmark Rd EB	2	Denmark Rd EB	
Rotterdam Rd	3	Rotterdam Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Denmark Rd WB	0.00	99999.00
Denmark Rd EB	0.00	99999.00
Rotterdam Rd	0.00	99999.00

Roundabout Geometry

Name	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
Denmark Rd WB	3.50	9.10	15.70	22.50	34.00	46.00	
Denmark Rd EB	4.00	7.30	14.10	40.90	34.00	22.50	
Rotterdam Rd	3.60	4.80	20.90	18.70	34.00	5.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Denmark Rd WB		(calculated)	(calculated)	0.650	1760.074
Denmark Rd EB		(calculated)	(calculated)	0.704	1874.712
Rotterdam Rd		(calculated)	(calculated)	0.640	1512.060

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	2.30				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
Denmark Rd WB	ONE HOUR	✓	221.13	100.000
Denmark Rd EB	ONE HOUR	✓	508.84	100.000
Rotterdam Rd	ONE HOUR	✓	418.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	Denmark Rd WB	166.48	173.41		
07:45-08:00	Denmark Rd EB	383.08	399.56		
07:45-08:00	Rotterdam Rd	314.69	318.07		
08:00-08:15	Denmark Rd WB	198.79	207.07		
08:00-08:15	Denmark Rd EB	457.43	477.11		
08:00-08:15	Rotterdam Rd	375.77	379.81		
08:15-08:30	Denmark Rd WB	243.47	253.61		
08:15-08:30	Denmark Rd EB	560.24	584.34		
08:15-08:30	Rotterdam Rd	460.23	465.17		
08:30-08:45	Denmark Rd WB	243.47	253.61		
08:30-08:45	Denmark Rd EB	560.24	584.34		
08:30-08:45	Rotterdam Rd	460.23	465.17		
08:45-09:00	Denmark Rd WB	198.79	207.07		
08:45-09:00	Denmark Rd EB	457.43	477.11		
08:45-09:00	Rotterdam Rd	375.77	379.81		
09:00-09:15	Denmark Rd WB	166.48	173.41		
09:00-09:15	Denmark Rd EB	383.08	399.56		
09:00-09:15	Rotterdam Rd	314.69	318.07		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	0.000	61.589	159.538
	Denmark Rd EB	23.032	0.000	485.806
	Rotterdam Rd	130.221	287.781	0.000

Turning Proportions (Veh) - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	0.00	0.28	0.72
	Denmark Rd EB	0.05	0.00	0.95
	Rotterdam Rd	0.31	0.69	0.00

Vehicle Mix

Average PCU Per Vehicle - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	1.000	1.035	1.044
	Denmark Rd EB	1.073	1.000	1.042
	Rotterdam Rd	1.000	1.016	1.000

Heavy Vehicle Percentages - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	0.0	2.7	3.4
	Denmark Rd EB	5.6	0.0	3.2
	Rotterdam Rd	0.0	1.2	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
Denmark Rd WB	0.16	2.89	0.20	A
Denmark Rd EB	0.33	3.23	0.50	A
Rotterdam Rd	0.31	3.53	0.45	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	166.48	166.00	215.92	0.00	1552.86	0.107	0.12	2.596	A
Denmark Rd EB	383.08	381.93	119.76	0.00	1712.97	0.224	0.29	2.702	A
Rotterdam Rd	314.69	313.62	17.29	0.00	1484.25	0.212	0.27	3.072	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	198.79	198.67	258.52	0.00	1525.87	0.130	0.15	2.712	A
Denmark Rd EB	457.44	457.11	143.34	0.00	1696.35	0.270	0.37	2.905	A
Rotterdam Rd	375.77	375.49	20.69	0.00	1481.94	0.254	0.34	3.253	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	243.46	243.28	316.55	0.00	1489.11	0.164	0.19	2.889	A
Denmark Rd EB	560.24	559.71	175.52	0.00	1673.65	0.335	0.50	3.230	A
Rotterdam Rd	460.23	459.78	25.33	0.00	1478.78	0.311	0.45	3.530	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	243.46	243.46	316.85	0.00	1488.91	0.164	0.20	2.889	A
Denmark Rd EB	560.24	560.24	175.65	0.00	1673.56	0.335	0.50	3.232	A
Rotterdam Rd	460.23	460.22	25.36	0.00	1478.77	0.311	0.45	3.533	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	198.79	198.97	259.01	0.00	1525.56	0.130	0.15	2.713	A
Denmark Rd EB	457.44	457.96	143.55	0.00	1696.19	0.270	0.37	2.910	A
Rotterdam Rd	375.77	376.21	20.73	0.00	1481.91	0.254	0.34	3.256	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	166.48	166.59	216.85	0.00	1552.27	0.107	0.12	2.599	A
Denmark Rd EB	383.08	383.41	120.19	0.00	1712.66	0.224	0.29	2.708	A
Rotterdam Rd	314.69	314.98	17.35	0.00	1484.20	0.212	0.27	3.081	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
07:45-08:00	Denmark Rd WB	166.48	1552.86	0.107	0.00	0.00	0.12	1.77	-	2.596
07:45-08:00	Denmark Rd EB	383.08	1712.97	0.224	0.00	0.00	0.29	4.23	-	2.702
07:45-08:00	Rotterdam Rd	314.69	1484.25	0.212	0.00	0.00	0.27	3.94	-	3.072
08:00-08:15	Denmark Rd WB	198.79	1525.87	0.130	0.00	0.12	0.15	2.22	-	2.712
08:00-08:15	Denmark Rd EB	457.44	1696.35	0.270	0.00	0.29	0.37	5.44	-	2.905
08:00-08:15	Rotterdam Rd	375.77	1481.94	0.254	0.00	0.27	0.34	5.00	-	3.253
08:15-08:30	Denmark Rd WB	243.46	1489.11	0.164	0.00	0.15	0.19	2.89	-	2.889
08:15-08:30	Denmark Rd EB	560.24	1673.65	0.335	0.00	0.37	0.50	7.39	-	3.230
08:15-08:30	Rotterdam Rd	460.23	1478.78	0.311	0.00	0.34	0.45	6.63	-	3.530
08:30-08:45	Denmark Rd WB	243.46	1488.91	0.164	0.00	0.19	0.20	2.92	-	2.889
08:30-08:45	Denmark Rd EB	560.24	1673.56	0.335	0.00	0.50	0.50	7.52	-	3.232
08:30-08:45	Rotterdam Rd	460.23	1478.77	0.311	0.00	0.45	0.45	6.75	-	3.533
08:45-09:00	Denmark Rd WB	198.79	1525.56	0.130	0.00	0.20	0.15	2.28	-	2.713
08:45-09:00	Denmark Rd EB	457.44	1696.19	0.270	0.00	0.50	0.37	5.65	-	2.910
08:45-09:00	Rotterdam Rd	375.77	1481.91	0.254	0.00	0.45	0.34	5.20	-	3.256
09:00-09:15	Denmark Rd WB	166.48	1552.27	0.107	0.00	0.15	0.12	1.83	-	2.599
09:00-09:15	Denmark Rd EB	383.08	1712.66	0.224	0.00	0.37	0.29	4.39	-	2.708
09:00-09:15	Rotterdam Rd	314.69	1484.20	0.212	0.00	0.34	0.27	4.11	-	3.081

DM - 2037 DM, 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
DM	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
2037 DM, PM	2037 DM	PM		ONE HOUR	15:45	17:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Denmark Rd/Rotterdam Rd	Roundabout	1,2,3			3.15	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Denmark Rd WB	1	Denmark Rd WB	
Denmark Rd EB	2	Denmark Rd EB	
Rotterdam Rd	3	Rotterdam Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Denmark Rd WB	0.00	99999.00
Denmark Rd EB	0.00	99999.00
Rotterdam Rd	0.00	99999.00

Roundabout Geometry

Name	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
Denmark Rd WB	3.50	9.10	15.70	22.50	34.00	46.00	
Denmark Rd EB	4.00	7.30	14.10	40.90	34.00	22.50	
Rotterdam Rd	3.60	4.80	20.90	18.70	34.00	5.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Denmark Rd WB		(calculated)	(calculated)	0.650	1760.074
Denmark Rd EB		(calculated)	(calculated)	0.704	1874.712
Rotterdam Rd		(calculated)	(calculated)	0.640	1512.060

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
Denmark Rd WB	ONE HOUR	✓	168.26	100.000
Denmark Rd EB	ONE HOUR	✓	436.83	100.000
Rotterdam Rd	ONE HOUR	✓	431.08	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
15:45-16:00	Denmark Rd WB	126.67	128.44		
15:45-16:00	Denmark Rd EB	328.87	341.44		
15:45-16:00	Rotterdam Rd	324.54	324.54		
16:00-16:15	Denmark Rd WB	151.26	153.37		
16:00-16:15	Denmark Rd EB	392.70	407.71		
16:00-16:15	Rotterdam Rd	387.53	387.53		
16:15-16:30	Denmark Rd WB	185.26	187.83		
16:15-16:30	Denmark Rd EB	480.96	499.34		
16:15-16:30	Rotterdam Rd	474.63	474.63		
16:30-16:45	Denmark Rd WB	185.26	187.83		
16:30-16:45	Denmark Rd EB	480.96	499.34		
16:30-16:45	Rotterdam Rd	474.63	474.63		
16:45-17:00	Denmark Rd WB	151.26	153.37		
16:45-17:00	Denmark Rd EB	392.70	407.71		
16:45-17:00	Rotterdam Rd	387.53	387.53		
17:00-17:15	Denmark Rd WB	126.67	128.44		
17:00-17:15	Denmark Rd EB	328.87	341.44		
17:00-17:15	Rotterdam Rd	324.54	324.54		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	0.000	28.804	139.455
	Denmark Rd EB	28.271	0.000	408.560
	Rotterdam Rd	136.004	295.077	0.000

Turning Proportions (Veh) - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	0.00	0.17	0.83
	Denmark Rd EB	0.06	0.00	0.94
	Rotterdam Rd	0.32	0.68	0.00

Vehicle Mix

Average PCU Per Vehicle - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	1.000	1.028	1.011
	Denmark Rd EB	1.027	1.000	1.039
	Rotterdam Rd	1.000	1.000	1.000

Heavy Vehicle Percentages - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	0.0	2.8	1.1
	Denmark Rd EB	2.7	0.0	3.9
	Rotterdam Rd	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
Denmark Rd WB	0.12	2.68	0.14	A
Denmark Rd EB	0.28	2.95	0.39	A
Rotterdam Rd	0.32	3.54	0.47	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	126.67	126.33	221.40	0.00	1594.03	0.079	0.09	2.452	A
Denmark Rd EB	328.87	327.94	104.70	0.00	1733.89	0.190	0.23	2.559	A
Rotterdam Rd	324.54	323.44	21.22	0.00	1498.11	0.217	0.28	3.062	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	151.26	151.18	265.07	0.00	1566.04	0.097	0.11	2.544	A
Denmark Rd EB	392.70	392.46	125.30	0.00	1719.77	0.228	0.29	2.712	A
Rotterdam Rd	387.53	387.24	25.40	0.00	1495.37	0.259	0.35	3.248	A

Main results: (16:15-16:30)

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	185.26	185.13	324.57	0.00	1527.90	0.121	0.14	2.680	A
Denmark Rd EB	480.96	480.57	153.44	0.00	1700.47	0.283	0.39	2.951	A
Rotterdam Rd	474.63	474.17	31.10	0.00	1491.62	0.318	0.46	3.536	A

Main results: (16:30-16:45)

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	185.26	185.26	324.88	0.00	1527.70	0.121	0.14	2.681	A
Denmark Rd EB	480.96	480.96	153.54	0.00	1700.40	0.283	0.39	2.951	A
Rotterdam Rd	474.63	474.62	31.13	0.00	1491.60	0.318	0.47	3.539	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	151.26	151.38	265.58	0.00	1565.71	0.097	0.11	2.547	A
Denmark Rd EB	392.70	393.09	125.47	0.00	1719.65	0.228	0.30	2.716	A
Rotterdam Rd	387.53	387.99	25.44	0.00	1495.34	0.259	0.35	3.254	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	126.67	126.76	222.35	0.00	1593.41	0.080	0.09	2.454	A
Denmark Rd EB	328.87	329.12	105.06	0.00	1733.65	0.190	0.23	2.565	A
Rotterdam Rd	324.54	324.84	21.30	0.00	1498.06	0.217	0.28	3.070	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
15:45-16:00	Denmark Rd WB	126.67	1594.03	0.079	0.00	0.00	0.09	1.27	-	2.452
15:45-16:00	Denmark Rd EB	328.87	1733.89	0.190	0.00	0.00	0.23	3.44	-	2.559
15:45-16:00	Rotterdam Rd	324.54	1498.11	0.217	0.00	0.00	0.28	4.05	-	3.062
16:00-16:15	Denmark Rd WB	151.26	1566.04	0.097	0.00	0.09	0.11	1.58	-	2.544
16:00-16:15	Denmark Rd EB	392.70	1719.77	0.228	0.00	0.23	0.29	4.37	-	2.712
16:00-16:15	Rotterdam Rd	387.53	1495.37	0.259	0.00	0.28	0.35	5.15	-	3.248
16:15-16:30	Denmark Rd WB	185.26	1527.90	0.121	0.00	0.11	0.14	2.04	-	2.680
16:15-16:30	Denmark Rd EB	480.96	1700.47	0.283	0.00	0.29	0.39	5.81	-	2.951
16:15-16:30	Rotterdam Rd	474.63	1491.62	0.318	0.00	0.35	0.46	6.85	-	3.536
16:30-16:45	Denmark Rd WB	185.26	1527.70	0.121	0.00	0.14	0.14	2.07	-	2.681
16:30-16:45	Denmark Rd EB	480.96	1700.40	0.283	0.00	0.39	0.39	5.90	-	2.951
16:30-16:45	Rotterdam Rd	474.63	1491.60	0.318	0.00	0.46	0.47	6.97	-	3.539
16:45-17:00	Denmark Rd WB	151.26	1565.71	0.097	0.00	0.14	0.11	1.63	-	2.547
16:45-17:00	Denmark Rd EB	392.70	1719.65	0.228	0.00	0.39	0.30	4.52	-	2.716
16:45-17:00	Rotterdam Rd	387.53	1495.34	0.259	0.00	0.47	0.35	5.36	-	3.254
17:00-17:15	Denmark Rd WB	126.67	1593.41	0.080	0.00	0.11	0.09	1.31	-	2.454
17:00-17:15	Denmark Rd EB	328.87	1733.65	0.190	0.00	0.30	0.23	3.57	-	2.565
17:00-17:15	Rotterdam Rd	324.54	1498.06	0.217	0.00	0.35	0.28	4.22	-	3.070

DM - 2016 DN, 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
DM	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
2016 DN, AM	2016 DN	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	Denmark Rd/Rotterdam Rd	Roundabout	1,2,3			2.68	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Denmark Rd WB	1	Denmark Rd WB	
Denmark Rd EB	2	Denmark Rd EB	
Rotterdam Rd	3	Rotterdam Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Denmark Rd WB	0.00	99999.00
Denmark Rd EB	0.00	99999.00
Rotterdam Rd	0.00	99999.00

Roundabout Geometry

Name	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
Denmark Rd WB	3.50	9.10	15.70	22.50	34.00	46.00	
Denmark Rd EB	4.00	7.30	14.10	40.90	34.00	22.50	
Rotterdam Rd	3.60	4.80	20.90	18.70	34.00	5.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Denmark Rd WB		(calculated)	(calculated)	0.650	1760.074
Denmark Rd EB		(calculated)	(calculated)	0.704	1874.712
Rotterdam Rd		(calculated)	(calculated)	0.640	1512.060

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	2.30				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
Denmark Rd WB	ONE HOUR	✓	111.57	100.000
Denmark Rd EB	ONE HOUR	✓	301.94	100.000
Rotterdam Rd	ONE HOUR	✓	267.51	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	Denmark Rd WB	83.99	84.62		
07:45-08:00	Denmark Rd EB	227.32	229.60		
07:45-08:00	Rotterdam Rd	201.40	201.40		
08:00-08:15	Denmark Rd WB	100.30	101.04		
08:00-08:15	Denmark Rd EB	271.44	274.16		
08:00-08:15	Rotterdam Rd	240.49	240.49		
08:15-08:30	Denmark Rd WB	122.84	123.75		
08:15-08:30	Denmark Rd EB	332.44	335.78		
08:15-08:30	Rotterdam Rd	294.54	294.54		
08:30-08:45	Denmark Rd WB	122.84	123.75		
08:30-08:45	Denmark Rd EB	332.44	335.78		
08:30-08:45	Rotterdam Rd	294.54	294.54		
08:45-09:00	Denmark Rd WB	100.30	101.04		
08:45-09:00	Denmark Rd EB	271.44	274.16		
08:45-09:00	Rotterdam Rd	240.49	240.49		
09:00-09:15	Denmark Rd WB	83.99	84.62		
09:00-09:15	Denmark Rd EB	227.32	229.60		
09:00-09:15	Rotterdam Rd	201.40	201.40		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	0.000	21.872	89.696
	Denmark Rd EB	35.268	0.000	266.671
	Rotterdam Rd	52.632	214.883	0.000

Turning Proportions (Veh) - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	0.00	0.20	0.80
	Denmark Rd EB	0.12	0.00	0.88
	Rotterdam Rd	0.20	0.80	0.00

Vehicle Mix

Average PCU Per Vehicle - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	1.000	1.038	1.000
	Denmark Rd EB	1.066	1.000	1.003
	Rotterdam Rd	1.000	1.000	1.000

Heavy Vehicle Percentages - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	0.0	2.9	0.0
	Denmark Rd EB	5.1	0.0	0.2
	Rotterdam Rd	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
Denmark Rd WB	0.08	2.45	0.08	A
Denmark Rd EB	0.19	2.47	0.23	A
Rotterdam Rd	0.20	3.02	0.25	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	83.99	83.78	161.28	0.00	1643.13	0.051	0.05	2.308	A
Denmark Rd EB	227.32	226.74	67.36	0.00	1809.11	0.126	0.14	2.275	A
Rotterdam Rd	201.40	200.78	26.49	0.00	1493.99	0.135	0.16	2.782	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	100.30	100.25	193.06	0.00	1622.62	0.062	0.07	2.364	A
Denmark Rd EB	271.44	271.30	80.60	0.00	1799.88	0.151	0.18	2.354	A
Rotterdam Rd	240.49	240.34	31.69	0.00	1490.43	0.161	0.19	2.879	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	122.84	122.77	236.41	0.00	1594.66	0.077	0.08	2.445	A
Denmark Rd EB	332.44	332.24	98.70	0.00	1787.26	0.186	0.23	2.474	A
Rotterdam Rd	294.54	294.32	38.81	0.00	1485.58	0.198	0.25	3.021	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	122.84	122.84	236.59	0.00	1594.54	0.077	0.08	2.445	A
Denmark Rd EB	332.44	332.44	98.76	0.00	1787.22	0.186	0.23	2.474	A
Rotterdam Rd	294.54	294.54	38.83	0.00	1485.56	0.198	0.25	3.021	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	100.30	100.37	193.35	0.00	1622.44	0.062	0.07	2.364	A
Denmark Rd EB	271.44	271.64	80.69	0.00	1799.82	0.151	0.18	2.355	A
Rotterdam Rd	240.49	240.70	31.73	0.00	1490.41	0.161	0.19	2.880	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	83.99	84.04	161.89	0.00	1642.73	0.051	0.05	2.311	A
Denmark Rd EB	227.32	227.45	67.57	0.00	1808.97	0.126	0.14	2.277	A
Rotterdam Rd	201.40	201.55	26.57	0.00	1493.93	0.135	0.16	2.785	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
07:45-08:00	Denmark Rd WB	83.99	1643.13	0.051	0.00	0.00	0.05	0.80	-	2.308
07:45-08:00	Denmark Rd EB	227.32	1809.11	0.126	0.00	0.00	0.14	2.12	-	2.275
07:45-08:00	Rotterdam Rd	201.40	1493.99	0.135	0.00	0.00	0.16	2.29	-	2.782
08:00-08:15	Denmark Rd WB	100.30	1622.62	0.062	0.00	0.05	0.07	0.98	-	2.364
08:00-08:15	Denmark Rd EB	271.44	1799.88	0.151	0.00	0.14	0.18	2.63	-	2.354
08:00-08:15	Rotterdam Rd	240.49	1490.43	0.161	0.00	0.16	0.19	2.84	-	2.879
08:15-08:30	Denmark Rd WB	122.84	1594.66	0.077	0.00	0.07	0.08	1.24	-	2.445
08:15-08:30	Denmark Rd EB	332.44	1787.26	0.186	0.00	0.18	0.23	3.38	-	2.474
08:15-08:30	Rotterdam Rd	294.54	1485.58	0.198	0.00	0.19	0.25	3.65	-	3.021
08:30-08:45	Denmark Rd WB	122.84	1594.54	0.077	0.00	0.08	0.08	1.25	-	2.445
08:30-08:45	Denmark Rd EB	332.44	1787.22	0.186	0.00	0.23	0.23	3.42	-	2.474
08:30-08:45	Rotterdam Rd	294.54	1485.56	0.198	0.00	0.25	0.25	3.70	-	3.021
08:45-09:00	Denmark Rd WB	100.30	1622.44	0.062	0.00	0.08	0.07	1.00	-	2.364
08:45-09:00	Denmark Rd EB	271.44	1799.82	0.151	0.00	0.23	0.18	2.70	-	2.355
08:45-09:00	Rotterdam Rd	240.49	1490.41	0.161	0.00	0.25	0.19	2.93	-	2.880
09:00-09:15	Denmark Rd WB	83.99	1642.73	0.051	0.00	0.07	0.05	0.82	-	2.311
09:00-09:15	Denmark Rd EB	227.32	1808.97	0.126	0.00	0.18	0.14	2.18	-	2.277
09:00-09:15	Rotterdam Rd	201.40	1493.93	0.135	0.00	0.19	0.16	2.37	-	2.785

DM - 2016 DN, 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
DM	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
2016 DN, PM	2016 DN	PM		ONE HOUR	15:45	17:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Denmark Rd/Rotterdam Rd	Roundabout	1,2,3			2.73	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Denmark Rd WB	1	Denmark Rd WB	
Denmark Rd EB	2	Denmark Rd EB	
Rotterdam Rd	3	Rotterdam Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Denmark Rd WB	0.00	99999.00
Denmark Rd EB	0.00	99999.00
Rotterdam Rd	0.00	99999.00

Roundabout Geometry

Name	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
Denmark Rd WB	3.50	9.10	15.70	22.50	34.00	46.00	
Denmark Rd EB	4.00	7.30	14.10	40.90	34.00	22.50	
Rotterdam Rd	3.60	4.80	20.90	18.70	34.00	5.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Denmark Rd WB		(calculated)	(calculated)	0.650	1760.074
Denmark Rd EB		(calculated)	(calculated)	0.704	1874.712
Rotterdam Rd		(calculated)	(calculated)	0.640	1512.060

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
Denmark Rd WB	ONE HOUR	✓	136.00	100.000
Denmark Rd EB	ONE HOUR	✓	367.80	100.000
Rotterdam Rd	ONE HOUR	✓	289.35	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
15:45-16:00	Denmark Rd WB	102.39	103.73		
15:45-16:00	Denmark Rd EB	276.90	278.01		
15:45-16:00	Rotterdam Rd	217.84	217.84		
16:00-16:15	Denmark Rd WB	122.26	123.86		
16:00-16:15	Denmark Rd EB	330.65	331.97		
16:00-16:15	Rotterdam Rd	260.12	260.12		
16:15-16:30	Denmark Rd WB	149.74	151.70		
16:15-16:30	Denmark Rd EB	404.96	406.57		
16:15-16:30	Rotterdam Rd	318.58	318.58		
16:30-16:45	Denmark Rd WB	149.74	151.70		
16:30-16:45	Denmark Rd EB	404.96	406.57		
16:30-16:45	Rotterdam Rd	318.58	318.58		
16:45-17:00	Denmark Rd WB	122.26	123.86		
16:45-17:00	Denmark Rd EB	330.65	331.97		
16:45-17:00	Rotterdam Rd	260.12	260.12		
17:00-17:15	Denmark Rd WB	102.39	103.73		
17:00-17:15	Denmark Rd EB	276.90	278.01		
17:00-17:15	Rotterdam Rd	217.84	217.84		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	0.000	61.365	74.635
	Denmark Rd EB	14.874	0.000	352.930
	Rotterdam Rd	51.667	237.683	0.000

Turning Proportions (Veh) - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	0.00	0.45	0.55
	Denmark Rd EB	0.04	0.00	0.96
	Rotterdam Rd	0.18	0.82	0.00

Vehicle Mix

Average PCU Per Vehicle - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	1.000	1.029	1.000
	Denmark Rd EB	1.051	1.000	1.002
	Rotterdam Rd	1.000	1.000	1.000

Heavy Vehicle Percentages - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	0.0	2.9	0.0
	Denmark Rd EB	5.1	0.0	0.2
	Rotterdam Rd	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
Denmark Rd WB	0.10	2.53	0.11	A
Denmark Rd EB	0.22	2.56	0.29	A
Rotterdam Rd	0.21	3.04	0.27	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	102.39	102.12	178.39	0.00	1622.91	0.063	0.07	2.367	A
Denmark Rd EB	276.90	276.19	56.04	0.00	1827.97	0.151	0.18	2.318	A
Rotterdam Rd	217.84	217.16	11.17	0.00	1504.55	0.145	0.17	2.795	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	122.26	122.20	213.54	0.00	1600.36	0.076	0.08	2.435	A
Denmark Rd EB	330.65	330.48	67.06	0.00	1820.24	0.182	0.22	2.416	A
Rotterdam Rd	260.12	259.96	13.36	0.00	1503.07	0.173	0.21	2.895	A

Main results: (16:15-16:30)

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	149.74	149.65	261.50	0.00	1569.59	0.095	0.11	2.534	A
Denmark Rd EB	404.96	404.70	82.12	0.00	1809.67	0.224	0.29	2.562	A
Rotterdam Rd	318.58	318.34	16.37	0.00	1501.05	0.212	0.27	3.043	A

Main results: (16:30-16:45)

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	149.74	149.74	261.69	0.00	1569.47	0.095	0.11	2.535	A
Denmark Rd EB	404.96	404.96	82.17	0.00	1809.64	0.224	0.29	2.562	A
Rotterdam Rd	318.58	318.58	16.38	0.00	1501.04	0.212	0.27	3.043	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	122.26	122.35	213.87	0.00	1600.15	0.076	0.08	2.435	A
Denmark Rd EB	330.65	330.91	67.14	0.00	1820.18	0.182	0.22	2.419	A
Rotterdam Rd	260.12	260.35	13.38	0.00	1503.06	0.173	0.21	2.899	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	102.39	102.45	179.07	0.00	1622.47	0.063	0.07	2.368	A
Denmark Rd EB	276.90	277.08	56.22	0.00	1827.84	0.151	0.18	2.321	A
Rotterdam Rd	217.84	218.00	11.21	0.00	1504.52	0.145	0.17	2.800	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
15:45-16:00	Denmark Rd WB	102.39	1622.91	0.063	0.00	0.00	0.07	0.99	-	2.367
15:45-16:00	Denmark Rd EB	276.90	1827.97	0.151	0.00	0.00	0.18	2.63	-	2.318
15:45-16:00	Rotterdam Rd	217.84	1504.55	0.145	0.00	0.00	0.17	2.49	-	2.795
16:00-16:15	Denmark Rd WB	122.26	1600.36	0.076	0.00	0.07	0.08	1.23	-	2.435
16:00-16:15	Denmark Rd EB	330.65	1820.24	0.182	0.00	0.18	0.22	3.28	-	2.416
16:00-16:15	Rotterdam Rd	260.12	1503.07	0.173	0.00	0.17	0.21	3.09	-	2.895
16:15-16:30	Denmark Rd WB	149.74	1569.59	0.095	0.00	0.08	0.11	1.56	-	2.534
16:15-16:30	Denmark Rd EB	404.96	1809.67	0.224	0.00	0.22	0.29	4.26	-	2.562
16:15-16:30	Rotterdam Rd	318.58	1501.05	0.212	0.00	0.21	0.27	3.97	-	3.043
16:30-16:45	Denmark Rd WB	149.74	1569.47	0.095	0.00	0.11	0.11	1.58	-	2.535
16:30-16:45	Denmark Rd EB	404.96	1809.64	0.224	0.00	0.29	0.29	4.31	-	2.562
16:30-16:45	Rotterdam Rd	318.58	1501.04	0.212	0.00	0.27	0.27	4.03	-	3.043
16:45-17:00	Denmark Rd WB	122.26	1600.15	0.076	0.00	0.11	0.08	1.26	-	2.435
16:45-17:00	Denmark Rd EB	330.65	1820.18	0.182	0.00	0.29	0.22	3.38	-	2.419
16:45-17:00	Rotterdam Rd	260.12	1503.06	0.173	0.00	0.27	0.21	3.19	-	2.899
17:00-17:15	Denmark Rd WB	102.39	1622.47	0.063	0.00	0.08	0.07	1.02	-	2.368
17:00-17:15	Denmark Rd EB	276.90	1827.84	0.151	0.00	0.22	0.18	2.71	-	2.321
17:00-17:15	Rotterdam Rd	217.84	1504.52	0.145	0.00	0.21	0.17	2.58	-	2.800

DM - 2016 DN, Sat

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
DM	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
2016 DN, Sat	2016 DN	Sat		ONE HOUR	11:30	13:00	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Denmark Rd/Rotterdam Rd	Roundabout	1,2,3			3.35	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Denmark Rd WB	1	Denmark Rd WB	
Denmark Rd EB	2	Denmark Rd EB	
Rotterdam Rd	3	Rotterdam Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Denmark Rd WB	0.00	99999.00
Denmark Rd EB	0.00	99999.00
Rotterdam Rd	0.00	99999.00

Roundabout Geometry

Name	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
Denmark Rd WB	3.50	9.10	15.70	22.50	34.00	46.00	
Denmark Rd EB	4.00	7.30	14.10	40.90	34.00	22.50	
Rotterdam Rd	3.60	4.80	20.90	18.70	34.00	5.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Denmark Rd WB		(calculated)	(calculated)	0.650	1760.074
Denmark Rd EB		(calculated)	(calculated)	0.704	1874.712
Rotterdam Rd		(calculated)	(calculated)	0.640	1512.060

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
Denmark Rd WB	ONE HOUR	✓	197.00	100.000
Denmark Rd EB	ONE HOUR	✓	478.00	100.000
Rotterdam Rd	ONE HOUR	✓	514.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
11:30-11:45	Denmark Rd WB	148.31	148.81		
11:30-11:45	Denmark Rd EB	359.86	361.91		
11:30-11:45	Rotterdam Rd	386.97	386.97		
11:45-12:00	Denmark Rd WB	177.10	177.70		
11:45-12:00	Denmark Rd EB	429.71	432.15		
11:45-12:00	Rotterdam Rd	462.08	462.08		
12:00-12:15	Denmark Rd WB	216.90	217.64		
12:00-12:15	Denmark Rd EB	526.29	529.28		
12:00-12:15	Rotterdam Rd	565.92	565.92		
12:15-12:30	Denmark Rd WB	216.90	217.64		
12:15-12:30	Denmark Rd EB	526.29	529.28		
12:15-12:30	Rotterdam Rd	565.92	565.92		
12:30-12:45	Denmark Rd WB	177.10	177.70		
12:30-12:45	Denmark Rd EB	429.71	432.15		
12:30-12:45	Rotterdam Rd	462.08	462.08		
12:45-13:00	Denmark Rd WB	148.31	148.81		
12:45-13:00	Denmark Rd EB	359.86	361.91		
12:45-13:00	Rotterdam Rd	386.97	386.97		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	3.000	23.000	171.000
	Denmark Rd EB	36.000	2.000	440.000
	Rotterdam Rd	222.000	290.000	2.000

Turning Proportions (Veh) - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	0.02	0.12	0.87
	Denmark Rd EB	0.08	0.00	0.92
	Rotterdam Rd	0.43	0.56	0.00

Vehicle Mix

Average PCU Per Vehicle - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	1.000	1.029	1.000
	Denmark Rd EB	1.051	1.000	1.002
	Rotterdam Rd	1.000	1.000	1.000

Heavy Vehicle Percentages - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	0.0	2.9	0.0
	Denmark Rd EB	5.1	0.0	0.2
	Rotterdam Rd	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
Denmark Rd WB	0.14	2.71	0.16	A
Denmark Rd EB	0.30	2.99	0.44	A
Rotterdam Rd	0.38	3.93	0.62	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	148.31	147.91	220.54	0.00	1611.29	0.092	0.10	2.460	A
Denmark Rd EB	359.86	358.85	132.14	0.00	1771.59	0.203	0.25	2.547	A
Rotterdam Rd	386.97	385.57	30.78	0.00	1491.48	0.259	0.35	3.250	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	177.10	177.00	264.07	0.00	1583.10	0.112	0.13	2.559	A
Denmark Rd EB	429.71	429.44	158.13	0.00	1753.39	0.245	0.32	2.719	A
Rotterdam Rd	462.08	461.68	36.83	0.00	1487.43	0.311	0.45	3.507	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	216.90	216.75	323.32	0.00	1544.73	0.140	0.16	2.710	A
Denmark Rd EB	526.29	525.84	193.65	0.00	1728.52	0.304	0.44	2.993	A
Rotterdam Rd	565.92	565.26	45.10	0.00	1481.90	0.382	0.61	3.925	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	216.90	216.90	323.70	0.00	1544.48	0.140	0.16	2.711	A
Denmark Rd EB	526.29	526.28	193.78	0.00	1728.43	0.304	0.44	2.994	A
Rotterdam Rd	565.92	565.92	45.14	0.00	1481.88	0.382	0.62	3.930	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	177.10	177.25	264.67	0.00	1582.71	0.112	0.13	2.563	A
Denmark Rd EB	429.71	430.16	158.35	0.00	1753.23	0.245	0.33	2.723	A
Rotterdam Rd	462.08	462.73	36.90	0.00	1487.39	0.311	0.45	3.517	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	148.31	148.41	221.57	0.00	1610.63	0.092	0.10	2.461	A
Denmark Rd EB	359.86	360.14	132.59	0.00	1771.27	0.203	0.26	2.553	A
Rotterdam Rd	386.97	387.37	30.89	0.00	1491.40	0.259	0.35	3.261	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
11:30-11:45	Denmark Rd WB	148.31	1611.29	0.092	0.00	0.00	0.10	1.49	-	2.460
11:30-11:45	Denmark Rd EB	359.86	1771.59	0.203	0.00	0.00	0.25	3.75	-	2.547
11:30-11:45	Rotterdam Rd	386.97	1491.48	0.259	0.00	0.00	0.35	5.12	-	3.250
11:45-12:00	Denmark Rd WB	177.10	1583.10	0.112	0.00	0.10	0.13	1.86	-	2.559
11:45-12:00	Denmark Rd EB	429.71	1753.39	0.245	0.00	0.25	0.32	4.79	-	2.719
11:45-12:00	Rotterdam Rd	462.08	1487.43	0.311	0.00	0.35	0.45	6.62	-	3.507
12:00-12:15	Denmark Rd WB	216.90	1544.73	0.140	0.00	0.13	0.16	2.41	-	2.710
12:00-12:15	Denmark Rd EB	526.29	1728.52	0.304	0.00	0.32	0.44	6.44	-	2.993
12:00-12:15	Rotterdam Rd	565.92	1481.90	0.382	0.00	0.45	0.61	9.03	-	3.925
12:15-12:30	Denmark Rd WB	216.90	1544.48	0.140	0.00	0.16	0.16	2.44	-	2.711
12:15-12:30	Denmark Rd EB	526.29	1728.43	0.304	0.00	0.44	0.44	6.55	-	2.994
12:15-12:30	Rotterdam Rd	565.92	1481.88	0.382	0.00	0.61	0.62	9.22	-	3.930
12:30-12:45	Denmark Rd WB	177.10	1582.71	0.112	0.00	0.16	0.13	1.92	-	2.563
12:30-12:45	Denmark Rd EB	429.71	1753.23	0.245	0.00	0.44	0.33	4.96	-	2.723
12:30-12:45	Rotterdam Rd	462.08	1487.39	0.311	0.00	0.62	0.45	6.92	-	3.517
12:45-13:00	Denmark Rd WB	148.31	1610.63	0.092	0.00	0.13	0.10	1.54	-	2.461
12:45-13:00	Denmark Rd EB	359.86	1771.27	0.203	0.00	0.33	0.26	3.88	-	2.553
12:45-13:00	Rotterdam Rd	386.97	1491.40	0.259	0.00	0.45	0.35	5.36	-	3.261

DM - 2022 DM, Sat

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
DM	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
2022 DM, Sat	2022 DM	Sat		ONE HOUR	11:30	13:00	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Denmark Rd/Rotterdam Rd	Roundabout	1,2,3			3.50	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Denmark Rd WB	1	Denmark Rd WB	
Denmark Rd EB	2	Denmark Rd EB	
Rotterdam Rd	3	Rotterdam Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Denmark Rd WB	0.00	99999.00
Denmark Rd EB	0.00	99999.00
Rotterdam Rd	0.00	99999.00

Roundabout Geometry

Name	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
Denmark Rd WB	3.50	9.10	15.70	22.50	34.00	46.00	
Denmark Rd EB	4.00	7.30	14.10	40.90	34.00	22.50	
Rotterdam Rd	3.60	4.80	20.90	18.70	34.00	5.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Denmark Rd WB		(calculated)	(calculated)	0.650	1760.074
Denmark Rd EB		(calculated)	(calculated)	0.704	1874.712
Rotterdam Rd		(calculated)	(calculated)	0.640	1512.060

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
Denmark Rd WB	ONE HOUR	✓	206.00	100.000
Denmark Rd EB	ONE HOUR	✓	502.00	100.000
Rotterdam Rd	ONE HOUR	✓	540.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
11:30-11:45	Denmark Rd WB	155.09	158.66		
11:30-11:45	Denmark Rd EB	377.93	389.17		
11:30-11:45	Rotterdam Rd	406.54	406.54		
11:45-12:00	Denmark Rd WB	185.19	189.45		
11:45-12:00	Denmark Rd EB	451.29	464.70		
11:45-12:00	Rotterdam Rd	485.45	485.45		
12:00-12:15	Denmark Rd WB	226.81	232.03		
12:00-12:15	Denmark Rd EB	552.71	569.14		
12:00-12:15	Rotterdam Rd	594.55	594.55		
12:15-12:30	Denmark Rd WB	226.81	232.03		
12:15-12:30	Denmark Rd EB	552.71	569.14		
12:15-12:30	Rotterdam Rd	594.55	594.55		
12:30-12:45	Denmark Rd WB	185.19	189.45		
12:30-12:45	Denmark Rd EB	451.29	464.70		
12:30-12:45	Rotterdam Rd	485.45	485.45		
12:45-13:00	Denmark Rd WB	155.09	158.66		
12:45-13:00	Denmark Rd EB	377.93	389.17		
12:45-13:00	Rotterdam Rd	406.54	406.54		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	3.000	24.000	179.000
	Denmark Rd EB	38.000	2.000	462.000
	Rotterdam Rd	233.000	305.000	2.000

Turning Proportions (Veh) - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	0.01	0.12	0.87
	Denmark Rd EB	0.08	0.00	0.92
	Rotterdam Rd	0.43	0.56	0.00

Vehicle Mix

Average PCU Per Vehicle - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	1.000	1.011	1.025
	Denmark Rd EB	1.028	1.000	1.030
	Rotterdam Rd	1.000	1.000	1.000

Heavy Vehicle Percentages - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	0.0	1.1	2.5
	Denmark Rd EB	2.8	0.0	3.0
	Rotterdam Rd	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
Denmark Rd WB	0.15	2.82	0.18	A
Denmark Rd EB	0.33	3.20	0.49	A
Rotterdam Rd	0.40	4.06	0.67	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	155.09	154.65	231.78	0.00	1573.27	0.099	0.11	2.537	A
Denmark Rd EB	377.93	376.81	138.13	0.00	1723.82	0.219	0.28	2.670	A
Rotterdam Rd	406.54	405.05	32.28	0.00	1490.89	0.273	0.37	3.311	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	185.19	185.08	277.54	0.00	1544.20	0.120	0.14	2.648	A
Denmark Rd EB	451.29	450.97	165.32	0.00	1704.77	0.265	0.36	2.871	A
Rotterdam Rd	485.45	485.01	38.63	0.00	1486.73	0.327	0.48	3.591	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	226.81	226.65	339.80	0.00	1504.65	0.151	0.18	2.816	A
Denmark Rd EB	552.71	552.19	202.44	0.00	1678.77	0.329	0.49	3.193	A
Rotterdam Rd	594.55	593.82	47.30	0.00	1481.04	0.401	0.67	4.054	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	226.81	226.81	340.21	0.00	1504.39	0.151	0.18	2.817	A
Denmark Rd EB	552.71	552.71	202.59	0.00	1678.66	0.329	0.49	3.196	A
Rotterdam Rd	594.55	594.54	47.34	0.00	1481.01	0.401	0.67	4.060	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	185.19	185.35	278.20	0.00	1543.78	0.120	0.14	2.651	A
Denmark Rd EB	451.29	451.80	165.56	0.00	1704.60	0.265	0.36	2.874	A
Rotterdam Rd	485.45	486.17	38.70	0.00	1486.68	0.327	0.49	3.599	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	155.09	155.20	232.88	0.00	1572.56	0.099	0.11	2.541	A
Denmark Rd EB	377.93	378.25	138.62	0.00	1723.47	0.219	0.28	2.678	A
Rotterdam Rd	406.54	406.98	32.40	0.00	1490.81	0.273	0.38	3.322	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
11:30-11:45	Denmark Rd WB	155.09	1573.27	0.099	0.00	0.00	0.11	1.61	-	2.537
11:30-11:45	Denmark Rd EB	377.93	1723.82	0.219	0.00	0.00	0.28	4.12	-	2.670
11:30-11:45	Rotterdam Rd	406.54	1490.89	0.273	0.00	0.00	0.37	5.48	-	3.311
11:45-12:00	Denmark Rd WB	185.19	1544.20	0.120	0.00	0.11	0.14	2.02	-	2.648
11:45-12:00	Denmark Rd EB	451.29	1704.77	0.265	0.00	0.28	0.36	5.31	-	2.871
11:45-12:00	Rotterdam Rd	485.45	1486.73	0.327	0.00	0.37	0.48	7.11	-	3.591
12:00-12:15	Denmark Rd WB	226.81	1504.65	0.151	0.00	0.14	0.18	2.62	-	2.816
12:00-12:15	Denmark Rd EB	552.71	1678.77	0.329	0.00	0.36	0.49	7.21	-	3.193
12:00-12:15	Rotterdam Rd	594.55	1481.04	0.401	0.00	0.48	0.67	9.78	-	4.054
12:15-12:30	Denmark Rd WB	226.81	1504.39	0.151	0.00	0.18	0.18	2.66	-	2.817
12:15-12:30	Denmark Rd EB	552.71	1678.66	0.329	0.00	0.49	0.49	7.34	-	3.196
12:15-12:30	Rotterdam Rd	594.55	1481.01	0.401	0.00	0.67	0.67	10.01	-	4.060
12:30-12:45	Denmark Rd WB	185.19	1543.78	0.120	0.00	0.18	0.14	2.08	-	2.651
12:30-12:45	Denmark Rd EB	451.29	1704.60	0.265	0.00	0.49	0.36	5.50	-	2.874
12:30-12:45	Rotterdam Rd	485.45	1486.68	0.327	0.00	0.67	0.49	7.45	-	3.599
12:45-13:00	Denmark Rd WB	155.09	1572.56	0.099	0.00	0.14	0.11	1.66	-	2.541
12:45-13:00	Denmark Rd EB	377.93	1723.47	0.219	0.00	0.36	0.28	4.28	-	2.678
12:45-13:00	Rotterdam Rd	406.54	1490.81	0.273	0.00	0.49	0.38	5.74	-	3.322

DM - 2037 DM, Sat

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
DM	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
2037 DM, Sat	2037 DM	Sat		ONE HOUR	11:30	13:00	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	Denmark Rd/Rotterdam Rd	Roundabout	1,2,3			3.79	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Denmark Rd WB	1	Denmark Rd WB	
Denmark Rd EB	2	Denmark Rd EB	
Rotterdam Rd	3	Rotterdam Rd	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Denmark Rd WB	0.00	99999.00
Denmark Rd EB	0.00	99999.00
Rotterdam Rd	0.00	99999.00

Roundabout Geometry

Name	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
Denmark Rd WB	3.50	9.10	15.70	22.50	34.00	46.00	
Denmark Rd EB	4.00	7.30	14.10	40.90	34.00	22.50	
Rotterdam Rd	3.60	4.80	20.90	18.70	34.00	5.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Denmark Rd WB		(calculated)	(calculated)	0.650	1760.074
Denmark Rd EB		(calculated)	(calculated)	0.704	1874.712
Rotterdam Rd		(calculated)	(calculated)	0.640	1512.060

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
Denmark Rd WB	ONE HOUR	✓	232.00	100.000
Denmark Rd EB	ONE HOUR	✓	562.00	100.000
Rotterdam Rd	ONE HOUR	✓	604.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
11:30-11:45	Denmark Rd WB	174.66	176.90		
11:30-11:45	Denmark Rd EB	423.10	439.17		
11:30-11:45	Rotterdam Rd	454.72	454.72		
11:45-12:00	Denmark Rd WB	208.56	211.23		
11:45-12:00	Denmark Rd EB	505.23	524.41		
11:45-12:00	Rotterdam Rd	542.98	542.98		
12:00-12:15	Denmark Rd WB	255.44	258.70		
12:00-12:15	Denmark Rd EB	618.77	642.26		
12:00-12:15	Rotterdam Rd	665.02	665.02		
12:15-12:30	Denmark Rd WB	255.44	258.70		
12:15-12:30	Denmark Rd EB	618.77	642.26		
12:15-12:30	Rotterdam Rd	665.02	665.02		
12:30-12:45	Denmark Rd WB	208.56	211.23		
12:30-12:45	Denmark Rd EB	505.23	524.41		
12:30-12:45	Rotterdam Rd	542.98	542.98		
12:45-13:00	Denmark Rd WB	174.66	176.90		
12:45-13:00	Denmark Rd EB	423.10	439.17		
12:45-13:00	Rotterdam Rd	454.72	454.72		

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	4.000	27.000	201.000
	Denmark Rd EB	42.000	2.000	518.000
	Rotterdam Rd	261.000	341.000	2.000

Turning Proportions (Veh) - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	0.02	0.12	0.87
	Denmark Rd EB	0.07	0.00	0.92
	Rotterdam Rd	0.43	0.56	0.00

Vehicle Mix

Average PCU Per Vehicle - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	1.000	1.028	1.011
	Denmark Rd EB	1.027	1.000	1.039
	Rotterdam Rd	1.000	1.000	1.000

Heavy Vehicle Percentages - Denmark Rd/ Rotterdam Rd (for whole period)

		To		
		Denmark Rd WB	Denmark Rd EB	Rotterdam Rd
From	Denmark Rd WB	0.0	2.8	1.1
	Denmark Rd EB	2.7	0.0	3.9
	Rotterdam Rd	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
Denmark Rd WB	0.17	2.91	0.21	A
Denmark Rd EB	0.38	3.49	0.60	A
Rotterdam Rd	0.45	4.43	0.81	A

Main Results for each time segment

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	174.66	174.16	258.74	0.00	1571.83	0.111	0.12	2.576	A
Denmark Rd EB	423.10	421.78	155.39	0.00	1699.59	0.249	0.33	2.815	A
Rotterdam Rd	454.72	452.97	36.03	0.00	1488.46	0.306	0.44	3.470	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	208.56	208.44	309.84	0.00	1539.04	0.136	0.16	2.705	A
Denmark Rd EB	505.23	504.83	185.98	0.00	1678.62	0.301	0.43	3.067	A
Rotterdam Rd	542.98	542.44	43.12	0.00	1483.81	0.366	0.57	3.822	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	255.44	255.24	379.31	0.00	1494.47	0.171	0.21	2.904	A
Denmark Rd EB	618.78	618.10	227.73	0.00	1649.98	0.375	0.60	3.487	A
Rotterdam Rd	665.02	664.06	52.79	0.00	1477.47	0.450	0.81	4.420	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	255.44	255.43	379.84	0.00	1494.12	0.171	0.21	2.905	A
Denmark Rd EB	618.78	618.77	227.91	0.00	1649.86	0.375	0.60	3.490	A
Rotterdam Rd	665.02	665.00	52.85	0.00	1477.44	0.450	0.81	4.430	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	208.56	208.76	310.68	0.00	1538.50	0.136	0.16	2.709	A
Denmark Rd EB	505.23	505.89	186.26	0.00	1678.42	0.301	0.43	3.073	A
Rotterdam Rd	542.98	543.92	43.21	0.00	1483.75	0.366	0.58	3.833	A

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

Name	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (s)	LOS
Denmark Rd WB	174.66	174.79	260.05	0.00	1570.99	0.111	0.13	2.580	A
Denmark Rd EB	423.10	423.50	155.96	0.00	1699.21	0.249	0.33	2.822	A
Rotterdam Rd	454.72	455.28	36.17	0.00	1488.36	0.306	0.44	3.485	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (s)
11:30-11:45	Denmark Rd WB	174.66	1571.83	0.111	0.00	0.00	0.12	1.84	-	2.576
11:30-11:45	Denmark Rd EB	423.10	1699.59	0.249	0.00	0.00	0.33	4.86	-	2.815
11:30-11:45	Rotterdam Rd	454.72	1488.46	0.306	0.00	0.00	0.44	6.41	-	3.470
11:45-12:00	Denmark Rd WB	208.56	1539.04	0.136	0.00	0.12	0.16	2.32	-	2.705
11:45-12:00	Denmark Rd EB	505.23	1678.62	0.301	0.00	0.33	0.43	6.34	-	3.067
11:45-12:00	Rotterdam Rd	542.98	1483.81	0.366	0.00	0.44	0.57	8.45	-	3.822
12:00-12:15	Denmark Rd WB	255.44	1494.47	0.171	0.00	0.16	0.21	3.04	-	2.904
12:00-12:15	Denmark Rd EB	618.78	1649.98	0.375	0.00	0.43	0.60	8.79	-	3.487
12:00-12:15	Rotterdam Rd	665.02	1477.47	0.450	0.00	0.57	0.81	11.89	-	4.420
12:15-12:30	Denmark Rd WB	255.44	1494.12	0.171	0.00	0.21	0.21	3.08	-	2.905
12:15-12:30	Denmark Rd EB	618.78	1649.86	0.375	0.00	0.60	0.60	8.96	-	3.490
12:15-12:30	Rotterdam Rd	665.02	1477.44	0.450	0.00	0.81	0.81	12.20	-	4.430
12:30-12:45	Denmark Rd WB	208.56	1538.50	0.136	0.00	0.21	0.16	2.39	-	2.709
12:30-12:45	Denmark Rd EB	505.23	1678.42	0.301	0.00	0.60	0.43	6.60	-	3.073
12:30-12:45	Rotterdam Rd	542.98	1483.75	0.366	0.00	0.81	0.58	8.90	-	3.833
12:45-13:00	Denmark Rd WB	174.66	1570.99	0.111	0.00	0.16	0.13	1.90	-	2.580
12:45-13:00	Denmark Rd EB	423.10	1699.21	0.249	0.00	0.43	0.33	5.06	-	2.822
12:45-13:00	Rotterdam Rd	454.72	1488.36	0.306	0.00	0.58	0.44	6.75	-	3.485

Junctions 8

ARCADY 8 - Roundabout Module

Filename: 13 Denmark Road-Rotterdam Road rdbt DS v3 new saturday 2018-10 (ARC).arc8
Path: L:\106xxx\1069948 Lowestoft Third Crossing\09 Documents\06_Modelling_October 2018
Report generation date: 19/10/2018 15:22:25

Summary of junction performance

	AM				PM				Sat			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2022 DS											
Rotterdam Rd	0.47	4.91	0.32	A	0.56	4.97	0.36	A	2.64	14.72	0.73	B
Denmark Rd WB	0.30	3.33	0.23	A	0.51	3.95	0.34	A	0.81	5.24	0.45	A
Denmark Rd EB	0.58	2.75	0.37	A	0.42	2.48	0.30	A	1.51	4.47	0.60	A
	A1 - 2037 DS											
Rotterdam Rd	0.53	5.24	0.35	A	0.59	5.16	0.37	A	3.33	17.85	0.78	C
Denmark Rd WB	0.36	3.51	0.27	A	0.61	4.24	0.38	A	0.99	5.84	0.50	A
Denmark Rd EB	0.65	2.89	0.40	A	0.45	2.52	0.31	A	1.64	4.72	0.62	A

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

"D1 - 2022 DS, AM " model duration: 08:00 - 09:30
"D2 - 2022 DS, PM" model duration: 17:00 - 18:30
"D3 - 2037 DS, AM" model duration: 08:00 - 09:30
"D4 - 2037 DS, PM" model duration: 17:00 - 18:30
"D5 - 2022 DS, Sat" model duration: 11:30 - 13:00
"D6 - 2037 DS, Sat" model duration: 11:30 - 13:00

Run using Junctions 8.0.6.541 at 19/10/2018 15:22:20

File summary

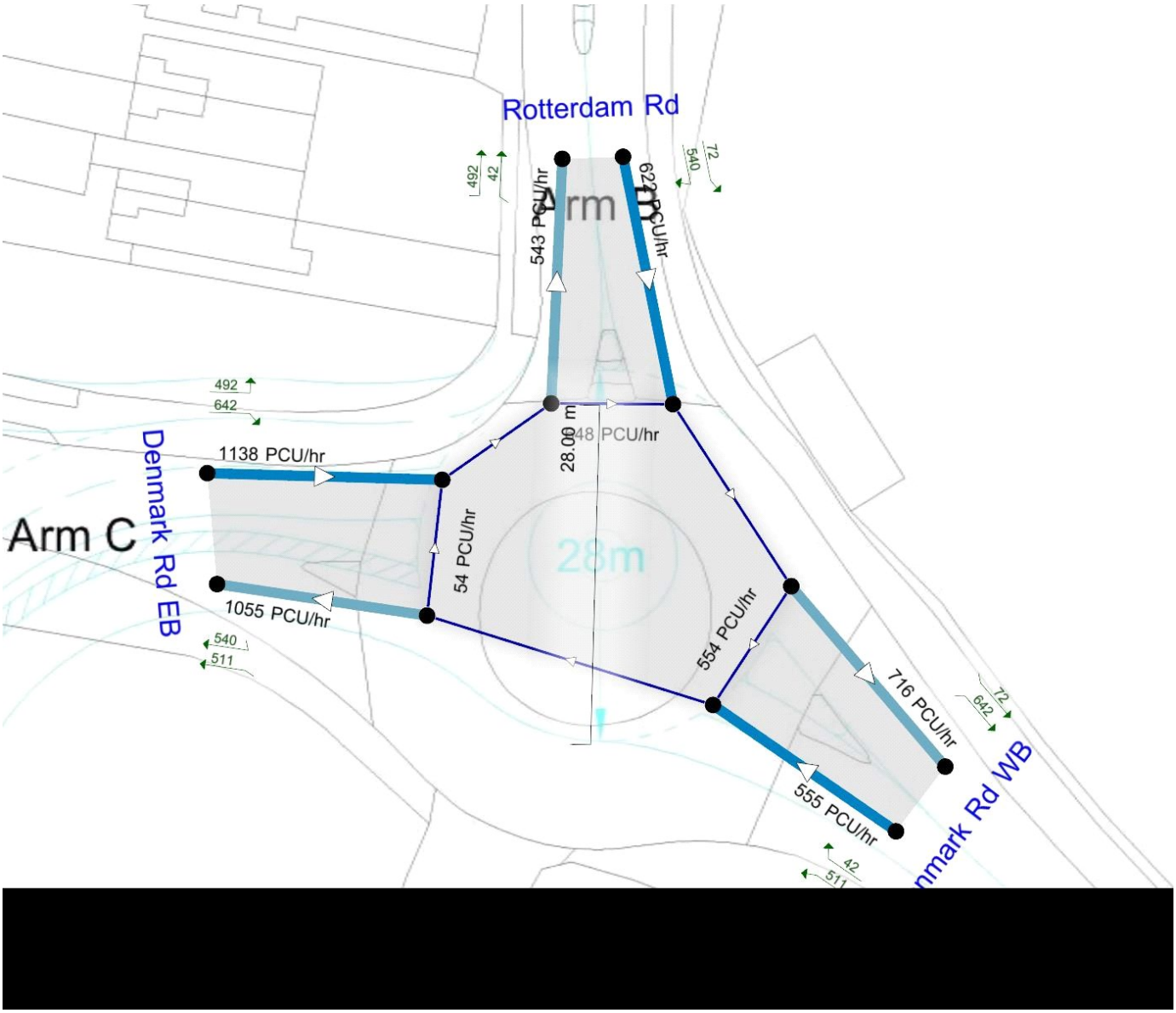
Title	(untitled)
Location	
Site Number	
Date	10/03/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	sarif
Description	

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) - 2022 DS, 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
2022 DS, AM	2022 DS	AM		ONE HOUR	08:00	09:30	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			3.41	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Rotterdam Rd	1	Rotterdam Rd	
Denmark Rd WB	2	Denmark Rd WB	
Denmark Rd EB	3	Denmark Rd EB	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Rotterdam Rd	0.00	99999.00
Denmark Rd WB	0.00	99999.00
Denmark Rd EB	0.00	99999.00

Roundabout Geometry

Name	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
Rotterdam Rd	4.00	4.40	3.40	17.00	28.00	25.10	
Denmark Rd WB	3.65	6.90	11.20	20.00	28.00	27.40	
Denmark Rd EB	7.30	7.30	0.00	8.00	28.00	28.15	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Rotterdam Rd		(calculated)	(calculated)	0.583	1310.937
Denmark Rd WB		(calculated)	(calculated)	0.648	1631.146
Denmark Rd EB		(calculated)	(calculated)	0.714	2063.856

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Rotterdam Rd	ONE HOUR	✓	314.40	100.000
Denmark Rd WB	ONE HOUR	✓	299.05	100.000
Denmark Rd EB	ONE HOUR	✓	685.52	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	Rotterdam Rd	236.69	236.69		
08:00-08:15	Denmark Rd WB	225.14	225.14		
08:00-08:15	Denmark Rd EB	516.09	516.09		
08:15-08:30	Rotterdam Rd	282.64	282.64		
08:15-08:30	Denmark Rd WB	268.84	268.84		
08:15-08:30	Denmark Rd EB	616.27	616.27		
08:30-08:45	Rotterdam Rd	346.16	346.16		
08:30-08:45	Denmark Rd WB	329.26	329.26		
08:30-08:45	Denmark Rd EB	754.77	754.77		
08:45-09:00	Rotterdam Rd	346.16	346.16		
08:45-09:00	Denmark Rd WB	329.26	329.26		
08:45-09:00	Denmark Rd EB	754.77	754.77		
09:00-09:15	Rotterdam Rd	282.64	282.64		
09:00-09:15	Denmark Rd WB	268.84	268.84		
09:00-09:15	Denmark Rd EB	616.27	616.27		
09:15-09:30	Rotterdam Rd	236.69	236.69		
09:15-09:30	Denmark Rd WB	225.14	225.14		
09:15-09:30	Denmark Rd EB	516.09	516.09		

Turning Proportions

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

		To		
		Rotterdam Rd	Denmark Rd WB	Denmark Rd EB
From	Rotterdam Rd	0.000	5.200	309.196
	Denmark Rd WB	1.010	0.000	298.043
	Denmark Rd EB	324.987	360.531	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		Rotterdam Rd	Denmark Rd WB	Denmark Rd EB
From	Rotterdam Rd	0.00	0.02	0.98
	Denmark Rd WB	0.00	0.00	1.00
	Denmark Rd EB	0.47	0.53	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		Rotterdam Rd	Denmark Rd WB	Denmark Rd EB
From	Rotterdam Rd	1.000	1.000	1.000
	Denmark Rd WB	1.000	1.000	1.000
	Denmark Rd EB	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		Rotterdam Rd	Denmark Rd WB	Denmark Rd EB
From	Rotterdam Rd	0.0	0.0	0.0
	Denmark Rd WB	0.0	0.0	0.0
	Denmark Rd EB	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
Rotterdam Rd	0.32	4.91	0.47	A
Denmark Rd WB	0.23	3.33	0.30	A
Denmark Rd EB	0.37	2.75	0.58	A

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	236.69	235.67	270.73	0.00	1153.24	0.205	0.26	3.919	A
Denmark Rd WB	225.14	224.43	231.77	0.00	1480.86	0.152	0.18	2.864	A
Denmark Rd EB	516.09	514.76	0.76	0.00	2063.32	0.250	0.33	2.322	A

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	282.64	282.33	323.92	0.00	1122.26	0.252	0.33	4.285	A
Denmark Rd WB	268.84	268.65	277.66	0.00	1451.11	0.185	0.23	3.044	A
Denmark Rd EB	616.27	615.90	0.91	0.00	2063.21	0.299	0.42	2.487	A

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	346.16	345.62	396.64	0.00	1079.90	0.321	0.47	4.900	A
Denmark Rd WB	329.26	328.96	339.91	0.00	1410.75	0.233	0.30	3.327	A
Denmark Rd EB	754.77	754.17	1.11	0.00	2063.06	0.366	0.57	2.748	A

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	346.16	346.15	396.95	0.00	1079.71	0.321	0.47	4.907	A
Denmark Rd WB	329.26	329.26	340.42	0.00	1410.41	0.233	0.30	3.329	A
Denmark Rd EB	754.77	754.76	1.11	0.00	2063.06	0.366	0.58	2.751	A

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	282.64	283.16	324.42	0.00	1121.96	0.252	0.34	4.295	A
Denmark Rd WB	268.84	269.14	278.48	0.00	1450.58	0.185	0.23	3.047	A
Denmark Rd EB	616.27	616.86	0.91	0.00	2063.21	0.299	0.43	2.489	A

Main results: (09:15-09:30)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	236.69	237.01	271.62	0.00	1152.72	0.205	0.26	3.932	A
Denmark Rd WB	225.14	225.34	233.09	0.00	1480.01	0.152	0.18	2.869	A
Denmark Rd EB	516.09	516.47	0.76	0.00	2063.31	0.250	0.33	2.327	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (s)
08:00-08:15	Rotterdam Rd	236.69	1153.24	0.205	0.00	0.00	0.26	3.77	-	3.919
08:00-08:15	Denmark Rd WB	225.14	1480.86	0.152	0.00	0.00	0.18	2.63	-	2.864
08:00-08:15	Denmark Rd EB	516.09	2063.32	0.250	0.00	0.00	0.33	4.91	-	2.322
08:15-08:30	Rotterdam Rd	282.64	1122.26	0.252	0.00	0.26	0.33	4.93	-	4.285
08:15-08:30	Denmark Rd WB	268.84	1451.11	0.185	0.00	0.18	0.23	3.35	-	3.044
08:15-08:30	Denmark Rd EB	616.27	2063.21	0.299	0.00	0.33	0.42	6.29	-	2.487
08:30-08:45	Rotterdam Rd	346.16	1079.90	0.321	0.00	0.33	0.47	6.87	-	4.900
08:30-08:45	Denmark Rd WB	329.26	1410.75	0.233	0.00	0.23	0.30	4.48	-	3.327
08:30-08:45	Denmark Rd EB	754.77	2063.06	0.366	0.00	0.42	0.57	8.49	-	2.748
08:45-09:00	Rotterdam Rd	346.16	1079.71	0.321	0.00	0.47	0.47	7.04	-	4.907
08:45-09:00	Denmark Rd WB	329.26	1410.41	0.233	0.00	0.30	0.30	4.55	-	3.329
08:45-09:00	Denmark Rd EB	754.77	2063.06	0.366	0.00	0.57	0.58	8.63	-	2.751
09:00-09:15	Rotterdam Rd	282.64	1121.96	0.252	0.00	0.47	0.34	5.18	-	4.295
09:00-09:15	Denmark Rd WB	268.84	1450.58	0.185	0.00	0.30	0.23	3.47	-	3.047
09:00-09:15	Denmark Rd EB	616.27	2063.21	0.299	0.00	0.58	0.43	6.50	-	2.489
09:15-09:30	Rotterdam Rd	236.69	1152.72	0.205	0.00	0.34	0.26	3.96	-	3.932
09:15-09:30	Denmark Rd WB	225.14	1480.01	0.152	0.00	0.23	0.18	2.73	-	2.869
09:15-09:30	Denmark Rd EB	516.09	2063.31	0.250	0.00	0.43	0.33	5.08	-	2.327

(Default Analysis Set) - 2022 DS, 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
2022 DS, PM	2022 DS	PM		ONE HOUR	17:00	18:30	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			3.62	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Rotterdam Rd	1	Rotterdam Rd	
Denmark Rd WB	2	Denmark Rd WB	
Denmark Rd EB	3	Denmark Rd EB	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Rotterdam Rd	0.00	99999.00
Denmark Rd WB	0.00	99999.00
Denmark Rd EB	0.00	99999.00

Roundabout Geometry

Name	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
Rotterdam Rd	4.00	4.40	3.40	17.00	28.00	25.10	
Denmark Rd WB	3.65	6.90	11.20	20.00	28.00	27.40	
Denmark Rd EB	7.30	7.30	0.00	8.00	28.00	28.15	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Rotterdam Rd		(calculated)	(calculated)	0.583	1310.937
Denmark Rd WB		(calculated)	(calculated)	0.648	1631.146
Denmark Rd EB		(calculated)	(calculated)	0.714	2063.856

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Rotterdam Rd	ONE HOUR	✓	367.31	100.000
Denmark Rd WB	ONE HOUR	✓	419.66	100.000
Denmark Rd EB	ONE HOUR	✓	556.14	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	Rotterdam Rd	276.53	276.53		
17:00-17:15	Denmark Rd WB	315.94	315.94		
17:00-17:15	Denmark Rd EB	418.69	418.69		
17:15-17:30	Rotterdam Rd	330.20	330.20		
17:15-17:30	Denmark Rd WB	377.26	377.26		
17:15-17:30	Denmark Rd EB	499.96	499.96		
17:30-17:45	Rotterdam Rd	404.41	404.41		
17:30-17:45	Denmark Rd WB	462.05	462.05		
17:30-17:45	Denmark Rd EB	612.32	612.32		
17:45-18:00	Rotterdam Rd	404.41	404.41		
17:45-18:00	Denmark Rd WB	462.05	462.05		
17:45-18:00	Denmark Rd EB	612.32	612.32		
18:00-18:15	Rotterdam Rd	330.20	330.20		
18:00-18:15	Denmark Rd WB	377.26	377.26		
18:00-18:15	Denmark Rd EB	499.96	499.96		
18:15-18:30	Rotterdam Rd	276.53	276.53		
18:15-18:30	Denmark Rd WB	315.94	315.94		
18:15-18:30	Denmark Rd EB	418.69	418.69		

Turning Proportions

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

		To		
		Rotterdam Rd	Denmark Rd WB	Denmark Rd EB
From	Rotterdam Rd	0.000	6.300	361.007
	Denmark Rd WB	1.002	0.000	418.655
	Denmark Rd EB	271.070	285.070	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		Rotterdam Rd	Denmark Rd WB	Denmark Rd EB
From	Rotterdam Rd	0.00	0.02	0.98
	Denmark Rd WB	0.00	0.00	1.00
	Denmark Rd EB	0.49	0.51	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		Rotterdam Rd	Denmark Rd WB	Denmark Rd EB
From	Rotterdam Rd	1.000	1.000	1.000
	Denmark Rd WB	1.000	1.000	1.000
	Denmark Rd EB	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		Rotterdam Rd	Denmark Rd WB	Denmark Rd EB
From	Rotterdam Rd	0.0	0.0	0.0
	Denmark Rd WB	0.0	0.0	0.0
	Denmark Rd EB	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
Rotterdam Rd	0.36	4.97	0.56	A
Denmark Rd WB	0.34	3.95	0.51	A
Denmark Rd EB	0.30	2.48	0.42	A

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	276.53	275.32	214.10	0.00	1186.23	0.233	0.30	3.947	A
Denmark Rd WB	315.94	314.84	270.60	0.00	1455.69	0.217	0.28	3.152	A
Denmark Rd EB	418.69	417.68	0.75	0.00	2063.32	0.203	0.25	2.186	A

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	330.20	329.83	256.14	0.00	1161.74	0.284	0.39	4.325	A
Denmark Rd WB	377.26	376.93	324.18	0.00	1420.95	0.266	0.36	3.448	A
Denmark Rd EB	499.96	499.70	0.90	0.00	2063.21	0.242	0.32	2.302	A

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	404.41	403.78	313.66	0.00	1128.23	0.358	0.55	4.965	A
Denmark Rd WB	462.05	461.47	396.85	0.00	1373.82	0.336	0.50	3.943	A
Denmark Rd EB	612.32	611.91	1.10	0.00	2063.07	0.297	0.42	2.481	A

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	404.41	404.40	313.87	0.00	1128.11	0.358	0.56	4.973	A
Denmark Rd WB	462.05	462.04	397.47	0.00	1373.42	0.336	0.51	3.949	A
Denmark Rd EB	612.32	612.32	1.10	0.00	2063.07	0.297	0.42	2.481	A

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	330.20	330.83	256.48	0.00	1161.54	0.284	0.40	4.336	A
Denmark Rd WB	377.26	377.83	325.15	0.00	1420.31	0.266	0.36	3.457	A
Denmark Rd EB	499.96	500.36	0.90	0.00	2063.21	0.242	0.32	2.303	A

Main results: (18:15-18:30)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	276.53	276.90	214.75	0.00	1185.85	0.233	0.31	3.963	A
Denmark Rd WB	315.94	316.28	272.15	0.00	1454.68	0.217	0.28	3.162	A
Denmark Rd EB	418.69	418.95	0.75	0.00	2063.32	0.203	0.26	2.189	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (s)
17:00-17:15	Rotterdam Rd	276.53	1186.23	0.233	0.00	0.00	0.30	4.43	-	3.947
17:00-17:15	Denmark Rd WB	315.94	1455.69	0.217	0.00	0.00	0.28	4.06	-	3.152
17:00-17:15	Denmark Rd EB	418.69	2063.32	0.203	0.00	0.00	0.25	3.75	-	2.186
17:15-17:30	Rotterdam Rd	330.20	1161.74	0.284	0.00	0.30	0.39	5.81	-	4.325
17:15-17:30	Denmark Rd WB	377.26	1420.95	0.266	0.00	0.28	0.36	5.31	-	3.448
17:15-17:30	Denmark Rd EB	499.96	2063.21	0.242	0.00	0.25	0.32	4.73	-	2.302
17:30-17:45	Rotterdam Rd	404.41	1128.23	0.358	0.00	0.39	0.55	8.12	-	4.965
17:30-17:45	Denmark Rd WB	462.05	1373.82	0.336	0.00	0.36	0.50	7.41	-	3.943
17:30-17:45	Denmark Rd EB	612.32	2063.07	0.297	0.00	0.32	0.42	6.23	-	2.481
17:45-18:00	Rotterdam Rd	404.41	1128.11	0.358	0.00	0.55	0.56	8.33	-	4.973
17:45-18:00	Denmark Rd WB	462.05	1373.42	0.336	0.00	0.50	0.51	7.57	-	3.949
17:45-18:00	Denmark Rd EB	612.32	2063.07	0.297	0.00	0.42	0.42	6.31	-	2.481
18:00-18:15	Rotterdam Rd	330.20	1161.54	0.284	0.00	0.56	0.40	6.12	-	4.336
18:00-18:15	Denmark Rd WB	377.26	1420.31	0.266	0.00	0.51	0.36	5.55	-	3.457
18:00-18:15	Denmark Rd EB	499.96	2063.21	0.242	0.00	0.42	0.32	4.87	-	2.303
18:15-18:30	Rotterdam Rd	276.53	1185.85	0.233	0.00	0.40	0.31	4.67	-	3.963
18:15-18:30	Denmark Rd WB	315.94	1454.68	0.217	0.00	0.36	0.28	4.24	-	3.162
18:15-18:30	Denmark Rd EB	418.69	2063.32	0.203	0.00	0.32	0.26	3.87	-	2.189

(Default Analysis Set) - 2037 DS, 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
2037 DS, AM	2037 DS	AM		ONE HOUR	08:00	09:30	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			3.59	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Rotterdam Rd	1	Rotterdam Rd	
Denmark Rd WB	2	Denmark Rd WB	
Denmark Rd EB	3	Denmark Rd EB	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Rotterdam Rd	0.00	99999.00
Denmark Rd WB	0.00	99999.00
Denmark Rd EB	0.00	99999.00

Roundabout Geometry

Name	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
Rotterdam Rd	4.00	4.40	3.40	17.00	28.00	25.10	
Denmark Rd WB	3.65	6.90	11.20	20.00	28.00	27.40	
Denmark Rd EB	7.30	7.30	0.00	8.00	28.00	28.15	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Rotterdam Rd		(calculated)	(calculated)	0.583	1310.937
Denmark Rd WB		(calculated)	(calculated)	0.648	1631.146
Denmark Rd EB		(calculated)	(calculated)	0.714	2063.856

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Rotterdam Rd	ONE HOUR	✓	331.15	100.000
Denmark Rd WB	ONE HOUR	✓	340.31	100.000
Denmark Rd EB	ONE HOUR	✓	741.76	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	Rotterdam Rd	249.30	249.30		
08:00-08:15	Denmark Rd WB	256.20	256.20		
08:00-08:15	Denmark Rd EB	558.43	558.43		
08:15-08:30	Rotterdam Rd	297.69	297.69		
08:15-08:30	Denmark Rd WB	305.93	305.93		
08:15-08:30	Denmark Rd EB	666.82	666.82		
08:30-08:45	Rotterdam Rd	364.60	364.60		
08:30-08:45	Denmark Rd WB	374.69	374.69		
08:30-08:45	Denmark Rd EB	816.69	816.69		
08:45-09:00	Rotterdam Rd	364.60	364.60		
08:45-09:00	Denmark Rd WB	374.69	374.69		
08:45-09:00	Denmark Rd EB	816.69	816.69		
09:00-09:15	Rotterdam Rd	297.69	297.69		
09:00-09:15	Denmark Rd WB	305.93	305.93		
09:00-09:15	Denmark Rd EB	666.82	666.82		
09:15-09:30	Rotterdam Rd	249.30	249.30		
09:15-09:30	Denmark Rd WB	256.20	256.20		
09:15-09:30	Denmark Rd EB	558.43	558.43		

Turning Proportions

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

		To		
		Rotterdam Rd	Denmark Rd WB	Denmark Rd EB
From	Rotterdam Rd	0.000	5.865	325.281
	Denmark Rd WB	1.102	0.000	339.206
	Denmark Rd EB	337.357	404.399	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		Rotterdam Rd	Denmark Rd WB	Denmark Rd EB
From	Rotterdam Rd	0.00	0.02	0.98
	Denmark Rd WB	0.00	0.00	1.00
	Denmark Rd EB	0.45	0.55	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		Rotterdam Rd	Denmark Rd WB	Denmark Rd EB
From	Rotterdam Rd	1.000	1.000	1.000
	Denmark Rd WB	1.000	1.000	1.000
	Denmark Rd EB	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		Rotterdam Rd	Denmark Rd WB	Denmark Rd EB
From	Rotterdam Rd	0.0	0.0	0.0
	Denmark Rd WB	0.0	0.0	0.0
	Denmark Rd EB	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
Rotterdam Rd	0.35	5.24	0.53	A
Denmark Rd WB	0.27	3.51	0.36	A
Denmark Rd EB	0.40	2.89	0.65	A

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	249.30	248.18	303.65	0.00	1134.06	0.220	0.28	4.059	A
Denmark Rd WB	256.20	255.36	243.79	0.00	1473.07	0.174	0.21	2.955	A
Denmark Rd EB	558.43	556.95	0.83	0.00	2063.27	0.271	0.37	2.388	A

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	297.69	297.34	363.32	0.00	1099.31	0.271	0.37	4.487	A
Denmark Rd WB	305.93	305.70	292.07	0.00	1441.76	0.212	0.27	3.168	A
Denmark Rd EB	666.82	666.40	0.99	0.00	2063.15	0.323	0.48	2.577	A

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	364.60	363.97	444.87	0.00	1051.80	0.347	0.53	5.229	A
Denmark Rd WB	374.69	374.30	357.52	0.00	1399.32	0.268	0.36	3.512	A
Denmark Rd EB	816.69	815.98	1.21	0.00	2062.99	0.396	0.65	2.885	A

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	364.60	364.59	445.25	0.00	1051.58	0.347	0.53	5.239	A
Denmark Rd WB	374.69	374.68	358.13	0.00	1398.93	0.268	0.36	3.513	A
Denmark Rd EB	816.69	816.68	1.21	0.00	2062.99	0.396	0.65	2.887	A

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	297.69	298.31	363.93	0.00	1098.95	0.271	0.37	4.501	A
Denmark Rd WB	305.93	306.31	293.03	0.00	1441.14	0.212	0.27	3.175	A
Denmark Rd EB	666.82	667.52	0.99	0.00	2063.15	0.323	0.48	2.582	A

Main results: (09:15-09:30)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	249.30	249.67	304.69	0.00	1133.46	0.220	0.28	4.074	A
Denmark Rd WB	256.20	256.44	245.24	0.00	1472.13	0.174	0.21	2.961	A
Denmark Rd EB	558.43	558.86	0.83	0.00	2063.26	0.271	0.37	2.395	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (s)
08:00-08:15	Rotterdam Rd	249.30	1134.06	0.220	0.00	0.00	0.28	4.10	-	4.059
08:00-08:15	Denmark Rd WB	256.20	1473.07	0.174	0.00	0.00	0.21	3.09	-	2.955
08:00-08:15	Denmark Rd EB	558.43	2063.27	0.271	0.00	0.00	0.37	5.46	-	2.388
08:15-08:30	Rotterdam Rd	297.69	1099.31	0.271	0.00	0.28	0.37	5.43	-	4.487
08:15-08:30	Denmark Rd WB	305.93	1441.76	0.212	0.00	0.21	0.27	3.97	-	3.168
08:15-08:30	Denmark Rd EB	666.82	2063.15	0.323	0.00	0.37	0.48	7.04	-	2.577
08:30-08:45	Rotterdam Rd	364.60	1051.80	0.347	0.00	0.37	0.53	7.71	-	5.229
08:30-08:45	Denmark Rd WB	374.69	1399.32	0.268	0.00	0.27	0.36	5.37	-	3.512
08:30-08:45	Denmark Rd EB	816.69	2062.99	0.396	0.00	0.48	0.65	9.62	-	2.885
08:45-09:00	Rotterdam Rd	364.60	1051.58	0.347	0.00	0.53	0.53	7.91	-	5.239
08:45-09:00	Denmark Rd WB	374.69	1398.93	0.268	0.00	0.36	0.36	5.47	-	3.513
08:45-09:00	Denmark Rd EB	816.69	2062.99	0.396	0.00	0.65	0.65	9.79	-	2.887
09:00-09:15	Rotterdam Rd	297.69	1098.95	0.271	0.00	0.53	0.37	5.73	-	4.501
09:00-09:15	Denmark Rd WB	305.93	1441.14	0.212	0.00	0.36	0.27	4.12	-	3.175
09:00-09:15	Denmark Rd EB	666.82	2063.15	0.323	0.00	0.65	0.48	7.30	-	2.582
09:15-09:30	Rotterdam Rd	249.30	1133.46	0.220	0.00	0.37	0.28	4.33	-	4.074
09:15-09:30	Denmark Rd WB	256.20	1472.13	0.174	0.00	0.27	0.21	3.21	-	2.961
09:15-09:30	Denmark Rd EB	558.43	2063.26	0.271	0.00	0.48	0.37	5.66	-	2.395

(Default Analysis Set) - 2037 DS, 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
2037 DS, PM	2037 DS	PM		ONE HOUR	17:00	18:30	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			3.79	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Rotterdam Rd	1	Rotterdam Rd	
Denmark Rd WB	2	Denmark Rd WB	
Denmark Rd EB	3	Denmark Rd EB	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Rotterdam Rd	0.00	99999.00
Denmark Rd WB	0.00	99999.00
Denmark Rd EB	0.00	99999.00

Roundabout Geometry

Name	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
Rotterdam Rd	4.00	4.40	3.40	17.00	28.00	25.10	
Denmark Rd WB	3.65	6.90	11.20	20.00	28.00	27.40	
Denmark Rd EB	7.30	7.30	0.00	8.00	28.00	28.15	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Rotterdam Rd		(calculated)	(calculated)	0.583	1310.937
Denmark Rd WB		(calculated)	(calculated)	0.648	1631.146
Denmark Rd EB		(calculated)	(calculated)	0.714	2063.856

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Rotterdam Rd	ONE HOUR	✓	374.45	100.000
Denmark Rd WB	ONE HOUR	✓	472.88	100.000
Denmark Rd EB	ONE HOUR	✓	578.94	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	Rotterdam Rd	281.91	281.91		
17:00-17:15	Denmark Rd WB	356.01	356.01		
17:00-17:15	Denmark Rd EB	435.86	435.86		
17:15-17:30	Rotterdam Rd	336.63	336.63		
17:15-17:30	Denmark Rd WB	425.11	425.11		
17:15-17:30	Denmark Rd EB	520.46	520.46		
17:30-17:45	Rotterdam Rd	412.28	412.28		
17:30-17:45	Denmark Rd WB	520.65	520.65		
17:30-17:45	Denmark Rd EB	637.43	637.43		
17:45-18:00	Rotterdam Rd	412.28	412.28		
17:45-18:00	Denmark Rd WB	520.65	520.65		
17:45-18:00	Denmark Rd EB	637.43	637.43		
18:00-18:15	Rotterdam Rd	336.63	336.63		
18:00-18:15	Denmark Rd WB	425.11	425.11		
18:00-18:15	Denmark Rd EB	520.46	520.46		
18:15-18:30	Rotterdam Rd	281.91	281.91		
18:15-18:30	Denmark Rd WB	356.01	356.01		
18:15-18:30	Denmark Rd EB	435.86	435.86		

Turning Proportions

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

		To		
		Rotterdam Rd	Denmark Rd WB	Denmark Rd EB
From	Rotterdam Rd	0.000	6.910	367.544
	Denmark Rd WB	1.088	0.000	471.794
	Denmark Rd EB	264.849	314.092	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		Rotterdam Rd	Denmark Rd WB	Denmark Rd EB
From	Rotterdam Rd	0.00	0.02	0.98
	Denmark Rd WB	0.00	0.00	1.00
	Denmark Rd EB	0.46	0.54	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		Rotterdam Rd	Denmark Rd WB	Denmark Rd EB
From	Rotterdam Rd	1.000	1.000	1.000
	Denmark Rd WB	1.000	1.000	1.000
	Denmark Rd EB	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		Rotterdam Rd	Denmark Rd WB	Denmark Rd EB
From	Rotterdam Rd	0.0	0.0	0.0
	Denmark Rd WB	0.0	0.0	0.0
	Denmark Rd EB	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
Rotterdam Rd	0.37	5.16	0.59	A
Denmark Rd WB	0.38	4.24	0.61	A
Denmark Rd EB	0.31	2.52	0.45	A

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	281.91	280.65	235.89	0.00	1173.53	0.240	0.31	4.026	A
Denmark Rd WB	356.01	354.72	275.47	0.00	1452.53	0.245	0.32	3.277	A
Denmark Rd EB	435.86	434.79	0.82	0.00	2063.27	0.211	0.27	2.210	A

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	336.63	336.23	282.21	0.00	1146.55	0.294	0.41	4.441	A
Denmark Rd WB	425.11	424.70	330.03	0.00	1417.15	0.300	0.43	3.625	A
Denmark Rd EB	520.46	520.18	0.98	0.00	2063.16	0.252	0.34	2.333	A

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	412.28	411.59	345.59	0.00	1109.63	0.372	0.59	5.151	A
Denmark Rd WB	520.65	519.92	403.99	0.00	1369.19	0.380	0.61	4.235	A
Denmark Rd EB	637.43	636.99	1.20	0.00	2063.00	0.309	0.45	2.524	A

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	412.28	412.27	345.82	0.00	1109.50	0.372	0.59	5.162	A
Denmark Rd WB	520.65	520.64	404.66	0.00	1368.76	0.380	0.61	4.244	A
Denmark Rd EB	637.43	637.42	1.20	0.00	2063.00	0.309	0.45	2.524	A

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	336.63	337.31	282.60	0.00	1146.33	0.294	0.42	4.453	A
Denmark Rd WB	425.11	425.83	331.08	0.00	1416.47	0.300	0.43	3.638	A
Denmark Rd EB	520.46	520.89	0.98	0.00	2063.16	0.252	0.34	2.336	A

Main results: (18:15-18:30)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	281.91	282.31	236.62	0.00	1173.11	0.240	0.32	4.042	A
Denmark Rd WB	356.01	356.43	277.10	0.00	1451.47	0.245	0.33	3.288	A
Denmark Rd EB	435.86	436.14	0.82	0.00	2063.27	0.211	0.27	2.212	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (s)
17:00-17:15	Rotterdam Rd	281.91	1173.53	0.240	0.00	0.00	0.31	4.60	-	4.026
17:00-17:15	Denmark Rd WB	356.01	1452.53	0.245	0.00	0.00	0.32	4.75	-	3.277
17:00-17:15	Denmark Rd EB	435.86	2063.27	0.211	0.00	0.00	0.27	3.95	-	2.210
17:15-17:30	Rotterdam Rd	336.63	1146.55	0.294	0.00	0.31	0.41	6.08	-	4.441
17:15-17:30	Denmark Rd WB	425.11	1417.15	0.300	0.00	0.32	0.43	6.29	-	3.625
17:15-17:30	Denmark Rd EB	520.46	2063.16	0.252	0.00	0.27	0.34	4.99	-	2.333
17:30-17:45	Rotterdam Rd	412.28	1109.63	0.372	0.00	0.41	0.59	8.58	-	5.151
17:30-17:45	Denmark Rd WB	520.65	1369.19	0.380	0.00	0.43	0.61	8.94	-	4.235
17:30-17:45	Denmark Rd EB	637.43	2063.00	0.309	0.00	0.34	0.45	6.59	-	2.524
17:45-18:00	Rotterdam Rd	412.28	1109.50	0.372	0.00	0.59	0.59	8.81	-	5.162
17:45-18:00	Denmark Rd WB	520.65	1368.76	0.380	0.00	0.61	0.61	9.16	-	4.244
17:45-18:00	Denmark Rd EB	637.43	2063.00	0.309	0.00	0.45	0.45	6.69	-	2.524
18:00-18:15	Rotterdam Rd	336.63	1146.33	0.294	0.00	0.59	0.42	6.41	-	4.453
18:00-18:15	Denmark Rd WB	425.11	1416.47	0.300	0.00	0.61	0.43	6.59	-	3.638
18:00-18:15	Denmark Rd EB	520.46	2063.16	0.252	0.00	0.45	0.34	5.14	-	2.336
18:15-18:30	Rotterdam Rd	281.91	1173.11	0.240	0.00	0.42	0.32	4.86	-	4.042
18:15-18:30	Denmark Rd WB	356.01	1451.47	0.245	0.00	0.43	0.33	4.97	-	3.288
18:15-18:30	Denmark Rd EB	435.86	2063.27	0.211	0.00	0.34	0.27	4.07	-	2.212

(Default Analysis Set) - 2022 DS, Sat

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
2022 DS, Sat	2022 DS	Sat		ONE HOUR	11:30	13:00	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			7.43	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Rotterdam Rd	1	Rotterdam Rd	
Denmark Rd WB	2	Denmark Rd WB	
Denmark Rd EB	3	Denmark Rd EB	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Rotterdam Rd	0.00	99999.00
Denmark Rd WB	0.00	99999.00
Denmark Rd EB	0.00	99999.00

Roundabout Geometry

Name	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
Rotterdam Rd	4.00	4.40	3.40	17.00	28.00	25.10	
Denmark Rd WB	3.65	6.90	11.20	20.00	28.00	27.40	
Denmark Rd EB	7.30	7.30	0.00	8.00	28.00	28.15	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Rotterdam Rd		(calculated)	(calculated)	0.583	1310.937
Denmark Rd WB		(calculated)	(calculated)	0.648	1631.146
Denmark Rd EB		(calculated)	(calculated)	0.714	2063.856

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Rotterdam Rd	ONE HOUR	✓	602.00	100.000
Denmark Rd WB	ONE HOUR	✓	509.00	100.000
Denmark Rd EB	ONE HOUR	✓	1108.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
11:30-11:45	Rotterdam Rd	453.22	453.22		
11:30-11:45	Denmark Rd WB	383.20	383.20		
11:30-11:45	Denmark Rd EB	834.16	834.16		
11:45-12:00	Rotterdam Rd	541.19	541.19		
11:45-12:00	Denmark Rd WB	457.58	457.58		
11:45-12:00	Denmark Rd EB	996.07	996.07		
12:00-12:15	Rotterdam Rd	662.81	662.81		
12:00-12:15	Denmark Rd WB	560.42	560.42		
12:00-12:15	Denmark Rd EB	1219.93	1219.93		
12:15-12:30	Rotterdam Rd	662.81	662.81		
12:15-12:30	Denmark Rd WB	560.42	560.42		
12:15-12:30	Denmark Rd EB	1219.93	1219.93		
12:30-12:45	Rotterdam Rd	541.19	541.19		
12:30-12:45	Denmark Rd WB	457.58	457.58		
12:30-12:45	Denmark Rd EB	996.07	996.07		
12:45-13:00	Rotterdam Rd	453.22	453.22		
12:45-13:00	Denmark Rd WB	383.20	383.20		
12:45-13:00	Denmark Rd EB	834.16	834.16		

Turning Proportions

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

		To		
		Rotterdam Rd	Denmark Rd WB	Denmark Rd EB
From	Rotterdam Rd	9.000	69.000	524.000
	Denmark Rd WB	38.000	2.000	469.000
	Denmark Rd EB	479.000	625.000	4.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		Rotterdam Rd	Denmark Rd WB	Denmark Rd EB
From	Rotterdam Rd	0.01	0.11	0.87
	Denmark Rd WB	0.07	0.00	0.92
	Denmark Rd EB	0.43	0.56	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		Rotterdam Rd	Denmark Rd WB	Denmark Rd EB
From	Rotterdam Rd	1.000	1.000	1.000
	Denmark Rd WB	1.000	1.000	1.000
	Denmark Rd EB	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		Rotterdam Rd	Denmark Rd WB	Denmark Rd EB
From	Rotterdam Rd	0.0	0.0	0.0
	Denmark Rd WB	0.0	0.0	0.0
	Denmark Rd EB	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
Rotterdam Rd	0.73	14.72	2.64	B
Denmark Rd WB	0.45	5.24	0.81	A
Denmark Rd EB	0.60	4.47	1.51	A

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	453.22	450.14	473.48	0.00	1035.14	0.438	0.77	6.122	A
Denmark Rd WB	383.20	381.66	401.55	0.00	1370.78	0.280	0.39	3.635	A
Denmark Rd EB	834.16	831.40	36.72	0.00	2037.65	0.409	0.69	2.978	A

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	541.19	539.43	566.65	0.00	980.86	0.552	1.21	8.123	A
Denmark Rd WB	457.58	457.01	481.20	0.00	1319.13	0.347	0.53	4.173	A
Denmark Rd EB	996.07	995.01	43.98	0.00	2032.47	0.490	0.95	3.467	A

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	662.81	657.37	693.51	0.00	906.97	0.731	2.57	14.121	B
Denmark Rd WB	560.42	559.32	586.42	0.00	1250.91	0.448	0.80	5.196	A
Denmark Rd EB	1219.93	1217.76	53.78	0.00	2025.48	0.602	1.50	4.445	A

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	662.81	662.52	694.72	0.00	906.26	0.731	2.64	14.723	B
Denmark Rd WB	560.42	560.39	590.99	0.00	1247.94	0.449	0.81	5.235	A
Denmark Rd EB	1219.93	1219.89	53.94	0.00	2025.36	0.602	1.51	4.469	A

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	541.19	546.72	568.48	0.00	979.80	0.552	1.26	8.414	A
Denmark Rd WB	457.58	458.67	487.66	0.00	1314.94	0.348	0.54	4.210	A
Denmark Rd EB	996.07	998.22	44.22	0.00	2032.30	0.490	0.97	3.490	A

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	453.22	455.09	475.67	0.00	1033.86	0.438	0.79	6.241	A
Denmark Rd WB	383.20	383.79	405.94	0.00	1367.93	0.280	0.39	3.659	A
Denmark Rd EB	834.16	835.25	36.96	0.00	2037.48	0.409	0.70	2.998	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (s)
11:30-11:45	Rotterdam Rd	453.22	1035.14	0.438	0.00	0.00	0.77	11.08	-	6.122
11:30-11:45	Denmark Rd WB	383.20	1370.78	0.280	0.00	0.00	0.39	5.66	-	3.635
11:30-11:45	Denmark Rd EB	834.16	2037.65	0.409	0.00	0.00	0.69	10.11	-	2.978
11:45-12:00	Rotterdam Rd	541.19	980.86	0.552	0.00	0.77	1.21	17.36	-	8.123
11:45-12:00	Denmark Rd WB	457.58	1319.13	0.347	0.00	0.39	0.53	7.76	-	4.173
11:45-12:00	Denmark Rd EB	996.07	2032.47	0.490	0.00	0.69	0.95	14.02	-	3.467
12:00-12:15	Rotterdam Rd	662.81	906.97	0.731	0.00	1.21	2.57	35.21	-	14.121
12:00-12:15	Denmark Rd WB	560.42	1250.91	0.448	0.00	0.53	0.80	11.73	-	5.196
12:00-12:15	Denmark Rd EB	1219.93	2025.48	0.602	0.00	0.95	1.50	21.76	-	4.445
12:15-12:30	Rotterdam Rd	662.81	906.26	0.731	0.00	2.57	2.64	39.21	-	14.723
12:15-12:30	Denmark Rd WB	560.42	1247.94	0.449	0.00	0.80	0.81	12.12	-	5.235
12:15-12:30	Denmark Rd EB	1219.93	2025.36	0.602	0.00	1.50	1.51	22.53	-	4.469
12:30-12:45	Rotterdam Rd	541.19	979.80	0.552	0.00	2.64	1.26	19.96	-	8.414
12:30-12:45	Denmark Rd WB	457.58	1314.94	0.348	0.00	0.81	0.54	8.25	-	4.210
12:30-12:45	Denmark Rd EB	996.07	2032.30	0.490	0.00	1.51	0.97	14.88	-	3.490
12:45-13:00	Rotterdam Rd	453.22	1033.86	0.438	0.00	1.26	0.79	12.26	-	6.241
12:45-13:00	Denmark Rd WB	383.20	1367.93	0.280	0.00	0.54	0.39	5.98	-	3.659
12:45-13:00	Denmark Rd EB	834.16	2037.48	0.409	0.00	0.97	0.70	10.65	-	2.998

(Default Analysis Set) - 2037 DS, Sat

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
2037 DS, Sat	2037 DS	Sat		ONE HOUR	11:30	13:00	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			8.54	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Rotterdam Rd	1	Rotterdam Rd	
Denmark Rd WB	2	Denmark Rd WB	
Denmark Rd EB	3	Denmark Rd EB	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Rotterdam Rd	0.00	99999.00
Denmark Rd WB	0.00	99999.00
Denmark Rd EB	0.00	99999.00

Roundabout Geometry

Name	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
Rotterdam Rd	4.00	4.40	3.40	17.00	28.00	25.10	
Denmark Rd WB	3.65	6.90	11.20	20.00	28.00	27.40	
Denmark Rd EB	7.30	7.30	0.00	8.00	28.00	28.15	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Rotterdam Rd		(calculated)	(calculated)	0.583	1310.937
Denmark Rd WB		(calculated)	(calculated)	0.648	1631.146
Denmark Rd EB		(calculated)	(calculated)	0.714	2063.856

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Rotterdam Rd	ONE HOUR	✓	630.00	100.000
Denmark Rd WB	ONE HOUR	✓	558.00	100.000
Denmark Rd EB	ONE HOUR	✓	1143.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
11:30-11:45	Rotterdam Rd	474.30	474.30		
11:30-11:45	Denmark Rd WB	420.09	420.09		
11:30-11:45	Denmark Rd EB	860.51	860.51		
11:45-12:00	Rotterdam Rd	566.36	566.36		
11:45-12:00	Denmark Rd WB	501.63	501.63		
11:45-12:00	Denmark Rd EB	1027.53	1027.53		
12:00-12:15	Rotterdam Rd	693.64	693.64		
12:00-12:15	Denmark Rd WB	614.37	614.37		
12:00-12:15	Denmark Rd EB	1258.47	1258.47		
12:15-12:30	Rotterdam Rd	693.64	693.64		
12:15-12:30	Denmark Rd WB	614.37	614.37		
12:15-12:30	Denmark Rd EB	1258.47	1258.47		
12:30-12:45	Rotterdam Rd	566.36	566.36		
12:30-12:45	Denmark Rd WB	501.63	501.63		
12:30-12:45	Denmark Rd EB	1027.53	1027.53		
12:45-13:00	Rotterdam Rd	474.30	474.30		
12:45-13:00	Denmark Rd WB	420.09	420.09		
12:45-13:00	Denmark Rd EB	860.51	860.51		

Turning Proportions

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

		To		
		Rotterdam Rd	Denmark Rd WB	Denmark Rd EB
From	Rotterdam Rd	10.000	73.000	547.000
	Denmark Rd WB	42.000	2.000	514.000
	Denmark Rd EB	494.000	645.000	4.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		Rotterdam Rd	Denmark Rd WB	Denmark Rd EB
From	Rotterdam Rd	0.02	0.12	0.87
	Denmark Rd WB	0.08	0.00	0.92
	Denmark Rd EB	0.43	0.56	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		Rotterdam Rd	Denmark Rd WB	Denmark Rd EB
From	Rotterdam Rd	1.000	1.000	1.000
	Denmark Rd WB	1.000	1.000	1.000
	Denmark Rd EB	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		Rotterdam Rd	Denmark Rd WB	Denmark Rd EB
From	Rotterdam Rd	0.0	0.0	0.0
	Denmark Rd WB	0.0	0.0	0.0
	Denmark Rd EB	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
Rotterdam Rd	0.78	17.85	3.33	C
Denmark Rd WB	0.50	5.84	0.99	A
Denmark Rd EB	0.62	4.72	1.64	A

Main Results for each time segment

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	474.30	470.91	488.45	0.00	1026.42	0.462	0.85	6.443	A
Denmark Rd WB	420.09	418.31	419.34	0.00	1359.24	0.309	0.44	3.820	A
Denmark Rd EB	860.51	857.60	40.46	0.00	2034.98	0.423	0.73	3.050	A

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	566.36	564.27	584.58	0.00	970.42	0.584	1.37	8.816	A
Denmark Rd WB	501.63	500.93	502.48	0.00	1305.34	0.384	0.62	4.471	A
Denmark Rd EB	1027.53	1026.38	48.46	0.00	2029.28	0.506	1.02	3.587	A

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	693.64	686.33	715.38	0.00	894.23	0.776	3.20	16.751	C
Denmark Rd WB	614.37	612.93	611.20	0.00	1234.84	0.498	0.98	5.776	A
Denmark Rd EB	1258.47	1256.03	59.23	0.00	2021.59	0.623	1.63	4.687	A

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	693.64	693.13	716.74	0.00	893.44	0.776	3.33	17.852	C
Denmark Rd WB	614.37	614.33	617.22	0.00	1230.93	0.499	0.99	5.838	A
Denmark Rd EB	1258.47	1258.42	59.44	0.00	2021.44	0.623	1.64	4.717	A

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	566.36	573.91	586.61	0.00	969.24	0.584	1.44	9.272	A
Denmark Rd WB	501.63	503.05	511.01	0.00	1299.80	0.386	0.63	4.527	A
Denmark Rd EB	1027.53	1029.95	48.78	0.00	2029.05	0.506	1.03	3.613	A

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

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Rotterdam Rd	474.30	476.56	490.78	0.00	1025.06	0.463	0.87	6.592	A
Denmark Rd WB	420.09	420.82	424.36	0.00	1355.99	0.310	0.45	3.852	A
Denmark Rd EB	860.51	861.70	40.75	0.00	2034.78	0.423	0.74	3.073	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (s)
11:30-11:45	Rotterdam Rd	474.30	1026.42	0.462	0.00	0.00	0.85	12.17	-	6.443
11:30-11:45	Denmark Rd WB	420.09	1359.24	0.309	0.00	0.00	0.44	6.51	-	3.820
11:30-11:45	Denmark Rd EB	860.51	2034.98	0.423	0.00	0.00	0.73	10.67	-	3.050
11:45-12:00	Rotterdam Rd	566.36	970.42	0.584	0.00	0.85	1.37	19.61	-	8.816
11:45-12:00	Denmark Rd WB	501.63	1305.34	0.384	0.00	0.44	0.62	9.09	-	4.471
11:45-12:00	Denmark Rd EB	1027.53	2029.28	0.506	0.00	0.73	1.02	14.94	-	3.587
12:00-12:15	Rotterdam Rd	693.64	894.23	0.776	0.00	1.37	3.20	42.90	-	16.751
12:00-12:15	Denmark Rd WB	614.37	1234.84	0.498	0.00	0.62	0.98	14.21	-	5.776
12:00-12:15	Denmark Rd EB	1258.47	2021.59	0.623	0.00	1.02	1.63	23.60	-	4.687
12:15-12:30	Rotterdam Rd	693.64	893.44	0.776	0.00	3.20	3.33	49.14	-	17.852
12:15-12:30	Denmark Rd WB	614.37	1230.93	0.499	0.00	0.98	0.99	14.77	-	5.838
12:15-12:30	Denmark Rd EB	1258.47	2021.44	0.623	0.00	1.63	1.64	24.51	-	4.717
12:30-12:45	Rotterdam Rd	566.36	969.24	0.584	0.00	3.33	1.44	23.12	-	9.272
12:30-12:45	Denmark Rd WB	501.63	1299.80	0.386	0.00	0.99	0.63	9.75	-	4.527
12:30-12:45	Denmark Rd EB	1027.53	2029.05	0.506	0.00	1.64	1.03	15.92	-	3.613
12:45-13:00	Rotterdam Rd	474.30	1025.06	0.463	0.00	1.44	0.87	13.59	-	6.592
12:45-13:00	Denmark Rd WB	420.09	1355.99	0.310	0.00	0.63	0.45	6.91	-	3.852
12:45-13:00	Denmark Rd EB	860.51	2034.78	0.423	0.00	1.03	0.74	11.27	-	3.073

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.6.541 [19821,26/11/2015]

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: 14 Normanston-Peto v 2018-1-31 unmitigated New Satday flows.arc8
Path: L:\106xxx\1069948 Lowestoft Third Crossing\09 Documents\06_Modelling_Junction Modelling Sep 2017_Junction Modelling\14 Normanston Dr-Peto Way rdbt
Report generation date: 19/10/2018 16:48:55

Summary of junction performance

	AM				PM				Sat			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2016 Base											
Arm 1	0.33	5.82	0.25	A	0.28	5.08	0.22	A	0.44	6.81	0.31	A
Arm 2	0.18	3.26	0.15	A	0.38	3.80	0.28	A	0.44	4.38	0.31	A
Arm 3	0.31	2.77	0.24	A	0.72	3.85	0.42	A	1.44	5.33	0.59	A
Arm 4	2.55	8.26	0.72	A	1.07	5.19	0.52	A	3.02	11.97	0.76	B
Arm 5	0.49	4.24	0.33	A	0.47	3.71	0.32	A	0.59	4.81	0.37	A
	A1 - 2022 Do Minimum											
Arm 1	0.45	7.00	0.31	A	0.25	5.25	0.20	A	0.51	7.45	0.34	A
Arm 2	0.20	3.28	0.17	A	0.55	4.30	0.35	A	0.49	4.66	0.33	A
Arm 3	0.33	2.77	0.25	A	0.84	4.33	0.46	A	1.69	5.96	0.63	A
Arm 4	3.53	10.84	0.78	B	1.52	6.42	0.60	A	4.11	15.69	0.81	C
Arm 5	0.57	4.75	0.36	A	0.55	4.01	0.36	A	0.67	5.18	0.40	A
	A1 - 2022 Do Something											
Arm 1	1.03	14.15	0.51	B	0.95	8.40	0.49	A	1.62	16.28	0.63	C
Arm 2	0.28	4.49	0.22	A	0.80	5.83	0.45	A	0.75	6.82	0.43	A
Arm 3	0.80	3.68	0.44	A	2.00	6.89	0.67	A	115.90	216.19	1.14	F
Arm 4	1.80	7.77	0.65	A	0.81	5.56	0.45	A	1.78	9.94	0.64	A
Arm 5	2.54	10.57	0.72	B	0.72	4.30	0.42	A	2.45	10.31	0.71	B
	A1 - 2037 Do Minimum											
Arm 1	0.64	9.53	0.39	A	0.29	5.63	0.23	A	0.72	9.48	0.42	A
Arm 2	0.25	3.57	0.20	A	0.65	4.64	0.40	A	0.65	5.47	0.40	A
Arm 3	0.44	3.04	0.31	A	1.20	5.21	0.55	A	2.61	8.29	0.73	A
Arm 4	13.54	36.68	0.95	E	2.32	9.01	0.70	A	13.19	46.17	0.95	E
Arm 5	0.87	6.11	0.47	A	0.58	4.23	0.37	A	0.91	6.30	0.48	A
	A1 - 2037 Do Something											
Arm 1	3.34	41.82	0.79	E	1.11	9.89	0.53	A	4.49	40.03	0.84	E
Arm 2	0.40	5.45	0.28	A	1.16	7.30	0.54	A	1.12	9.34	0.53	A
Arm 3	1.16	4.53	0.54	A	3.55	10.68	0.78	B	238.65	548.23	1.30	F
Arm 4	4.65	17.05	0.83	C	1.48	8.24	0.60	A	2.78	13.55	0.74	B
Arm 5	7.21	27.40	0.89	D	0.91	5.01	0.48	A	4.02	15.61	0.81	C

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

"D1 - 2016 Base, AM " model duration: 08:00 - 09:30
"D2 - 2016 Base, PM" model duration: 17:00 - 18:30
"D3 - 2022 Do Minimum, AM" model duration: 08:00 - 09:30
"D4 - 2022 Do Minimum, PM" model duration: 17:00 - 18:30
"D5 - 2022 Do Something, AM" model duration: 08:00 - 09:30
"D6 - 2022 Do Something, PM" model duration: 17:00 - 18:30
"D7 - 2037 Do Minimum, AM" model duration: 08:00 - 09:30
"D8 - 2037 Do Minimum, PM" model duration: 17:00 - 18:30
"D9 - 2037 Do Something, AM" model duration: 08:00 - 09:30
"D10 - 2037 Do Something, PM" model duration: 17:00 - 18:30
"D11 - 2016 Base, Sat" model duration: 11:30 - 13:00
"D12 - 2022 Do Minimum, Sat" model duration: 11:30 - 13:00
"D13 - 2022 Do Something, Sat" model duration: 11:30 - 13:00
"D14 - 2037 Do Minimum, Sat" model duration: 11:30 - 13:00
"D15 - 2037 Do Something, Sat" model duration: 11:30 - 13:00

Run using Junctions 8.0.6.541 at 19/10/2018 16:48:40

File summary

Title	A1117 Normanston Drive/A1117 Peto Way
Location	Lowestoft
Site Number	
Date	13/02/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ecopp
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) - 2016 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
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
2016 Base, AM	2016 Base	AM		ONE HOUR	08:00	09:30	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			5.97	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Fir Lane	
2	2	A1144 Normanston Drive	
3	3	Peto Way	
4	4	A1117 Normanston Drive	
5	5	A1117 Peto Way	

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	4.20	5.00	4.70	13.10	53.30	32.00	
2	3.30	7.30	22.10	23.60	53.30	35.00	
3	4.70	7.50	12.50	42.30	53.30	20.50	
4	3.20	7.40	35.10	12.50	53.30	53.00	
5	4.20	7.50	18.10	12.90	53.30	42.00	

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)	0.525	1382.785
2		(calculated)	(calculated)	0.599	1749.904
3		(calculated)	(calculated)	0.671	2030.963
4		(calculated)	(calculated)	0.560	1683.560
5		(calculated)	(calculated)	0.587	1773.547

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	✓	186.38	100.000
2	ONE HOUR	✓	179.21	100.000
3	ONE HOUR	✓	366.00	100.000
4	ONE HOUR	✓	1022.02	100.000
5	ONE HOUR	✓	378.63	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	0.000	18.871	167.509	0.000
	2	0.000	0.000	6.008	157.488	15.716
	3	18.304	13.944	0.000	181.691	152.061
	4	178.974	388.578	186.300	0.000	268.174
	5	0.000	69.585	206.018	103.031	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.00	0.10	0.90	0.00
	2	0.00	0.00	0.03	0.88	0.09
	3	0.05	0.04	0.00	0.50	0.42
	4	0.18	0.38	0.18	0.00	0.26
	5	0.00	0.18	0.54	0.27	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.25	5.82	0.33	A
2	0.15	3.26	0.18	A
3	0.24	2.77	0.31	A
4	0.72	8.26	2.55	A
5	0.33	4.24	0.49	A

Main Results for each time segment

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	140.32	139.67	725.26	0.00	1001.74	0.140	0.16	4.173	A
2	134.92	134.51	511.11	0.00	1443.50	0.093	0.10	2.750	A
3	275.54	274.83	332.82	0.00	1807.80	0.152	0.18	2.347	A
4	769.43	765.76	150.19	0.00	1599.53	0.481	0.92	4.299	A
5	285.05	284.06	589.04	0.00	1427.51	0.200	0.25	3.145	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	167.55	167.32	868.38	0.00	926.55	0.181	0.22	4.740	A
2	161.11	160.99	612.03	0.00	1383.00	0.116	0.13	2.945	A
3	329.03	328.83	398.51	0.00	1763.76	0.187	0.23	2.508	A
4	918.78	917.00	179.71	0.00	1583.01	0.580	1.36	5.391	A
5	340.38	340.05	705.35	0.00	1359.19	0.250	0.33	3.532	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	205.21	204.77	1061.99	0.00	824.83	0.249	0.33	5.802	A
2	197.32	197.13	748.82	0.00	1301.00	0.152	0.18	3.261	A
3	402.97	402.65	487.83	0.00	1703.87	0.237	0.31	2.766	A
4	1125.27	1120.70	220.05	0.00	1560.44	0.721	2.51	8.102	A
5	416.88	416.26	862.11	0.00	1267.10	0.329	0.49	4.228	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	205.21	205.20	1065.09	0.00	823.20	0.249	0.33	5.824	A
2	197.32	197.31	750.55	0.00	1299.96	0.152	0.18	3.264	A
3	402.97	402.97	488.56	0.00	1703.38	0.237	0.31	2.767	A
4	1125.27	1125.12	220.23	0.00	1560.34	0.721	2.55	8.262	A
5	416.88	416.87	865.40	0.00	1265.17	0.330	0.49	4.243	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	167.55	167.98	872.91	0.00	924.16	0.181	0.22	4.763	A
2	161.11	161.29	614.62	0.00	1381.45	0.117	0.13	2.952	A
3	329.03	329.34	399.65	0.00	1763.00	0.187	0.23	2.513	A
4	918.78	923.35	179.99	0.00	1582.85	0.580	1.40	5.495	A
5	340.38	340.99	710.08	0.00	1356.41	0.251	0.34	3.549	A

Main results: (09:15-09:30)

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	140.32	140.55	729.75	0.00	999.38	0.140	0.16	4.192	A
2	134.92	135.04	514.10	0.00	1441.71	0.094	0.10	2.754	A
3	275.54	275.74	334.49	0.00	1806.69	0.153	0.18	2.353	A
4	769.43	771.30	150.70	0.00	1599.24	0.481	0.94	4.357	A
5	285.05	285.40	593.21	0.00	1425.06	0.200	0.25	3.161	A

(Default Analysis Set) - 2016 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
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
2016 Base, PM	2016 Base	PM		ONE HOUR	17:00	18:30	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			4.33	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Fir Lane	
2	2	A1144 Normanston Drive	
3	3	Peto Way	
4	4	A1117 Normanston Drive	
5	5	A1117 Peto Way	

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	4.20	5.00	4.70	13.10	53.30	32.00	
2	3.30	7.30	22.10	23.60	53.30	35.00	
3	4.70	7.50	12.50	42.30	53.30	20.50	
4	3.20	7.40	35.10	12.50	53.30	53.00	
5	4.20	7.50	18.10	12.90	53.30	42.00	

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)	0.525	1382.785
2		(calculated)	(calculated)	0.599	1749.904
3		(calculated)	(calculated)	0.671	2030.963
4		(calculated)	(calculated)	0.560	1683.560
5		(calculated)	(calculated)	0.587	1773.547

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	✓	177.97	100.000
2	ONE HOUR	✓	327.51	100.000
3	ONE HOUR	✓	616.90	100.000
4	ONE HOUR	✓	678.57	100.000
5	ONE HOUR	✓	413.09	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	0.000	32.092	145.876	0.000
	2	0.000	0.000	6.268	292.035	29.208
	3	11.154	26.030	0.000	250.967	328.751
	4	114.639	257.843	130.527	0.000	175.566
	5	0.000	50.919	265.550	96.619	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.00	0.18	0.82	0.00
	2	0.00	0.00	0.02	0.89	0.09
	3	0.02	0.04	0.00	0.41	0.53
	4	0.17	0.38	0.19	0.00	0.26
	5	0.00	0.12	0.64	0.23	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.22	5.08	0.28	A
2	0.28	3.80	0.38	A
3	0.42	3.85	0.72	A
4	0.52	5.19	1.07	A
5	0.32	3.71	0.47	A

Main Results for each time segment

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	133.98	133.41	620.75	0.00	1056.65	0.127	0.14	3.896	A
2	246.57	245.75	503.06	0.00	1448.33	0.170	0.20	2.992	A
3	464.44	462.99	422.90	0.00	1747.40	0.266	0.36	2.801	A
4	510.87	508.85	296.56	0.00	1517.63	0.337	0.50	3.560	A
5	310.99	309.98	405.10	0.00	1535.57	0.203	0.25	2.934	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	159.99	159.80	743.13	0.00	992.35	0.161	0.19	4.323	A
2	294.43	294.17	602.31	0.00	1388.83	0.212	0.27	3.288	A
3	554.58	554.08	506.31	0.00	1691.47	0.328	0.49	3.163	A
4	610.02	609.27	354.91	0.00	1484.99	0.411	0.69	4.107	A
5	371.36	371.05	485.04	0.00	1488.61	0.249	0.33	3.221	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	195.95	195.61	909.65	0.00	904.87	0.217	0.27	5.073	A
2	360.60	360.15	737.32	0.00	1307.90	0.276	0.38	3.796	A
3	679.22	678.28	619.85	0.00	1615.35	0.420	0.72	3.837	A
4	747.12	745.63	434.46	0.00	1440.47	0.519	1.07	5.169	A
5	454.82	454.28	593.60	0.00	1424.84	0.319	0.47	3.707	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	195.95	195.94	911.06	0.00	904.12	0.217	0.28	5.082	A
2	360.60	360.59	738.40	0.00	1307.25	0.276	0.38	3.801	A
3	679.22	679.21	620.68	0.00	1614.79	0.421	0.72	3.847	A
4	747.12	747.10	435.05	0.00	1440.14	0.519	1.07	5.194	A
5	454.82	454.81	594.74	0.00	1424.17	0.319	0.47	3.712	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	159.99	160.32	745.31	0.00	991.21	0.161	0.19	4.334	A
2	294.43	294.86	603.99	0.00	1387.82	0.212	0.27	3.296	A
3	554.58	555.51	507.61	0.00	1690.60	0.328	0.49	3.173	A
4	610.02	611.50	355.81	0.00	1484.48	0.411	0.70	4.132	A
5	371.36	371.89	486.77	0.00	1487.59	0.250	0.33	3.229	A

Main results: (18:15-18:30)

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	133.98	134.17	623.75	0.00	1055.07	0.127	0.15	3.911	A
2	246.57	246.82	505.53	0.00	1446.85	0.170	0.21	2.999	A
3	464.44	464.94	424.89	0.00	1746.07	0.266	0.36	2.810	A
4	510.87	511.63	297.81	0.00	1516.93	0.337	0.51	3.582	A
5	310.99	311.31	407.29	0.00	1534.29	0.203	0.26	2.946	A

(Default Analysis Set) - 2022 Do Minimum, AM

Data Errors and Warnings

Severity	Area	Item	Description
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
2022 Do Minimum, AM	2022 Do Minimum	AM		ONE HOUR	08:00	09:30	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			7.40	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Fir Lane	
2	2	A1144 Normanston Drive	
3	3	Peto Way	
4	4	A1117 Normanston Drive	
5	5	A1117 Peto Way	

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	4.20	5.00	4.70	13.10	53.30	32.00	
2	3.30	7.30	22.10	23.60	53.30	35.00	
3	4.70	7.50	12.50	42.30	53.30	20.50	
4	3.20	7.40	35.10	12.50	53.30	53.00	
5	4.20	7.50	18.10	12.90	53.30	42.00	

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)	0.525	1382.785
2		(calculated)	(calculated)	0.599	1749.904
3		(calculated)	(calculated)	0.671	2030.963
4		(calculated)	(calculated)	0.560	1683.560
5		(calculated)	(calculated)	0.587	1773.547

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	✓	209.49	100.000
2	ONE HOUR	✓	196.90	100.000
3	ONE HOUR	✓	392.08	100.000
4	ONE HOUR	✓	1089.45	100.000
5	ONE HOUR	✓	393.10	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	0.000	27.978	181.512	0.000
	2	0.000	0.000	7.915	170.689	18.291
	3	10.060	37.813	0.000	161.472	182.732
	4	180.115	497.372	175.154	0.000	236.812
	5	0.000	115.580	244.472	33.049	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.00	0.13	0.87	0.00
	2	0.00	0.00	0.04	0.87	0.09
	3	0.03	0.10	0.00	0.41	0.47
	4	0.17	0.46	0.16	0.00	0.22
	5	0.00	0.29	0.62	0.08	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.31	7.00	0.45	A
2	0.17	3.28	0.20	A
3	0.25	2.77	0.33	A
4	0.78	10.84	3.53	B
5	0.36	4.75	0.57	A

Main Results for each time segment

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	157.71	156.92	826.92	0.00	948.33	0.166	0.20	4.544	A
2	148.23	147.78	496.26	0.00	1452.40	0.102	0.11	2.759	A
3	295.18	294.41	302.59	0.00	1828.07	0.161	0.19	2.346	A
4	820.20	815.92	186.89	0.00	1578.99	0.519	1.07	4.692	A
5	295.95	294.86	674.51	0.00	1377.30	0.215	0.27	3.323	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	188.33	188.01	990.09	0.00	862.60	0.218	0.28	5.334	A
2	177.00	176.88	594.30	0.00	1393.64	0.127	0.14	2.958	A
3	352.47	352.26	362.35	0.00	1788.01	0.197	0.24	2.507	A
4	979.40	977.03	223.62	0.00	1558.44	0.628	1.66	6.165	A
5	353.39	352.99	807.66	0.00	1299.08	0.272	0.37	3.802	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	230.65	229.99	1209.70	0.00	747.22	0.309	0.44	6.951	A
2	216.79	216.58	726.71	0.00	1314.26	0.165	0.20	3.279	A
3	431.68	431.34	443.47	0.00	1733.61	0.249	0.33	2.764	A
4	1199.51	1192.38	273.82	0.00	1530.36	0.784	3.45	10.434	B
5	432.81	432.04	985.86	0.00	1194.40	0.362	0.56	4.717	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	230.65	230.64	1214.68	0.00	744.60	0.310	0.45	7.003	A
2	216.79	216.78	728.97	0.00	1312.90	0.165	0.20	3.283	A
3	431.68	431.68	444.29	0.00	1733.06	0.249	0.33	2.765	A
4	1199.51	1199.17	274.04	0.00	1530.23	0.784	3.53	10.842	B
5	432.81	432.80	991.22	0.00	1191.26	0.363	0.57	4.746	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	188.33	188.98	997.23	0.00	858.85	0.219	0.28	5.378	A
2	177.00	177.21	597.62	0.00	1391.64	0.127	0.15	2.964	A
3	352.47	352.81	363.60	0.00	1787.17	0.197	0.25	2.509	A
4	979.40	986.63	223.97	0.00	1558.25	0.629	1.72	6.374	A
5	353.39	354.15	815.25	0.00	1294.63	0.273	0.38	3.832	A

Main results: (09:15-09:30)

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	157.71	158.04	832.71	0.00	945.29	0.167	0.20	4.574	A
2	148.23	148.36	499.53	0.00	1450.44	0.102	0.11	2.766	A
3	295.18	295.39	304.25	0.00	1826.96	0.162	0.19	2.350	A
4	820.20	822.72	187.52	0.00	1578.64	0.520	1.09	4.777	A
5	295.95	296.35	679.95	0.00	1374.11	0.215	0.28	3.343	A

(Default Analysis Set) - 2022 Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
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
2022 Do Minimum, PM	2022 Do Minimum	PM		ONE HOUR	17:00	18:30	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			4.99	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Fir Lane	
2	2	A1144 Normanston Drive	
3	3	Peto Way	
4	4	A1117 Normanston Drive	
5	5	A1117 Peto Way	

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	4.20	5.00	4.70	13.10	53.30	32.00	
2	3.30	7.30	22.10	23.60	53.30	35.00	
3	4.70	7.50	12.50	42.30	53.30	20.50	
4	3.20	7.40	35.10	12.50	53.30	53.00	
5	4.20	7.50	18.10	12.90	53.30	42.00	

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)	0.525	1382.785
2		(calculated)	(calculated)	0.599	1749.904
3		(calculated)	(calculated)	0.671	2030.963
4		(calculated)	(calculated)	0.560	1683.560
5		(calculated)	(calculated)	0.587	1773.547

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	✓	156.59	100.000
2	ONE HOUR	✓	416.39	100.000
3	ONE HOUR	✓	639.31	100.000
4	ONE HOUR	✓	778.58	100.000
5	ONE HOUR	✓	452.14	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	0.000	28.149	128.436	0.000
	2	0.000	0.000	11.574	344.378	60.436
	3	5.153	50.320	0.000	268.470	315.362
	4	122.609	261.972	143.610	0.000	250.387
	5	0.000	64.707	249.142	138.294	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.00	0.18	0.82	0.00
	2	0.00	0.00	0.03	0.83	0.15
	3	0.01	0.08	0.00	0.42	0.49
	4	0.16	0.34	0.18	0.00	0.32
	5	0.00	0.14	0.55	0.31	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.20	5.25	0.25	A
2	0.35	4.30	0.55	A
3	0.46	4.33	0.84	A
4	0.60	6.42	1.52	A
5	0.36	4.01	0.55	A

Main Results for each time segment

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	117.89	117.37	681.02	0.00	1024.98	0.115	0.13	3.965	A
2	313.48	312.37	515.71	0.00	1440.74	0.218	0.28	3.187	A
3	481.30	479.72	503.72	0.00	1693.21	0.284	0.40	2.962	A
4	586.15	583.61	323.61	0.00	1502.50	0.390	0.64	3.906	A
5	340.40	339.24	437.55	0.00	1516.51	0.224	0.29	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	140.77	140.60	815.33	0.00	954.42	0.147	0.17	4.422	A
2	374.32	373.95	617.48	0.00	1379.74	0.271	0.37	3.579	A
3	574.72	574.13	603.09	0.00	1626.59	0.353	0.54	3.418	A
4	699.93	698.85	387.31	0.00	1466.86	0.477	0.90	4.680	A
5	406.47	406.09	523.92	0.00	1465.77	0.277	0.38	3.397	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	172.40	172.09	997.76	0.00	858.57	0.201	0.25	5.241	A
2	458.45	457.76	755.77	0.00	1296.83	0.354	0.54	4.286	A
3	703.89	702.71	738.25	0.00	1535.96	0.458	0.84	4.314	A
4	857.23	854.84	474.05	0.00	1418.32	0.604	1.50	6.362	A
5	497.82	497.15	640.90	0.00	1397.05	0.356	0.55	3.998	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	172.40	172.40	999.74	0.00	857.53	0.201	0.25	5.253	A
2	458.45	458.44	757.07	0.00	1296.05	0.354	0.55	4.297	A
3	703.89	703.87	739.37	0.00	1535.21	0.459	0.84	4.330	A
4	857.23	857.18	474.83	0.00	1417.89	0.605	1.52	6.420	A
5	497.82	497.81	642.59	0.00	1396.06	0.357	0.55	4.007	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	140.77	141.07	818.30	0.00	952.86	0.148	0.17	4.437	A
2	374.32	375.01	619.48	0.00	1378.54	0.272	0.37	3.591	A
3	574.72	575.89	604.82	0.00	1625.43	0.354	0.55	3.433	A
4	699.93	702.30	388.48	0.00	1466.20	0.477	0.92	4.726	A
5	406.47	407.13	526.41	0.00	1464.31	0.278	0.39	3.406	A

Main results: (18:15-18:30)

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	117.89	118.06	684.63	0.00	1023.09	0.115	0.13	3.979	A
2	313.48	313.86	518.39	0.00	1439.14	0.218	0.28	3.199	A
3	481.30	481.91	506.20	0.00	1691.55	0.285	0.40	2.976	A
4	586.15	587.26	325.09	0.00	1501.67	0.390	0.64	3.941	A
5	340.40	340.78	440.22	0.00	1514.94	0.225	0.29	3.066	A

(Default Analysis Set) - 2022 Do Something, AM

Data Errors and Warnings

Severity	Area	Item	Description
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
2022 Do Something, AM	2022 Do Something	AM		ONE HOUR	08:00	09:30	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			7.85	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Fir Lane	
2	2	A1144 Normanston Drive	
3	3	Peto Way	
4	4	A1117 Normanston Drive	
5	5	A1117 Peto Way	

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	4.20	5.00	4.70	13.10	53.30	32.00	
2	3.30	7.30	22.10	23.60	53.30	35.00	
3	4.70	7.50	12.50	42.30	53.30	20.50	
4	3.20	7.40	35.10	12.50	53.30	53.00	
5	4.20	7.50	18.10	12.90	53.30	42.00	

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)	0.525	1382.785
2		(calculated)	(calculated)	0.599	1749.904
3		(calculated)	(calculated)	0.671	2030.963
4		(calculated)	(calculated)	0.560	1683.560
5		(calculated)	(calculated)	0.587	1773.547

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	✓	241.58	100.000
2	ONE HOUR	✓	202.65	100.000
3	ONE HOUR	✓	709.79	100.000
4	ONE HOUR	✓	765.34	100.000
5	ONE HOUR	✓	801.34	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	0.000	130.378	111.207	0.000
	2	0.000	0.000	45.934	146.651	10.070
	3	36.558	155.511	0.000	106.779	410.946
	4	125.855	384.868	149.890	0.000	104.730
	5	0.000	93.519	607.150	100.667	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.00	0.54	0.46	0.00
	2	0.00	0.00	0.23	0.72	0.05
	3	0.05	0.22	0.00	0.15	0.58
	4	0.16	0.50	0.20	0.00	0.14
	5	0.00	0.12	0.76	0.13	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.51	14.15	1.03	B
2	0.22	4.49	0.28	A
3	0.44	3.68	0.80	A
4	0.65	7.77	1.80	A
5	0.72	10.57	2.54	B

Main Results for each time segment

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	181.88	180.70	1117.71	0.00	795.55	0.229	0.29	5.845	A
2	152.57	152.02	823.24	0.00	1256.39	0.121	0.14	3.258	A
3	534.37	532.75	276.15	0.00	1845.80	0.290	0.41	2.738	A
4	576.19	573.50	460.16	0.00	1426.10	0.404	0.67	4.223	A
5	603.29	600.28	639.18	0.00	1398.06	0.432	0.75	4.495	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	217.18	216.50	1338.22	0.00	679.70	0.320	0.46	7.760	A
2	182.18	181.99	985.81	0.00	1158.93	0.157	0.19	3.684	A
3	638.09	637.54	330.68	0.00	1809.24	0.353	0.54	3.070	A
4	688.03	686.76	550.68	0.00	1375.45	0.500	0.99	5.218	A
5	720.38	718.69	765.30	0.00	1323.97	0.544	1.18	5.931	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	265.99	263.84	1634.64	0.00	523.96	0.508	1.00	13.727	B
2	223.13	222.77	1202.96	0.00	1028.75	0.217	0.28	4.464	A
3	781.50	780.49	403.91	0.00	1760.14	0.444	0.79	3.671	A
4	842.66	839.52	674.15	0.00	1306.37	0.645	1.78	7.660	A
5	882.29	877.06	935.84	0.00	1223.79	0.721	2.48	10.230	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	265.99	265.88	1642.00	0.00	520.10	0.511	1.03	14.149	B
2	223.13	223.12	1210.02	0.00	1024.52	0.218	0.28	4.491	A
3	781.50	781.48	405.75	0.00	1758.91	0.444	0.80	3.682	A
4	842.66	842.57	675.01	0.00	1305.89	0.645	1.80	7.766	A
5	882.29	882.06	938.74	0.00	1222.08	0.722	2.54	10.569	B

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	217.18	219.36	1348.63	0.00	674.23	0.322	0.48	7.952	A
2	182.18	182.54	995.72	0.00	1152.99	0.158	0.19	3.710	A
3	638.09	639.08	333.31	0.00	1807.48	0.353	0.55	3.085	A
4	688.03	691.16	552.01	0.00	1374.70	0.500	1.01	5.289	A
5	720.38	725.69	769.52	0.00	1321.49	0.545	1.22	6.093	A

Main results: (09:15-09:30)

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	181.88	182.60	1125.79	0.00	791.31	0.230	0.30	5.922	A
2	152.57	152.77	830.16	0.00	1252.24	0.122	0.14	3.274	A
3	534.37	534.93	278.21	0.00	1844.42	0.290	0.41	2.749	A
4	576.19	577.51	462.04	0.00	1425.04	0.404	0.68	4.255	A
5	603.29	605.08	643.23	0.00	1395.68	0.432	0.77	4.563	A

(Default Analysis Set) - 2022 Do Something, PM

Data Errors and Warnings

Severity	Area	Item	Description
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
2022 Do Something, PM	2022 Do Something	PM		ONE HOUR	17:00	18:30	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			6.19	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Fir Lane	
2	2	A1144 Normanston Drive	
3	3	Peto Way	
4	4	A1117 Normanston Drive	
5	5	A1117 Peto Way	

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	4.20	5.00	4.70	13.10	53.30	32.00	
2	3.30	7.30	22.10	23.60	53.30	35.00	
3	4.70	7.50	12.50	42.30	53.30	20.50	
4	3.20	7.40	35.10	12.50	53.30	53.00	
5	4.20	7.50	18.10	12.90	53.30	42.00	

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)	0.525	1382.785
2		(calculated)	(calculated)	0.599	1749.904
3		(calculated)	(calculated)	0.671	2030.963
4		(calculated)	(calculated)	0.560	1683.560
5		(calculated)	(calculated)	0.587	1773.547

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	✓	371.86	100.000
2	ONE HOUR	✓	452.00	100.000
3	ONE HOUR	✓	958.52	100.000
4	ONE HOUR	✓	480.41	100.000
5	ONE HOUR	✓	547.55	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	0.000	206.854	165.006	0.000
	2	0.000	0.000	96.644	305.253	50.105
	3	18.829	114.376	0.000	184.531	640.789
	4	102.942	183.942	96.157	0.000	97.373
	5	0.000	53.362	399.826	94.359	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.00	0.56	0.44	0.00
	2	0.00	0.00	0.21	0.68	0.11
	3	0.02	0.12	0.00	0.19	0.67
	4	0.21	0.38	0.20	0.00	0.20
	5	0.00	0.10	0.73	0.17	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.49	8.40	0.95	A
2	0.45	5.83	0.80	A
3	0.67	6.89	2.00	A
4	0.45	5.56	0.81	A
5	0.42	4.30	0.72	A

Main Results for each time segment

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	279.96	278.44	706.56	0.00	1011.57	0.277	0.38	4.900	A
2	340.29	338.91	721.28	0.00	1317.51	0.258	0.35	3.674	A
3	721.63	718.76	460.78	0.00	1722.00	0.419	0.72	3.578	A
4	361.68	360.21	617.96	0.00	1337.81	0.270	0.37	3.678	A
5	412.22	410.77	387.08	0.00	1546.15	0.267	0.36	3.166	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	334.29	333.62	845.86	0.00	938.38	0.356	0.55	5.947	A
2	406.34	405.77	863.77	0.00	1232.09	0.330	0.49	4.354	A
3	861.69	860.29	551.79	0.00	1660.98	0.519	1.07	4.487	A
4	431.88	431.31	739.65	0.00	1269.72	0.340	0.51	4.291	A
5	492.23	491.74	463.44	0.00	1501.30	0.328	0.49	3.563	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	409.43	407.87	1035.15	0.00	838.93	0.488	0.94	8.320	A
2	497.66	496.44	1056.79	0.00	1116.38	0.446	0.80	5.795	A
3	1055.35	1051.73	675.01	0.00	1578.36	0.669	1.97	6.788	A
4	528.95	527.77	904.28	0.00	1177.60	0.449	0.81	5.529	A
5	602.86	601.94	566.95	0.00	1440.49	0.419	0.71	4.289	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	409.43	409.39	1037.15	0.00	837.88	0.489	0.95	8.400	A
2	497.66	497.64	1059.35	0.00	1114.85	0.446	0.80	5.832	A
3	1055.35	1055.26	676.78	0.00	1577.17	0.669	2.00	6.895	A
4	528.95	528.92	907.27	0.00	1175.94	0.450	0.81	5.563	A
5	602.86	602.85	568.36	0.00	1439.66	0.419	0.72	4.301	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	334.29	335.84	848.88	0.00	936.79	0.357	0.56	6.007	A
2	406.34	407.56	867.59	0.00	1229.80	0.330	0.50	4.386	A
3	861.69	865.32	554.42	0.00	1659.22	0.519	1.09	4.556	A
4	431.88	433.05	743.91	0.00	1267.33	0.341	0.52	4.320	A
5	492.23	493.14	465.53	0.00	1500.07	0.328	0.49	3.577	A

Main results: (18:15-18:30)

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	279.96	280.65	710.22	0.00	1009.64	0.277	0.39	4.944	A
2	340.29	340.87	725.66	0.00	1314.88	0.259	0.35	3.700	A
3	721.63	723.08	463.65	0.00	1720.08	0.420	0.73	3.618	A
4	361.68	362.27	621.66	0.00	1335.73	0.271	0.37	3.699	A
5	412.22	412.72	389.33	0.00	1544.84	0.267	0.37	3.180	A

(Default Analysis Set) - 2037 Do Minimum, AM

Data Errors and Warnings

Severity	Area	Item	Description
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
2037 Do Minimum, AM	2037 Do Minimum	AM		ONE HOUR	08:00	09:30	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			20.28	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Fir Lane	
2	2	A1144 Normanston Drive	
3	3	Peto Way	
4	4	A1117 Normanston Drive	
5	5	A1117 Peto Way	

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	4.20	5.00	4.70	13.10	53.30	32.00	
2	3.30	7.30	22.10	23.60	53.30	35.00	
3	4.70	7.50	12.50	42.30	53.30	20.50	
4	3.20	7.40	35.10	12.50	53.30	53.00	
5	4.20	7.50	18.10	12.90	53.30	42.00	

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)	0.525	1382.785
2		(calculated)	(calculated)	0.599	1749.904
3		(calculated)	(calculated)	0.671	2030.963
4		(calculated)	(calculated)	0.560	1683.560
5		(calculated)	(calculated)	0.587	1773.547

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	✓	223.83	100.000
2	ONE HOUR	✓	226.25	100.000
3	ONE HOUR	✓	477.99	100.000
4	ONE HOUR	✓	1285.19	100.000
5	ONE HOUR	✓	470.12	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	0.000	31.501	192.325	0.000
	2	0.000	0.000	9.105	193.494	23.651
	3	3.711	45.750	0.000	189.036	239.494
	4	187.576	594.523	205.972	0.000	297.123
	5	0.000	150.918	293.858	25.346	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.00	0.14	0.86	0.00
	2	0.00	0.00	0.04	0.86	0.10
	3	0.01	0.10	0.00	0.40	0.50
	4	0.15	0.46	0.16	0.00	0.23
	5	0.00	0.32	0.63	0.05	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.39	9.53	0.64	A
2	0.20	3.57	0.25	A
3	0.31	3.04	0.44	A
4	0.95	36.68	13.54	E
5	0.47	6.11	0.87	A

Main Results for each time segment

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	168.51	167.55	985.42	0.00	865.05	0.195	0.24	5.155	A
2	170.33	169.79	560.89	0.00	1413.66	0.120	0.14	2.892	A
3	359.86	358.87	325.92	0.00	1812.43	0.199	0.25	2.475	A
4	967.56	961.06	234.69	0.00	1552.25	0.623	1.63	6.026	A
5	353.93	352.47	776.01	0.00	1317.68	0.269	0.37	3.725	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	201.22	200.76	1179.34	0.00	763.17	0.264	0.35	6.395	A
2	203.39	203.23	671.58	0.00	1347.30	0.151	0.18	3.146	A
3	429.70	429.41	390.31	0.00	1769.26	0.243	0.32	2.686	A
4	1155.36	1149.91	280.83	0.00	1526.43	0.757	2.99	9.424	A
5	422.63	422.01	928.50	0.00	1228.10	0.344	0.52	4.466	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	246.44	245.35	1426.97	0.00	633.07	0.389	0.63	9.259	A
2	249.11	248.83	817.27	0.00	1259.96	0.198	0.25	3.560	A
3	526.28	525.79	477.47	0.00	1710.81	0.308	0.44	3.036	A
4	1415.03	1381.30	343.86	0.00	1491.17	0.949	11.42	26.957	D
5	517.61	516.29	1116.37	0.00	1117.74	0.463	0.85	5.972	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	246.44	246.37	1443.99	0.00	624.13	0.395	0.64	9.527	A
2	249.11	249.10	823.19	0.00	1256.42	0.198	0.25	3.572	A
3	526.28	526.27	478.67	0.00	1710.01	0.308	0.44	3.040	A
4	1415.03	1406.55	344.18	0.00	1490.99	0.949	13.54	36.682	E
5	517.61	517.54	1135.83	0.00	1106.30	0.468	0.87	6.114	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	201.22	202.30	1210.36	0.00	746.88	0.269	0.37	6.622	A
2	203.39	203.66	681.91	0.00	1341.11	0.152	0.18	3.164	A
3	429.70	430.19	392.15	0.00	1768.02	0.243	0.32	2.691	A
4	1155.36	1196.48	281.35	0.00	1526.14	0.757	3.26	12.171	B
5	422.63	423.94	964.38	0.00	1207.02	0.350	0.54	4.604	A

Main results: (09:15-09:30)

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	168.51	169.02	995.66	0.00	859.67	0.196	0.25	5.217	A
2	170.33	170.50	565.87	0.00	1410.68	0.121	0.14	2.902	A
3	359.86	360.15	327.99	0.00	1811.05	0.199	0.25	2.481	A
4	967.56	973.86	235.54	0.00	1551.77	0.624	1.69	6.297	A
5	353.93	354.62	785.98	0.00	1311.82	0.270	0.37	3.765	A

(Default Analysis Set) - 2037 Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
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
2037 Do Minimum, PM	2037 Do Minimum	PM		ONE HOUR	17:00	18:30	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			6.18	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Fir Lane	
2	2	A1144 Normanston Drive	
3	3	Peto Way	
4	4	A1117 Normanston Drive	
5	5	A1117 Peto Way	

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	4.20	5.00	4.70	13.10	53.30	32.00	
2	3.30	7.30	22.10	23.60	53.30	35.00	
3	4.70	7.50	12.50	42.30	53.30	20.50	
4	3.20	7.40	35.10	12.50	53.30	53.00	
5	4.20	7.50	18.10	12.90	53.30	42.00	

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)	0.525	1382.785
2		(calculated)	(calculated)	0.599	1749.904
3		(calculated)	(calculated)	0.671	2030.963
4		(calculated)	(calculated)	0.560	1683.560
5		(calculated)	(calculated)	0.587	1773.547

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	✓	170.53	100.000
2	ONE HOUR	✓	460.03	100.000
3	ONE HOUR	✓	757.06	100.000
4	ONE HOUR	✓	855.25	100.000
5	ONE HOUR	✓	446.95	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	0.000	31.479	139.047	0.000
	2	0.000	0.000	13.328	362.019	84.683
	3	5.752	62.173	0.000	284.950	404.181
	4	146.739	290.279	161.080	0.000	257.149
	5	0.000	69.559	277.042	100.347	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.00	0.18	0.82	0.00
	2	0.00	0.00	0.03	0.79	0.18
	3	0.01	0.08	0.00	0.38	0.53
	4	0.17	0.34	0.19	0.00	0.30
	5	0.00	0.16	0.62	0.22	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.23	5.63	0.29	A
2	0.40	4.64	0.65	A
3	0.55	5.21	1.20	A
4	0.70	9.01	2.32	A
5	0.37	4.23	0.58	A

Main Results for each time segment

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	128.38	127.80	720.09	0.00	1004.46	0.128	0.15	4.104	A
2	346.33	345.06	531.60	0.00	1431.22	0.242	0.32	3.312	A
3	569.95	567.92	514.56	0.00	1685.95	0.338	0.51	3.214	A
4	643.88	640.71	417.68	0.00	1449.86	0.444	0.79	4.433	A
5	336.49	335.31	499.02	0.00	1480.40	0.227	0.29	3.141	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	153.30	153.10	862.14	0.00	929.83	0.165	0.20	4.633	A
2	413.56	413.11	636.53	0.00	1368.31	0.302	0.43	3.766	A
3	680.58	679.73	616.09	0.00	1617.87	0.421	0.72	3.834	A
4	768.85	767.24	499.93	0.00	1403.85	0.548	1.19	5.639	A
5	401.80	401.40	597.54	0.00	1422.52	0.282	0.39	3.526	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	187.75	187.38	1054.33	0.00	828.85	0.227	0.29	5.608	A
2	506.50	505.64	778.81	0.00	1283.02	0.395	0.65	4.626	A
3	833.53	831.66	754.09	0.00	1525.34	0.546	1.19	5.176	A
4	941.65	937.29	611.71	0.00	1341.30	0.702	2.28	8.815	A
5	492.10	491.37	730.09	0.00	1344.65	0.366	0.57	4.215	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	187.75	187.75	1057.41	0.00	827.23	0.227	0.29	5.628	A
2	506.50	506.49	780.57	0.00	1281.97	0.395	0.65	4.641	A
3	833.53	833.50	755.38	0.00	1524.47	0.547	1.20	5.209	A
4	941.65	941.49	613.01	0.00	1340.57	0.702	2.32	9.011	A
5	492.10	492.09	733.20	0.00	1342.83	0.366	0.58	4.231	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	153.30	153.67	866.63	0.00	927.47	0.165	0.20	4.656	A
2	413.56	414.41	639.17	0.00	1366.73	0.303	0.44	3.782	A
3	680.58	682.44	618.08	0.00	1616.53	0.421	0.73	3.861	A
4	768.85	773.22	501.86	0.00	1402.76	0.548	1.23	5.756	A
5	401.80	402.51	601.96	0.00	1419.92	0.283	0.40	3.542	A

Main results: (18:15-18:30)

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	128.38	128.59	724.47	0.00	1002.16	0.128	0.15	4.121	A
2	346.33	346.80	534.63	0.00	1429.40	0.242	0.32	3.325	A
3	569.95	570.82	517.23	0.00	1684.15	0.338	0.51	3.237	A
4	643.88	645.56	419.81	0.00	1448.67	0.444	0.81	4.493	A
5	336.49	336.89	502.68	0.00	1478.25	0.228	0.30	3.156	A

(Default Analysis Set) - 2037 Do Something, AM

Data Errors and Warnings

Severity	Area	Item	Description
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
2037 Do Something, AM	2037 Do Something	AM		ONE HOUR	08:00	09:30	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			18.00	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Fir Lane	
2	2	A1144 Normanston Drive	
3	3	Peto Way	
4	4	A1117 Normanston Drive	
5	5	A1117 Peto Way	

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	4.20	5.00	4.70	13.10	53.30	32.00	
2	3.30	7.30	22.10	23.60	53.30	35.00	
3	4.70	7.50	12.50	42.30	53.30	20.50	
4	3.20	7.40	35.10	12.50	53.30	53.00	
5	4.20	7.50	18.10	12.90	53.30	42.00	

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)	0.525	1382.785
2		(calculated)	(calculated)	0.599	1749.904
3		(calculated)	(calculated)	0.671	2030.963
4		(calculated)	(calculated)	0.560	1683.560
5		(calculated)	(calculated)	0.587	1773.547

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	✓	278.86	100.000
2	ONE HOUR	✓	238.83	100.000
3	ONE HOUR	✓	844.30	100.000
4	ONE HOUR	✓	927.36	100.000
5	ONE HOUR	✓	914.89	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	0.000	156.352	122.511	0.000
	2	0.000	0.000	53.468	168.892	16.471
	3	45.604	174.635	0.000	123.107	500.956
	4	142.479	463.404	170.290	0.000	151.186
	5	0.000	108.218	697.247	109.424	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.00	0.56	0.44	0.00
	2	0.00	0.00	0.22	0.71	0.07
	3	0.05	0.21	0.00	0.15	0.59
	4	0.15	0.50	0.18	0.00	0.16
	5	0.00	0.12	0.76	0.12	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.79	41.82	3.34	E
2	0.28	5.45	0.40	A
3	0.54	4.53	1.16	A
4	0.83	17.05	4.65	C
5	0.89	27.40	7.21	D

Main Results for each time segment

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	209.94	208.27	1289.89	0.00	705.09	0.298	0.42	7.221	A
2	179.80	179.09	939.31	0.00	1186.80	0.152	0.18	3.571	A
3	635.64	633.50	312.37	0.00	1821.51	0.349	0.53	3.025	A
4	698.16	694.08	553.48	0.00	1373.88	0.508	1.02	5.264	A
5	688.78	684.57	746.18	0.00	1335.21	0.516	1.05	5.498	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	250.69	249.31	1543.80	0.00	571.69	0.439	0.76	11.120	B
2	214.70	214.42	1124.16	0.00	1075.99	0.200	0.25	4.177	A
3	759.01	758.19	373.92	0.00	1780.24	0.426	0.74	3.518	A
4	833.68	830.95	662.43	0.00	1312.93	0.635	1.70	7.425	A
5	822.47	819.16	893.26	0.00	1248.80	0.659	1.88	8.315	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	307.03	298.69	1871.22	0.00	399.66	0.768	2.85	33.306	D
2	262.96	262.40	1356.24	0.00	936.87	0.281	0.39	5.333	A
3	929.59	927.93	453.17	0.00	1727.11	0.538	1.15	4.496	A
4	1021.04	1010.10	810.73	0.00	1229.95	0.830	4.44	15.648	C
5	1007.31	989.06	1087.48	0.00	1134.71	0.888	6.44	22.387	C

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	307.03	305.07	1893.64	0.00	387.89	0.792	3.34	41.818	E
2	262.96	262.93	1377.87	0.00	923.90	0.285	0.40	5.446	A
3	929.59	929.56	458.20	0.00	1723.74	0.539	1.16	4.532	A
4	1021.04	1020.18	812.15	0.00	1229.15	0.831	4.65	17.047	C
5	1007.31	1004.25	1096.34	0.00	1129.50	0.892	7.21	27.395	D

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	250.69	260.67	1578.08	0.00	553.68	0.453	0.85	12.684	B
2	214.70	215.26	1159.35	0.00	1054.90	0.204	0.26	4.290	A
3	759.01	760.65	382.44	0.00	1774.54	0.428	0.75	3.558	A
4	833.68	845.15	664.59	0.00	1311.72	0.636	1.78	7.898	A
5	822.47	843.23	905.79	0.00	1241.44	0.663	2.02	9.488	A

Main results: (09:15-09:30)

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	209.94	211.59	1303.25	0.00	698.07	0.301	0.44	7.423	A
2	179.80	180.11	950.93	0.00	1179.84	0.152	0.18	3.603	A
3	635.64	636.49	315.57	0.00	1819.37	0.349	0.54	3.044	A
4	698.16	701.11	556.10	0.00	1372.42	0.509	1.05	5.385	A
5	688.78	692.51	752.84	0.00	1331.29	0.517	1.09	5.669	A

(Default Analysis Set) - 2037 Do Something, PM

Data Errors and Warnings

Severity	Area	Item	Description
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
2037 Do Something, PM	2037 Do Something	PM		ONE HOUR	17:00	18:30	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			8.52	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Fir Lane	
2	2	A1144 Normanston Drive	
3	3	Peto Way	
4	4	A1117 Normanston Drive	
5	5	A1117 Peto Way	

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	4.20	5.00	4.70	13.10	53.30	32.00	
2	3.30	7.30	22.10	23.60	53.30	35.00	
3	4.70	7.50	12.50	42.30	53.30	20.50	
4	3.20	7.40	35.10	12.50	53.30	53.00	
5	4.20	7.50	18.10	12.90	53.30	42.00	

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)	0.525	1382.785
2		(calculated)	(calculated)	0.599	1749.904
3		(calculated)	(calculated)	0.671	2030.963
4		(calculated)	(calculated)	0.560	1683.560
5		(calculated)	(calculated)	0.587	1773.547

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	✓	370.62	100.000
2	ONE HOUR	✓	524.67	100.000
3	ONE HOUR	✓	1113.23	100.000
4	ONE HOUR	✓	593.71	100.000
5	ONE HOUR	✓	599.08	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	0.000	211.700	158.915	0.000
	2	0.000	0.000	133.624	331.739	59.311
	3	43.293	124.111	0.000	208.790	737.031
	4	111.934	208.770	124.238	0.000	148.766
	5	0.000	64.542	448.507	86.031	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.00	0.57	0.43	0.00
	2	0.00	0.00	0.25	0.63	0.11
	3	0.04	0.11	0.00	0.19	0.66
	4	0.19	0.35	0.21	0.00	0.25
	5	0.00	0.11	0.75	0.14	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.53	9.89	1.11	A
2	0.54	7.30	1.16	A
3	0.78	10.68	3.55	B
4	0.60	8.24	1.48	A
5	0.48	5.01	0.91	A

Main Results for each time segment

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	279.02	277.41	791.84	0.00	966.76	0.289	0.40	5.211	A
2	395.00	393.24	771.40	0.00	1287.46	0.307	0.44	4.020	A
3	838.09	834.29	476.56	0.00	1711.42	0.490	0.95	4.088	A
4	446.97	444.84	722.27	0.00	1279.44	0.349	0.53	4.303	A
5	451.02	449.31	458.84	0.00	1504.00	0.300	0.43	3.407	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	333.18	332.40	948.02	0.00	884.70	0.377	0.60	6.508	A
2	471.67	470.85	923.83	0.00	1196.08	0.394	0.65	4.959	A
3	1000.77	998.48	570.71	0.00	1648.30	0.607	1.52	5.519	A
4	533.73	532.69	864.44	0.00	1199.90	0.445	0.79	5.386	A
5	538.56	537.92	549.36	0.00	1450.82	0.371	0.59	3.941	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	408.05	406.08	1159.27	0.00	773.72	0.527	1.09	9.740	A
2	577.68	575.67	1129.71	0.00	1072.67	0.539	1.15	7.215	A
3	1225.68	1217.96	697.72	0.00	1563.14	0.784	3.45	10.207	B
4	653.68	651.04	1054.60	0.00	1093.50	0.598	1.45	8.087	A
5	659.60	658.32	671.06	0.00	1379.33	0.478	0.91	4.983	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	408.05	407.99	1162.77	0.00	771.88	0.529	1.11	9.888	A
2	577.68	577.62	1133.27	0.00	1070.53	0.540	1.16	7.303	A
3	1225.68	1225.30	700.17	0.00	1561.49	0.785	3.55	10.675	B
4	653.68	653.59	1060.78	0.00	1090.04	0.600	1.48	8.244	A
5	659.60	659.57	674.07	0.00	1377.56	0.479	0.91	5.013	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	333.18	335.15	953.14	0.00	882.02	0.378	0.61	6.608	A
2	471.67	473.68	929.06	0.00	1192.95	0.395	0.66	5.020	A
3	1000.77	1008.67	574.27	0.00	1645.91	0.608	1.58	5.716	A
4	533.73	536.38	873.03	0.00	1195.09	0.447	0.82	5.488	A
5	538.56	539.83	553.66	0.00	1448.30	0.372	0.60	3.967	A

Main results: (18:15-18:30)

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	279.02	279.83	796.70	0.00	964.21	0.289	0.41	5.266	A
2	395.00	395.85	776.61	0.00	1284.34	0.308	0.45	4.057	A
3	838.09	840.51	479.89	0.00	1709.19	0.490	0.97	4.157	A
4	446.97	448.07	727.62	0.00	1276.45	0.350	0.54	4.351	A
5	451.02	451.68	462.19	0.00	1502.03	0.300	0.43	3.428	A

(Default Analysis Set) - 2016 Base, Sat

Data Errors and Warnings

Severity	Area	Item	Description
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
2016 Base, Sat	2016 Base	Sat		ONE HOUR	11:30	13:00	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			7.34	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Fir Lane	
2	2	A1144 Normanston Drive	
3	3	Peto Way	
4	4	A1117 Normanston Drive	
5	5	A1117 Peto Way	

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	4.20	5.00	4.70	13.10	53.30	32.00	
2	3.30	7.30	22.10	23.60	53.30	35.00	
3	4.70	7.50	12.50	42.30	53.30	20.50	
4	3.20	7.40	35.10	12.50	53.30	53.00	
5	4.20	7.50	18.10	12.90	53.30	42.00	

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)	0.525	1382.785
2		(calculated)	(calculated)	0.599	1749.904
3		(calculated)	(calculated)	0.671	2030.963
4		(calculated)	(calculated)	0.560	1683.560
5		(calculated)	(calculated)	0.587	1773.547

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	✓	213.00	100.000
2	ONE HOUR	✓	331.00	100.000
3	ONE HOUR	✓	890.00	100.000
4	ONE HOUR	✓	843.00	100.000
5	ONE HOUR	✓	404.00	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	17.000	63.000	90.000	43.000
	2	15.000	0.000	47.000	149.000	120.000
	3	119.000	137.000	0.000	328.000	306.000
	4	90.000	260.000	276.000	0.000	217.000
	5	5.000	18.000	289.000	92.000	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.08	0.30	0.42	0.20
	2	0.05	0.00	0.14	0.45	0.36
	3	0.13	0.15	0.00	0.37	0.34
	4	0.11	0.31	0.33	0.00	0.26
	5	0.01	0.04	0.72	0.23	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.31	6.81	0.44	A
2	0.31	4.38	0.44	A
3	0.59	5.33	1.44	A
4	0.76	11.97	3.02	B
5	0.37	4.81	0.59	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	160.36	159.56	803.41	0.00	960.68	0.167	0.20	4.489	A
2	249.19	248.31	639.27	0.00	1366.67	0.182	0.22	3.214	A
3	670.04	667.63	381.69	0.00	1775.04	0.377	0.60	3.244	A
4	634.65	631.25	555.06	0.00	1373.00	0.462	0.85	4.831	A
5	304.15	303.03	672.05	0.00	1378.75	0.221	0.28	3.344	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	191.48	191.17	961.88	0.00	877.42	0.218	0.28	5.243	A
2	297.56	297.26	765.50	0.00	1291.00	0.230	0.30	3.622	A
3	800.09	799.07	457.03	0.00	1724.52	0.464	0.86	3.886	A
4	757.84	755.86	664.41	0.00	1311.82	0.578	1.35	6.452	A
5	363.19	362.77	804.61	0.00	1300.88	0.279	0.39	3.835	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	234.52	233.88	1175.10	0.00	765.40	0.306	0.44	6.764	A
2	364.44	363.87	935.74	0.00	1188.95	0.307	0.44	4.360	A
3	979.91	977.63	559.35	0.00	1655.91	0.592	1.43	5.289	A
4	928.16	921.79	812.95	0.00	1228.70	0.755	2.94	11.495	B
5	444.81	444.01	982.20	0.00	1196.55	0.372	0.59	4.779	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	234.52	234.50	1180.07	0.00	762.79	0.307	0.44	6.813	A
2	364.44	364.43	939.04	0.00	1186.97	0.307	0.44	4.376	A
3	979.91	979.86	560.40	0.00	1655.21	0.592	1.44	5.330	A
4	928.16	927.85	814.72	0.00	1227.72	0.756	3.02	11.972	B
5	444.81	444.80	987.37	0.00	1193.52	0.373	0.59	4.807	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	191.48	192.12	968.97	0.00	873.70	0.219	0.28	5.288	A
2	297.56	298.12	770.29	0.00	1288.13	0.231	0.30	3.637	A
3	800.09	802.36	458.64	0.00	1723.44	0.464	0.87	3.917	A
4	757.84	764.33	667.03	0.00	1310.35	0.578	1.39	6.668	A
5	363.19	363.99	811.88	0.00	1296.61	0.280	0.39	3.863	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	160.36	160.68	808.97	0.00	957.76	0.167	0.20	4.519	A
2	249.19	249.50	643.57	0.00	1364.10	0.183	0.22	3.230	A
3	670.04	671.09	383.77	0.00	1773.64	0.378	0.61	3.270	A
4	634.65	636.75	557.97	0.00	1371.37	0.463	0.87	4.913	A
5	304.15	304.58	677.18	0.00	1375.74	0.221	0.29	3.364	A

(Default Analysis Set) - 2022 Do Minimum, Sat

Data Errors and Warnings

Severity	Area	Item	Description
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
2022 Do Minimum, Sat	2022 Do Minimum	Sat		ONE HOUR	11:30	13:00	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			8.86	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Fir Lane	
2	2	A1144 Normanston Drive	
3	3	Peto Way	
4	4	A1117 Normanston Drive	
5	5	A1117 Peto Way	

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	4.20	5.00	4.70	13.10	53.30	32.00	
2	3.30	7.30	22.10	23.60	53.30	35.00	
3	4.70	7.50	12.50	42.30	53.30	20.50	
4	3.20	7.40	35.10	12.50	53.30	53.00	
5	4.20	7.50	18.10	12.90	53.30	42.00	

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)	0.525	1382.785
2		(calculated)	(calculated)	0.599	1749.904
3		(calculated)	(calculated)	0.671	2030.963
4		(calculated)	(calculated)	0.560	1683.560
5		(calculated)	(calculated)	0.587	1773.547

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	✓	224.00	100.000
2	ONE HOUR	✓	349.00	100.000
3	ONE HOUR	✓	936.00	100.000
4	ONE HOUR	✓	887.00	100.000
5	ONE HOUR	✓	425.00	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	18.000	66.000	95.000	45.000
	2	16.000	0.000	49.000	157.000	127.000
	3	125.000	144.000	0.000	345.000	322.000
	4	94.000	274.000	291.000	0.000	228.000
	5	5.000	19.000	304.000	97.000	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.08	0.29	0.42	0.20
	2	0.05	0.00	0.14	0.45	0.36
	3	0.13	0.15	0.00	0.37	0.34
	4	0.11	0.31	0.33	0.00	0.26
	5	0.01	0.04	0.72	0.23	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.34	7.45	0.51	A
2	0.33	4.66	0.49	A
3	0.63	5.96	1.69	A
4	0.81	15.69	4.11	C
5	0.40	5.18	0.67	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	168.64	167.77	845.91	0.00	938.35	0.180	0.22	4.667	A
2	262.75	261.78	672.85	0.00	1346.55	0.195	0.24	3.315	A
3	704.67	702.02	402.63	0.00	1761.00	0.400	0.66	3.391	A
4	667.78	663.95	584.23	0.00	1356.68	0.492	0.96	5.170	A
5	319.96	318.74	707.04	0.00	1358.20	0.236	0.31	3.458	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	201.37	201.01	1012.72	0.00	850.71	0.237	0.31	5.539	A
2	313.74	313.40	805.69	0.00	1266.91	0.248	0.33	3.775	A
3	841.44	840.25	482.12	0.00	1707.69	0.493	0.96	4.144	A
4	797.39	794.91	699.33	0.00	1292.28	0.617	1.58	7.202	A
5	382.07	381.59	846.43	0.00	1276.31	0.299	0.42	4.022	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	246.63	245.86	1235.65	0.00	733.59	0.336	0.50	7.368	A
2	384.26	383.60	984.01	0.00	1160.01	0.331	0.49	4.632	A
3	1030.56	1027.71	589.98	0.00	1635.37	0.630	1.67	5.887	A
4	976.61	967.14	855.47	0.00	1204.91	0.811	3.94	14.591	B
5	467.93	466.98	1031.48	0.00	1167.60	0.401	0.66	5.132	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	246.63	246.60	1242.59	0.00	729.94	0.338	0.51	7.447	A
2	384.26	384.24	988.45	0.00	1157.35	0.332	0.49	4.656	A
3	1030.56	1030.49	591.22	0.00	1634.55	0.630	1.69	5.957	A
4	976.61	975.94	857.64	0.00	1203.70	0.811	4.11	15.686	C
5	467.93	467.91	1038.85	0.00	1163.28	0.402	0.67	5.176	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	201.37	202.14	1022.59	0.00	845.53	0.238	0.32	5.601	A
2	313.74	314.39	812.11	0.00	1263.06	0.248	0.33	3.796	A
3	841.44	844.28	484.00	0.00	1706.43	0.493	0.98	4.188	A
4	797.39	807.24	702.52	0.00	1290.50	0.618	1.65	7.597	A
5	382.07	383.01	856.80	0.00	1270.22	0.301	0.43	4.061	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	168.64	169.01	852.35	0.00	934.97	0.180	0.22	4.703	A
2	262.75	263.10	677.74	0.00	1343.61	0.196	0.24	3.332	A
3	704.67	705.91	404.93	0.00	1759.45	0.401	0.67	3.420	A
4	667.78	670.45	587.47	0.00	1354.86	0.493	0.98	5.281	A
5	319.96	320.45	713.05	0.00	1354.67	0.236	0.31	3.481	A

(Default Analysis Set) - 2022 Do Something, Sat

Data Errors and Warnings

Severity	Area	Item	Description
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
2022 Do Something, Sat	2022 Do Something	Sat		ONE HOUR	11:30	13:00	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			98.93	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Fir Lane	
2	2	A1144 Normanston Drive	
3	3	Peto Way	
4	4	A1117 Normanston Drive	
5	5	A1117 Peto Way	

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	4.20	5.00	4.70	13.10	53.30	32.00	
2	3.30	7.30	22.10	23.60	53.30	35.00	
3	4.70	7.50	12.50	42.30	53.30	20.50	
4	3.20	7.40	35.10	12.50	53.30	53.00	
5	4.20	7.50	18.10	12.90	53.30	42.00	

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)	0.525	1382.785
2		(calculated)	(calculated)	0.599	1749.904
3		(calculated)	(calculated)	0.671	2030.963
4		(calculated)	(calculated)	0.560	1683.560
5		(calculated)	(calculated)	0.587	1773.547

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	✓	334.00	100.000
2	ONE HOUR	✓	361.00	100.000
3	ONE HOUR	✓	1570.00	100.000
4	ONE HOUR	✓	595.00	100.000
5	ONE HOUR	✓	793.00	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	27.000	99.000	141.000	67.000
	2	16.000	0.000	51.000	163.000	131.000
	3	210.000	242.000	0.000	578.000	540.000
	4	63.000	184.000	195.000	0.000	153.000
	5	10.000	35.000	567.000	181.000	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.08	0.30	0.42	0.20
	2	0.04	0.00	0.14	0.45	0.36
	3	0.13	0.15	0.00	0.37	0.34
	4	0.11	0.31	0.33	0.00	0.26
	5	0.01	0.04	0.72	0.23	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.63	16.28	1.62	C
2	0.43	6.82	0.75	A
3	1.14	216.19	115.90	F
4	0.64	9.94	1.78	A
5	0.71	10.31	2.45	B

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	251.45	249.73	1051.02	0.00	830.59	0.303	0.43	6.181	A
2	271.78	270.60	935.81	0.00	1188.90	0.229	0.29	3.915	A
3	1181.98	1172.73	523.47	0.00	1679.97	0.704	2.31	6.976	A
4	447.95	445.52	901.27	0.00	1179.29	0.380	0.61	4.891	A
5	597.01	593.97	680.58	0.00	1373.74	0.435	0.76	4.600	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	300.26	299.18	1257.11	0.00	722.31	0.416	0.70	8.486	A
2	324.53	324.00	1120.59	0.00	1078.13	0.301	0.43	4.771	A
3	1411.40	1395.80	626.85	0.00	1610.65	0.876	6.21	15.720	C
4	534.89	533.47	1073.88	0.00	1082.71	0.494	0.96	6.537	A
5	712.89	711.12	812.50	0.00	1296.24	0.550	1.20	6.134	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	367.74	364.27	1504.64	0.00	592.26	0.621	1.57	15.557	C
2	397.47	396.23	1367.57	0.00	930.07	0.427	0.74	6.729	A
3	1728.60	1504.79	765.30	0.00	1517.82	1.139	62.17	91.311	F
4	655.11	651.99	1185.21	0.00	1020.42	0.642	1.74	9.688	A
5	873.11	868.34	935.12	0.00	1224.21	0.713	2.40	9.982	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	367.74	367.52	1512.38	0.00	588.20	0.625	1.62	16.276	C
2	397.47	397.43	1375.80	0.00	925.14	0.430	0.75	6.821	A
3	1728.60	1513.66	769.39	0.00	1515.08	1.141	115.90	216.188	F
4	655.11	654.95	1191.96	0.00	1016.65	0.644	1.78	9.943	A
5	873.11	872.88	939.93	0.00	1221.38	0.715	2.45	10.308	B

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	300.26	303.71	1296.27	0.00	701.74	0.428	0.76	9.120	A
2	324.53	325.77	1132.01	0.00	1071.29	0.303	0.44	4.838	A
3	1411.40	1593.03	632.63	0.00	1606.78	0.878	70.49	211.281	F
4	534.89	537.46	1200.13	0.00	1012.08	0.529	1.14	7.627	A
5	712.89	717.42	872.32	0.00	1261.10	0.565	1.32	6.674	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	251.45	252.66	1101.94	0.00	803.84	0.313	0.46	6.547	A
2	271.78	272.33	944.58	0.00	1183.64	0.230	0.30	3.952	A
3	1181.98	1453.86	527.92	0.00	1676.99	0.705	2.52	43.069	E
4	447.95	449.64	1080.19	0.00	1079.18	0.415	0.72	5.733	A
5	597.01	598.98	764.65	0.00	1324.35	0.451	0.83	4.975	A

(Default Analysis Set) - 2037 Do Minimum, Sat

Data Errors and Warnings

Severity	Area	Item	Description
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
2037 Do Minimum, Sat	2037 Do Minimum	Sat		ONE HOUR	11:30	13:00	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			19.64	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Fir Lane	
2	2	A1144 Normanston Drive	
3	3	Peto Way	
4	4	A1117 Normanston Drive	
5	5	A1117 Peto Way	

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	4.20	5.00	4.70	13.10	53.30	32.00	
2	3.30	7.30	22.10	23.60	53.30	35.00	
3	4.70	7.50	12.50	42.30	53.30	20.50	
4	3.20	7.40	35.10	12.50	53.30	53.00	
5	4.20	7.50	18.10	12.90	53.30	42.00	

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)	0.525	1382.785
2		(calculated)	(calculated)	0.599	1749.904
3		(calculated)	(calculated)	0.671	2030.963
4		(calculated)	(calculated)	0.560	1683.560
5		(calculated)	(calculated)	0.587	1773.547

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	✓	251.00	100.000
2	ONE HOUR	✓	391.00	100.000
3	ONE HOUR	✓	1047.00	100.000
4	ONE HOUR	✓	992.00	100.000
5	ONE HOUR	✓	476.00	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	20.000	74.000	106.000	51.000
	2	18.000	0.000	55.000	176.000	142.000
	3	140.000	161.000	0.000	386.000	360.000
	4	106.000	306.000	325.000	0.000	255.000
	5	6.000	21.000	340.000	109.000	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.08	0.29	0.42	0.20
	2	0.05	0.00	0.14	0.45	0.36
	3	0.13	0.15	0.00	0.37	0.34
	4	0.11	0.31	0.33	0.00	0.26
	5	0.01	0.04	0.71	0.23	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.42	9.48	0.72	A
2	0.40	5.47	0.65	A
3	0.73	8.29	2.61	A
4	0.95	46.17	13.19	E
5	0.48	6.30	0.91	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	188.97	187.89	944.83	0.00	886.38	0.213	0.27	5.147	A
2	294.37	293.20	752.53	0.00	1298.78	0.227	0.29	3.577	A
3	788.24	784.91	451.20	0.00	1728.43	0.456	0.83	3.804	A
4	746.83	741.68	653.69	0.00	1317.81	0.567	1.29	6.195	A
5	358.36	356.86	790.18	0.00	1309.36	0.274	0.37	3.780	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	225.64	225.13	1130.69	0.00	788.73	0.286	0.40	6.382	A
2	351.50	351.04	900.90	0.00	1209.84	0.291	0.41	4.190	A
3	941.23	939.45	540.32	0.00	1668.67	0.564	1.28	4.925	A
4	891.79	887.23	782.49	0.00	1245.75	0.716	2.43	9.915	A
5	427.91	427.26	945.40	0.00	1218.17	0.351	0.54	4.547	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	276.36	275.15	1366.16	0.00	665.02	0.416	0.70	9.206	A
2	430.50	429.56	1093.19	0.00	1094.56	0.393	0.64	5.405	A
3	1152.77	1147.61	660.93	0.00	1587.80	0.726	2.57	8.084	A
4	1092.21	1058.97	956.20	0.00	1148.55	0.951	10.74	32.316	D
5	524.09	522.68	1136.46	0.00	1105.94	0.474	0.89	6.157	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	276.36	276.28	1383.13	0.00	656.10	0.421	0.72	9.475	A
2	430.50	430.47	1103.16	0.00	1088.58	0.395	0.65	5.469	A
3	1152.77	1152.59	662.72	0.00	1586.60	0.727	2.61	8.286	A
4	1092.21	1082.39	959.95	0.00	1146.46	0.953	13.19	46.170	E
5	524.09	524.00	1155.33	0.00	1094.85	0.479	0.91	6.304	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	225.64	226.85	1163.51	0.00	771.49	0.292	0.42	6.626	A
2	351.50	352.43	919.71	0.00	1198.55	0.293	0.42	4.260	A
3	941.23	946.43	543.06	0.00	1666.84	0.565	1.31	5.033	A
4	891.79	933.96	787.82	0.00	1242.77	0.718	2.65	13.152	B
5	427.91	429.31	982.19	0.00	1196.56	0.358	0.56	4.701	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	188.97	189.54	954.44	0.00	881.33	0.214	0.27	5.209	A
2	294.37	294.85	759.54	0.00	1294.57	0.227	0.30	3.604	A
3	788.24	790.10	454.16	0.00	1726.45	0.457	0.85	3.852	A
4	746.83	752.09	657.98	0.00	1315.41	0.568	1.33	6.450	A
5	358.36	359.08	799.48	0.00	1303.89	0.275	0.38	3.812	A

(Default Analysis Set) - 2037 Do Something, Sat

Data Errors and Warnings

Severity	Area	Item	Description
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
2037 Do Something, Sat	2037 Do Something	Sat		ONE HOUR	11:30	13:00	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			242.33	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Fir Lane	
2	2	A1144 Normanston Drive	
3	3	Peto Way	
4	4	A1117 Normanston Drive	
5	5	A1117 Peto Way	

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	4.20	5.00	4.70	13.10	53.30	32.00	
2	3.30	7.30	22.10	23.60	53.30	35.00	
3	4.70	7.50	12.50	42.30	53.30	20.50	
4	3.20	7.40	35.10	12.50	53.30	53.00	
5	4.20	7.50	18.10	12.90	53.30	42.00	

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)	0.525	1382.785
2		(calculated)	(calculated)	0.599	1749.904
3		(calculated)	(calculated)	0.671	2030.963
4		(calculated)	(calculated)	0.560	1683.560
5		(calculated)	(calculated)	0.587	1773.547

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	✓	392.00	100.000
2	ONE HOUR	✓	397.00	100.000
3	ONE HOUR	✓	1721.00	100.000
4	ONE HOUR	✓	688.00	100.000
5	ONE HOUR	✓	870.00	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	31.000	116.000	166.000	79.000
	2	18.000	0.000	56.000	179.000	144.000
	3	230.000	265.000	0.000	634.000	592.000
	4	73.000	212.000	226.000	0.000	177.000
	5	11.000	38.000	622.000	199.000	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.08	0.30	0.42	0.20
	2	0.05	0.00	0.14	0.45	0.36
	3	0.13	0.15	0.00	0.37	0.34
	4	0.11	0.31	0.33	0.00	0.26
	5	0.01	0.04	0.71	0.23	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	40.03	4.49	E
2	0.53	9.34	1.12	A
3	1.30	548.23	238.65	F
4	0.74	13.55	2.78	B
5	0.81	15.61	4.02	C

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	295.12	292.66	1167.79	0.00	769.24	0.384	0.61	7.517	A
2	298.88	297.43	1053.01	0.00	1118.65	0.267	0.36	4.377	A
3	1295.66	1281.26	587.32	0.00	1637.16	0.791	3.60	9.756	A
4	517.96	514.62	989.61	0.00	1129.87	0.458	0.84	5.820	A
5	654.98	651.11	764.23	0.00	1324.60	0.494	0.97	5.316	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	352.40	350.28	1391.00	0.00	651.97	0.541	1.14	11.850	B
2	356.89	356.13	1260.40	0.00	994.32	0.359	0.55	5.633	A
3	1547.14	1489.19	703.08	0.00	1559.54	0.992	18.09	36.017	E
4	618.50	616.06	1156.50	0.00	1036.49	0.597	1.45	8.513	A
5	782.11	779.35	902.04	0.00	1243.64	0.629	1.66	7.706	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	431.60	420.29	1640.40	0.00	520.94	0.829	3.97	32.713	D
2	437.11	434.99	1529.86	0.00	832.78	0.525	1.08	9.001	A
3	1894.86	1456.59	853.41	0.00	1458.74	1.299	127.65	187.753	F
4	757.50	752.43	1182.20	0.00	1022.11	0.741	2.72	13.102	B
5	957.89	949.10	997.52	0.00	1187.55	0.807	3.85	14.581	B

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	431.60	429.52	1650.84	0.00	515.45	0.837	4.49	40.032	E
2	437.11	436.96	1547.62	0.00	822.14	0.532	1.12	9.340	A
3	1894.86	1452.30	862.73	0.00	1452.50	1.305	238.29	448.885	F
4	757.50	757.23	1182.15	0.00	1022.13	0.741	2.78	13.549	B
5	957.89	957.24	999.95	0.00	1186.13	0.808	4.02	15.613	C

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	352.40	365.30	1415.81	0.00	638.93	0.552	1.27	13.735	B
2	356.89	359.05	1287.62	0.00	978.00	0.365	0.58	5.835	A
3	1547.14	1545.71	717.65	0.00	1549.77	0.998	238.65	548.226	F
4	618.50	623.23	1196.42	0.00	1014.15	0.610	1.60	9.316	A
5	782.11	791.04	923.75	0.00	1230.89	0.635	1.78	8.343	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	295.12	297.47	1230.90	0.00	736.08	0.401	0.68	8.252	A
2	298.88	299.72	1065.50	0.00	1111.16	0.269	0.37	4.442	A
3	1295.66	1625.99	593.82	0.00	1632.80	0.794	156.07	437.737	F
4	517.96	520.06	1209.25	0.00	1006.98	0.514	1.08	7.427	A
5	654.98	657.76	867.53	0.00	1263.92	0.518	1.09	5.967	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.6.541 [19821,26/11/2015]

Filename: 14 Normanston-Peto v11 2018-04-03 mitigated New Satday flows.arc8
Path: L:\106xxx\1069948 Lowestoft Third Crossing\09 Documents\06_Modelling_Junction Modelling Sep 2017_Junction Modelling\14 Normanston Dr-Peto Way rdbt
Report generation date: 19/10/2018 15:15:13

Summary of junction performance

	AM				PM				Sat			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2022 Do Something											
Arm 1	0.98	13.48	0.50	B	0.93	8.25	0.48	A	1.66	16.68	0.63	C
Arm 2	0.27	4.43	0.22	A	0.79	5.75	0.44	A	0.73	6.67	0.42	A
Arm 3	0.52	2.42	0.34	A	1.05	3.58	0.51	A	6.25	13.54	0.87	B
Arm 4	1.78	7.68	0.64	A	0.80	5.50	0.45	A	2.15	12.09	0.69	B
Arm 5	1.73	7.12	0.64	A	0.59	3.55	0.37	A	1.81	7.55	0.65	A
	A1 - 2037 Do Something											
Arm 1	2.96	36.84	0.77	E	1.08	9.65	0.52	A	5.46	48.98	0.87	E
Arm 2	0.39	5.36	0.28	A	1.14	7.16	0.53	A	1.08	9.00	0.52	A
Arm 3	0.71	2.77	0.42	A	1.49	4.40	0.60	A	24.49	47.43	0.99	E
Arm 4	4.52	16.55	0.83	C	1.45	8.09	0.60	A	5.23	26.35	0.85	D
Arm 5	3.43	12.62	0.78	B	0.74	4.04	0.43	A	2.91	11.21	0.75	B

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

"D5 - 2022 Do Something, AM " model duration: 08:00 - 09:30
"D6 - 2022 Do Something, PM" model duration: 17:00 - 18:30
"D9 - 2037 Do Something, AM" model duration: 08:00 - 09:30
"D10 - 2037 Do Something, PM" model duration: 17:00 - 18:30
"D13 - 2022 Do Something, Sat" model duration: 11:30 - 13:00
"D15 - 2037 Do Something, Sat" model duration: 11:30 - 13:00

Run using Junctions 8.0.6.541 at 19/10/2018 15:15:09

File summary

Title	A1117 Normanston Drive/A1117 Peto Way
Location	Lowestoft
Site Number	
Date	13/02/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ecopp
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) - 2022 Do Something, 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.
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
2022 Do Something, AM	2022 Do Something	AM		ONE HOUR	08:00	09:30	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			6.41	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Fir Lane	
2	2	A1144 Normanston Drive	
3	3	Peto Way	
4	4	A1117 Normanston Drive	
5	5	A1117 Peto Way	

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	4.20	5.00	4.70	13.10	55.00	32.00	
2	3.30	7.30	22.10	23.60	55.00	35.00	
3	3.90	8.90	69.20	27.00	55.00	14.00	
4	3.20	7.40	35.10	12.50	55.00	53.00	
5	4.70	7.70	27.30	12.20	55.00	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)	0.518	1382.785
2		(calculated)	(calculated)	0.591	1749.904
3		(calculated)	(calculated)	0.762	2576.699
4		(calculated)	(calculated)	0.551	1683.560
5		(calculated)	(calculated)	0.615	1965.587

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	✓	241.58	100.000
2	ONE HOUR	✓	202.65	100.000
3	ONE HOUR	✓	709.79	100.000
4	ONE HOUR	✓	765.34	100.000
5	ONE HOUR	✓	801.34	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	0.000	130.378	111.207	0.000
	2	0.000	0.000	45.934	146.651	10.070
	3	36.558	155.511	0.000	106.779	410.946
	4	125.855	384.868	149.890	0.000	104.730
	5	0.000	93.519	607.150	100.667	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.00	0.54	0.46	0.00
	2	0.00	0.00	0.23	0.72	0.05
	3	0.05	0.22	0.00	0.15	0.58
	4	0.16	0.50	0.20	0.00	0.14
	5	0.00	0.12	0.76	0.13	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.50	13.48	0.98	B
2	0.22	4.43	0.27	A
3	0.34	2.42	0.52	A
4	0.64	7.68	1.78	A
5	0.64	7.12	1.73	A

Main Results for each time segment

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	181.88	180.72	1118.36	0.00	803.83	0.226	0.29	5.767	A
2	152.57	152.02	823.73	0.00	1263.33	0.121	0.14	3.237	A
3	534.37	533.21	276.23	0.00	2366.09	0.226	0.29	1.963	A
4	576.19	573.51	460.55	0.00	1429.66	0.403	0.67	4.193	A
5	603.29	600.81	639.32	0.00	1572.15	0.384	0.62	3.697	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	217.18	216.52	1338.76	0.00	689.74	0.315	0.45	7.596	A
2	182.18	181.99	986.27	0.00	1167.33	0.156	0.18	3.653	A
3	638.09	637.75	330.76	0.00	2324.51	0.275	0.38	2.134	A
4	688.03	686.77	550.85	0.00	1379.88	0.499	0.98	5.184	A
5	720.38	719.17	765.37	0.00	1494.58	0.482	0.92	4.635	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	265.99	263.97	1636.87	0.00	535.41	0.497	0.96	13.165	B
2	223.13	222.78	1204.95	0.00	1038.15	0.215	0.27	4.413	A
3	781.50	780.91	404.23	0.00	2268.49	0.345	0.52	2.418	A
4	842.66	839.57	674.50	0.00	1311.71	0.642	1.76	7.575	A
5	882.29	879.16	935.99	0.00	1389.58	0.635	1.70	7.009	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	265.99	265.91	1642.14	0.00	532.68	0.499	0.98	13.484	B
2	223.13	223.12	1210.17	0.00	1035.07	0.216	0.27	4.433	A
3	781.50	781.49	405.78	0.00	2267.31	0.345	0.52	2.422	A
4	842.66	842.58	675.01	0.00	1311.42	0.643	1.78	7.675	A
5	882.29	882.20	938.75	0.00	1387.88	0.636	1.73	7.116	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	217.18	219.23	1346.33	0.00	685.82	0.317	0.47	7.749	A
2	182.18	182.53	993.65	0.00	1162.96	0.157	0.19	3.675	A
3	638.09	638.67	332.96	0.00	2322.83	0.275	0.38	2.139	A
4	688.03	691.11	551.66	0.00	1379.43	0.499	1.01	5.252	A
5	720.38	723.51	769.36	0.00	1492.12	0.483	0.94	4.702	A

Main results: (09:15-09:30)

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	181.88	182.57	1125.20	0.00	800.29	0.227	0.30	5.835	A
2	152.57	152.76	829.66	0.00	1259.83	0.121	0.14	3.251	A
3	534.37	534.72	278.12	0.00	2364.64	0.226	0.29	1.968	A
4	576.19	577.49	461.87	0.00	1428.93	0.403	0.68	4.235	A
5	603.29	604.55	643.16	0.00	1569.78	0.384	0.63	3.733	A

(Default Analysis Set) - 2022 Do Something, 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.
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
2022 Do Something, PM	2022 Do Something	PM		ONE HOUR	17:00	18:30	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			4.87	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Fir Lane	
2	2	A1144 Normanston Drive	
3	3	Peto Way	
4	4	A1117 Normanston Drive	
5	5	A1117 Peto Way	

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	4.20	5.00	4.70	13.10	55.00	32.00	
2	3.30	7.30	22.10	23.60	55.00	35.00	
3	3.90	8.90	69.20	27.00	55.00	14.00	
4	3.20	7.40	35.10	12.50	55.00	53.00	
5	4.70	7.70	27.30	12.20	55.00	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)	0.518	1382.785
2		(calculated)	(calculated)	0.591	1749.904
3		(calculated)	(calculated)	0.762	2576.699
4		(calculated)	(calculated)	0.551	1683.560
5		(calculated)	(calculated)	0.615	1965.587

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	✓	371.86	100.000
2	ONE HOUR	✓	452.00	100.000
3	ONE HOUR	✓	958.52	100.000
4	ONE HOUR	✓	480.41	100.000
5	ONE HOUR	✓	547.55	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	0.000	206.854	165.006	0.000
	2	0.000	0.000	96.644	305.253	50.105
	3	18.829	114.376	0.000	184.531	640.789
	4	102.942	183.942	96.157	0.000	97.373
	5	0.000	53.362	399.826	94.359	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.00	0.56	0.44	0.00
	2	0.00	0.00	0.21	0.68	0.11
	3	0.02	0.12	0.00	0.19	0.67
	4	0.21	0.38	0.20	0.00	0.20
	5	0.00	0.10	0.73	0.17	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.48	8.25	0.93	A
2	0.44	5.75	0.79	A
3	0.51	3.58	1.05	A
4	0.45	5.50	0.80	A
5	0.37	3.55	0.59	A

Main Results for each time segment

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	279.96	278.45	706.87	0.00	1016.85	0.275	0.38	4.865	A
2	340.29	338.91	721.47	0.00	1323.74	0.257	0.34	3.651	A
3	721.63	719.72	460.83	0.00	2225.34	0.324	0.48	2.388	A
4	361.68	360.21	618.73	0.00	1342.46	0.269	0.37	3.661	A
5	412.22	410.97	387.22	0.00	1727.29	0.239	0.31	2.732	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	334.29	333.63	846.04	0.00	944.81	0.354	0.54	5.884	A
2	406.34	405.78	863.86	0.00	1239.63	0.328	0.48	4.314	A
3	861.69	860.96	551.82	0.00	2155.96	0.400	0.66	2.778	A
4	431.88	431.32	740.19	0.00	1275.49	0.339	0.51	4.262	A
5	492.23	491.83	463.54	0.00	1680.32	0.293	0.41	3.029	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	409.43	407.91	1035.61	0.00	846.67	0.484	0.92	8.176	A
2	497.66	496.47	1057.01	0.00	1125.54	0.442	0.78	5.712	A
3	1055.35	1053.84	675.09	0.00	2061.97	0.512	1.04	3.567	A
4	528.95	527.78	906.00	0.00	1184.08	0.447	0.80	5.475	A
5	602.86	602.15	567.26	0.00	1616.49	0.373	0.59	3.547	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	409.43	409.39	1037.16	0.00	845.87	0.484	0.93	8.246	A
2	497.66	497.64	1059.36	0.00	1124.15	0.443	0.79	5.745	A
3	1055.35	1055.33	676.79	0.00	2060.68	0.512	1.05	3.580	A
4	528.95	528.93	907.33	0.00	1183.35	0.447	0.80	5.500	A
5	602.86	602.85	568.38	0.00	1615.81	0.373	0.59	3.553	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	334.29	335.80	848.41	0.00	943.58	0.354	0.55	5.937	A
2	406.34	407.53	867.37	0.00	1237.56	0.328	0.49	4.343	A
3	861.69	863.19	554.35	0.00	2154.03	0.400	0.67	2.791	A
4	431.88	433.03	742.19	0.00	1274.39	0.339	0.52	4.284	A
5	492.23	492.94	465.22	0.00	1679.29	0.293	0.42	3.038	A

Main results: (18:15-18:30)

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	279.96	280.64	710.04	0.00	1015.21	0.276	0.38	4.906	A
2	340.29	340.87	725.56	0.00	1321.32	0.258	0.35	3.675	A
3	721.63	722.38	463.62	0.00	2223.21	0.325	0.48	2.401	A
4	361.68	362.26	621.09	0.00	1341.15	0.270	0.37	3.678	A
5	412.22	412.63	389.22	0.00	1726.06	0.239	0.31	2.741	A

(Default Analysis Set) - 2037 Do Something, 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.
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
2037 Do Something, AM	2037 Do Something	AM		ONE HOUR	08:00	09:30	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			12.73	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Fir Lane	
2	2	A1144 Normanston Drive	
3	3	Peto Way	
4	4	A1117 Normanston Drive	
5	5	A1117 Peto Way	

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	4.20	5.00	4.70	13.10	55.00	32.00	
2	3.30	7.30	22.10	23.60	55.00	35.00	
3	3.90	8.90	69.20	27.00	55.00	14.00	
4	3.20	7.40	35.10	12.50	55.00	53.00	
5	4.70	7.70	27.30	12.20	55.00	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)	0.518	1382.785
2		(calculated)	(calculated)	0.591	1749.904
3		(calculated)	(calculated)	0.762	2576.699
4		(calculated)	(calculated)	0.551	1683.560
5		(calculated)	(calculated)	0.615	1965.587

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	✓	278.86	100.000
2	ONE HOUR	✓	238.83	100.000
3	ONE HOUR	✓	844.30	100.000
4	ONE HOUR	✓	927.36	100.000
5	ONE HOUR	✓	914.89	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	0.000	156.352	122.511	0.000
	2	0.000	0.000	53.468	168.892	16.471
	3	45.604	174.635	0.000	123.107	500.956
	4	142.479	463.404	170.290	0.000	151.186
	5	0.000	108.218	697.247	109.424	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.00	0.56	0.44	0.00
	2	0.00	0.00	0.22	0.71	0.07
	3	0.05	0.21	0.00	0.15	0.59
	4	0.15	0.50	0.18	0.00	0.16
	5	0.00	0.12	0.76	0.12	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.77	36.84	2.96	E
2	0.28	5.36	0.39	A
3	0.42	2.77	0.71	A
4	0.83	16.55	4.52	C
5	0.78	12.62	3.43	B

Main Results for each time segment

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	209.94	208.30	1290.91	0.00	714.51	0.294	0.41	7.089	A
2	179.80	179.10	940.11	0.00	1194.59	0.151	0.18	3.543	A
3	635.64	634.15	312.49	0.00	2338.44	0.272	0.37	2.110	A
4	698.16	694.11	554.03	0.00	1378.12	0.507	1.01	5.233	A
5	688.78	685.44	746.37	0.00	1506.27	0.457	0.84	4.368	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	250.69	249.38	1545.09	0.00	582.92	0.430	0.74	10.750	B
2	214.70	214.43	1125.29	0.00	1085.21	0.198	0.25	4.133	A
3	759.01	758.53	374.10	0.00	2291.46	0.331	0.49	2.348	A
4	833.68	831.00	662.71	0.00	1318.21	0.632	1.68	7.347	A
5	822.47	820.35	893.39	0.00	1415.80	0.581	1.36	6.024	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	307.03	299.38	1882.17	0.00	408.43	0.752	2.65	31.112	D
2	262.96	262.40	1366.27	0.00	942.86	0.279	0.38	5.286	A
3	929.59	928.72	454.74	0.00	2229.98	0.417	0.71	2.765	A
4	1021.04	1010.47	811.40	0.00	1236.23	0.826	4.33	15.274	C
5	1007.31	999.58	1087.99	0.00	1296.04	0.777	3.30	11.844	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	307.03	305.79	1896.22	0.00	401.15	0.765	2.96	36.838	E
2	262.96	262.94	1380.82	0.00	934.26	0.281	0.39	5.362	A
3	929.59	929.58	458.83	0.00	2226.86	0.417	0.71	2.774	A
4	1021.04	1020.26	812.17	0.00	1235.81	0.826	4.52	16.545	C
5	1007.31	1006.77	1096.42	0.00	1290.85	0.780	3.43	12.616	B

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	250.69	259.37	1564.89	0.00	572.67	0.438	0.80	11.794	B
2	214.70	215.26	1146.74	0.00	1072.54	0.200	0.25	4.203	A
3	759.01	759.87	380.34	0.00	2286.70	0.332	0.50	2.358	A
4	833.68	844.72	663.92	0.00	1317.54	0.633	1.76	7.783	A
5	822.47	830.49	905.22	0.00	1408.51	0.584	1.43	6.311	A

Main results: (09:15-09:30)

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	209.94	211.42	1301.69	0.00	708.93	0.296	0.43	7.259	A
2	179.80	180.10	949.48	0.00	1189.06	0.151	0.18	3.568	A
3	635.64	636.13	315.31	0.00	2336.28	0.272	0.37	2.119	A
4	698.16	701.05	555.80	0.00	1377.15	0.507	1.04	5.348	A
5	688.78	691.06	752.69	0.00	1502.38	0.458	0.85	4.451	A

(Default Analysis Set) - 2037 Do Something, 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.
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
2037 Do Something, PM	2037 Do Something	PM		ONE HOUR	17:00	18:30	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			6.08	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Fir Lane	
2	2	A1144 Normanston Drive	
3	3	Peto Way	
4	4	A1117 Normanston Drive	
5	5	A1117 Peto Way	

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	4.20	5.00	4.70	13.10	55.00	32.00	
2	3.30	7.30	22.10	23.60	55.00	35.00	
3	3.90	8.90	69.20	27.00	55.00	14.00	
4	3.20	7.40	35.10	12.50	55.00	53.00	
5	4.70	7.70	27.30	12.20	55.00	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)	0.518	1382.785
2		(calculated)	(calculated)	0.591	1749.904
3		(calculated)	(calculated)	0.762	2576.699
4		(calculated)	(calculated)	0.551	1683.560
5		(calculated)	(calculated)	0.615	1965.587

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	✓	370.62	100.000
2	ONE HOUR	✓	524.67	100.000
3	ONE HOUR	✓	1113.23	100.000
4	ONE HOUR	✓	593.71	100.000
5	ONE HOUR	✓	599.08	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	0.000	211.700	158.915	0.000
	2	0.000	0.000	133.624	331.739	59.311
	3	43.293	124.111	0.000	208.790	737.031
	4	111.934	208.770	124.238	0.000	148.766
	5	0.000	64.542	448.507	86.031	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.00	0.57	0.43	0.00
	2	0.00	0.00	0.25	0.63	0.11
	3	0.04	0.11	0.00	0.19	0.66
	4	0.19	0.35	0.21	0.00	0.25
	5	0.00	0.11	0.75	0.14	0.00

Vehicle Mix

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

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.52	9.65	1.08	A
2	0.53	7.16	1.14	A
3	0.60	4.40	1.49	A
4	0.60	8.09	1.45	A
5	0.43	4.04	0.74	A

Main Results for each time segment

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	279.02	277.42	792.25	0.00	972.66	0.287	0.40	5.167	A
2	395.00	393.26	771.64	0.00	1294.10	0.305	0.44	3.989	A
3	838.09	835.67	476.62	0.00	2213.30	0.379	0.61	2.609	A
4	446.97	444.86	723.39	0.00	1284.76	0.348	0.53	4.276	A
5	451.02	449.56	459.05	0.00	1683.08	0.268	0.36	2.914	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	333.18	332.41	948.30	0.00	891.87	0.374	0.59	6.425	A
2	471.67	470.86	923.97	0.00	1204.12	0.392	0.64	4.904	A
3	1000.77	999.71	570.75	0.00	2141.53	0.467	0.87	3.150	A
4	533.73	532.71	865.44	0.00	1206.45	0.442	0.79	5.336	A
5	538.56	538.05	549.56	0.00	1627.39	0.331	0.49	3.302	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	408.05	406.14	1160.20	0.00	782.17	0.522	1.07	9.529	A
2	577.68	575.73	1130.06	0.00	1082.39	0.534	1.13	7.078	A
3	1225.68	1223.25	697.83	0.00	2044.63	0.599	1.48	4.369	A
4	653.68	651.09	1058.91	0.00	1099.78	0.594	1.43	7.976	A
5	659.60	658.63	671.89	0.00	1552.10	0.425	0.73	4.025	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	408.05	408.00	1162.84	0.00	780.81	0.523	1.08	9.653	A
2	577.68	577.63	1133.30	0.00	1080.48	0.535	1.14	7.159	A
3	1225.68	1225.64	700.18	0.00	2042.84	0.600	1.49	4.405	A
4	653.68	653.61	1061.06	0.00	1098.60	0.595	1.45	8.086	A
5	659.60	659.58	674.15	0.00	1550.72	0.425	0.74	4.039	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	333.18	335.08	952.18	0.00	889.86	0.374	0.61	6.510	A
2	471.67	473.62	928.70	0.00	1201.33	0.393	0.65	4.961	A
3	1000.77	1003.19	574.15	0.00	2138.93	0.468	0.89	3.175	A
4	533.73	536.33	868.57	0.00	1204.72	0.443	0.80	5.408	A
5	538.56	539.52	552.80	0.00	1625.40	0.331	0.50	3.320	A

Main results: (18:15-18:30)

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	279.02	279.81	796.40	0.00	970.51	0.288	0.41	5.219	A
2	395.00	395.84	776.46	0.00	1291.26	0.306	0.44	4.023	A
3	838.09	839.18	479.85	0.00	2210.83	0.379	0.61	2.628	A
4	446.97	448.04	726.54	0.00	1283.02	0.348	0.54	4.316	A
5	451.02	451.54	461.97	0.00	1681.29	0.268	0.37	2.928	A

(Default Analysis Set) - 2022 Do Something, Sat

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.
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
2022 Do Something, Sat	2022 Do Something	Sat		ONE HOUR	11:30	13:00	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			11.61	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Fir Lane	
2	2	A1144 Normanston Drive	
3	3	Peto Way	
4	4	A1117 Normanston Drive	
5	5	A1117 Peto Way	

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	4.20	5.00	4.70	13.10	55.00	32.00	
2	3.30	7.30	22.10	23.60	55.00	35.00	
3	3.90	8.90	69.20	27.00	55.00	14.00	
4	3.20	7.40	35.10	12.50	55.00	53.00	
5	4.70	7.70	27.30	12.20	55.00	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)	0.518	1382.785
2		(calculated)	(calculated)	0.591	1749.904
3		(calculated)	(calculated)	0.762	2576.699
4		(calculated)	(calculated)	0.551	1683.560
5		(calculated)	(calculated)	0.615	1965.587

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	✓	334.00	100.000
2	ONE HOUR	✓	361.00	100.000
3	ONE HOUR	✓	1570.00	100.000
4	ONE HOUR	✓	595.00	100.000
5	ONE HOUR	✓	793.00	100.000

Turning Proportions

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

		To				
		1	2	3	4	5
From	1	0.000	27.000	99.000	141.000	67.000
	2	16.000	0.000	51.000	163.000	131.000
	3	210.000	242.000	0.000	578.000	540.000
	4	63.000	184.000	195.000	0.000	153.000
	5	10.000	35.000	567.000	181.000	0.000

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

		To				
		1	2	3	4	5
From	1	0.00	0.08	0.30	0.42	0.20
	2	0.04	0.00	0.14	0.45	0.36
	3	0.13	0.15	0.00	0.37	0.34
	4	0.11	0.31	0.33	0.00	0.26
	5	0.01	0.04	0.72	0.23	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.63	16.68	1.66	C
2	0.42	6.67	0.73	A
3	0.87	13.54	6.25	B
4	0.69	12.09	2.15	B
5	0.65	7.55	1.81	A

Main Results for each time segment

Main results: (11:30-11:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	251.45	249.75	1052.28	0.00	838.04	0.300	0.42	6.102	A
2	271.78	270.61	936.36	0.00	1196.81	0.227	0.29	3.882	A
3	1181.98	1177.27	523.61	0.00	2177.47	0.543	1.18	3.584	A
4	447.95	445.54	904.15	0.00	1185.10	0.378	0.60	4.852	A
5	597.01	594.51	681.90	0.00	1545.95	0.386	0.62	3.774	A

Main results: (11:45-12:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	300.26	299.21	1259.50	0.00	730.77	0.411	0.69	8.321	A
2	324.53	324.01	1121.11	0.00	1087.68	0.298	0.42	4.711	A
3	1411.40	1408.03	627.00	0.00	2098.64	0.673	2.02	5.188	A
4	534.89	533.48	1081.62	0.00	1087.26	0.492	0.96	6.483	A
5	712.89	711.63	816.03	0.00	1463.40	0.487	0.94	4.781	A

Main results: (12:00-12:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	367.74	364.08	1537.25	0.00	586.98	0.627	1.60	15.895	C
2	397.47	396.27	1368.28	0.00	941.68	0.422	0.72	6.585	A
3	1728.60	1712.96	765.54	0.00	1993.00	0.867	5.93	12.229	B
4	655.11	650.60	1316.73	0.00	957.65	0.684	2.08	11.556	B
5	873.11	869.77	994.02	0.00	1353.86	0.645	1.78	7.384	A

Main results: (12:15-12:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	367.74	367.50	1545.33	0.00	582.80	0.631	1.66	16.680	C
2	397.47	397.43	1375.84	0.00	937.21	0.424	0.73	6.669	A
3	1728.60	1727.32	769.40	0.00	1990.06	0.869	6.25	13.539	B
4	655.11	654.83	1326.96	0.00	952.01	0.688	2.15	12.088	B
5	873.11	872.98	1001.35	0.00	1349.36	0.647	1.81	7.552	A

Main results: (12:30-12:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	300.26	304.03	1270.99	0.00	724.82	0.414	0.72	8.631	A
2	324.53	325.73	1131.88	0.00	1081.31	0.300	0.43	4.773	A
3	1411.40	1427.99	632.53	0.00	2094.42	0.674	2.10	5.531	A
4	534.89	539.52	1095.89	0.00	1079.39	0.496	1.00	6.725	A
5	712.89	716.25	826.34	0.00	1457.06	0.489	0.97	4.880	A

Main results: (12:45-13:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	251.45	252.58	1059.84	0.00	834.13	0.301	0.44	6.204	A
2	271.78	272.32	943.86	0.00	1192.38	0.228	0.30	3.914	A
3	1181.98	1185.59	527.72	0.00	2174.34	0.544	1.20	3.656	A
4	447.95	449.47	910.67	0.00	1181.51	0.379	0.62	4.929	A
5	597.01	598.34	687.29	0.00	1542.63	0.387	0.64	3.819	A

(Default Analysis Set) - 2037 Do Something, Sat

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.
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
2037 Do Something, Sat	2037 Do Something	Sat		ONE HOUR	11:30	13:00	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			32.52	D

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Fir Lane	
2	2	A1144 Normanston Drive	
3	3	Peto Way	
4	4	A1117 Normanston Drive	
5	5	A1117 Peto Way	

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	4.20	5.00	4.70	13.10	55.00	32.00	
2	3.30	7.30	22.10	23.60	55.00	35.00	
3	3.90	8.90	69.20	27.00	55.00	14.00	
4	3.20	7.40	35.10	12.50	55.00	53.00	
5	4.70	7.70	27.30	12.20	55.00	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)	0.518	1382.785
2		(calculated)	(calculated)	0.591	1749.904
3		(calculated)	(calculated)	0.762	2576.699
4		(calculated)	(calculated)	0.551	1683.560
5		(calculated)	(calculated)	0.615	1965.587

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	✓	392.00	100.000
2	ONE HOUR	✓	397.00	100.000
3	ONE HOUR	✓	1721.00	100.000
4	ONE HOUR	✓	688.00	100.000
5	ONE HOUR	✓	870.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.000	31.000	116.000	166.000	79.000
	2	18.000	0.000	56.000	179.000	144.000
	3	230.000	265.000	0.000	634.000	592.000
	4	73.000	212.000	226.000	0.000	177.000
	5	11.000	38.000	622.000	199.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.00	0.08	0.30	0.42	0.20
	2	0.05	0.00	0.14	0.45	0.36
	3	0.13	0.15	0.00	0.37	0.34
	4	0.11	0.31	0.33	0.00	0.26
	5	0.01	0.04	0.71	0.23	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	1.000	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000	1.000
	5	1.000	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To				
		1	2	3	4	5
From	1	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0
	5	0.0	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	0.87	48.98	5.46	E
2	0.52	9.00	1.08	A
3	0.99	47.43	24.49	E
4	0.85	26.35	5.23	D
5	0.75	11.21	2.91	B

Main Results for each time segment

Main results: (11:30-11:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	295.12	292.70	1169.84	0.00	777.18	0.380	0.60	7.393	A
2	298.88	297.45	1053.78	0.00	1127.45	0.265	0.36	4.330	A
3	1295.66	1289.51	587.54	0.00	2128.72	0.609	1.54	4.260	A
4	517.96	514.64	994.83	0.00	1135.11	0.456	0.83	5.773	A
5	654.98	651.88	766.62	0.00	1493.81	0.438	0.77	4.261	A

Main results: (11:45-12:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	352.40	350.33	1399.77	0.00	658.15	0.535	1.12	11.617	B
2	356.89	356.15	1261.23	0.00	1004.91	0.355	0.55	5.544	A
3	1547.14	1541.13	703.33	0.00	2040.44	0.758	3.04	7.125	A
4	618.50	615.91	1189.33	0.00	1027.88	0.602	1.48	8.683	A
5	782.11	780.23	916.87	0.00	1401.34	0.558	1.25	5.778	A

Main results: (12:00-12:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	431.60	417.83	1696.60	0.00	504.49	0.856	4.56	36.973	E
2	437.11	435.11	1527.67	0.00	847.53	0.516	1.04	8.687	A
3	1894.86	1835.21	852.58	0.00	1926.64	0.984	17.95	29.059	D
4	757.50	744.99	1420.90	0.00	900.22	0.841	4.60	21.656	C
5	957.89	951.76	1100.91	0.00	1288.09	0.744	2.78	10.516	B

Main results: (12:15-12:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	431.60	428.01	1713.64	0.00	495.67	0.871	5.46	48.979	E
2	437.11	436.97	1545.60	0.00	836.93	0.522	1.08	8.996	A
3	1894.86	1868.68	861.82	0.00	1919.59	0.987	24.49	47.428	E
4	757.50	754.98	1444.84	0.00	887.02	0.854	5.23	26.350	D
5	957.89	957.36	1118.04	0.00	1277.55	0.750	2.91	11.206	B

Main results: (12:30-12:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	352.40	369.22	1432.46	0.00	641.23	0.550	1.26	14.005	B
2	356.89	358.92	1291.84	0.00	986.83	0.362	0.57	5.753	A
3	1547.14	1631.74	719.39	0.00	2028.20	0.763	3.34	11.018	B
4	618.50	632.65	1251.49	0.00	993.61	0.622	1.69	10.343	B
5	782.11	788.41	955.49	0.00	1377.58	0.568	1.33	6.175	A

Main results: (12:45-13:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	295.12	297.64	1181.31	0.00	771.24	0.383	0.63	7.639	A
2	298.88	299.71	1065.48	0.00	1120.54	0.267	0.37	4.389	A
3	1295.66	1302.70	593.77	0.00	2123.98	0.610	1.58	4.419	A
4	517.96	521.31	1005.08	0.00	1129.46	0.459	0.86	5.950	A
5	654.98	657.15	775.47	0.00	1488.36	0.440	0.79	4.341	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.6.541 [19821,26/11/2015]

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Filename: 15 Normanston Dr-Rotterdam Rd v5 2017-10-25.arc8
Path: L:\106xxx\1069948 Lowestoft Third Crossing\09 Documents\06_Modelling_Junction Modelling Sep 2017_Junction Modelling\15 Normanston Dr-Rotterdam Rd rdbt
Report generation date: 03/04/2018 10:56:02

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2016 Base							
Arm 1	0.24	3.09	0.19	A	0.37	3.47	0.27	A
Arm 2	0.11	3.47	0.10	A	0.11	3.71	0.10	A
Arm 3	0.67	5.28	0.40	A	0.28	4.02	0.22	A
Arm 4	0.08	4.37	0.07	A	0.12	4.00	0.11	A
	A1 - 2022 Do Minimum							
Arm 1	0.27	3.19	0.21	A	0.45	3.76	0.31	A
Arm 2	0.14	3.61	0.12	A	0.16	3.95	0.13	A
Arm 3	0.86	5.99	0.46	A	0.35	4.34	0.26	A
Arm 4	0.11	4.73	0.10	A	0.23	4.57	0.19	A
	A1 - 2022 Do Something							
Arm 1	0.32	3.58	0.24	A	0.68	4.62	0.41	A
Arm 2	0.34	4.23	0.25	A	0.42	4.89	0.29	A
Arm 3	0.83	6.39	0.46	A	0.32	4.64	0.24	A
Arm 4	0.45	6.17	0.31	A	0.48	5.42	0.32	A
	A1 - 2037 Do Minimum							
Arm 1	0.33	3.37	0.25	A	0.55	4.07	0.36	A
Arm 2	0.16	3.77	0.14	A	0.18	4.15	0.15	A
Arm 3	1.33	7.58	0.57	A	0.43	4.67	0.30	A
Arm 4	0.15	5.23	0.13	A	0.30	4.96	0.23	A
	A1 - 2037 Do Something							
Arm 1	0.38	3.76	0.28	A	0.82	5.04	0.45	A
Arm 2	0.35	4.37	0.26	A	0.45	5.20	0.31	A
Arm 3	1.13	7.45	0.53	A	0.38	4.89	0.28	A
Arm 4	0.56	7.03	0.36	A	0.55	5.86	0.36	A

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.

"D1 - 2016 Base, AM " model duration: 08:00 - 09:30
"D2 - 2016 Base, PM" model duration: 17:00 - 18:30
"D3 - 2022 Do Minimum, AM" model duration: 08:00 - 09:30
"D4 - 2022 Do Minimum, PM" model duration: 17:00 - 18:30
"D5 - 2022 Do Something, AM" model duration: 08:00 - 09:30
"D6 - 2022 Do Something, PM" model duration: 17:00 - 18:30
"D7 - 2037 Do Minimum, AM" model duration: 08:00 - 09:30
"D8 - 2037 Do Minimum, PM" model duration: 17:00 - 18:30
"D9 - 2037 Do Something, AM" model duration: 08:00 - 09:30
"D10 - 2037 Do Something, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.6.541 at 03/04/2018 10:55:57

File summary

Title	A1144 Normanston Drive/Rotterdam Road
Location	Lowestoft
Site Number	
Date	13/02/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ecopp
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) - 2016 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
2016 Base, AM	2016 Base	AM		ONE HOUR	08:00	09:30	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			4.32	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1144 St Peter's Street	
2	2	Rotterdam Road South	
3	3	A1144 Normanston Drive	
4	4	Rotterdam Road 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
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	4.00	6.10	7.20	14.40	31.50	40.00	
2	3.80	5.40	3.20	12.10	31.50	35.00	
3	2.90	5.40	5.90	15.50	31.50	23.00	
4	3.50	5.10	5.60	7.30	31.50	38.00	

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)	0.590	1458.337
2		(calculated)	(calculated)	0.554	1271.936
3		(calculated)	(calculated)	0.560	1212.343
4		(calculated)	(calculated)	0.512	1165.519

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	✓	252.63	100.000
2	ONE HOUR	✓	107.71	100.000
3	ONE HOUR	✓	417.72	100.000
4	ONE HOUR	✓	57.11	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	65.127	167.407	20.098
	2	80.044	0.000	12.835	14.834
	3	414.208	1.723	0.000	1.790
	4	33.812	19.127	4.172	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.26	0.66	0.08
	2	0.74	0.00	0.12	0.14
	3	0.99	0.00	0.00	0.00
	4	0.59	0.33	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	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	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	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	0.19	3.09	0.24	A
2	0.10	3.47	0.11	A
3	0.40	5.28	0.67	A
4	0.07	4.37	0.08	A

Main Results for each time segment

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	190.19	189.59	18.76	0.00	1447.26	0.131	0.15	2.860	A
2	81.09	80.80	143.84	0.00	1192.30	0.068	0.07	3.238	A
3	314.48	313.01	86.26	0.00	1164.05	0.270	0.37	4.223	A
4	43.00	42.81	371.72	0.00	975.10	0.044	0.05	3.860	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	227.11	226.97	22.47	0.00	1445.07	0.157	0.19	2.955	A
2	96.83	96.77	172.21	0.00	1176.59	0.082	0.09	3.333	A
3	375.52	375.08	103.29	0.00	1154.51	0.325	0.48	4.617	A
4	51.34	51.29	445.38	0.00	937.36	0.055	0.06	4.062	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	278.15	277.94	27.52	0.00	1442.09	0.193	0.24	3.092	A
2	118.59	118.50	210.88	0.00	1155.18	0.103	0.11	3.472	A
3	459.92	459.16	126.49	0.00	1141.53	0.403	0.67	5.270	A
4	62.88	62.81	545.25	0.00	886.20	0.071	0.08	4.372	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	278.15	278.15	27.55	0.00	1442.07	0.193	0.24	3.092	A
2	118.59	118.59	211.04	0.00	1155.09	0.103	0.11	3.472	A
3	459.92	459.91	126.59	0.00	1141.47	0.403	0.67	5.281	A
4	62.88	62.88	546.07	0.00	885.78	0.071	0.08	4.374	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	227.11	227.32	22.53	0.00	1445.04	0.157	0.19	2.956	A
2	96.83	96.93	172.47	0.00	1176.45	0.082	0.09	3.336	A
3	375.52	376.27	103.46	0.00	1154.42	0.325	0.49	4.632	A
4	51.34	51.41	446.68	0.00	936.69	0.055	0.06	4.066	A

Main results: (09:15-09:30)

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	190.19	190.34	18.86	0.00	1447.20	0.131	0.15	2.863	A
2	81.09	81.16	144.41	0.00	1191.98	0.068	0.07	3.240	A
3	314.48	314.94	86.63	0.00	1163.84	0.270	0.37	4.244	A
4	43.00	43.04	373.90	0.00	973.98	0.044	0.05	3.867	A

(Default Analysis Set) - 2016 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
2016 Base, PM	2016 Base	PM		ONE HOUR	17:00	18:30	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			3.73	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1144 St Peter's Street	
2	2	Rotterdam Road South	
3	3	A1144 Normanston Drive	
4	4	Rotterdam Road 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
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	4.00	6.10	7.20	14.40	31.50	40.00	
2	3.80	5.40	3.20	12.10	31.50	35.00	
3	2.90	5.40	5.90	15.50	31.50	23.00	
4	3.50	5.10	5.60	7.30	31.50	38.00	

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)	0.590	1458.337
2		(calculated)	(calculated)	0.554	1271.936
3		(calculated)	(calculated)	0.560	1212.343
4		(calculated)	(calculated)	0.512	1165.519

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	✓	353.60	100.000
2	ONE HOUR	✓	96.62	100.000
3	ONE HOUR	✓	228.37	100.000
4	ONE HOUR	✓	96.51	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	36.748	294.178	22.676
	2	58.814	0.000	12.669	25.140
	3	219.316	5.865	0.000	3.189
	4	52.680	40.553	3.279	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.10	0.83	0.06
	2	0.61	0.00	0.13	0.26
	3	0.96	0.03	0.00	0.01
	4	0.55	0.42	0.03	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	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	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	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	0.27	3.47	0.37	A
2	0.10	3.71	0.11	A
3	0.22	4.02	0.28	A
4	0.11	4.00	0.12	A

Main Results for each time segment

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	266.21	265.30	37.26	0.00	1436.34	0.185	0.23	3.073	A
2	72.74	72.47	240.19	0.00	1138.95	0.064	0.07	3.375	A
3	171.93	171.24	79.98	0.00	1167.56	0.147	0.17	3.612	A
4	72.66	72.37	212.96	0.00	1056.42	0.069	0.07	3.658	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	317.88	317.65	44.64	0.00	1431.98	0.222	0.28	3.230	A
2	86.86	86.80	287.58	0.00	1112.71	0.078	0.08	3.508	A
3	205.30	205.13	95.79	0.00	1158.72	0.177	0.21	3.774	A
4	86.76	86.69	255.10	0.00	1034.84	0.084	0.09	3.796	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	389.32	388.96	54.66	0.00	1426.07	0.273	0.37	3.471	A
2	106.38	106.28	352.15	0.00	1076.97	0.099	0.11	3.708	A
3	251.44	251.18	117.29	0.00	1146.68	0.219	0.28	4.019	A
4	106.26	106.16	312.37	0.00	1005.50	0.106	0.12	4.003	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	389.32	389.32	54.72	0.00	1426.04	0.273	0.37	3.471	A
2	106.38	106.38	352.47	0.00	1076.79	0.099	0.11	3.708	A
3	251.44	251.44	117.40	0.00	1146.62	0.219	0.28	4.021	A
4	106.26	106.26	312.68	0.00	1005.34	0.106	0.12	4.003	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	317.88	318.23	44.73	0.00	1431.93	0.222	0.29	3.235	A
2	86.86	86.96	288.11	0.00	1112.42	0.078	0.09	3.510	A
3	205.30	205.55	95.96	0.00	1158.62	0.177	0.22	3.777	A
4	86.76	86.87	255.61	0.00	1034.57	0.084	0.09	3.801	A

Main results: (18:15-18:30)

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	266.21	266.44	37.45	0.00	1436.23	0.185	0.23	3.077	A
2	72.74	72.81	241.22	0.00	1138.38	0.064	0.07	3.377	A
3	171.93	172.10	80.35	0.00	1167.36	0.147	0.17	3.616	A
4	72.66	72.73	214.01	0.00	1055.88	0.069	0.07	3.661	A

(Default Analysis Set) - 2022 Do Minimum, 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
2022 Do Minimum, AM	2022 Do Minimum	AM		ONE HOUR	08:00	09:30	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			4.76	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1144 St Peter's Street	
2	2	Rotterdam Road South	
3	3	A1144 Normanston Drive	
4	4	Rotterdam Road 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
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	4.00	6.10	7.20	14.40	31.50	40.00	
2	3.80	5.40	3.20	12.10	31.50	35.00	
3	2.90	5.40	5.90	15.50	31.50	23.00	
4	3.50	5.10	5.60	7.30	31.50	38.00	

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)	0.590	1458.337
2		(calculated)	(calculated)	0.554	1271.936
3		(calculated)	(calculated)	0.560	1212.343
4		(calculated)	(calculated)	0.512	1165.519

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	✓	275.31	100.000
2	ONE HOUR	✓	128.32	100.000
3	ONE HOUR	✓	474.03	100.000
4	ONE HOUR	✓	79.18	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	62.577	185.408	27.322
	2	89.512	0.000	10.867	27.939
	3	468.427	3.720	0.000	1.887
	4	39.720	31.786	7.670	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.23	0.67	0.10
	2	0.70	0.00	0.08	0.22
	3	0.99	0.01	0.00	0.00
	4	0.50	0.40	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	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	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	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	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	0.21	3.19	0.27	A
2	0.12	3.61	0.14	A
3	0.46	5.99	0.86	A
4	0.10	4.73	0.11	A

Main Results for each time segment

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	207.27	206.60	32.36	0.00	1439.23	0.144	0.17	2.919	A
2	96.60	96.25	165.38	0.00	1180.37	0.082	0.09	3.320	A
3	356.88	355.09	108.60	0.00	1151.54	0.310	0.45	4.510	A
4	59.61	59.34	420.82	0.00	949.94	0.063	0.07	4.041	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	247.50	247.34	38.77	0.00	1435.45	0.172	0.21	3.029	A
2	115.36	115.27	198.00	0.00	1162.31	0.099	0.11	3.437	A
3	426.15	425.56	130.06	0.00	1139.53	0.374	0.59	5.038	A
4	71.18	71.10	504.28	0.00	907.19	0.078	0.08	4.305	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	303.12	302.88	47.47	0.00	1430.31	0.212	0.27	3.193	A
2	141.28	141.16	242.47	0.00	1137.69	0.124	0.14	3.612	A
3	521.92	520.86	159.26	0.00	1123.18	0.465	0.86	5.965	A
4	87.17	87.06	617.25	0.00	849.31	0.103	0.11	4.723	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	303.12	303.12	47.54	0.00	1430.27	0.212	0.27	3.193	A
2	141.28	141.28	242.66	0.00	1137.58	0.124	0.14	3.612	A
3	521.92	521.90	159.40	0.00	1123.10	0.465	0.86	5.987	A
4	87.17	87.17	618.38	0.00	848.74	0.103	0.11	4.726	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	247.50	247.73	38.88	0.00	1435.39	0.172	0.21	3.031	A
2	115.36	115.48	198.33	0.00	1162.13	0.099	0.11	3.439	A
3	426.15	427.19	130.28	0.00	1139.40	0.374	0.60	5.061	A
4	71.18	71.29	506.04	0.00	906.28	0.079	0.09	4.311	A

Main results: (09:15-09:30)

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	207.27	207.43	32.55	0.00	1439.12	0.144	0.17	2.922	A
2	96.60	96.69	166.06	0.00	1180.00	0.082	0.09	3.325	A
3	356.88	357.48	109.09	0.00	1151.27	0.310	0.45	4.540	A
4	59.61	59.68	423.50	0.00	948.57	0.063	0.07	4.050	A

(Default Analysis Set) - 2022 Do Minimum, 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
2022 Do Minimum, PM	2022 Do Minimum	PM		ONE HOUR	17:00	18:30	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			4.08	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1144 St Peter's Street	
2	2	Rotterdam Road South	
3	3	A1144 Normanston Drive	
4	4	Rotterdam Road 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
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	4.00	6.10	7.20	14.40	31.50	40.00	
2	3.80	5.40	3.20	12.10	31.50	35.00	
3	2.90	5.40	5.90	15.50	31.50	23.00	
4	3.50	5.10	5.60	7.30	31.50	38.00	

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)	0.590	1458.337
2		(calculated)	(calculated)	0.554	1271.936
3		(calculated)	(calculated)	0.560	1212.343
4		(calculated)	(calculated)	0.512	1165.519

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	✓	395.81	100.000
2	ONE HOUR	✓	128.69	100.000
3	ONE HOUR	✓	260.96	100.000
4	ONE HOUR	✓	163.71	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	41.848	315.901	38.061
	2	92.014	0.000	11.713	24.966
	3	254.221	3.574	0.000	3.167
	4	66.700	91.650	5.358	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.11	0.80	0.10
	2	0.71	0.00	0.09	0.19
	3	0.97	0.01	0.00	0.01
	4	0.41	0.56	0.03	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	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	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	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	0.31	3.76	0.45	A
2	0.13	3.95	0.16	A
3	0.26	4.34	0.35	A
4	0.19	4.57	0.23	A

Main Results for each time segment

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	297.99	296.92	75.39	0.00	1413.83	0.211	0.27	3.220	A
2	96.89	96.51	269.55	0.00	1122.70	0.086	0.09	3.508	A
3	196.47	195.64	116.28	0.00	1147.24	0.171	0.21	3.779	A
4	123.25	122.71	262.27	0.00	1031.16	0.120	0.14	3.960	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	355.82	355.54	90.33	0.00	1405.01	0.253	0.34	3.430	A
2	115.69	115.60	322.76	0.00	1093.24	0.106	0.12	3.681	A
3	234.60	234.38	139.27	0.00	1134.37	0.207	0.26	3.999	A
4	147.17	147.03	314.19	0.00	1004.57	0.147	0.17	4.198	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	435.79	435.33	110.60	0.00	1393.04	0.313	0.45	3.756	A
2	141.69	141.55	395.20	0.00	1053.13	0.135	0.15	3.949	A
3	287.32	286.99	170.53	0.00	1116.87	0.257	0.34	4.335	A
4	180.25	180.02	384.71	0.00	968.44	0.186	0.23	4.565	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	435.79	435.79	110.74	0.00	1392.96	0.313	0.45	3.760	A
2	141.69	141.69	395.61	0.00	1052.90	0.135	0.16	3.950	A
3	287.32	287.32	170.70	0.00	1116.77	0.257	0.35	4.339	A
4	180.25	180.24	385.14	0.00	968.22	0.186	0.23	4.568	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	355.82	356.28	90.56	0.00	1404.88	0.253	0.34	3.433	A
2	115.69	115.84	323.43	0.00	1092.86	0.106	0.12	3.687	A
3	234.60	234.93	139.55	0.00	1134.21	0.207	0.26	4.004	A
4	147.17	147.39	314.90	0.00	1004.20	0.147	0.17	4.202	A

Main results: (18:15-18:30)

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	297.99	298.28	75.81	0.00	1413.58	0.211	0.27	3.230	A
2	96.89	96.98	270.78	0.00	1122.02	0.086	0.09	3.514	A
3	196.47	196.68	116.84	0.00	1146.93	0.171	0.21	3.791	A
4	123.25	123.39	263.64	0.00	1030.46	0.120	0.14	3.970	A

(Default Analysis Set) - 2022 Do Something, 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
2022 Do Something, AM	2022 Do Something	AM		ONE HOUR	08:00	09:30	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			5.21	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1144 St Peter's Street	
2	2	Rotterdam Road South	
3	3	A1144 Normanston Drive	
4	4	Rotterdam Road 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
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	4.00	6.10	7.20	14.40	31.50	40.00	
2	3.80	5.40	3.20	12.10	31.50	35.00	
3	2.90	5.40	5.90	15.50	31.50	23.00	
4	3.50	5.10	5.60	7.30	31.50	38.00	

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)	0.590	1458.337
2		(calculated)	(calculated)	0.554	1271.936
3		(calculated)	(calculated)	0.560	1212.343
4		(calculated)	(calculated)	0.512	1165.519

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	✓	295.54	100.000
2	ONE HOUR	✓	261.35	100.000
3	ONE HOUR	✓	429.73	100.000
4	ONE HOUR	✓	241.21	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	83.606	182.876	29.060
	2	133.288	0.000	5.704	122.354
	3	416.088	11.855	0.000	1.785
	4	58.272	175.464	7.479	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.28	0.62	0.10
	2	0.51	0.00	0.02	0.47
	3	0.97	0.03	0.00	0.00
	4	0.24	0.73	0.03	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	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	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	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	0.24	3.58	0.32	A
2	0.25	4.23	0.34	A
3	0.46	6.39	0.83	A
4	0.31	6.17	0.45	A

Main Results for each time segment

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	222.50	221.73	145.90	0.00	1372.21	0.162	0.19	3.128	A
2	196.75	195.96	164.61	0.00	1180.80	0.167	0.20	3.651	A
3	323.52	321.85	213.48	0.00	1092.82	0.296	0.42	4.660	A
4	181.60	180.66	420.46	0.00	950.13	0.191	0.23	4.672	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	265.69	265.49	174.87	0.00	1355.10	0.196	0.24	3.303	A
2	234.94	234.73	197.10	0.00	1162.81	0.202	0.25	3.878	A
3	386.32	385.74	255.71	0.00	1069.18	0.361	0.56	5.263	A
4	216.85	216.54	503.86	0.00	907.40	0.239	0.31	5.208	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	325.40	325.08	214.03	0.00	1331.99	0.244	0.32	3.575	A
2	287.75	287.41	241.34	0.00	1138.32	0.253	0.34	4.228	A
3	473.14	472.07	313.10	0.00	1037.05	0.456	0.83	6.360	A
4	265.58	265.03	616.69	0.00	849.60	0.313	0.45	6.153	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	325.40	325.39	214.47	0.00	1331.73	0.244	0.32	3.576	A
2	287.75	287.74	241.58	0.00	1138.18	0.253	0.34	4.232	A
3	473.14	473.12	313.46	0.00	1036.85	0.456	0.83	6.385	A
4	265.58	265.57	617.90	0.00	848.98	0.313	0.45	6.170	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	265.69	266.00	175.56	0.00	1354.70	0.196	0.25	3.306	A
2	234.94	235.27	197.49	0.00	1162.59	0.202	0.25	3.883	A
3	386.32	387.37	256.29	0.00	1068.85	0.361	0.57	5.290	A
4	216.85	217.39	505.75	0.00	906.43	0.239	0.32	5.228	A

Main results: (09:15-09:30)

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	222.50	222.70	146.91	0.00	1371.61	0.162	0.19	3.135	A
2	196.75	196.97	165.34	0.00	1180.39	0.167	0.20	3.660	A
3	323.52	324.11	214.57	0.00	1092.21	0.296	0.42	4.691	A
4	181.60	181.91	423.22	0.00	948.71	0.191	0.24	4.696	A

(Default Analysis Set) - 2022 Do Something, 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
2022 Do Something, PM	2022 Do Something	PM		ONE HOUR	17:00	18:30	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			4.86	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1144 St Peter's Street	
2	2	Rotterdam Road South	
3	3	A1144 Normanston Drive	
4	4	Rotterdam Road 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
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	4.00	6.10	7.20	14.40	31.50	40.00	
2	3.80	5.40	3.20	12.10	31.50	35.00	
3	2.90	5.40	5.90	15.50	31.50	23.00	
4	3.50	5.10	5.60	7.30	31.50	38.00	

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)	0.590	1458.337
2		(calculated)	(calculated)	0.554	1271.936
3		(calculated)	(calculated)	0.560	1212.343
4		(calculated)	(calculated)	0.512	1165.519

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	✓	483.35	100.000
2	ONE HOUR	✓	279.12	100.000
3	ONE HOUR	✓	224.76	100.000
4	ONE HOUR	✓	287.80	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	118.457	333.594	31.294
	2	110.711	0.000	3.604	164.800
	3	215.032	1.725	0.000	8.005
	4	62.689	214.935	10.176	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.25	0.69	0.06
	2	0.40	0.00	0.01	0.59
	3	0.96	0.01	0.00	0.04
	4	0.22	0.75	0.04	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	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	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	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	0.41	4.62	0.68	A
2	0.29	4.89	0.42	A
3	0.24	4.64	0.32	A
4	0.32	5.42	0.48	A

Main Results for each time segment

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	363.89	362.43	169.95	0.00	1358.01	0.268	0.36	3.611	A
2	210.13	209.21	281.23	0.00	1116.23	0.188	0.23	3.965	A
3	169.21	168.48	229.97	0.00	1083.59	0.156	0.18	3.930	A
4	216.67	215.62	245.46	0.00	1039.78	0.208	0.26	4.363	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	434.52	434.06	203.68	0.00	1338.10	0.325	0.48	3.980	A
2	250.92	250.65	336.82	0.00	1085.45	0.231	0.30	4.311	A
3	202.06	201.85	275.51	0.00	1058.09	0.191	0.23	4.203	A
4	258.73	258.41	294.08	0.00	1014.87	0.255	0.34	4.756	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	532.17	531.37	249.33	0.00	1311.15	0.406	0.68	4.612	A
2	307.31	306.85	412.33	0.00	1043.64	0.294	0.41	4.882	A
3	247.47	247.14	337.29	0.00	1023.51	0.242	0.32	4.634	A
4	316.87	316.34	360.05	0.00	981.07	0.323	0.47	5.411	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	532.17	532.16	249.75	0.00	1310.90	0.406	0.68	4.622	A
2	307.31	307.31	412.94	0.00	1043.31	0.295	0.42	4.890	A
3	247.47	247.46	337.79	0.00	1023.23	0.242	0.32	4.640	A
4	316.87	316.87	360.54	0.00	980.82	0.323	0.48	5.421	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	434.52	435.30	204.33	0.00	1337.71	0.325	0.48	3.994	A
2	250.92	251.37	337.79	0.00	1084.92	0.231	0.30	4.322	A
3	202.06	202.38	276.31	0.00	1057.65	0.191	0.24	4.212	A
4	258.73	259.25	294.88	0.00	1014.46	0.255	0.34	4.769	A

Main results: (18:15-18:30)

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	363.89	364.35	171.03	0.00	1357.37	0.268	0.37	3.626	A
2	210.13	210.41	282.73	0.00	1115.40	0.188	0.23	3.978	A
3	169.21	169.42	231.28	0.00	1082.86	0.156	0.19	3.941	A
4	216.67	216.99	246.84	0.00	1039.07	0.209	0.27	4.380	A

(Default Analysis Set) - 2037 Do Minimum, 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
2037 Do Minimum, AM	2037 Do Minimum	AM		ONE HOUR	08:00	09:30	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			5.71	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1144 St Peter's Street	
2	2	Rotterdam Road South	
3	3	A1144 Normanston Drive	
4	4	Rotterdam Road 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
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	4.00	6.10	7.20	14.40	31.50	40.00	
2	3.80	5.40	3.20	12.10	31.50	35.00	
3	2.90	5.40	5.90	15.50	31.50	23.00	
4	3.50	5.10	5.60	7.30	31.50	38.00	

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)	0.590	1458.337
2		(calculated)	(calculated)	0.554	1271.936
3		(calculated)	(calculated)	0.560	1212.343
4		(calculated)	(calculated)	0.512	1165.519

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	✓	324.56	100.000
2	ONE HOUR	✓	141.22	100.000
3	ONE HOUR	✓	578.56	100.000
4	ONE HOUR	✓	92.91	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	69.250	217.768	37.539
	2	89.670	0.000	15.775	35.772
	3	573.254	3.153	0.000	2.156
	4	46.961	37.203	8.751	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.21	0.67	0.12
	2	0.63	0.00	0.11	0.25
	3	0.99	0.01	0.00	0.00
	4	0.51	0.40	0.09	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	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	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	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	0.25	3.37	0.33	A
2	0.14	3.77	0.16	A
3	0.57	7.58	1.33	A
4	0.13	5.23	0.15	A

Main Results for each time segment

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	244.34	243.53	36.79	0.00	1436.62	0.170	0.20	3.016	A
2	106.32	105.91	198.12	0.00	1162.24	0.091	0.10	3.408	A
3	435.57	433.14	122.25	0.00	1143.90	0.381	0.61	5.048	A
4	69.95	69.62	498.77	0.00	910.01	0.077	0.08	4.280	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	291.77	291.57	44.09	0.00	1432.31	0.204	0.25	3.155	A
2	126.95	126.85	237.21	0.00	1140.60	0.111	0.12	3.550	A
3	520.12	519.18	146.41	0.00	1130.38	0.460	0.84	5.882	A
4	83.53	83.43	597.80	0.00	859.28	0.097	0.11	4.640	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	357.34	357.03	53.98	0.00	1426.47	0.251	0.33	3.366	A
2	155.48	155.33	290.47	0.00	1111.11	0.140	0.16	3.766	A
3	637.01	635.11	179.28	0.00	1111.97	0.573	1.32	7.519	A
4	102.30	102.14	731.38	0.00	790.85	0.129	0.15	5.225	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	357.34	357.34	54.07	0.00	1426.42	0.251	0.33	3.366	A
2	155.48	155.48	290.73	0.00	1110.97	0.140	0.16	3.766	A
3	637.01	636.96	179.44	0.00	1111.88	0.573	1.33	7.577	A
4	102.30	102.30	733.31	0.00	789.86	0.130	0.15	5.235	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	291.77	292.08	44.24	0.00	1432.22	0.204	0.26	3.160	A
2	126.95	127.10	237.64	0.00	1140.37	0.111	0.13	3.552	A
3	520.12	521.98	146.68	0.00	1130.22	0.460	0.86	5.936	A
4	83.53	83.69	600.74	0.00	857.77	0.097	0.11	4.651	A

Main results: (09:15-09:30)

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	244.34	244.55	37.02	0.00	1436.48	0.170	0.21	3.020	A
2	106.32	106.41	198.97	0.00	1161.78	0.092	0.10	3.413	A
3	435.57	436.54	122.81	0.00	1143.59	0.381	0.62	5.098	A
4	69.95	70.05	502.48	0.00	908.11	0.077	0.08	4.295	A

(Default Analysis Set) - 2037 Do Minimum, 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
2037 Do Minimum, PM	2037 Do Minimum	PM		ONE HOUR	17:00	18:30	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			4.41	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1144 St Peter's Street	
2	2	Rotterdam Road South	
3	3	A1144 Normanston Drive	
4	4	Rotterdam Road 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
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	4.00	6.10	7.20	14.40	31.50	40.00	
2	3.80	5.40	3.20	12.10	31.50	35.00	
3	2.90	5.40	5.90	15.50	31.50	23.00	
4	3.50	5.10	5.60	7.30	31.50	38.00	

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)	0.590	1458.337
2		(calculated)	(calculated)	0.554	1271.936
3		(calculated)	(calculated)	0.560	1212.343
4		(calculated)	(calculated)	0.512	1165.519

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	✓	445.59	100.000
2	ONE HOUR	✓	140.62	100.000
3	ONE HOUR	✓	303.04	100.000
4	ONE HOUR	✓	196.28	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	47.508	351.518	46.560
	2	97.493	0.000	11.610	31.517
	3	295.582	3.921	0.000	3.540
	4	73.181	113.046	10.055	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.11	0.79	0.10
	2	0.69	0.00	0.08	0.22
	3	0.98	0.01	0.00	0.01
	4	0.37	0.58	0.05	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	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	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	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	0.36	4.07	0.55	A
2	0.15	4.15	0.18	A
3	0.30	4.67	0.43	A
4	0.23	4.96	0.30	A

Main Results for each time segment

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	335.46	334.21	95.19	0.00	1402.14	0.239	0.31	3.368	A
2	105.87	105.44	306.11	0.00	1102.46	0.096	0.11	3.608	A
3	228.15	227.15	131.66	0.00	1138.63	0.200	0.25	3.945	A
4	147.77	147.09	297.60	0.00	1013.06	0.146	0.17	4.157	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	400.57	400.22	114.07	0.00	1391.00	0.288	0.40	3.633	A
2	126.41	126.30	366.57	0.00	1068.98	0.118	0.13	3.818	A
3	272.43	272.15	157.70	0.00	1124.06	0.242	0.32	4.225	A
4	176.45	176.26	356.54	0.00	982.87	0.180	0.22	4.462	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	490.60	490.01	139.65	0.00	1375.89	0.357	0.55	4.061	A
2	154.83	154.65	448.82	0.00	1023.44	0.151	0.18	4.142	A
3	333.66	333.21	193.08	0.00	1104.24	0.302	0.43	4.665	A
4	216.11	215.80	436.54	0.00	941.89	0.229	0.30	4.955	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	490.60	490.59	139.85	0.00	1375.78	0.357	0.55	4.066	A
2	154.83	154.82	449.36	0.00	1023.15	0.151	0.18	4.145	A
3	333.66	333.65	193.30	0.00	1104.12	0.302	0.43	4.672	A
4	216.11	216.11	437.09	0.00	941.61	0.230	0.30	4.961	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	400.57	401.16	114.39	0.00	1390.81	0.288	0.41	3.641	A
2	126.41	126.59	367.44	0.00	1068.50	0.118	0.13	3.824	A
3	272.43	272.87	158.05	0.00	1123.86	0.242	0.32	4.233	A
4	176.45	176.76	357.44	0.00	982.41	0.180	0.22	4.471	A

Main results: (18:15-18:30)

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	335.46	335.82	95.75	0.00	1401.81	0.239	0.32	3.377	A
2	105.87	105.98	307.60	0.00	1101.63	0.096	0.11	3.618	A
3	228.15	228.43	132.32	0.00	1138.26	0.200	0.25	3.957	A
4	147.77	147.97	299.23	0.00	1012.23	0.146	0.17	4.166	A

(Default Analysis Set) - 2037 Do Something, 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
2037 Do Something, AM	2037 Do Something	AM		ONE HOUR	08:00	09:30	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			5.86	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1144 St Peter's Street	
2	2	Rotterdam Road South	
3	3	A1144 Normanston Drive	
4	4	Rotterdam Road 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
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	4.00	6.10	7.20	14.40	31.50	40.00	
2	3.80	5.40	3.20	12.10	31.50	35.00	
3	2.90	5.40	5.90	15.50	31.50	23.00	
4	3.50	5.10	5.60	7.30	31.50	38.00	

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)	0.590	1458.337
2		(calculated)	(calculated)	0.554	1271.936
3		(calculated)	(calculated)	0.560	1212.343
4		(calculated)	(calculated)	0.512	1165.519

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	✓	334.03	100.000
2	ONE HOUR	✓	264.50	100.000
3	ONE HOUR	✓	498.45	100.000
4	ONE HOUR	✓	262.76	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	85.932	213.024	35.072
	2	148.771	0.000	6.455	109.272
	3	484.463	11.978	0.000	2.008
	4	69.971	184.322	8.472	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.26	0.64	0.10
	2	0.56	0.00	0.02	0.41
	3	0.97	0.02	0.00	0.00
	4	0.27	0.70	0.03	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	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	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	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	0.28	3.76	0.38	A
2	0.26	4.37	0.35	A
3	0.53	7.45	1.13	A
4	0.36	7.03	0.56	A

Main Results for each time segment

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	251.47	250.58	153.31	0.00	1367.83	0.184	0.22	3.218	A
2	199.13	198.31	192.46	0.00	1165.38	0.171	0.21	3.718	A
3	375.26	373.17	219.78	0.00	1089.30	0.345	0.52	5.013	A
4	197.82	196.73	483.21	0.00	917.98	0.216	0.27	4.984	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	300.28	300.04	183.78	0.00	1349.84	0.222	0.28	3.429	A
2	237.78	237.56	230.46	0.00	1144.34	0.208	0.26	3.969	A
3	448.10	447.31	263.26	0.00	1064.95	0.421	0.72	5.821	A
4	236.22	235.83	579.12	0.00	868.85	0.272	0.37	5.683	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	367.77	367.38	224.87	0.00	1325.59	0.277	0.38	3.754	A
2	291.22	290.86	282.17	0.00	1115.71	0.261	0.35	4.362	A
3	548.80	547.21	322.33	0.00	1031.88	0.532	1.12	7.404	A
4	289.31	288.56	708.60	0.00	802.52	0.361	0.56	6.994	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	367.77	367.77	225.45	0.00	1325.25	0.278	0.38	3.758	A
2	291.22	291.21	282.48	0.00	1115.54	0.261	0.35	4.366	A
3	548.80	548.77	322.72	0.00	1031.66	0.532	1.13	7.454	A
4	289.31	289.29	710.35	0.00	801.62	0.361	0.56	7.026	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	300.28	300.67	184.66	0.00	1349.32	0.223	0.29	3.433	A
2	237.78	238.13	230.96	0.00	1144.07	0.208	0.26	3.975	A
3	448.10	449.66	263.89	0.00	1064.60	0.421	0.73	5.868	A
4	236.22	236.95	581.79	0.00	867.48	0.272	0.38	5.717	A

Main results: (09:15-09:30)

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	251.47	251.72	154.48	0.00	1367.14	0.184	0.23	3.227	A
2	199.13	199.35	193.35	0.00	1164.88	0.171	0.21	3.731	A
3	375.26	376.08	220.92	0.00	1088.66	0.345	0.53	5.057	A
4	197.82	198.22	486.69	0.00	916.20	0.216	0.28	5.018	A

(Default Analysis Set) - 2037 Do Something, 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
2037 Do Something, PM	2037 Do Something	PM		ONE HOUR	17:00	18:30	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			5.23	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	A1144 St Peter's Street	
2	2	Rotterdam Road South	
3	3	A1144 Normanston Drive	
4	4	Rotterdam Road 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
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	4.00	6.10	7.20	14.40	31.50	40.00	
2	3.80	5.40	3.20	12.10	31.50	35.00	
3	2.90	5.40	5.90	15.50	31.50	23.00	
4	3.50	5.10	5.60	7.30	31.50	38.00	

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)	0.590	1458.337
2		(calculated)	(calculated)	0.554	1271.936
3		(calculated)	(calculated)	0.560	1212.343
4		(calculated)	(calculated)	0.512	1165.519

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	✓	531.71	100.000
2	ONE HOUR	✓	282.16	100.000
3	ONE HOUR	✓	257.48	100.000
4	ONE HOUR	✓	311.10	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	102.171	393.359	36.182
	2	121.596	0.000	4.610	155.957
	3	245.491	2.974	0.000	9.020
	4	69.714	229.990	11.395	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.19	0.74	0.07
	2	0.43	0.00	0.02	0.55
	3	0.95	0.01	0.00	0.04
	4	0.22	0.74	0.04	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	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	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0
	3	0.0	0.0	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	0.45	5.04	0.82	A
2	0.31	5.20	0.45	A
3	0.28	4.89	0.38	A
4	0.36	5.86	0.55	A

Main Results for each time segment

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	400.30	398.63	183.04	0.00	1350.28	0.296	0.42	3.776	A
2	212.43	211.46	330.56	0.00	1088.92	0.195	0.24	4.098	A
3	193.85	192.98	235.13	0.00	1080.70	0.179	0.22	4.052	A
4	234.21	233.03	277.35	0.00	1023.44	0.229	0.29	4.548	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	478.00	477.44	219.38	0.00	1328.83	0.360	0.56	4.225	A
2	253.66	253.36	395.93	0.00	1052.73	0.241	0.32	4.503	A
3	231.47	231.23	281.71	0.00	1054.62	0.219	0.28	4.371	A
4	279.67	279.30	332.31	0.00	995.28	0.281	0.39	5.026	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	585.43	584.41	268.53	0.00	1299.81	0.450	0.81	5.025	A
2	310.67	310.15	484.64	0.00	1003.61	0.310	0.44	5.188	A
3	283.50	283.08	344.85	0.00	1019.27	0.278	0.38	4.888	A
4	342.53	341.87	406.82	0.00	957.11	0.358	0.55	5.845	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	585.43	585.41	269.03	0.00	1299.51	0.451	0.82	5.040	A
2	310.67	310.66	485.47	0.00	1003.15	0.310	0.45	5.198	A
3	283.50	283.49	345.42	0.00	1018.96	0.278	0.38	4.894	A
4	342.53	342.51	407.43	0.00	956.80	0.358	0.55	5.859	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	478.00	479.00	220.18	0.00	1328.36	0.360	0.57	4.243	A
2	253.66	254.17	397.22	0.00	1052.01	0.241	0.32	4.514	A
3	231.47	231.88	282.61	0.00	1054.12	0.220	0.28	4.380	A
4	279.67	280.31	333.28	0.00	994.78	0.281	0.39	5.044	A

Main results: (18:15-18:30)

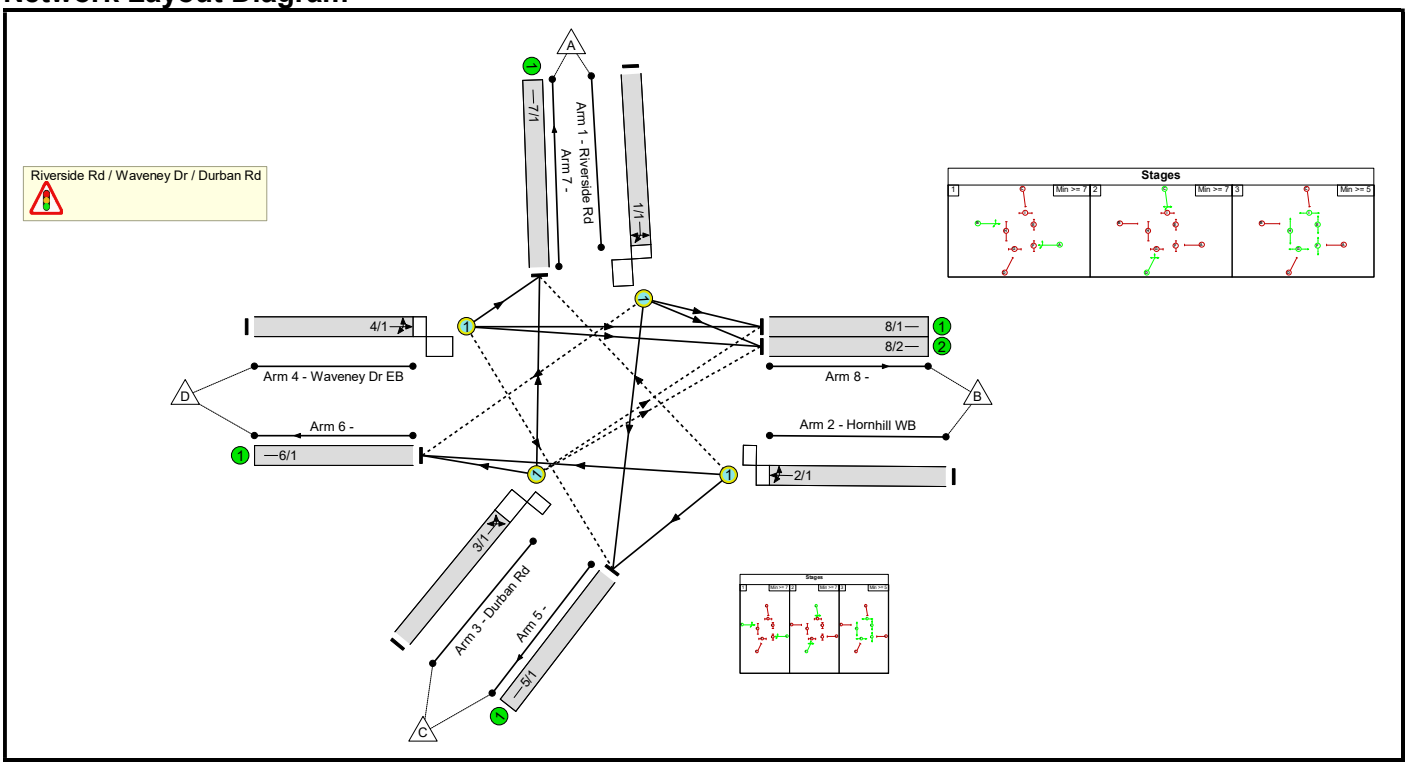
Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	400.30	400.87	184.26	0.00	1349.56	0.297	0.42	3.798	A
2	212.43	212.73	332.43	0.00	1087.88	0.195	0.24	4.116	A
3	193.85	194.10	236.53	0.00	1079.92	0.180	0.22	4.064	A
4	234.21	234.59	278.98	0.00	1022.61	0.229	0.30	4.572	A

Full Input Data And Results

User and Project Details

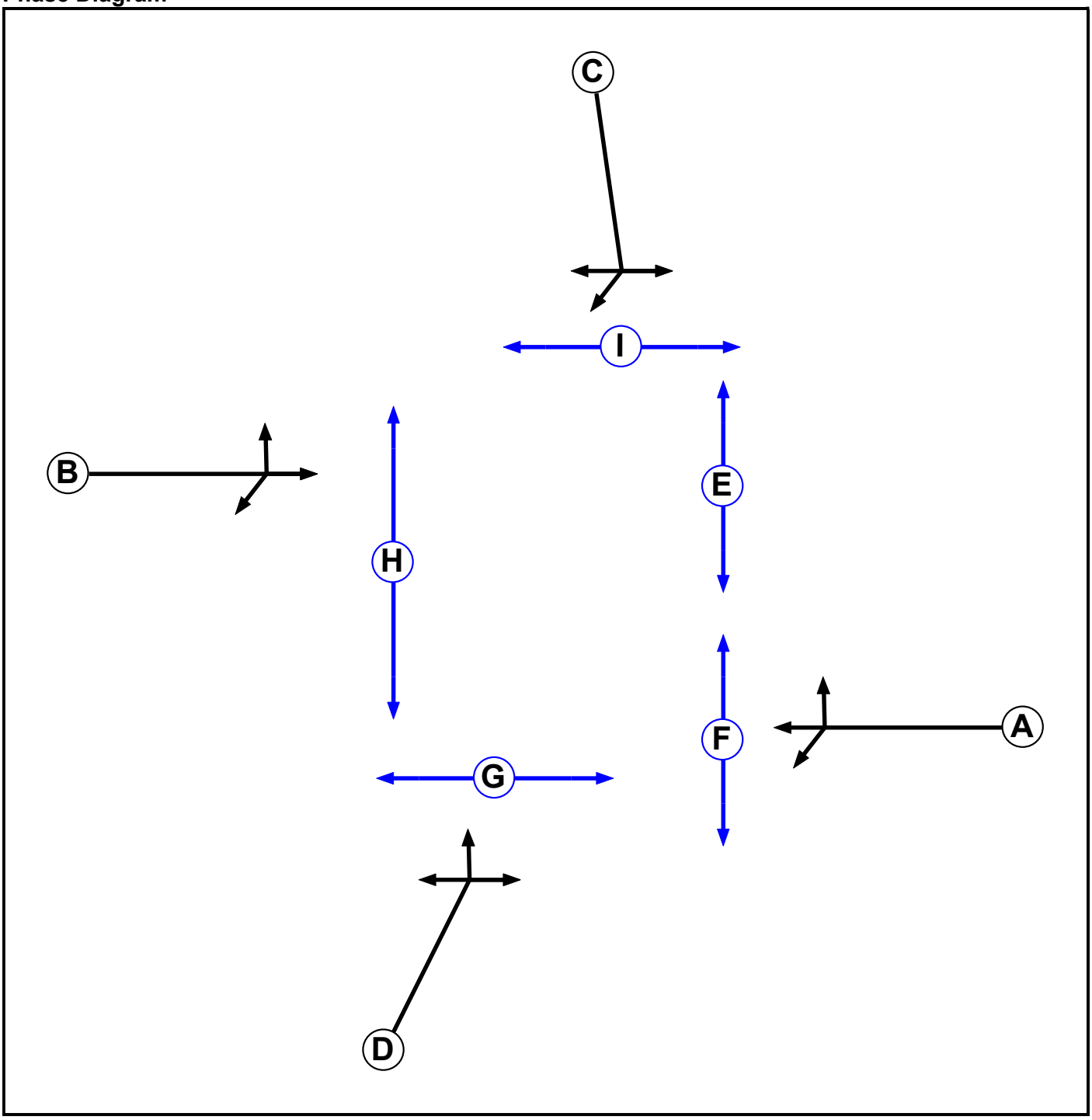
Project:	
Title:	
Location:	
Additional detail:	
File name:	16 Waveney Drive- Riverside Road-Durban Road sig v2a.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

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		5	5
F	Pedestrian		5	5
G	Pedestrian		5	5
H	Pedestrian		5	5
I	Pedestrian		5	5

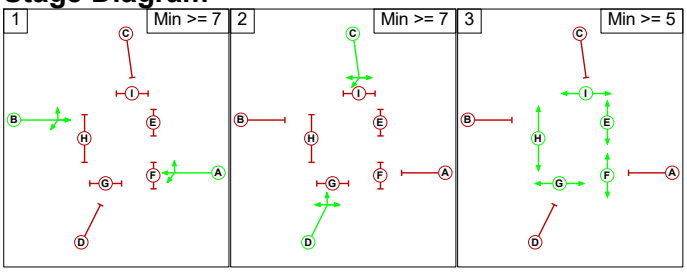
Phase Intergreens Matrix

		Starting Phase								
		A	B	C	D	E	F	G	H	I
Terminating Phase	A		-	5	6	10	10	10	10	10
	B	-		6	5	10	10	10	10	10
	C	7	5		-	10	10	10	10	10
	D	5	5	-		10	10	10	10	10
	E	5	5	5	5		-	-	-	-
	F	15	15	15	15	-		-	-	-
	G	14	14	14	14	-	-		-	-
	H	10	10	10	10	-	-	-		-
	I	13	13	13	13	-	-	-	-	

Phases in Stage

Stage No.	Phases in Stage
1	A B
2	C D
3	E F G H I

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Full Input Data And Results

Prohibited Stage Change

		To Stage		
		1	2	3
From Stage	1		6	10
	2	7		10
	3	15	15	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Riverside Rd / Waveney Dr / Durban Rd											
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 (Riverside Rd)	6/1 (Right)	1439	0	3/1	1.09	To 6/1 (Left) To 7/1 (Ahead)	3.00	2.00	0.50	3	2.00
2/1 (Hornhill WB)	7/1 (Right)	1439	0	4/1	1.09	To 7/1 (Left) To 8/1 (Ahead) To 8/2 (Ahead)	2.00	1.00	0.50	2	2.00
3/1 (Durban Rd)	8/1 (Right)	1439	0	1/1	1.09	To 5/1 (Ahead) To 8/1 (Left) To 8/2 (Left)	3.00	1.00	0.50	3	2.00
	8/2 (Right)	1439	0	1/1	1.09	To 5/1 (Ahead) To 8/1 (Left) To 8/2 (Left)					
4/1 (Waveney Dr EB)	5/1 (Right)	1439	0	2/1	1.09	To 5/1 (Left) To 6/1 (Ahead)	3.00	2.00	0.50	3	2.00

Full Input Data And Results

Lane Input Data

Junction: Riverside Rd / Waveney Dr / Durban Rd												
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 (Riverside Rd)	O	C	2	3	60.0	Geom	-	4.20	0.00	Y	Arm 5 Ahead	Inf
											Arm 6 Right	10.00
											Arm 8 Left	17.00
2/1 (Hornhill WB)	O	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Left	13.00
											Arm 6 Ahead	Inf
											Arm 7 Right	20.00
3/1 (Durban Rd)	O	D	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 6 Left	8.00
											Arm 7 Ahead	Inf
											Arm 8 Right	10.00
4/1 (Waveney Dr EB)	O	B	2	3	60.0	Geom	-	3.70	0.00	Y	Arm 5 Right	10.00
											Arm 7 Left	11.00
											Arm 8 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	-	-	-	-	-	-
8/2	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2022 DM AM'	08:00	09:00	01:00	
2: '2022 DM PM'	16:00	17:00	01:00	
3: '2037 DM AM'	08:00	09:00	01:00	
4: '2037 DM PM'	16:00	17:00	01:00	
5: '2016 Base AM'	08:00	09:00	01:00	
6: '2016 Base PM'	16:00	17:00	01:00	

Scenario 1: '2022 DM AM (all red)' (FG1: '2022 DM AM', Plan 1: 'All red')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	40	0	7	47
	B	169	0	24	156	349
	C	1	60	0	0	61
	D	97	422	0	0	519
	Tot.	267	522	24	163	976

Traffic Lane Flows

Lane	Scenario 1: 2022 DM AM (all red)
Junction: Riverside Rd / Waveney Dr / Durban Rd	
1/1	47
2/1	349
3/1	61
4/1	519
5/1	24
6/1	163
7/1	267
8/1	261
8/2	261

Full Input Data And Results

Lane Saturation Flows

Junction: Riverside Rd / Waveney Dr / Durban Rd								
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 (Riverside Rd)	4.20	0.00	Y	Arm 5 Ahead	Inf	0.0 %	1854	1854
				Arm 6 Right	10.00	14.9 %		
				Arm 8 Left	17.00	85.1 %		
2/1 (Hornhill WB)	3.50	0.00	Y	Arm 5 Left	13.00	6.9 %	1882	1882
				Arm 6 Ahead	Inf	44.7 %		
				Arm 7 Right	20.00	48.4 %		
3/1 (Durban Rd)	3.00	0.00	Y	Arm 6 Left	8.00	0.0 %	1669	1669
				Arm 7 Ahead	Inf	1.6 %		
				Arm 8 Right	10.00	98.4 %		
4/1 (Waveney Dr EB)	3.70	0.00	Y	Arm 5 Right	10.00	0.0 %	1936	1936
				Arm 7 Left	11.00	18.7 %		
				Arm 8 Ahead	Inf	81.3 %		
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
8/2	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2022 DM PM (all red)' (FG2: '2022 DM PM', Plan 1: 'All red')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	128	4	53	185
	B	18	0	81	419	518
	C	1	67	0	1	69
	D	16	225	0	0	241
	Tot.	35	420	85	473	1013

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2022 DM PM (all red)
Junction: Riverside Rd / Waveney Dr / Durban Rd	
1/1	185
2/1	518
3/1	69
4/1	241
5/1	85
6/1	473
7/1	35
8/1	209
8/2	211

Lane Saturation Flows

Junction: Riverside Rd / Waveney Dr / Durban Rd								
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 (Riverside Rd)	4.20	0.00	Y	Arm 5 Ahead	Inf	2.2 %	1843	1843
				Arm 6 Right	10.00	28.6 %		
				Arm 8 Left	17.00	69.2 %		
2/1 (Hornhill WB)	3.50	0.00	Y	Arm 5 Left	13.00	15.6 %	1925	1925
				Arm 6 Ahead	Inf	80.9 %		
				Arm 7 Right	20.00	3.5 %		
3/1 (Durban Rd)	3.00	0.00	Y	Arm 6 Left	8.00	1.4 %	1668	1668
				Arm 7 Ahead	Inf	1.4 %		
				Arm 8 Right	10.00	97.1 %		
4/1 (Waveney Dr EB)	3.70	0.00	Y	Arm 5 Right	10.00	0.0 %	1967	1967
				Arm 7 Left	11.00	6.6 %		
				Arm 8 Ahead	Inf	93.4 %		
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
8/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 3: '2037 DM AM (all red)' (FG3: '2037 DM AM', Plan 1: 'All red')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	47	0	8	55
	B	137	0	23	169	329
	C	2	68	0	0	70
	D	162	494	0	0	656
	Tot.	301	609	23	177	1110

Traffic Lane Flows

Lane	Scenario 3: 2037 DM AM (all red)
Junction: Riverside Rd / Waveney Dr / Durban Rd	
1/1	55
2/1	329
3/1	70
4/1	656
5/1	23
6/1	177
7/1	301
8/1	304
8/2	305

Full Input Data And Results

Lane Saturation Flows

Junction: Riverside Rd / Waveney Dr / Durban Rd								
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 (Riverside Rd)	4.20	0.00	Y	Arm 5 Ahead	Inf	0.0 %	1855	1855
				Arm 6 Right	10.00	14.5 %		
				Arm 8 Left	17.00	85.5 %		
2/1 (Hornhill WB)	3.50	0.00	Y	Arm 5 Left	13.00	7.0 %	1891	1891
				Arm 6 Ahead	Inf	51.4 %		
				Arm 7 Right	20.00	41.6 %		
3/1 (Durban Rd)	3.00	0.00	Y	Arm 6 Left	8.00	0.0 %	1671	1671
				Arm 7 Ahead	Inf	2.9 %		
				Arm 8 Right	10.00	97.1 %		
4/1 (Waveney Dr EB)	3.70	0.00	Y	Arm 5 Right	10.00	0.0 %	1920	1920
				Arm 7 Left	11.00	24.7 %		
				Arm 8 Ahead	Inf	75.3 %		
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
8/2	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2037 DM PM (all red)' (FG4: '2037 DM PM', Plan 1: 'All red')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	137	4	67	208
	B	19	0	90	474	583
	C	1	69	0	1	71
	D	19	252	0	0	271
	Tot.	39	458	94	542	1133

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2037 DM PM (all red)
Junction: Riverside Rd / Waveney Dr / Durban Rd	
1/1	208
2/1	583
3/1	71
4/1	271
5/1	94
6/1	542
7/1	39
8/1	228
8/2	230

Lane Saturation Flows

Junction: Riverside Rd / Waveney Dr / Durban Rd								
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 (Riverside Rd)	4.20	0.00	Y	Arm 5 Ahead	Inf	1.9 %	1839	1839
				Arm 6 Right	10.00	32.2 %		
				Arm 8 Left	17.00	65.9 %		
2/1 (Hornhill WB)	3.50	0.00	Y	Arm 5 Left	13.00	15.4 %	1926	1926
				Arm 6 Ahead	Inf	81.3 %		
				Arm 7 Right	20.00	3.3 %		
3/1 (Durban Rd)	3.00	0.00	Y	Arm 6 Left	8.00	1.4 %	1668	1668
				Arm 7 Ahead	Inf	1.4 %		
				Arm 8 Right	10.00	97.2 %		
4/1 (Waveney Dr EB)	3.70	0.00	Y	Arm 5 Right	10.00	0.0 %	1966	1966
				Arm 7 Left	11.00	7.0 %		
				Arm 8 Ahead	Inf	93.0 %		
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
8/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 5: '2022 DM AM (No ped)' (FG1: '2022 DM AM', Plan 2: 'No ped phase')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	40	0	7	47
	B	169	0	24	156	349
	C	1	60	0	0	61
	D	97	422	0	0	519
	Tot.	267	522	24	163	976

Traffic Lane Flows

Lane	Scenario 5: 2022 DM AM (No ped)
Junction: Riverside Rd / Waveney Dr / Durban Rd	
1/1	47
2/1	349
3/1	61
4/1	519
5/1	24
6/1	163
7/1	267
8/1	261
8/2	261

Full Input Data And Results

Lane Saturation Flows

Junction: Riverside Rd / Waveney Dr / Durban Rd								
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 (Riverside Rd)	4.20	0.00	Y	Arm 5 Ahead	Inf	0.0 %	1854	1854
				Arm 6 Right	10.00	14.9 %		
				Arm 8 Left	17.00	85.1 %		
2/1 (Hornhill WB)	3.50	0.00	Y	Arm 5 Left	13.00	6.9 %	1882	1882
				Arm 6 Ahead	Inf	44.7 %		
				Arm 7 Right	20.00	48.4 %		
3/1 (Durban Rd)	3.00	0.00	Y	Arm 6 Left	8.00	0.0 %	1669	1669
				Arm 7 Ahead	Inf	1.6 %		
				Arm 8 Right	10.00	98.4 %		
4/1 (Waveney Dr EB)	3.70	0.00	Y	Arm 5 Right	10.00	0.0 %	1936	1936
				Arm 7 Left	11.00	18.7 %		
				Arm 8 Ahead	Inf	81.3 %		
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
8/2	Infinite Saturation Flow						Inf	Inf

Scenario 6: '2022 DM AM (No ped)' (FG2: '2022 DM PM', Plan 2: 'No ped phase')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	128	4	53	185
	B	18	0	81	419	518
	C	1	67	0	1	69
	D	16	225	0	0	241
	Tot.	35	420	85	473	1013

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 6: 2022 DM AM (No ped)
Junction: Riverside Rd / Waveney Dr / Durban Rd	
1/1	185
2/1	518
3/1	69
4/1	241
5/1	85
6/1	473
7/1	35
8/1	209
8/2	211

Lane Saturation Flows

Junction: Riverside Rd / Waveney Dr / Durban Rd								
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 (Riverside Rd)	4.20	0.00	Y	Arm 5 Ahead	Inf	2.2 %	1843	1843
				Arm 6 Right	10.00	28.6 %		
				Arm 8 Left	17.00	69.2 %		
2/1 (Hornhill WB)	3.50	0.00	Y	Arm 5 Left	13.00	15.6 %	1925	1925
				Arm 6 Ahead	Inf	80.9 %		
				Arm 7 Right	20.00	3.5 %		
3/1 (Durban Rd)	3.00	0.00	Y	Arm 6 Left	8.00	1.4 %	1668	1668
				Arm 7 Ahead	Inf	1.4 %		
				Arm 8 Right	10.00	97.1 %		
4/1 (Waveney Dr EB)	3.70	0.00	Y	Arm 5 Right	10.00	0.0 %	1967	1967
				Arm 7 Left	11.00	6.6 %		
				Arm 8 Ahead	Inf	93.4 %		
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
8/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 7: '2037 DM AM (No ped)' (FG3: '2037 DM AM', Plan 2: 'No ped phase')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	47	0	8	55
	B	137	0	23	169	329
	C	2	68	0	0	70
	D	162	494	0	0	656
	Tot.	301	609	23	177	1110

Traffic Lane Flows

Lane	Scenario 7: 2037 DM AM (No ped)
Junction: Riverside Rd / Waveney Dr / Durban Rd	
1/1	55
2/1	329
3/1	70
4/1	656
5/1	23
6/1	177
7/1	301
8/1	304
8/2	305

Full Input Data And Results

Lane Saturation Flows

Junction: Riverside Rd / Waveney Dr / Durban Rd								
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 (Riverside Rd)	4.20	0.00	Y	Arm 5 Ahead	Inf	0.0 %	1855	1855
				Arm 6 Right	10.00	14.5 %		
				Arm 8 Left	17.00	85.5 %		
2/1 (Hornhill WB)	3.50	0.00	Y	Arm 5 Left	13.00	7.0 %	1891	1891
				Arm 6 Ahead	Inf	51.4 %		
				Arm 7 Right	20.00	41.6 %		
3/1 (Durban Rd)	3.00	0.00	Y	Arm 6 Left	8.00	0.0 %	1671	1671
				Arm 7 Ahead	Inf	2.9 %		
				Arm 8 Right	10.00	97.1 %		
4/1 (Waveney Dr EB)	3.70	0.00	Y	Arm 5 Right	10.00	0.0 %	1920	1920
				Arm 7 Left	11.00	24.7 %		
				Arm 8 Ahead	Inf	75.3 %		
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
8/2	Infinite Saturation Flow						Inf	Inf

Scenario 8: '2037 DM PM (No ped)' (FG4: '2037 DM PM', Plan 2: 'No ped phase')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	137	4	67	208
	B	19	0	90	474	583
	C	1	69	0	1	71
	D	19	252	0	0	271
	Tot.	39	458	94	542	1133

Full Input Data And Results

Traffic Lane Flows

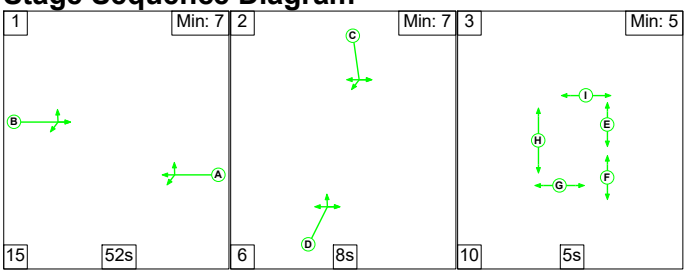
Lane	Scenario 8: 2037 DM PM (No ped)
Junction: Riverside Rd / Waveney Dr / Durban Rd	
1/1	208
2/1	583
3/1	71
4/1	271
5/1	94
6/1	542
7/1	39
8/1	228
8/2	230

Lane Saturation Flows

Junction: Riverside Rd / Waveney Dr / Durban Rd								
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 (Riverside Rd)	4.20	0.00	Y	Arm 5 Ahead	Inf	1.9 %	1839	1839
				Arm 6 Right	10.00	32.2 %		
				Arm 8 Left	17.00	65.9 %		
2/1 (Hornhill WB)	3.50	0.00	Y	Arm 5 Left	13.00	15.4 %	1926	1926
				Arm 6 Ahead	Inf	81.3 %		
				Arm 7 Right	20.00	3.3 %		
3/1 (Durban Rd)	3.00	0.00	Y	Arm 6 Left	8.00	1.4 %	1668	1668
				Arm 7 Ahead	Inf	1.4 %		
				Arm 8 Right	10.00	97.2 %		
4/1 (Waveney Dr EB)	3.70	0.00	Y	Arm 5 Right	10.00	0.0 %	1966	1966
				Arm 7 Left	11.00	7.0 %		
				Arm 8 Ahead	Inf	93.0 %		
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
8/2	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2022 DM AM (all red)' (FG1: '2022 DM AM', Plan 1: 'All red')

Stage Sequence Diagram

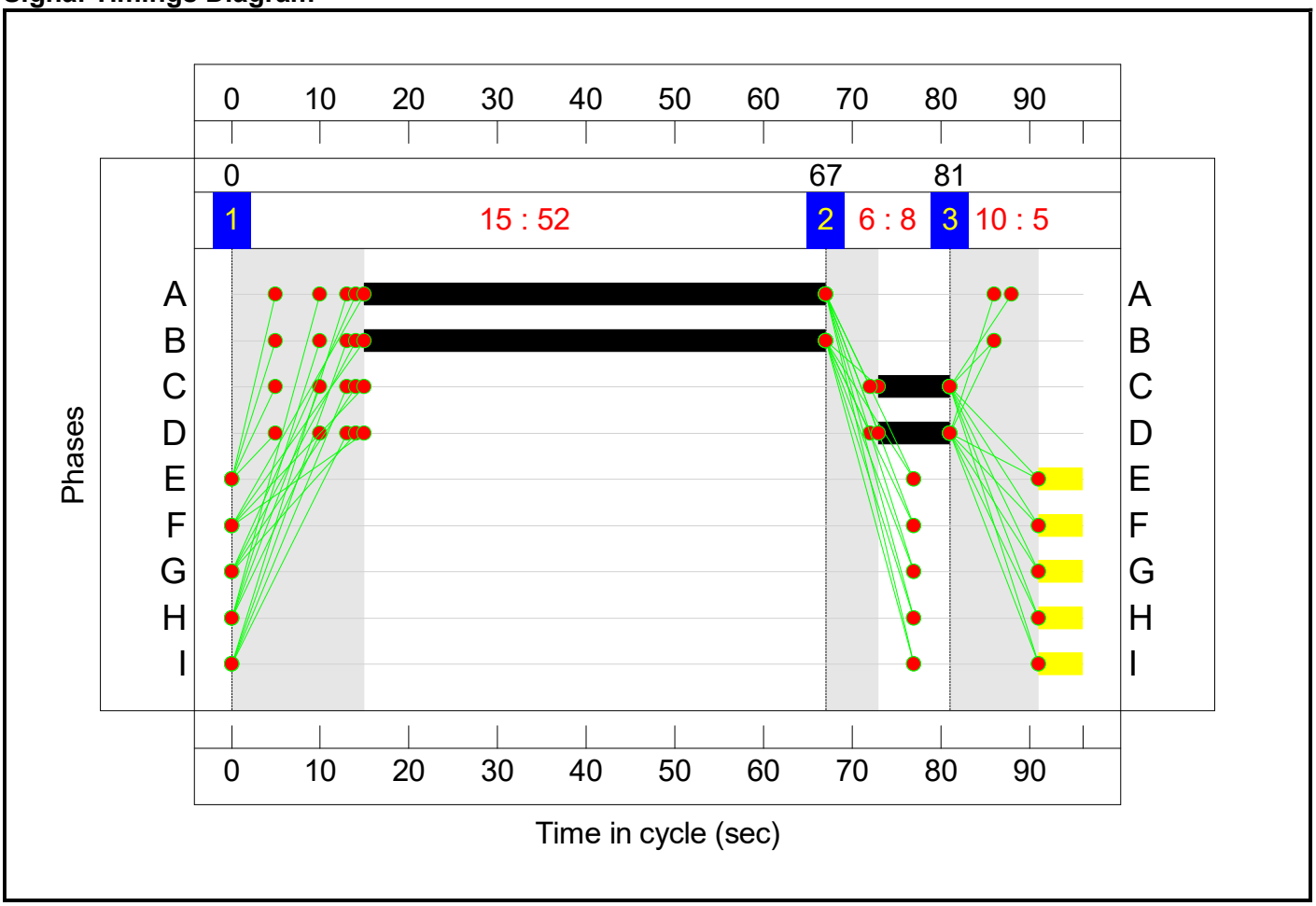


Full Input Data And Results

Stage Timings

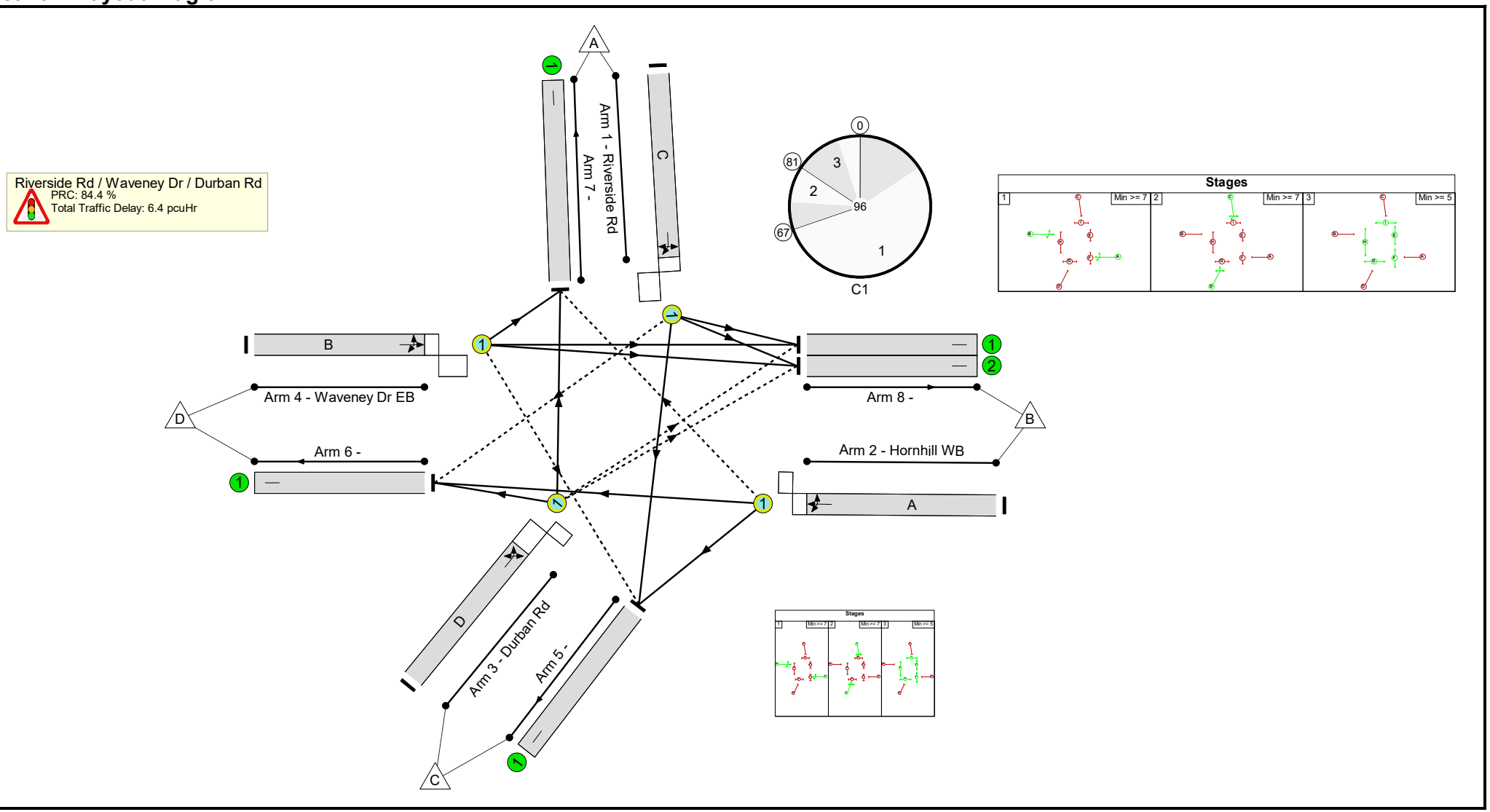
Stage	1	2	3
Duration	52	8	5
Change Point	0	67	81

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**48.8%**
Riverside Rd / Waveney Dr / Durban Rd	-	-	**N/A**	-	-		-	-	-	-	-	-	**48.8%**
1/1	Riverside Rd Ahead Right Left	O	N/A	N/A	C		1	8	-	47	1854	174	27.0%
2/1	Hornhill WB Left Ahead Right	O	N/A	N/A	A		1	52	-	349	1882	749	46.6%
3/1	Durban Rd Left Ahead Right	O	N/A	N/A	D		1	8	-	61	1669	131	46.7%
4/1	Waveney Dr EB Right Left Ahead	O	N/A	N/A	B		1	52	-	519	1936	1063	48.8%
5/1		U	N/A	N/A	-		-	-	-	24	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	163	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	267	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	261	Inf	Inf	0.0%
8/2		U	N/A	N/A	-		-	-	-	261	Inf	Inf	0.0%

Full Input Data And Results

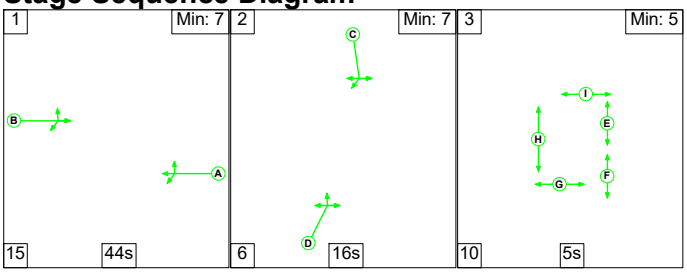
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**233**	**0**	**3**	**4.6**	**1.5**	**0.3**	**6.4**	**-**	**-**	**-**	**-**
Riverside Rd / Waveney Dr / Durban Rd	**-**	**-**	**233**	**0**	**3**	**4.6**	**1.5**	**0.3**	**6.4**	**-**	**-**	**-**	**-**
1/1	47	47	7	0	0	0.5	0.2	0.0	0.7	54.6	1.2	0.2	1.3
2/1	349	349	167	0	2	1.4	0.4	0.3	2.2	22.5	6.7	0.4	7.1
3/1	61	61	59	0	1	0.7	0.4	0.0	1.2	69.0	1.5	0.4	2.0
4/1	519	519	0	0	0	1.9	0.5	0.0	2.4	16.5	8.4	0.5	8.8
5/1	24	24	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	163	163	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	267	267	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	261	261	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	261	261	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 84.4 Total Delay for Signalled Lanes (pcuHr): 6.44 Cycle Time (s): 96
PRC Over All Lanes (%): 84.4 Total Delay Over All Lanes(pcuHr): 6.44

Full Input Data And Results

Scenario 2: '2022 DM PM (all red)' (FG2: '2022 DM PM', Plan 1: 'All red')

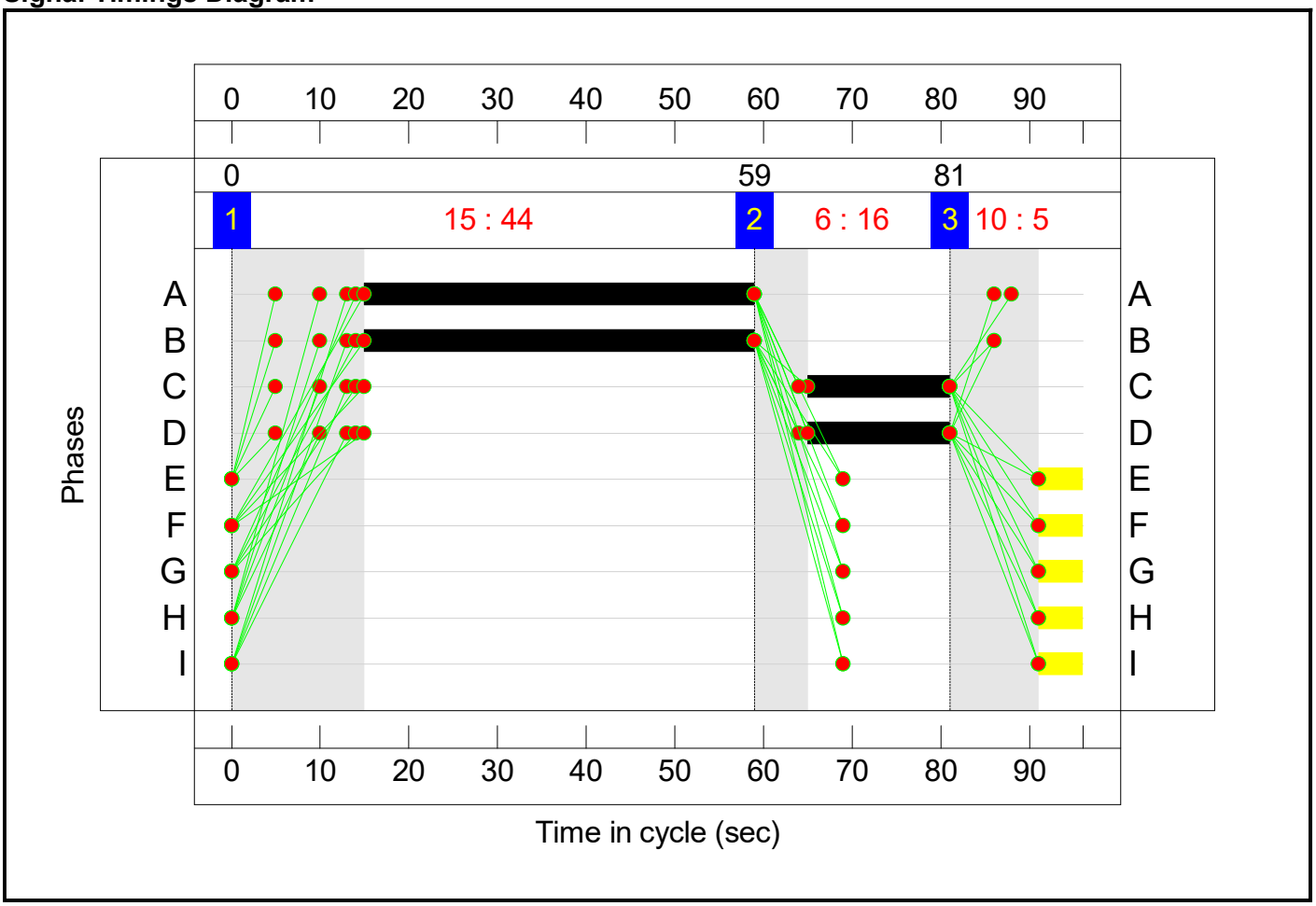
Stage Sequence Diagram



Stage Timings

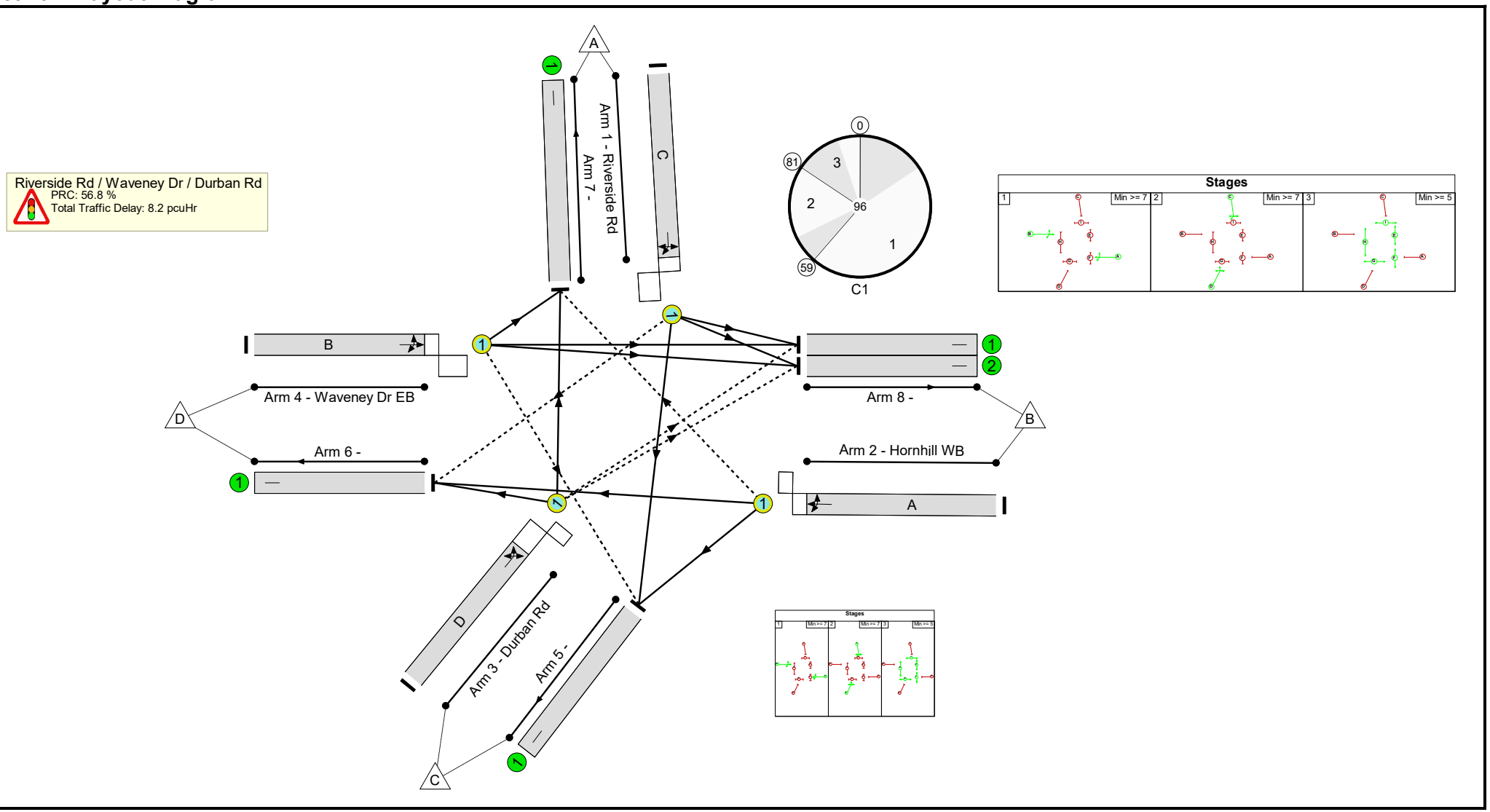
Stage	1	2	3
Duration	44	16	5
Change Point	0	59	81

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**57.4%**
Riverside Rd / Waveney Dr / Durban Rd	-	-	**N/A**	-	-		-	-	-	-	-	-	**57.4%**
1/1	Riverside Rd Ahead Right Left	O	N/A	N/A	C		1	16	-	185	1843	326	56.7%
2/1	Hornhill WB Left Ahead Right	O	N/A	N/A	A		1	44	-	518	1925	902	57.4%
3/1	Durban Rd Left Ahead Right	O	N/A	N/A	D		1	16	-	69	1668	186	37.1%
4/1	Waveney Dr EB Right Left Ahead	O	N/A	N/A	B		1	44	-	241	1967	922	26.1%
5/1		U	N/A	N/A	-		-	-	-	85	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	473	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	35	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	209	Inf	Inf	0.0%
8/2		U	N/A	N/A	-		-	-	-	211	Inf	Inf	0.0%

Full Input Data And Results

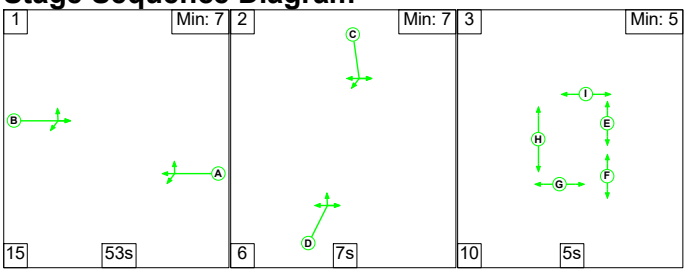
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**136**	**0**	**2**	**6.2**	**1.8**	**0.2**	**8.2**	**-**	**-**	**-**	**-**
Riverside Rd / Waveney Dr / Durban Rd	**-**	**-**	**136**	**0**	**2**	**6.2**	**1.8**	**0.2**	**8.2**	**-**	**-**	**-**	**-**
1/1	185	185	52	0	1	1.9	0.6	0.0	2.5	48.8	4.5	0.6	5.1
2/1	518	518	18	0	0	2.7	0.7	0.0	3.3	23.2	9.9	0.7	10.6
3/1	69	69	66	0	1	0.7	0.3	0.2	1.1	57.3	1.6	0.3	1.9
4/1	241	241	0	0	0	1.0	0.2	0.0	1.2	18.1	3.9	0.2	4.1
5/1	85	85	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	473	473	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	35	35	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	209	209	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	211	211	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 56.8 Total Delay for Signalled Lanes (pcuHr): 8.16 Cycle Time (s): 96
PRC Over All Lanes (%): 56.8 Total Delay Over All Lanes(pcuHr): 8.16

Full Input Data And Results

Scenario 3: '2037 DM AM (all red)' (FG3: '2037 DM AM', Plan 1: 'All red')

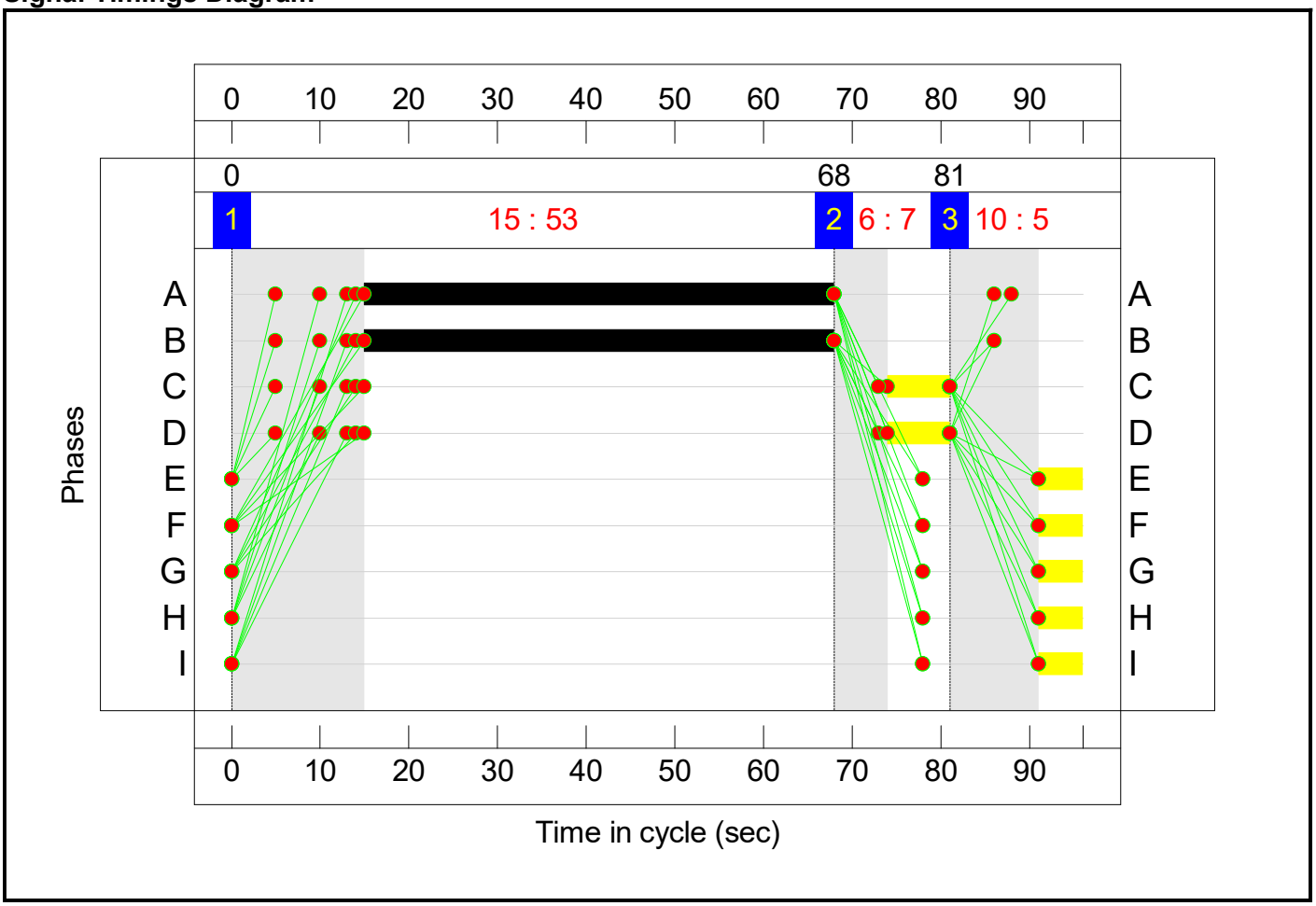
Stage Sequence Diagram



Stage Timings

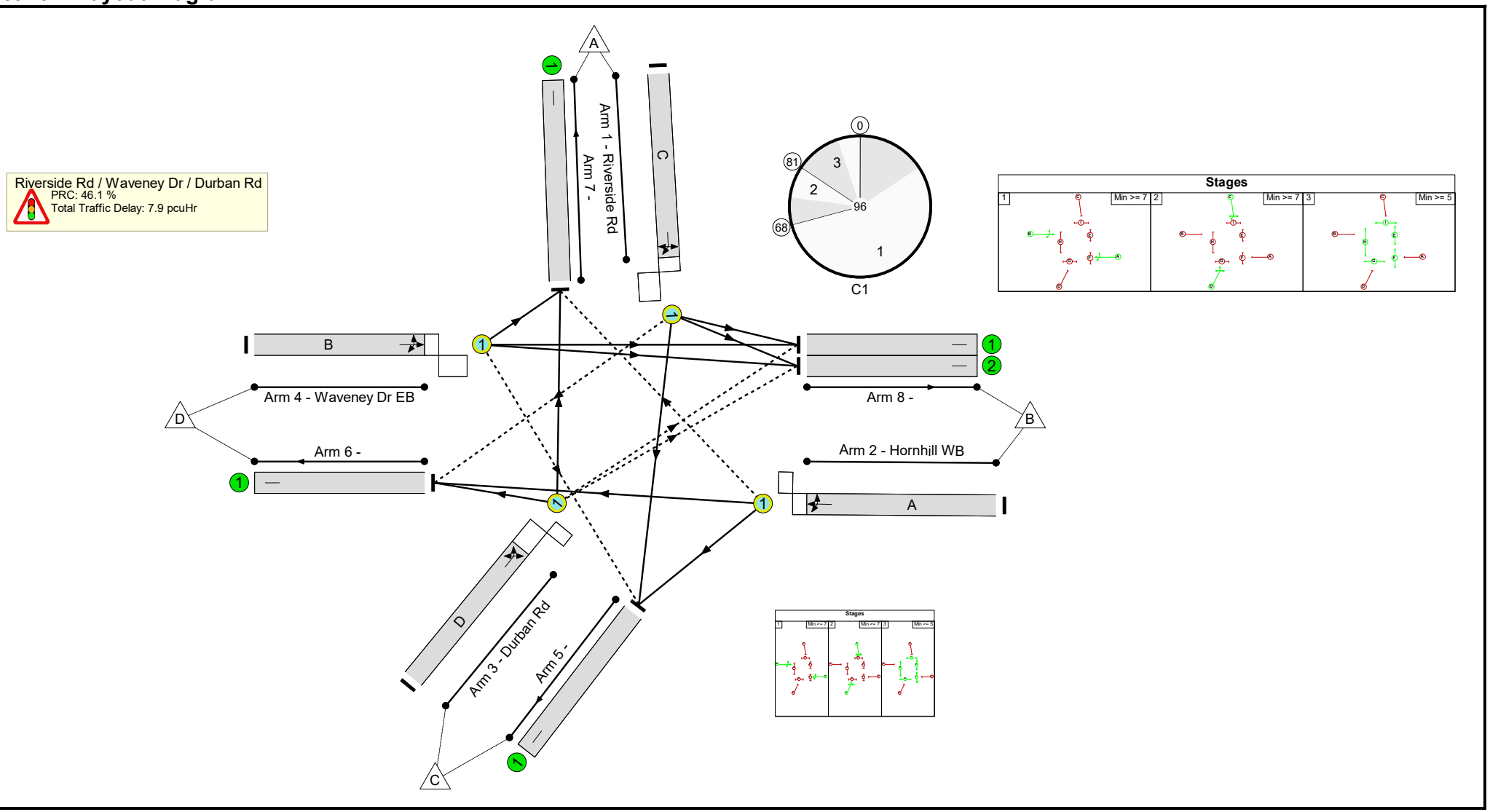
Stage	1	2	3
Duration	53	7	5
Change Point	0	68	81

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**61.6%**
Riverside Rd / Waveney Dr / Durban Rd	-	-	**N/A**	-	-		-	-	-	-	-	-	**61.6%**
1/1	Riverside Rd Ahead Right Left	O	N/A	N/A	C		1	7	-	55	1855	155	35.6%
2/1	Hornhill WB Left Ahead Right	O	N/A	N/A	A		1	53	-	329	1891	658	50.0%
3/1	Durban Rd Left Ahead Right	O	N/A	N/A	D		1	7	-	70	1671	114	61.6%
4/1	Waveney Dr EB Right Left Ahead	O	N/A	N/A	B		1	53	-	656	1920	1080	60.7%
5/1		U	N/A	N/A	-		-	-	-	23	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	177	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	301	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	304	Inf	Inf	0.0%
8/2		U	N/A	N/A	-		-	-	-	305	Inf	Inf	0.0%

Full Input Data And Results

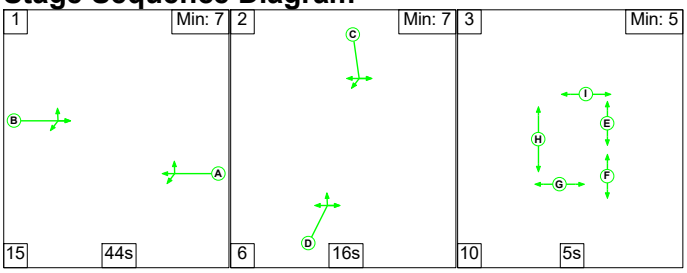
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**204**	**0**	**9**	**5.2**	**2.3**	**0.4**	**7.9**	**-**	**-**	**-**	**-**
Riverside Rd / Waveney Dr / Durban Rd	**-**	**-**	**204**	**0**	**9**	**5.2**	**2.3**	**0.4**	**7.9**	**-**	**-**	**-**	**-**
1/1	55	55	8	0	0	0.6	0.3	0.0	0.9	59.6	1.4	0.3	1.6
2/1	329	329	136	0	1	1.1	0.5	0.4	2.0	21.7	4.8	0.5	5.3
3/1	70	70	60	0	8	0.8	0.8	0.1	1.7	85.0	1.8	0.8	2.5
4/1	656	656	0	0	0	2.6	0.8	0.0	3.4	18.6	11.7	0.8	12.4
5/1	23	23	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	177	177	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	301	301	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	304	304	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	305	305	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 46.1 Total Delay for Signalled Lanes (pcuHr): 7.93 Cycle Time (s): 96
PRC Over All Lanes (%): 46.1 Total Delay Over All Lanes(pcuHr): 7.93

Full Input Data And Results

Scenario 4: '2037 DM PM (all red)' (FG4: '2037 DM PM', Plan 1: 'All red')

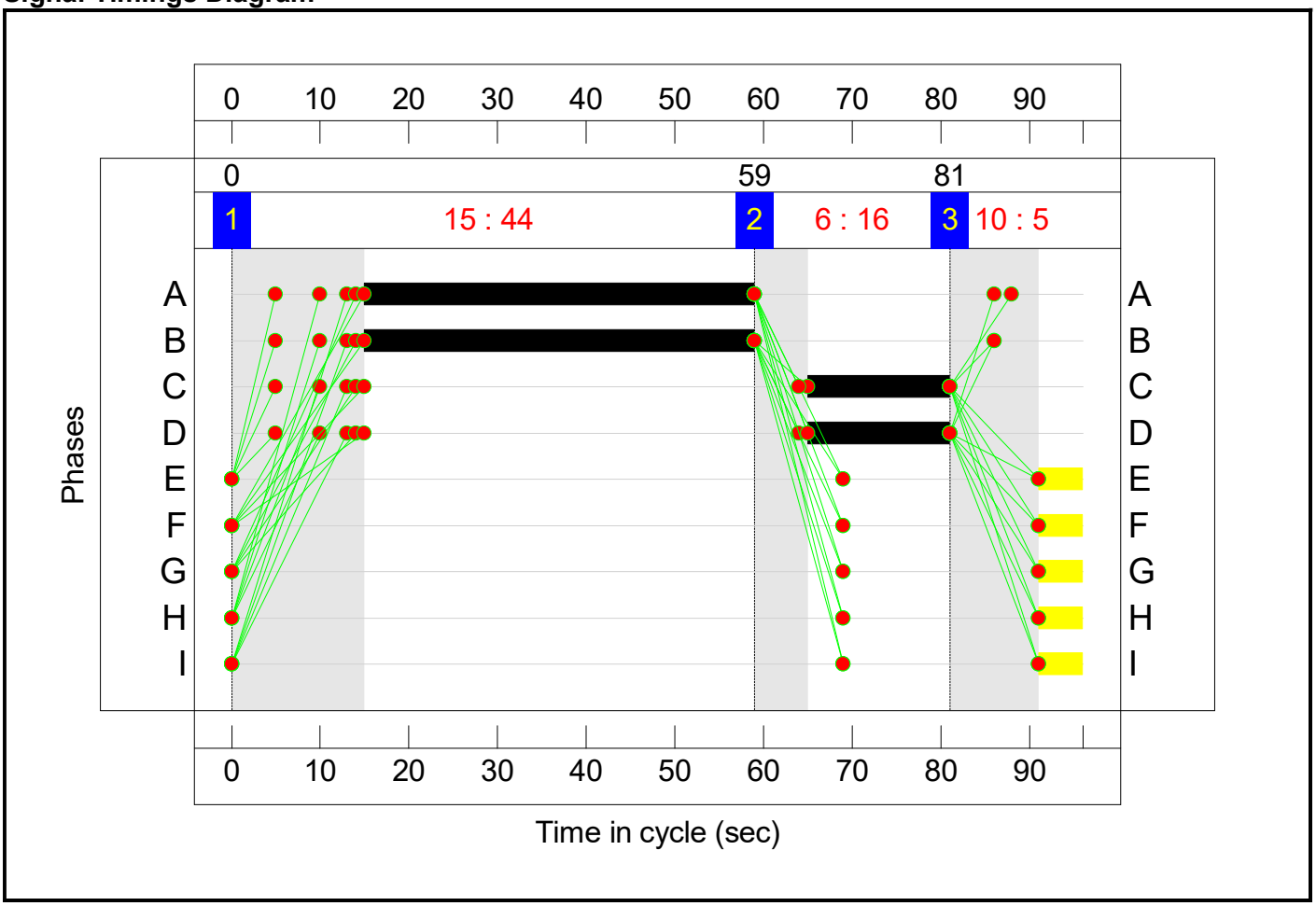
Stage Sequence Diagram



Stage Timings

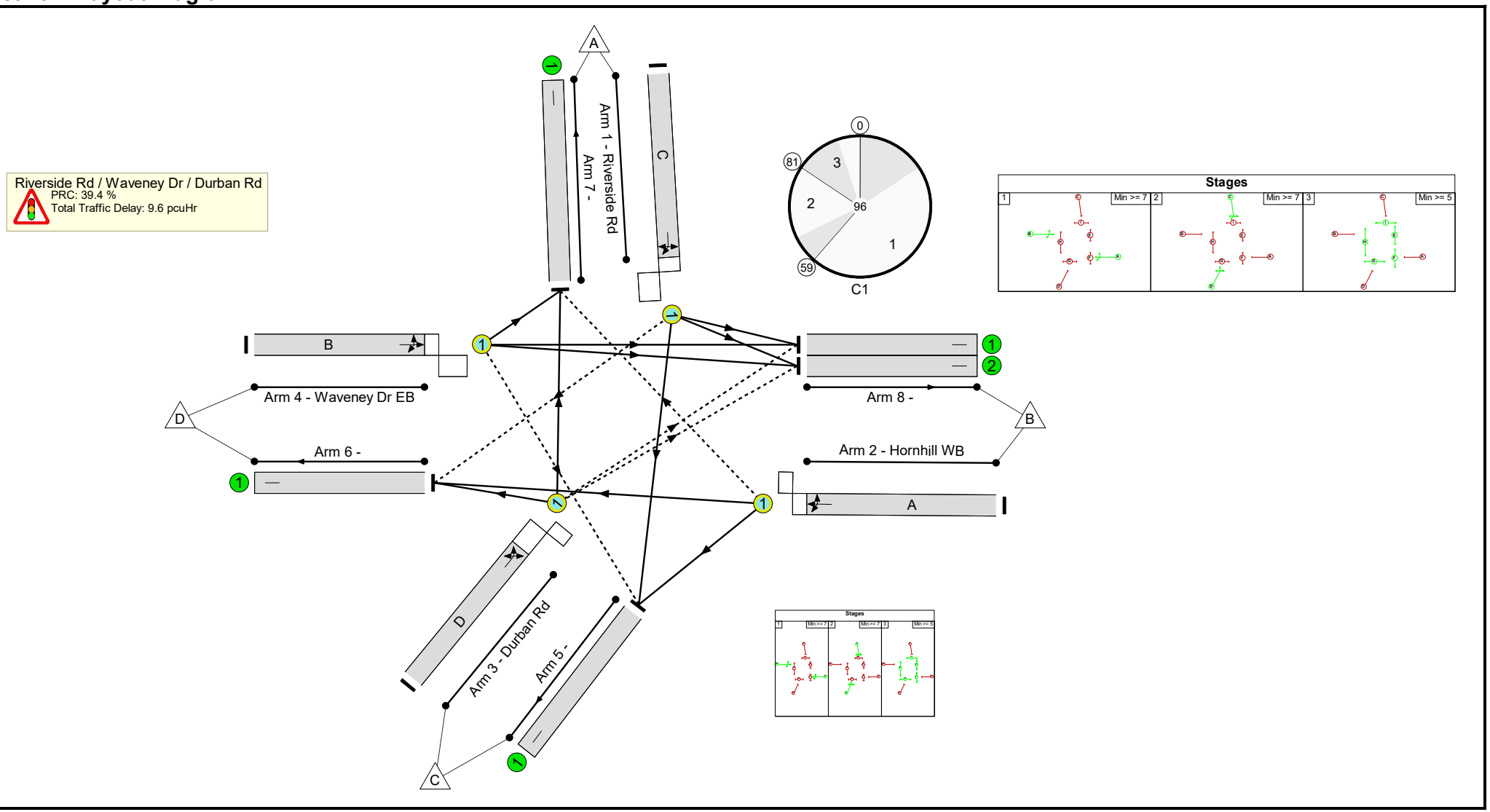
Stage	1	2	3
Duration	44	16	5
Change Point	0	59	81

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**64.6%**
Riverside Rd / Waveney Dr / Durban Rd	-	-	**N/A**	-	-		-	-	-	-	-	-	**64.6%**
1/1	Riverside Rd Ahead Right Left	O	N/A	N/A	C		1	16	-	208	1839	326	63.9%
2/1	Hornhill WB Left Ahead Right	O	N/A	N/A	A		1	44	-	583	1926	903	64.6%
3/1	Durban Rd Left Ahead Right	O	N/A	N/A	D		1	16	-	71	1668	176	40.3%
4/1	Waveney Dr EB Right Left Ahead	O	N/A	N/A	B		1	44	-	271	1966	904	30.0%
5/1		U	N/A	N/A	-		-	-	-	94	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	542	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	39	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	228	Inf	Inf	0.0%
8/2		U	N/A	N/A	-		-	-	-	230	Inf	Inf	0.0%

Full Input Data And Results

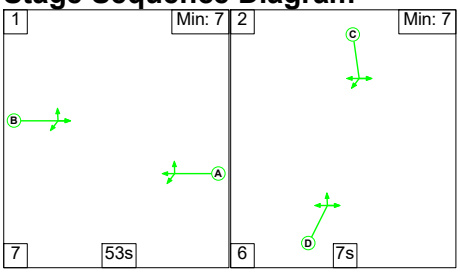
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**153**	**0**	**2**	**7.1**	**2.3**	**0.2**	**9.6**	**-**	**-**	**-**	**-**
Riverside Rd / Waveney Dr / Durban Rd	**-**	**-**	**153**	**0**	**2**	**7.1**	**2.3**	**0.2**	**9.6**	**-**	**-**	**-**	**-**
1/1	208	208	66	0	1	2.1	0.9	0.0	3.0	51.8	5.1	0.9	6.0
2/1	583	583	19	0	0	3.1	0.9	0.0	4.1	25.1	11.8	0.9	12.7
3/1	71	71	68	0	1	0.7	0.3	0.2	1.2	59.1	1.6	0.3	2.0
4/1	271	271	0	0	0	1.2	0.2	0.0	1.4	18.6	4.4	0.2	4.7
5/1	94	94	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	542	542	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	39	39	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	228	228	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	230	230	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 39.4 Total Delay for Signalled Lanes (pcuHr): 9.61 Cycle Time (s): 96
PRC Over All Lanes (%): 39.4 Total Delay Over All Lanes(pcuHr): 9.61

Full Input Data And Results

Scenario 5: '2022 DM AM (No ped)' (FG1: '2022 DM AM', Plan 2: 'No ped phase')

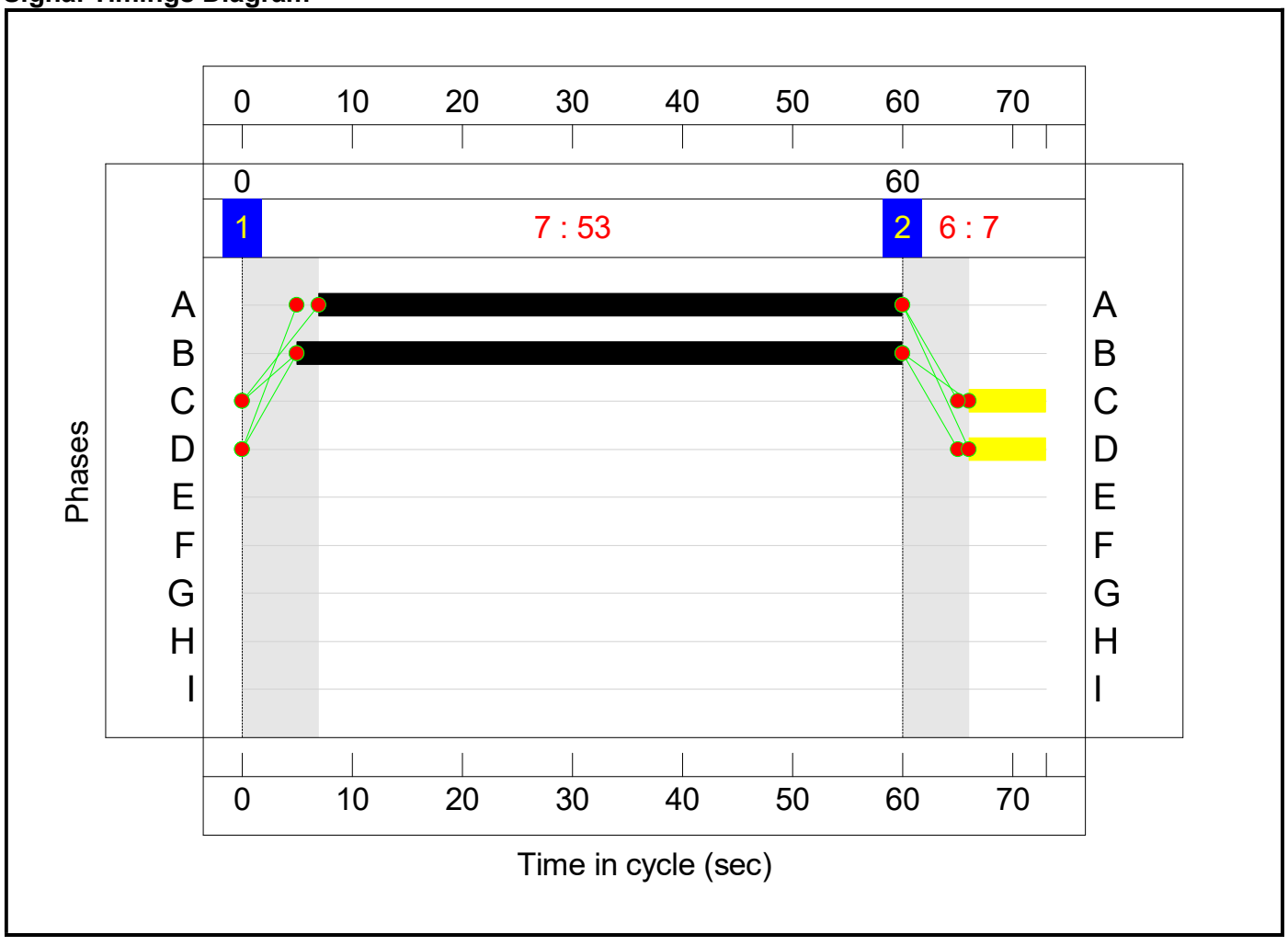
Stage Sequence Diagram



Stage Timings

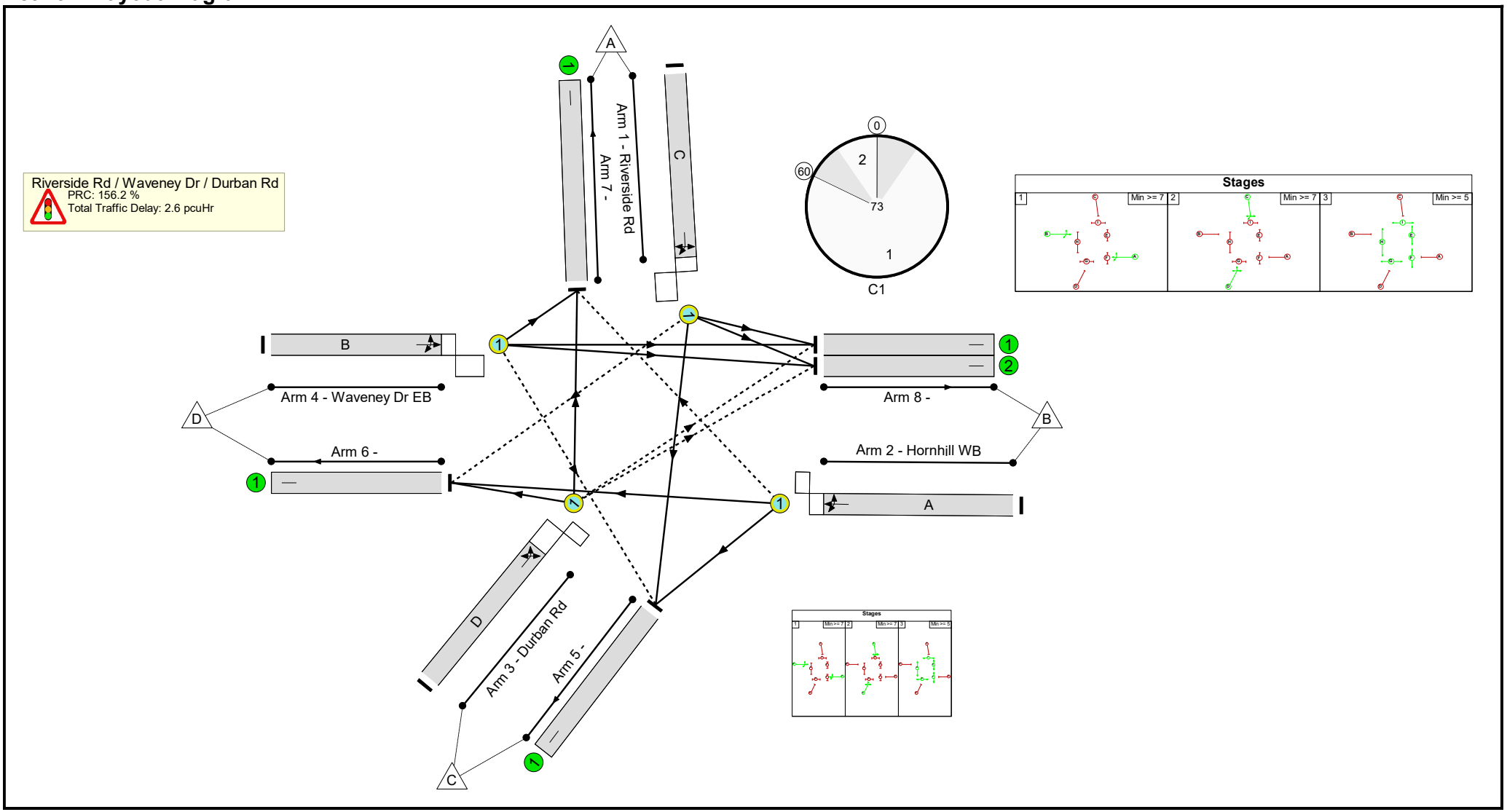
Stage	1	2
Duration	53	7
Change Point	0	60

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**35.1%**
Riverside Rd / Waveney Dr / Durban Rd	-	-	**N/A**	-	-		-	-	-	-	-	-	**35.1%**
1/1	Riverside Rd Ahead Right Left	O	N/A	N/A	C		1	7	-	47	1854	203	23.1%
2/1	Hornhill WB Left Ahead Right	O	N/A	N/A	A		1	53	-	349	1882	1277	27.3%
3/1	Durban Rd Left Ahead Right	O	N/A	N/A	D		1	7	-	61	1669	183	33.4%
4/1	Waveney Dr EB Right Left Ahead	O	N/A	N/A	B		1	55	-	519	1936	1478	35.1%
5/1		U	N/A	N/A	-		-	-	-	24	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	163	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	267	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	261	Inf	Inf	0.0%
8/2		U	N/A	N/A	-		-	-	-	261	Inf	Inf	0.0%

Full Input Data And Results

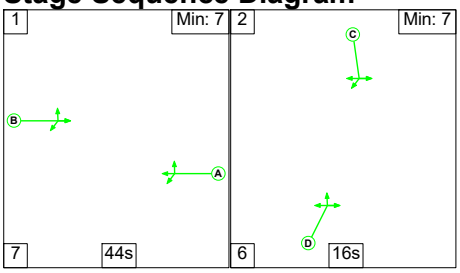
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**232**	**0**	**4**	**1.6**	**0.9**	**0.1**	**2.6**	**-**	**-**	**-**	**-**
Riverside Rd / Waveney Dr / Durban Rd	**-**	**-**	**232**	**0**	**4**	**1.6**	**0.9**	**0.1**	**2.6**	**-**	**-**	**-**	**-**
1/1	47	47	7	0	0	0.4	0.2	0.0	0.5	41.3	0.9	0.2	1.0
2/1	349	349	167	0	2	0.3	0.2	0.1	0.6	5.9	2.2	0.2	2.4
3/1	61	61	58	0	2	0.5	0.2	0.0	0.8	46.7	1.1	0.2	1.4
4/1	519	519	0	0	0	0.4	0.3	0.0	0.7	4.6	3.3	0.3	3.6
5/1	24	24	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	163	163	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	267	267	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	261	261	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	261	261	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 156.2 Total Delay for Signalled Lanes (pcuHr): 2.56 Cycle Time (s): 73
PRC Over All Lanes (%): 156.2 Total Delay Over All Lanes(pcuHr): 2.56

Full Input Data And Results

Scenario 6: '2022 DM AM (No ped)' (FG2: '2022 DM PM', Plan 2: 'No ped phase')

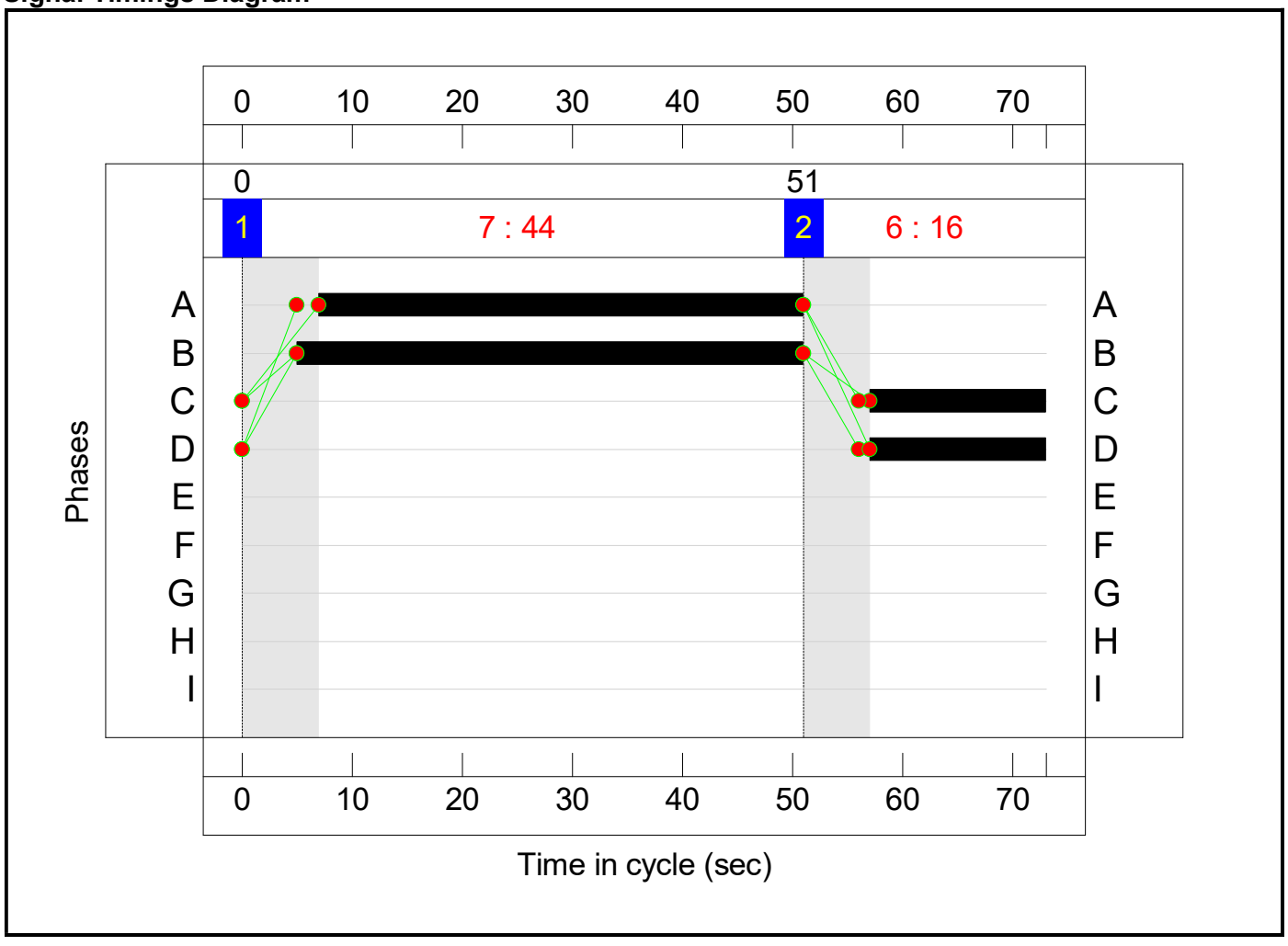
Stage Sequence Diagram



Stage Timings

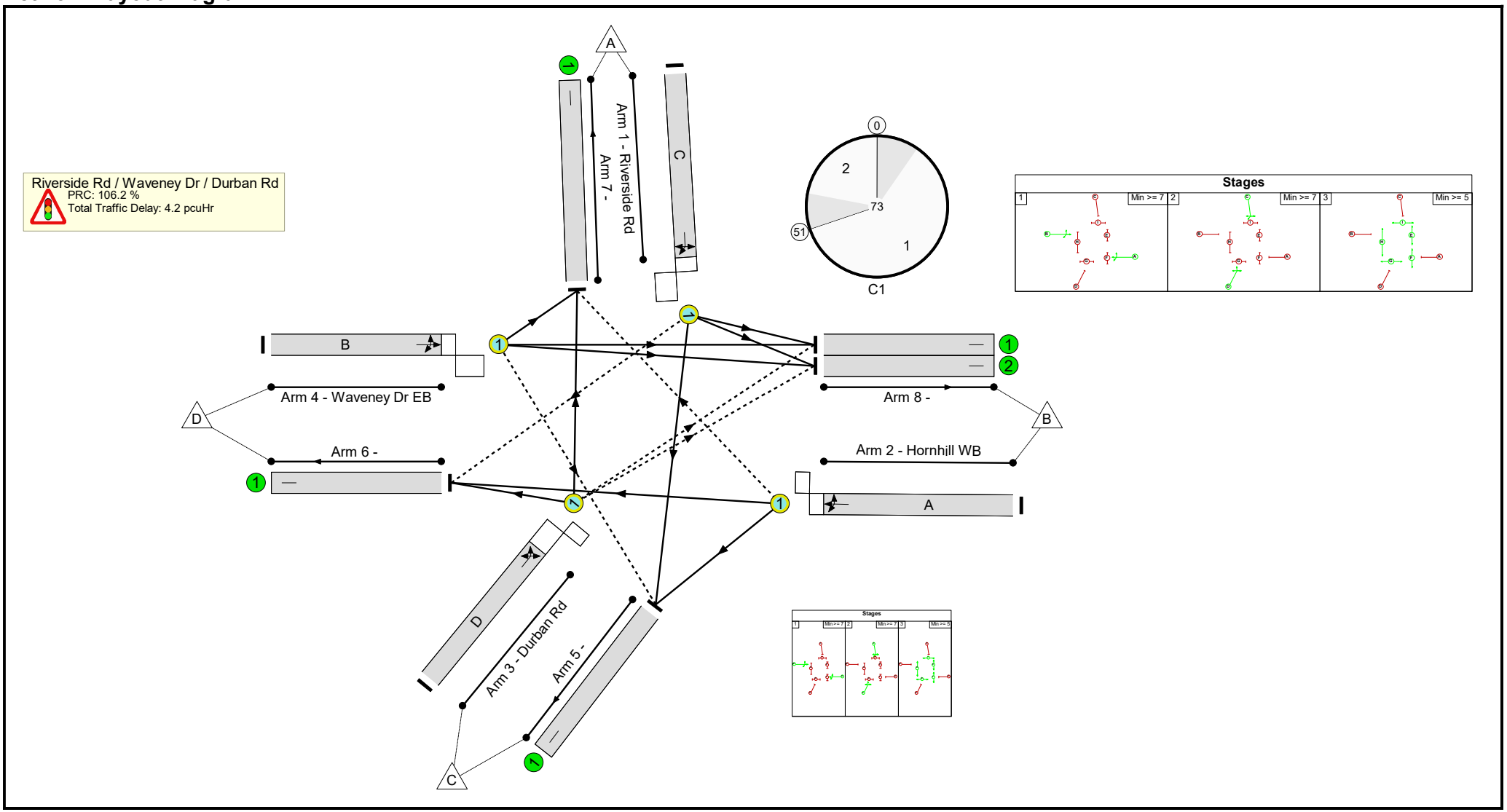
Stage	1	2
Duration	44	16
Change Point	0	51

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**43.7%**
Riverside Rd / Waveney Dr / Durban Rd	-	-	**N/A**	-	-		-	-	-	-	-	-	**43.7%**
1/1	Riverside Rd Ahead Right Left	O	N/A	N/A	C		1	16	-	185	1843	429	43.1%
2/1	Hornhill WB Left Ahead Right	O	N/A	N/A	A		1	44	-	518	1925	1187	43.7%
3/1	Durban Rd Left Ahead Right	O	N/A	N/A	D		1	16	-	69	1668	291	23.7%
4/1	Waveney Dr EB Right Left Ahead	O	N/A	N/A	B		1	46	-	241	1967	1266	19.0%
5/1		U	N/A	N/A	-		-	-	-	85	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	473	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	35	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	209	Inf	Inf	0.0%
8/2		U	N/A	N/A	-		-	-	-	211	Inf	Inf	0.0%

Full Input Data And Results

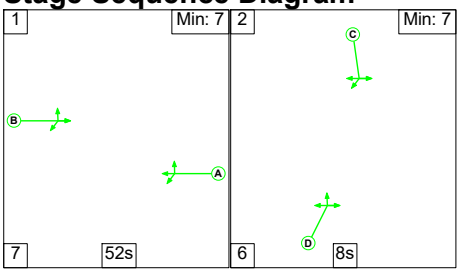
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**135**	**0**	**3**	**3.1**	**1.0**	**0.1**	**4.2**	**-**	**-**	**-**	**-**
Riverside Rd / Waveney Dr / Durban Rd	**-**	**-**	**135**	**0**	**3**	**3.1**	**1.0**	**0.1**	**4.2**	**-**	**-**	**-**	**-**
1/1	185	185	52	0	1	1.2	0.4	0.0	1.6	31.3	3.2	0.4	3.6
2/1	518	518	18	0	0	1.1	0.4	0.0	1.4	10.1	5.5	0.4	5.9
3/1	69	69	65	0	2	0.4	0.2	0.1	0.7	35.8	1.1	0.2	1.3
4/1	241	241	0	0	0	0.4	0.1	0.0	0.5	7.0	1.9	0.1	2.1
5/1	85	85	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	473	473	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	35	35	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	209	209	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	211	211	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 106.2 Total Delay for Signalled Lanes (pcuHr): 4.21 Cycle Time (s): 73
PRC Over All Lanes (%): 106.2 Total Delay Over All Lanes(pcuHr): 4.21

Full Input Data And Results

Scenario 7: '2037 DM AM (No ped)' (FG3: '2037 DM AM', Plan 2: 'No ped phase')

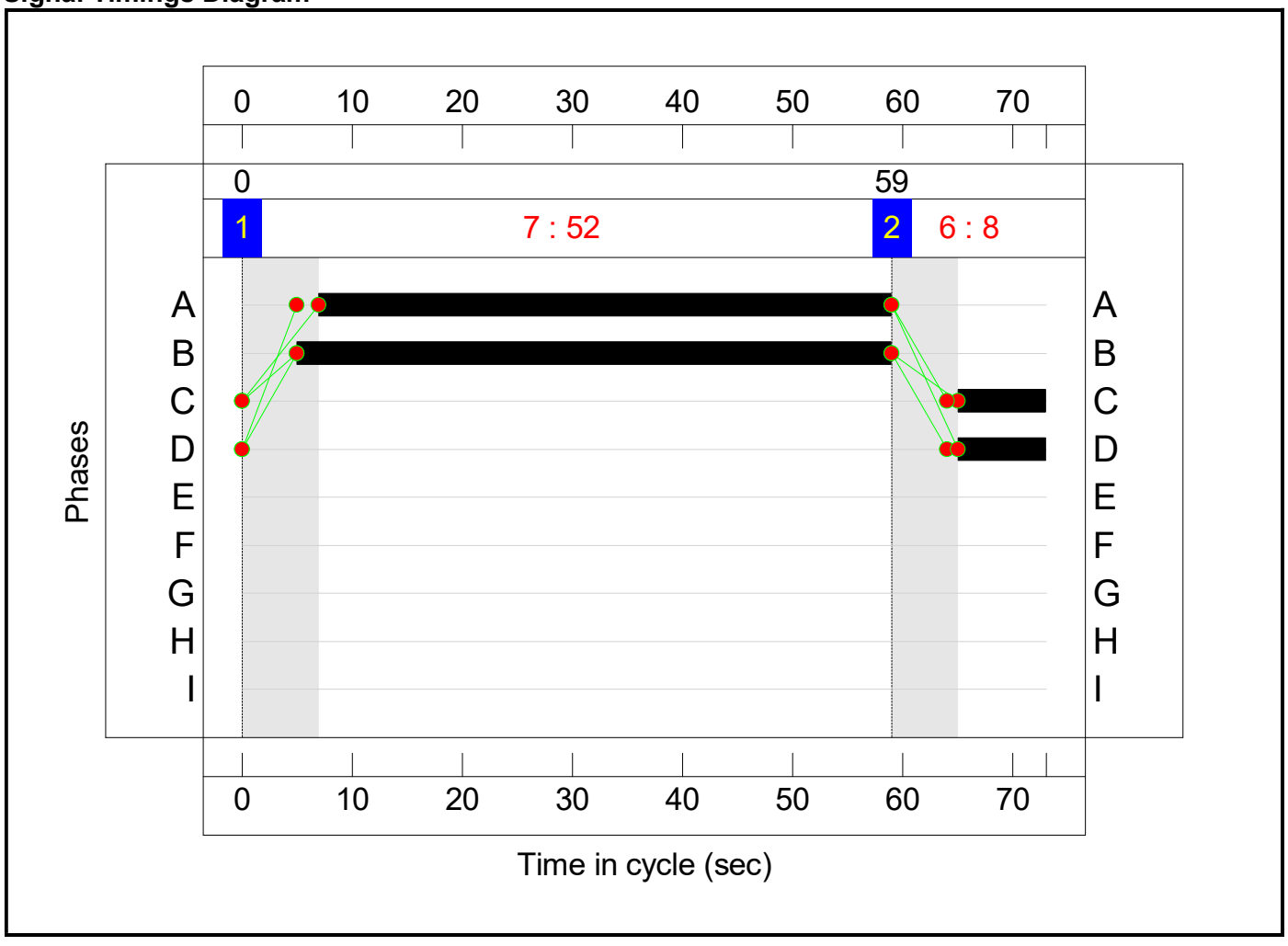
Stage Sequence Diagram



Stage Timings

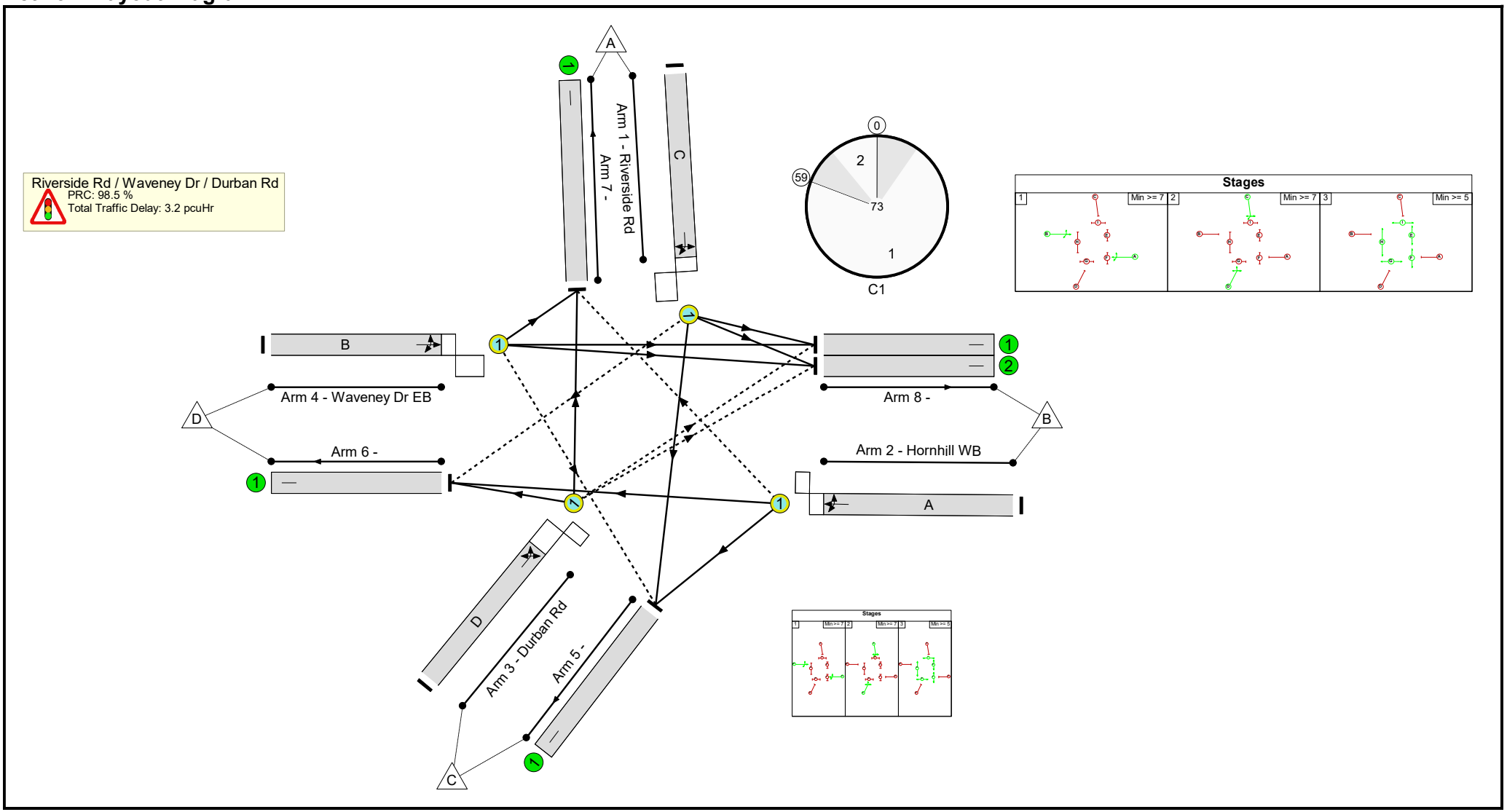
Stage	1	2
Duration	52	8
Change Point	0	59

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**45.3%**
Riverside Rd / Waveney Dr / Durban Rd	-	-	**N/A**	-	-		-	-	-	-	-	-	**45.3%**
1/1	Riverside Rd Ahead Right Left	O	N/A	N/A	C		1	8	-	55	1855	229	24.0%
2/1	Hornhill WB Left Ahead Right	O	N/A	N/A	A		1	52	-	329	1891	1159	28.4%
3/1	Durban Rd Left Ahead Right	O	N/A	N/A	D		1	8	-	70	1671	172	40.6%
4/1	Waveney Dr EB Right Left Ahead	O	N/A	N/A	B		1	54	-	656	1920	1447	45.3%
5/1		U	N/A	N/A	-		-	-	-	23	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	177	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	301	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	304	Inf	Inf	0.0%
8/2		U	N/A	N/A	-		-	-	-	305	Inf	Inf	0.0%

Full Input Data And Results

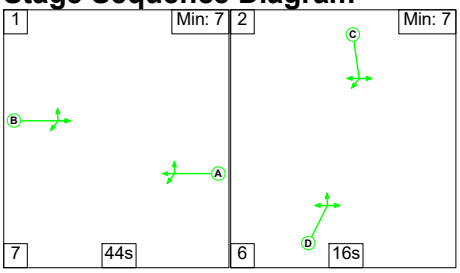
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**209**	**0**	**4**	**2.0**	**1.1**	**0.1**	**3.2**	**-**	**-**	**-**	**-**
Riverside Rd / Waveney Dr / Durban Rd	**-**	**-**	**209**	**0**	**4**	**2.0**	**1.1**	**0.1**	**3.2**	**-**	**-**	**-**	**-**
1/1	55	55	8	0	0	0.4	0.2	0.0	0.6	39.3	1.0	0.2	1.2
2/1	329	329	135	0	2	0.3	0.2	0.1	0.6	6.4	2.2	0.2	2.4
3/1	70	70	66	0	2	0.6	0.3	0.0	1.0	48.9	1.3	0.3	1.6
4/1	656	656	0	0	0	0.6	0.4	0.0	1.1	5.8	5.1	0.4	5.5
5/1	23	23	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	177	177	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	301	301	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	304	304	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	305	305	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 98.5 Total Delay for Signalled Lanes (pcuHr): 3.19 Cycle Time (s): 73
PRC Over All Lanes (%): 98.5 Total Delay Over All Lanes(pcuHr): 3.19

Full Input Data And Results

Scenario 8: '2037 DM PM (No ped)' (FG4: '2037 DM PM', Plan 2: 'No ped phase')

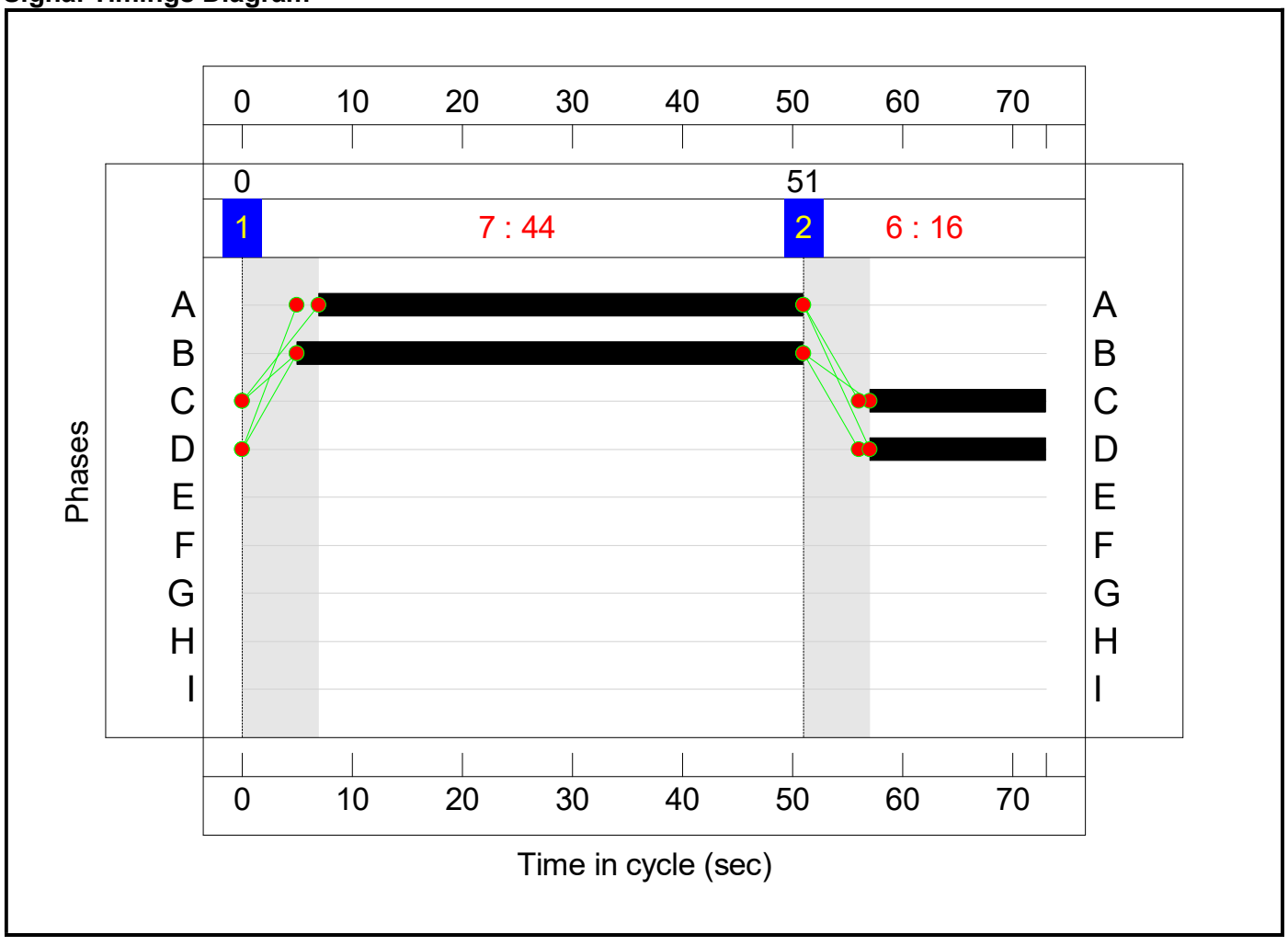
Stage Sequence Diagram



Stage Timings

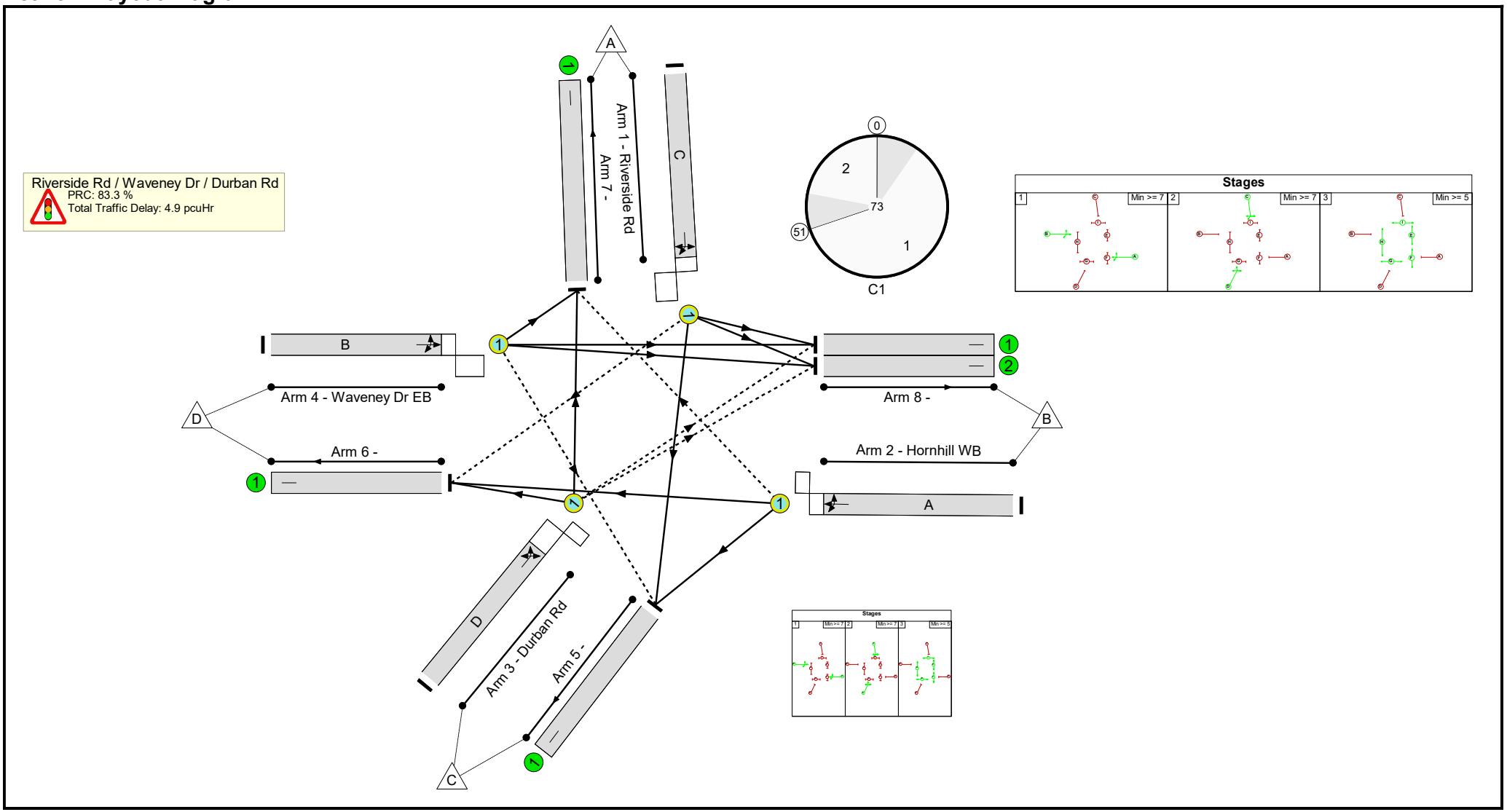
Stage	1	2
Duration	44	16
Change Point	0	51

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**49.1%**
Riverside Rd / Waveney Dr / Durban Rd	-	-	**N/A**	-	-		-	-	-	-	-	-	**49.1%**
1/1	Riverside Rd Ahead Right Left	O	N/A	N/A	C		1	16	-	208	1839	428	48.6%
2/1	Hornhill WB Left Ahead Right	O	N/A	N/A	A		1	44	-	583	1926	1187	49.1%
3/1	Durban Rd Left Ahead Right	O	N/A	N/A	D		1	16	-	71	1668	281	25.2%
4/1	Waveney Dr EB Right Left Ahead	O	N/A	N/A	B		1	46	-	271	1966	1266	21.4%
5/1		U	N/A	N/A	-		-	-	-	94	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	542	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	39	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	228	Inf	Inf	0.0%
8/2		U	N/A	N/A	-		-	-	-	230	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	**-**	**-**	**152**	**0**	**3**	**3.5**	**1.3**	**0.1**	**4.9**	**-**	**-**	**-**	**-**
Riverside Rd / Waveney Dr / Durban Rd	**-**	**-**	**152**	**0**	**3**	**3.5**	**1.3**	**0.1**	**4.9**	**-**	**-**	**-**	**-**
1/1	208	208	66	0	1	1.4	0.5	0.0	1.9	32.4	3.6	0.5	4.1
2/1	583	583	19	0	0	1.2	0.5	0.0	1.7	10.7	6.5	0.5	7.0
3/1	71	71	67	0	2	0.4	0.2	0.1	0.7	36.4	1.1	0.2	1.3
4/1	271	271	0	0	0	0.4	0.1	0.0	0.5	7.2	2.3	0.1	2.4
5/1	94	94	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	542	542	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	39	39	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	228	228	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	230	230	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 83.3 Total Delay for Signalled Lanes (pcuHr): 4.86 Cycle Time (s): 73
PRC Over All Lanes (%): 83.3 Total Delay Over All Lanes(pcuHr): 4.86

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.6.541 [19821,26/11/2015]

Filename: 17 New rdbt north of the lake ARC v5 2018-08-15.arc8
Path: L:\TPS01\106xxx\1069948 Lowestoft Third Crossing\09 Documents\06_Modelling_Junction Modelling Aug 2018\17 New rdbt north of the Lake
Report generation date: 15/08/2018 10:03:37

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (min)	RFC	LOS	Queue (PCU)	Delay (min)	RFC	LOS
	A1 - 2022 DS							
Denmark Rd WB	0.63	0.06	0.39	A	1.00	0.07	0.50	A
New Bascule Bridge	1.21	0.06	0.55	A	1.32	0.06	0.57	A
Denmark Rd EB	1.35	0.10	0.58	A	1.25	0.09	0.56	A
	A1 - 2037 DS							
Denmark Rd WB	0.80	0.07	0.45	A	1.24	0.08	0.56	A
New Bascule Bridge	1.61	0.07	0.62	A	1.65	0.07	0.62	A
Denmark Rd EB	2.03	0.13	0.67	A	1.54	0.11	0.61	A

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.

"D1 - 2022 DS, AM " model duration: 08:00 - 09:30
"D2 - 2022 DS, PM" model duration: 16:00 - 17:30
"D5 - 2037 DS, AM" model duration: 08:00 - 09:30
"D6 - 2037 DS, PM" model duration: 16:00 - 17:30

Run using Junctions 8.0.6.541 at 15/08/2018 10:03:33

File summary

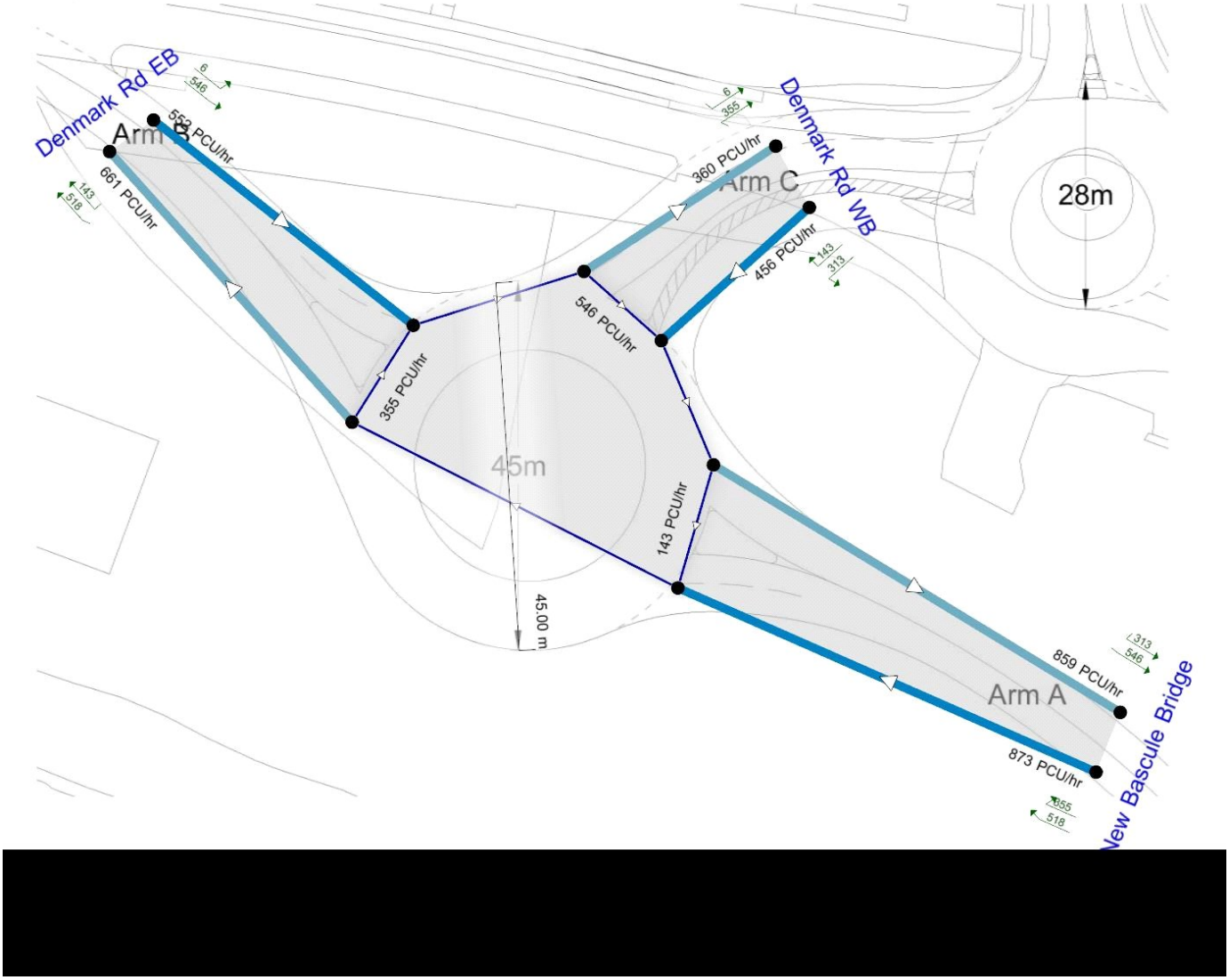
Title	Lake Lothing Option P8F
Location	
Site Number	
Date	10/02/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	sarif
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (min)	Queue Threshold (PCU)
5.75			N/A	0.85	0.60	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	min	-Min	perMin



The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - 2022 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	New Bascule Bridge - 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
2022 DS, AM	2022 DS	AM	HGV	ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (min)	Junction LOS
1	(untitled)	Roundabout	A,B,C			0.07	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Denmark Rd WB	A	Denmark Rd WB	
New Bascule Bridge	B	New Bascule Bridge	
Denmark Rd EB	C	Denmark Rd EB	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Denmark Rd WB	0.00	99999.00
New Bascule Bridge	0.00	99999.00
Denmark Rd EB	0.00	99999.00

Roundabout Geometry

Name	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
Denmark Rd WB	7.30	8.28	3.30	15.00	50.00	34.00	
New Bascule Bridge	3.95	10.51	35.90	29.30	50.00	29.00	
Denmark Rd EB	3.65	7.15	12.65	20.00	50.00	19.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Denmark Rd WB		(calculated)	(calculated)	0.712	2292.803
New Bascule Bridge		(calculated)	(calculated)	0.765	2497.666
Denmark Rd EB		(calculated)	(calculated)	0.626	1732.122

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Denmark Rd WB	ONE HOUR	✓	607.24	100.000
New Bascule Bridge	ONE HOUR	✓	1162.99	100.000
Denmark Rd EB	ONE HOUR	✓	735.61	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	Denmark Rd WB	457.16	457.16		
08:00-08:15	New Bascule Bridge	875.56	875.56		
08:00-08:15	Denmark Rd EB	553.80	553.80		
08:15-08:30	Denmark Rd WB	545.90	545.90		
08:15-08:30	New Bascule Bridge	1045.50	1045.50		
08:15-08:30	Denmark Rd EB	661.29	661.29		
08:30-08:45	Denmark Rd WB	668.58	668.58		
08:30-08:45	New Bascule Bridge	1280.47	1280.47		
08:30-08:45	Denmark Rd EB	809.92	809.92		
08:45-09:00	Denmark Rd WB	668.58	668.58		
08:45-09:00	New Bascule Bridge	1280.47	1280.47		
08:45-09:00	Denmark Rd EB	809.92	809.92		
09:00-09:15	Denmark Rd WB	545.90	545.90		
09:00-09:15	New Bascule Bridge	1045.50	1045.50		
09:00-09:15	Denmark Rd EB	661.29	661.29		
09:15-09:30	Denmark Rd WB	457.16	457.16		
09:15-09:30	New Bascule Bridge	875.56	875.56		
09:15-09:30	Denmark Rd EB	553.80	553.80		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		Denmark Rd WB	New Bascule Bridge	Denmark Rd EB
From	Denmark Rd WB	0.000	416.668	190.571
	New Bascule Bridge	472.601	0.000	690.386
	Denmark Rd EB	7.458	728.148	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		Denmark Rd WB	New Bascule Bridge	Denmark Rd EB
From	Denmark Rd WB	0.00	0.69	0.31
	New Bascule Bridge	0.41	0.00	0.59
	Denmark Rd EB	0.01	0.99	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		Denmark Rd WB	New Bascule Bridge	Denmark Rd EB
From	Denmark Rd WB	1.000	1.000	1.000
	New Bascule Bridge	1.000	1.000	1.000
	Denmark Rd EB	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		Denmark Rd WB	New Bascule Bridge	Denmark Rd EB
From	Denmark Rd WB	0.0	0.0	0.0
	New Bascule Bridge	0.0	0.0	0.0
	Denmark Rd EB	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS
Denmark Rd WB	0.39	0.06	0.63	A
New Bascule Bridge	0.55	0.06	1.21	A
Denmark Rd EB	0.58	0.10	1.35	A

Main Results for each time segment

Main results: (08:00-08:15)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
Denmark Rd WB	457.16	455.90	545.91	0.00	1904.07	0.240	0.31	0.041	A
New Bascule Bridge	875.56	873.25	143.08	0.00	2388.22	0.367	0.58	0.040	A
Denmark Rd EB	553.80	551.50	354.86	0.00	1510.13	0.367	0.58	0.062	A

Main results: (08:15-08:30)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
Denmark Rd WB	545.90	545.46	653.64	0.00	1827.35	0.299	0.42	0.047	A
New Bascule Bridge	1045.50	1044.66	171.18	0.00	2366.72	0.442	0.79	0.045	A
Denmark Rd EB	661.29	660.34	424.52	0.00	1466.56	0.451	0.81	0.074	A

Main results: (08:30-08:45)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
Denmark Rd WB	668.58	667.76	799.64	0.00	1723.39	0.388	0.63	0.057	A
New Bascule Bridge	1280.47	1278.81	209.56	0.00	2337.36	0.548	1.20	0.057	A
Denmark Rd EB	809.92	807.83	519.67	0.00	1407.03	0.576	1.34	0.100	A

Main results: (08:45-09:00)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
Denmark Rd WB	668.58	668.57	801.66	0.00	1721.95	0.388	0.63	0.057	A
New Bascule Bridge	1280.47	1280.45	209.82	0.00	2337.16	0.548	1.21	0.057	A
Denmark Rd EB	809.92	809.87	520.33	0.00	1406.62	0.576	1.35	0.101	A

Main results: (09:00-09:15)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
Denmark Rd WB	545.90	546.71	656.64	0.00	1825.22	0.299	0.43	0.047	A
New Bascule Bridge	1045.50	1047.14	171.58	0.00	2366.42	0.442	0.80	0.046	A
Denmark Rd EB	661.29	663.36	425.53	0.00	1465.93	0.451	0.83	0.075	A

Main results: (09:15-09:30)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
Denmark Rd WB	457.16	457.61	549.16	0.00	1901.75	0.240	0.32	0.042	A
New Bascule Bridge	875.56	876.41	143.61	0.00	2387.81	0.367	0.58	0.040	A
Denmark Rd EB	553.80	554.79	356.15	0.00	1509.33	0.367	0.58	0.063	A

(Default Analysis Set) - 2022 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	New Bascule Bridge - 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
2022 DS, PM	2022 DS	PM	HGV	ONE HOUR	16:00	17:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (min)	Junction LOS
1	(untitled)	Roundabout	A,B,C			0.07	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Denmark Rd WB	A	Denmark Rd WB	
New Bascule Bridge	B	New Bascule Bridge	
Denmark Rd EB	C	Denmark Rd EB	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Denmark Rd WB	0.00	99999.00
New Bascule Bridge	0.00	99999.00
Denmark Rd EB	0.00	99999.00

Roundabout Geometry

Name	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
Denmark Rd WB	7.30	8.28	3.30	15.00	50.00	34.00	
New Bascule Bridge	3.95	10.51	35.90	29.30	50.00	29.00	
Denmark Rd EB	3.65	7.15	12.65	20.00	50.00	19.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Denmark Rd WB		(calculated)	(calculated)	0.712	2292.803
New Bascule Bridge		(calculated)	(calculated)	0.765	2497.666
Denmark Rd EB		(calculated)	(calculated)	0.626	1732.122

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Denmark Rd WB	ONE HOUR	✓	779.66	100.000
New Bascule Bridge	ONE HOUR	✓	1205.41	100.000
Denmark Rd EB	ONE HOUR	✓	735.50	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
16:00-16:15	Denmark Rd WB	586.97	586.97		
16:00-16:15	New Bascule Bridge	907.50	907.50		
16:00-16:15	Denmark Rd EB	553.73	553.73		
16:15-16:30	Denmark Rd WB	700.90	700.90		
16:15-16:30	New Bascule Bridge	1083.64	1083.64		
16:15-16:30	Denmark Rd EB	661.20	661.20		
16:30-16:45	Denmark Rd WB	858.42	858.42		
16:30-16:45	New Bascule Bridge	1327.18	1327.18		
16:30-16:45	Denmark Rd EB	809.80	809.80		
16:45-17:00	Denmark Rd WB	858.42	858.42		
16:45-17:00	New Bascule Bridge	1327.18	1327.18		
16:45-17:00	Denmark Rd EB	809.80	809.80		
17:00-17:15	Denmark Rd WB	700.90	700.90		
17:00-17:15	New Bascule Bridge	1083.64	1083.64		
17:00-17:15	Denmark Rd EB	661.20	661.20		
17:15-17:30	Denmark Rd WB	586.97	586.97		
17:15-17:30	New Bascule Bridge	907.50	907.50		
17:15-17:30	Denmark Rd EB	553.73	553.73		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		Denmark Rd WB	New Bascule Bridge	Denmark Rd EB
From	Denmark Rd WB	0.000	575.686	203.976
	New Bascule Bridge	403.655	0.000	801.756
	Denmark Rd EB	0.000	735.504	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		Denmark Rd WB	New Bascule Bridge	Denmark Rd EB
From	Denmark Rd WB	0.00	0.74	0.26
	New Bascule Bridge	0.33	0.00	0.67
	Denmark Rd EB	0.00	1.00	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		Denmark Rd WB	New Bascule Bridge	Denmark Rd EB
From	Denmark Rd WB	1.000	1.000	1.000
	New Bascule Bridge	1.000	1.000	1.000
	Denmark Rd EB	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		Denmark Rd WB	New Bascule Bridge	Denmark Rd EB
From	Denmark Rd WB	0.0	0.0	0.0
	New Bascule Bridge	0.0	0.0	0.0
	Denmark Rd EB	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS
Denmark Rd WB	0.50	0.07	1.00	A
New Bascule Bridge	0.57	0.06	1.32	A
Denmark Rd EB	0.56	0.09	1.25	A

Main Results for each time segment

Main results: (16:00-16:15)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
Denmark Rd WB	586.97	585.19	551.50	0.00	1900.09	0.309	0.45	0.046	A
New Bascule Bridge	907.50	905.04	153.10	0.00	2380.55	0.381	0.61	0.041	A
Denmark Rd EB	553.73	551.50	303.07	0.00	1542.53	0.359	0.56	0.060	A

Main results: (16:15-16:30)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
Denmark Rd WB	700.90	700.20	660.32	0.00	1822.59	0.385	0.62	0.053	A
New Bascule Bridge	1083.64	1082.71	183.19	0.00	2357.53	0.460	0.85	0.047	A
Denmark Rd EB	661.20	660.32	362.57	0.00	1505.31	0.439	0.78	0.071	A

Main results: (16:30-16:45)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
Denmark Rd WB	858.42	856.95	807.96	0.00	1717.47	0.500	0.99	0.070	A
New Bascule Bridge	1327.18	1325.30	224.20	0.00	2326.16	0.571	1.32	0.060	A
Denmark Rd EB	809.80	807.96	443.80	0.00	1454.49	0.557	1.24	0.093	A

Main results: (16:45-17:00)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
Denmark Rd WB	858.42	858.40	809.77	0.00	1716.17	0.500	1.00	0.070	A
New Bascule Bridge	1327.18	1327.16	224.58	0.00	2325.87	0.571	1.32	0.060	A
Denmark Rd EB	809.80	809.77	444.42	0.00	1454.10	0.557	1.25	0.093	A

Main results: (17:00-17:15)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
Denmark Rd WB	700.90	702.37	663.03	0.00	1820.66	0.385	0.63	0.054	A
New Bascule Bridge	1083.64	1085.51	183.75	0.00	2357.10	0.460	0.86	0.047	A
Denmark Rd EB	661.20	663.03	363.50	0.00	1504.73	0.439	0.79	0.071	A

Main results: (17:15-17:30)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
Denmark Rd WB	586.97	587.69	554.63	0.00	1897.86	0.309	0.45	0.046	A
New Bascule Bridge	907.50	908.44	153.75	0.00	2380.05	0.381	0.62	0.041	A
Denmark Rd EB	553.73	554.63	304.21	0.00	1541.82	0.359	0.56	0.061	A

(Default Analysis Set) - 2037 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	New Bascule Bridge - 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
2037 DS, AM	2037 DS	AM	HGV	ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (min)	Junction LOS
1	(untitled)	Roundabout	A,B,C			0.09	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Denmark Rd WB	A	Denmark Rd WB	
New Bascule Bridge	B	New Bascule Bridge	
Denmark Rd EB	C	Denmark Rd EB	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Denmark Rd WB	0.00	99999.00
New Bascule Bridge	0.00	99999.00
Denmark Rd EB	0.00	99999.00

Roundabout Geometry

Name	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
Denmark Rd WB	7.30	8.28	3.30	15.00	50.00	34.00	
New Bascule Bridge	3.95	10.51	35.90	29.30	50.00	29.00	
Denmark Rd EB	3.65	7.15	12.65	20.00	50.00	19.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Denmark Rd WB		(calculated)	(calculated)	0.712	2292.803
New Bascule Bridge		(calculated)	(calculated)	0.765	2497.666
Denmark Rd EB		(calculated)	(calculated)	0.626	1732.122

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Denmark Rd WB	ONE HOUR	✓	664.49	100.000
New Bascule Bridge	ONE HOUR	✓	1299.92	100.000
Denmark Rd EB	ONE HOUR	✓	851.95	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	Denmark Rd WB	500.26	500.26		
08:00-08:15	New Bascule Bridge	978.65	978.65		
08:00-08:15	Denmark Rd EB	641.39	641.39		
08:15-08:30	Denmark Rd WB	597.36	597.36		
08:15-08:30	New Bascule Bridge	1168.60	1168.60		
08:15-08:30	Denmark Rd EB	765.89	765.89		
08:30-08:45	Denmark Rd WB	731.61	731.61		
08:30-08:45	New Bascule Bridge	1431.24	1431.24		
08:30-08:45	Denmark Rd EB	938.02	938.02		
08:45-09:00	Denmark Rd WB	731.61	731.61		
08:45-09:00	New Bascule Bridge	1431.24	1431.24		
08:45-09:00	Denmark Rd EB	938.02	938.02		
09:00-09:15	Denmark Rd WB	597.36	597.36		
09:00-09:15	New Bascule Bridge	1168.60	1168.60		
09:00-09:15	Denmark Rd EB	765.89	765.89		
09:15-09:30	Denmark Rd WB	500.26	500.26		
09:15-09:30	New Bascule Bridge	978.65	978.65		
09:15-09:30	Denmark Rd EB	641.39	641.39		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		Denmark Rd WB	New Bascule Bridge	Denmark Rd EB
From	Denmark Rd WB	0.000	449.776	214.710
	New Bascule Bridge	492.565	0.000	807.358
	Denmark Rd EB	23.371	828.580	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		Denmark Rd WB	New Bascule Bridge	Denmark Rd EB
From	Denmark Rd WB	0.00	0.68	0.32
	New Bascule Bridge	0.38	0.00	0.62
	Denmark Rd EB	0.03	0.97	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		Denmark Rd WB	New Bascule Bridge	Denmark Rd EB
From	Denmark Rd WB	1.000	1.000	1.000
	New Bascule Bridge	1.000	1.000	1.000
	Denmark Rd EB	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		Denmark Rd WB	New Bascule Bridge	Denmark Rd EB
From	Denmark Rd WB	0.0	0.0	0.0
	New Bascule Bridge	0.0	0.0	0.0
	Denmark Rd EB	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS
Denmark Rd WB	0.45	0.07	0.80	A
New Bascule Bridge	0.62	0.07	1.61	A
Denmark Rd EB	0.67	0.13	2.03	A

Main Results for each time segment

Main results: (08:00-08:15)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
Denmark Rd WB	500.26	498.78	620.92	0.00	1850.65	0.270	0.37	0.044	A
New Bascule Bridge	978.65	975.86	161.17	0.00	2374.38	0.412	0.70	0.043	A
Denmark Rd EB	641.39	638.43	369.77	0.00	1500.80	0.427	0.74	0.069	A

Main results: (08:15-08:30)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
Denmark Rd WB	597.36	596.80	743.49	0.00	1763.37	0.339	0.51	0.051	A
New Bascule Bridge	1168.60	1167.47	192.84	0.00	2350.15	0.497	0.98	0.051	A
Denmark Rd EB	765.89	764.46	442.37	0.00	1455.39	0.526	1.10	0.087	A

Main results: (08:30-08:45)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
Denmark Rd WB	731.61	730.48	908.74	0.00	1645.70	0.445	0.79	0.065	A
New Bascule Bridge	1431.24	1428.78	236.03	0.00	2317.11	0.618	1.60	0.067	A
Denmark Rd EB	938.02	934.38	541.39	0.00	1393.44	0.673	2.01	0.130	A

Main results: (08:45-09:00)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
Denmark Rd WB	731.61	731.59	912.18	0.00	1643.25	0.445	0.80	0.066	A
New Bascule Bridge	1431.24	1431.20	236.39	0.00	2316.83	0.618	1.61	0.068	A
Denmark Rd EB	938.02	937.91	542.31	0.00	1392.87	0.673	2.03	0.132	A

Main results: (09:00-09:15)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
Denmark Rd WB	597.36	598.49	748.41	0.00	1759.87	0.339	0.52	0.052	A
New Bascule Bridge	1168.60	1171.05	193.39	0.00	2349.73	0.497	1.00	0.051	A
Denmark Rd EB	765.89	769.52	443.73	0.00	1454.54	0.527	1.13	0.088	A

Main results: (09:15-09:30)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
Denmark Rd WB	500.26	500.84	625.25	0.00	1847.57	0.271	0.37	0.045	A
New Bascule Bridge	978.65	979.81	161.83	0.00	2373.87	0.412	0.70	0.043	A
Denmark Rd EB	641.39	642.88	371.27	0.00	1499.87	0.428	0.75	0.070	A

(Default Analysis Set) - 2037 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	New Bascule Bridge - 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
2037 DS, PM	2037 DS	PM	HGV	ONE HOUR	16:00	17:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (min)	Junction LOS
1	(untitled)	Roundabout	A,B,C			0.08	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Denmark Rd WB	A	Denmark Rd WB	
New Bascule Bridge	B	New Bascule Bridge	
Denmark Rd EB	C	Denmark Rd EB	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Denmark Rd WB	0.00	99999.00
New Bascule Bridge	0.00	99999.00
Denmark Rd EB	0.00	99999.00

Roundabout Geometry

Name	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
Denmark Rd WB	7.30	8.28	3.30	15.00	50.00	34.00	
New Bascule Bridge	3.95	10.51	35.90	29.30	50.00	29.00	
Denmark Rd EB	3.65	7.15	12.65	20.00	50.00	19.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Denmark Rd WB		(calculated)	(calculated)	0.712	2292.803
New Bascule Bridge		(calculated)	(calculated)	0.765	2497.666
Denmark Rd EB		(calculated)	(calculated)	0.626	1732.122

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Denmark Rd WB	ONE HOUR	✓	839.34	100.000
New Bascule Bridge	ONE HOUR	✓	1315.24	100.000
Denmark Rd EB	ONE HOUR	✓	801.15	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
16:00-16:15	Denmark Rd WB	631.90	631.90		
16:00-16:15	New Bascule Bridge	990.18	990.18		
16:00-16:15	Denmark Rd EB	603.15	603.15		
16:15-16:30	Denmark Rd WB	754.55	754.55		
16:15-16:30	New Bascule Bridge	1182.37	1182.37		
16:15-16:30	Denmark Rd EB	720.22	720.22		
16:30-16:45	Denmark Rd WB	924.13	924.13		
16:30-16:45	New Bascule Bridge	1448.11	1448.11		
16:30-16:45	Denmark Rd EB	882.08	882.08		
16:45-17:00	Denmark Rd WB	924.13	924.13		
16:45-17:00	New Bascule Bridge	1448.11	1448.11		
16:45-17:00	Denmark Rd EB	882.08	882.08		
17:00-17:15	Denmark Rd WB	754.55	754.55		
17:00-17:15	New Bascule Bridge	1182.37	1182.37		
17:00-17:15	Denmark Rd EB	720.22	720.22		
17:15-17:30	Denmark Rd WB	631.90	631.90		
17:15-17:30	New Bascule Bridge	990.18	990.18		
17:15-17:30	Denmark Rd EB	603.15	603.15		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		Denmark Rd WB	New Bascule Bridge	Denmark Rd EB
From	Denmark Rd WB	0.000	630.417	208.921
	New Bascule Bridge	409.304	0.000	905.937
	Denmark Rd EB	0.015	801.137	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		Denmark Rd WB	New Bascule Bridge	Denmark Rd EB
From	Denmark Rd WB	0.00	0.75	0.25
	New Bascule Bridge	0.31	0.00	0.69
	Denmark Rd EB	0.00	1.00	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		Denmark Rd WB	New Bascule Bridge	Denmark Rd EB
From	Denmark Rd WB	1.000	1.000	1.000
	New Bascule Bridge	1.000	1.000	1.000
	Denmark Rd EB	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		Denmark Rd WB	New Bascule Bridge	Denmark Rd EB
From	Denmark Rd WB	0.0	0.0	0.0
	New Bascule Bridge	0.0	0.0	0.0
	Denmark Rd EB	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS
Denmark Rd WB	0.56	0.08	1.24	A
New Bascule Bridge	0.62	0.07	1.65	A
Denmark Rd EB	0.61	0.11	1.54	A

Main Results for each time segment

Main results: (16:00-16:15)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
Denmark Rd WB	631.90	629.86	600.58	0.00	1865.14	0.339	0.51	0.048	A
New Bascule Bridge	990.18	987.34	156.78	0.00	2377.73	0.416	0.71	0.043	A
Denmark Rd EB	603.15	600.59	307.26	0.00	1539.91	0.392	0.64	0.064	A

Main results: (16:15-16:30)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
Denmark Rd WB	754.55	753.67	719.11	0.00	1780.73	0.424	0.73	0.058	A
New Bascule Bridge	1182.37	1181.21	187.60	0.00	2354.16	0.502	1.00	0.051	A
Denmark Rd EB	720.22	719.13	367.59	0.00	1502.17	0.479	0.91	0.077	A

Main results: (16:30-16:45)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
Denmark Rd WB	924.13	922.13	879.62	0.00	1666.44	0.555	1.23	0.080	A
New Bascule Bridge	1448.11	1445.57	229.53	0.00	2322.08	0.624	1.64	0.068	A
Denmark Rd EB	882.08	879.63	449.86	0.00	1450.70	0.608	1.52	0.105	A

Main results: (16:45-17:00)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
Denmark Rd WB	924.13	924.09	882.01	0.00	1664.73	0.555	1.24	0.081	A
New Bascule Bridge	1448.11	1448.07	230.02	0.00	2321.71	0.624	1.65	0.069	A
Denmark Rd EB	882.08	882.03	450.64	0.00	1450.21	0.608	1.54	0.106	A

Main results: (17:00-17:15)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
Denmark Rd WB	754.55	756.54	722.64	0.00	1778.22	0.424	0.74	0.059	A
New Bascule Bridge	1182.37	1184.90	188.31	0.00	2353.61	0.502	1.02	0.051	A
Denmark Rd EB	720.22	722.65	368.74	0.00	1501.45	0.480	0.93	0.077	A

Main results: (17:15-17:30)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
Denmark Rd WB	631.90	632.80	604.27	0.00	1862.51	0.339	0.52	0.049	A
New Bascule Bridge	990.18	991.38	157.51	0.00	2377.17	0.417	0.72	0.043	A
Denmark Rd EB	603.15	604.28	308.52	0.00	1539.12	0.392	0.65	0.064	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.6.541 [19821,26/11/2015]

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: 18 New rdbt south of the lake v5 2018-10-19 one hour.arc8
Path: L:\106xxx\1069948 Lowestoft Third Crossing\09 Documents\06_Modelling_November 2018
Report generation date: 19/12/2018 17:22:42

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2022 DS							
Riverside Rd	0.80	3.90	0.45	A	0.56	3.46	0.36	A
Waveney Dr WB	1.67	4.93	0.63	A	2.24	5.71	0.69	A
Waveney Dr EB	1.65	5.59	0.62	A	5.29	15.01	0.85	C
	A1 - 2037 DS							
Riverside Rd	1.35	5.23	0.58	A	0.75	3.95	0.43	A
Waveney Dr WB	2.56	6.85	0.72	A	3.44	8.01	0.78	A
Waveney Dr EB	2.19	6.91	0.69	A	23.21	59.11	0.99	F

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.

"D1 - 2022 DS, AM " model duration: 08:00 - 09:30
"D2 - 2022 DS, PM" model duration: 17:00 - 18:30
"D3 - 2037 DS, AM" model duration: 08:00 - 09:30
"D4 - 2037 DS, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.6.541 at 19/12/2018 17:22:40

File summary

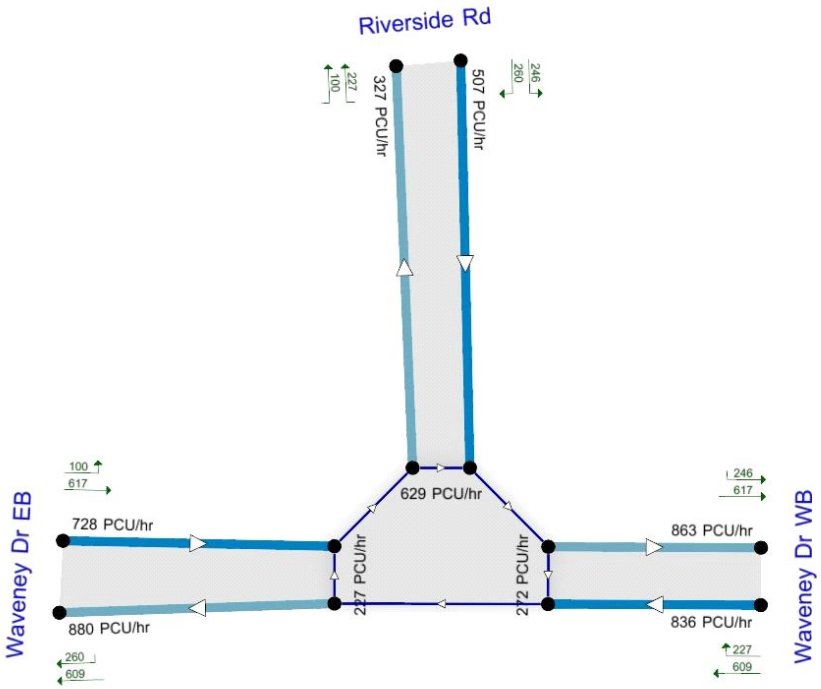
Title	(untitled)
Location	
Site Number	
Date	14/02/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	sarif
Description	

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



20.00 m

The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - 2022 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Waveney Dr EB - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Riverside Rd - 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2022 DS, AM	2022 DS	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	2,4,1				4.91	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Riverside Rd	1	Riverside Rd	
Waveney Dr WB	2	Waveney Dr WB	
Waveney Dr EB	4	Waveney Dr EB	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Riverside Rd	0.00	99999.00		0.00
Waveney Dr WB	0.00	99999.00		0.00
Waveney Dr EB	0.00	99999.00		0.00

Roundabout Geometry

Name	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
Riverside Rd	3.65	10.50	38.27	20.00	50.00	42.00	
Waveney Dr WB	7.30	7.75	2.50	20.30	50.00	38.00	
Waveney Dr EB	3.00	8.00	34.42	20.00	50.00	32.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Riverside Rd		(calculated)	(calculated)	0.715	2324.623
Waveney Dr WB		(calculated)	(calculated)	0.702	2236.273
Waveney Dr EB		(calculated)	(calculated)	0.650	1929.752

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Riverside Rd	ONE HOUR	✓	675.00	100.000
Waveney Dr WB	ONE HOUR	✓	1114.00	100.000
Waveney Dr EB	ONE HOUR	✓	971.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	Riverside Rd	508.18	508.18		
08:00-08:15	Waveney Dr WB	838.68	838.68		
08:00-08:15	Waveney Dr EB	731.02	731.02		
08:15-08:30	Riverside Rd	606.81	606.81		
08:15-08:30	Waveney Dr WB	1001.46	1001.46		
08:15-08:30	Waveney Dr EB	872.91	872.91		
08:30-08:45	Riverside Rd	743.19	743.19		
08:30-08:45	Waveney Dr WB	1226.54	1226.54		
08:30-08:45	Waveney Dr EB	1069.09	1069.09		
08:45-09:00	Riverside Rd	743.19	743.19		
08:45-09:00	Waveney Dr WB	1226.54	1226.54		
08:45-09:00	Waveney Dr EB	1069.09	1069.09		
09:00-09:15	Riverside Rd	606.81	606.81		
09:00-09:15	Waveney Dr WB	1001.46	1001.46		
09:00-09:15	Waveney Dr EB	872.91	872.91		
09:15-09:30	Riverside Rd	508.18	508.18		
09:15-09:30	Waveney Dr WB	838.68	838.68		
09:15-09:30	Waveney Dr EB	731.02	731.02		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		Waveney Dr WB	Waveney Dr EB	Riverside Rd
From	Waveney Dr WB	0.000	811.000	303.000
	Waveney Dr EB	823.000	15.000	133.000
	Riverside Rd	328.000	347.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		Waveney Dr WB	Waveney Dr EB	Riverside Rd
From	Waveney Dr WB	0.00	0.73	0.27
	Waveney Dr EB	0.85	0.02	0.14
	Riverside Rd	0.49	0.51	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		Waveney Dr WB	Waveney Dr EB	Riverside Rd
From	Waveney Dr WB	1.000	1.000	1.000
	Waveney Dr EB	1.000	1.000	1.000
	Riverside Rd	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		Waveney Dr WB	Waveney Dr EB	Riverside Rd
From	Waveney Dr WB	0.0	0.0	0.0
	Waveney Dr EB	0.0	0.0	0.0
	Riverside Rd	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Riverside Rd	0.45	3.90	0.80	A	619.39	929.09	50.34	3.25	0.56	50.34	3.25
Waveney Dr WB	0.63	4.93	1.67	A	1022.23	1533.34	99.68	3.90	1.11	99.69	3.90
Waveney Dr EB	0.62	5.59	1.65	A	891.01	1336.51	98.89	4.44	1.10	98.90	4.44

Main Results for each time segment

Main results: (08:00-08:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Riverside Rd	508.18	127.04	506.69	327.11	628.50	0.00	1875.35	1323.99	0.271	0.00	0.37	2.628	A
Waveney Dr WB	838.68	209.67	835.91	863.47	271.73	0.00	2045.44	1740.68	0.410	0.00	0.69	2.970	A
Waveney Dr EB	731.02	182.75	728.26	880.28	227.36	0.00	1781.96	1621.99	0.410	0.00	0.69	3.408	A

Main results: (08:15-08:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Riverside Rd	606.81	151.70	606.25	391.47	752.34	0.00	1786.83	1323.99	0.340	0.37	0.51	3.047	A
Waveney Dr WB	1001.46	250.37	1000.28	1033.46	325.12	0.00	2007.94	1740.68	0.499	0.69	0.99	3.567	A
Waveney Dr EB	872.91	218.23	871.74	1053.33	272.07	0.00	1752.90	1621.99	0.498	0.69	0.98	4.081	A

Main results: (08:30-08:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Riverside Rd	743.19	185.80	742.04	478.96	920.41	0.00	1666.69	1323.99	0.446	0.51	0.80	3.888	A
Waveney Dr WB	1226.54	306.63	1223.86	1264.51	397.94	0.00	1956.80	1740.65	0.627	0.99	1.66	4.894	A
Waveney Dr EB	1069.09	267.27	1066.49	1288.92	332.88	0.00	1713.37	1621.99	0.624	0.98	1.63	5.543	A

Main results: (08:45-09:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Riverside Rd	743.19	185.80	743.17	480.02	922.61	0.00	1665.12	1323.99	0.446	0.80	0.80	3.904	A
Waveney Dr WB	1226.54	306.63	1226.49	1267.22	398.56	0.00	1956.37	1740.65	0.627	1.66	1.67	4.932	A
Waveney Dr EB	1069.09	267.27	1069.04	1291.45	333.60	0.00	1712.90	1621.99	0.624	1.63	1.65	5.591	A

Main results: (09:00-09:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Riverside Rd	606.81	151.70	607.95	393.03	755.57	0.00	1784.52	1323.99	0.340	0.80	0.52	3.064	A
Waveney Dr WB	1001.46	250.37	1004.12	1037.47	326.06	0.00	2007.29	1740.68	0.499	1.67	1.00	3.600	A
Waveney Dr EB	872.91	218.23	875.49	1057.06	273.11	0.00	1752.22	1621.99	0.498	1.65	1.00	4.117	A

Main results: (09:15-09:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Riverside Rd	508.18	127.04	508.75	328.74	631.93	0.00	1872.90	1323.99	0.271	0.52	0.37	2.639	A
Waveney Dr WB	838.68	209.67	839.89	867.83	272.85	0.00	2044.66	1740.68	0.410	1.00	0.70	2.990	A
Waveney Dr EB	731.02	182.75	732.22	884.30	228.45	0.00	1781.25	1621.99	0.410	1.00	0.70	3.437	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Riverside Rd	5.45	0.36	2.628	A	A
Waveney Dr WB	10.13	0.68	2.970	A	A
Waveney Dr EB	10.11	0.67	3.408	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Riverside Rd	7.56	0.50	3.047	A	A
Waveney Dr WB	14.49	0.97	3.567	A	A
Waveney Dr EB	14.41	0.96	4.081	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Riverside Rd	11.71	0.78	3.888	A	A
Waveney Dr WB	23.97	1.60	4.894	A	A
Waveney Dr EB	23.58	1.57	5.543	A	A

Queueing Delay results: (08:45-09:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Riverside Rd	12.02	0.80	3.904	A	A
Waveney Dr WB	24.95	1.66	4.932	A	A
Waveney Dr EB	24.62	1.64	5.591	A	A

Queueing Delay results: (09:00-09:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Riverside Rd	7.91	0.53	3.064	A	A
Waveney Dr WB	15.45	1.03	3.600	A	A
Waveney Dr EB	15.46	1.03	4.117	A	A

Queueing Delay results: (09:15-09:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Riverside Rd	5.69	0.38	2.639	A	A
Waveney Dr WB	10.69	0.71	2.990	A	A
Waveney Dr EB	10.72	0.71	3.437	A	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (s)
08:00-08:15	Riverside Rd	508.18	1875.35	0.271	0.00	0.00	0.37	5.45	-	2.628
08:00-08:15	Waveney Dr WB	838.68	2045.44	0.410	0.00	0.00	0.69	10.13	-	2.970
08:00-08:15	Waveney Dr EB	731.02	1781.96	0.410	0.00	0.00	0.69	10.11	-	3.408
08:15-08:30	Riverside Rd	606.81	1786.83	0.340	0.00	0.37	0.51	7.56	-	3.047
08:15-08:30	Waveney Dr WB	1001.46	2007.94	0.499	0.00	0.69	0.99	14.49	-	3.567
08:15-08:30	Waveney Dr EB	872.91	1752.90	0.498	0.00	0.69	0.98	14.41	-	4.081
08:30-08:45	Riverside Rd	743.19	1666.69	0.446	0.00	0.51	0.80	11.71	-	3.888
08:30-08:45	Waveney Dr WB	1226.54	1956.80	0.627	0.00	0.99	1.66	23.97	-	4.894
08:30-08:45	Waveney Dr EB	1069.09	1713.37	0.624	0.00	0.98	1.63	23.58	-	5.543
08:45-09:00	Riverside Rd	743.19	1665.12	0.446	0.00	0.80	0.80	12.02	-	3.904
08:45-09:00	Waveney Dr WB	1226.54	1956.37	0.627	0.00	1.66	1.67	24.95	-	4.932
08:45-09:00	Waveney Dr EB	1069.09	1712.90	0.624	0.00	1.63	1.65	24.62	-	5.591
09:00-09:15	Riverside Rd	606.81	1784.52	0.340	0.00	0.80	0.52	7.91	-	3.064
09:00-09:15	Waveney Dr WB	1001.46	2007.29	0.499	0.00	1.67	1.00	15.45	-	3.600
09:00-09:15	Waveney Dr EB	872.91	1752.22	0.498	0.00	1.65	1.00	15.46	-	4.117
09:15-09:30	Riverside Rd	508.18	1872.90	0.271	0.00	0.52	0.37	5.69	-	2.639
09:15-09:30	Waveney Dr WB	838.68	2044.66	0.410	0.00	1.00	0.70	10.69	-	2.990
09:15-09:30	Waveney Dr EB	731.02	1781.25	0.410	0.00	1.00	0.70	10.72	-	3.437

(Default Analysis Set) - 2022 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Waveney Dr EB - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Riverside Rd - 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2022 DS, PM	2022 DS	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	2,4,1				9.00	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Riverside Rd	1	Riverside Rd	
Waveney Dr WB	2	Waveney Dr WB	
Waveney Dr EB	4	Waveney Dr EB	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Riverside Rd	0.00	99999.00		0.00
Waveney Dr WB	0.00	99999.00		0.00
Waveney Dr EB	0.00	99999.00		0.00

Roundabout Geometry

Name	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
Riverside Rd	3.65	10.50	38.27	20.00	50.00	42.00	
Waveney Dr WB	7.30	7.75	2.50	20.30	50.00	38.00	
Waveney Dr EB	3.00	8.00	34.42	20.00	50.00	32.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Riverside Rd		(calculated)	(calculated)	0.715	2324.623
Waveney Dr WB		(calculated)	(calculated)	0.702	2236.273
Waveney Dr EB		(calculated)	(calculated)	0.650	1929.752

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Riverside Rd	ONE HOUR	✓	530.00	100.000
Waveney Dr WB	ONE HOUR	✓	1295.00	100.000
Waveney Dr EB	ONE HOUR	✓	1198.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	Riverside Rd	399.01	399.01		
17:00-17:15	Waveney Dr WB	974.94	974.94		
17:00-17:15	Waveney Dr EB	901.92	901.92		
17:15-17:30	Riverside Rd	476.46	476.46		
17:15-17:30	Waveney Dr WB	1164.18	1164.18		
17:15-17:30	Waveney Dr EB	1076.98	1076.98		
17:30-17:45	Riverside Rd	583.54	583.54		
17:30-17:45	Waveney Dr WB	1425.82	1425.82		
17:30-17:45	Waveney Dr EB	1319.02	1319.02		
17:45-18:00	Riverside Rd	583.54	583.54		
17:45-18:00	Waveney Dr WB	1425.82	1425.82		
17:45-18:00	Waveney Dr EB	1319.02	1319.02		
18:00-18:15	Riverside Rd	476.46	476.46		
18:00-18:15	Waveney Dr WB	1164.18	1164.18		
18:00-18:15	Waveney Dr EB	1076.98	1076.98		
18:15-18:30	Riverside Rd	399.01	399.01		
18:15-18:30	Waveney Dr WB	974.94	974.94		
18:15-18:30	Waveney Dr EB	901.92	901.92		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		Waveney Dr WB	Waveney Dr EB	Riverside Rd
From	Waveney Dr WB	0.000	772.000	523.000
	Waveney Dr EB	889.000	3.000	306.000
	Riverside Rd	300.000	230.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		Waveney Dr WB	Waveney Dr EB	Riverside Rd
From	Waveney Dr WB	0.00	0.60	0.40
	Waveney Dr EB	0.74	0.00	0.26
	Riverside Rd	0.57	0.43	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		Waveney Dr WB	Waveney Dr EB	Riverside Rd
From	Waveney Dr WB	1.000	1.000	1.000
	Waveney Dr EB	1.000	1.000	1.000
	Riverside Rd	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		Waveney Dr WB	Waveney Dr EB	Riverside Rd
From	Waveney Dr WB	0.0	0.0	0.0
	Waveney Dr EB	0.0	0.0	0.0
	Riverside Rd	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Riverside Rd	0.36	3.46	0.56	A	486.34	729.51	36.05	2.97	0.40	36.05	2.97
Waveney Dr WB	0.69	5.71	2.24	A	1188.31	1782.47	128.77	4.33	1.43	128.79	4.34
Waveney Dr EB	0.85	15.01	5.29	C	1099.31	1648.96	239.95	8.73	2.67	239.98	8.73

Main Results for each time segment

Main results: (17:00-17:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Riverside Rd	399.01	99.75	397.91	621.56	668.11	0.00	1847.04	1543.88	0.216	0.00	0.27	2.483	A
Waveney Dr WB	974.94	243.74	971.54	891.09	174.93	0.00	2113.42	1763.13	0.461	0.00	0.85	3.144	A
Waveney Dr EB	901.92	225.48	897.30	754.10	392.37	0.00	1674.70	1466.88	0.539	0.00	1.15	4.605	A

Main results: (17:15-17:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Riverside Rd	476.46	119.11	476.07	743.83	799.59	0.00	1753.05	1543.88	0.272	0.27	0.37	2.819	A
Waveney Dr WB	1164.18	291.04	1162.60	1066.37	209.29	0.00	2089.29	1763.13	0.557	0.85	1.25	3.878	A
Waveney Dr EB	1076.98	269.24	1073.89	902.35	469.53	0.00	1624.54	1466.89	0.663	1.15	1.93	6.501	A

Main results: (17:30-17:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Riverside Rd	583.54	145.89	582.81	907.98	972.80	0.00	1629.24	1543.88	0.358	0.37	0.55	3.439	A
Waveney Dr WB	1425.82	356.46	1421.94	1299.42	256.19	0.00	2056.35	1763.14	0.693	1.25	2.22	5.639	A
Waveney Dr EB	1319.02	329.76	1306.52	1103.86	574.27	0.00	1556.46	1466.88	0.847	1.93	5.05	13.760	B

Main results: (17:45-18:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Riverside Rd	583.54	145.89	583.52	912.46	981.39	0.00	1623.10	1543.88	0.360	0.55	0.56	3.462	A
Waveney Dr WB	1425.82	356.46	1425.73	1308.39	256.53	0.00	2056.12	1763.14	0.693	2.22	2.24	5.708	A
Waveney Dr EB	1319.02	329.76	1318.06	1106.46	575.80	0.00	1555.46	1466.88	0.848	5.05	5.29	15.007	C

Main results: (18:00-18:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Riverside Rd	476.46	119.11	477.19	750.17	811.66	0.00	1744.42	1543.88	0.273	0.56	0.38	2.841	A
Waveney Dr WB	1164.18	291.04	1168.05	1079.04	209.81	0.00	2088.93	1763.13	0.557	2.24	1.27	3.926	A
Waveney Dr EB	1076.98	269.24	1090.10	906.13	471.73	0.00	1623.11	1466.89	0.664	5.29	2.01	6.912	A

Main results: (18:15-18:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Riverside Rd	399.01	99.75	399.41	625.63	674.02	0.00	1842.81	1543.88	0.217	0.38	0.28	2.496	A
Waveney Dr WB	974.94	243.74	976.58	897.84	175.60	0.00	2112.95	1763.13	0.461	1.27	0.86	3.171	A
Waveney Dr EB	901.92	225.48	905.25	757.77	394.40	0.00	1673.38	1466.88	0.539	2.01	1.18	4.706	A

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Riverside Rd	4.05	0.27	2.483	A	A
Waveney Dr WB	12.44	0.83	3.144	A	A
Waveney Dr EB	16.67	1.11	4.605	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Riverside Rd	5.50	0.37	2.819	A	A
Waveney Dr WB	18.23	1.22	3.878	A	A
Waveney Dr EB	27.62	1.84	6.501	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Riverside Rd	8.17	0.54	3.439	A	A
Waveney Dr WB	31.77	2.12	5.639	A	A
Waveney Dr EB	66.76	4.45	13.760	B	B

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Riverside Rd	8.37	0.56	3.462	A	A
Waveney Dr WB	33.46	2.23	5.708	A	A
Waveney Dr EB	77.98	5.20	15.007	C	B

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Riverside Rd	5.75	0.38	2.841	A	A
Waveney Dr WB	19.66	1.31	3.926	A	A
Waveney Dr EB	32.59	2.17	6.912	A	A

Queueing Delay results: (18:15-18:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Riverside Rd	4.21	0.28	2.496	A	A
Waveney Dr WB	13.21	0.88	3.171	A	A
Waveney Dr EB	18.33	1.22	4.706	A	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (s)
17:00-17:15	Riverside Rd	399.01	1847.04	0.216	0.00	0.00	0.27	4.05	-	2.483
17:00-17:15	Waveney Dr WB	974.94	2113.42	0.461	0.00	0.00	0.85	12.44	-	3.144
17:00-17:15	Waveney Dr EB	901.92	1674.70	0.539	0.00	0.00	1.15	16.67	-	4.605
17:15-17:30	Riverside Rd	476.46	1753.05	0.272	0.00	0.27	0.37	5.50	-	2.819
17:15-17:30	Waveney Dr WB	1164.18	2089.29	0.557	0.00	0.85	1.25	18.23	-	3.878
17:15-17:30	Waveney Dr EB	1076.98	1624.54	0.663	0.00	1.15	1.93	27.62	-	6.501
17:30-17:45	Riverside Rd	583.54	1629.24	0.358	0.00	0.37	0.55	8.17	-	3.439
17:30-17:45	Waveney Dr WB	1425.82	2056.35	0.693	0.00	1.25	2.22	31.77	-	5.639
17:30-17:45	Waveney Dr EB	1319.02	1556.46	0.847	0.00	1.93	5.05	66.76	-	13.760
17:45-18:00	Riverside Rd	583.54	1623.10	0.360	0.00	0.55	0.56	8.37	-	3.462
17:45-18:00	Waveney Dr WB	1425.82	2056.12	0.693	0.00	2.22	2.24	33.46	-	5.708
17:45-18:00	Waveney Dr EB	1319.02	1555.46	0.848	0.00	5.05	5.29	77.98	-	15.007
18:00-18:15	Riverside Rd	476.46	1744.42	0.273	0.00	0.56	0.38	5.75	-	2.841
18:00-18:15	Waveney Dr WB	1164.18	2088.93	0.557	0.00	2.24	1.27	19.66	-	3.926
18:00-18:15	Waveney Dr EB	1076.98	1623.11	0.664	0.00	5.29	2.01	32.59	-	6.912
18:15-18:30	Riverside Rd	399.01	1842.81	0.217	0.00	0.38	0.28	4.21	-	2.496
18:15-18:30	Waveney Dr WB	974.94	2112.95	0.461	0.00	1.27	0.86	13.21	-	3.171
18:15-18:30	Waveney Dr EB	901.92	1673.38	0.539	0.00	2.01	1.18	18.33	-	4.706

(Default Analysis Set) - 2037 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Waveney Dr EB - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Riverside Rd - 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2037 DS, AM	2037 DS	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	2,4,1				6.43	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Riverside Rd	1	Riverside Rd	
Waveney Dr WB	2	Waveney Dr WB	
Waveney Dr EB	4	Waveney Dr EB	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Riverside Rd	0.00	99999.00		0.00
Waveney Dr WB	0.00	99999.00		0.00
Waveney Dr EB	0.00	99999.00		0.00

Roundabout Geometry

Name	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
Riverside Rd	3.65	10.50	38.27	20.00	50.00	42.00	
Waveney Dr WB	7.30	7.75	2.50	20.30	50.00	38.00	
Waveney Dr EB	3.00	8.00	34.42	20.00	50.00	32.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Riverside Rd		(calculated)	(calculated)	0.715	2324.623
Waveney Dr WB		(calculated)	(calculated)	0.702	2236.273
Waveney Dr EB		(calculated)	(calculated)	0.650	1929.752

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Riverside Rd	ONE HOUR	✓	849.00	100.000
Waveney Dr WB	ONE HOUR	✓	1239.00	100.000
Waveney Dr EB	ONE HOUR	✓	1049.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	Riverside Rd	639.17	639.17		
08:00-08:15	Waveney Dr WB	932.78	932.78		
08:00-08:15	Waveney Dr EB	789.74	789.74		
08:15-08:30	Riverside Rd	763.23	763.23		
08:15-08:30	Waveney Dr WB	1113.84	1113.84		
08:15-08:30	Waveney Dr EB	943.03	943.03		
08:30-08:45	Riverside Rd	934.77	934.77		
08:30-08:45	Waveney Dr WB	1364.16	1364.16		
08:30-08:45	Waveney Dr EB	1154.97	1154.97		
08:45-09:00	Riverside Rd	934.77	934.77		
08:45-09:00	Waveney Dr WB	1364.16	1364.16		
08:45-09:00	Waveney Dr EB	1154.97	1154.97		
09:00-09:15	Riverside Rd	763.23	763.23		
09:00-09:15	Waveney Dr WB	1113.84	1113.84		
09:00-09:15	Waveney Dr EB	943.03	943.03		
09:15-09:30	Riverside Rd	639.17	639.17		
09:15-09:30	Waveney Dr WB	932.78	932.78		
09:15-09:30	Waveney Dr EB	789.74	789.74		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		Waveney Dr WB	Waveney Dr EB	Riverside Rd
From	Waveney Dr WB	0.000	884.000	355.000
	Waveney Dr EB	882.000	10.000	157.000
	Riverside Rd	410.000	439.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		Waveney Dr WB	Waveney Dr EB	Riverside Rd
From	Waveney Dr WB	0.00	0.71	0.29
	Waveney Dr EB	0.84	0.01	0.15
	Riverside Rd	0.48	0.52	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		Waveney Dr WB	Waveney Dr EB	Riverside Rd
From	Waveney Dr WB	1.000	1.000	1.000
	Waveney Dr EB	1.000	1.000	1.000
	Riverside Rd	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		Waveney Dr WB	Waveney Dr EB	Riverside Rd
From	Waveney Dr WB	0.0	0.0	0.0
	Waveney Dr EB	0.0	0.0	0.0
	Riverside Rd	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Riverside Rd	0.58	5.23	1.35	A	779.06	1168.59	78.65	4.04	0.87	78.66	4.04
Waveney Dr WB	0.72	6.85	2.56	A	1136.93	1705.39	140.32	4.94	1.56	140.33	4.94
Waveney Dr EB	0.69	6.91	2.19	A	962.58	1443.87	124.47	5.17	1.38	124.48	5.17

Main Results for each time segment

Main results: (08:00-08:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Riverside Rd	639.17	159.79	637.06	383.98	668.79	0.00	1846.55	1348.16	0.346	0.00	0.53	2.971	A
Waveney Dr WB	932.78	233.20	929.31	968.94	336.91	0.00	1999.66	1735.95	0.466	0.00	0.87	3.352	A
Waveney Dr EB	789.74	197.44	786.50	999.95	266.27	0.00	1756.67	1606.43	0.450	0.00	0.81	3.698	A

Main results: (08:15-08:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Riverside Rd	763.23	190.81	762.28	459.54	800.58	0.00	1752.35	1348.16	0.436	0.53	0.77	3.633	A
Waveney Dr WB	1113.84	278.46	1112.06	1159.72	403.13	0.00	1953.16	1735.95	0.570	0.87	1.31	4.272	A
Waveney Dr EB	943.03	235.76	941.49	1196.56	318.63	0.00	1722.63	1606.43	0.547	0.81	1.20	4.599	A

Main results: (08:30-08:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Riverside Rd	934.77	233.69	932.49	561.75	978.82	0.00	1624.93	1348.16	0.575	0.77	1.34	5.183	A
Waveney Dr WB	1364.16	341.04	1359.30	1418.17	493.14	0.00	1889.94	1735.93	0.722	1.31	2.53	6.723	A
Waveney Dr EB	1154.97	288.74	1151.10	1462.98	389.47	0.00	1676.58	1606.44	0.689	1.20	2.16	6.801	A

Main results: (08:45-09:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Riverside Rd	934.77	233.69	934.72	563.67	982.02	0.00	1622.65	1348.16	0.576	1.34	1.35	5.232	A
Waveney Dr WB	1364.16	341.04	1364.02	1422.40	494.33	0.00	1889.11	1735.93	0.722	2.53	2.56	6.851	A
Waveney Dr EB	1154.97	288.74	1154.86	1467.53	390.82	0.00	1675.70	1606.44	0.689	2.16	2.19	6.907	A

Main results: (09:00-09:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Riverside Rd	763.23	190.81	765.51	462.25	805.17	0.00	1749.06	1348.16	0.436	1.35	0.78	3.667	A
Waveney Dr WB	1113.84	278.46	1118.71	1165.83	404.86	0.00	1951.95	1735.95	0.571	2.56	1.34	4.346	A
Waveney Dr EB	943.03	235.76	946.89	1203.03	320.54	0.00	1721.39	1606.43	0.548	2.19	1.23	4.672	A

Main results: (09:15-09:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Riverside Rd	639.17	159.79	640.16	386.23	672.91	0.00	1843.61	1348.16	0.347	0.78	0.53	2.995	A
Waveney Dr WB	932.78	233.20	934.63	974.51	338.56	0.00	1998.51	1735.95	0.467	1.34	0.88	3.388	A
Waveney Dr EB	789.74	197.44	791.35	1005.40	267.79	0.00	1755.68	1606.43	0.450	1.23	0.82	3.741	A

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Riverside Rd	7.73	0.52	2.971	A	A
Waveney Dr WB	12.68	0.85	3.352	A	A
Waveney Dr EB	11.82	0.79	3.698	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Riverside Rd	11.26	0.75	3.633	A	A
Waveney Dr WB	19.15	1.28	4.272	A	A
Waveney Dr EB	17.45	1.16	4.599	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Riverside Rd	19.36	1.29	5.183	A	A
Waveney Dr WB	35.87	2.39	6.723	A	A
Waveney Dr EB	30.83	2.06	6.801	A	A

Queueing Delay results: (08:45-09:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Riverside Rd	20.16	1.34	5.232	A	A
Waveney Dr WB	38.24	2.55	6.851	A	A
Waveney Dr EB	32.70	2.18	6.907	A	A

Queueing Delay results: (09:00-09:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Riverside Rd	11.99	0.80	3.667	A	A
Waveney Dr WB	20.86	1.39	4.346	A	A
Waveney Dr EB	19.02	1.27	4.672	A	A

Queueing Delay results: (09:15-09:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Riverside Rd	8.14	0.54	2.995	A	A
Waveney Dr WB	13.52	0.90	3.388	A	A
Waveney Dr EB	12.65	0.84	3.741	A	A

Brief results for arms

Arm Results

Time Segment	Arm	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (s)
08:00-08:15	Riverside Rd	639.17	1846.55	0.346	0.00	0.00	0.53	7.73	-	2.971
08:00-08:15	Waveney Dr WB	932.78	1999.66	0.466	0.00	0.00	0.87	12.68	-	3.352
08:00-08:15	Waveney Dr EB	789.74	1756.67	0.450	0.00	0.00	0.81	11.82	-	3.698
08:15-08:30	Riverside Rd	763.23	1752.35	0.436	0.00	0.53	0.77	11.26	-	3.633
08:15-08:30	Waveney Dr WB	1113.84	1953.16	0.570	0.00	0.87	1.31	19.15	-	4.272
08:15-08:30	Waveney Dr EB	943.03	1722.63	0.547	0.00	0.81	1.20	17.45	-	4.599
08:30-08:45	Riverside Rd	934.77	1624.93	0.575	0.00	0.77	1.34	19.36	-	5.183
08:30-08:45	Waveney Dr WB	1364.16	1889.94	0.722	0.00	1.31	2.53	35.87	-	6.723
08:30-08:45	Waveney Dr EB	1154.97	1676.58	0.689	0.00	1.20	2.16	30.83	-	6.801
08:45-09:00	Riverside Rd	934.77	1622.65	0.576	0.00	1.34	1.35	20.16	-	5.232
08:45-09:00	Waveney Dr WB	1364.16	1889.11	0.722	0.00	2.53	2.56	38.24	-	6.851
08:45-09:00	Waveney Dr EB	1154.97	1675.70	0.689	0.00	2.16	2.19	32.70	-	6.907
09:00-09:15	Riverside Rd	763.23	1749.06	0.436	0.00	1.35	0.78	11.99	-	3.667
09:00-09:15	Waveney Dr WB	1113.84	1951.95	0.571	0.00	2.56	1.34	20.86	-	4.346
09:00-09:15	Waveney Dr EB	943.03	1721.39	0.548	0.00	2.19	1.23	19.02	-	4.672
09:15-09:30	Riverside Rd	639.17	1843.61	0.347	0.00	0.78	0.53	8.14	-	2.995
09:15-09:30	Waveney Dr WB	932.78	1998.51	0.467	0.00	1.34	0.88	13.52	-	3.388
09:15-09:30	Waveney Dr EB	789.74	1755.68	0.450	0.00	1.23	0.82	12.65	-	3.741

(Default Analysis Set) - 2037 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Waveney Dr EB - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Riverside Rd - 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2037 DS, PM	2037 DS	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	2,4,1				27.11	D

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description
Riverside Rd	1	Riverside Rd	
Waveney Dr WB	2	Waveney Dr WB	
Waveney Dr EB	4	Waveney Dr EB	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Riverside Rd	0.00	99999.00		0.00
Waveney Dr WB	0.00	99999.00		0.00
Waveney Dr EB	0.00	99999.00		0.00

Roundabout Geometry

Name	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
Riverside Rd	3.65	10.50	38.27	20.00	50.00	42.00	
Waveney Dr WB	7.30	7.75	2.50	20.30	50.00	38.00	
Waveney Dr EB	3.00	8.00	34.42	20.00	50.00	32.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Riverside Rd		(calculated)	(calculated)	0.715	2324.623
Waveney Dr WB		(calculated)	(calculated)	0.702	2236.273
Waveney Dr EB		(calculated)	(calculated)	0.650	1929.752

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Riverside Rd	ONE HOUR	✓	621.00	100.000
Waveney Dr WB	ONE HOUR	✓	1430.00	100.000
Waveney Dr EB	ONE HOUR	✓	1303.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	Riverside Rd	467.52	467.52		
17:00-17:15	Waveney Dr WB	1076.58	1076.58		
17:00-17:15	Waveney Dr EB	980.97	980.97		
17:15-17:30	Riverside Rd	558.27	558.27		
17:15-17:30	Waveney Dr WB	1285.54	1285.54		
17:15-17:30	Waveney Dr EB	1171.37	1171.37		
17:30-17:45	Riverside Rd	683.73	683.73		
17:30-17:45	Waveney Dr WB	1574.46	1574.46		
17:30-17:45	Waveney Dr EB	1434.63	1434.63		
17:45-18:00	Riverside Rd	683.73	683.73		
17:45-18:00	Waveney Dr WB	1574.46	1574.46		
17:45-18:00	Waveney Dr EB	1434.63	1434.63		
18:00-18:15	Riverside Rd	558.27	558.27		
18:00-18:15	Waveney Dr WB	1285.54	1285.54		
18:00-18:15	Waveney Dr EB	1171.37	1171.37		
18:15-18:30	Riverside Rd	467.52	467.52		
18:15-18:30	Waveney Dr WB	1076.58	1076.58		
18:15-18:30	Waveney Dr EB	980.97	980.97		

Turning Proportions

Turning Counts / Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		Waveney Dr WB	Waveney Dr EB	Riverside Rd
From	Waveney Dr WB	0.000	757.000	673.000
	Waveney Dr EB	941.000	3.000	359.000
	Riverside Rd	348.000	273.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		Waveney Dr WB	Waveney Dr EB	Riverside Rd
From	Waveney Dr WB	0.00	0.53	0.47
	Waveney Dr EB	0.72	0.00	0.28
	Riverside Rd	0.56	0.44	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		Waveney Dr WB	Waveney Dr EB	Riverside Rd
From	Waveney Dr WB	1.000	1.000	1.000
	Waveney Dr EB	1.000	1.000	1.000
	Riverside Rd	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		Waveney Dr WB	Waveney Dr EB	Riverside Rd
From	Waveney Dr WB	0.0	0.0	0.0
	Waveney Dr EB	0.0	0.0	0.0
	Riverside Rd	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Riverside Rd	0.43	3.95	0.75	A	569.84	854.76	46.99	3.30	0.52	46.99	3.30
Waveney Dr WB	0.78	8.01	3.44	A	1312.19	1968.29	180.24	5.49	2.00	180.26	5.49
Waveney Dr EB	0.99	59.11	23.21	F	1195.66	1793.48	664.26	22.22	7.38	664.30	22.22

Main Results for each time segment

Main results: (17:00-17:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Riverside Rd	467.52	116.88	466.14	773.25	706.19	0.00	1819.82	1600.88	0.257	0.00	0.34	2.657	A
Waveney Dr WB	1076.58	269.14	1072.37	965.16	207.17	0.00	2090.78	1739.74	0.515	0.00	1.05	3.520	A
Waveney Dr EB	980.97	245.24	974.75	774.85	504.69	0.00	1601.69	1397.52	0.612	0.00	1.55	5.688	A

Main results: (17:15-17:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Riverside Rd	558.27	139.57	557.73	924.99	844.25	0.00	1721.13	1600.87	0.324	0.34	0.48	3.092	A
Waveney Dr WB	1285.54	321.39	1283.22	1154.11	247.87	0.00	2062.20	1739.74	0.623	1.05	1.63	4.607	A
Waveney Dr EB	1171.37	292.84	1165.31	927.17	603.92	0.00	1537.18	1397.52	0.762	1.55	3.07	9.527	A

Main results: (17:30-17:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Riverside Rd	683.73	170.93	682.71	1117.70	999.22	0.00	1610.35	1600.87	0.425	0.48	0.73	3.877	A
Waveney Dr WB	1574.46	393.61	1567.48	1378.63	303.31	0.00	2023.26	1739.74	0.778	1.63	3.38	7.781	A
Waveney Dr EB	1434.63	358.66	1379.22	1133.08	737.70	0.00	1450.22	1397.52	0.989	3.07	16.92	36.159	E

Main results: (17:45-18:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Riverside Rd	683.73	170.93	683.68	1129.20	1021.13	0.00	1594.69	1600.87	0.429	0.73	0.75	3.951	A
Waveney Dr WB	1574.46	393.61	1574.20	1401.01	303.80	0.00	2022.92	1739.74	0.778	3.38	3.44	8.009	A
Waveney Dr EB	1434.63	358.66	1409.47	1137.14	740.87	0.00	1448.16	1397.52	0.991	16.92	23.21	59.108	F

Main results: (18:00-18:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Riverside Rd	558.27	139.57	559.24	952.90	906.04	0.00	1676.96	1600.87	0.333	0.75	0.50	3.225	A
Waveney Dr WB	1285.54	321.39	1292.60	1216.55	248.73	0.00	2061.59	1739.74	0.624	3.44	1.68	4.724	A
Waveney Dr EB	1171.37	292.84	1250.61	932.99	608.33	0.00	1534.31	1397.52	0.763	23.21	3.40	16.070	C

Main results: (18:15-18:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Riverside Rd	467.52	116.88	468.13	780.06	715.88	0.00	1812.89	1600.88	0.258	0.50	0.35	2.679	A
Waveney Dr WB	1076.58	269.14	1079.01	975.94	208.07	0.00	2090.15	1739.74	0.515	1.68	1.07	3.568	A
Waveney Dr EB	980.97	245.24	988.13	779.27	507.81	0.00	1599.65	1397.52	0.613	3.40	1.61	5.955	A

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Riverside Rd	5.07	0.34	2.657	A	A
Waveney Dr WB	15.33	1.02	3.520	A	A
Waveney Dr EB	22.20	1.48	5.688	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Riverside Rd	7.05	0.47	3.092	A	A
Waveney Dr WB	23.71	1.58	4.607	A	A
Waveney Dr EB	42.70	2.85	9.527	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Riverside Rd	10.75	0.72	3.877	A	A
Waveney Dr WB	47.20	3.15	7.781	A	A
Waveney Dr EB	176.60	11.77	36.159	E	D

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Riverside Rd	11.14	0.74	3.951	A	A
Waveney Dr WB	51.27	3.42	8.009	A	A
Waveney Dr EB	304.29	20.29	59.108	F	E

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Riverside Rd	7.67	0.51	3.225	A	A
Waveney Dr WB	26.25	1.75	4.724	A	A
Waveney Dr EB	93.07	6.20	16.070	C	B

Queueing Delay results: (18:15-18:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Riverside Rd	5.31	0.35	2.679	A	A
Waveney Dr WB	16.48	1.10	3.568	A	A
Waveney Dr EB	25.39	1.69	5.955	A	A

Brief results for arms

Arm Results

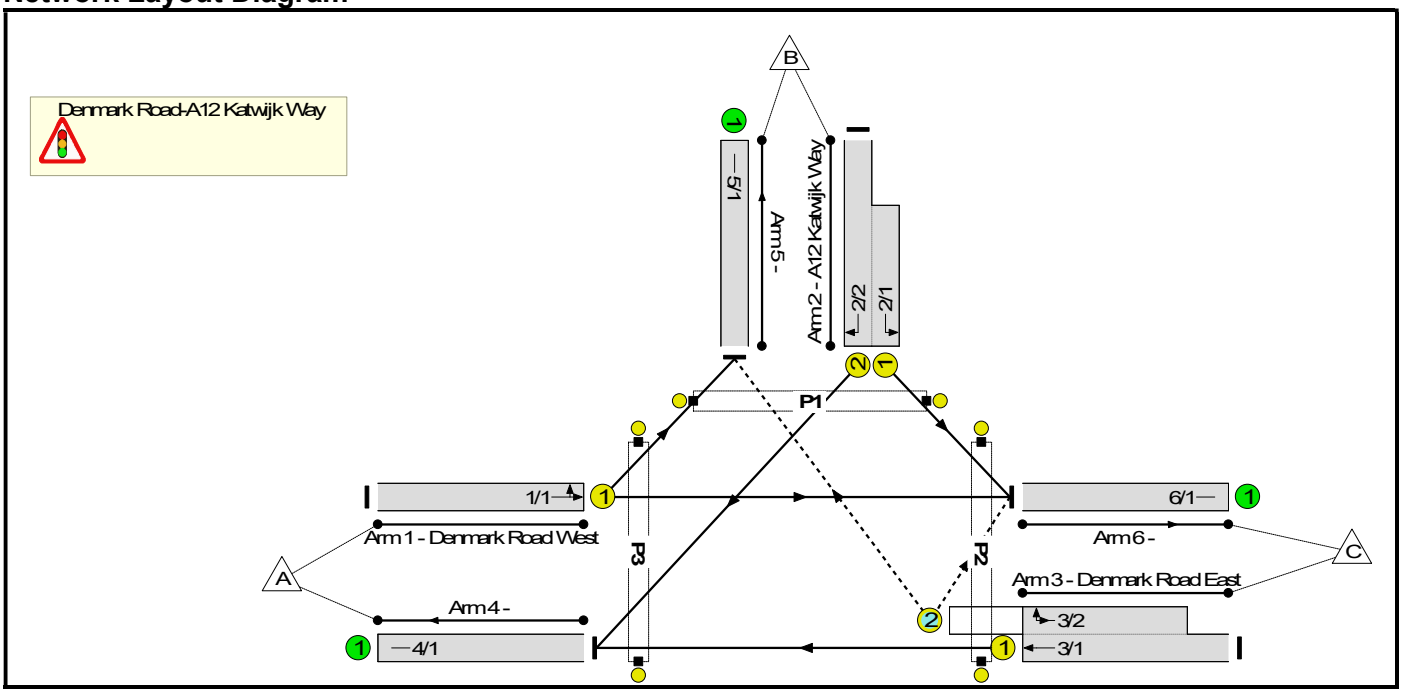
Time Segment	Arm	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (s)
17:00-17:15	Riverside Rd	467.52	1819.82	0.257	0.00	0.00	0.34	5.07	-	2.657
17:00-17:15	Waveney Dr WB	1076.58	2090.78	0.515	0.00	0.00	1.05	15.33	-	3.520
17:00-17:15	Waveney Dr EB	980.97	1601.69	0.612	0.00	0.00	1.55	22.20	-	5.688
17:15-17:30	Riverside Rd	558.27	1721.13	0.324	0.00	0.34	0.48	7.05	-	3.092
17:15-17:30	Waveney Dr WB	1285.54	2062.20	0.623	0.00	1.05	1.63	23.71	-	4.607
17:15-17:30	Waveney Dr EB	1171.37	1537.18	0.762	0.00	1.55	3.07	42.70	-	9.527
17:30-17:45	Riverside Rd	683.73	1610.35	0.425	0.00	0.48	0.73	10.75	-	3.877
17:30-17:45	Waveney Dr WB	1574.46	2023.26	0.778	0.00	1.63	3.38	47.20	-	7.781
17:30-17:45	Waveney Dr EB	1434.63	1450.22	0.989	0.00	3.07	16.92	176.60	-	36.159
17:45-18:00	Riverside Rd	683.73	1594.69	0.429	0.00	0.73	0.75	11.14	-	3.951
17:45-18:00	Waveney Dr WB	1574.46	2022.92	0.778	0.00	3.38	3.44	51.27	-	8.009
17:45-18:00	Waveney Dr EB	1434.63	1448.16	0.991	0.00	16.92	23.21	304.29	-	59.108
18:00-18:15	Riverside Rd	558.27	1676.96	0.333	0.00	0.75	0.50	7.67	-	3.225
18:00-18:15	Waveney Dr WB	1285.54	2061.59	0.624	0.00	3.44	1.68	26.25	-	4.724
18:00-18:15	Waveney Dr EB	1171.37	1534.31	0.763	0.00	23.21	3.40	93.07	-	16.070
18:15-18:30	Riverside Rd	467.52	1812.89	0.258	0.00	0.50	0.35	5.31	-	2.679
18:15-18:30	Waveney Dr WB	1076.58	2090.15	0.515	0.00	1.68	1.07	16.48	-	3.568
18:15-18:30	Waveney Dr EB	980.97	1599.65	0.613	0.00	3.40	1.61	25.39	-	5.955

Full Input Data And Results

User and Project Details

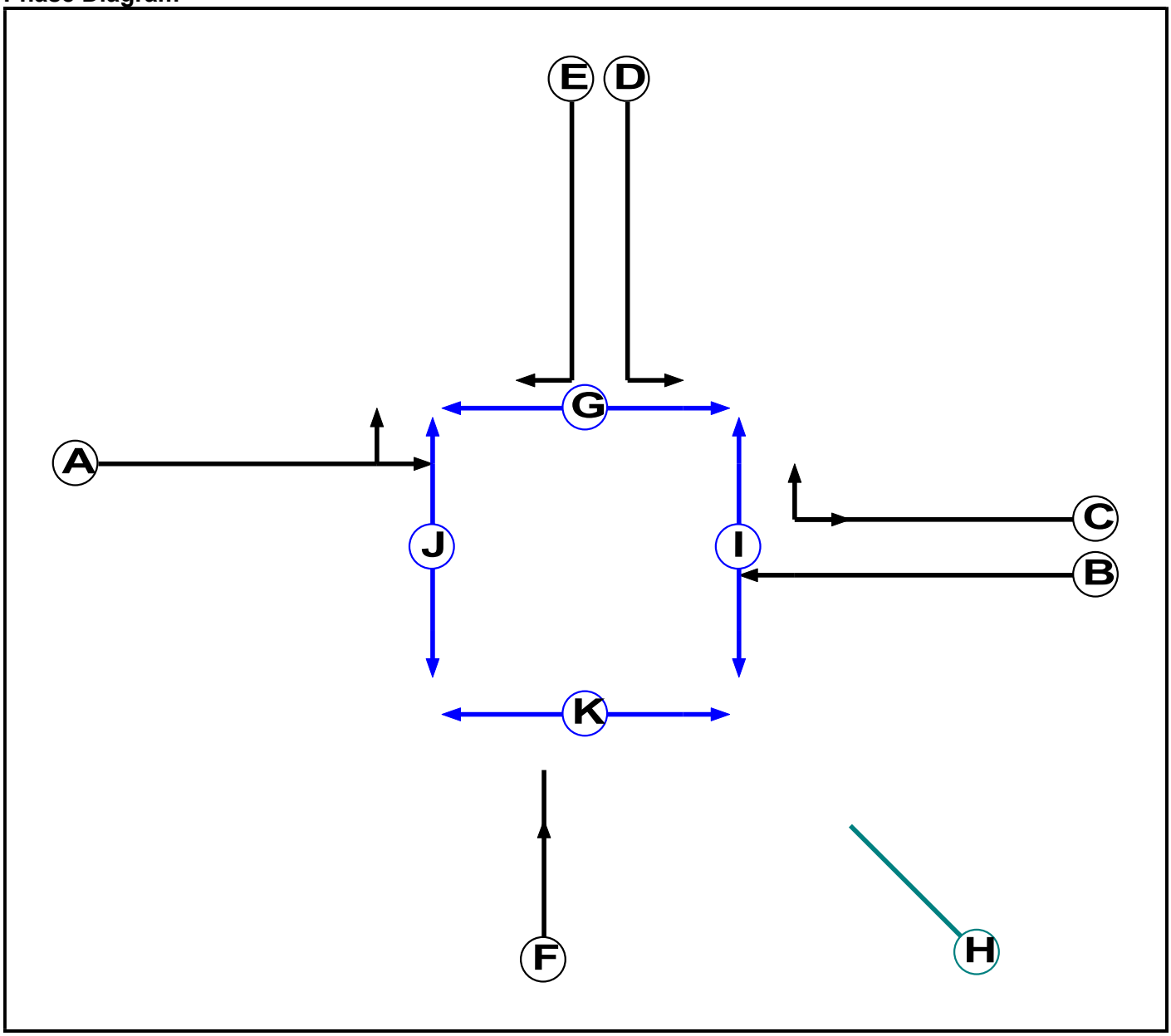
Project:	
Title:	
Location:	
File name:	19 Denmark Rd-A12 Katwijk Way sig v5.lsg3x
Author:	
Company:	
Address:	
Notes:	

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		4	4
D	Traffic		7	7
E	Traffic		7	7
F	Traffic		7	7
G	Pedestrian		7	7
H	Dummy		7	7
I	Pedestrian		5	5
J	Pedestrian		5	5
K	Pedestrian		5	5

Full Input Data And Results

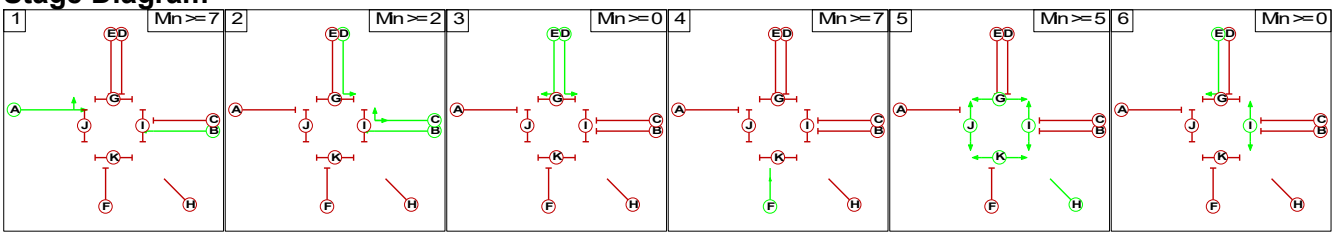
Phase Intergreens Matrix

		Starting Phase										
		A	B	C	D	E	F	G	H	I	J	K
Terminating Phase	A		-	5	7	5	6	9	9	10	10	6
	B	-		-	-	5	8	10	10	6	10	10
	C	6	-		-	7	6	10	10	6	10	-
	D	5	-	-		-	5	6	6	9	9	-
	E	7	6	6	-		7	6	6	-	10	10
	F	6	6	6	6	5		8	8	10	5	7
	G	5	5	5	5	5	5		-	-	-	-
	H	5	5	5	5	5	5	-		-	-	-
	I	5	5	5	5	-	5	-	-		-	-
	J	0	0	0	0	0	9	-	-	-		-
	K	5	5	-	-	5	5	-	-	-	-	

Phases in Stage

Stage No.	Phases in Stage
1	A B
2	B C D
3	D E
4	F
5	G H I J K
6	E I

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	3	B	Losing	4	4
1	3	D	Gaining absolute	4	4
2	3	E	Gaining absolute	5	5

Full Input Data And Results

Prohibited Stage Change

		To Stage					
		1	2	3	4	5	6
From Stage	1		7	9	8	10	10
	2	6		7	8	10	9
	3	7	6		7	10	9
	4	6	6	6		10	10
	5	5	5	5	9		5
	6	7	6	5	7	10	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Denmark Road-A12 Katwijk Way											
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)**
3/2 (Denmark Road East)	5/1 (Right)	1439	0	1/1	1.09	All	4.00	-	0.50	4	2.00
	6/1 (U-Turn)	1439	0	2/1	1.09	All					

Full Input Data And Results

Lane Input Data

Junction: Denmark Road-A12 Katwijk Way												
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 (Denmark Road West)	U	A	2	3	60.0	Geom	-	2.50	0.00	Y	Arm 5 Left	15.00
											Arm 6 Ahead	Inf
2/1 (A12 Katwijk Way)	U	D	2	3	7.7	Geom	-	3.80	0.00	Y	Arm 6 Left	14.80
2/2 (A12 Katwijk Way)	U	E	2	3	60.0	Geom	-	3.80	0.00	N	Arm 4 Right	17.20
3/1 (Denmark Road East)	U	B	2	3	60.0	Geom	-	3.20	0.00	Y	Arm 4 Ahead	Inf
3/2 (Denmark Road East)	O	C	2	3	9.5	Geom	-	3.20	0.00	N	Arm 5 Right	16.90
											Arm 6 U-Turn	5.00
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'Base 2016 AM'	08:00	09:00	01:00	
2: 'Base 2016 PM'	17:00	18:00	01:00	
3: 'Base 2016 Saturday'	11:30	12:30	01:00	
4: '2022 DM AM'	08:00	09:00	01:00	
5: '2022 DM PM'	17:00	18:00	01:00	
6: '2022 DM Saturday'	11:30	12:30	01:00	
7: '2022 DS AM'	08:00	09:00	01:00	
8: '2022 DS PM'	17:00	18:00	01:00	
9: '2022 DS Saturday'	11:30	12:30	01:00	
10: '2037 DM AM'	08:00	09:00	01:00	
11: '2037 DM PM'	17:00	18:00	01:00	
12: '2037 DM Saturday'	11:30	12:30	01:00	
13: '2037 DS AM'	08:00	09:00	01:00	
14: '2037 DS PM'	17:00	18:00	01:00	
15: '2037 DS Saturday'	11:30	12:30	01:00	
16: '2022 DM new Saturday'	11:30	12:30	01:00	
17: '2037 DM new Saturday'	11:30	12:30	01:00	
18: '2022 DS new Saturday'	11:30	12:30	01:00	
19: '2037 DS new Saturday'	11:30	12:30	01:00	

Scenario 1: 'Base 2016 AM' (FG1: 'Base 2016 AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	61	187	248
	B	43	0	135	178
	C	353	580	2	935
	Tot.	396	641	324	1361

Traffic Lane Flows

Lane	Scenario 1: Base 2016 AM
Junction: Denmark Road-A12 Katwijk Way	
1/1	248
2/1 (short)	135
2/2 (with short)	178(In) 43(Out)
3/1 (with short)	935(In) 353(Out)
3/2 (short)	582
4/1	396
5/1	641
6/1	324

Full Input Data And Results

Lane Saturation Flows

Junction: Denmark Road-A12 Katwijk Way								
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 (Denmark Road West)	2.50	0.00	Y	Arm 5 Left	15.00	24.6 %	1820	1820
				Arm 6 Ahead	Inf	75.4 %		
2/1 (A12 Katwijk Way)	3.80	0.00	Y	Arm 6 Left	14.80	100.0 %	1811	1811
2/2 (A12 Katwijk Way)	3.80	0.00	N	Arm 4 Right	17.20	100.0 %	1964	1964
3/1 (Denmark Road East)	3.20	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1935	1935
3/2 (Denmark Road East)	3.20	0.00	N	Arm 5 Right	16.90	99.7 %	1905	1905
				Arm 6 U-Turn	5.00	0.3 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: 'Base 2016 PM' (FG2: 'Base 2016 PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	46	298	344
	B	85	0	283	368
	C	346	348	3	697
	Tot.	431	394	584	1409

Traffic Lane Flows

Lane	Scenario 2: Base 2016 PM
Junction: Denmark Road-A12 Katwijk Way	
1/1	344
2/1 (short)	283
2/2 (with short)	368(In) 85(Out)
3/1 (with short)	697(In) 346(Out)
3/2 (short)	351
4/1	431
5/1	394
6/1	584

Full Input Data And Results

Lane Saturation Flows

Junction: Denmark Road-A12 Katwijk Way								
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 (Denmark Road West)	2.50	0.00	Y	Arm 5 Left	15.00	13.4 %	1840	1840
				Arm 6 Ahead	Inf	86.6 %		
2/1 (A12 Katwijk Way)	3.80	0.00	Y	Arm 6 Left	14.80	100.0 %	1811	1811
2/2 (A12 Katwijk Way)	3.80	0.00	N	Arm 4 Right	17.20	100.0 %	1964	1964
3/1 (Denmark Road East)	3.20	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1935	1935
3/2 (Denmark Road East)	3.20	0.00	N	Arm 5 Right	16.90	99.1 %	1903	1903
				Arm 6 U-Turn	5.00	0.9 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: 'Base 2016 Saturday' (FG3: 'Base 2016 Saturday', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	25	182	207
	B	113	0	179	292
	C	349	327	7	683
	Tot.	462	352	368	1182

Traffic Lane Flows

Lane	Scenario 3: Base 2016 Saturday
Junction: Denmark Road-A12 Katwijk Way	
1/1	207
2/1 (short)	179
2/2 (with short)	292(In) 113(Out)
3/1 (with short)	683(In) 349(Out)
3/2 (short)	334
4/1	462
5/1	352
6/1	368

Full Input Data And Results

Lane Saturation Flows

Junction: Denmark Road-A12 Katwijk Way								
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 (Denmark Road West)	2.50	0.00	Y	Arm 5 Left	15.00	12.1 %	1843	1843
				Arm 6 Ahead	Inf	87.9 %		
2/1 (A12 Katwijk Way)	3.80	0.00	Y	Arm 6 Left	14.80	100.0 %	1811	1811
2/2 (A12 Katwijk Way)	3.80	0.00	N	Arm 4 Right	17.20	100.0 %	1964	1964
3/1 (Denmark Road East)	3.20	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1935	1935
3/2 (Denmark Road East)	3.20	0.00	N	Arm 5 Right	16.90	97.9 %	1898	1898
				Arm 6 U-Turn	5.00	2.1 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2022 DM AM' (FG4: '2022 DM AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	11	230	241
	B	0	0	181	181
	C	406	321	0	727
	Tot.	406	332	411	1149

Traffic Lane Flows

Lane	Scenario 4: 2022 DM AM
Junction: Denmark Road-A12 Katwijk Way	
1/1	241
2/1 (short)	181
2/2 (with short)	181(In) 0(Out)
3/1 (with short)	727(In) 406(Out)
3/2 (short)	321
4/1	406
5/1	332
6/1	411

Full Input Data And Results

Lane Saturation Flows

Junction: Denmark Road-A12 Katwijk Way								
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 (Denmark Road West)	2.50	0.00	Y	Arm 5 Left	15.00	4.6 %	1857	1857
				Arm 6 Ahead	Inf	95.4 %		
2/1 (A12 Katwijk Way)	3.80	0.00	Y	Arm 6 Left	14.80	100.0 %	1811	1811
2/2 (A12 Katwijk Way)	3.80	0.00	N	Arm 4 Right	17.20	0.0 %	2135	2135
3/1 (Denmark Road East)	3.20	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1935	1935
3/2 (Denmark Road East)	3.20	0.00	N	Arm 5 Right	16.90	100.0 %	1906	1906
				Arm 6 U-Turn	5.00	0.0 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 5: '2022 DM PM' (FG5: '2022 DM PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	10	301	311
	B	0	0	318	318
	C	383	183	0	566
	Tot.	383	193	619	1195

Traffic Lane Flows

Lane	Scenario 5: 2022 DM PM
Junction: Denmark Road-A12 Katwijk Way	
1/1	311
2/1 (short)	318
2/2 (with short)	318(In) 0(Out)
3/1 (with short)	566(In) 383(Out)
3/2 (short)	183
4/1	383
5/1	193
6/1	619

Full Input Data And Results

Lane Saturation Flows

Junction: Denmark Road-A12 Katwijk Way								
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 (Denmark Road West)	2.50	0.00	Y	Arm 5 Left	15.00	3.2 %	1859	1859
				Arm 6 Ahead	Inf	96.8 %		
2/1 (A12 Katwijk Way)	3.80	0.00	Y	Arm 6 Left	14.80	100.0 %	1811	1811
2/2 (A12 Katwijk Way)	3.80	0.00	N	Arm 4 Right	17.20	0.0 %	2135	2135
3/1 (Denmark Road East)	3.20	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1935	1935
3/2 (Denmark Road East)	3.20	0.00	N	Arm 5 Right	16.90	100.0 %	1906	1906
				Arm 6 U-Turn	5.00	0.0 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 6: '2022 DM Saturday' (FG16: '2022 DM new Saturday', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	26	191	217
	B	119	0	188	307
	C	367	344	7	718
	Tot.	486	370	386	1242

Traffic Lane Flows

Lane	Scenario 6: 2022 DM Saturday
Junction: Denmark Road-A12 Katwijk Way	
1/1	217
2/1 (short)	188
2/2 (with short)	307(In) 119(Out)
3/1 (with short)	718(In) 367(Out)
3/2 (short)	351
4/1	486
5/1	370
6/1	386

Full Input Data And Results

Lane Saturation Flows

Junction: Denmark Road-A12 Katwijk Way								
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 (Denmark Road West)	2.50	0.00	Y	Arm 5 Left	15.00	12.0 %	1843	1843
				Arm 6 Ahead	Inf	88.0 %		
2/1 (A12 Katwijk Way)	3.80	0.00	Y	Arm 6 Left	14.80	100.0 %	1811	1811
2/2 (A12 Katwijk Way)	3.80	0.00	N	Arm 4 Right	17.20	100.0 %	1964	1964
3/1 (Denmark Road East)	3.20	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1935	1935
3/2 (Denmark Road East)	3.20	0.00	N	Arm 5 Right	16.90	98.0 %	1898	1898
				Arm 6 U-Turn	5.00	2.0 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 7: '2022 DS AM' (FG7: '2022 DS AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	12	58	70
	B	0	0	63	63
	C	44	173	0	217
	Tot.	44	185	121	350

Traffic Lane Flows

Lane	Scenario 7: 2022 DS AM
Junction: Denmark Road-A12 Katwijk Way	
1/1	70
2/1 (short)	63
2/2 (with short)	63(In) 0(Out)
3/1 (with short)	217(In) 44(Out)
3/2 (short)	173
4/1	44
5/1	185
6/1	121

Full Input Data And Results

Lane Saturation Flows

Junction: Denmark Road-A12 Katwijk Way								
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 (Denmark Road West)	2.50	0.00	Y	Arm 5 Left	15.00	17.1 %	1834	1834
				Arm 6 Ahead	Inf	82.9 %		
2/1 (A12 Katwijk Way)	3.80	0.00	Y	Arm 6 Left	14.80	100.0 %	1811	1811
2/2 (A12 Katwijk Way)	3.80	0.00	N	Arm 4 Right	17.20	0.0 %	2135	2135
3/1 (Denmark Road East)	3.20	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1935	1935
3/2 (Denmark Road East)	3.20	0.00	N	Arm 5 Right	16.90	100.0 %	1906	1906
				Arm 6 U-Turn	5.00	0.0 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 8: '2022 DS PM' (FG8: '2022 DS PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	10	64	74
	B	0	0	161	161
	C	59	83	0	142
	Tot.	59	93	225	377

Traffic Lane Flows

Lane	Scenario 8: 2022 DS PM
Junction: Denmark Road-A12 Katwijk Way	
1/1	74
2/1 (short)	161
2/2 (with short)	161(In) 0(Out)
3/1 (with short)	142(In) 59(Out)
3/2 (short)	83
4/1	59
5/1	93
6/1	225

Full Input Data And Results

Lane Saturation Flows

Junction: Denmark Road-A12 Katwijk Way								
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 (Denmark Road West)	2.50	0.00	Y	Arm 5 Left	15.00	13.5 %	1840	1840
				Arm 6 Ahead	Inf	86.5 %		
2/1 (A12 Katwijk Way)	3.80	0.00	Y	Arm 6 Left	14.80	100.0 %	1811	1811
2/2 (A12 Katwijk Way)	3.80	0.00	N	Arm 4 Right	17.20	0.0 %	2135	2135
3/1 (Denmark Road East)	3.20	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1935	1935
3/2 (Denmark Road East)	3.20	0.00	N	Arm 5 Right	16.90	100.0 %	1906	1906
				Arm 6 U-Turn	5.00	0.0 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 9: '2022 DS Saturday' (FG18: '2022 DS new Saturday', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	5	39	44
	B	16	0	25	41
	C	77	72	2	151
	Tot.	93	77	66	236

Traffic Lane Flows

Lane	Scenario 9: 2022 DS Saturday
Junction: Denmark Road-A12 Katwijk Way	
1/1	44
2/1 (short)	25
2/2 (with short)	41(In) 16(Out)
3/1 (with short)	151(In) 77(Out)
3/2 (short)	74
4/1	93
5/1	77
6/1	66

Full Input Data And Results

Lane Saturation Flows

Junction: Denmark Road-A12 Katwijk Way								
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 (Denmark Road West)	2.50	0.00	Y	Arm 5 Left	15.00	11.4 %	1844	1844
				Arm 6 Ahead	Inf	88.6 %		
2/1 (A12 Katwijk Way)	3.80	0.00	Y	Arm 6 Left	14.80	100.0 %	1811	1811
2/2 (A12 Katwijk Way)	3.80	0.00	N	Arm 4 Right	17.20	100.0 %	1964	1964
3/1 (Denmark Road East)	3.20	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1935	1935
3/2 (Denmark Road East)	3.20	0.00	N	Arm 5 Right	16.90	97.3 %	1896	1896
				Arm 6 U-Turn	5.00	2.7 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 10: '2037 DM AM' (FG10: '2037 DM AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	12	248	260
	B	0	0	206	206
	C	472	325	0	797
	Tot.	472	337	454	1263

Traffic Lane Flows

Lane	Scenario 10: 2037 DM AM
Junction: Denmark Road-A12 Katwijk Way	
1/1	260
2/1 (short)	206
2/2 (with short)	206(In) 0(Out)
3/1 (with short)	797(In) 472(Out)
3/2 (short)	325
4/1	472
5/1	337
6/1	454

Full Input Data And Results

Lane Saturation Flows

Junction: Denmark Road-A12 Katwijk Way								
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 (Denmark Road West)	2.50	0.00	Y	Arm 5 Left	15.00	4.6 %	1856	1856
				Arm 6 Ahead	Inf	95.4 %		
2/1 (A12 Katwijk Way)	3.80	0.00	Y	Arm 6 Left	14.80	100.0 %	1811	1811
2/2 (A12 Katwijk Way)	3.80	0.00	N	Arm 4 Right	17.20	0.0 %	2135	2135
3/1 (Denmark Road East)	3.20	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1935	1935
3/2 (Denmark Road East)	3.20	0.00	N	Arm 5 Right	16.90	100.0 %	1906	1906
				Arm 6 U-Turn	5.00	0.0 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 11: '2037 DM PM' (FG11: '2037 DM PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	11	314	325
	B	0	0	353	353
	C	434	183	0	617
	Tot.	434	194	667	1295

Traffic Lane Flows

Lane	Scenario 11: 2037 DM PM
Junction: Denmark Road-A12 Katwijk Way	
1/1	325
2/1 (short)	353
2/2 (with short)	353(In) 0(Out)
3/1 (with short)	617(In) 434(Out)
3/2 (short)	183
4/1	434
5/1	194
6/1	667

Full Input Data And Results

Lane Saturation Flows

Junction: Denmark Road-A12 Katwijk Way								
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 (Denmark Road West)	2.50	0.00	Y	Arm 5 Left	15.00	3.4 %	1859	1859
				Arm 6 Ahead	Inf	96.6 %		
2/1 (A12 Katwijk Way)	3.80	0.00	Y	Arm 6 Left	14.80	100.0 %	1811	1811
2/2 (A12 Katwijk Way)	3.80	0.00	N	Arm 4 Right	17.20	0.0 %	2135	2135
3/1 (Denmark Road East)	3.20	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1935	1935
3/2 (Denmark Road East)	3.20	0.00	N	Arm 5 Right	16.90	100.0 %	1906	1906
				Arm 6 U-Turn	5.00	0.0 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 12: '2037 DM Saturday' (FG17: '2037 DM new Saturday', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	29	214	243
	B	133	0	211	344
	C	410	385	8	803
	Tot.	543	414	433	1390

Traffic Lane Flows

Lane	Scenario 12: 2037 DM Saturday
Junction: Denmark Road-A12 Katwijk Way	
1/1	243
2/1 (short)	211
2/2 (with short)	344(In) 133(Out)
3/1 (with short)	803(In) 410(Out)
3/2 (short)	393
4/1	543
5/1	414
6/1	433

Full Input Data And Results

Lane Saturation Flows

Junction: Denmark Road-A12 Katwijk Way								
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 (Denmark Road West)	2.50	0.00	Y	Arm 5 Left	15.00	11.9 %	1843	1843
				Arm 6 Ahead	Inf	88.1 %		
2/1 (A12 Katwijk Way)	3.80	0.00	Y	Arm 6 Left	14.80	100.0 %	1811	1811
2/2 (A12 Katwijk Way)	3.80	0.00	N	Arm 4 Right	17.20	100.0 %	1964	1964
3/1 (Denmark Road East)	3.20	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1935	1935
3/2 (Denmark Road East)	3.20	0.00	N	Arm 5 Right	16.90	98.0 %	1898	1898
				Arm 6 U-Turn	5.00	2.0 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 13: '2037 DS AM' (FG13: '2037 DS AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	13	78	91
	B	0	0	96	96
	C	42	194	0	236
	Tot.	42	207	174	423

Traffic Lane Flows

Lane	Scenario 13: 2037 DS AM
Junction: Denmark Road-A12 Katwijk Way	
1/1	91
2/1 (short)	96
2/2 (with short)	96(In) 0(Out)
3/1 (with short)	236(In) 42(Out)
3/2 (short)	194
4/1	42
5/1	207
6/1	174

Full Input Data And Results

Lane Saturation Flows

Junction: Denmark Road-A12 Katwijk Way								
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 (Denmark Road West)	2.50	0.00	Y	Arm 5 Left	15.00	14.3 %	1839	1839
				Arm 6 Ahead	Inf	85.7 %		
2/1 (A12 Katwijk Way)	3.80	0.00	Y	Arm 6 Left	14.80	100.0 %	1811	1811
2/2 (A12 Katwijk Way)	3.80	0.00	N	Arm 4 Right	17.20	0.0 %	2135	2135
3/1 (Denmark Road East)	3.20	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1935	1935
3/2 (Denmark Road East)	3.20	0.00	N	Arm 5 Right	16.90	100.0 %	1906	1906
				Arm 6 U-Turn	5.00	0.0 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 14: '2037 DS PM' (FG14: '2037 DS PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	11	73	84
	B	0	0	199	199
	C	61	104	0	165
	Tot.	61	115	272	448

Traffic Lane Flows

Lane	Scenario 14: 2037 DS PM
Junction: Denmark Road-A12 Katwijk Way	
1/1	84
2/1 (short)	199
2/2 (with short)	199(In) 0(Out)
3/1 (with short)	165(In) 61(Out)
3/2 (short)	104
4/1	61
5/1	115
6/1	272

Full Input Data And Results

Lane Saturation Flows

Junction: Denmark Road-A12 Katwijk Way								
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 (Denmark Road West)	2.50	0.00	Y	Arm 5 Left	15.00	13.1 %	1841	1841
				Arm 6 Ahead	Inf	86.9 %		
2/1 (A12 Katwijk Way)	3.80	0.00	Y	Arm 6 Left	14.80	100.0 %	1811	1811
2/2 (A12 Katwijk Way)	3.80	0.00	N	Arm 4 Right	17.20	0.0 %	2135	2135
3/1 (Denmark Road East)	3.20	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1935	1935
3/2 (Denmark Road East)	3.20	0.00	N	Arm 5 Right	16.90	100.0 %	1906	1906
				Arm 6 U-Turn	5.00	0.0 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 15: '2037 DS Saturday' (FG19: '2037 DS new Saturday', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	6	42	48
	B	22	0	35	57
	C	92	86	2	180
	Tot.	114	92	79	285

Traffic Lane Flows

Lane	Scenario 15: 2037 DS Saturday
Junction: Denmark Road-A12 Katwijk Way	
1/1	48
2/1 (short)	35
2/2 (with short)	57(In) 22(Out)
3/1 (with short)	180(In) 92(Out)
3/2 (short)	88
4/1	114
5/1	92
6/1	79

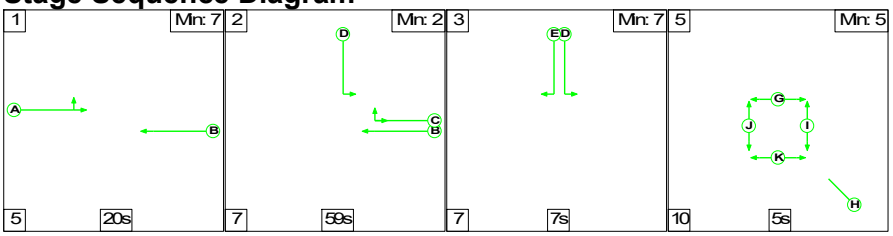
Full Input Data And Results

Lane Saturation Flows

Junction: Denmark Road-A12 Katwijk Way								
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 (Denmark Road West)	2.50	0.00	Y	Arm 5 Left	15.00	12.5 %	1842	1842
				Arm 6 Ahead	Inf	87.5 %		
2/1 (A12 Katwijk Way)	3.80	0.00	Y	Arm 6 Left	14.80	100.0 %	1811	1811
2/2 (A12 Katwijk Way)	3.80	0.00	N	Arm 4 Right	17.20	100.0 %	1964	1964
3/1 (Denmark Road East)	3.20	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1935	1935
3/2 (Denmark Road East)	3.20	0.00	N	Arm 5 Right	16.90	97.7 %	1897	1897
				Arm 6 U-Turn	5.00	2.3 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: 'Base 2016 AM' (FG1: 'Base 2016 AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

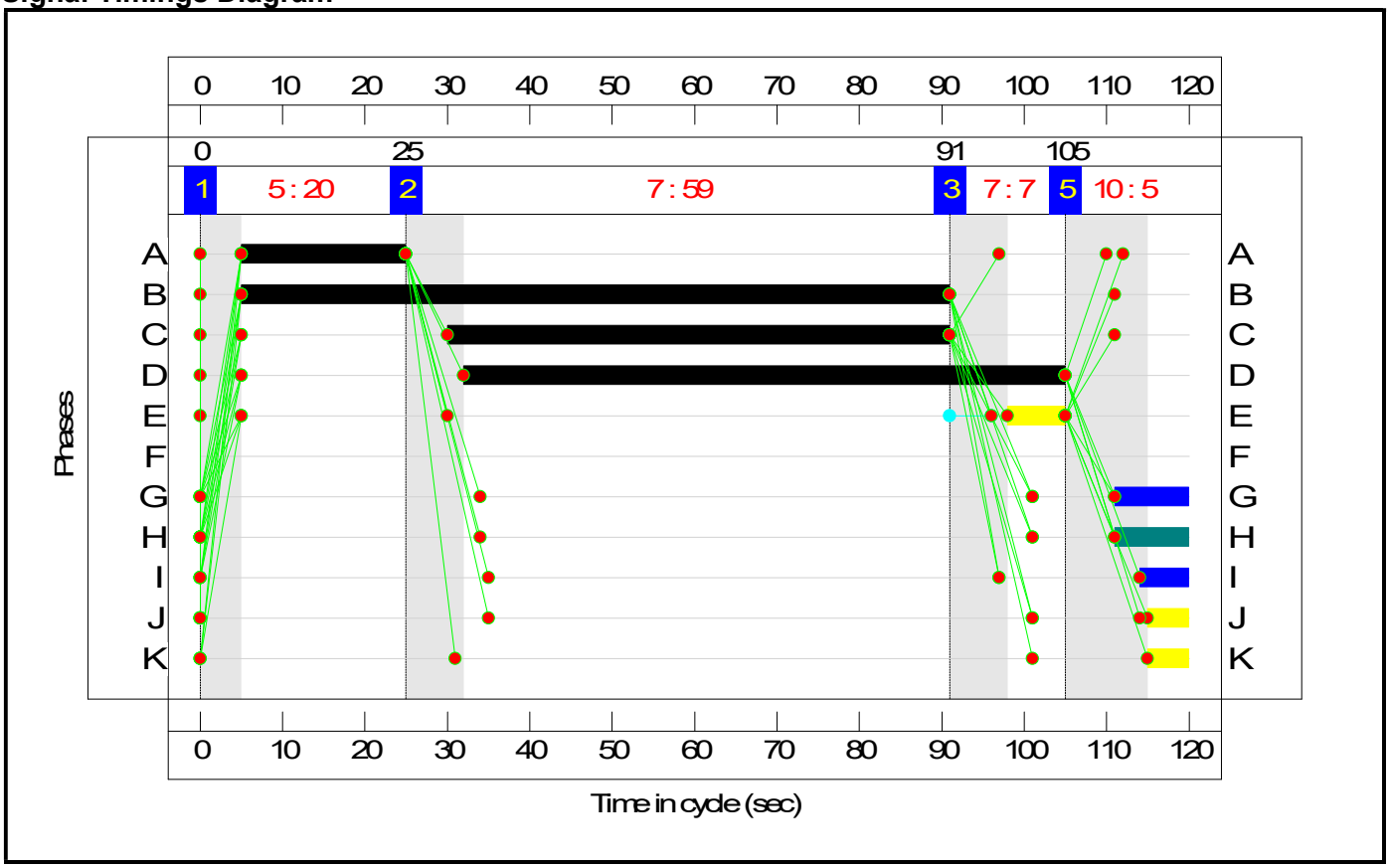


Stage Timings

Stage	1	2	3	5
Duration	20	59	7	5
Change Point	0	25	91	105

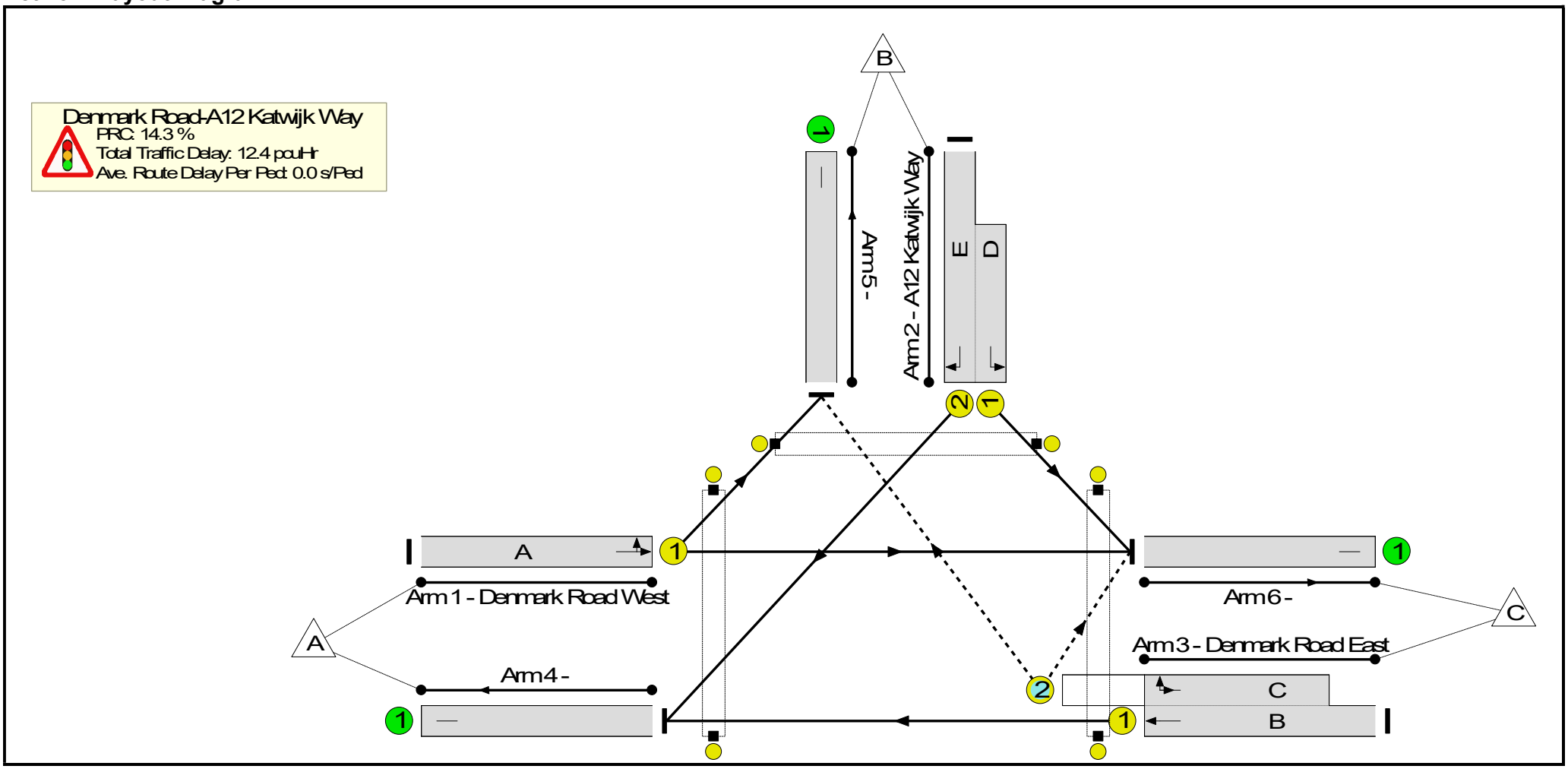
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**78.8%**
Denmark Road-A12 Katwijk Way	-	-	**N/A**	-	-		-	-	-	-	-	-	**78.8%**
1/1	Denmark Road West Left Ahead	U	N/A	N/A	A		1	20	-	248	1820	318	77.9%
2/2+2/1	A12 Katwijk Way Right Left	U	N/A	N/A	E D		1	7:73	-	178	1964:1811	131+411	32.8 : 32.8%
3/1+3/2	Denmark Road East Ahead Right U-Turn	U+O	N/A	N/A	B C		1	86:61	-	935	1935:1905	448+739	78.8 : 78.8%
4/1		U	N/A	N/A	-		-	-	-	396	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	641	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	324	Inf	Inf	0.0%
Ped Link: P1	A12 Katwijk Way Ped	-	N/A	-	G		1	9	-	0	-	0	0.0%
Ped Link: P2	Denmark Road East Ped	-	N/A	-	I		1	6	-	0	-	0	0.0%
Ped Link: P3	Denmark Road West	-	N/A	-	J		1	5	-	0	-	0	0.0%

Full Input Data And Results

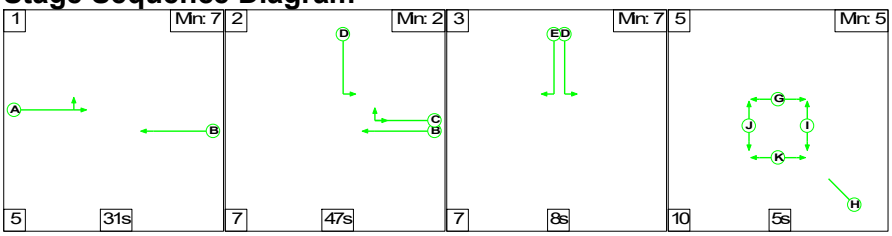
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2**	**561**	**19**	**8.5**	**3.8**	**0.2**	**12.4**	**-**	**-**	**-**	**-**
Denmark Road-A12 Katwijk Way	**-**	**-**	**2**	**561**	**19**	**8.5**	**3.8**	**0.2**	**12.4**	**-**	**-**	**-**	**-**
1/1	248	248	-	-	-	3.3	1.7	-	4.9	71.7	7.9	1.7	9.5
2/2+2/1	178	178	-	-	-	1.0	0.2	-	1.2	25.1	1.8	0.2	2.1
3/1+3/2	935	935	2	561	19	4.3	1.8	0.2	6.2	24.1	17.3	1.8	19.1
4/1	396	396	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	641	641	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	324	324	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 14.3 Total Delay for Signalled Lanes (pcuHr): 12.43 Cycle Time (s): 120
PRC Over All Lanes (%): 14.3 Total Delay Over All Lanes(pcuHr): 12.43

Full Input Data And Results

Scenario 2: 'Base 2016 PM' (FG2: 'Base 2016 PM', Plan 1: 'Network Control Plan 1')

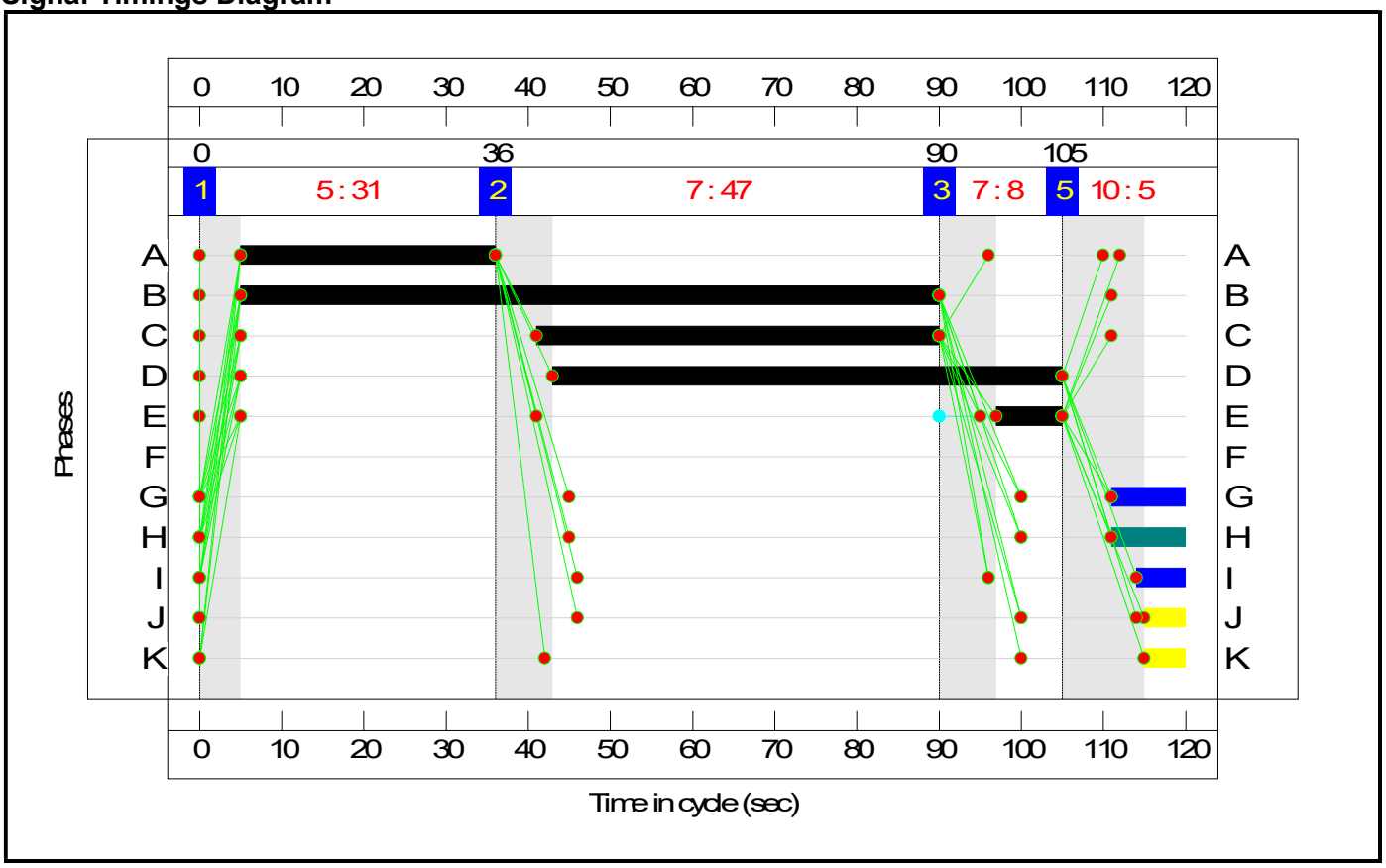
Stage Sequence Diagram



Stage Timings

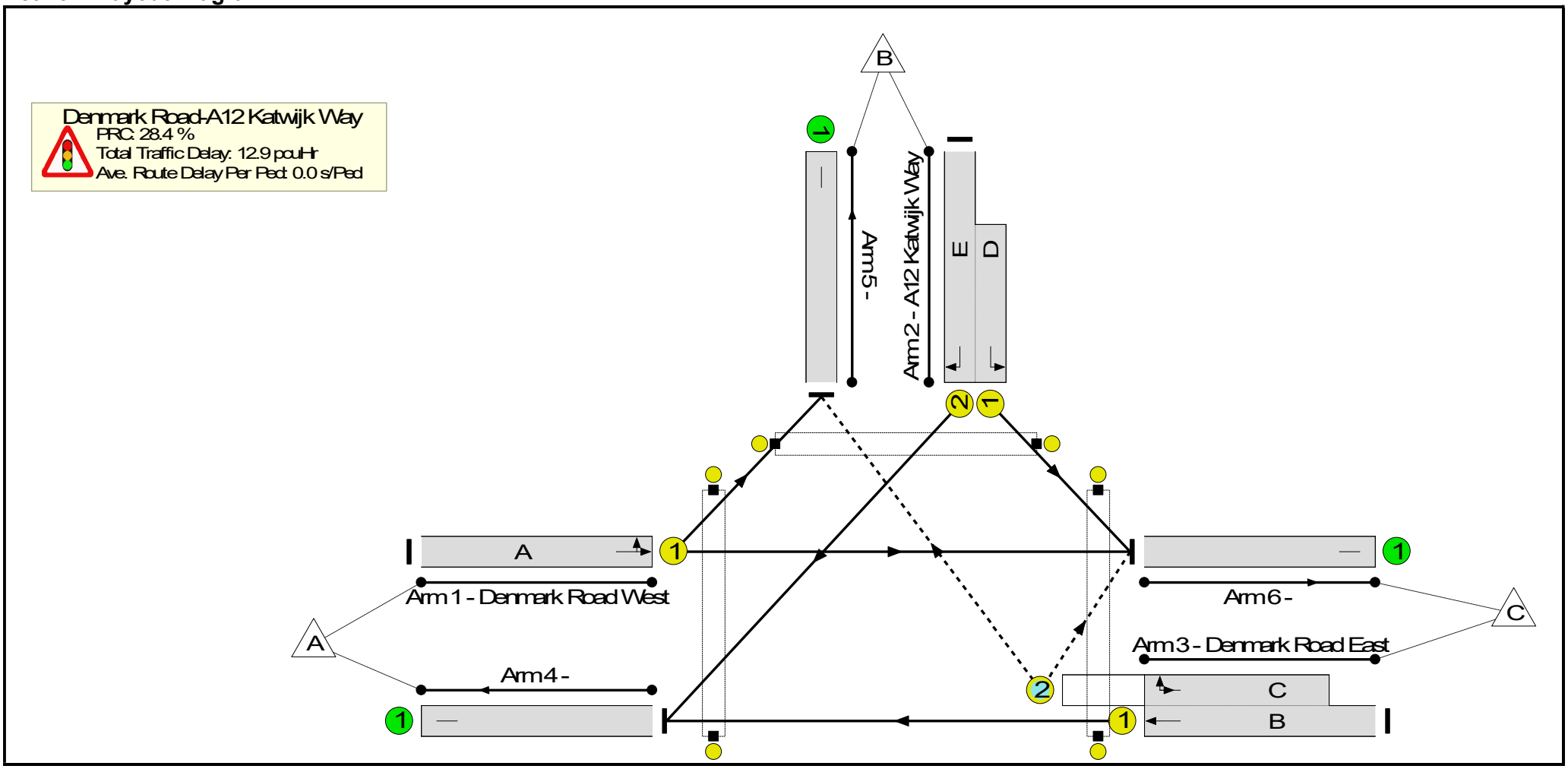
Stage	1	2	3	5
Duration	31	47	8	5
Change Point	0	36	90	105

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**70.1%**
Denmark Road-A12 Katwijk Way	-	-	**N/A**	-	-		-	-	-	-	-	-	**70.1%**
1/1	Denmark Road West Left Ahead	U	N/A	N/A	A		1	31	-	344	1840	491	70.1%
2/2+2/1	A12 Katwijk Way Right Left	U	N/A	N/A	E D		1	8:62	-	368	1964:1811	147+490	57.7 : 57.7%
3/1+3/2	Denmark Road East Ahead Right U-Turn	U+O	N/A	N/A	B C		1	85:49	-	697	1935:1903	516+523	67.1 : 67.1%
4/1		U	N/A	N/A	-		-	-	-	431	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	394	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	584	Inf	Inf	0.0%
Ped Link: P1	A12 Katwijk Way Ped	-	N/A	-	G		1	9	-	0	-	0	0.0%
Ped Link: P2	Denmark Road East Ped	-	N/A	-	I		1	6	-	0	-	0	0.0%
Ped Link: P3	Denmark Road West	-	N/A	-	J		1	5	-	0	-	0	0.0%

Full Input Data And Results

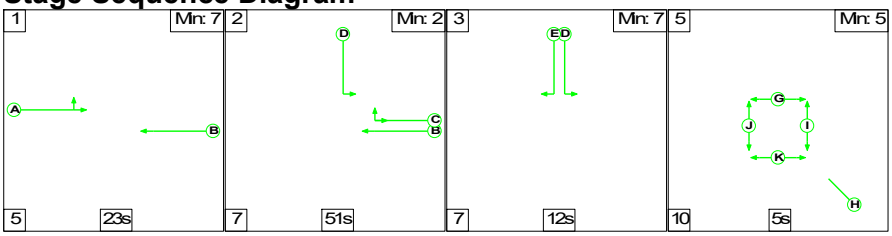
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**3**	**336**	**12**	**9.8**	**2.8**	**0.3**	**12.9**	**-**	**-**	**-**	**-**
Denmark Road-A12 Katwijk Way	**-**	**-**	**3**	**336**	**12**	**9.8**	**2.8**	**0.3**	**12.9**	**-**	**-**	**-**	**-**
1/1	344	344	-	-	-	3.8	1.2	-	4.9	51.8	10.3	1.2	11.5
2/2+2/1	368	368	-	-	-	2.5	0.7	-	3.2	31.4	5.3	0.7	5.9
3/1+3/2	697	697	3	336	12	3.4	1.0	0.3	4.8	24.7	9.6	1.0	10.6
4/1	431	431	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	394	394	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	584	584	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 28.4 Total Delay for Signalled Lanes (pcuHr): 12.95 Cycle Time (s): 120
PRC Over All Lanes (%): 28.4 Total Delay Over All Lanes(pcuHr): 12.95

Full Input Data And Results

Scenario 3: 'Base 2016 Saturday' (FG3: 'Base 2016 Saturday', Plan 1: 'Network Control Plan 1')

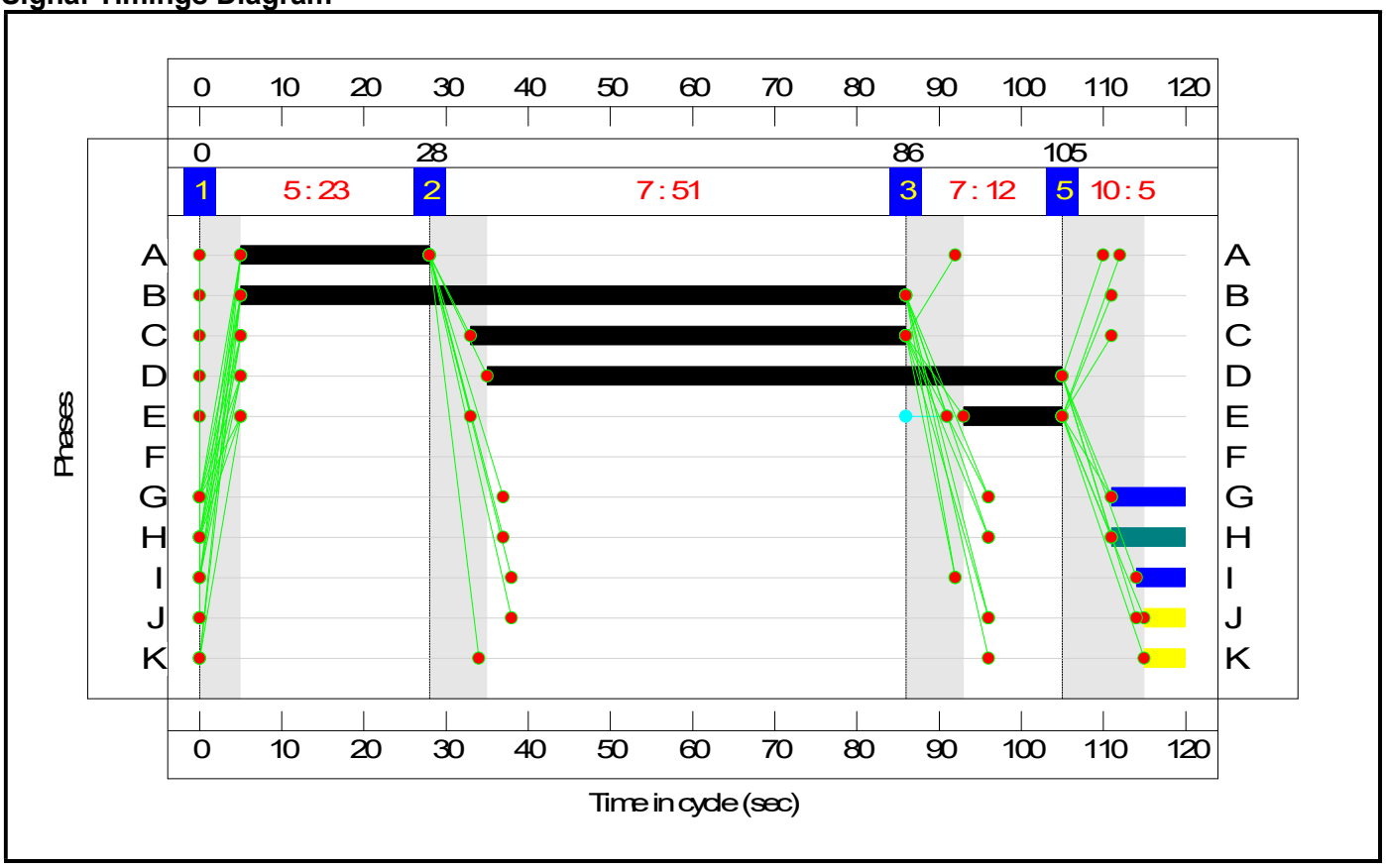
Stage Sequence Diagram



Stage Timings

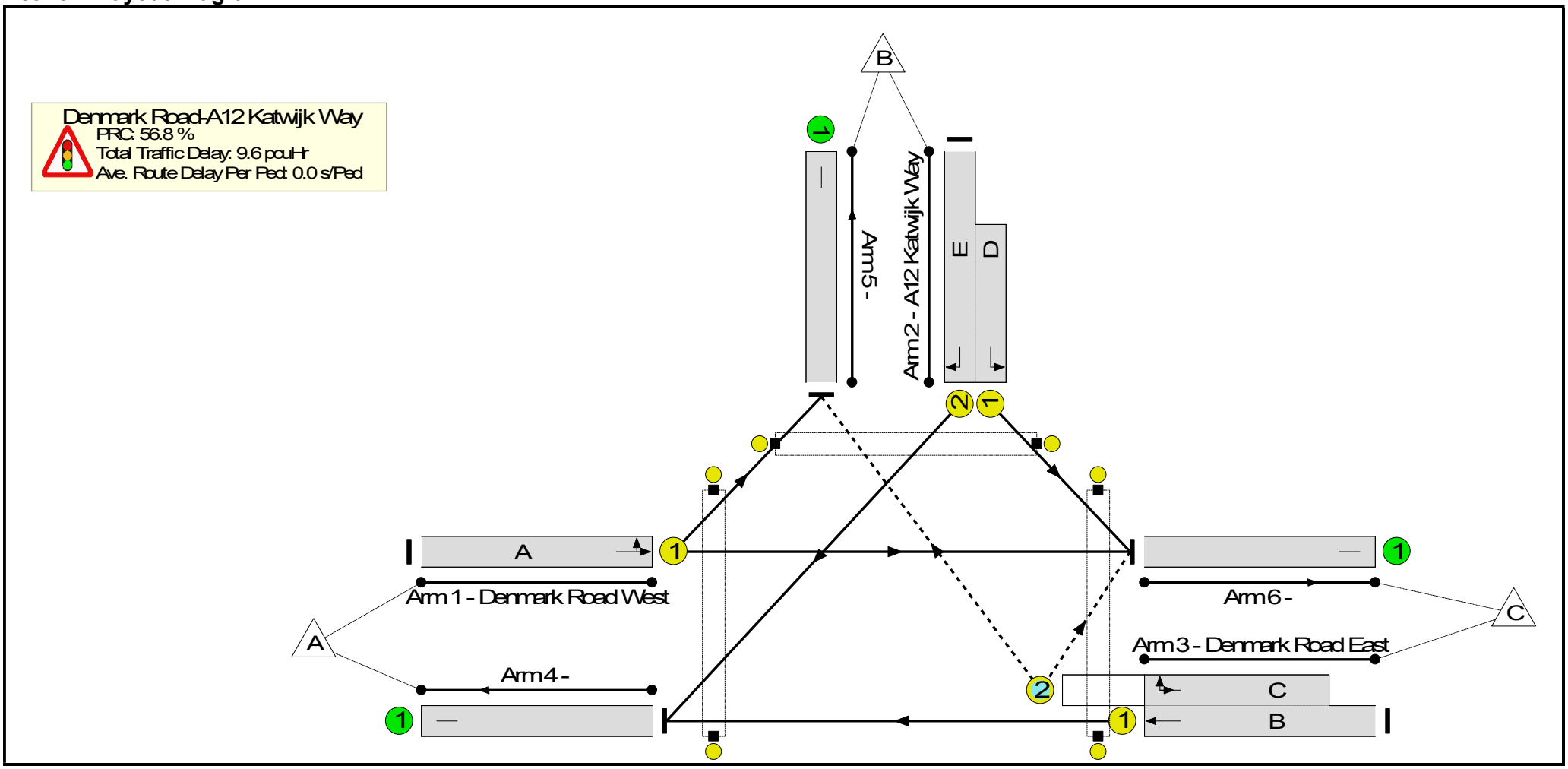
Stage	1	2	3	5
Duration	23	51	12	5
Change Point	0	28	86	105

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**57.4%**
Denmark Road-A12 Katwijk Way	-	-	**N/A**	-	-		-	-	-	-	-	-	**57.4%**
1/1	Denmark Road West Left Ahead	U	N/A	N/A	A		1	23	-	207	1843	369	56.2%
2/2+2/1	A12 Katwijk Way Right Left	U	N/A	N/A	E D		1	12:70	-	292	1964:1811	213+337	53.1 : 53.1%
3/1+3/2	Denmark Road East Ahead Right U-Turn	U+O	N/A	N/A	B C		1	81:53	-	683	1935:1898	608+582	57.4 : 57.4%
4/1		U	N/A	N/A	-		-	-	-	462	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	352	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	368	Inf	Inf	0.0%
Ped Link: P1	A12 Katwijk Way Ped	-	N/A	-	G		1	9	-	0	-	0	0.0%
Ped Link: P2	Denmark Road East Ped	-	N/A	-	I		1	6	-	0	-	0	0.0%
Ped Link: P3	Denmark Road West	-	N/A	-	J		1	5	-	0	-	0	0.0%

Full Input Data And Results

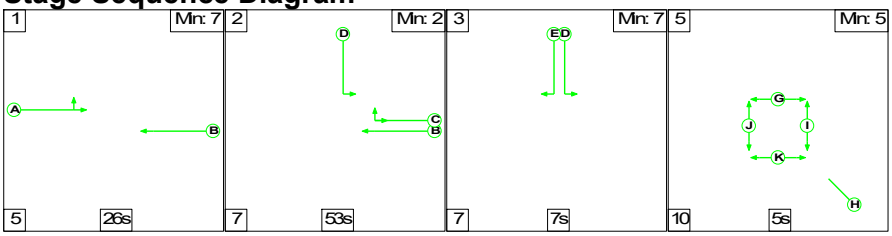
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**7**	**316**	**11**	**7.6**	**1.9**	**0.2**	**9.6**	**-**	**-**	**-**	**-**
Denmark Road-A12 Katwijk Way	**-**	**-**	**7**	**316**	**11**	**7.6**	**1.9**	**0.2**	**9.6**	**-**	**-**	**-**	**-**
1/1	207	207	-	-	-	2.5	0.6	-	3.1	54.3	6.2	0.6	6.8
2/2+2/1	292	292	-	-	-	2.1	0.6	-	2.7	33.4	3.5	0.6	4.1
3/1+3/2	683	683	7	316	11	2.9	0.7	0.2	3.8	19.9	8.0	0.7	8.7
4/1	462	462	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	352	352	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	368	368	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 56.8 Total Delay for Signalled Lanes (pcuHr): 9.60 Cycle Time (s): 120
PRC Over All Lanes (%): 56.8 Total Delay Over All Lanes(pcuHr): 9.60

Full Input Data And Results

Scenario 4: '2022 DM AM' (FG4: '2022 DM AM', Plan 1: 'Network Control Plan 1')

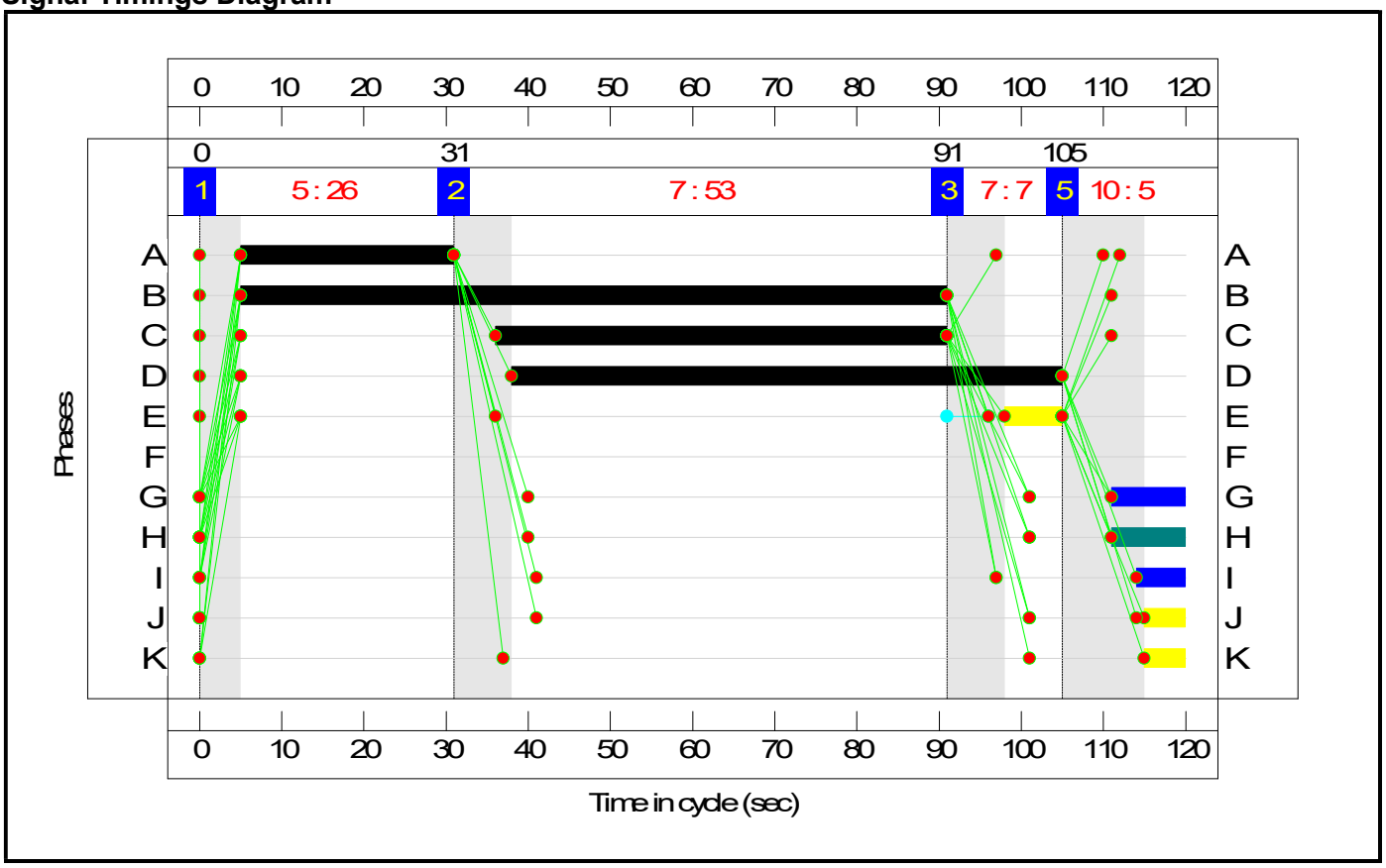
Stage Sequence Diagram



Stage Timings

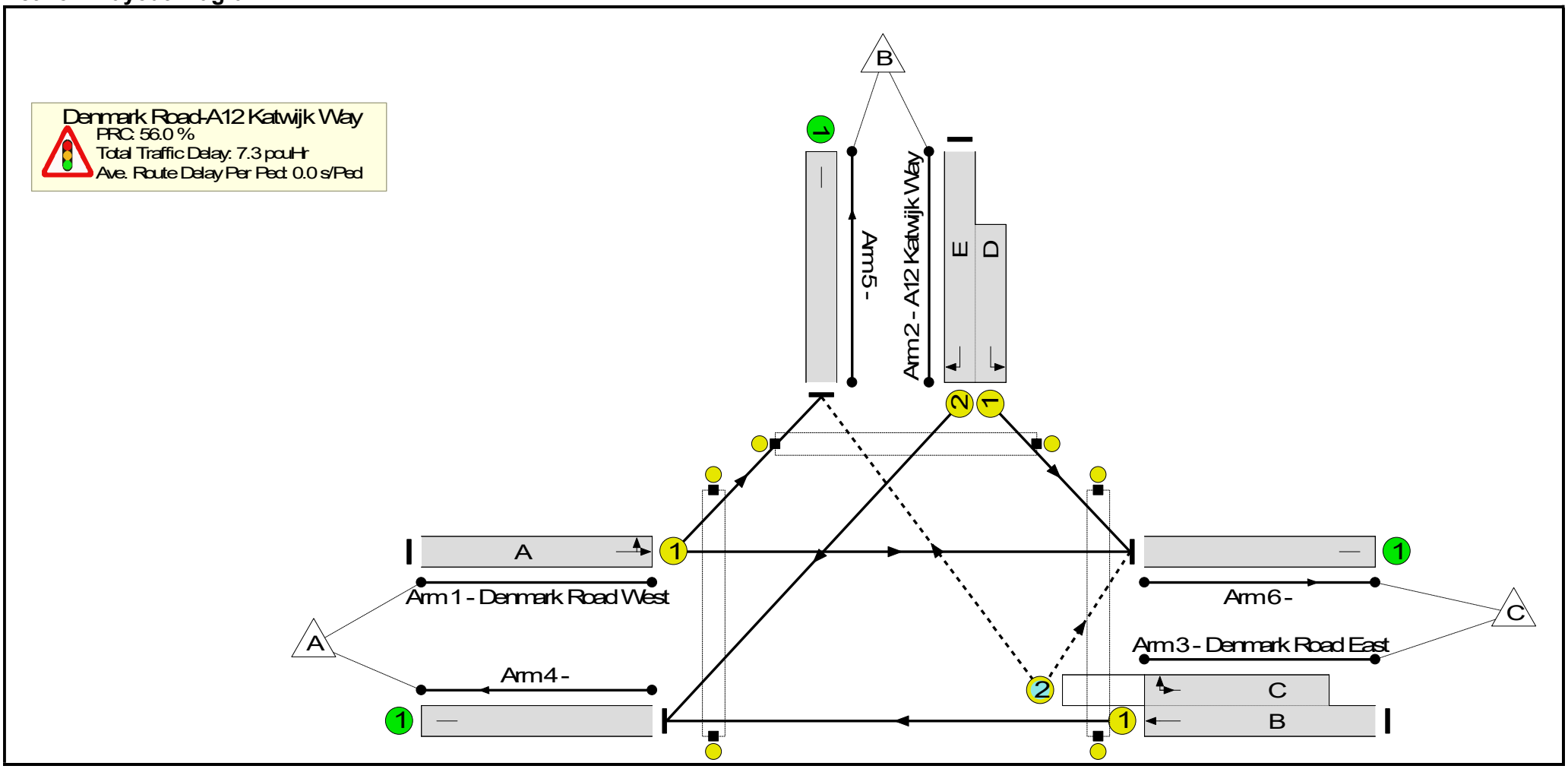
Stage	1	2	3	5
Duration	26	53	7	5
Change Point	0	31	91	105

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**57.7%**
Denmark Road-A12 Katwijk Way	-	-	**N/A**	-	-		-	-	-	-	-	-	**57.7%**
1/1	Denmark Road West Left Ahead	U	N/A	N/A	A		1	26	-	241	1857	418	57.7%
2/2+2/1	A12 Katwijk Way Right Left	U	N/A	N/A	E D		1	7:67	-	181	2135:1811	0+1026	0.0 : 17.6%
3/1+3/2	Denmark Road East Ahead Right U-Turn	U+O	N/A	N/A	B C		1	86:55	-	727	1935:1906	707+559	57.5 : 57.5%
4/1		U	N/A	N/A	-		-	-	-	406	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	332	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	411	Inf	Inf	0.0%
Ped Link: P1	A12 Katwijk Way Ped	-	N/A	-	G		1	9	-	0	-	0	0.0%
Ped Link: P2	Denmark Road East Ped	-	N/A	-	I		1	6	-	0	-	0	0.0%
Ped Link: P3	Denmark Road West	-	N/A	-	J		1	5	-	0	-	0	0.0%

Full Input Data And Results

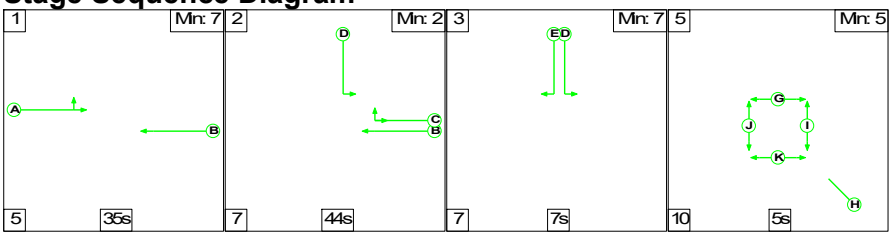
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**310**	**11**	**5.9**	**1.5**	**0.0**	**7.3**	**-**	**-**	**-**	**-**
Denmark Road-A12 Katwijk Way	**-**	**-**	**0**	**310**	**11**	**5.9**	**1.5**	**0.0**	**7.3**	**-**	**-**	**-**	**-**
1/1	241	241	-	-	-	2.8	0.7	-	3.4	51.5	7.1	0.7	7.8
2/2+2/1	181	181	-	-	-	0.6	0.1	-	0.7	14.7	2.9	0.1	3.0
3/1+3/2	727	727	0	310	11	2.5	0.7	0.0	3.2	15.6	6.8	0.7	7.5
4/1	406	406	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	332	332	-	-	-	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
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 56.0 Total Delay for Signalled Lanes (pcuHr): 7.34 Cycle Time (s): 120
PRC Over All Lanes (%): 56.0 Total Delay Over All Lanes(pcuHr): 7.34

Full Input Data And Results

Scenario 5: '2022 DM PM' (FG5: '2022 DM PM', Plan 1: 'Network Control Plan 1')

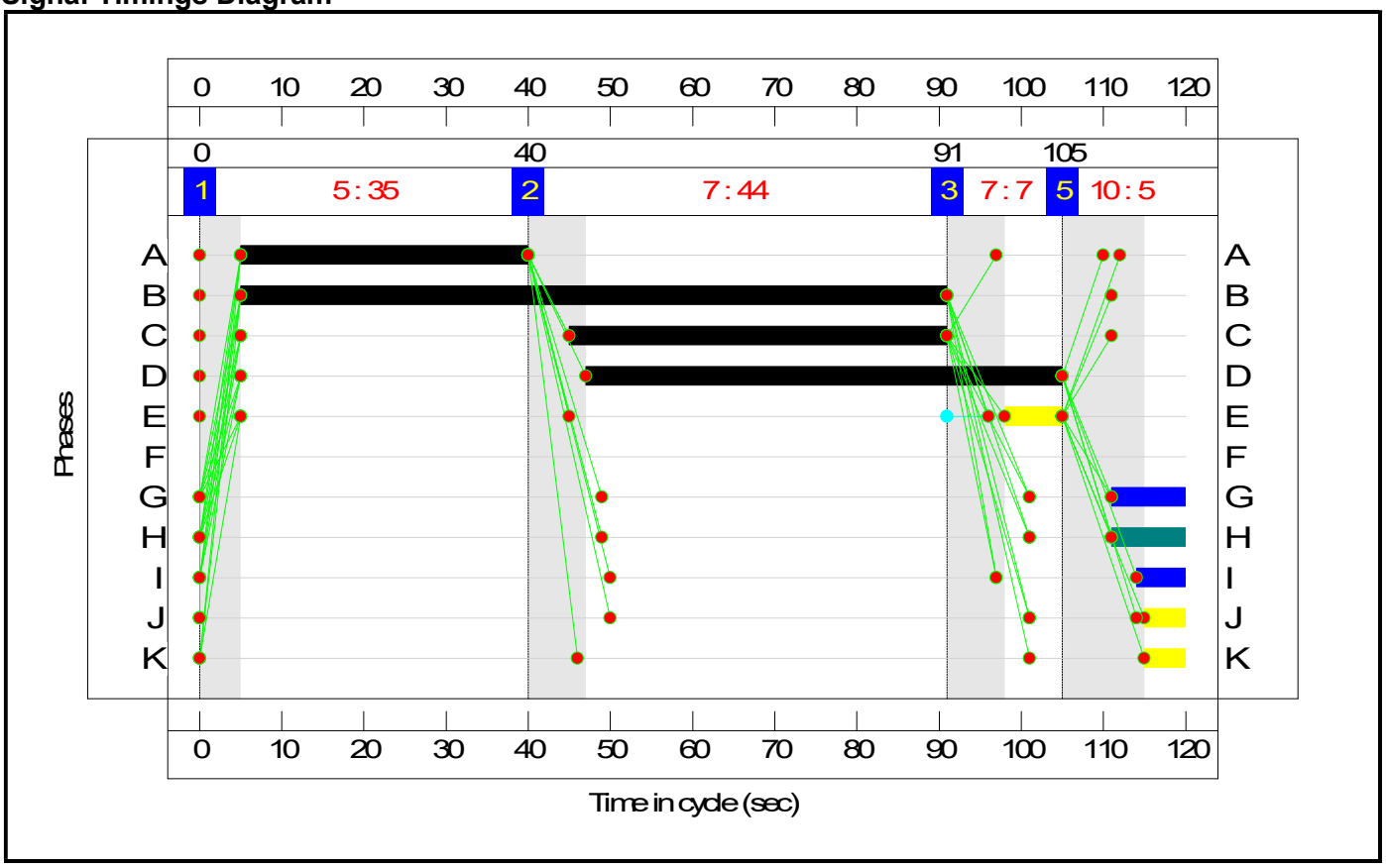
Stage Sequence Diagram



Stage Timings

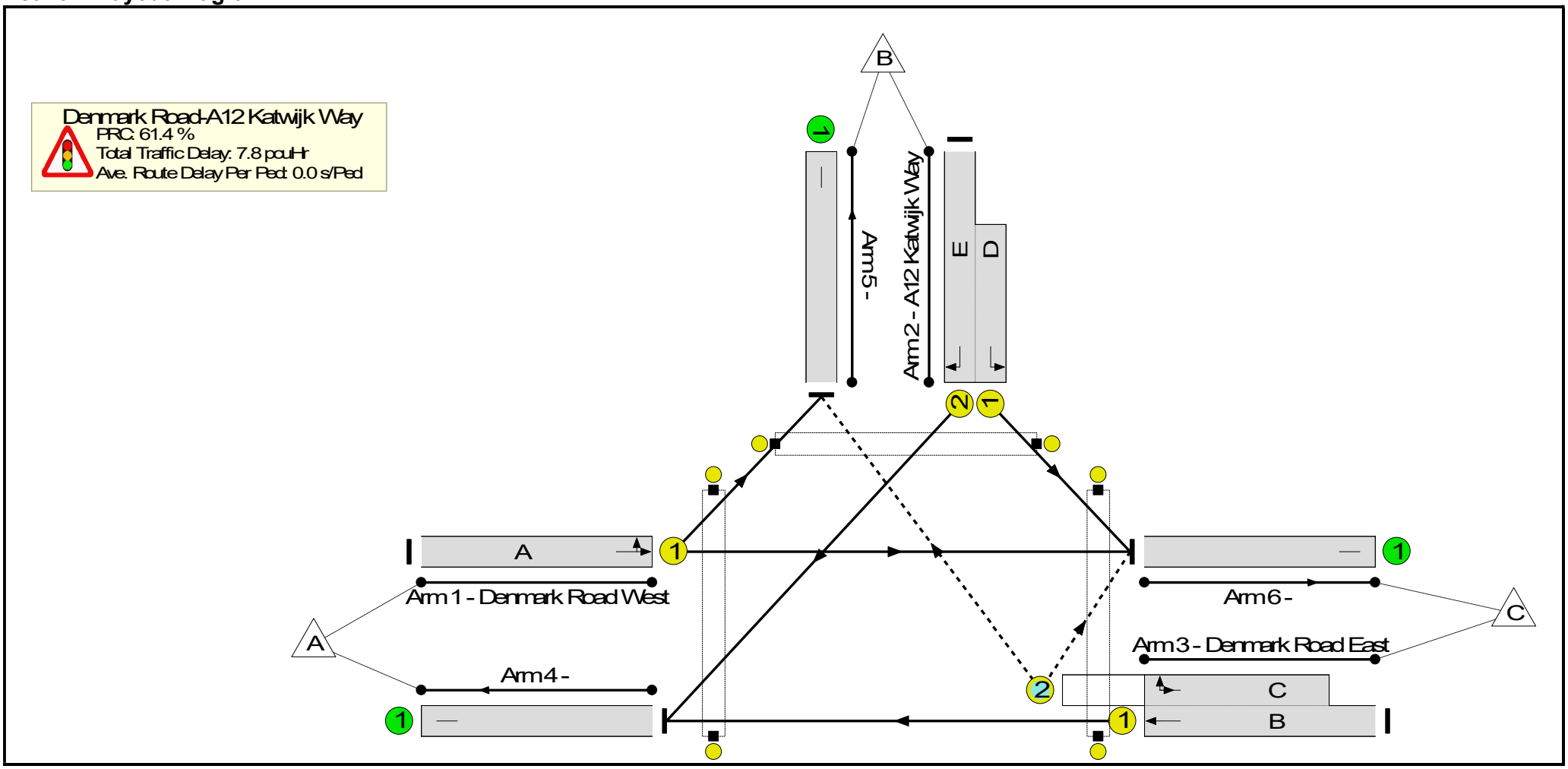
Stage	1	2	3	5
Duration	35	44	7	5
Change Point	0	40	91	105

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**55.8%**
Denmark Road-A12 Katwijk Way	-	-	**N/A**	-	-		-	-	-	-	-	-	**55.8%**
1/1	Denmark Road West Left Ahead	U	N/A	N/A	A		1	35	-	311	1859	558	55.8%
2/2+2/1	A12 Katwijk Way Right Left	U	N/A	N/A	E D		1	7:58	-	318	2135:1811	0+890	0.0 : 35.7%
3/1+3/2	Denmark Road East Ahead Right U-Turn	U+O	N/A	N/A	B C		1	86:46	-	566	1935:1906	920+439	41.7 : 41.7%
4/1		U	N/A	N/A	-		-	-	-	383	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	193	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	619	Inf	Inf	0.0%
Ped Link: P1	A12 Katwijk Way Ped	-	N/A	-	G		1	9	-	0	-	0	0.0%
Ped Link: P2	Denmark Road East Ped	-	N/A	-	I		1	6	-	0	-	0	0.0%
Ped Link: P3	Denmark Road West	-	N/A	-	J		1	5	-	0	-	0	0.0%

Full Input Data And Results

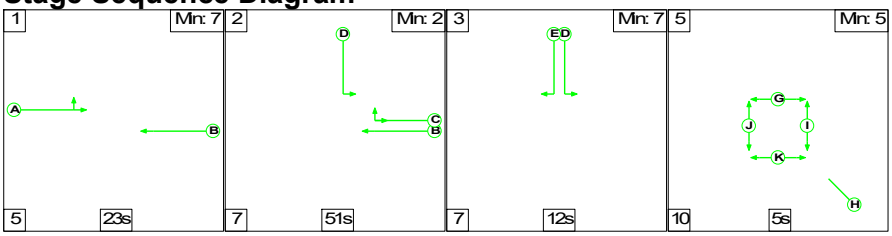
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**177**	**6**	**6.6**	**1.3**	**0.0**	**7.8**	**-**	**-**	**-**	**-**
Denmark Road-A12 Katwijk Way	**-**	**-**	**0**	**177**	**6**	**6.6**	**1.3**	**0.0**	**7.8**	**-**	**-**	**-**	**-**
1/1	311	311	-	-	-	3.1	0.6	-	3.7	42.6	8.6	0.6	9.3
2/2+2/1	318	318	-	-	-	1.7	0.3	-	1.9	21.9	6.4	0.3	6.7
3/1+3/2	566	566	0	177	6	1.9	0.4	0.0	2.2	14.0	4.4	0.4	4.7
4/1	383	383	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	193	193	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	619	619	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 61.4 Total Delay for Signalled Lanes (pcuHr): 7.82 Cycle Time (s): 120
PRC Over All Lanes (%): 61.4 Total Delay Over All Lanes(pcuHr): 7.82

Full Input Data And Results

Scenario 6: '2022 DM Saturday' (FG16: '2022 DM new Saturday', Plan 1: 'Network Control Plan 1')

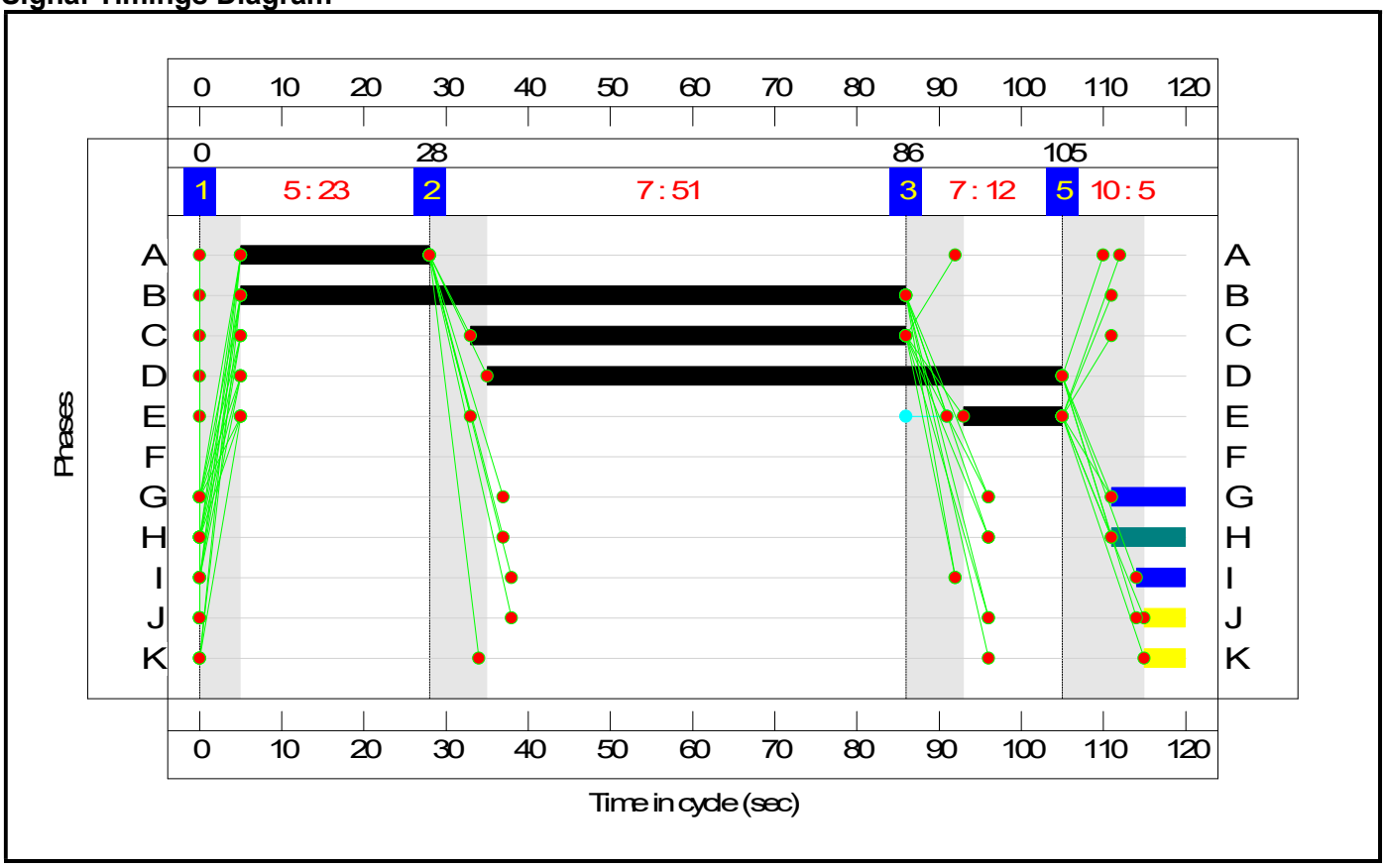
Stage Sequence Diagram



Stage Timings

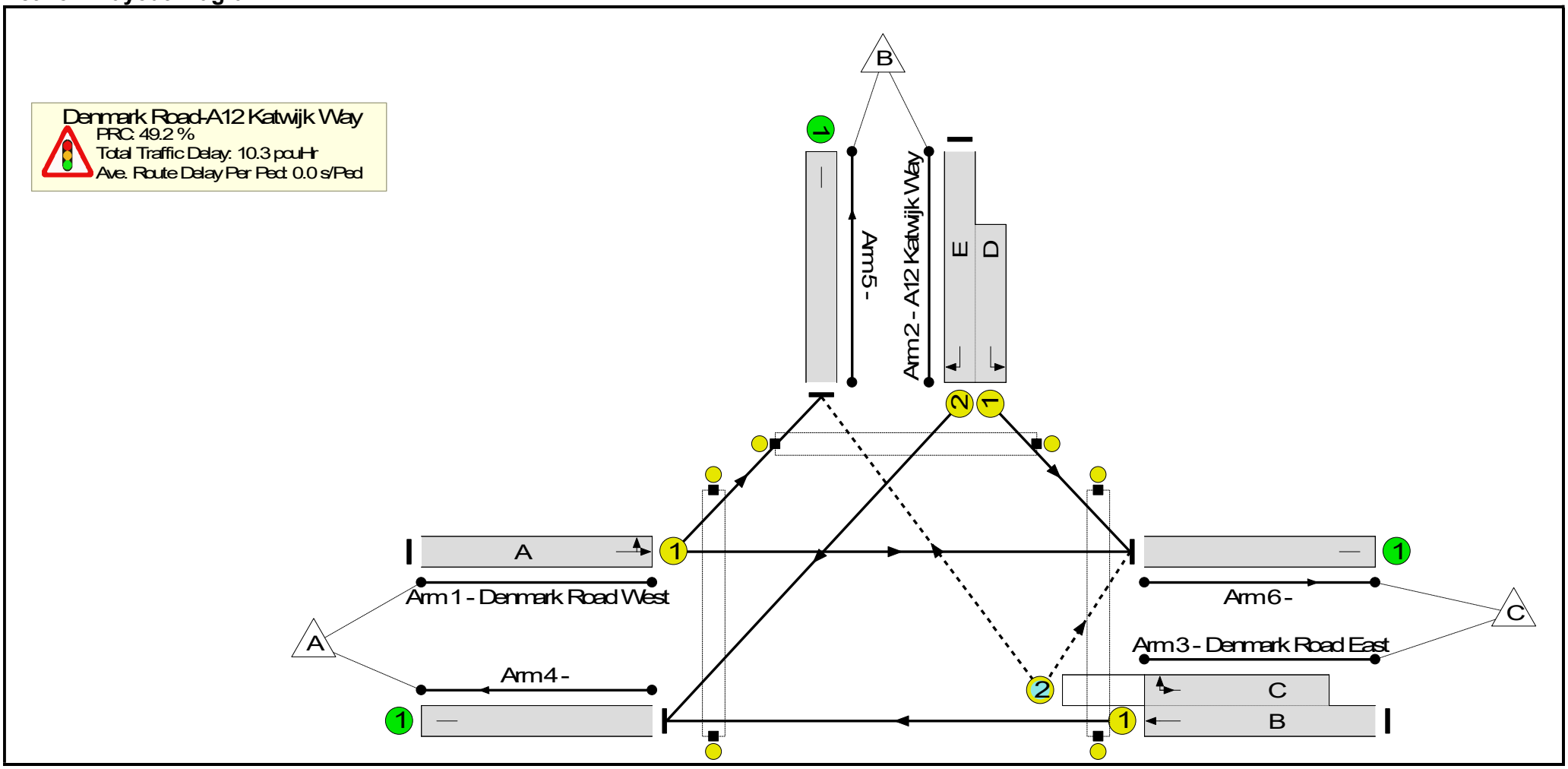
Stage	1	2	3	5
Duration	23	51	12	5
Change Point	0	28	86	105

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**60.3%**
Denmark Road-A12 Katwijk Way	-	-	**N/A**	-	-		-	-	-	-	-	-	**60.3%**
1/1	Denmark Road West Left Ahead	U	N/A	N/A	A		1	23	-	217	1843	369	58.9%
2/2+2/1	A12 Katwijk Way Right Left	U	N/A	N/A	E D		1	12:70	-	307	1964:1811	213+336	55.9 : 55.9%
3/1+3/2	Denmark Road East Ahead Right U-Turn	U+O	N/A	N/A	B C		1	81:53	-	718	1935:1898	608+582	60.3 : 60.3%
4/1		U	N/A	N/A	-		-	-	-	486	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	370	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	386	Inf	Inf	0.0%
Ped Link: P1	A12 Katwijk Way Ped	-	N/A	-	G		1	9	-	0	-	0	0.0%
Ped Link: P2	Denmark Road East Ped	-	N/A	-	I		1	6	-	0	-	0	0.0%
Ped Link: P3	Denmark Road West	-	N/A	-	J		1	5	-	0	-	0	0.0%

Full Input Data And Results

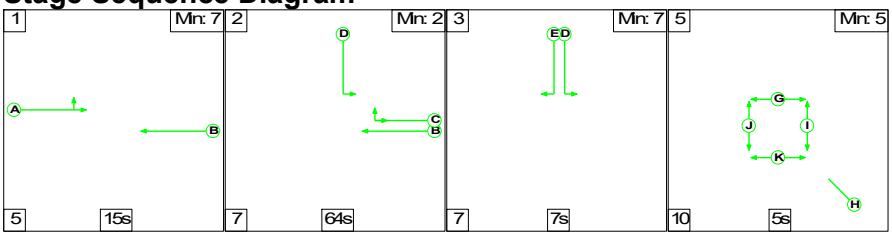
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**7**	**333**	**12**	**8.0**	**2.1**	**0.2**	**10.3**	**-**	**-**	**-**	**-**
Denmark Road-A12 Katwijk Way	**-**	**-**	**7**	**333**	**12**	**8.0**	**2.1**	**0.2**	**10.3**	**-**	**-**	**-**	**-**
1/1	217	217	-	-	-	2.6	0.7	-	3.3	55.3	6.5	0.7	7.2
2/2+2/1	307	307	-	-	-	2.3	0.6	-	2.9	33.9	3.7	0.6	4.4
3/1+3/2	718	718	7	333	12	3.1	0.8	0.2	4.1	20.4	8.5	0.8	9.2
4/1	486	486	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	370	370	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	386	386	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 49.2 Total Delay for Signalled Lanes (pcuHr): 10.29 Cycle Time (s): 120
PRC Over All Lanes (%): 49.2 Total Delay Over All Lanes(pcuHr): 10.29

Full Input Data And Results

Scenario 7: '2022 DS AM' (FG7: '2022 DS AM', Plan 1: 'Network Control Plan 1')

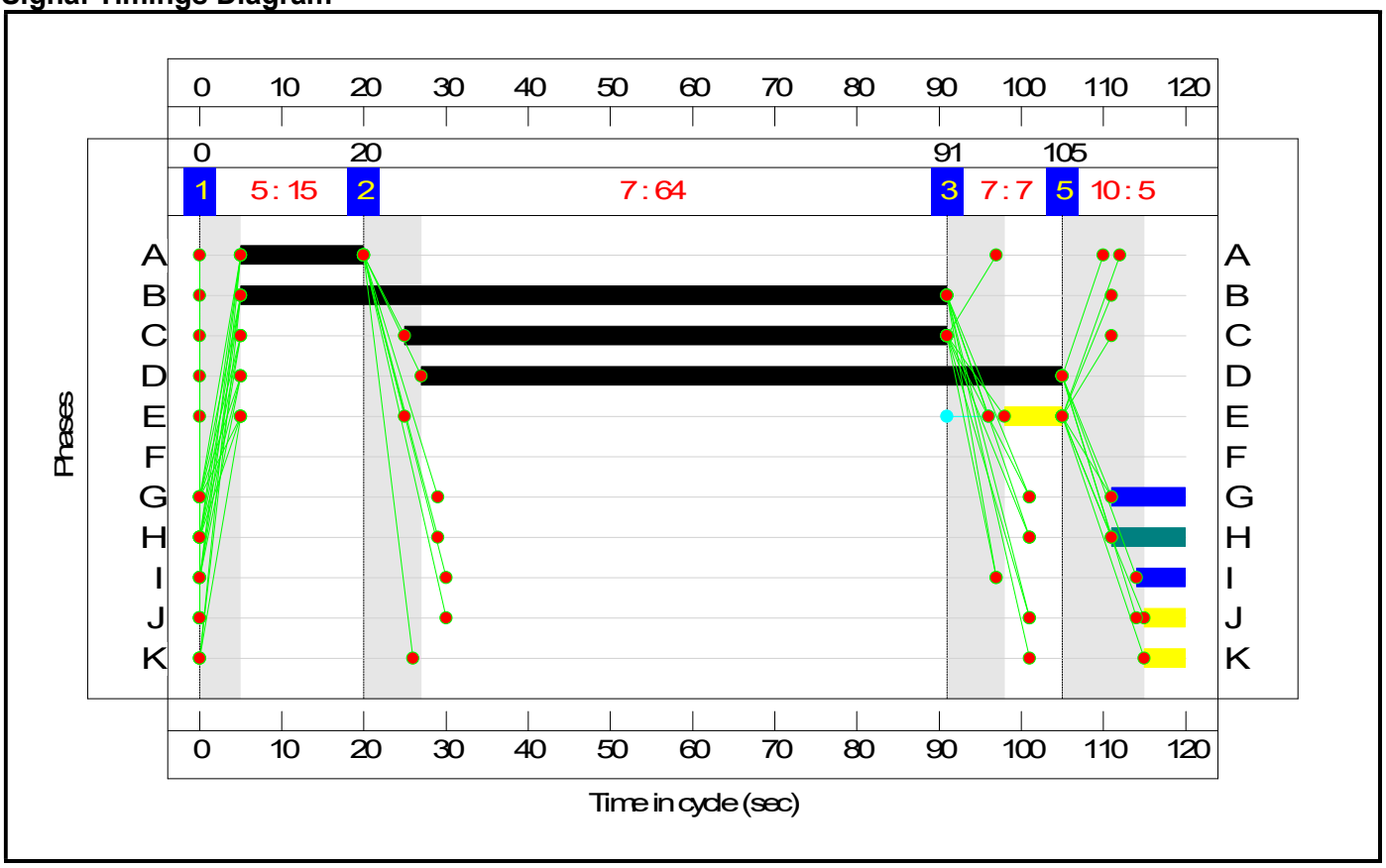
Stage Sequence Diagram



Stage Timings

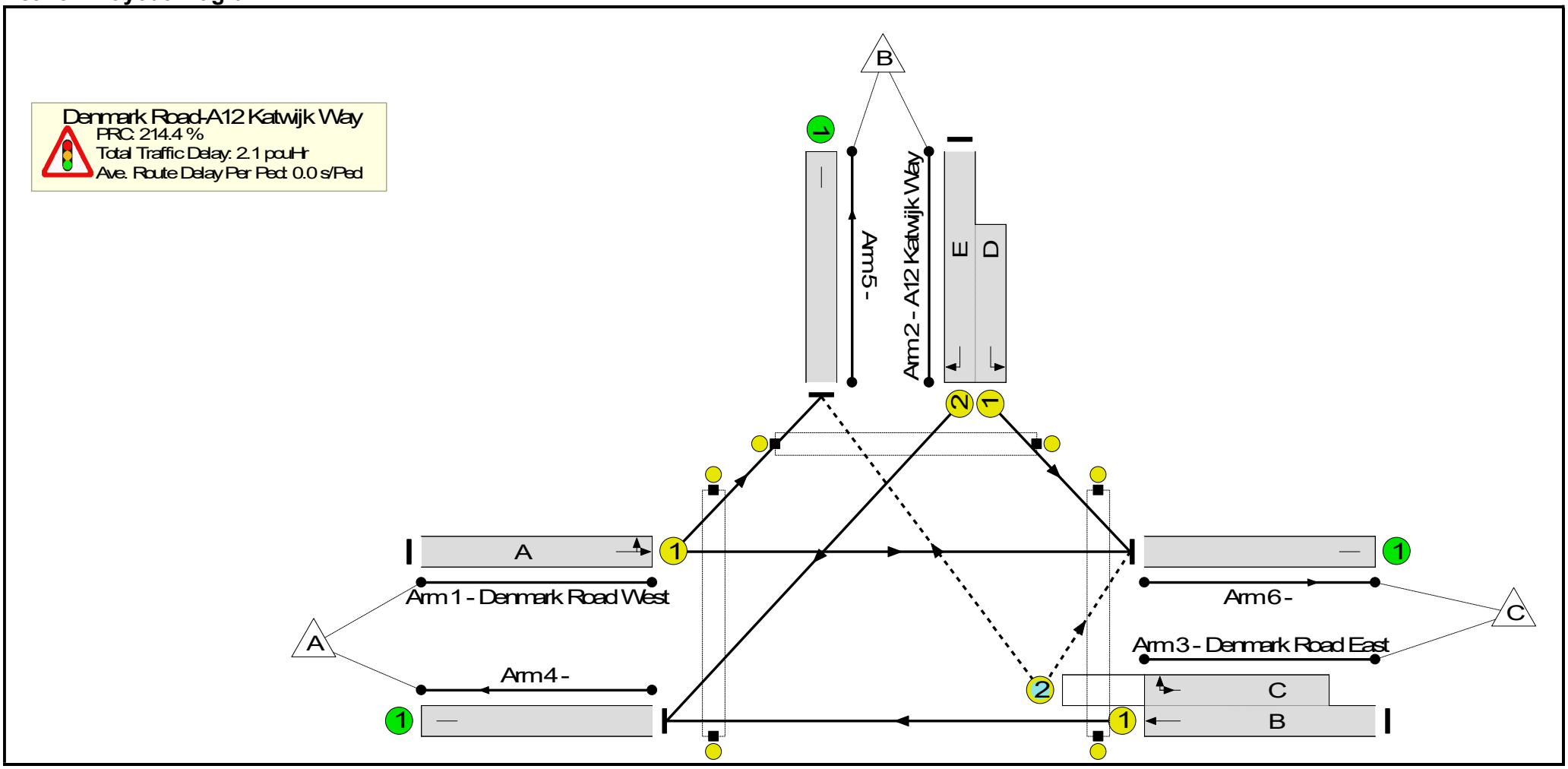
Stage	1	2	3	5
Duration	15	64	7	5
Change Point	0	20	91	105

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**28.6%**
Denmark Road-A12 Katwijk Way	-	-	**N/A**	-	-		-	-	-	-	-	-	**28.6%**
1/1	Denmark Road West Left Ahead	U	N/A	N/A	A		1	15	-	70	1834	245	28.6%
2/2+2/1	A12 Katwijk Way Right Left	U	N/A	N/A	E D		1	7:78	-	63	2135:1811	0+1192	0.0 : 5.3%
3/1+3/2	Denmark Road East Ahead Right U-Turn	U+O	N/A	N/A	B C		1	86:66	-	217	1935:1906	233+914	18.9 : 18.9%
4/1		U	N/A	N/A	-		-	-	-	44	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	185	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	121	Inf	Inf	0.0%
Ped Link: P1	A12 Katwijk Way Ped	-	N/A	-	G		1	9	-	0	-	0	0.0%
Ped Link: P2	Denmark Road East Ped	-	N/A	-	I		1	6	-	0	-	0	0.0%
Ped Link: P3	Denmark Road West	-	N/A	-	J		1	5	-	0	-	0	0.0%

Full Input Data And Results

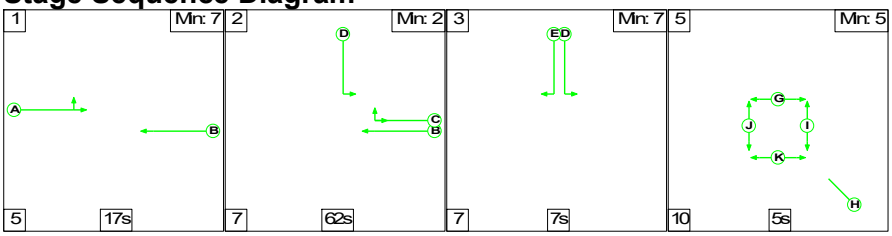
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**167**	**6**	**1.7**	**0.3**	**0.0**	**2.1**	**-**	**-**	**-**	**-**
Denmark Road-A12 Katwijk Way	**-**	**-**	**0**	**167**	**6**	**1.7**	**0.3**	**0.0**	**2.1**	**-**	**-**	**-**	**-**
1/1	70	70	-	-	-	0.9	0.2	-	1.1	57.2	2.1	0.2	2.3
2/2+2/1	63	63	-	-	-	0.1	0.0	-	0.2	8.9	0.7	0.0	0.8
3/1+3/2	217	217	0	167	6	0.7	0.1	0.0	0.8	13.2	2.8	0.1	2.9
4/1	44	44	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	185	185	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	121	121	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 214.4 Total Delay for Signalled Lanes (pcuHr): 2.06 Cycle Time (s): 120
PRC Over All Lanes (%): 214.4 Total Delay Over All Lanes(pcuHr): 2.06

Full Input Data And Results

Scenario 8: '2022 DS PM' (FG8: '2022 DS PM', Plan 1: 'Network Control Plan 1')

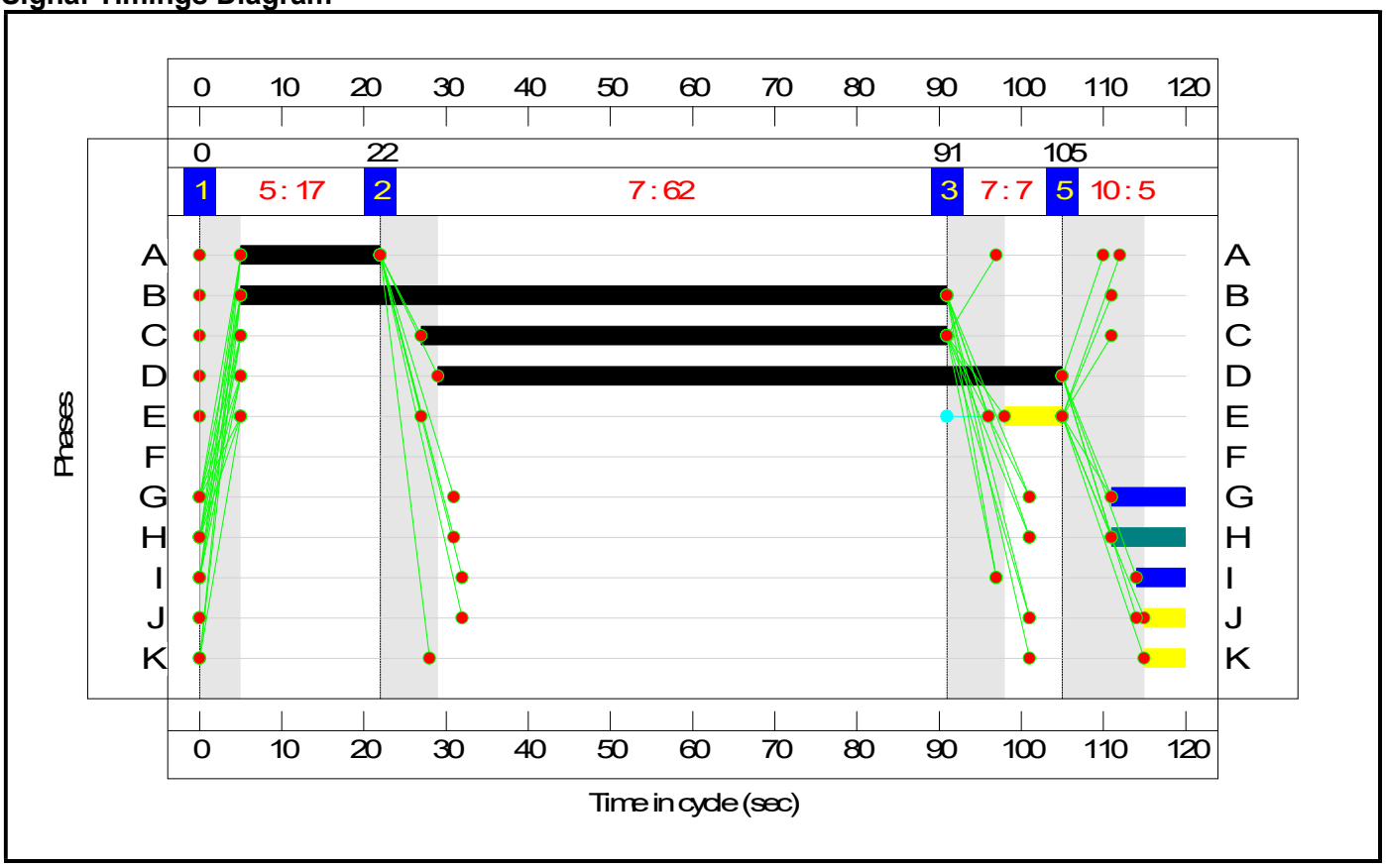
Stage Sequence Diagram



Stage Timings

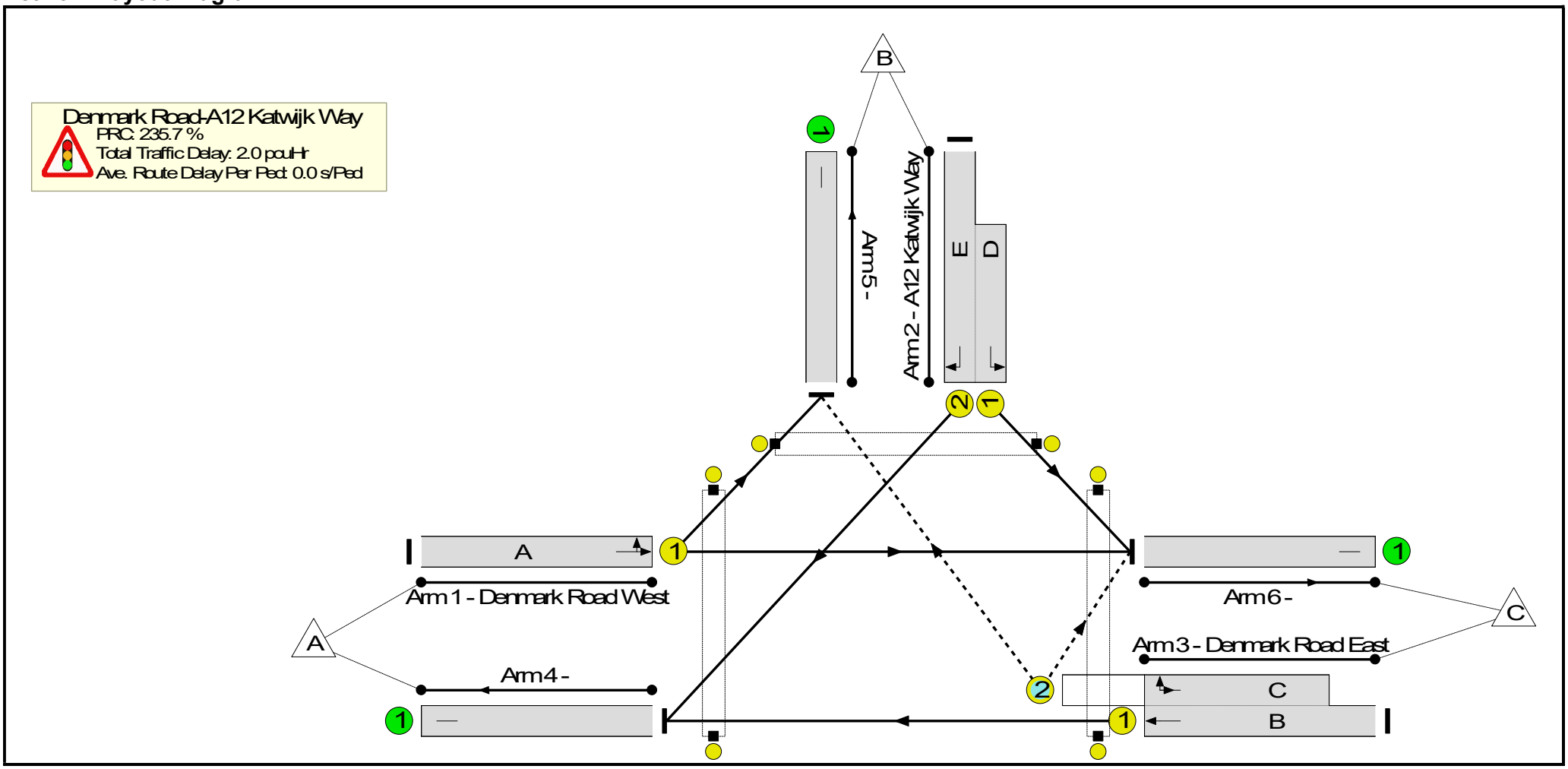
Stage	1	2	3	5
Duration	17	62	7	5
Change Point	0	22	91	105

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**26.8%**
Denmark Road-A12 Katwijk Way	-	-	**N/A**	-	-		-	-	-	-	-	-	**26.8%**
1/1	Denmark Road West Left Ahead	U	N/A	N/A	A		1	17	-	74	1840	276	26.8%
2/2+2/1	A12 Katwijk Way Right Left	U	N/A	N/A	E D		1	7:76	-	161	2135:1811	0+1162	0.0 : 13.9%
3/1+3/2	Denmark Road East Ahead Right U-Turn	U+O	N/A	N/A	B C		1	86:64	-	142	1935:1906	519+730	11.4 : 11.4%
4/1		U	N/A	N/A	-		-	-	-	59	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	93	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	225	Inf	Inf	0.0%
Ped Link: P1	A12 Katwijk Way Ped	-	N/A	-	G		1	9	-	0	-	0	0.0%
Ped Link: P2	Denmark Road East Ped	-	N/A	-	I		1	6	-	0	-	0	0.0%
Ped Link: P3	Denmark Road West	-	N/A	-	J		1	5	-	0	-	0	0.0%

Full Input Data And Results

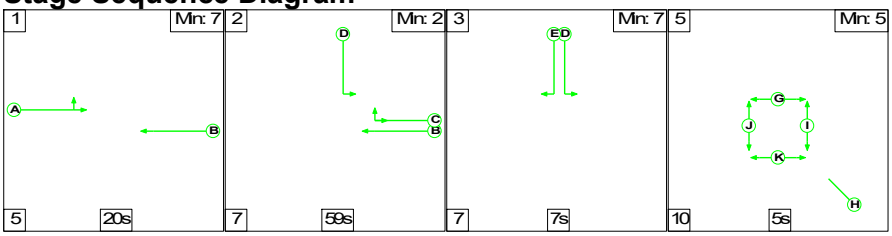
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**80**	**3**	**1.7**	**0.3**	**0.0**	**2.0**	**-**	**-**	**-**	**-**
Denmark Road-A12 Katwijk Way	**-**	**-**	**0**	**80**	**3**	**1.7**	**0.3**	**0.0**	**2.0**	**-**	**-**	**-**	**-**
1/1	74	74	-	-	-	0.9	0.2	-	1.1	54.1	2.2	0.2	2.4
2/2+2/1	161	161	-	-	-	0.4	0.1	-	0.5	10.3	2.1	0.1	2.2
3/1+3/2	142	142	0	80	3	0.4	0.1	0.0	0.4	11.3	1.3	0.1	1.4
4/1	59	59	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	93	93	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	225	225	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 235.7 Total Delay for Signalled Lanes (pcuHr): 2.02 Cycle Time (s): 120
PRC Over All Lanes (%): 235.7 Total Delay Over All Lanes(pcuHr): 2.02

Full Input Data And Results

Scenario 9: '2022 DS Saturday' (FG18: '2022 DS new Saturday', Plan 1: 'Network Control Plan 1')

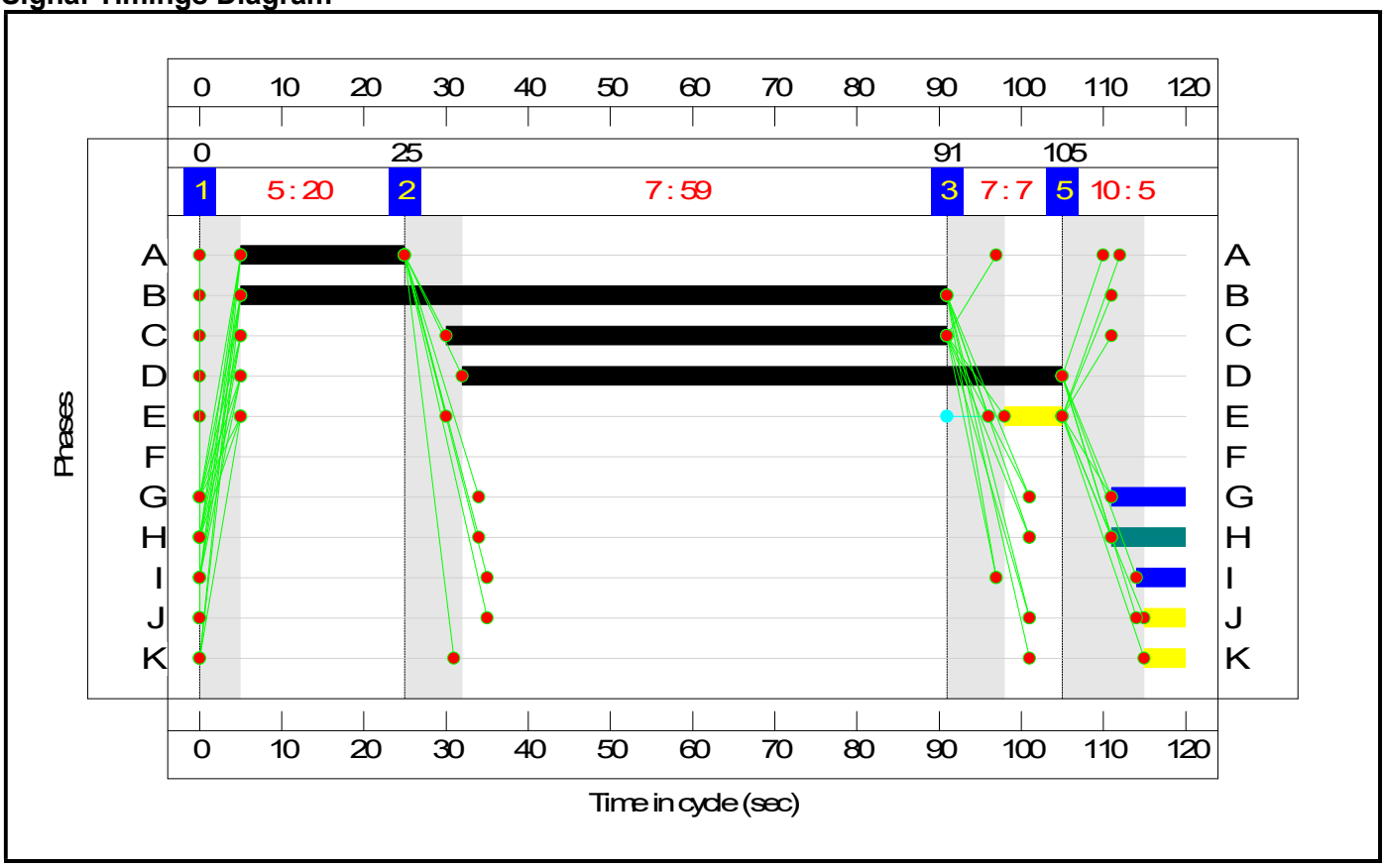
Stage Sequence Diagram



Stage Timings

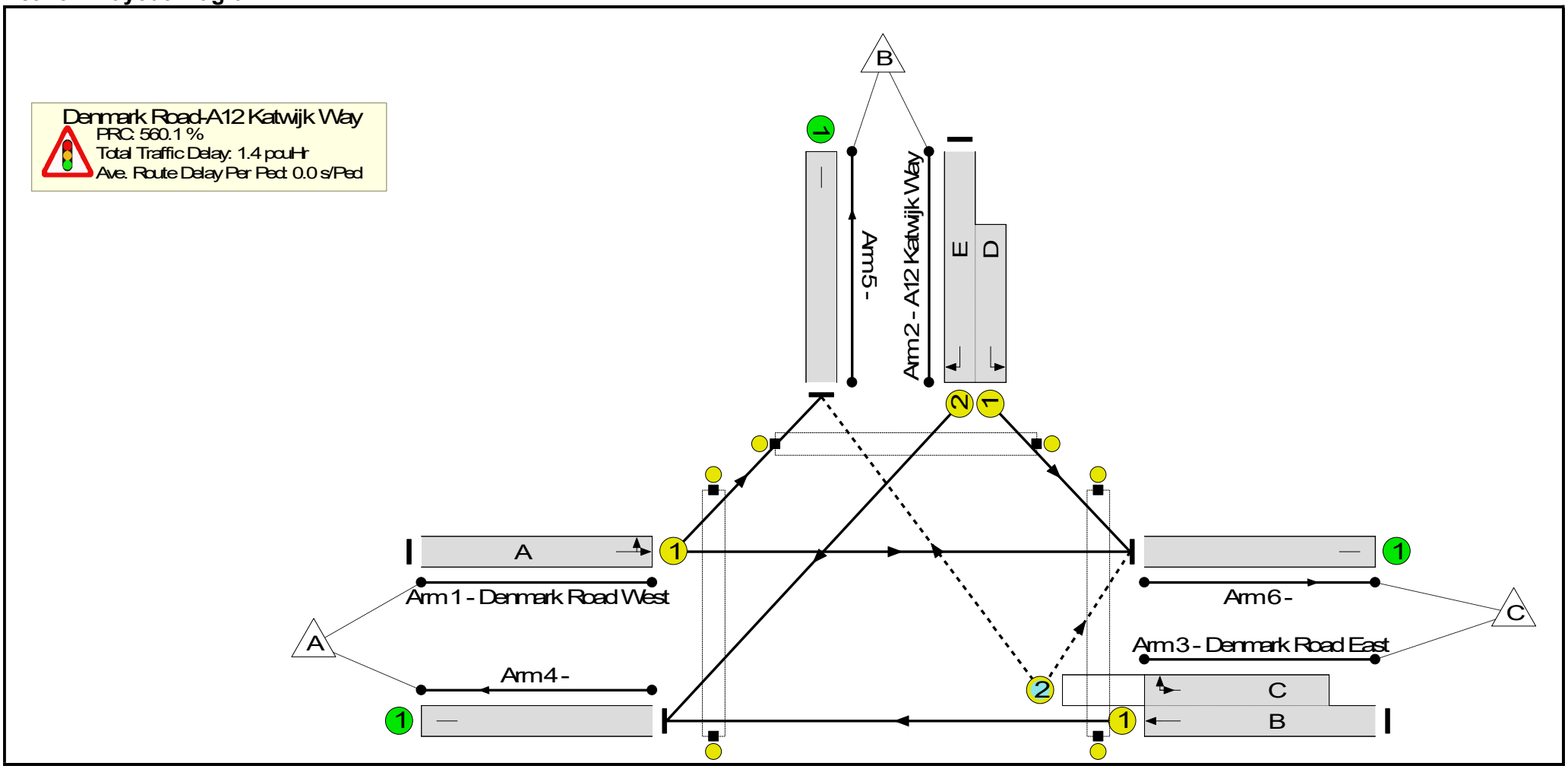
Stage	1	2	3	5
Duration	20	59	7	5
Change Point	0	25	91	105

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**13.6%**
Denmark Road-A12 Katwijk Way	-	-	**N/A**	-	-		-	-	-	-	-	-	**13.6%**
1/1	Denmark Road West Left Ahead	U	N/A	N/A	A		1	20	-	44	1844	323	13.6%
2/2+2/1	A12 Katwijk Way Right Left	U	N/A	N/A	E D		1	7:73	-	41	1964:1811	131+205	12.2 : 12.2%
3/1+3/2	Denmark Road East Ahead Right U-Turn	U+O	N/A	N/A	B C		1	86:61	-	151	1935:1896	660+634	11.7 : 11.7%
4/1		U	N/A	N/A	-		-	-	-	93	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	77	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	66	Inf	Inf	0.0%
Ped Link: P1	A12 Katwijk Way Ped	-	N/A	-	G		1	9	-	0	-	0	0.0%
Ped Link: P2	Denmark Road East Ped	-	N/A	-	I		1	6	-	0	-	0	0.0%
Ped Link: P3	Denmark Road West	-	N/A	-	J		1	5	-	0	-	0	0.0%

Full Input Data And Results

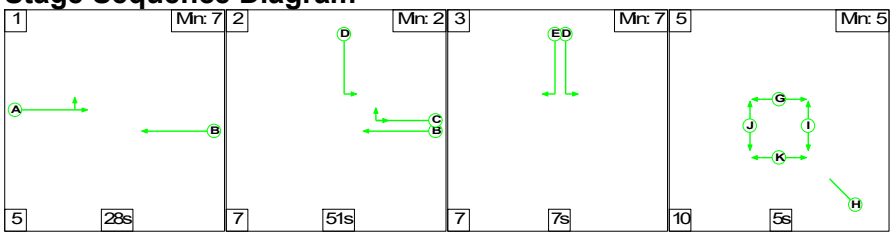
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2**	**70**	**2**	**1.2**	**0.2**	**0.0**	**1.4**	**-**	**-**	**-**	**-**
Denmark Road-A12 Katwijk Way	**-**	**-**	**2**	**70**	**2**	**1.2**	**0.2**	**0.0**	**1.4**	**-**	**-**	**-**	**-**
1/1	44	44	-	-	-	0.5	0.1	-	0.6	48.3	1.2	0.1	1.3
2/2+2/1	41	41	-	-	-	0.3	0.1	-	0.4	32.2	0.5	0.1	0.6
3/1+3/2	151	151	2	70	2	0.4	0.1	0.0	0.5	11.2	1.2	0.1	1.3
4/1	93	93	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	77	77	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	66	66	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 560.1 Total Delay for Signalled Lanes (pcuHr): 1.43 Cycle Time (s): 120
PRC Over All Lanes (%): 560.1 Total Delay Over All Lanes(pcuHr): 1.43

Full Input Data And Results

Scenario 10: '2037 DM AM' (FG10: '2037 DM AM', Plan 1: 'Network Control Plan 1')

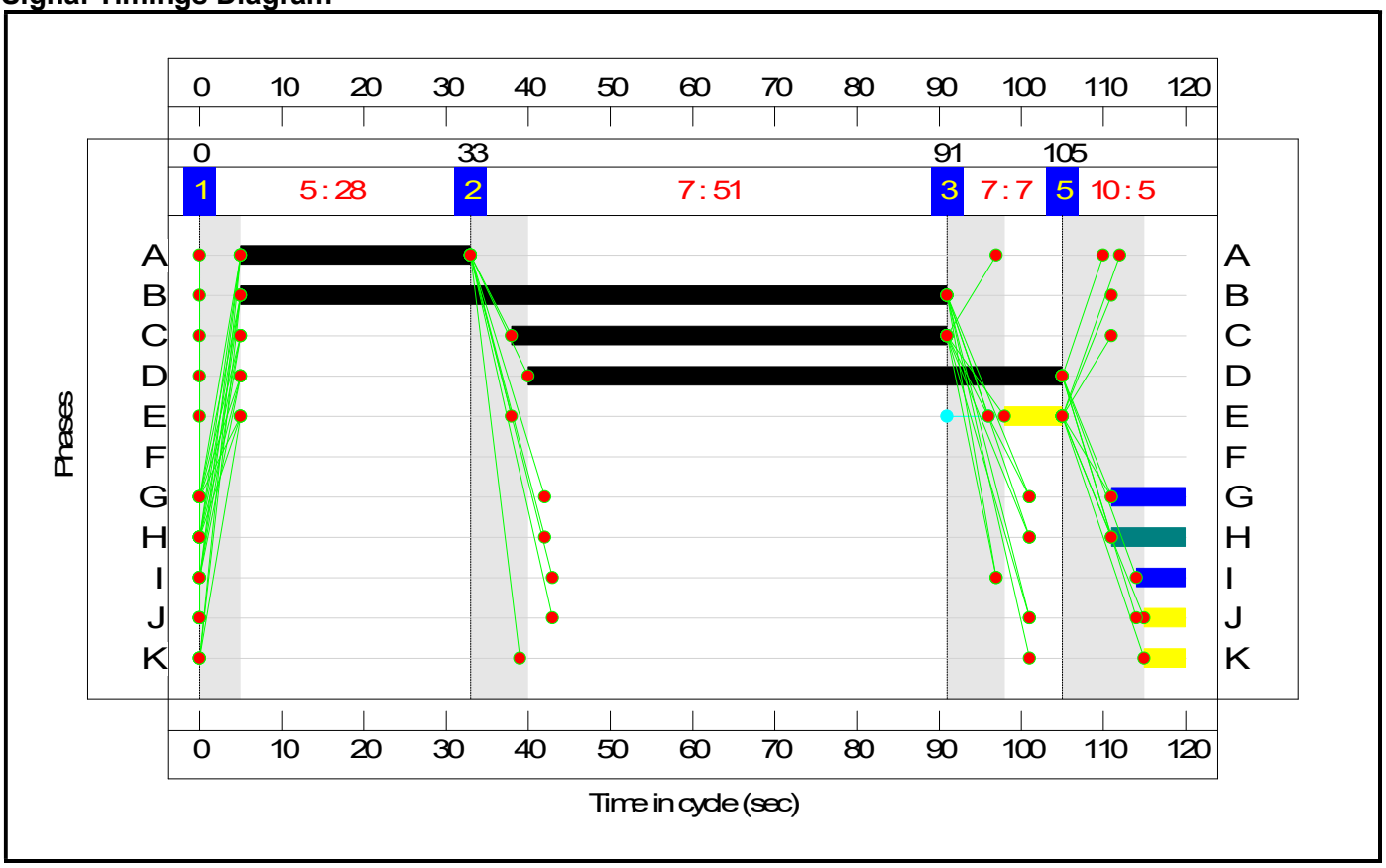
Stage Sequence Diagram



Stage Timings

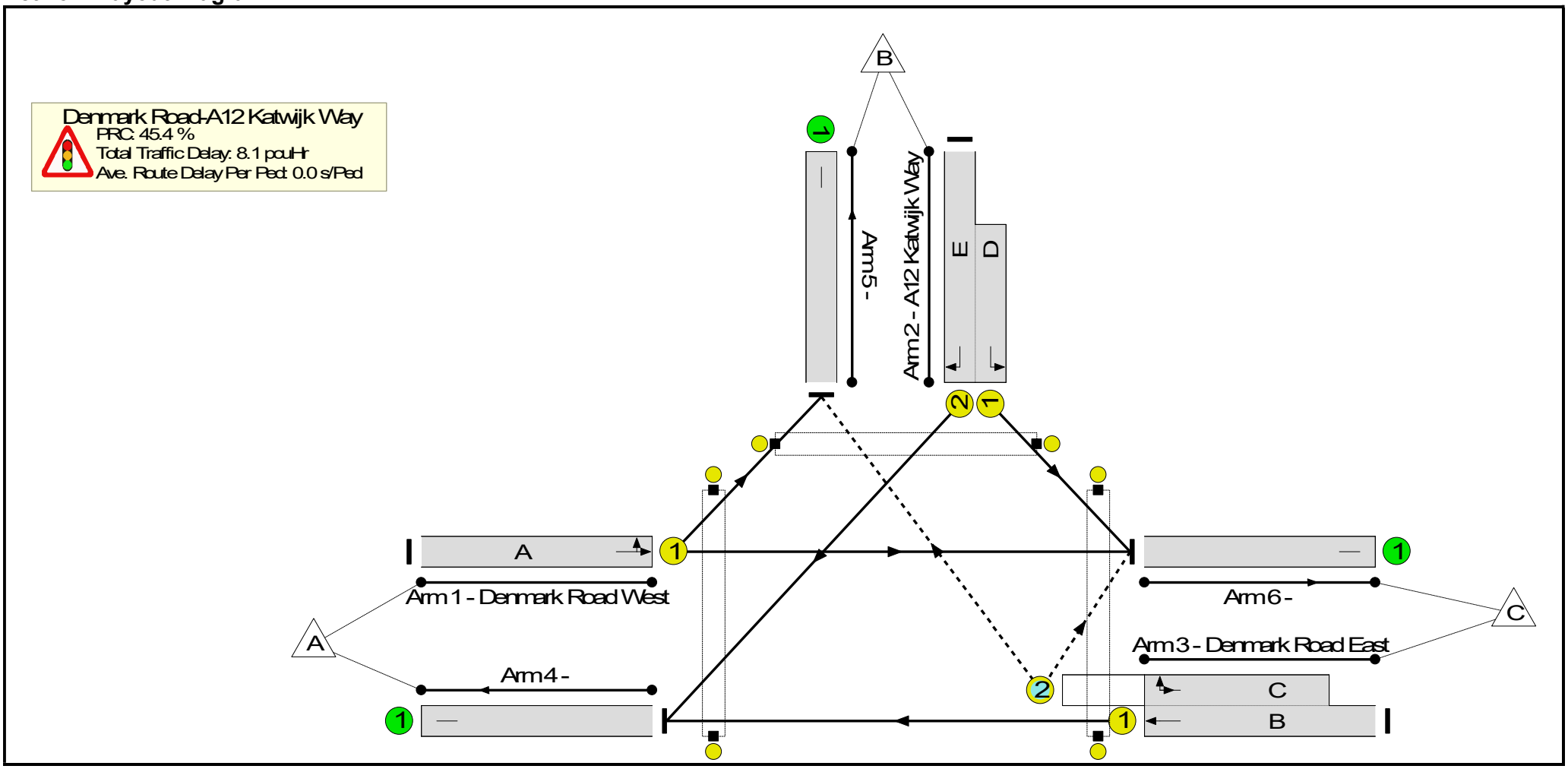
Stage	1	2	3	5
Duration	28	51	7	5
Change Point	0	33	91	105

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**61.9%**
Denmark Road-A12 Katwijk Way	-	-	**N/A**	-	-		-	-	-	-	-	-	**61.9%**
1/1	Denmark Road West Left Ahead	U	N/A	N/A	A		1	28	-	260	1856	449	58.0%
2/2+2/1	A12 Katwijk Way Right Left	U	N/A	N/A	E D		1	7:65	-	206	2135:1811	0+996	0.0 : 20.7%
3/1+3/2	Denmark Road East Ahead Right U-Turn	U+O	N/A	N/A	B C		1	86:53	-	797	1935:1906	762+525	61.9 : 61.9%
4/1		U	N/A	N/A	-		-	-	-	472	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	337	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	454	Inf	Inf	0.0%
Ped Link: P1	A12 Katwijk Way Ped	-	N/A	-	G		1	9	-	0	-	0	0.0%
Ped Link: P2	Denmark Road East Ped	-	N/A	-	I		1	6	-	0	-	0	0.0%
Ped Link: P3	Denmark Road West	-	N/A	-	J		1	5	-	0	-	0	0.0%

Full Input Data And Results

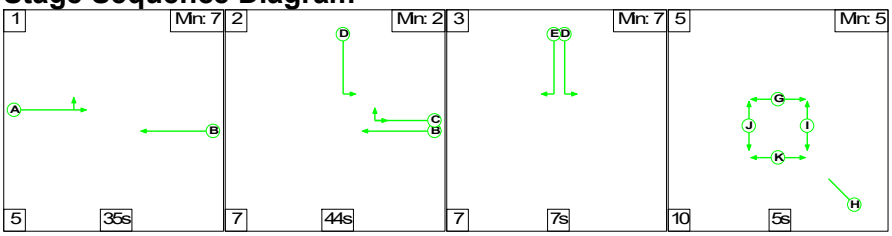
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**314**	**11**	**6.4**	**1.6**	**0.0**	**8.1**	**-**	**-**	**-**	**-**
Denmark Road-A12 Katwijk Way	**-**	**-**	**0**	**314**	**11**	**6.4**	**1.6**	**0.0**	**8.1**	**-**	**-**	**-**	**-**
1/1	260	260	-	-	-	2.9	0.7	-	3.6	49.6	7.6	0.7	8.3
2/2+2/1	206	206	-	-	-	0.8	0.1	-	0.9	16.0	3.4	0.1	3.6
3/1+3/2	797	797	0	314	11	2.8	0.8	0.0	3.6	16.1	7.1	0.8	7.9
4/1	472	472	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	337	337	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	454	454	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 45.4 Total Delay for Signalled Lanes (pcuHr): 8.07 Cycle Time (s): 120
PRC Over All Lanes (%): 45.4 Total Delay Over All Lanes(pcuHr): 8.07

Full Input Data And Results

Scenario 11: '2037 DM PM' (FG11: '2037 DM PM', Plan 1: 'Network Control Plan 1')

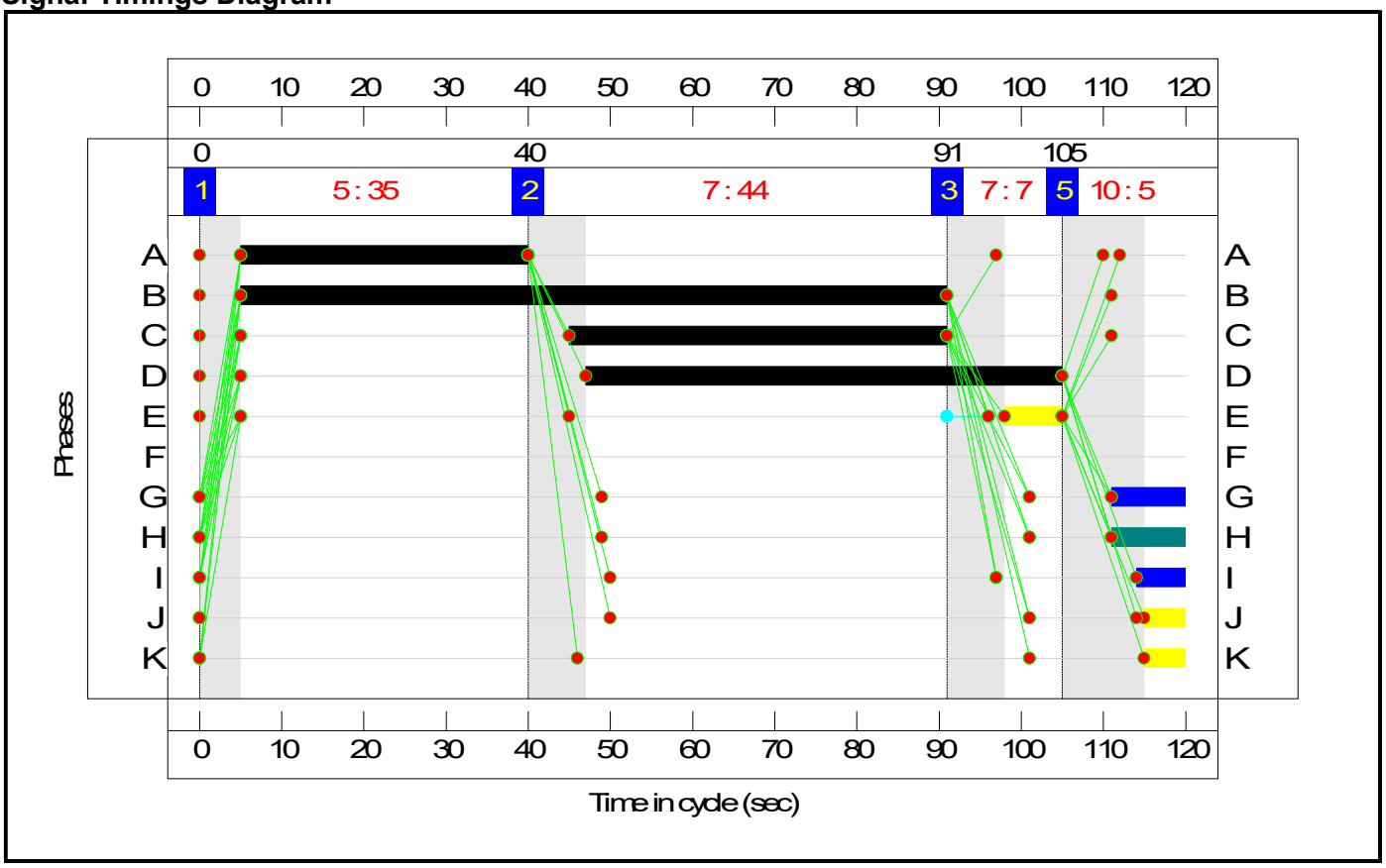
Stage Sequence Diagram



Stage Timings

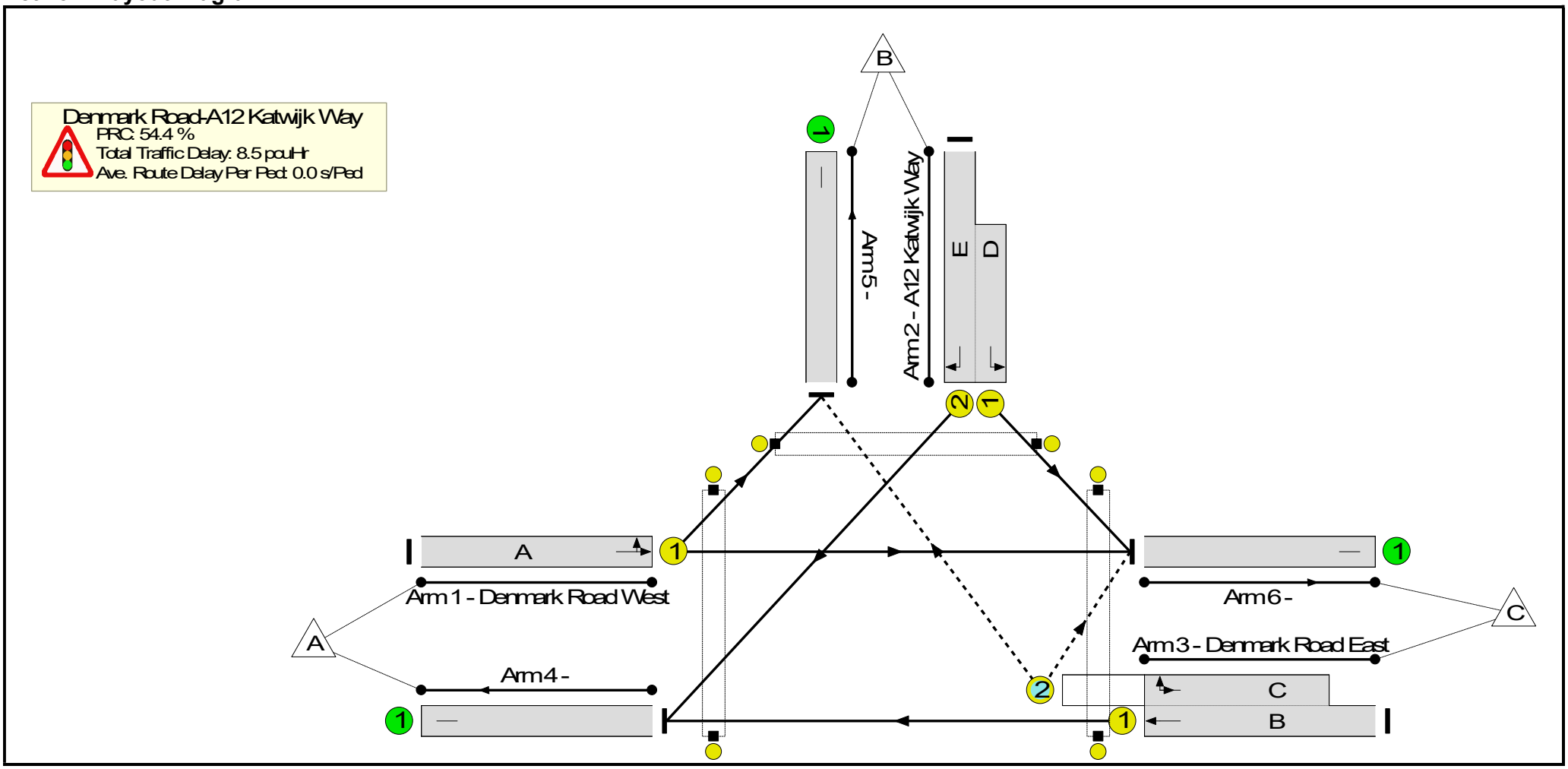
Stage	1	2	3	5
Duration	35	44	7	5
Change Point	0	40	91	105

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**58.3%**
Denmark Road-A12 Katwijk Way	-	-	**N/A**	-	-		-	-	-	-	-	-	**58.3%**
1/1	Denmark Road West Left Ahead	U	N/A	N/A	A		1	35	-	325	1859	558	58.3%
2/2+2/1	A12 Katwijk Way Right Left	U	N/A	N/A	E D		1	7:58	-	353	2135:1811	0+890	0.0 : 39.6%
3/1+3/2	Denmark Road East Ahead Right U-Turn	U+O	N/A	N/A	B C		1	86:46	-	617	1935:1906	1012+427	42.9 : 42.9%
4/1		U	N/A	N/A	-		-	-	-	434	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	194	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	667	Inf	Inf	0.0%
Ped Link: P1	A12 Katwijk Way Ped	-	N/A	-	G		1	9	-	0	-	0	0.0%
Ped Link: P2	Denmark Road East Ped	-	N/A	-	I		1	6	-	0	-	0	0.0%
Ped Link: P3	Denmark Road West	-	N/A	-	J		1	5	-	0	-	0	0.0%

Full Input Data And Results

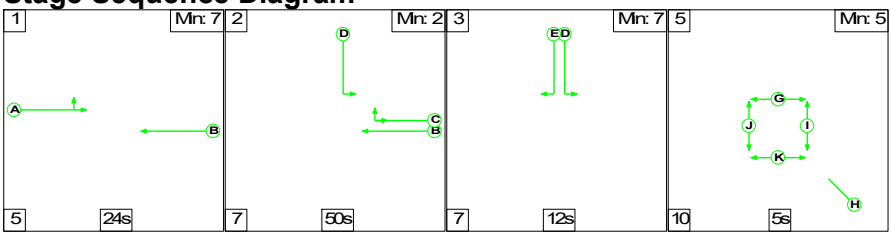
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**177**	**6**	**7.1**	**1.4**	**0.0**	**8.5**	**-**	**-**	**-**	**-**
Denmark Road-A12 Katwijk Way	**-**	**-**	**0**	**177**	**6**	**7.1**	**1.4**	**0.0**	**8.5**	**-**	**-**	**-**	**-**
1/1	325	325	-	-	-	3.2	0.7	-	3.9	43.3	9.1	0.7	9.8
2/2+2/1	353	353	-	-	-	1.9	0.3	-	2.2	22.6	7.4	0.3	7.7
3/1+3/2	617	617	0	177	6	2.0	0.4	0.0	2.3	13.6	5.1	0.4	5.4
4/1	434	434	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	194	194	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	667	667	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 54.4 Total Delay for Signalled Lanes (pcuHr): 8.46 Cycle Time (s): 120
PRC Over All Lanes (%): 54.4 Total Delay Over All Lanes(pcuHr): 8.46

Full Input Data And Results

Scenario 12: '2037 DM Saturday' (FG17: '2037 DM new Saturday', Plan 1: 'Network Control Plan 1')

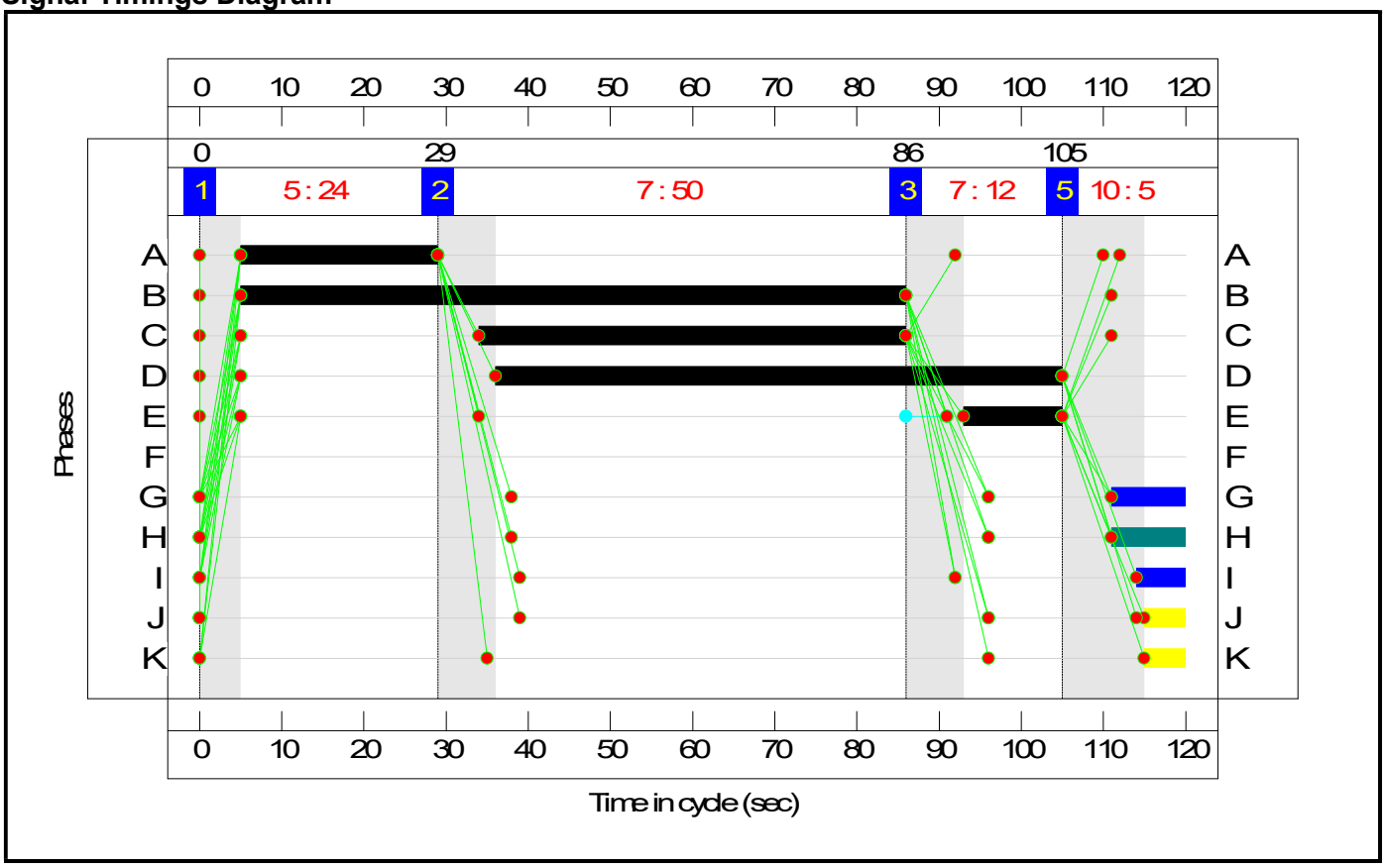
Stage Sequence Diagram



Stage Timings

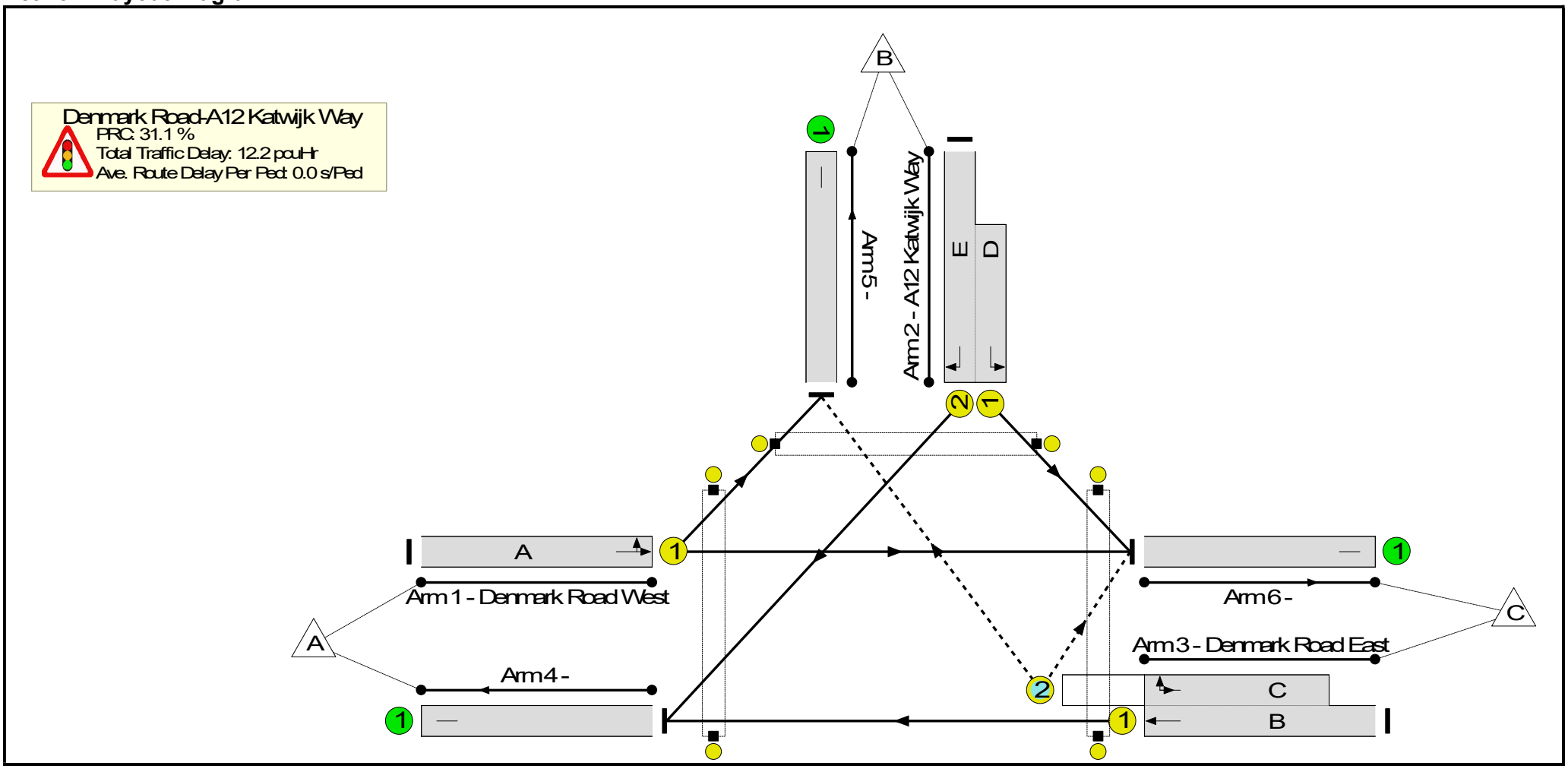
Stage	1	2	3	5
Duration	24	50	12	5
Change Point	0	29	86	105

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**68.7%**
Denmark Road-A12 Katwijk Way	-	-	**N/A**	-	-		-	-	-	-	-	-	**68.7%**
1/1	Denmark Road West Left Ahead	U	N/A	N/A	A		1	24	-	243	1843	384	63.3%
2/2+2/1	A12 Katwijk Way Right Left	U	N/A	N/A	E D		1	12:69	-	344	1964:1811	213+338	62.5 : 62.5%
3/1+3/2	Denmark Road East Ahead Right U-Turn	U+O	N/A	N/A	B C		1	81:52	-	803	1935:1898	597+572	68.7 : 68.7%
4/1		U	N/A	N/A	-		-	-	-	543	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	414	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	433	Inf	Inf	0.0%
Ped Link: P1	A12 Katwijk Way Ped	-	N/A	-	G		1	9	-	0	-	0	0.0%
Ped Link: P2	Denmark Road East Ped	-	N/A	-	I		1	6	-	0	-	0	0.0%
Ped Link: P3	Denmark Road West	-	N/A	-	J		1	5	-	0	-	0	0.0%

Full Input Data And Results

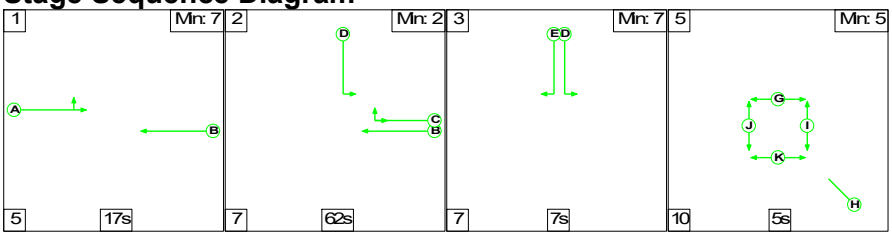
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**8**	**372**	**13**	**9.3**	**2.8**	**0.2**	**12.2**	**-**	**-**	**-**	**-**
Denmark Road-A12 Katwijk Way	**-**	**-**	**8**	**372**	**13**	**9.3**	**2.8**	**0.2**	**12.2**	**-**	**-**	**-**	**-**
1/1	243	243	-	-	-	2.9	0.9	-	3.8	55.9	7.4	0.9	8.2
2/2+2/1	344	344	-	-	-	2.6	0.8	-	3.4	35.7	4.2	0.8	5.0
3/1+3/2	803	803	8	372	13	3.7	1.1	0.2	5.0	22.6	10.0	1.1	11.1
4/1	543	543	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	414	414	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	433	433	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 31.1 Total Delay for Signalled Lanes (pcuHr): 12.23 Cycle Time (s): 120
PRC Over All Lanes (%): 31.1 Total Delay Over All Lanes(pcuHr): 12.23

Full Input Data And Results

Scenario 13: '2037 DS AM' (FG13: '2037 DS AM', Plan 1: 'Network Control Plan 1')

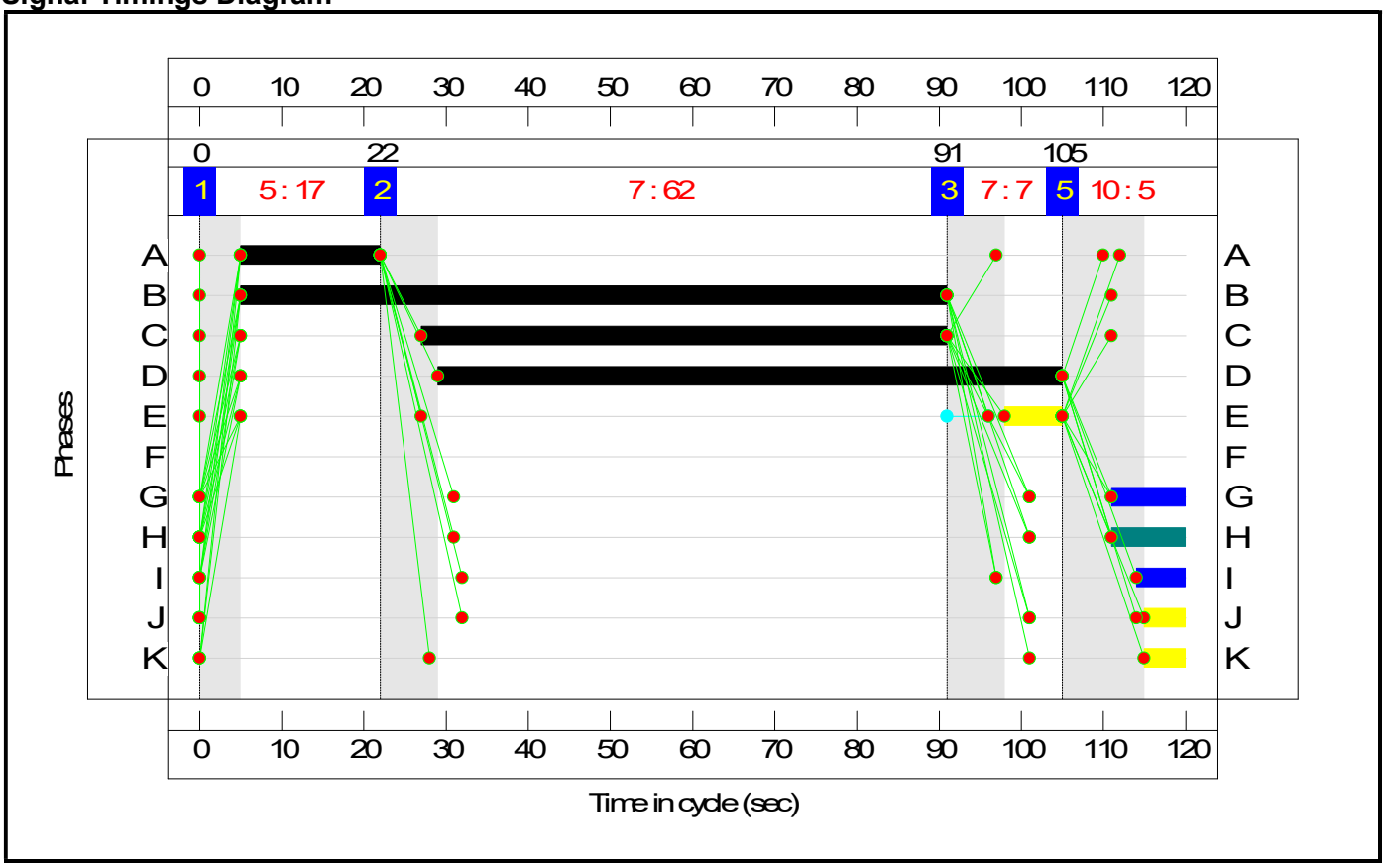
Stage Sequence Diagram



Stage Timings

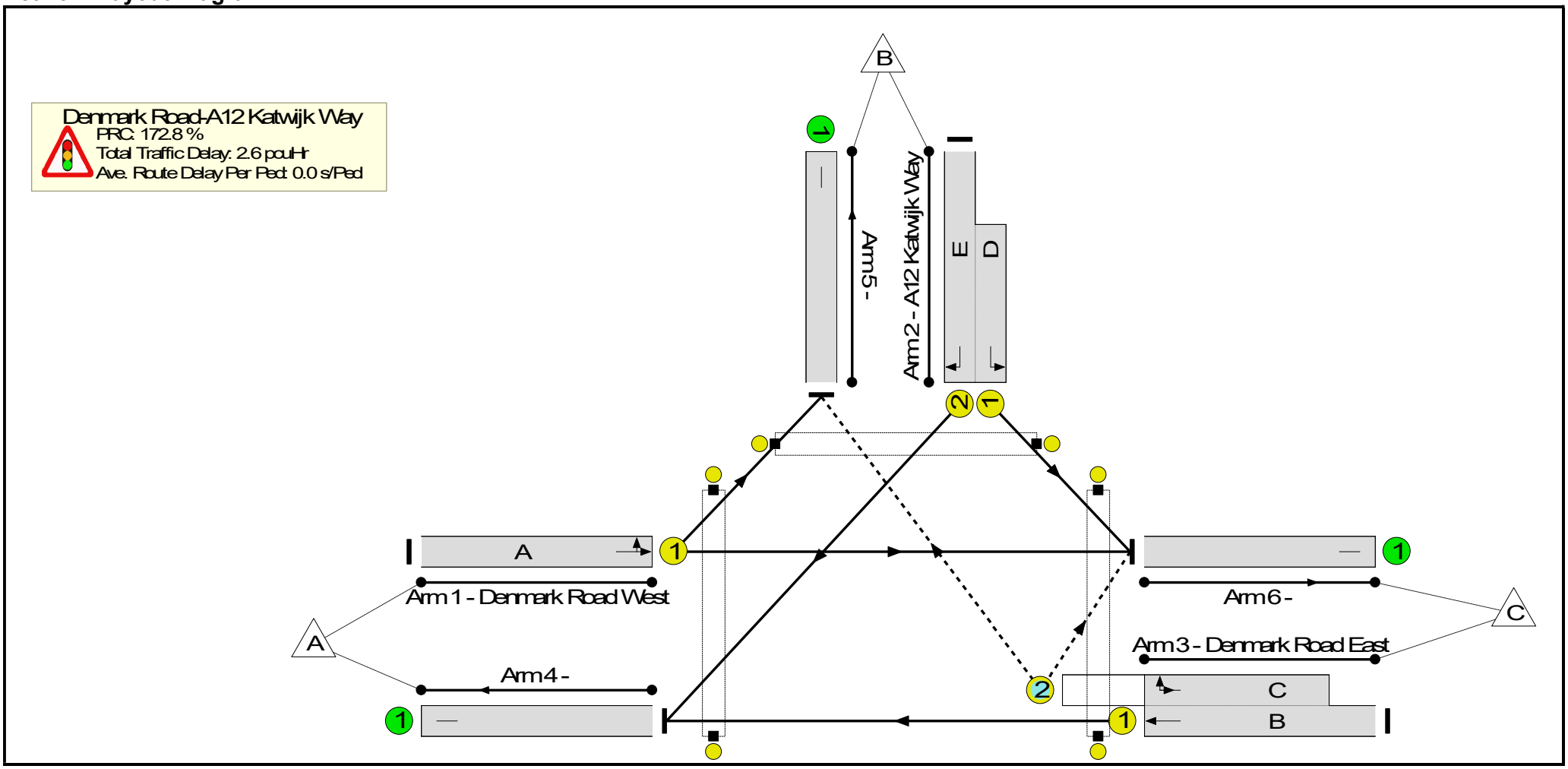
Stage	1	2	3	5
Duration	17	62	7	5
Change Point	0	22	91	105

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**33.0%**
Denmark Road-A12 Katwijk Way	-	-	**N/A**	-	-		-	-	-	-	-	-	**33.0%**
1/1	Denmark Road West Left Ahead	U	N/A	N/A	A		1	17	-	91	1839	276	33.0%
2/2+2/1	A12 Katwijk Way Right Left	U	N/A	N/A	E D		1	7:76	-	96	2135:1811	0+1162	0.0 : 8.3%
3/1+3/2	Denmark Road East Ahead Right U-Turn	U+O	N/A	N/A	B C		1	86:64	-	236	1935:1906	196+907	21.4 : 21.4%
4/1		U	N/A	N/A	-		-	-	-	42	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	207	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	174	Inf	Inf	0.0%
Ped Link: P1	A12 Katwijk Way Ped	-	N/A	-	G		1	9	-	0	-	0	0.0%
Ped Link: P2	Denmark Road East Ped	-	N/A	-	I		1	6	-	0	-	0	0.0%
Ped Link: P3	Denmark Road West	-	N/A	-	J		1	5	-	0	-	0	0.0%

Full Input Data And Results

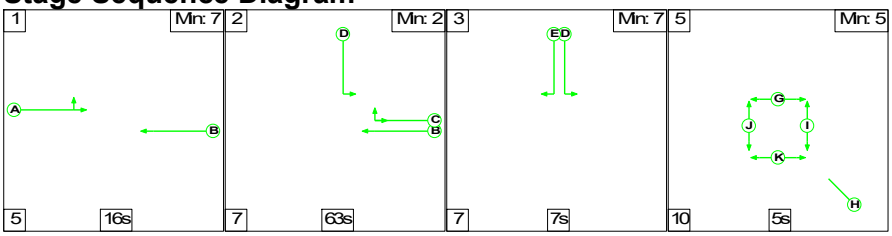
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**188**	**6**	**2.2**	**0.4**	**0.0**	**2.6**	**-**	**-**	**-**	**-**
Denmark Road-A12 Katwijk Way	**-**	**-**	**0**	**188**	**6**	**2.2**	**0.4**	**0.0**	**2.6**	**-**	**-**	**-**	**-**
1/1	91	91	-	-	-	1.2	0.2	-	1.4	55.3	2.7	0.2	3.0
2/2+2/1	96	96	-	-	-	0.2	0.0	-	0.3	9.8	1.2	0.0	1.2
3/1+3/2	236	236	0	188	6	0.8	0.1	0.0	0.9	14.4	3.3	0.1	3.4
4/1	42	42	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	207	207	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	174	174	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 172.8 Total Delay for Signalled Lanes (pcuHr): 2.61 Cycle Time (s): 120
PRC Over All Lanes (%): 172.8 Total Delay Over All Lanes(pcuHr): 2.61

Full Input Data And Results

Scenario 14: '2037 DS PM' (FG14: '2037 DS PM', Plan 1: 'Network Control Plan 1')

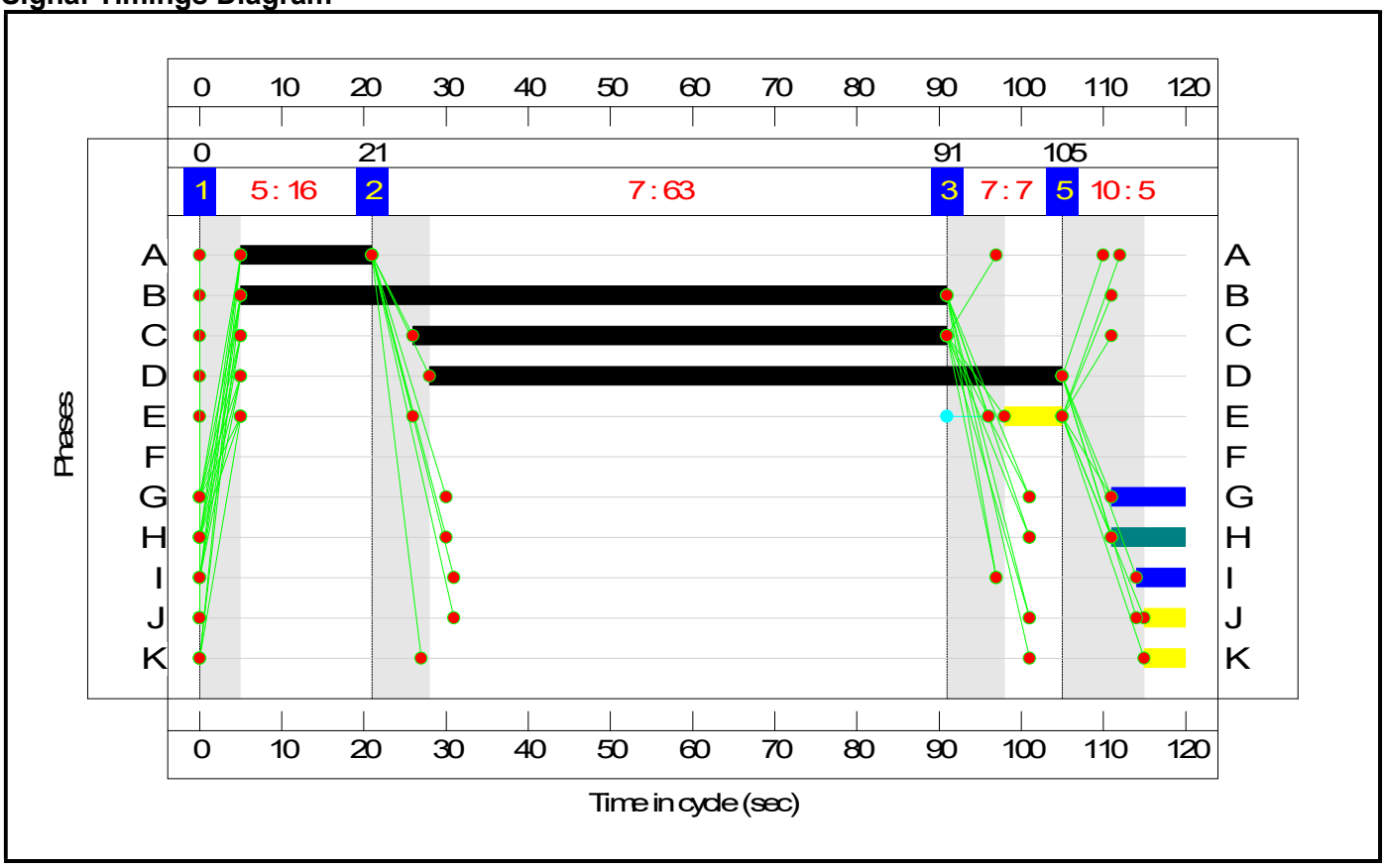
Stage Sequence Diagram



Stage Timings

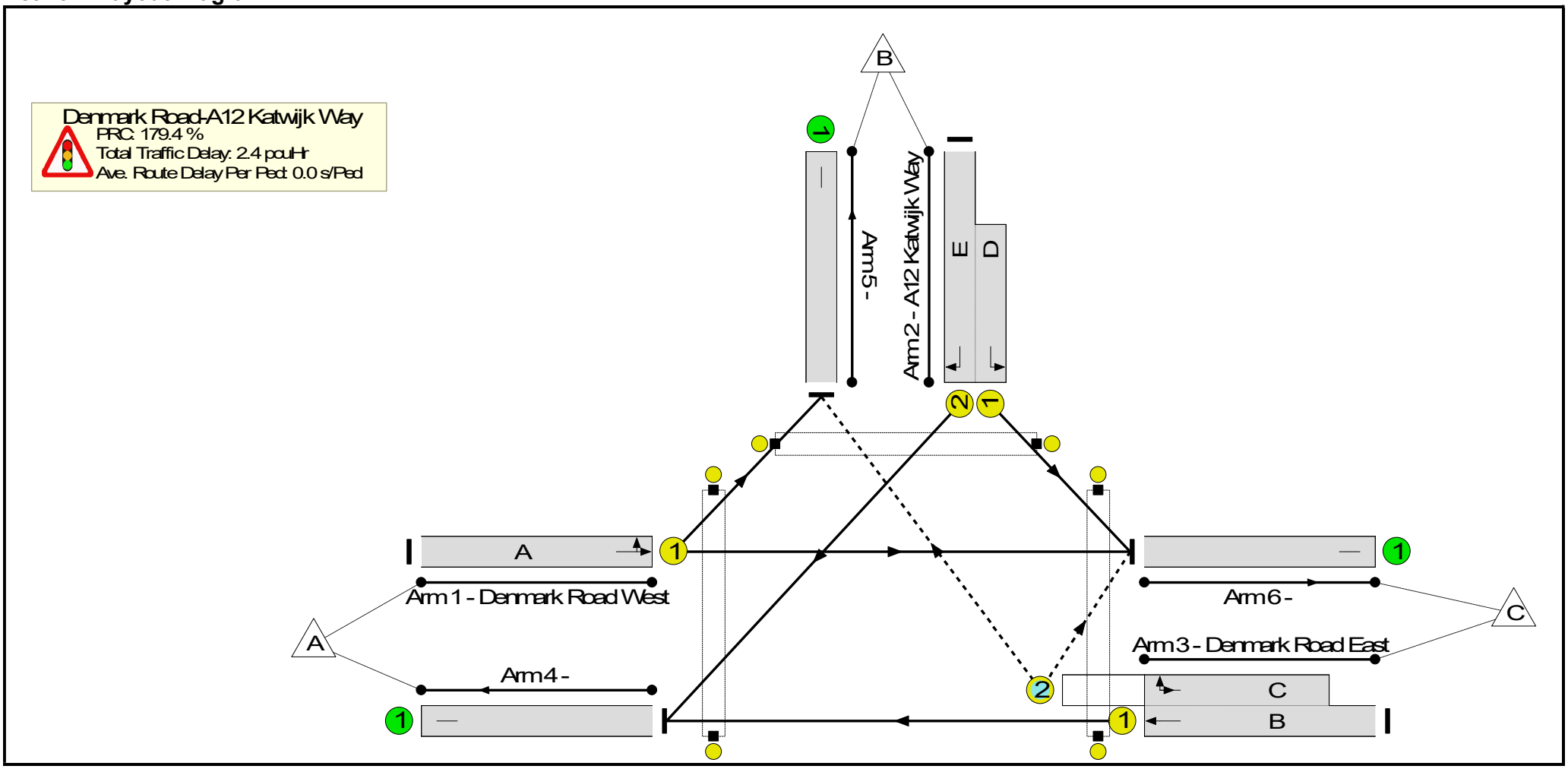
Stage	1	2	3	5
Duration	16	63	7	5
Change Point	0	21	91	105

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**32.2%**
Denmark Road-A12 Katwijk Way	-	-	**N/A**	-	-		-	-	-	-	-	-	**32.2%**
1/1	Denmark Road West Left Ahead	U	N/A	N/A	A		1	16	-	84	1841	261	32.2%
2/2+2/1	A12 Katwijk Way Right Left	U	N/A	N/A	E D		1	7:77	-	199	2135:1811	0+1177	0.0 : 16.9%
3/1+3/2	Denmark Road East Ahead Right U-Turn	U+O	N/A	N/A	B C		1	86:65	-	165	1935:1906	454+774	13.4 : 13.4%
4/1		U	N/A	N/A	-		-	-	-	61	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	115	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	272	Inf	Inf	0.0%
Ped Link: P1	A12 Katwijk Way Ped	-	N/A	-	G		1	9	-	0	-	0	0.0%
Ped Link: P2	Denmark Road East Ped	-	N/A	-	I		1	6	-	0	-	0	0.0%
Ped Link: P3	Denmark Road West	-	N/A	-	J		1	5	-	0	-	0	0.0%

Full Input Data And Results

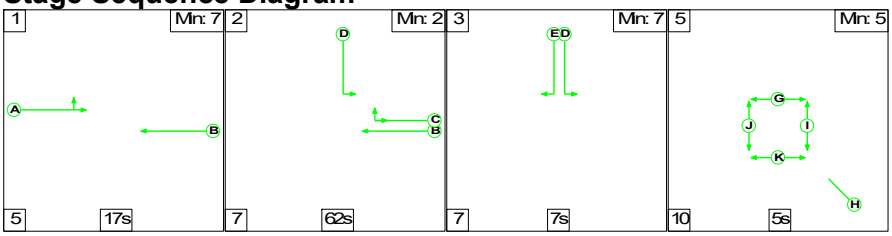
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**101**	**3**	**2.0**	**0.4**	**0.0**	**2.4**	**-**	**-**	**-**	**-**
Denmark Road-A12 Katwijk Way	**-**	**-**	**0**	**101**	**3**	**2.0**	**0.4**	**0.0**	**2.4**	**-**	**-**	**-**	**-**
1/1	84	84	-	-	-	1.1	0.2	-	1.3	56.5	2.5	0.2	2.7
2/2+2/1	199	199	-	-	-	0.5	0.1	-	0.6	10.1	2.6	0.1	2.7
3/1+3/2	165	165	0	101	3	0.5	0.1	0.0	0.5	11.5	1.6	0.1	1.7
4/1	61	61	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	115	115	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	272	272	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 179.4 Total Delay for Signalled Lanes (pcuHr): 2.40 Cycle Time (s): 120
PRC Over All Lanes (%): 179.4 Total Delay Over All Lanes(pcuHr): 2.40

Full Input Data And Results

Scenario 15: '2037 DS Saturday' (FG19: '2037 DS new Saturday', Plan 1: 'Network Control Plan 1')

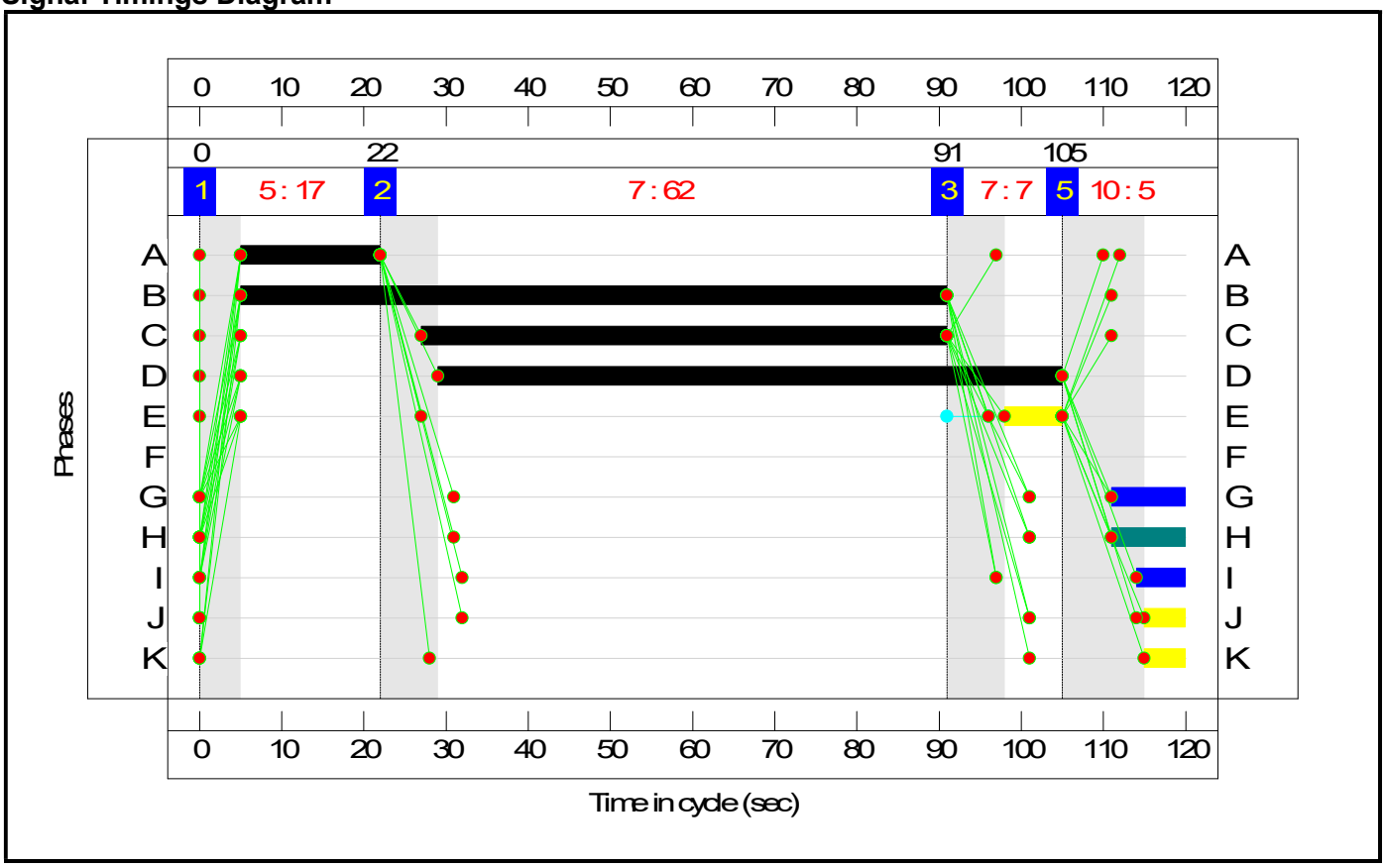
Stage Sequence Diagram



Stage Timings

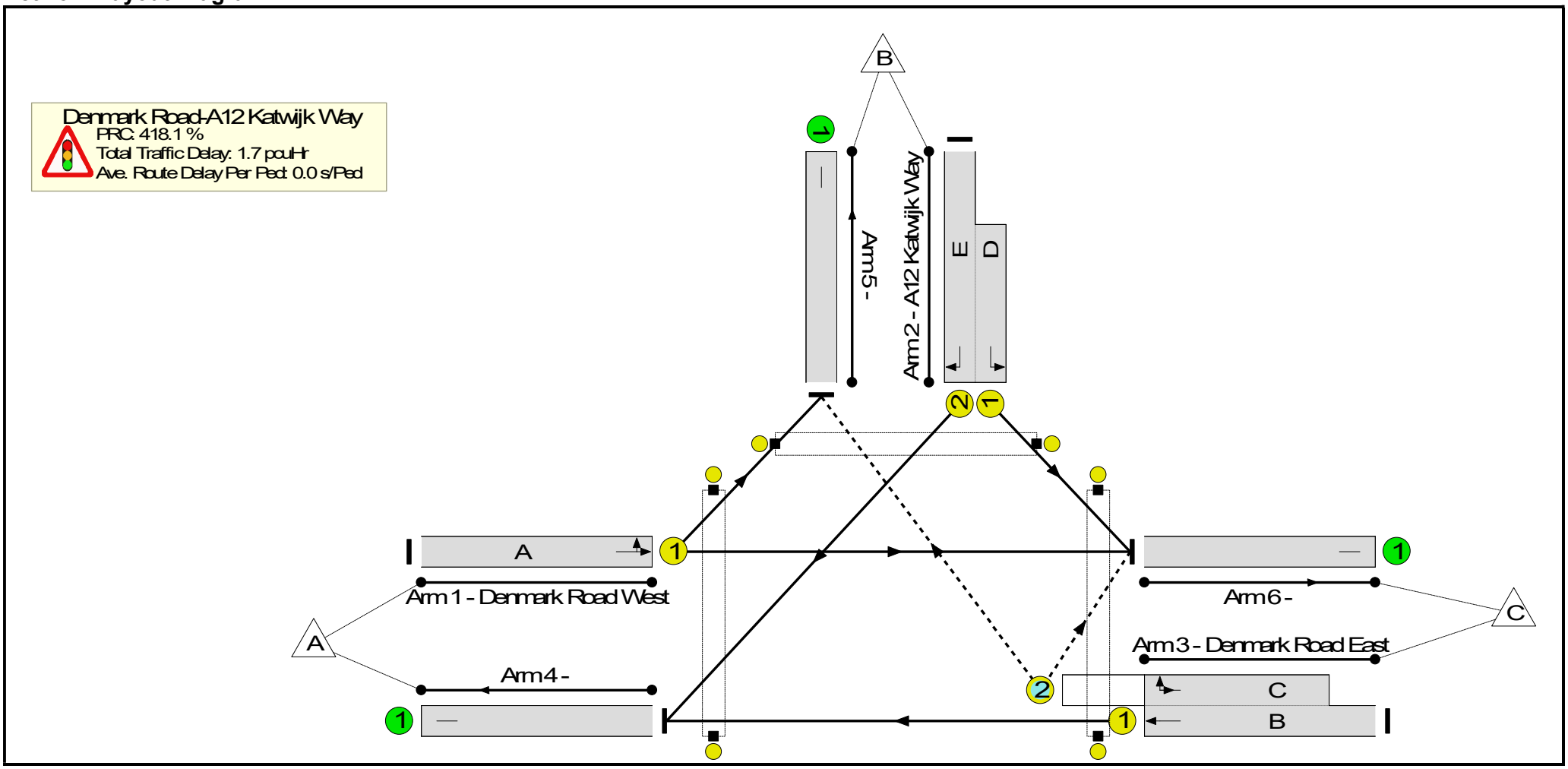
Stage	1	2	3	5
Duration	17	62	7	5
Change Point	0	22	91	105

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**17.4%**
Denmark Road-A12 Katwijk Way	-	-	**N/A**	-	-		-	-	-	-	-	-	**17.4%**
1/1	Denmark Road West Left Ahead	U	N/A	N/A	A		1	17	-	48	1842	276	17.4%
2/2+2/1	A12 Katwijk Way Right Left	U	N/A	N/A	E D		1	7:76	-	57	1964:1811	131+208	16.8 : 16.8%
3/1+3/2	Denmark Road East Ahead Right U-Turn	U+O	N/A	N/A	B C		1	86:64	-	180	1935:1897	687+657	13.4 : 13.4%
4/1		U	N/A	N/A	-		-	-	-	114	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	92	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	79	Inf	Inf	0.0%
Ped Link: P1	A12 Katwijk Way Ped	-	N/A	-	G		1	9	-	0	-	0	0.0%
Ped Link: P2	Denmark Road East Ped	-	N/A	-	I		1	6	-	0	-	0	0.0%
Ped Link: P3	Denmark Road West	-	N/A	-	J		1	5	-	0	-	0	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	**-**	**-**	**2**	**83**	**3**	**1.4**	**0.3**	**0.0**	**1.7**	**-**	**-**	**-**	**-**
Denmark Road-A12 Katwijk Way	**-**	**-**	**2**	**83**	**3**	**1.4**	**0.3**	**0.0**	**1.7**	**-**	**-**	**-**	**-**
1/1	48	48	-	-	-	0.6	0.1	-	0.7	52.4	1.4	0.1	1.5
2/2+2/1	57	57	-	-	-	0.4	0.1	-	0.5	31.6	0.7	0.1	0.8
3/1+3/2	180	180	2	83	3	0.4	0.1	0.0	0.5	10.7	1.4	0.1	1.5
4/1	114	114	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	92	92	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	79	79	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 418.1 Total Delay for Signalled Lanes (pcuHr): 1.73 Cycle Time (s): 120
PRC Over All Lanes (%): 418.1 Total Delay Over All Lanes(pcuHr): 1.73

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.6.541 [19821,26/11/2015]

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: Waveney Dr, Kimberley Rd v3.arc8
Path: L:\106xxx\1069948 Lowestoft Third Crossing\09 Documents\06_Modelling_October 2018
Report generation date: 19/10/2018 16:09:05

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2016 Base							
Stream B-AC	0.04	6.86	0.03	A	0.06	8.10	0.05	A
Stream C-AB	0.05	6.21	0.04	A	0.08	7.36	0.07	A
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
	A1 - DM 2022							
Stream B-AC	0.07	7.43	0.06	A	0.08	8.87	0.07	A
Stream C-AB	0.05	6.38	0.04	A	0.11	7.96	0.09	A
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
	A1 - DM 2037							
Stream B-AC	0.08	7.87	0.07	A	0.10	9.50	0.09	A
Stream C-AB	0.05	6.57	0.05	A	0.10	8.37	0.09	A
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
	A1 - DS 2022							
Stream B-AC	0.18	11.92	0.14	B	0.39	20.35	0.26	C
Stream C-AB	0.04	6.79	0.03	A	0.11	9.94	0.09	A
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
	A1 - DS 2037							
Stream B-AC	0.23	13.86	0.17	B	0.63	30.06	0.37	D
Stream C-AB	0.05	7.11	0.04	A	0.14	11.30	0.11	B
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.

"D1 - 2016 Base, AM " model duration: 07:45 - 09:15
"D2 - 2016 Base, PM" model duration: 16:45 - 18:15
"D3 - DM 2022, AM" model duration: 07:45 - 09:15
"D4 - DM 2022, PM" model duration: 16:45 - 18:15
"D5 - DM 2037, AM" model duration: 07:45 - 09:15
"D6 - DM 2037, PM" model duration: 16:45 - 18:15
"D7 - DS 2022, AM" model duration: 07:45 - 09:15
"D8 - DS 2022, PM" model duration: 16:45 - 18:15
"D9 - DS 2037, AM" model duration: 07:45 - 09:15
"D10 - DS 2037, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.6.541 at 19/10/2018 16:08:59

File summary

Title	Waveney Dr / Kimberley Rd
Location	Lowestoft
Site Number	
Date	01/11/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	OFiolna
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) - 2016 Base, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2016 Base, AM	2016 Base	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	Woolgrove Rd / High Dane	T-Junction	Two-way	A,B,C		6.48	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
Waveney Dr (NE)	A	Waveney Dr (NE)		Major
Kimberley Rd	B	Kimberley Rd		Minor
Waveney Dr (SW)	C	Waveney Dr (SW)		Major

Major Arm Geometry

Name	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)
Waveney Dr (SW)	6.00		0.00	✓	2.50	192.00	✓	6.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	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)
Kimberley Rd	One lane	3.00										37	17

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	497.905	0.091	0.229	0.144	0.327
1	B-C	634.639	0.097	0.246	-	-
1	C-B	707.523	0.274	0.274	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Waveney Dr (NE)	ONE HOUR	✓	140.00	100.000
Kimberley Rd	ONE HOUR	✓	18.00	100.000
Waveney Dr (SW)	ONE HOUR	✓	411.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Woolgrove Rd / High Dane (for whole period)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	0.000	0.000	140.000
	Kimberley Rd	0.000	0.000	18.000
	Waveney Dr (SW)	386.000	25.000	0.000

Turning Proportions (PCU) - Woolgrove Rd / High Dane (for whole period)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	0.00	0.00	1.00
	Kimberley Rd	0.00	0.00	1.00
	Waveney Dr (SW)	0.94	0.06	0.00

Vehicle Mix

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (07:45-08:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (07:45-08:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (08:00-08:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (08:00-08:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (08:15-08:30)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (08:15-08:30)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (08:30-08:45)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (08:30-08:45)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (08:45-09:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (08:45-09:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (09:00-09:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (09:00-09:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-AC	0.03	6.86	0.04	A	16.52	24.78	2.77	6.71	0.03	2.77	6.71
C-AB	0.04	6.21	0.05	A	22.94	34.41	3.50	6.10	0.04	3.50	6.10
C-A	-	-	-	-	354.20	531.30	-	-	-	-	-
A-B	-	-	-	-	0.00	0.00	-	-	-	-	-
A-C	-	-	-	-	128.47	192.70	-	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	13.55	3.39	13.45	0.00	608.72	0.022	0.00	0.02	6.652	A
C-AB	18.82	4.71	18.70	0.00	678.63	0.028	0.00	0.03	6.001	A
C-A	290.60	72.65	290.60	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	105.40	26.35	105.40	0.00	-	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	16.18	4.05	16.16	0.00	603.69	0.027	0.02	0.03	6.739	A
C-AB	22.47	5.62	22.45	0.00	673.02	0.033	0.03	0.04	6.086	A
C-A	347.01	86.75	347.01	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	125.86	31.46	125.86	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	19.82	4.95	19.79	0.00	596.74	0.033	0.03	0.04	6.863	A
C-AB	27.53	6.88	27.49	0.00	665.27	0.041	0.04	0.05	6.208	A
C-A	424.99	106.25	424.99	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	154.14	38.54	154.14	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	19.82	4.95	19.82	0.00	596.74	0.033	0.04	0.04	6.863	A
C-AB	27.53	6.88	27.52	0.00	665.27	0.041	0.05	0.05	6.208	A
C-A	424.99	106.25	424.99	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	154.14	38.54	154.14	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	16.18	4.05	16.21	0.00	603.69	0.027	0.04	0.03	6.742	A
C-AB	22.47	5.62	22.51	0.00	673.02	0.033	0.05	0.04	6.087	A
C-A	347.01	86.75	347.01	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	125.86	31.46	125.86	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	13.55	3.39	13.57	0.00	608.72	0.022	0.03	0.03	6.653	A
C-AB	18.82	4.71	18.85	0.00	678.63	0.028	0.04	0.03	6.003	A
C-A	290.60	72.65	290.60	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	105.40	26.35	105.40	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.36	0.02	6.652	A	A
C-AB	0.46	0.03	6.001	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.44	0.03	6.739	A	A
C-AB	0.57	0.04	6.086	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.55	0.04	6.863	A	A
C-AB	0.71	0.05	6.208	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.56	0.04	6.863	A	A
C-AB	0.71	0.05	6.208	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.47	0.03	6.742	A	A
C-AB	0.57	0.04	6.087	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.39	0.03	6.653	A	A
C-AB	0.47	0.03	6.003	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2016 Base, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2016 Base, PM	2016 Base	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	Woolgrove Rd / High Dane	T-Junction	Two-way	A,B,C		7.67	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
Waveney Dr (NE)	A	Waveney Dr (NE)		Major
Kimberley Rd	B	Kimberley Rd		Minor
Waveney Dr (SW)	C	Waveney Dr (SW)		Major

Major Arm Geometry

Name	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)
Waveney Dr (SW)	6.00		0.00	✓	2.50	192.00	✓	6.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	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)
Kimberley Rd	One lane	3.00										37	17

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	497.905	0.091	0.229	0.144	0.327
1	B-C	634.639	0.097	0.246	-	-
1	C-B	707.523	0.274	0.274	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Waveney Dr (NE)	ONE HOUR	✓	437.00	100.000
Kimberley Rd	ONE HOUR	✓	25.00	100.000
Waveney Dr (SW)	ONE HOUR	✓	216.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Woolgrove Rd / High Dane (for whole period)

		To		
		Waveney Dr (NE)	**Kimberley Rd**	**Waveney Dr (SW)**
From	**Waveney Dr (NE)**	0.000	0.000	437.000
	Kimberley Rd	0.000	0.000	25.000
	Waveney Dr (SW)	182.000	34.000	0.000

Turning Proportions (PCU) - Woolgrove Rd / High Dane (for whole period)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	0.00	0.00	1.00
	Kimberley Rd	0.00	0.00	1.00
	Waveney Dr (SW)	0.84	0.16	0.00

Vehicle Mix

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (16:45-17:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (16:45-17:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (17:00-17:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (17:00-17:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (17:15-17:30)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (17:15-17:30)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (17:30-17:45)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (17:30-17:45)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (17:45-18:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (17:45-18:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (18:00-18:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (18:00-18:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-AC	0.05	8.10	0.06	A	22.94	34.41	4.42	7.70	0.05	4.42	7.70
C-AB	0.07	7.36	0.08	A	31.20	46.80	5.48	7.03	0.06	5.48	7.03
C-A	-	-	-	-	167.01	250.51	-	-	-	-	-
A-B	-	-	-	-	0.00	0.00	-	-	-	-	-
A-C	-	-	-	-	401.00	601.50	-	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	18.82	4.71	18.67	0.00	553.74	0.034	0.00	0.04	7.399	A
C-AB	25.60	6.40	25.41	0.00	617.33	0.041	0.00	0.05	6.688	A
C-A	137.02	34.25	137.02	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	329.00	82.25	329.00	0.00	-	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	22.47	5.62	22.44	0.00	538.04	0.042	0.04	0.05	7.680	A
C-AB	30.57	7.64	30.52	0.00	599.83	0.051	0.05	0.06	6.955	A
C-A	163.61	40.90	163.61	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	392.85	98.21	392.85	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	27.53	6.88	27.47	0.00	516.33	0.053	0.05	0.06	8.099	A
C-AB	37.43	9.36	37.37	0.00	575.63	0.065	0.06	0.08	7.357	A
C-A	200.39	50.10	200.39	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	481.15	120.29	481.15	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	27.53	6.88	27.52	0.00	516.33	0.053	0.06	0.06	8.101	A
C-AB	37.43	9.36	37.43	0.00	575.63	0.065	0.08	0.08	7.357	A
C-A	200.39	50.10	200.39	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	481.15	120.29	481.15	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	22.47	5.62	22.53	0.00	538.04	0.042	0.06	0.05	7.683	A
C-AB	30.57	7.64	30.63	0.00	599.83	0.051	0.08	0.06	6.959	A
C-A	163.61	40.90	163.61	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	392.85	98.21	392.85	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	18.82	4.71	18.86	0.00	553.74	0.034	0.05	0.04	7.405	A
C-AB	25.60	6.40	25.64	0.00	617.33	0.041	0.06	0.05	6.695	A
C-A	137.02	34.25	137.02	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	329.00	82.25	329.00	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.56	0.04	7.399	A	A
C-AB	0.70	0.05	6.688	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.70	0.05	7.680	A	A
C-AB	0.88	0.06	6.955	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.90	0.06	8.099	A	A
C-AB	1.14	0.08	7.357	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.92	0.06	8.101	A	A
C-AB	1.15	0.08	7.357	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.74	0.05	7.683	A	A
C-AB	0.89	0.06	6.959	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.60	0.04	7.405	A	A
C-AB	0.72	0.05	6.695	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - DM 2022, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
DM 2022, AM	DM 2022	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	Woolgrove Rd / High Dane	T-Junction	Two-way	A,B,C		6.98	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
Waveney Dr (NE)	A	Waveney Dr (NE)		Major
Kimberley Rd	B	Kimberley Rd		Minor
Waveney Dr (SW)	C	Waveney Dr (SW)		Major

Major Arm Geometry

Name	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)
Waveney Dr (SW)	6.00		0.00	✓	2.50	192.00	✓	6.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	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)
Kimberley Rd	One lane	3.00										37	17

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	497.905	0.091	0.229	0.144	0.327
1	B-C	634.639	0.097	0.246	-	-
1	C-B	707.523	0.274	0.274	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Waveney Dr (NE)	ONE HOUR	✓	199.00	100.000
Kimberley Rd	ONE HOUR	✓	33.00	100.000
Waveney Dr (SW)	ONE HOUR	✓	596.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Woolgrove Rd / High Dane (for whole period)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	0.000	1.000	198.000
	Kimberley Rd	1.000	0.000	32.000
	Waveney Dr (SW)	572.000	24.000	0.000

Turning Proportions (PCU) - Woolgrove Rd / High Dane (for whole period)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	0.00	0.01	0.99
	Kimberley Rd	0.03	0.00	0.97
	Waveney Dr (SW)	0.96	0.04	0.00

Vehicle Mix

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (07:45-08:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (07:45-08:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (08:00-08:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (08:00-08:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (08:15-08:30)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (08:15-08:30)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (08:30-08:45)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (08:30-08:45)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (08:45-09:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (08:45-09:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (09:00-09:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (09:00-09:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-AC	0.06	7.43	0.07	A	30.28	45.42	5.43	7.18	0.06	5.43	7.18
C-AB	0.04	6.38	0.05	A	22.02	33.03	3.43	6.24	0.04	3.43	6.24
C-A	-	-	-	-	524.88	787.32	-	-	-	-	-
A-B	-	-	-	-	0.92	1.38	-	-	-	-	-
A-C	-	-	-	-	181.69	272.53	-	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	24.84	6.21	24.65	0.00	588.79	0.042	0.00	0.05	7.018	A
C-AB	18.07	4.52	17.95	0.00	666.45	0.027	0.00	0.03	6.106	A
C-A	430.63	107.66	430.63	0.00	-	-	-	-	-	-
A-B	0.75	0.19	0.75	0.00	-	-	-	-	-	-
A-C	149.06	37.27	149.06	0.00	-	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	29.67	7.42	29.62	0.00	580.71	0.051	0.05	0.06	7.185	A
C-AB	21.58	5.39	21.55	0.00	658.48	0.033	0.03	0.04	6.216	A
C-A	514.22	128.55	514.22	0.00	-	-	-	-	-	-
A-B	0.90	0.22	0.90	0.00	-	-	-	-	-	-
A-C	178.00	44.50	178.00	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	36.33	9.08	36.27	0.00	569.40	0.064	0.06	0.07	7.427	A
C-AB	26.42	6.61	26.39	0.00	647.46	0.041	0.04	0.05	6.375	A
C-A	629.78	157.45	629.78	0.00	-	-	-	-	-	-
A-B	1.10	0.28	1.10	0.00	-	-	-	-	-	-
A-C	218.00	54.50	218.00	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	36.33	9.08	36.33	0.00	569.40	0.064	0.07	0.07	7.427	A
C-AB	26.42	6.61	26.42	0.00	647.46	0.041	0.05	0.05	6.375	A
C-A	629.78	157.45	629.78	0.00	-	-	-	-	-	-
A-B	1.10	0.28	1.10	0.00	-	-	-	-	-	-
A-C	218.00	54.50	218.00	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	29.67	7.42	29.73	0.00	580.71	0.051	0.07	0.06	7.189	A
C-AB	21.58	5.39	21.61	0.00	658.48	0.033	0.05	0.04	6.219	A
C-A	514.22	128.55	514.22	0.00	-	-	-	-	-	-
A-B	0.90	0.22	0.90	0.00	-	-	-	-	-	-
A-C	178.00	44.50	178.00	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	24.84	6.21	24.89	0.00	588.79	0.042	0.06	0.05	7.024	A
C-AB	18.07	4.52	18.09	0.00	666.45	0.027	0.04	0.03	6.107	A
C-A	430.63	107.66	430.63	0.00	-	-	-	-	-	-
A-B	0.75	0.19	0.75	0.00	-	-	-	-	-	-
A-C	149.06	37.27	149.06	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.70	0.05	7.018	A	A
C-AB	0.45	0.03	6.106	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.86	0.06	7.185	A	A
C-AB	0.56	0.04	6.216	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	1.09	0.07	7.427	A	A
C-AB	0.70	0.05	6.375	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	1.12	0.07	7.427	A	A
C-AB	0.70	0.05	6.375	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.91	0.06	7.189	A	A
C-AB	0.56	0.04	6.219	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.75	0.05	7.024	A	A
C-AB	0.46	0.03	6.107	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - DM 2022, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
DM 2022, PM	DM 2022	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	Woolgrove Rd / High Dane	T-Junction	Two-way	A,B,C		8.34	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
Waveney Dr (NE)	A	Waveney Dr (NE)		Major
Kimberley Rd	B	Kimberley Rd		Minor
Waveney Dr (SW)	C	Waveney Dr (SW)		Major

Major Arm Geometry

Name	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)
Waveney Dr (SW)	6.00		0.00	✓	2.50	192.00	✓	6.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	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)
Kimberley Rd	One lane	3.00										37	17

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	497.905	0.091	0.229	0.144	0.327
1	B-C	634.639	0.097	0.246	-	-
1	C-B	707.523	0.274	0.274	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Waveney Dr (NE)	ONE HOUR	✓	536.00	100.000
Kimberley Rd	ONE HOUR	✓	31.00	100.000
Waveney Dr (SW)	ONE HOUR	✓	315.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Woolgrove Rd / High Dane (for whole period)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	0.000	2.000	534.000
	Kimberley Rd	1.000	0.000	30.000
	Waveney Dr (SW)	271.000	44.000	0.000

Turning Proportions (PCU) - Woolgrove Rd / High Dane (for whole period)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	0.00	0.00	1.00
	Kimberley Rd	0.03	0.00	0.97
	Waveney Dr (SW)	0.86	0.14	0.00

Vehicle Mix

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (16:45-17:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (16:45-17:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (17:00-17:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (17:00-17:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (17:15-17:30)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (17:15-17:30)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (17:30-17:45)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (17:30-17:45)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (17:45-18:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (17:45-18:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (18:00-18:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (18:00-18:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-AC	0.07	8.87	0.08	A	28.45	42.67	5.91	8.31	0.07	5.91	8.31
C-AB	0.09	7.96	0.11	A	40.38	60.56	7.57	7.50	0.08	7.57	7.50
C-A	-	-	-	-	248.67	373.01	-	-	-	-	-
A-B	-	-	-	-	1.84	2.75	-	-	-	-	-
A-C	-	-	-	-	490.01	735.01	-	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	23.34	5.83	23.14	0.00	527.70	0.044	0.00	0.05	7.842	A
C-AB	33.13	8.28	32.87	0.00	596.90	0.056	0.00	0.06	7.017	A
C-A	204.02	51.01	204.02	0.00	-	-	-	-	-	-
A-B	1.51	0.38	1.51	0.00	-	-	-	-	-	-
A-C	402.02	100.51	402.02	0.00	-	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	27.87	6.97	27.82	0.00	507.89	0.055	0.05	0.06	8.247	A
C-AB	39.56	9.89	39.49	0.00	575.43	0.069	0.06	0.08	7.388	A
C-A	243.62	60.91	243.62	0.00	-	-	-	-	-	-
A-B	1.80	0.45	1.80	0.00	-	-	-	-	-	-
A-C	480.06	120.01	480.06	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	34.13	8.53	34.05	0.00	480.37	0.071	0.06	0.08	8.871	A
C-AB	48.44	12.11	48.34	0.00	545.75	0.089	0.08	0.11	7.959	A
C-A	298.38	74.59	298.38	0.00	-	-	-	-	-	-
A-B	2.20	0.55	2.20	0.00	-	-	-	-	-	-
A-C	587.94	146.99	587.94	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	34.13	8.53	34.13	0.00	480.37	0.071	0.08	0.08	8.873	A
C-AB	48.44	12.11	48.44	0.00	545.75	0.089	0.11	0.11	7.962	A
C-A	298.38	74.59	298.38	0.00	-	-	-	-	-	-
A-B	2.20	0.55	2.20	0.00	-	-	-	-	-	-
A-C	587.94	146.99	587.94	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	27.87	6.97	27.95	0.00	507.88	0.055	0.08	0.06	8.253	A
C-AB	39.56	9.89	39.65	0.00	575.43	0.069	0.11	0.08	7.391	A
C-A	243.62	60.91	243.62	0.00	-	-	-	-	-	-
A-B	1.80	0.45	1.80	0.00	-	-	-	-	-	-
A-C	480.06	120.01	480.06	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	23.34	5.83	23.39	0.00	527.70	0.044	0.06	0.05	7.852	A
C-AB	33.13	8.28	33.19	0.00	596.90	0.056	0.08	0.07	7.027	A
C-A	204.02	51.01	204.02	0.00	-	-	-	-	-	-
A-B	1.51	0.38	1.51	0.00	-	-	-	-	-	-
A-C	402.02	100.51	402.02	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.73	0.05	7.842	A	A
C-AB	0.95	0.06	7.017	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.93	0.06	8.247	A	A
C-AB	1.21	0.08	7.388	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	1.22	0.08	8.871	A	A
C-AB	1.59	0.11	7.959	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	1.25	0.08	8.873	A	A
C-AB	1.61	0.11	7.962	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.99	0.07	8.253	A	A
C-AB	1.23	0.08	7.391	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.79	0.05	7.852	A	A
C-AB	0.98	0.07	7.027	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - DM 2037, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
DM 2037, AM	DM 2037	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	Woolgrove Rd / High Dane	T-Junction	Two-way	A,B,C		7.30	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
Waveney Dr (NE)	A	Waveney Dr (NE)		Major
Kimberley Rd	B	Kimberley Rd		Minor
Waveney Dr (SW)	C	Waveney Dr (SW)		Major

Major Arm Geometry

Name	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)
Waveney Dr (SW)	6.00		0.00	✓	2.50	192.00	✓	6.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	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)
Kimberley Rd	One lane	3.00										37	17

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	497.905	0.091	0.229	0.144	0.327
1	B-C	634.639	0.097	0.246	-	-
1	C-B	707.523	0.274	0.274	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Waveney Dr (NE)	ONE HOUR	✓	249.00	100.000
Kimberley Rd	ONE HOUR	✓	35.00	100.000
Waveney Dr (SW)	ONE HOUR	✓	753.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Woolgrove Rd / High Dane (for whole period)

		To		
		Waveney Dr (NE)	**Kimberley Rd**	**Waveney Dr (SW)**
From	**Waveney Dr (NE)**	0.000	1.000	248.000
	Kimberley Rd	2.000	0.000	33.000
	Waveney Dr (SW)	726.000	27.000	0.000

Turning Proportions (PCU) - Woolgrove Rd / High Dane (for whole period)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	0.00	0.00	1.00
	Kimberley Rd	0.06	0.00	0.94
	Waveney Dr (SW)	0.96	0.04	0.00

Vehicle Mix

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (07:45-08:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (07:45-08:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (08:00-08:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (08:00-08:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (08:15-08:30)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (08:15-08:30)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (08:30-08:45)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (08:30-08:45)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (08:45-09:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (08:45-09:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (09:00-09:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (09:00-09:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-AC	0.07	7.87	0.08	A	32.12	48.17	6.05	7.53	0.07	6.05	7.53
C-AB	0.05	6.57	0.05	A	24.78	37.16	3.96	6.40	0.04	3.96	6.40
C-A	-	-	-	-	666.19	999.29	-	-	-	-	-
A-B	-	-	-	-	0.92	1.38	-	-	-	-	-
A-C	-	-	-	-	227.57	341.35	-	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	26.35	6.59	26.14	0.00	569.37	0.046	0.00	0.05	7.290	A
C-AB	20.33	5.08	20.19	0.00	656.13	0.031	0.00	0.03	6.225	A
C-A	546.57	136.64	546.57	0.00	-	-	-	-	-	-
A-B	0.75	0.19	0.75	0.00	-	-	-	-	-	-
A-C	186.71	46.68	186.71	0.00	-	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	31.46	7.87	31.42	0.00	557.98	0.056	0.05	0.07	7.520	A
C-AB	24.27	6.07	24.24	0.00	646.16	0.038	0.03	0.04	6.366	A
C-A	652.66	163.16	652.66	0.00	-	-	-	-	-	-
A-B	0.90	0.22	0.90	0.00	-	-	-	-	-	-
A-C	222.95	55.74	222.95	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	38.54	9.63	38.46	0.00	541.72	0.071	0.07	0.08	7.868	A
C-AB	29.73	7.43	29.68	0.00	632.37	0.047	0.04	0.05	6.570	A
C-A	799.34	199.84	799.34	0.00	-	-	-	-	-	-
A-B	1.10	0.28	1.10	0.00	-	-	-	-	-	-
A-C	273.05	68.26	273.05	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	38.54	9.63	38.53	0.00	541.71	0.071	0.08	0.08	7.869	A
C-AB	29.73	7.43	29.73	0.00	632.37	0.047	0.05	0.05	6.570	A
C-A	799.34	199.84	799.34	0.00	-	-	-	-	-	-
A-B	1.10	0.28	1.10	0.00	-	-	-	-	-	-
A-C	273.05	68.26	273.05	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	31.46	7.87	31.53	0.00	557.97	0.056	0.08	0.07	7.522	A
C-AB	24.27	6.07	24.32	0.00	646.16	0.038	0.05	0.04	6.370	A
C-A	652.66	163.16	652.66	0.00	-	-	-	-	-	-
A-B	0.90	0.22	0.90	0.00	-	-	-	-	-	-
A-C	222.95	55.74	222.95	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	26.35	6.59	26.40	0.00	569.36	0.046	0.07	0.05	7.293	A
C-AB	20.33	5.08	20.36	0.00	656.13	0.031	0.04	0.04	6.230	A
C-A	546.57	136.64	546.57	0.00	-	-	-	-	-	-
A-B	0.75	0.19	0.75	0.00	-	-	-	-	-	-
A-C	186.71	46.68	186.71	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.77	0.05	7.290	A	A
C-AB	0.52	0.03	6.225	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.96	0.06	7.520	A	A
C-AB	0.64	0.04	6.366	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	1.23	0.08	7.868	A	A
C-AB	0.81	0.05	6.570	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	1.26	0.08	7.869	A	A
C-AB	0.81	0.05	6.570	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	1.02	0.07	7.522	A	A
C-AB	0.65	0.04	6.370	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.82	0.05	7.293	A	A
C-AB	0.53	0.04	6.230	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - DM 2037, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
DM 2037, PM	DM 2037	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	Woolgrove Rd / High Dane	T-Junction	Two-way	A,B,C		8.90	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
Waveney Dr (NE)	A	Waveney Dr (NE)		Major
Kimberley Rd	B	Kimberley Rd		Minor
Waveney Dr (SW)	C	Waveney Dr (SW)		Major

Major Arm Geometry

Name	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)
Waveney Dr (SW)	6.00		0.00	✓	2.50	192.00	✓	6.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	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)
Kimberley Rd	One lane	3.00										37	17

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	497.905	0.091	0.229	0.144	0.327
1	B-C	634.639	0.097	0.246	-	-
1	C-B	707.523	0.274	0.274	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Waveney Dr (NE)	ONE HOUR	✓	627.00	100.000
Kimberley Rd	ONE HOUR	✓	36.00	100.000
Waveney Dr (SW)	ONE HOUR	✓	372.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Woolgrove Rd / High Dane (for whole period)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	0.000	3.000	624.000
	Kimberley Rd	1.000	0.000	35.000
	Waveney Dr (SW)	331.000	41.000	0.000

Turning Proportions (PCU) - Woolgrove Rd / High Dane (for whole period)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	0.00	0.00	1.00
	Kimberley Rd	0.03	0.00	0.97
	Waveney Dr (SW)	0.89	0.11	0.00

Vehicle Mix

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (16:45-17:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (16:45-17:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (17:00-17:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (17:00-17:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (17:15-17:30)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (17:15-17:30)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (17:30-17:45)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (17:30-17:45)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (17:45-18:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (17:45-18:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (18:00-18:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (18:00-18:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-AC	0.09	9.50	0.10	A	33.03	49.55	7.25	8.78	0.08	7.25	8.78
C-AB	0.09	8.37	0.10	A	37.62	56.43	7.35	7.81	0.08	7.35	7.81
C-A	-	-	-	-	303.73	455.60	-	-	-	-	-
A-B	-	-	-	-	2.75	4.13	-	-	-	-	-
A-C	-	-	-	-	572.59	858.89	-	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	27.10	6.78	26.86	0.00	511.68	0.053	0.00	0.06	8.163	A
C-AB	30.87	7.72	30.62	0.00	578.12	0.053	0.00	0.06	7.229	A
C-A	249.19	62.30	249.19	0.00	-	-	-	-	-	-
A-B	2.26	0.56	2.26	0.00	-	-	-	-	-	-
A-C	469.78	117.44	469.78	0.00	-	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	32.36	8.09	32.30	0.00	488.56	0.066	0.06	0.08	8.678	A
C-AB	36.86	9.21	36.79	0.00	553.01	0.067	0.06	0.08	7.671	A
C-A	297.56	74.39	297.56	0.00	-	-	-	-	-	-
A-B	2.70	0.67	2.70	0.00	-	-	-	-	-	-
A-C	560.96	140.24	560.96	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	39.64	9.91	39.53	0.00	456.42	0.087	0.08	0.10	9.497	A
C-AB	45.14	11.29	45.04	0.00	518.28	0.087	0.08	0.10	8.366	A
C-A	364.44	91.11	364.44	0.00	-	-	-	-	-	-
A-B	3.30	0.83	3.30	0.00	-	-	-	-	-	-
A-C	687.04	171.76	687.04	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	39.64	9.91	39.63	0.00	456.42	0.087	0.10	0.10	9.500	A
C-AB	45.14	11.29	45.14	0.00	518.28	0.087	0.10	0.10	8.369	A
C-A	364.44	91.11	364.44	0.00	-	-	-	-	-	-
A-B	3.30	0.83	3.30	0.00	-	-	-	-	-	-
A-C	687.04	171.76	687.04	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	32.36	8.09	32.46	0.00	488.55	0.066	0.10	0.08	8.685	A
C-AB	36.86	9.21	36.96	0.00	553.01	0.067	0.10	0.08	7.674	A
C-A	297.56	74.39	297.56	0.00	-	-	-	-	-	-
A-B	2.70	0.67	2.70	0.00	-	-	-	-	-	-
A-C	560.96	140.24	560.96	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	27.10	6.78	27.17	0.00	511.67	0.053	0.08	0.06	8.174	A
C-AB	30.87	7.72	30.93	0.00	578.12	0.053	0.08	0.06	7.239	A
C-A	249.19	62.30	249.19	0.00	-	-	-	-	-	-
A-B	2.26	0.56	2.26	0.00	-	-	-	-	-	-
A-C	469.78	117.44	469.78	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.88	0.06	8.163	A	A
C-AB	0.92	0.06	7.229	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	1.13	0.08	8.678	A	A
C-AB	1.17	0.08	7.671	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	1.51	0.10	9.497	A	A
C-AB	1.56	0.10	8.366	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	1.56	0.10	9.500	A	A
C-AB	1.57	0.10	8.369	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	1.21	0.08	8.685	A	A
C-AB	1.19	0.08	7.674	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	0.95	0.06	8.174	A	A
C-AB	0.94	0.06	7.239	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - DS 2022, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
DS 2022, AM	DS 2022	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	Woolgrove Rd / High Dane	T-Junction	Two-way	A,B,C		10.51	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
Waveney Dr (NE)	A	Waveney Dr (NE)		Major
Kimberley Rd	B	Kimberley Rd		Minor
Waveney Dr (SW)	C	Waveney Dr (SW)		Major

Major Arm Geometry

Name	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)
Waveney Dr (SW)	6.00		0.00	✓	2.50	192.00	✓	6.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	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)
Kimberley Rd	One lane	3.00										37	17

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	497.905	0.091	0.229	0.144	0.327
1	B-C	634.639	0.097	0.246	-	-
1	C-B	707.523	0.274	0.274	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Waveney Dr (NE)	ONE HOUR	✓	343.00	100.000
Kimberley Rd	ONE HOUR	✓	50.00	100.000
Waveney Dr (SW)	ONE HOUR	✓	762.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Woolgrove Rd / High Dane (for whole period)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	0.000	17.000	326.000
	Kimberley Rd	23.000	0.000	27.000
	Waveney Dr (SW)	743.000	19.000	0.000

Turning Proportions (PCU) - Woolgrove Rd / High Dane (for whole period)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	0.00	0.05	0.95
	Kimberley Rd	0.46	0.00	0.54
	Waveney Dr (SW)	0.98	0.02	0.00

Vehicle Mix

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (07:45-08:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (07:45-08:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (08:00-08:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (08:00-08:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (08:15-08:30)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (08:15-08:30)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (08:30-08:45)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (08:30-08:45)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (08:45-09:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (08:45-09:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (09:00-09:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (09:00-09:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-AC	0.14	11.92	0.18	B	45.88	68.82	12.27	10.70	0.14	12.27	10.70
C-AB	0.03	6.79	0.04	A	17.43	26.15	2.87	6.58	0.03	2.87	6.58
C-A	-	-	-	-	681.79	1022.68	-	-	-	-	-
A-B	-	-	-	-	15.60	23.40	-	-	-	-	-
A-C	-	-	-	-	299.14	448.71	-	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	37.64	9.41	37.24	0.00	446.91	0.084	0.00	0.10	9.658	A
C-AB	14.30	3.58	14.20	0.00	636.73	0.022	0.00	0.03	6.361	A
C-A	559.37	139.84	559.37	0.00	-	-	-	-	-	-
A-B	12.80	3.20	12.80	0.00	-	-	-	-	-	-
A-C	245.43	61.36	245.43	0.00	-	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	44.95	11.24	44.83	0.00	422.40	0.106	0.10	0.13	10.484	B
C-AB	17.08	4.27	17.06	0.00	622.99	0.027	0.03	0.03	6.534	A
C-A	667.94	166.99	667.94	0.00	-	-	-	-	-	-
A-B	15.28	3.82	15.28	0.00	-	-	-	-	-	-
A-C	293.07	73.27	293.07	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	55.05	13.76	54.85	0.00	387.16	0.142	0.13	0.18	11.909	B
C-AB	20.92	5.23	20.89	0.00	604.00	0.035	0.03	0.04	6.790	A
C-A	818.06	204.51	818.06	0.00	-	-	-	-	-	-
A-B	18.72	4.68	18.72	0.00	-	-	-	-	-	-
A-C	358.93	89.73	358.93	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	55.05	13.76	55.05	0.00	387.15	0.142	0.18	0.18	11.923	B
C-AB	20.92	5.23	20.92	0.00	604.00	0.035	0.04	0.04	6.790	A
C-A	818.06	204.51	818.06	0.00	-	-	-	-	-	-
A-B	18.72	4.68	18.72	0.00	-	-	-	-	-	-
A-C	358.93	89.73	358.93	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	44.95	11.24	45.14	0.00	422.38	0.106	0.18	0.13	10.504	B
C-AB	17.08	4.27	17.11	0.00	622.99	0.027	0.04	0.03	6.538	A
C-A	667.94	166.99	667.94	0.00	-	-	-	-	-	-
A-B	15.28	3.82	15.28	0.00	-	-	-	-	-	-
A-C	293.07	73.27	293.07	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	37.64	9.41	37.76	0.00	446.88	0.084	0.13	0.10	9.683	A
C-AB	14.30	3.58	14.33	0.00	636.73	0.022	0.03	0.03	6.361	A
C-A	559.37	139.84	559.37	0.00	-	-	-	-	-	-
A-B	12.80	3.20	12.80	0.00	-	-	-	-	-	-
A-C	245.43	61.36	245.43	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	1.44	0.10	9.658	A	A
C-AB	0.37	0.02	6.361	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	1.89	0.13	10.484	B	B
C-AB	0.46	0.03	6.534	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	2.61	0.17	11.909	B	B
C-AB	0.59	0.04	6.790	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	2.71	0.18	11.923	B	B
C-AB	0.59	0.04	6.790	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	2.05	0.14	10.504	B	B
C-AB	0.47	0.03	6.538	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	1.58	0.11	9.683	A	A
C-AB	0.38	0.03	6.361	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - DS 2022, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
DS 2022, PM	DS 2022	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	Woolgrove Rd / High Dane	T-Junction	Two-way	A,B,C		16.50	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
Waveney Dr (NE)	A	Waveney Dr (NE)		Major
Kimberley Rd	B	Kimberley Rd		Minor
Waveney Dr (SW)	C	Waveney Dr (SW)		Major

Major Arm Geometry

Name	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)
Waveney Dr (SW)	6.00		0.00	✓	2.50	192.00	✓	6.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	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)
Kimberley Rd	One lane	3.00										37	17

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	497.905	0.091	0.229	0.144	0.327
1	B-C	634.639	0.097	0.246	-	-
1	C-B	707.523	0.274	0.274	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Waveney Dr (NE)	ONE HOUR	✓	890.00	100.000
Kimberley Rd	ONE HOUR	✓	63.00	100.000
Waveney Dr (SW)	ONE HOUR	✓	421.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Woolgrove Rd / High Dane (for whole period)

		To		
		Waveney Dr (NE)	**Kimberley Rd**	**Waveney Dr (SW)**
From	**Waveney Dr (NE)**	0.000	53.000	837.000
	Kimberley Rd	35.000	0.000	28.000
	Waveney Dr (SW)	384.000	37.000	0.000

Turning Proportions (PCU) - Woolgrove Rd / High Dane (for whole period)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	0.00	0.06	0.94
	Kimberley Rd	0.56	0.00	0.44
	Waveney Dr (SW)	0.91	0.09	0.00

Vehicle Mix

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (16:45-17:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (16:45-17:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (17:00-17:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (17:00-17:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (17:15-17:30)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (17:15-17:30)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (17:30-17:45)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (17:30-17:45)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (17:45-18:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (17:45-18:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (18:00-18:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (18:00-18:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-AC	0.26	20.35	0.39	C	57.81	86.71	23.34	16.15	0.26	23.35	16.15
C-AB	0.09	9.94	0.11	A	33.95	50.93	7.62	8.98	0.08	7.62	8.98
C-A	-	-	-	-	352.37	528.55	-	-	-	-	-
A-B	-	-	-	-	48.63	72.95	-	-	-	-	-
A-C	-	-	-	-	768.05	1152.07	-	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	47.43	11.86	46.77	0.00	358.18	0.132	0.00	0.17	12.690	B
C-AB	27.86	6.96	27.61	0.00	523.84	0.053	0.00	0.06	7.975	A
C-A	289.10	72.27	289.10	0.00	-	-	-	-	-	-
A-B	39.90	9.98	39.90	0.00	-	-	-	-	-	-
A-C	630.14	157.53	630.14	0.00	-	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	56.64	14.16	56.37	0.00	319.22	0.177	0.17	0.23	15.050	C
C-AB	33.26	8.32	33.19	0.00	488.19	0.068	0.06	0.08	8.702	A
C-A	345.21	86.30	345.21	0.00	-	-	-	-	-	-
A-B	47.65	11.91	47.65	0.00	-	-	-	-	-	-
A-C	752.45	188.11	752.45	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	69.36	17.34	68.77	0.00	263.93	0.263	0.23	0.38	20.229	C
C-AB	40.74	10.18	40.61	0.00	438.90	0.093	0.08	0.11	9.939	A
C-A	422.79	105.70	422.79	0.00	-	-	-	-	-	-
A-B	58.35	14.59	58.35	0.00	-	-	-	-	-	-
A-C	921.55	230.39	921.55	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	69.36	17.34	69.34	0.00	263.89	0.263	0.38	0.39	20.348	C
C-AB	40.74	10.18	40.74	0.00	438.90	0.093	0.11	0.11	9.945	A
C-A	422.79	105.70	422.79	0.00	-	-	-	-	-	-
A-B	58.35	14.59	58.35	0.00	-	-	-	-	-	-
A-C	921.55	230.39	921.55	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	56.64	14.16	57.21	0.00	319.17	0.177	0.39	0.24	15.149	C
C-AB	33.26	8.32	33.38	0.00	488.19	0.068	0.11	0.08	8.710	A
C-A	345.21	86.30	345.21	0.00	-	-	-	-	-	-
A-B	47.65	11.91	47.65	0.00	-	-	-	-	-	-
A-C	752.45	188.11	752.45	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	47.43	11.86	47.71	0.00	358.09	0.132	0.24	0.17	12.769	B
C-AB	27.86	6.96	27.93	0.00	523.84	0.053	0.08	0.06	7.986	A
C-A	289.10	72.27	289.10	0.00	-	-	-	-	-	-
A-B	39.90	9.98	39.90	0.00	-	-	-	-	-	-
A-C	630.14	157.53	630.14	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	2.35	0.16	12.690	B	B
C-AB	0.91	0.06	7.975	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	3.36	0.22	15.050	C	B
C-AB	1.20	0.08	8.702	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	5.41	0.36	20.229	C	C
C-AB	1.67	0.11	9.939	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	5.76	0.38	20.348	C	C
C-AB	1.69	0.11	9.945	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	3.81	0.25	15.149	C	B
C-AB	1.22	0.08	8.710	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	2.66	0.18	12.769	B	B
C-AB	0.93	0.06	7.986	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - DS 2037, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
DS 2037, AM	DS 2037	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	Woolgrove Rd / High Dane	T-Junction	Two-way	A,B,C		11.93	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
Waveney Dr (NE)	A	Waveney Dr (NE)		Major
Kimberley Rd	B	Kimberley Rd		Minor
Waveney Dr (SW)	C	Waveney Dr (SW)		Major

Major Arm Geometry

Name	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)
Waveney Dr (SW)	6.00		0.00	✓	2.50	192.00	✓	6.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	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)
Kimberley Rd	One lane	3.00										37	17

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	497.905	0.091	0.229	0.144	0.327
1	B-C	634.639	0.097	0.246	-	-
1	C-B	707.523	0.274	0.274	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Waveney Dr (NE)	ONE HOUR	✓	419.00	100.000
Kimberley Rd	ONE HOUR	✓	55.00	100.000
Waveney Dr (SW)	ONE HOUR	✓	912.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Woolgrove Rd / High Dane (for whole period)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	0.000	20.000	399.000
	Kimberley Rd	25.000	0.000	30.000
	Waveney Dr (SW)	890.000	22.000	0.000

Turning Proportions (PCU) - Woolgrove Rd / High Dane (for whole period)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	0.00	0.05	0.95
	Kimberley Rd	0.45	0.00	0.55
	Waveney Dr (SW)	0.98	0.02	0.00

Vehicle Mix

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (07:45-08:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (07:45-08:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (08:00-08:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (08:00-08:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (08:15-08:30)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (08:15-08:30)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (08:30-08:45)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (08:30-08:45)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (08:45-09:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (08:45-09:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (09:00-09:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (09:00-09:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-AC	0.17	13.86	0.23	B	50.47	75.70	15.13	11.99	0.17	15.13	11.99
C-AB	0.04	7.11	0.05	A	20.19	30.28	3.45	6.83	0.04	3.45	6.83
C-A	-	-	-	-	816.68	1225.02	-	-	-	-	-
A-B	-	-	-	-	18.35	27.53	-	-	-	-	-
A-C	-	-	-	-	366.13	549.19	-	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	41.41	10.35	40.93	0.00	421.75	0.098	0.00	0.12	10.386	B
C-AB	16.56	4.14	16.44	0.00	621.05	0.027	0.00	0.03	6.547	A
C-A	670.04	167.51	670.04	0.00	-	-	-	-	-	-
A-B	15.06	3.76	15.06	0.00	-	-	-	-	-	-
A-C	300.39	75.10	300.39	0.00	-	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	49.44	12.36	49.29	0.00	391.05	0.126	0.12	0.16	11.582	B
C-AB	19.78	4.94	19.75	0.00	604.27	0.033	0.03	0.04	6.774	A
C-A	800.09	200.02	800.09	0.00	-	-	-	-	-	-
A-B	17.98	4.49	17.98	0.00	-	-	-	-	-	-
A-C	358.69	89.67	358.69	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	60.56	15.14	60.27	0.00	346.22	0.175	0.16	0.23	13.834	B
C-AB	24.22	6.06	24.18	0.00	581.06	0.042	0.04	0.05	7.110	A
C-A	979.91	244.98	979.91	0.00	-	-	-	-	-	-
A-B	22.02	5.51	22.02	0.00	-	-	-	-	-	-
A-C	439.31	109.83	439.31	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	60.56	15.14	60.55	0.00	346.21	0.175	0.23	0.23	13.862	B
C-AB	24.22	6.06	24.22	0.00	581.06	0.042	0.05	0.05	7.110	A
C-A	979.91	244.98	979.91	0.00	-	-	-	-	-	-
A-B	22.02	5.51	22.02	0.00	-	-	-	-	-	-
A-C	439.31	109.83	439.31	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	49.44	12.36	49.72	0.00	391.03	0.126	0.23	0.16	11.611	B
C-AB	19.78	4.94	19.82	0.00	604.27	0.033	0.05	0.04	6.777	A
C-A	800.09	200.02	800.09	0.00	-	-	-	-	-	-
A-B	17.98	4.49	17.98	0.00	-	-	-	-	-	-
A-C	358.69	89.67	358.69	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	41.41	10.35	41.57	0.00	421.71	0.098	0.16	0.12	10.421	B
C-AB	16.56	4.14	16.59	0.00	621.05	0.027	0.04	0.03	6.550	A
C-A	670.04	167.51	670.04	0.00	-	-	-	-	-	-
A-B	15.06	3.76	15.06	0.00	-	-	-	-	-	-
A-C	300.39	75.10	300.39	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	1.70	0.11	10.386	B	B
C-AB	0.45	0.03	6.547	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	2.29	0.15	11.582	B	B
C-AB	0.56	0.04	6.774	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	3.31	0.22	13.834	B	B
C-AB	0.71	0.05	7.110	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	3.45	0.23	13.862	B	B
C-AB	0.72	0.05	7.110	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	2.51	0.17	11.611	B	B
C-AB	0.56	0.04	6.777	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	1.87	0.12	10.421	B	B
C-AB	0.45	0.03	6.550	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - DS 2037, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	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)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
DS 2037, PM	DS 2037	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	Woolgrove Rd / High Dane	T-Junction	Two-way	A,B,C		23.24	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Arm	Name	Description	Arm Type
Waveney Dr (NE)	A	Waveney Dr (NE)		Major
Kimberley Rd	B	Kimberley Rd		Minor
Waveney Dr (SW)	C	Waveney Dr (SW)		Major

Major Arm Geometry

Name	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)
Waveney Dr (SW)	6.00		0.00	✓	2.50	192.00	✓	6.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	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)
Kimberley Rd	One lane	3.00										37	17

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	497.905	0.091	0.229	0.144	0.327
1	B-C	634.639	0.097	0.246	-	-
1	C-B	707.523	0.274	0.274	-	-

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

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Waveney Dr (NE)	ONE HOUR	✓	1037.00	100.000
Kimberley Rd	ONE HOUR	✓	70.00	100.000
Waveney Dr (SW)	ONE HOUR	✓	498.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Woolgrove Rd / High Dane (for whole period)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	0.000	60.000	977.000
	Kimberley Rd	40.000	0.000	30.000
	Waveney Dr (SW)	458.000	40.000	0.000

Turning Proportions (PCU) - Woolgrove Rd / High Dane (for whole period)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	0.00	0.06	0.94
	Kimberley Rd	0.57	0.00	0.43
	Waveney Dr (SW)	0.92	0.08	0.00

Vehicle Mix

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (16:45-17:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (16:45-17:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (17:00-17:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (17:00-17:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (17:15-17:30)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (17:15-17:30)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (17:30-17:45)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (17:30-17:45)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (17:45-18:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (17:45-18:00)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Average PCU Per Vehicle - Woolgrove Rd / High Dane - (18:00-18:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	1.100	1.100	1.100
	Kimberley Rd	1.100	1.100	1.100
	Waveney Dr (SW)	1.100	1.100	1.100

Heavy Vehicle Percentages - Woolgrove Rd / High Dane - (18:00-18:15)

		To		
		Waveney Dr (NE)	Kimberley Rd	Waveney Dr (SW)
From	Waveney Dr (NE)	10.0	10.0	10.0
	Kimberley Rd	10.0	10.0	10.0
	Waveney Dr (SW)	10.0	10.0	10.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-AC	0.37	30.06	0.63	D	64.23	96.35	34.12	21.25	0.38	34.12	21.25
C-AB	0.11	11.30	0.14	B	36.70	55.06	9.11	9.93	0.10	9.11	9.93
C-A	-	-	-	-	420.27	630.40	-	-	-	-	-
A-B	-	-	-	-	55.06	82.59	-	-	-	-	-
A-C	-	-	-	-	896.51	1344.77	-	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	52.70	13.17	51.86	0.00	322.07	0.164	0.00	0.21	14.611	B
C-AB	30.11	7.53	29.83	0.00	493.51	0.061	0.00	0.07	8.535	A
C-A	344.81	86.20	344.81	0.00	-	-	-	-	-	-
A-B	45.17	11.29	45.17	0.00	-	-	-	-	-	-
A-C	735.54	183.88	735.54	0.00	-	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	62.93	15.73	62.50	0.00	275.57	0.228	0.21	0.32	18.547	C
C-AB	35.96	8.99	35.87	0.00	451.97	0.080	0.07	0.09	9.514	A
C-A	411.73	102.93	411.73	0.00	-	-	-	-	-	-
A-B	53.94	13.48	53.94	0.00	-	-	-	-	-	-
A-C	878.30	219.58	878.30	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	77.07	19.27	75.89	0.00	208.63	0.369	0.32	0.61	29.567	D
C-AB	44.04	11.01	43.87	0.00	394.53	0.112	0.09	0.14	11.286	B
C-A	504.27	126.07	504.27	0.00	-	-	-	-	-	-
A-B	66.06	16.52	66.06	0.00	-	-	-	-	-	-
A-C	1075.70	268.92	1075.70	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	77.07	19.27	77.01	0.00	208.58	0.370	0.61	0.63	30.062	D
C-AB	44.04	11.01	44.04	0.00	394.53	0.112	0.14	0.14	11.297	B
C-A	504.27	126.07	504.27	0.00	-	-	-	-	-	-
A-B	66.06	16.52	66.06	0.00	-	-	-	-	-	-
A-C	1075.70	268.92	1075.70	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	62.93	15.73	64.11	0.00	275.50	0.228	0.63	0.33	18.834	C
C-AB	35.96	8.99	36.12	0.00	451.97	0.080	0.14	0.10	9.528	A
C-A	411.73	102.93	411.73	0.00	-	-	-	-	-	-
A-B	53.94	13.48	53.94	0.00	-	-	-	-	-	-
A-C	878.30	219.58	878.30	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-AC	52.70	13.17	53.16	0.00	321.96	0.164	0.33	0.22	14.756	B
C-AB	30.11	7.53	30.21	0.00	493.51	0.061	0.10	0.07	8.550	A
C-A	344.81	86.20	344.81	0.00	-	-	-	-	-	-
A-B	45.17	11.29	45.17	0.00	-	-	-	-	-	-
A-C	735.54	183.88	735.54	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	2.98	0.20	14.611	B	B
C-AB	1.05	0.07	8.535	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	4.54	0.30	18.547	C	B
C-AB	1.41	0.09	9.514	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	8.48	0.57	29.567	D	C
C-AB	2.05	0.14	11.286	B	B
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	9.34	0.62	30.062	D	C
C-AB	2.07	0.14	11.297	B	B
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	5.34	0.36	18.834	C	B
C-AB	1.45	0.10	9.528	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

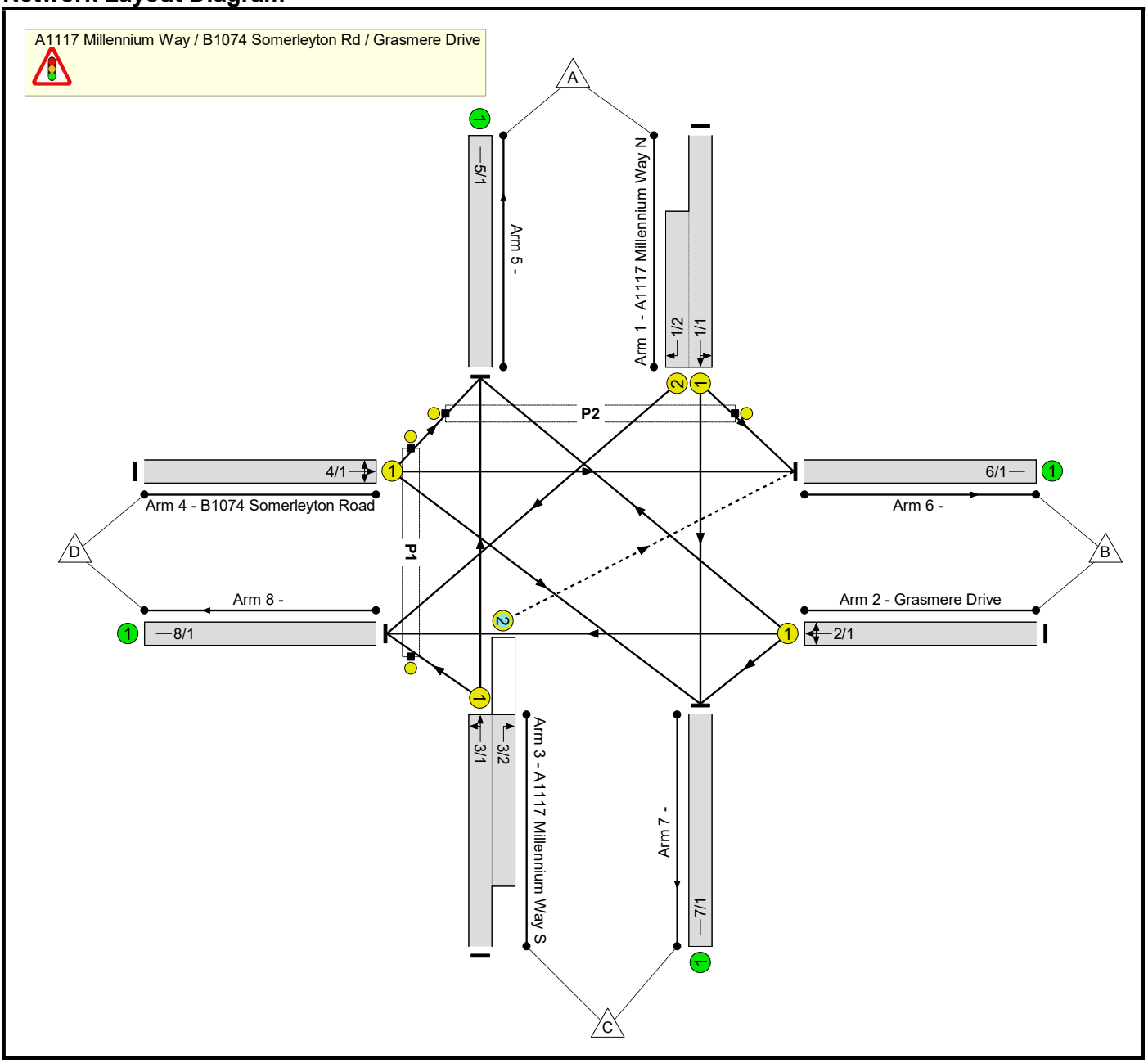
Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	3.44	0.23	14.756	B	B
C-AB	1.08	0.07	8.550	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Full Input Data And Results

User and Project Details

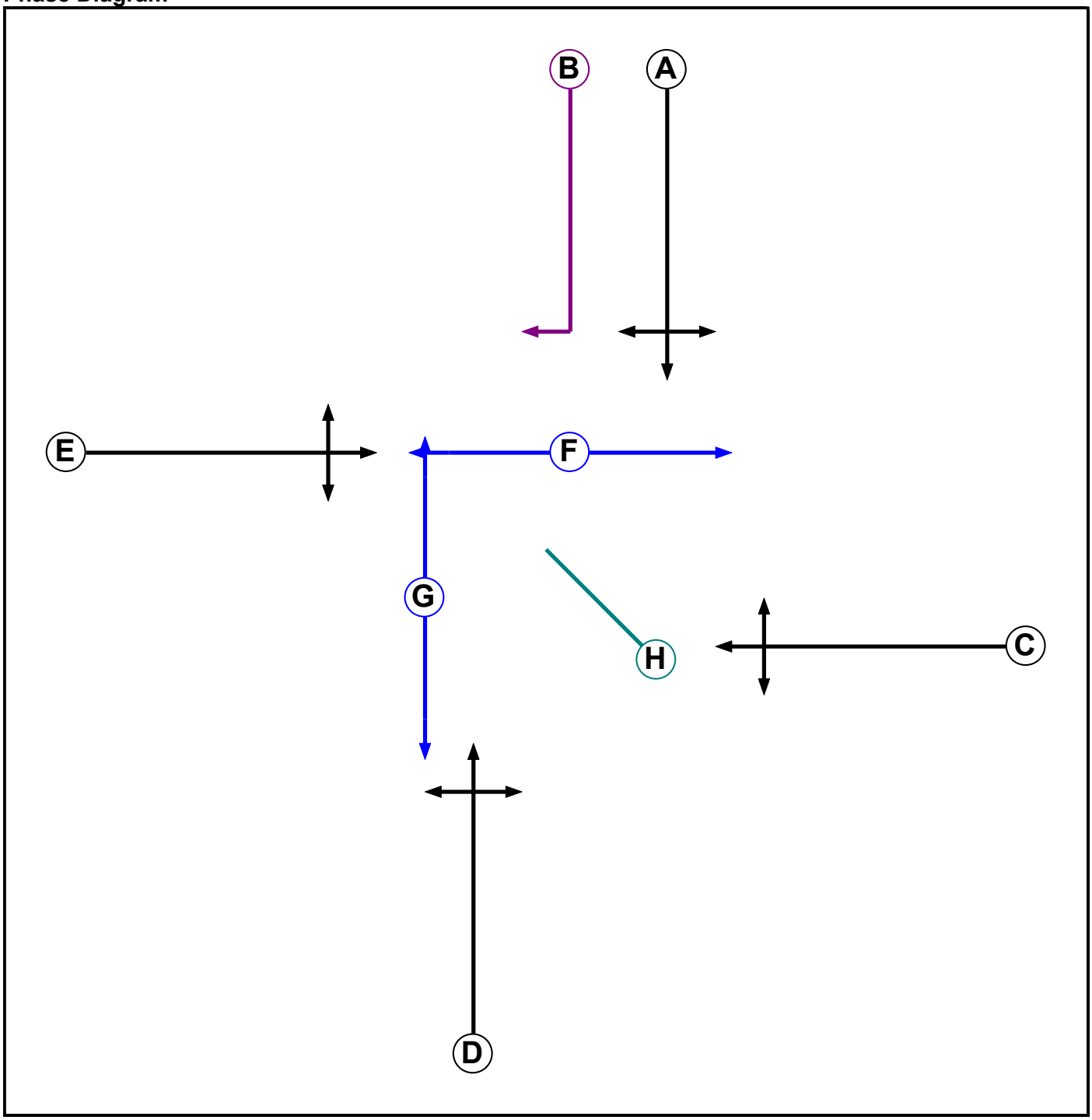
Project:	
Title:	
Location:	
Additional detail:	
File name:	21 Millennium Way-Somerleyton Rd v3 2018-08-15.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Ind. Arrow	A	4	4
C	Traffic		7	7
D	Traffic		7	7
E	Traffic		7	7
F	Pedestrian		5	5
G	Pedestrian		5	5
H	Dummy		2	2

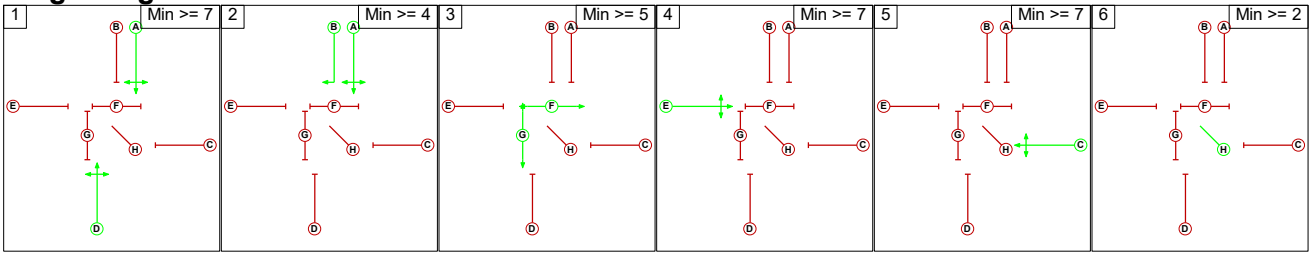
Phase Intergreens Matrix

		Starting Phase							
		A	B	C	D	E	F	G	H
Terminating Phase	A		-	7	-	7	5	10	3
	B	-		7	7	7	5	10	3
	C	7	7		7	7	10	10	3
	D	-	5	7		7	10	10	3
	E	7	7	7	7		8	8	3
	F	5	5	5	5	5		-	3
	G	5	5	5	5	5	-		3
	H	2	2	2	2	2	2	2	

Phases in Stage

Stage No.	Phases in Stage
1	A D
2	A B
3	F G
4	E
5	C
6	H

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Full Input Data And Results

Prohibited Stage Change

		To Stage					
		1	2	3	4	5	6
From Stage	1		5	10	7	7	3
	2	7		10	7	7	3
	3	5	5		5	5	3
	4	7	7	8		7	3
	5	7	7	10	7		3
	6	2	2	2	2	2	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive											
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)**
3/2 (A1117 Millennium Way S)	6/1 (Right)	1439	0	1/1	1.09	All	5.00	-	0.50	5	2.00

Full Input Data And Results

Lane Input Data

Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive												
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 (A1117 Millennium Way N)	U	A B	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 6 Left	21.90
											Arm 7 Ahead	Inf
1/2 (A1117 Millennium Way N)	U	A B	2	3	10.1	Geom	-	3.30	0.00	Y	Arm 8 Right	18.70
2/1 (Grasmere Drive)	U	C	2	3	60.0	Geom	-	4.50	0.00	Y	Arm 5 Right	22.70
											Arm 7 Left	22.60
											Arm 8 Ahead	Inf
3/1 (A1117 Millennium Way S)	U	D	2	3	60.0	Geom	-	3.20	0.00	Y	Arm 5 Ahead	Inf
											Arm 8 Left	22.00
3/2 (A1117 Millennium Way S)	O	D	2	3	11.1	Geom	-	3.20	0.00	Y	Arm 6 Right	18.70
4/1 (B1074 Somerleyton Road)	U	E	2	3	60.0	Geom	-	5.00	0.00	Y	Arm 5 Left	23.10
											Arm 6 Ahead	Inf
											Arm 7 Right	22.70
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	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'Base 2016 AM'	08:00	09:00	01:00	
2: 'Base 2016 PM'	17:00	18:00	01:00	
3: 'DM 2022 AM'	08:00	09:00	01:00	
4: 'DM 2022 PM'	17:00	18:00	01:00	
5: 'DS 2022 AM'	08:00	09:00	01:00	
6: 'DS 2022 PM'	17:00	18:00	01:00	
7: 'DM 2037 AM'	08:00	09:00	01:00	
8: 'DM 2037 PM'	17:00	18:00	01:00	
9: 'DS 2037 AM'	08:00	09:00	01:00	
10: 'DS 2037 PM'	17:00	18:00	01:00	

Scenario 1: 'Base 2016 AM' (FG1: 'Base 2016 AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	11	310	145	466
	B	1	0	0	13	14
	C	390	10	0	30	430
	D	51	80	111	0	242
	Tot.	442	101	421	188	1152

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: Base 2016 AM
Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	
1/1 (with short)	466(In) 321(Out)
1/2 (short)	145
2/1	14
3/1 (with short)	430(In) 420(Out)
3/2 (short)	10
4/1	242
5/1	442
6/1	101
7/1	421
8/1	188

Lane Saturation Flows

Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive								
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 (A1117 Millennium Way N)	3.30	0.00	Y	Arm 6 Left	21.90	3.4 %	1940	1940
				Arm 7 Ahead	Inf	96.6 %		
1/2 (A1117 Millennium Way N)	3.30	0.00	Y	Arm 8 Right	18.70	100.0 %	1801	1801
2/1 (Grasmere Drive)	4.50	0.00	Y	Arm 5 Right	22.70	7.1 %	2055	2055
				Arm 7 Left	22.60	0.0 %		
				Arm 8 Ahead	Inf	92.9 %		
3/1 (A1117 Millennium Way S)	3.20	0.00	Y	Arm 5 Ahead	Inf	92.9 %	1926	1926
				Arm 8 Left	22.00	7.1 %		
3/2 (A1117 Millennium Way S)	3.20	0.00	Y	Arm 6 Right	18.70	100.0 %	1791	1791
4/1 (B1074 Somerleyton Road)	5.00	0.00	Y	Arm 5 Left	23.10	21.1 %	2026	2026
				Arm 6 Ahead	Inf	33.1 %		
				Arm 7 Right	22.70	45.9 %		
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

Full Input Data And Results

Scenario 2: 'Base 2016 PM' (FG2: 'Base 2016 PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	3	434	33	470
	B	18	0	0	87	105
	C	373	0	0	83	456
	D	87	34	45	0	166
	Tot.	478	37	479	203	1197

Traffic Lane Flows

Lane	Scenario 2: Base 2016 PM
Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	
1/1 (with short)	470(In) 437(Out)
1/2 (short)	33
2/1	105
3/1 (with short)	456(In) 456(Out)
3/2 (short)	0
4/1	166
5/1	478
6/1	37
7/1	479
8/1	203

Full Input Data And Results

Lane Saturation Flows

Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive								
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 (A1117 Millennium Way N)	3.30	0.00	Y	Arm 6 Left	21.90	0.7 %	1944	1944
				Arm 7 Ahead	Inf	99.3 %		
1/2 (A1117 Millennium Way N)	3.30	0.00	Y	Arm 8 Right	18.70	100.0 %	1801	1801
2/1 (Grasmere Drive)	4.50	0.00	Y	Arm 5 Right	22.70	17.1 %	2042	2042
				Arm 7 Left	22.60	0.0 %		
				Arm 8 Ahead	Inf	82.9 %		
3/1 (A1117 Millennium Way S)	3.20	0.00	Y	Arm 5 Ahead	Inf	81.8 %	1911	1911
				Arm 8 Left	22.00	18.2 %		
3/2 (A1117 Millennium Way S)	3.20	0.00	Y	Arm 6 Right	18.70	0.0 %	1935	1935
4/1 (B1074 Somerleyton Road)	5.00	0.00	Y	Arm 5 Left	23.10	52.4 %	2011	2011
				Arm 6 Ahead	Inf	20.5 %		
				Arm 7 Right	22.70	27.1 %		
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 3: 'DM 2022 AM' (FG3: 'DM 2022 AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	7	363	196	566
	B	0	0	0	26	26
	C	350	7	0	66	423
	D	160	63	98	0	321
	Tot.	510	77	461	288	1336

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: DM 2022 AM
Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	
1/1 (with short)	566(In) 370(Out)
1/2 (short)	196
2/1	26
3/1 (with short)	423(In) 416(Out)
3/2 (short)	7
4/1	321
5/1	510
6/1	77
7/1	461
8/1	288

Lane Saturation Flows

Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive								
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 (A1117 Millennium Way N)	3.30	0.00	Y	Arm 6 Left	21.90	1.9 %	1942	1942
				Arm 7 Ahead	Inf	98.1 %		
1/2 (A1117 Millennium Way N)	3.30	0.00	Y	Arm 8 Right	18.70	100.0 %	1801	1801
2/1 (Grasmere Drive)	4.50	0.00	Y	Arm 5 Right	22.70	0.0 %	2065	2065
				Arm 7 Left	22.60	0.0 %		
				Arm 8 Ahead	Inf	100.0 %		
3/1 (A1117 Millennium Way S)	3.20	0.00	Y	Arm 5 Ahead	Inf	84.1 %	1914	1914
				Arm 8 Left	22.00	15.9 %		
3/2 (A1117 Millennium Way S)	3.20	0.00	Y	Arm 6 Right	18.70	100.0 %	1791	1791
4/1 (B1074 Somerleyton Road)	5.00	0.00	Y	Arm 5 Left	23.10	49.8 %	2009	2009
				Arm 6 Ahead	Inf	19.6 %		
				Arm 7 Right	22.70	30.5 %		
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

Full Input Data And Results

Scenario 4: 'DM 2022 PM' (FG4: 'DM 2022 PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	4	460	81	545
	B	18	0	0	223	241
	C	376	0	0	88	464
	D	193	28	27	0	248
	Tot.	587	32	487	392	1498

Traffic Lane Flows

Lane	Scenario 4: DM 2022 PM
Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	
1/1 (with short)	545(In) 464(Out)
1/2 (short)	81
2/1	241
3/1 (with short)	464(In) 464(Out)
3/2 (short)	0
4/1	248
5/1	587
6/1	32
7/1	487
8/1	392

Full Input Data And Results

Lane Saturation Flows

Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive								
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 (A1117 Millennium Way N)	3.30	0.00	Y	Arm 6 Left	21.90	0.9 %	1944	1944
				Arm 7 Ahead	Inf	99.1 %		
1/2 (A1117 Millennium Way N)	3.30	0.00	Y	Arm 8 Right	18.70	100.0 %	1801	1801
2/1 (Grasmere Drive)	4.50	0.00	Y	Arm 5 Right	22.70	7.5 %	2055	2055
				Arm 7 Left	22.60	0.0 %		
				Arm 8 Ahead	Inf	92.5 %		
3/1 (A1117 Millennium Way S)	3.20	0.00	Y	Arm 5 Ahead	Inf	81.0 %	1910	1910
				Arm 8 Left	22.00	19.0 %		
3/2 (A1117 Millennium Way S)	3.20	0.00	Y	Arm 6 Right	18.70	0.0 %	1935	1935
4/1 (B1074 Somerleyton Road)	5.00	0.00	Y	Arm 5 Left	23.10	77.8 %	2000	2000
				Arm 6 Ahead	Inf	11.3 %		
				Arm 7 Right	22.70	10.9 %		
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 5: 'DS 2022 AM' (FG5: 'DS 2022 AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	3	715	27	745
	B	0	0	0	34	34
	C	412	0	0	71	483
	D	158	64	103	0	325
	Tot.	570	67	818	132	1587

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: DS 2022 AM
Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	
1/1 (with short)	745(In) 718(Out)
1/2 (short)	27
2/1	34
3/1 (with short)	483(In) 483(Out)
3/2 (short)	0
4/1	325
5/1	570
6/1	67
7/1	818
8/1	132

Lane Saturation Flows

Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive								
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 (A1117 Millennium Way N)	3.30	0.00	Y	Arm 6 Left	21.90	0.4 %	1944	1944
				Arm 7 Ahead	Inf	99.6 %		
1/2 (A1117 Millennium Way N)	3.30	0.00	Y	Arm 8 Right	18.70	100.0 %	1801	1801
2/1 (Grasmere Drive)	4.50	0.00	Y	Arm 5 Right	22.70	0.0 %	2065	2065
				Arm 7 Left	22.60	0.0 %		
				Arm 8 Ahead	Inf	100.0 %		
3/1 (A1117 Millennium Way S)	3.20	0.00	Y	Arm 5 Ahead	Inf	85.3 %	1916	1916
				Arm 8 Left	22.00	14.7 %		
3/2 (A1117 Millennium Way S)	3.20	0.00	Y	Arm 6 Right	18.70	0.0 %	1935	1935
4/1 (B1074 Somerleyton Road)	5.00	0.00	Y	Arm 5 Left	23.10	48.6 %	2009	2009
				Arm 6 Ahead	Inf	19.7 %		
				Arm 7 Right	22.70	31.7 %		
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 6: 'DS 2022 PM' (FG6: 'DS 2022 PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	1	494	65	560
	B	23	0	0	211	234
	C	450	0	0	38	488
	D	191	24	64	0	279
	Tot.	664	25	558	314	1561

Traffic Lane Flows

Lane	Scenario 6: DS 2022 PM
Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	
1/1 (with short)	560(In) 495(Out)
1/2 (short)	65
2/1	234
3/1 (with short)	488(In) 488(Out)
3/2 (short)	0
4/1	279
5/1	664
6/1	25
7/1	558
8/1	314

Full Input Data And Results

Lane Saturation Flows

Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive								
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 (A1117 Millennium Way N)	3.30	0.00	Y	Arm 6 Left	21.90	0.2 %	1945	1945
				Arm 7 Ahead	Inf	99.8 %		
1/2 (A1117 Millennium Way N)	3.30	0.00	Y	Arm 8 Right	18.70	100.0 %	1801	1801
2/1 (Grasmere Drive)	4.50	0.00	Y	Arm 5 Right	22.70	9.8 %	2052	2052
				Arm 7 Left	22.60	0.0 %		
				Arm 8 Ahead	Inf	90.2 %		
3/1 (A1117 Millennium Way S)	3.20	0.00	Y	Arm 5 Ahead	Inf	92.2 %	1925	1925
				Arm 8 Left	22.00	7.8 %		
3/2 (A1117 Millennium Way S)	3.20	0.00	Y	Arm 6 Right	18.70	0.0 %	1935	1935
4/1 (B1074 Somerleyton Road)	5.00	0.00	Y	Arm 5 Left	23.10	68.5 %	1996	1996
				Arm 6 Ahead	Inf	8.6 %		
				Arm 7 Right	22.70	22.9 %		
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 7: 'DM 2037 AM' (FG7: 'DM 2037 AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	9	436	228	673
	B	0	0	0	30	30
	C	448	0	0	91	539
	D	167	63	110	0	340
	Tot.	615	72	546	349	1582

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 7: DM 2037 AM
Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	
1/1 (with short)	673(In) 445(Out)
1/2 (short)	228
2/1	30
3/1 (with short)	539(In) 539(Out)
3/2 (short)	0
4/1	340
5/1	615
6/1	72
7/1	546
8/1	349

Lane Saturation Flows

Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive								
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 (A1117 Millennium Way N)	3.30	0.00	Y	Arm 6 Left	21.90	2.0 %	1942	1942
				Arm 7 Ahead	Inf	98.0 %		
1/2 (A1117 Millennium Way N)	3.30	0.00	Y	Arm 8 Right	18.70	100.0 %	1801	1801
2/1 (Grasmere Drive)	4.50	0.00	Y	Arm 5 Right	22.70	0.0 %	2065	2065
				Arm 7 Left	22.60	0.0 %		
				Arm 8 Ahead	Inf	100.0 %		
3/1 (A1117 Millennium Way S)	3.20	0.00	Y	Arm 5 Ahead	Inf	83.1 %	1913	1913
				Arm 8 Left	22.00	16.9 %		
3/2 (A1117 Millennium Way S)	3.20	0.00	Y	Arm 6 Right	18.70	0.0 %	1935	1935
4/1 (B1074 Somerleyton Road)	5.00	0.00	Y	Arm 5 Left	23.10	49.1 %	2008	2008
				Arm 6 Ahead	Inf	18.5 %		
				Arm 7 Right	22.70	32.4 %		
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 8: 'DM 2037 PM' (FG8: 'DM 2037 PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	2	488	79	569
	B	23	0	0	284	307
	C	424	0	0	55	479
	D	219	24	32	0	275
	Tot.	666	26	520	418	1630

Traffic Lane Flows

Lane	Scenario 8: DM 2037 PM
Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	
1/1 (with short)	569(In) 490(Out)
1/2 (short)	79
2/1	307
3/1 (with short)	479(In) 479(Out)
3/2 (short)	0
4/1	275
5/1	666
6/1	26
7/1	520
8/1	418

Full Input Data And Results

Lane Saturation Flows

Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive								
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 (A1117 Millennium Way N)	3.30	0.00	Y	Arm 6 Left	21.90	0.4 %	1944	1944
				Arm 7 Ahead	Inf	99.6 %		
1/2 (A1117 Millennium Way N)	3.30	0.00	Y	Arm 8 Right	18.70	100.0 %	1801	1801
2/1 (Grasmere Drive)	4.50	0.00	Y	Arm 5 Right	22.70	7.5 %	2055	2055
				Arm 7 Left	22.60	0.0 %		
				Arm 8 Ahead	Inf	92.5 %		
3/1 (A1117 Millennium Way S)	3.20	0.00	Y	Arm 5 Ahead	Inf	88.5 %	1920	1920
				Arm 8 Left	22.00	11.5 %		
3/2 (A1117 Millennium Way S)	3.20	0.00	Y	Arm 6 Right	18.70	0.0 %	1935	1935
4/1 (B1074 Somerleyton Road)	5.00	0.00	Y	Arm 5 Left	23.10	79.6 %	1996	1996
				Arm 6 Ahead	Inf	8.7 %		
				Arm 7 Right	22.70	11.6 %		
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

Scenario 9: 'DS 2037 AM' (FG9: 'DS 2037 AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	5	789	28	822
	B	0	0	0	39	39
	C	502	0	0	85	587
	D	159	67	111	0	337
	Tot.	661	72	900	152	1785

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 9: DS 2037 AM
Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	
1/1 (with short)	822(In) 794(Out)
1/2 (short)	28
2/1	39
3/1 (with short)	587(In) 587(Out)
3/2 (short)	0
4/1	337
5/1	661
6/1	72
7/1	900
8/1	152

Lane Saturation Flows

Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive								
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 (A1117 Millennium Way N)	3.30	0.00	Y	Arm 6 Left	21.90	0.6 %	1944	1944
				Arm 7 Ahead	Inf	99.4 %		
1/2 (A1117 Millennium Way N)	3.30	0.00	Y	Arm 8 Right	18.70	100.0 %	1801	1801
2/1 (Grasmere Drive)	4.50	0.00	Y	Arm 5 Right	22.70	0.0 %	2065	2065
				Arm 7 Left	22.60	0.0 %		
				Arm 8 Ahead	Inf	100.0 %		
3/1 (A1117 Millennium Way S)	3.20	0.00	Y	Arm 5 Ahead	Inf	85.5 %	1916	1916
				Arm 8 Left	22.00	14.5 %		
3/2 (A1117 Millennium Way S)	3.20	0.00	Y	Arm 6 Right	18.70	0.0 %	1935	1935
4/1 (B1074 Somerleyton Road)	5.00	0.00	Y	Arm 5 Left	23.10	47.2 %	2010	2010
				Arm 6 Ahead	Inf	19.9 %		
				Arm 7 Right	22.70	32.9 %		
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

Full Input Data And Results

Scenario 10: 'DS 2037 PM' (FG10: 'DS 2037 PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	4	502	67	573
	B	26	0	0	235	261
	C	471	0	0	25	496
	D	210	18	89	0	317
	Tot.	707	22	591	327	1647

Traffic Lane Flows

Lane	Scenario 10: DS 2037 PM
Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	
1/1 (with short)	573(In) 506(Out)
1/2 (short)	67
2/1	261
3/1 (with short)	496(In) 496(Out)
3/2 (short)	0
4/1	317
5/1	707
6/1	22
7/1	591
8/1	327

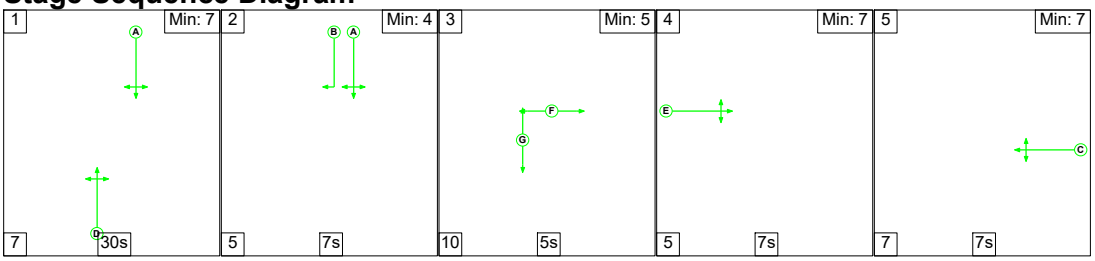
Full Input Data And Results

Lane Saturation Flows

Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive								
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 (A1117 Millennium Way N)	3.30	0.00	Y	Arm 6 Left	21.90	0.8 %	1944	1944
				Arm 7 Ahead	Inf	99.2 %		
1/2 (A1117 Millennium Way N)	3.30	0.00	Y	Arm 8 Right	18.70	100.0 %	1801	1801
2/1 (Grasmere Drive)	4.50	0.00	Y	Arm 5 Right	22.70	10.0 %	2051	2051
				Arm 7 Left	22.60	0.0 %		
				Arm 8 Ahead	Inf	90.0 %		
3/1 (A1117 Millennium Way S)	3.20	0.00	Y	Arm 5 Ahead	Inf	95.0 %	1928	1928
				Arm 8 Left	22.00	5.0 %		
3/2 (A1117 Millennium Way S)	3.20	0.00	Y	Arm 6 Right	18.70	0.0 %	1935	1935
4/1 (B1074 Somerleyton Road)	5.00	0.00	Y	Arm 5 Left	23.10	66.2 %	1992	1992
				Arm 6 Ahead	Inf	5.7 %		
				Arm 7 Right	22.70	28.1 %		
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: 'Base 2016 AM' (FG1: 'Base 2016 AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

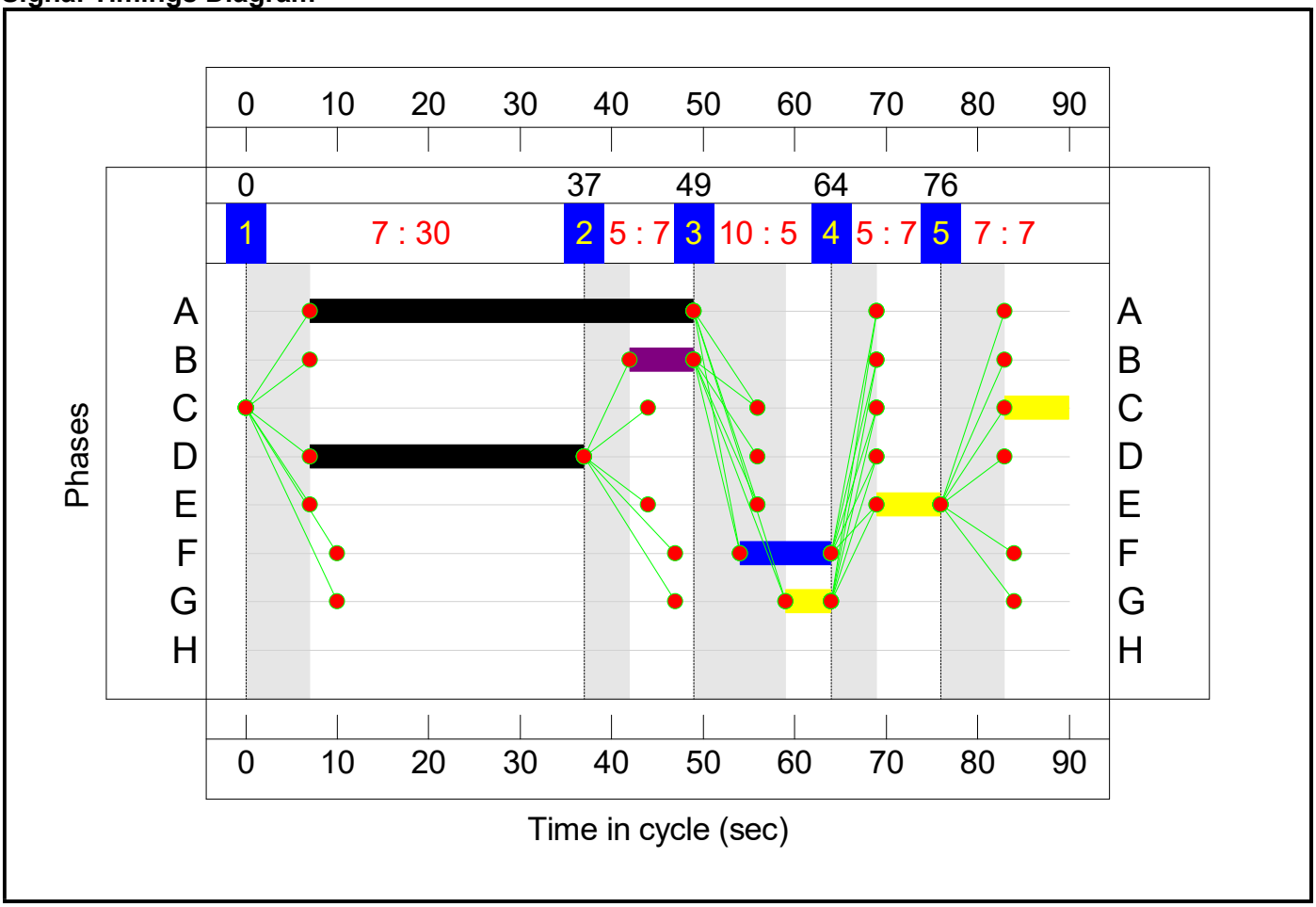


Stage Timings

Stage	1	2	3	4	5
Duration	30	7	5	7	7
Change Point	0	37	49	64	76

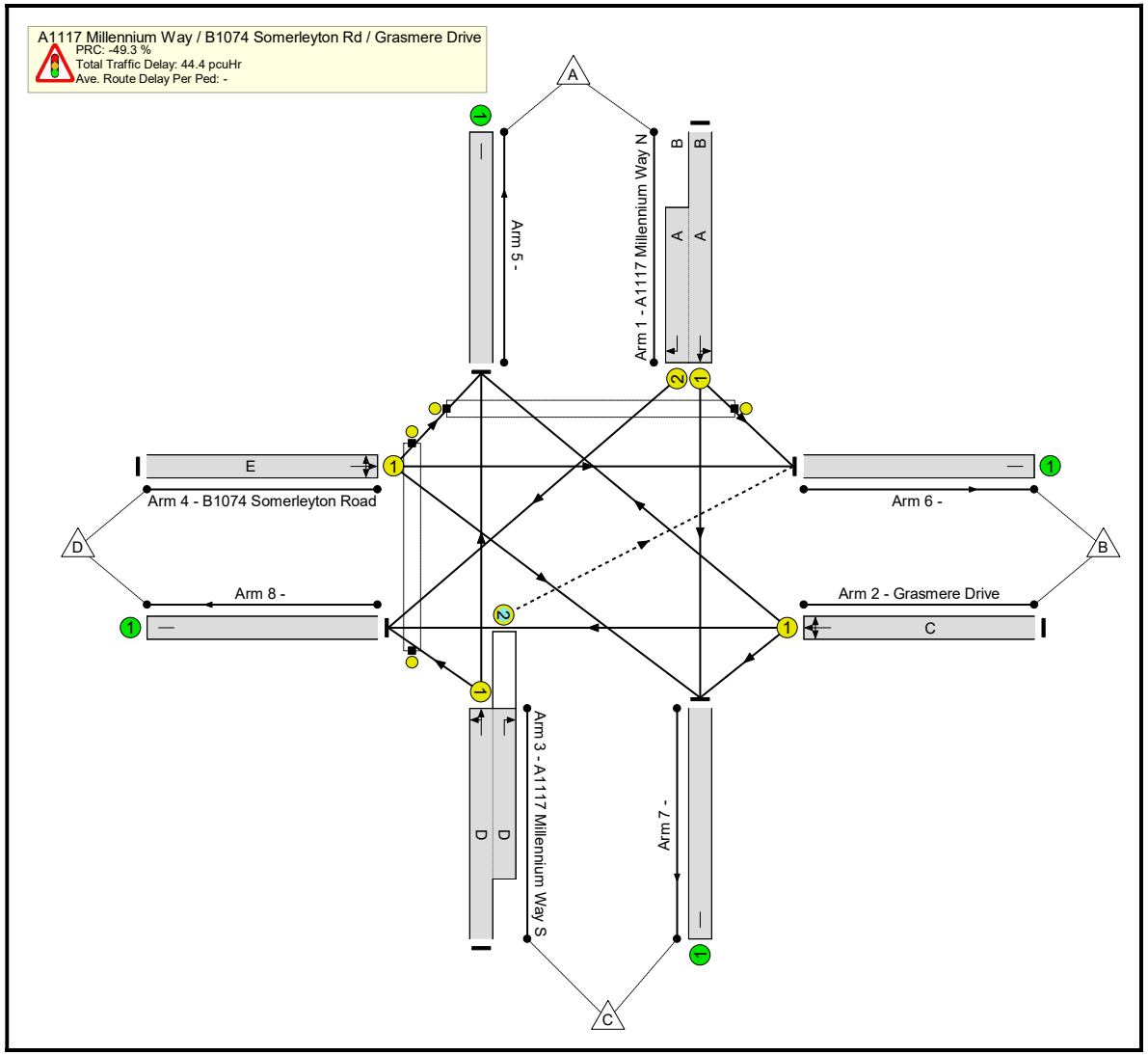
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**134.4%**
A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	-	-	**N/A**	-	-		-	-	-	-	-	-	**134.4%**
1/1+1/2	A1117 Millennium Way N Left Ahead Right	U	N/A	N/A	A	B	1	42	7:7	466	1940:1801	751+339	42.7 : 42.7%
2/1	Grasmere Drive Right Left Ahead	U	N/A	N/A	C		1	7	-	14	2055	183	7.7%
3/1+3/2	A1117 Millennium Way S Ahead Right Left	U+O	N/A	N/A	D		1	30	-	430	1926:1791	651+15	64.6 : 64.6%
4/1	B1074 Somerleyton Road Left Ahead Right	U	N/A	N/A	E		1	7	-	242	2026	180	134.4%
5/1		U	N/A	N/A	-		-	-	-	442	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	101	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	421	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	188	Inf	Inf	0.0%
Ped Link: P1	Somerleyton Road	-	N/A	-	G		1	5	-	0	-	0	0.0%
Ped Link: P2	Millennium Way N	-	N/A	-	F		1	10	-	0	-	0	0.0%

Full Input Data And Results

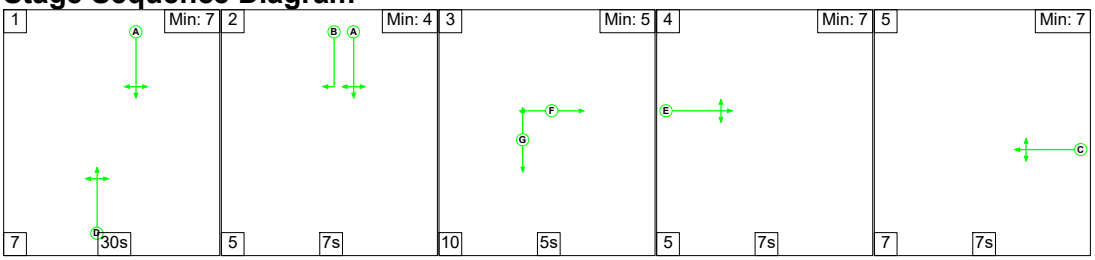
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**10**	**0**	**0**	**10.3**	**34.1**	**0.0**	**44.4**	**-**	**-**	**-**	**-**
A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	**-**	**-**	**10**	**0**	**0**	**10.3**	**34.1**	**0.0**	**44.4**	**-**	**-**	**-**	**-**
1/1+1/2	466	466	-	-	-	1.8	0.4	-	2.2	17.2	5.0	0.4	5.4
2/1	14	14	-	-	-	0.1	0.0	-	0.2	48.5	0.3	0.0	0.4
3/1+3/2	430	430	10	0	0	2.9	0.9	0.0	3.9	32.3	8.7	0.9	9.7
4/1	242	180	-	-	-	5.4	32.8	-	38.2	567.9	8.4	32.8	41.2
5/1	429	429	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	81	81	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	393	393	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	188	188	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): -49.3 Total Delay for Signalled Lanes (pcuHr): 44.45 Cycle Time (s): 90
PRC Over All Lanes (%): -49.3 Total Delay Over All Lanes(pcuHr): 44.45

Full Input Data And Results

Scenario 2: 'Base 2016 PM' (FG2: 'Base 2016 PM', Plan 1: 'Network Control Plan 1')

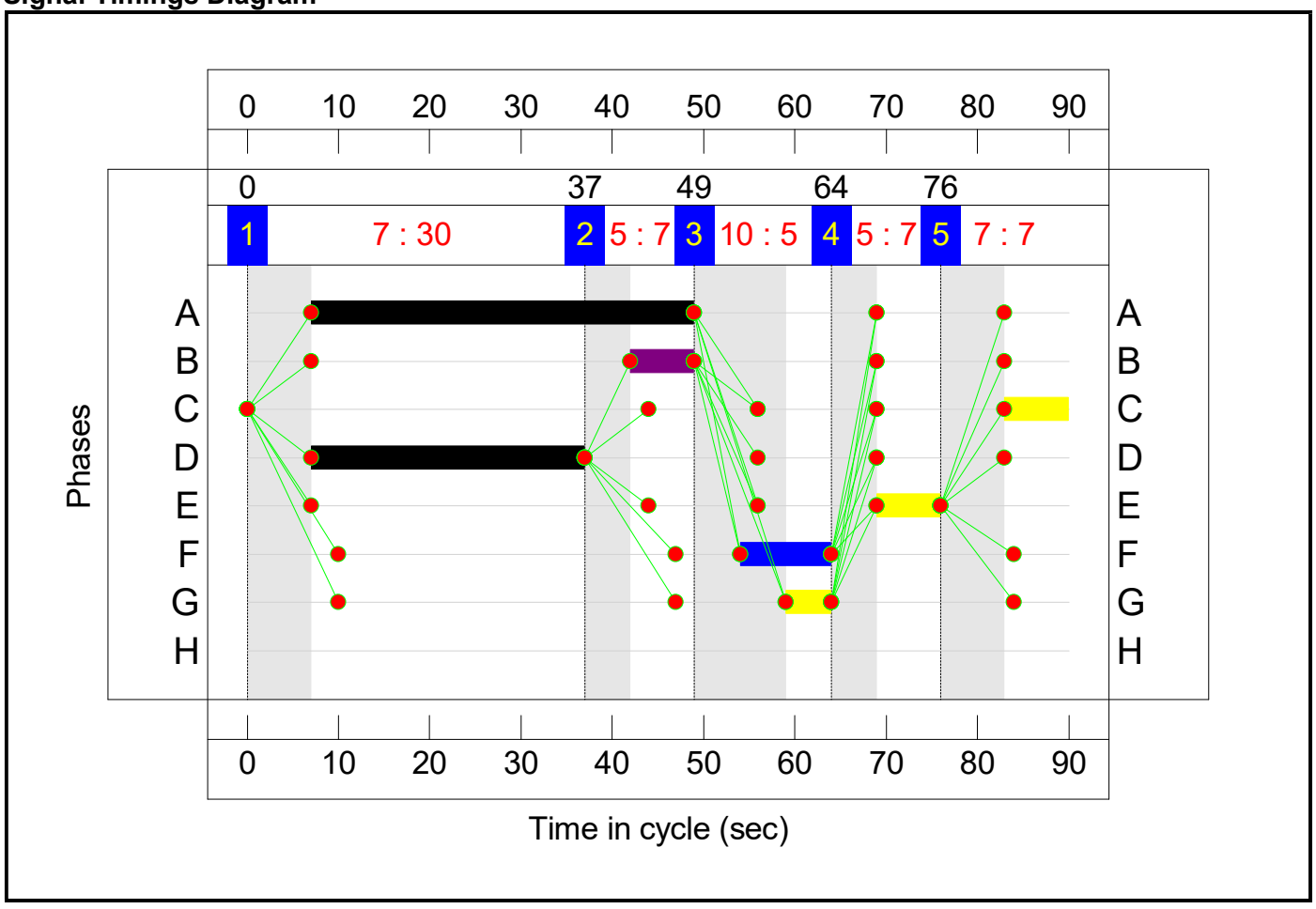
Stage Sequence Diagram



Stage Timings

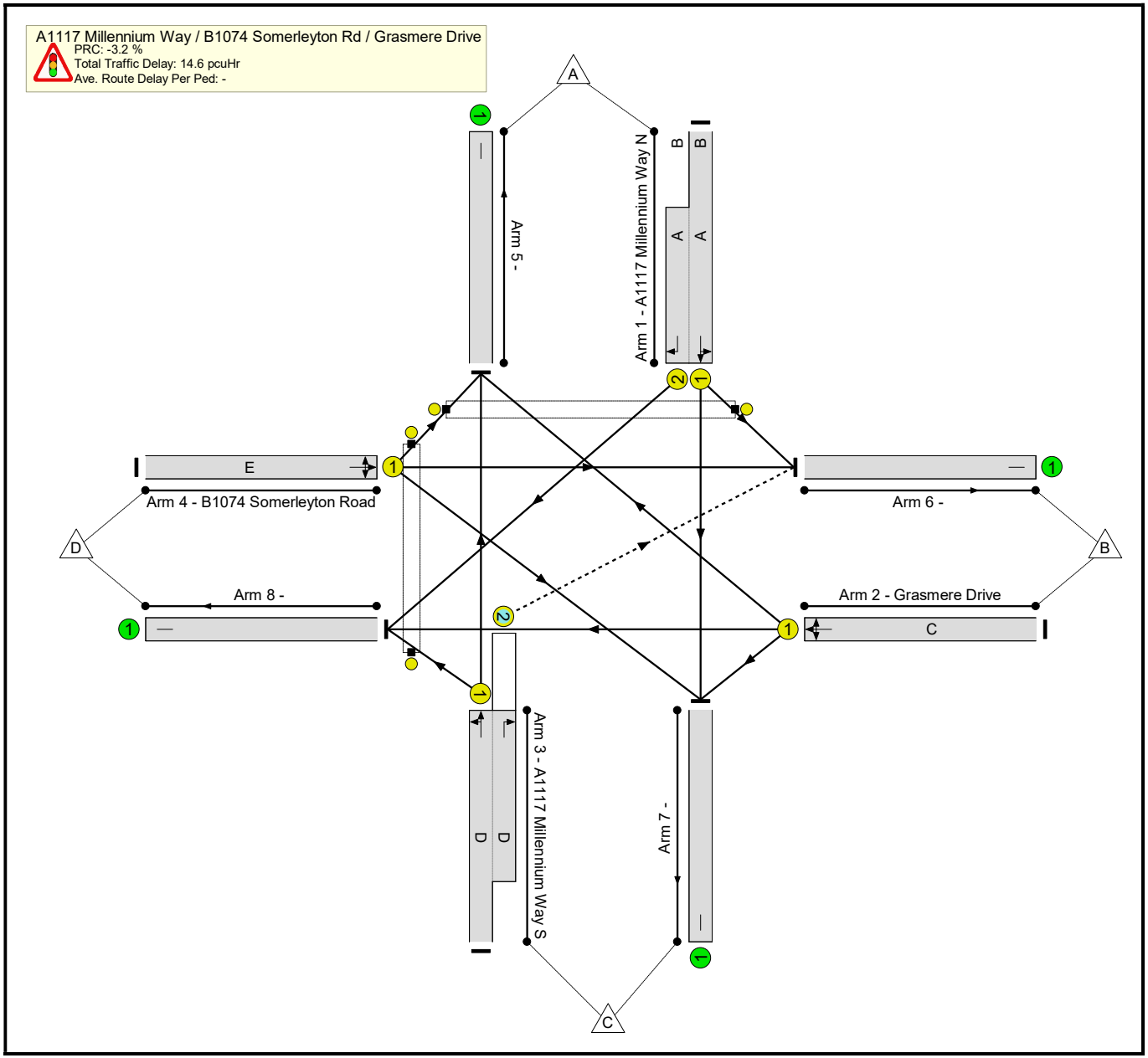
Stage	1	2	3	4	5
Duration	30	7	5	7	7
Change Point	0	37	49	64	76

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**92.9%**
A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.9%**
1/1+1/2	A1117 Millennium Way N Left Ahead Right	U	N/A	N/A	A	B	1	42	7:7	470	1944:1801	881+67	49.6 : 49.6%
2/1	Grasmere Drive Right Left Ahead	U	N/A	N/A	C		1	7	-	105	2042	182	57.8%
3/1+3/2	A1117 Millennium Way S Ahead Right Left	U+O	N/A	N/A	D		1	30	-	456	1911:1935	654+0	69.7 : 0.0%
4/1	B1074 Somerleyton Road Left Ahead Right	U	N/A	N/A	E		1	7	-	166	2011	179	92.9%
5/1		U	N/A	N/A	-		-	-	-	478	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	37	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	479	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	203	Inf	Inf	0.0%
Ped Link: P1	Somerleyton Road	-	N/A	-	G		1	5	-	0	-	0	0.0%
Ped Link: P2	Millennium Way N	-	N/A	-	F		1	10	-	0	-	0	0.0%

Full Input Data And Results

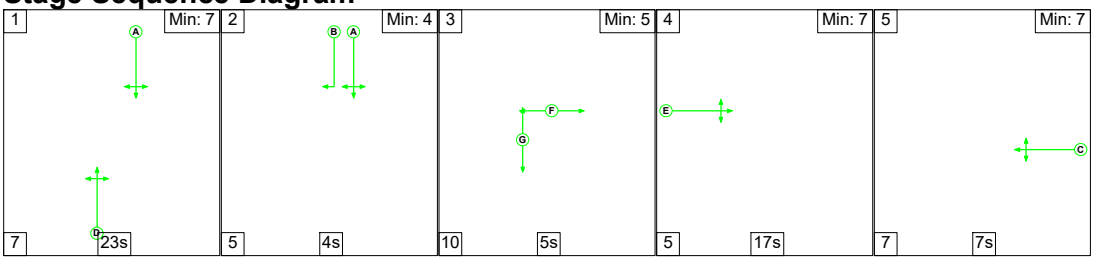
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**8.3**	**6.3**	**0.0**	**14.6**	**-**	**-**	**-**	**-**
A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	**-**	**-**	**0**	**0**	**0**	**8.3**	**6.3**	**0.0**	**14.6**	**-**	**-**	**-**	**-**
1/1+1/2	470	470	-	-	-	2.0	0.5	-	2.5	19.4	7.3	0.5	7.8
2/1	105	105	-	-	-	1.1	0.7	-	1.8	62.5	2.5	0.7	3.2
3/1+3/2	456	456	0	0	0	3.2	1.1	0.0	4.4	34.4	9.8	1.1	10.9
4/1	166	166	-	-	-	1.9	4.0	-	5.9	127.5	4.1	4.0	8.1
5/1	478	478	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	37	37	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	479	479	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	203	203	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): -3.2 Total Delay for Signalled Lanes (pcuHr): 14.58 Cycle Time (s): 90
PRC Over All Lanes (%): -3.2 Total Delay Over All Lanes(pcuHr): 14.58

Full Input Data And Results

Scenario 3: 'DM 2022 AM' (FG3: 'DM 2022 AM', Plan 1: 'Network Control Plan 1')

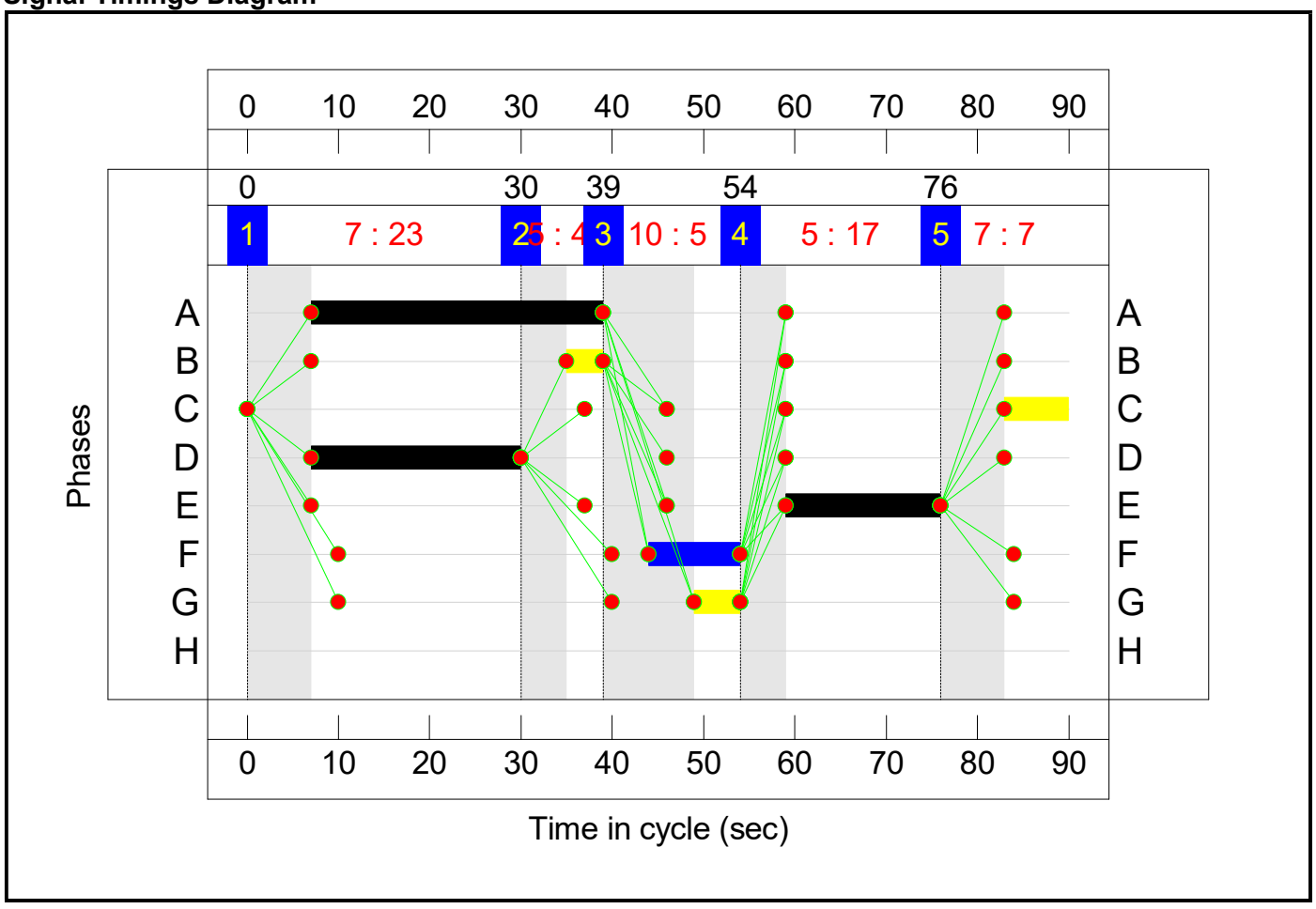
Stage Sequence Diagram



Stage Timings

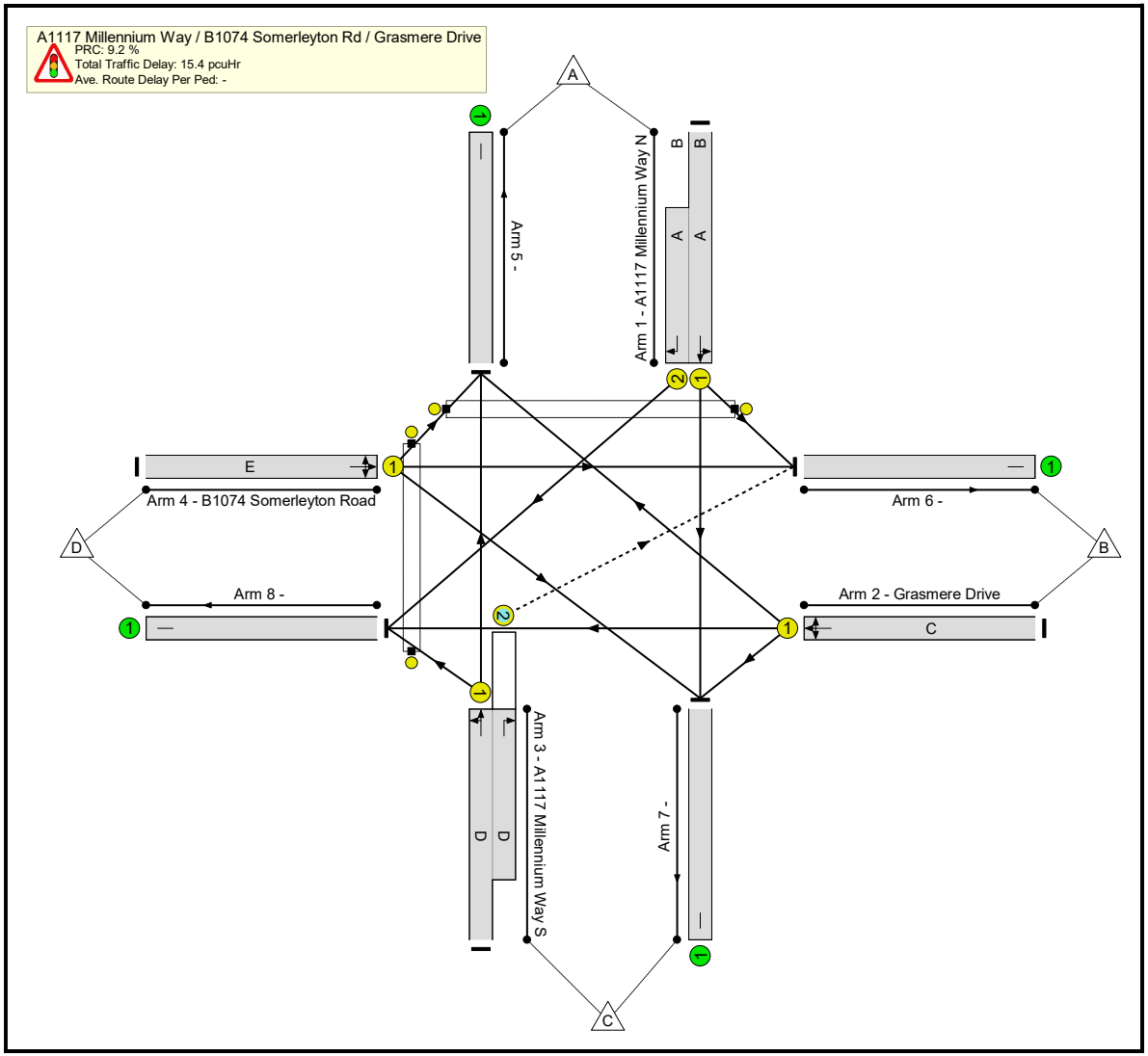
Stage	1	2	3	4	5
Duration	23	4	5	17	7
Change Point	0	30	39	54	76

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**82.4%**
A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	-	-	**N/A**	-	-		-	-	-	-	-	-	**82.4%**
1/1+1/2	A1117 Millennium Way N Left Ahead Right	U	N/A	N/A	A	B	1	32	4:4	566	1942:1801	595+315	62.1 : 62.1%
2/1	Grasmere Drive Right Left Ahead	U	N/A	N/A	C		1	7	-	26	2065	184	14.2%
3/1+3/2	A1117 Millennium Way S Ahead Right Left	U+O	N/A	N/A	D		1	23	-	423	1914:1791	505+8	82.4 : 82.4%
4/1	B1074 Somerleyton Road Left Ahead Right	U	N/A	N/A	E		1	17	-	321	2009	402	79.9%
5/1		U	N/A	N/A	-		-	-	-	510	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	77	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	461	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	288	Inf	Inf	0.0%
Ped Link: P1	Somerleyton Road	-	N/A	-	G		1	5	-	0	-	0	0.0%
Ped Link: P2	Millennium Way N	-	N/A	-	F		1	10	-	0	-	0	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	**-**	**-**	**7**	**0**	**0**	**10.3**	**5.0**	**0.0**	**15.4**	**-**	**-**	**-**	**-**
A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	**-**	**-**	**7**	**0**	**0**	**10.3**	**5.0**	**0.0**	**15.4**	**-**	**-**	**-**	**-**
1/1+1/2	566	566	-	-	-	3.4	0.8	-	4.2	26.8	7.2	0.8	8.0
2/1	26	26	-	-	-	0.3	0.1	-	0.4	49.3	0.6	0.1	0.7
3/1+3/2	423	423	7	0	0	3.6	2.2	0.0	5.9	50.0	9.7	2.2	11.9
4/1	321	321	-	-	-	3.1	1.9	-	5.0	55.6	7.6	1.9	9.5
5/1	510	510	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	77	77	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	461	461	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	288	288	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-

C1

PRC for Signalled Lanes (%): 9.2
PRC Over All Lanes (%): 9.2

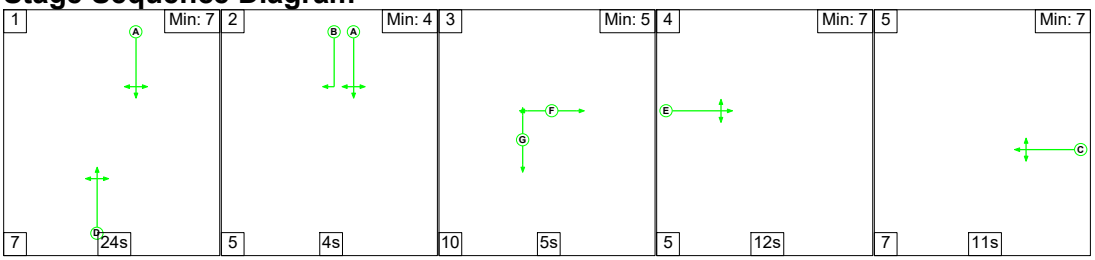
Total Delay for Signalled Lanes (pcuHr): 15.40
Total Delay Over All Lanes(pcuHr): 15.40

Cycle Time (s): 90

Full Input Data And Results

Scenario 4: 'DM 2022 PM' (FG4: 'DM 2022 PM', Plan 1: 'Network Control Plan 1')

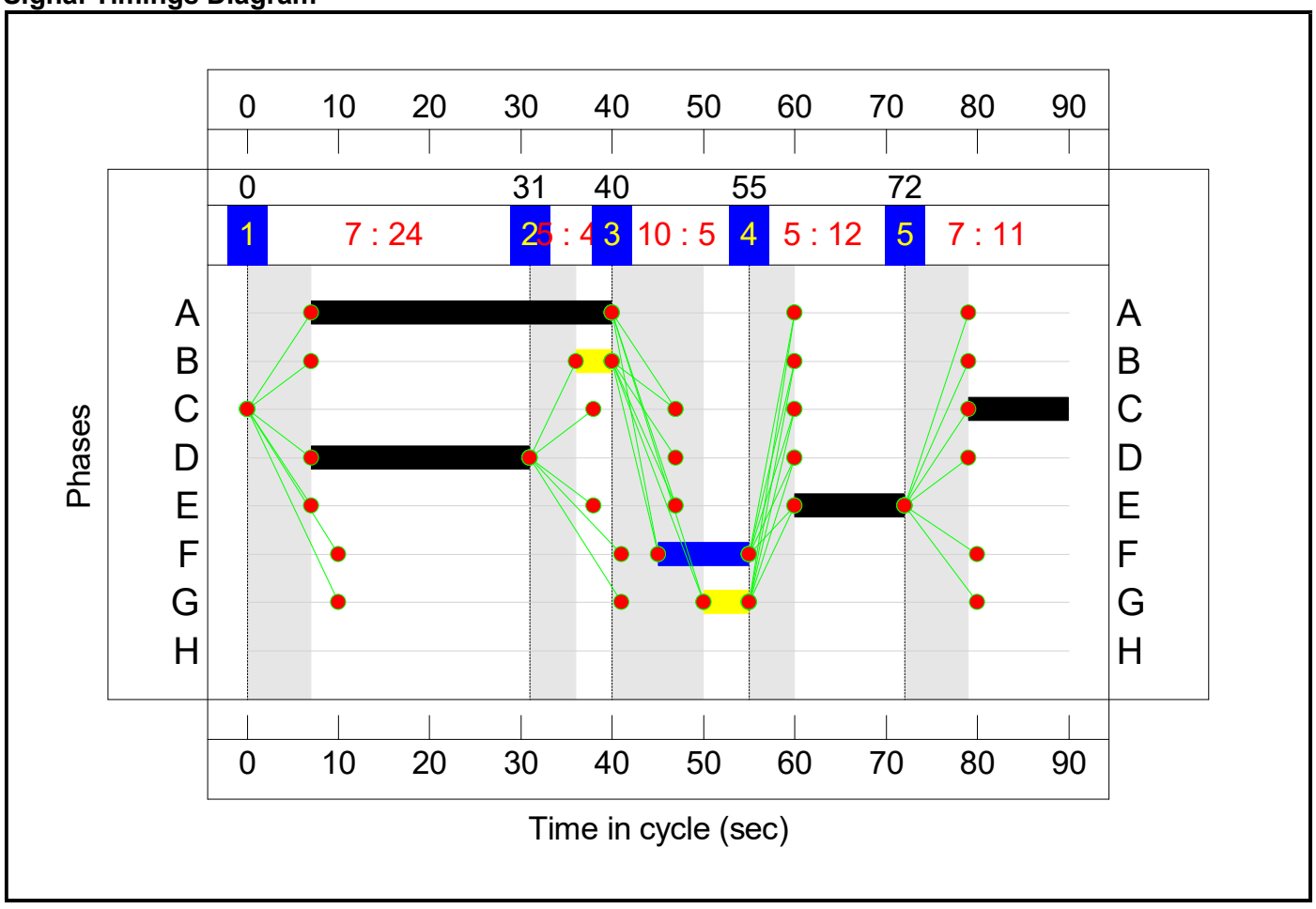
Stage Sequence Diagram



Stage Timings

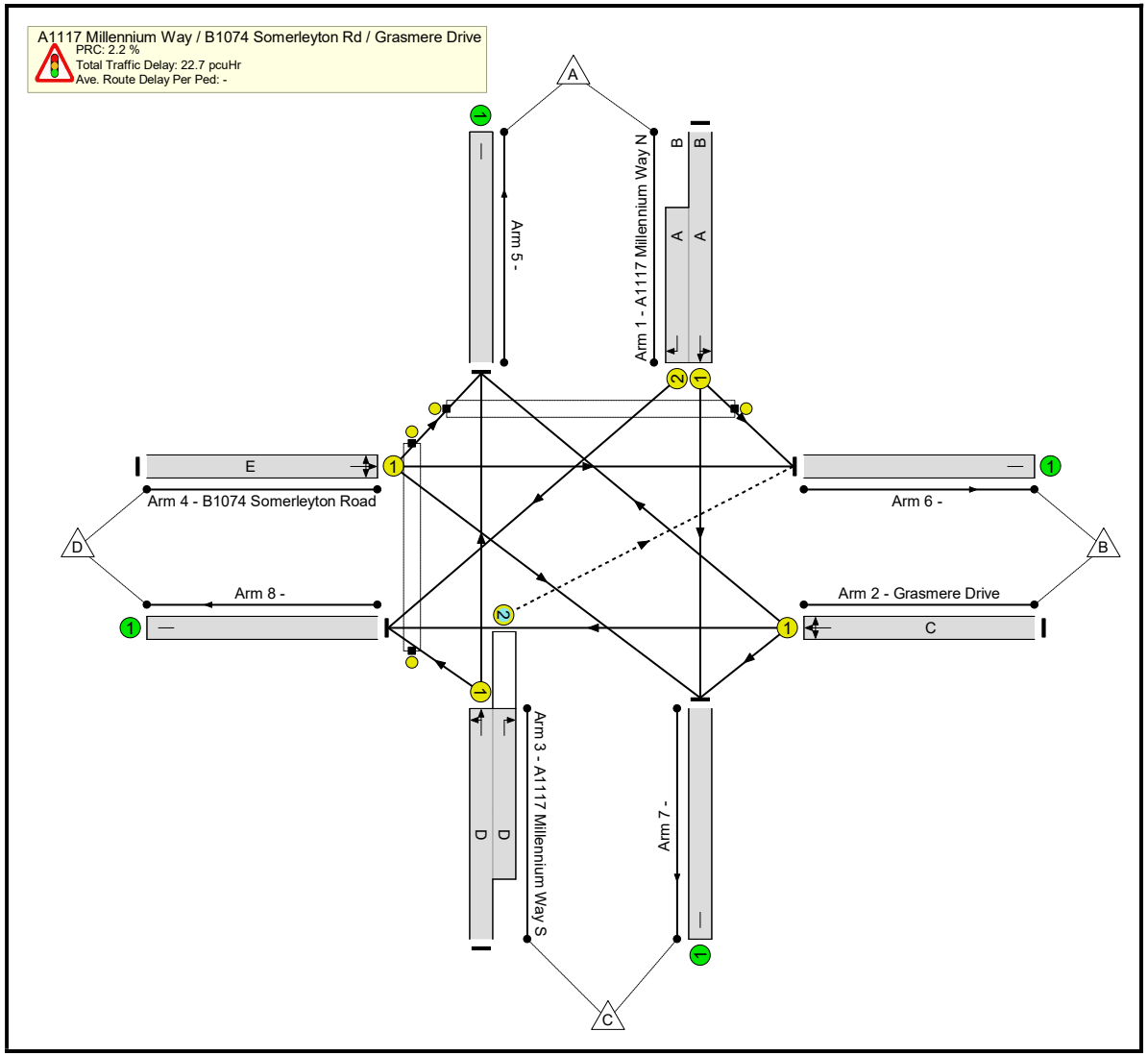
Stage	1	2	3	4	5
Duration	24	4	5	12	11
Change Point	0	31	40	55	72

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**88.1%**
A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	-	-	**N/A**	-	-		-	-	-	-	-	-	**88.1%**
1/1+1/2	A1117 Millennium Way N Left Ahead Right	U	N/A	N/A	A	B	1	33	4:4	545	1944:1801	675+118	68.7 : 68.7%
2/1	Grasmere Drive Right Left Ahead	U	N/A	N/A	C		1	11	-	241	2055	274	88.0%
3/1+3/2	A1117 Millennium Way S Ahead Right Left	U+O	N/A	N/A	D		1	24	-	464	1910:1935	527+0	88.1 : 0.0%
4/1	B1074 Somerleyton Road Left Ahead Right	U	N/A	N/A	E		1	12	-	248	2000	289	85.8%
5/1		U	N/A	N/A	-		-	-	-	587	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	32	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	487	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	392	Inf	Inf	0.0%
Ped Link: P1	Somerleyton Road	-	N/A	-	G		1	5	-	0	-	0	0.0%
Ped Link: P2	Millennium Way N	-	N/A	-	F		1	10	-	0	-	0	0.0%

Full Input Data And Results

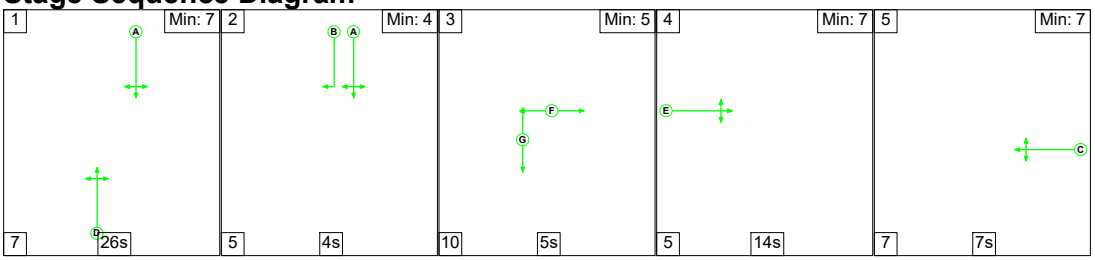
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**12.5**	**10.2**	**0.0**	**22.7**	**-**	**-**	**-**	**-**
A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	**-**	**-**	**0**	**0**	**0**	**12.5**	**10.2**	**0.0**	**22.7**	**-**	**-**	**-**	**-**
1/1+1/2	545	545	-	-	-	3.4	1.1	-	4.5	29.4	9.4	1.1	10.5
2/1	241	241	-	-	-	2.6	3.1	-	5.6	84.3	5.9	3.1	9.0
3/1+3/2	464	464	0	0	0	4.0	3.3	0.0	7.3	56.9	11.0	3.3	14.3
4/1	248	248	-	-	-	2.6	2.7	-	5.3	76.5	6.0	2.7	8.7
5/1	587	587	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	32	32	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	487	487	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	392	392	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 2.2 Total Delay for Signalled Lanes (pcuHr): 22.70 Cycle Time (s): 90
PRC Over All Lanes (%): 2.2 Total Delay Over All Lanes(pcuHr): 22.70

Full Input Data And Results

Scenario 5: 'DS 2022 AM' (FG5: 'DS 2022 AM', Plan 1: 'Network Control Plan 1')

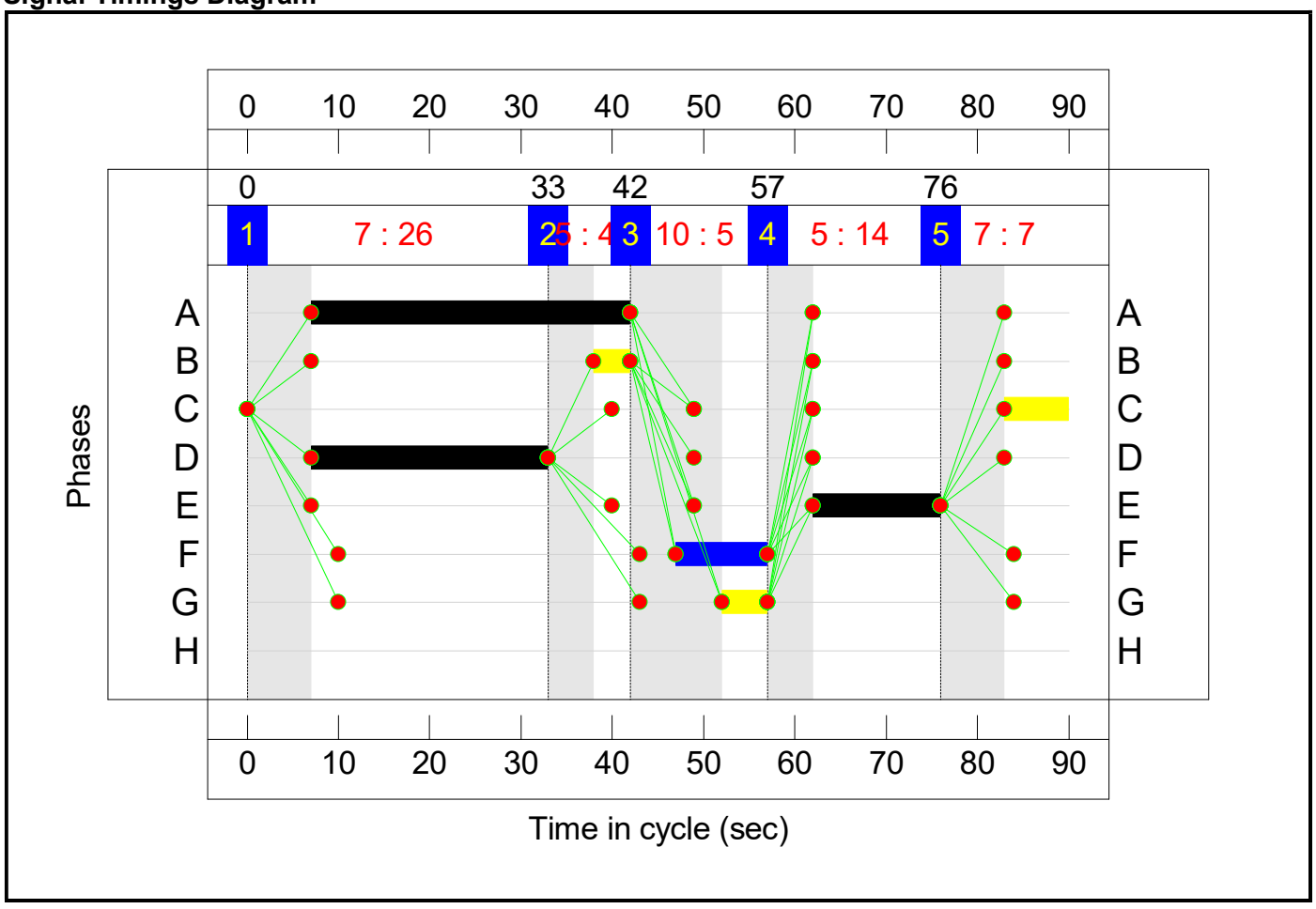
Stage Sequence Diagram



Stage Timings

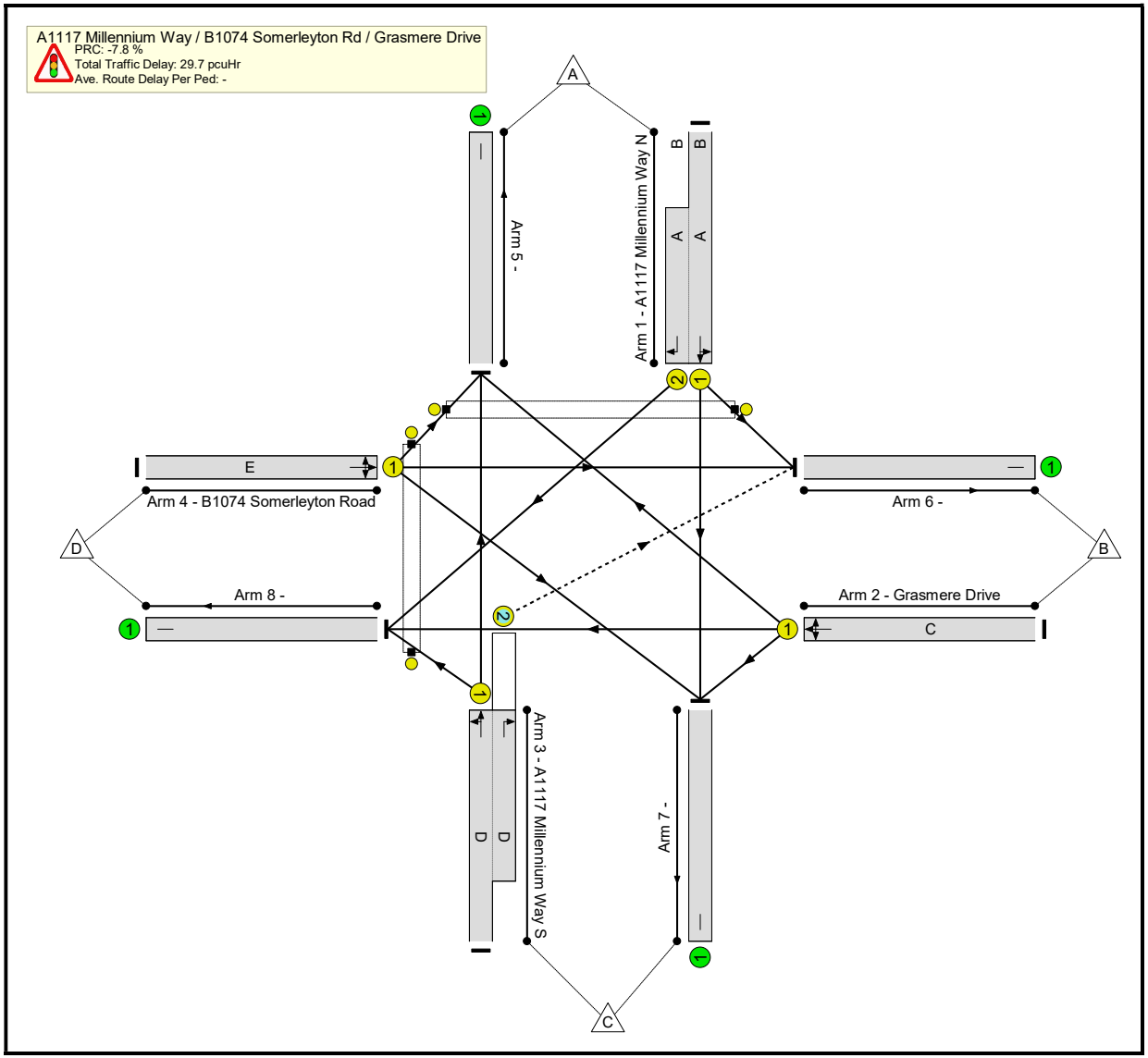
Stage	1	2	3	4	5
Duration	26	4	5	14	7
Change Point	0	33	42	57	76

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**97.1%**
A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	-	-	**N/A**	-	-		-	-	-	-	-	-	**97.1%**
1/1+1/2	A1117 Millennium Way N Left Ahead Right	U	N/A	N/A	A	B	1	35	4:4	745	1944:1801	755+28	95.1 : 95.1%
2/1	Grasmere Drive Right Left Ahead	U	N/A	N/A	C		1	7	-	34	2065	184	18.5%
3/1+3/2	A1117 Millennium Way S Ahead Right Left	U+O	N/A	N/A	D		1	26	-	483	1916:1935	570+0	84.8 : 0.0%
4/1	B1074 Somerleyton Road Left Ahead Right	U	N/A	N/A	E		1	14	-	325	2009	335	97.1%
5/1		U	N/A	N/A	-		-	-	-	570	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	67	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	818	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	132	Inf	Inf	0.0%
Ped Link: P1	Somerleyton Road	-	N/A	-	G		1	5	-	0	-	0	0.0%
Ped Link: P2	Millennium Way N	-	N/A	-	F		1	10	-	0	-	0	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	**-**	**-**	**0**	**0**	**0**	**13.0**	**16.7**	**0.0**	**29.7**	**-**	**-**	**-**	**-**
A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	**-**	**-**	**0**	**0**	**0**	**13.0**	**16.7**	**0.0**	**29.7**	**-**	**-**	**-**	**-**
1/1+1/2	745	745	-	-	-	5.3	7.1	-	12.4	60.1	17.6	7.1	24.7
2/1	34	34	-	-	-	0.4	0.1	-	0.5	50.1	0.8	0.1	0.9
3/1+3/2	483	483	0	0	0	4.0	2.6	0.0	6.6	49.1	11.4	2.6	14.0
4/1	325	325	-	-	-	3.4	6.9	-	10.3	113.6	8.0	6.9	14.9
5/1	570	570	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	67	67	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	818	818	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	132	132	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-

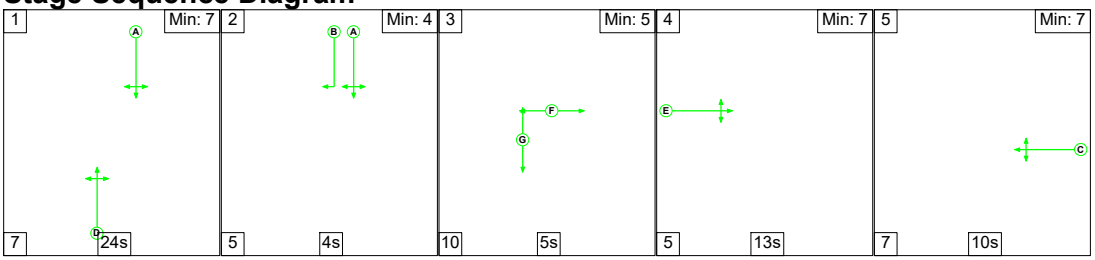
C1 PRC for Signalled Lanes (%): -7.8 Total Delay for Signalled Lanes (pcuHr): 29.74 Cycle Time (s): 90

PRC Over All Lanes (%): -7.8 Total Delay Over All Lanes(pcuHr): 29.74

Full Input Data And Results

Scenario 6: 'DS 2022 PM' (FG6: 'DS 2022 PM', Plan 1: 'Network Control Plan 1')

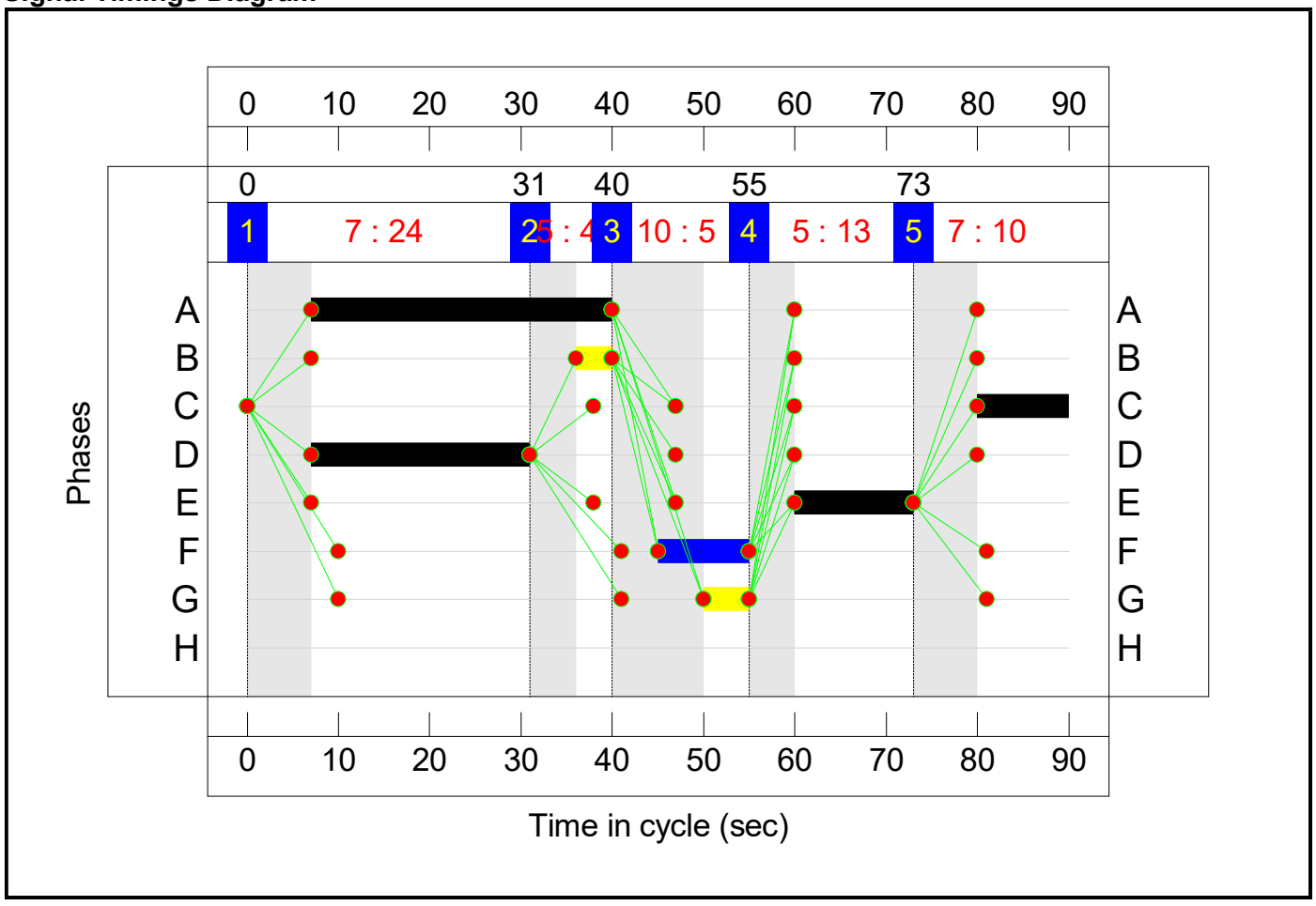
Stage Sequence Diagram



Stage Timings

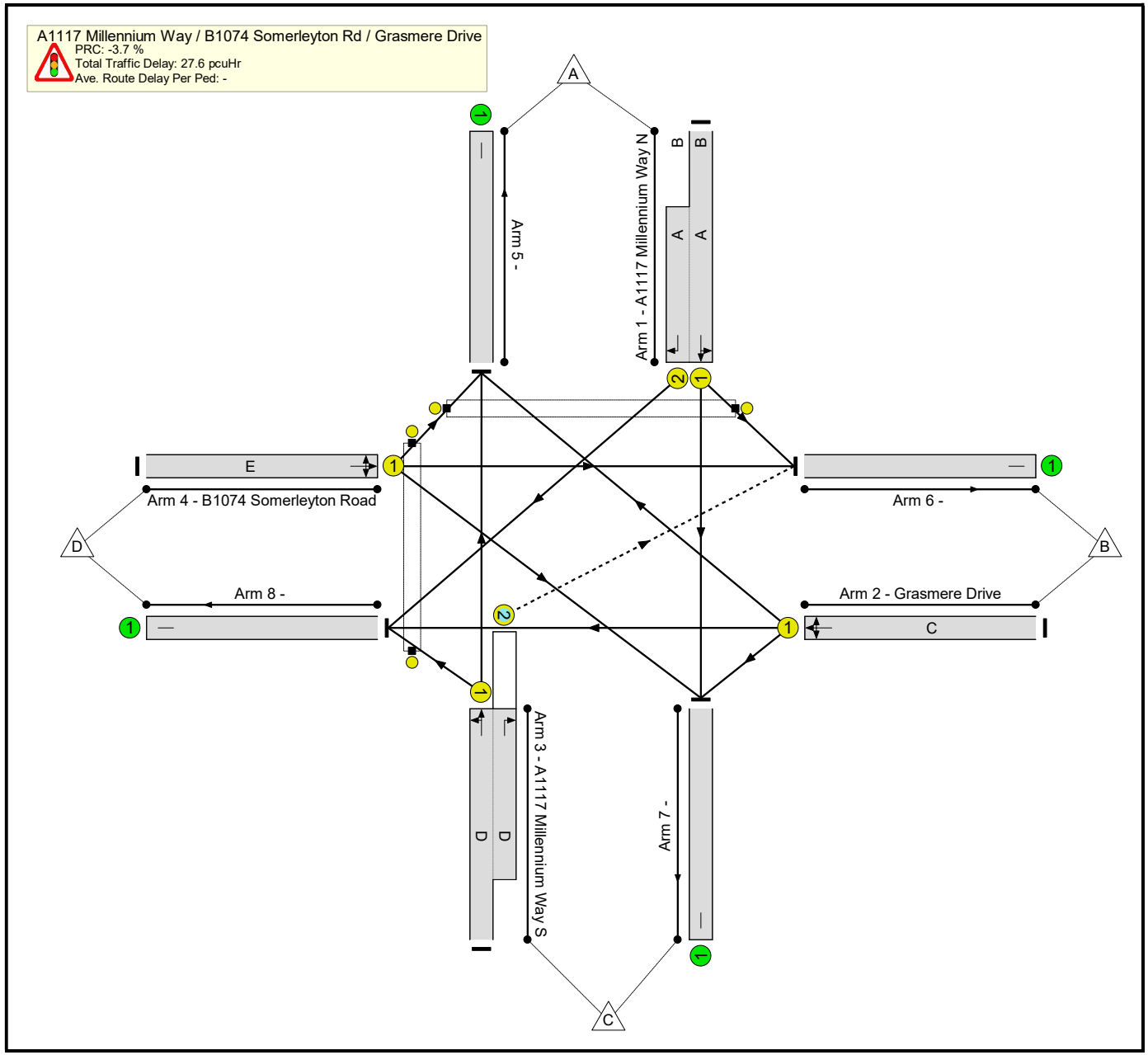
Stage	1	2	3	4	5
Duration	24	4	5	13	10
Change Point	0	31	40	55	73

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**93.3%**
A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	-	-	**N/A**	-	-		-	-	-	-	-	-	**93.3%**
1/1+1/2	A1117 Millennium Way N Left Ahead Right	U	N/A	N/A	A	B	1	33	4:4	560	1945:1801	686+90	72.1 : 72.1%
2/1	Grasmere Drive Right Left Ahead	U	N/A	N/A	C		1	10	-	234	2052	251	93.3%
3/1+3/2	A1117 Millennium Way S Ahead Right Left	U+O	N/A	N/A	D		1	24	-	488	1925:1935	527+0	92.5 : 0.0%
4/1	B1074 Somerleyton Road Left Ahead Right	U	N/A	N/A	E		1	13	-	279	1996	310	89.9%
5/1		U	N/A	N/A	-		-	-	-	664	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	25	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	558	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	314	Inf	Inf	0.0%
Ped Link: P1	Somerleyton Road	-	N/A	-	G		1	5	-	0	-	0	0.0%
Ped Link: P2	Millennium Way N	-	N/A	-	F		1	10	-	0	-	0	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	**-**	**-**	**0**	**0**	**0**	**13.2**	**14.4**	**0.0**	**27.6**	**-**	**-**	**-**	**-**
A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	**-**	**-**	**0**	**0**	**0**	**13.2**	**14.4**	**0.0**	**27.6**	**-**	**-**	**-**	**-**
1/1+1/2	560	560	-	-	-	3.5	1.3	-	4.8	31.0	10.4	1.3	11.7
2/1	234	234	-	-	-	2.5	4.5	-	7.1	108.8	5.8	4.5	10.3
3/1+3/2	488	488	0	0	0	4.3	4.9	0.0	9.2	68.0	11.9	4.9	16.9
4/1	279	279	-	-	-	2.9	3.6	-	6.5	83.8	6.8	3.6	10.4
5/1	664	664	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	25	25	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	558	558	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	314	314	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-

C1

PRC for Signalled Lanes (%): -3.7

PRC Over All Lanes (%): -3.7

Total Delay for Signalled Lanes (pcuHr): 27.60

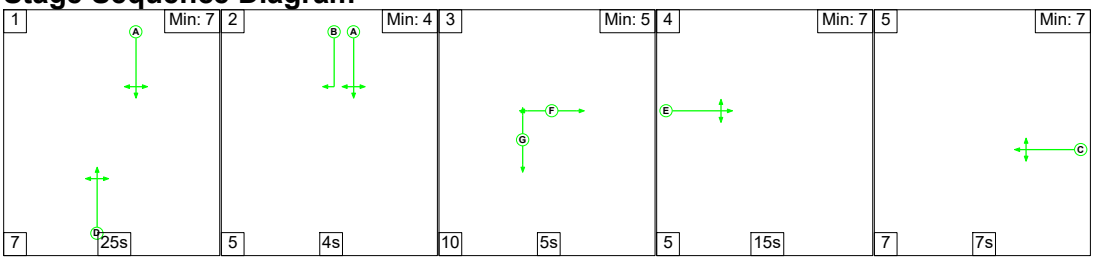
Total Delay Over All Lanes(pcuHr): 27.60

Cycle Time (s): 90

Full Input Data And Results

Scenario 7: 'DM 2037 AM' (FG7: 'DM 2037 AM', Plan 1: 'Network Control Plan 1')

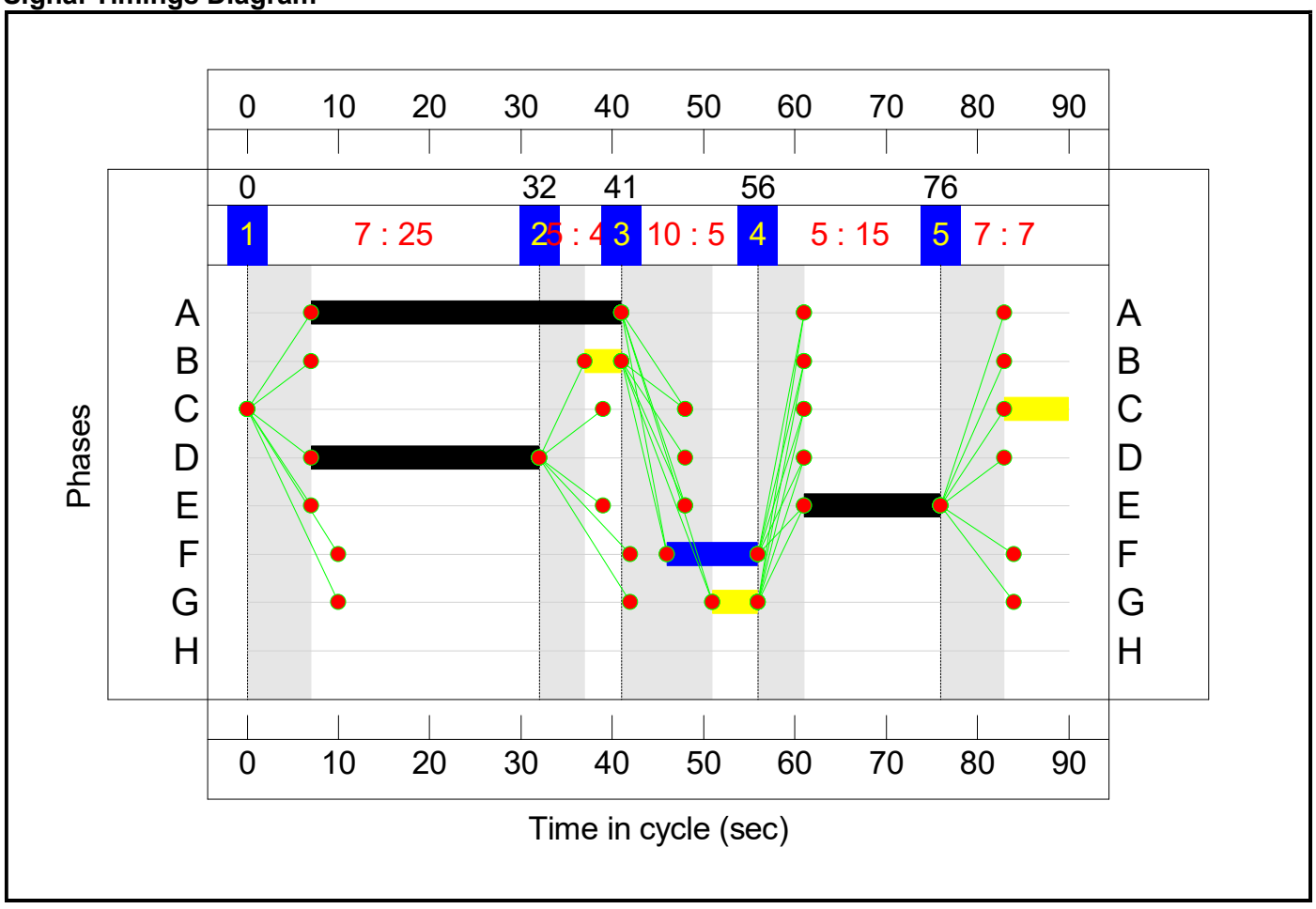
Stage Sequence Diagram



Stage Timings

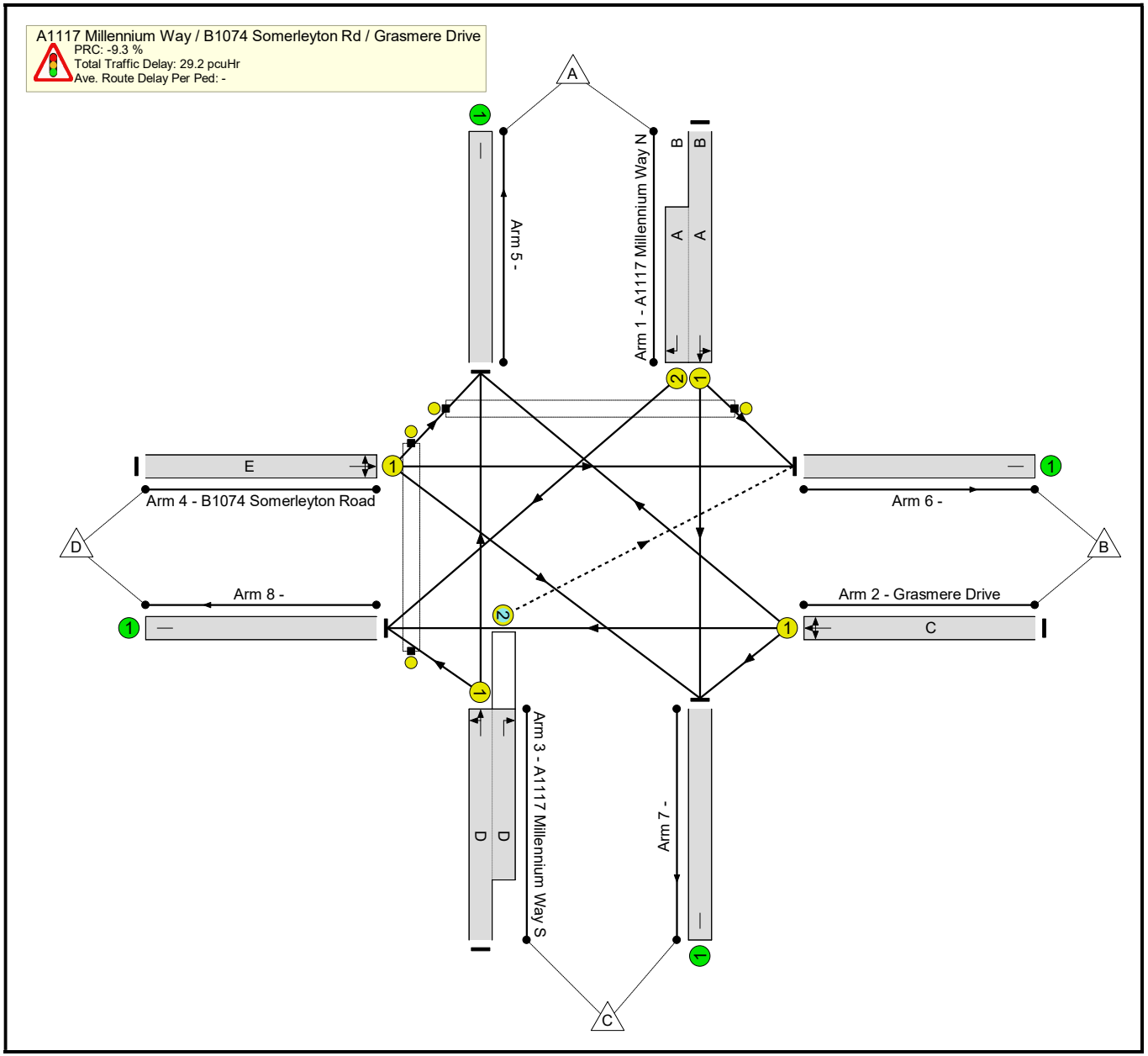
Stage	1	2	3	4	5
Duration	25	4	5	15	7
Change Point	0	32	41	56	76

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**98.3%**
A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	-	-	**N/A**	-	-		-	-	-	-	-	-	**98.3%**
1/1+1/2	A1117 Millennium Way N Left Ahead Right	U	N/A	N/A	A	B	1	34	4:4	673	1942:1801	625+320	71.1 : 71.1%
2/1	Grasmere Drive Right Left Ahead	U	N/A	N/A	C		1	7	-	30	2065	184	16.3%
3/1+3/2	A1117 Millennium Way S Ahead Right Left	U+O	N/A	N/A	D		1	25	-	539	1913:1935	548+0	98.3 : 0.0%
4/1	B1074 Somerleyton Road Left Ahead Right	U	N/A	N/A	E		1	15	-	340	2008	357	95.2%
5/1		U	N/A	N/A	-		-	-	-	615	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	72	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	546	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	349	Inf	Inf	0.0%
Ped Link: P1	Somerleyton Road	-	N/A	-	G		1	5	-	0	-	0	0.0%
Ped Link: P2	Millennium Way N	-	N/A	-	F		1	10	-	0	-	0	0.0%

Full Input Data And Results

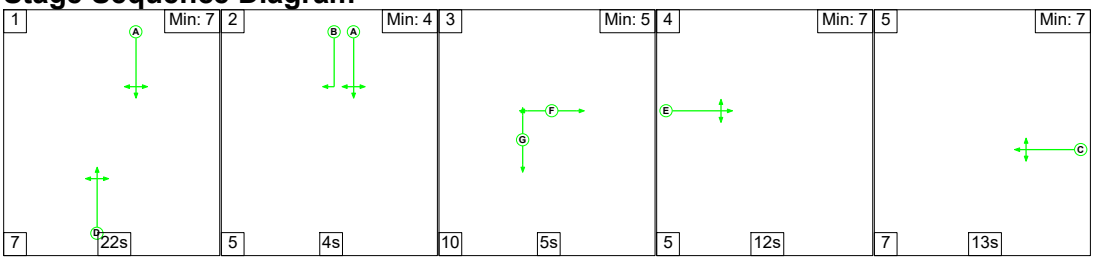
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**12.4**	**16.8**	**0.0**	**29.2**	**-**	**-**	**-**	**-**
A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	**-**	**-**	**0**	**0**	**0**	**12.4**	**16.8**	**0.0**	**29.2**	**-**	**-**	**-**	**-**
1/1+1/2	673	673	-	-	-	3.9	1.2	-	5.1	27.5	8.8	1.2	10.0
2/1	30	30	-	-	-	0.3	0.1	-	0.4	49.7	0.7	0.1	0.8
3/1+3/2	539	539	0	0	0	4.7	9.5	0.0	14.3	95.5	13.3	9.5	22.9
4/1	340	340	-	-	-	3.5	5.9	-	9.4	99.2	8.4	5.9	14.3
5/1	615	615	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	72	72	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	546	546	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	349	349	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): -9.3 Total Delay for Signalled Lanes (pcuHr): 29.21 Cycle Time (s): 90
PRC Over All Lanes (%): -9.3 Total Delay Over All Lanes(pcuHr): 29.21

Full Input Data And Results

Scenario 8: 'DM 2037 PM' (FG8: 'DM 2037 PM', Plan 1: 'Network Control Plan 1')

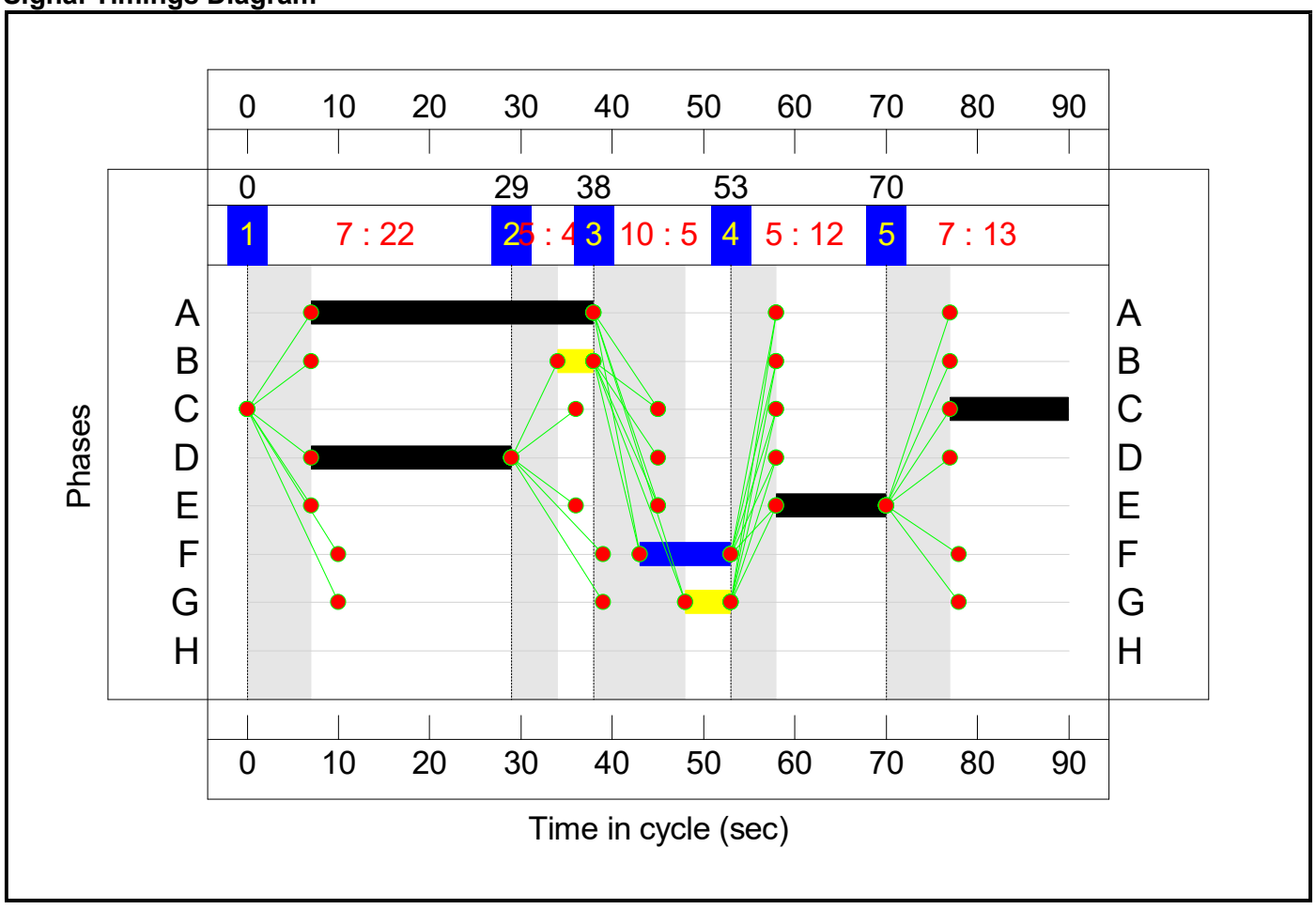
Stage Sequence Diagram



Stage Timings

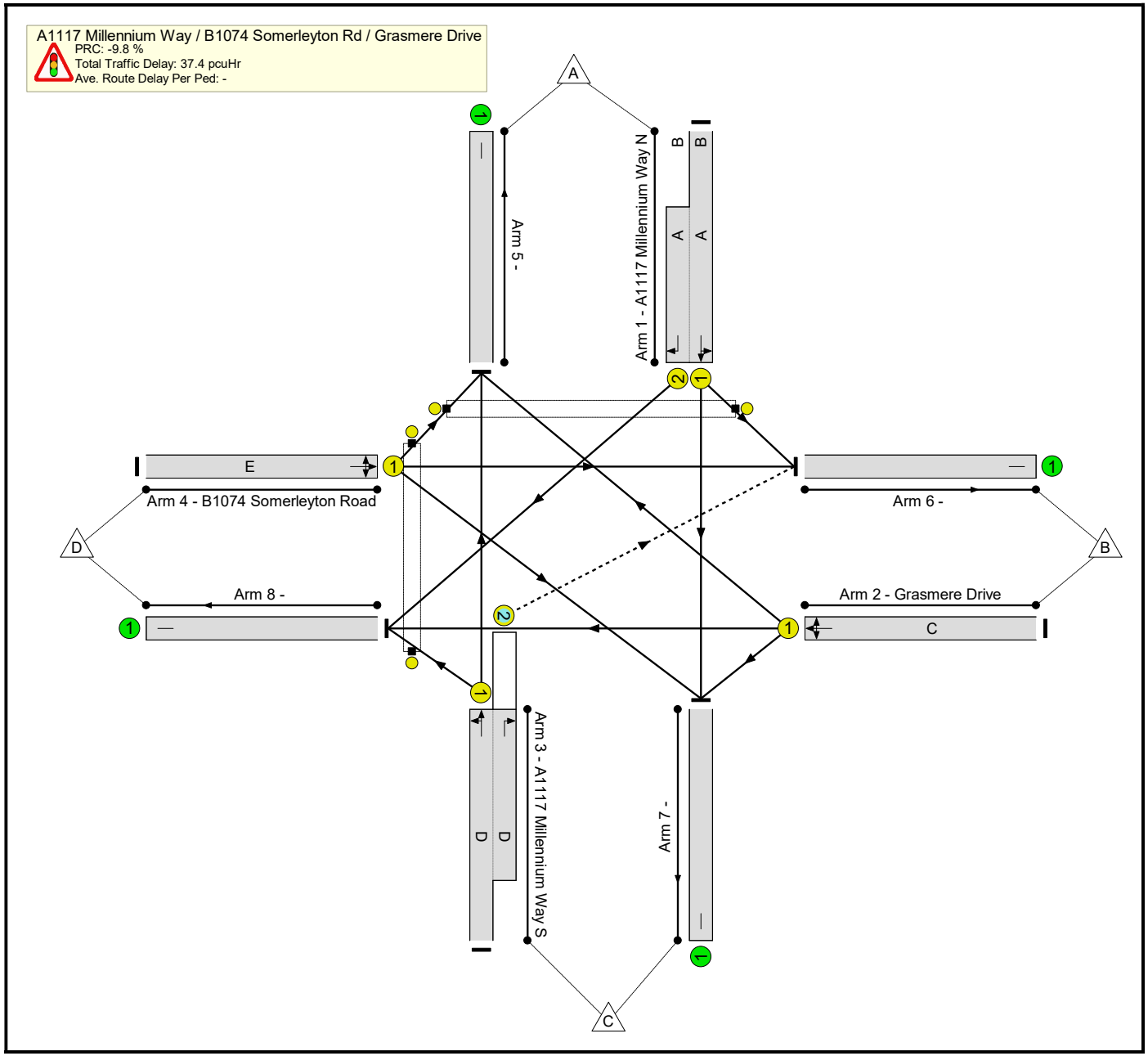
Stage	1	2	3	4	5
Duration	22	4	5	12	13
Change Point	0	29	38	53	70

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**98.9%**
A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	-	-	**N/A**	-	-		-	-	-	-	-	-	**98.9%**
1/1+1/2	A1117 Millennium Way N Left Ahead Right	U	N/A	N/A	A	B	1	31	4:4	569	1944:1801	642+103	76.4 : 76.4%
2/1	Grasmere Drive Right Left Ahead	U	N/A	N/A	C		1	13	-	307	2055	320	96.0%
3/1+3/2	A1117 Millennium Way S Ahead Right Left	U+O	N/A	N/A	D		1	22	-	479	1920:1935	485+0	98.9 : 0.0%
4/1	B1074 Somerleyton Road Left Ahead Right	U	N/A	N/A	E		1	12	-	275	1996	288	95.4%
5/1		U	N/A	N/A	-		-	-	-	666	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	26	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	520	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	418	Inf	Inf	0.0%
Ped Link: P1	Somerleyton Road	-	N/A	-	G		1	5	-	0	-	0	0.0%
Ped Link: P2	Millennium Way N	-	N/A	-	F		1	10	-	0	-	0	0.0%

Full Input Data And Results

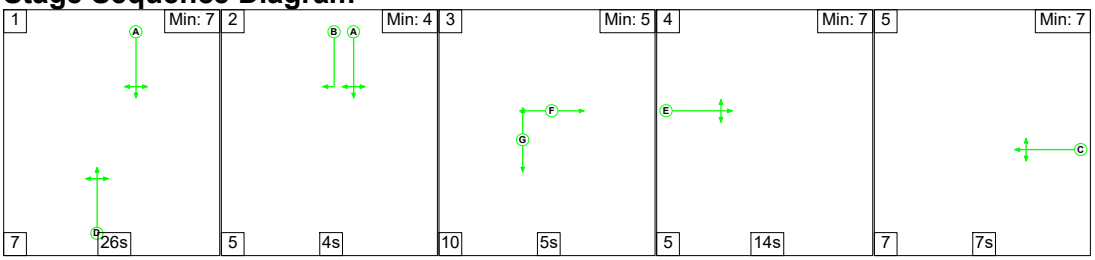
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**14.4**	**23.0**	**0.0**	**37.4**	**-**	**-**	**-**	**-**
A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	**-**	**-**	**0**	**0**	**0**	**14.4**	**23.0**	**0.0**	**37.4**	**-**	**-**	**-**	**-**
1/1+1/2	569	569	-	-	-	3.8	1.6	-	5.4	34.3	10.7	1.6	12.3
2/1	307	307	-	-	-	3.2	6.1	-	9.4	109.8	7.6	6.1	13.7
3/1+3/2	479	479	0	0	0	4.4	9.6	0.0	14.1	105.8	11.9	9.6	21.5
4/1	275	275	-	-	-	2.9	5.6	-	8.5	111.6	6.8	5.6	12.4
5/1	666	666	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	26	26	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	520	520	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	418	418	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): -9.8 Total Delay for Signalled Lanes (pcuHr): 37.39 Cycle Time (s): 90
PRC Over All Lanes (%): -9.8 Total Delay Over All Lanes(pcuHr): 37.39

Full Input Data And Results

Scenario 9: 'DS 2037 AM' (FG9: 'DS 2037 AM', Plan 1: 'Network Control Plan 1')

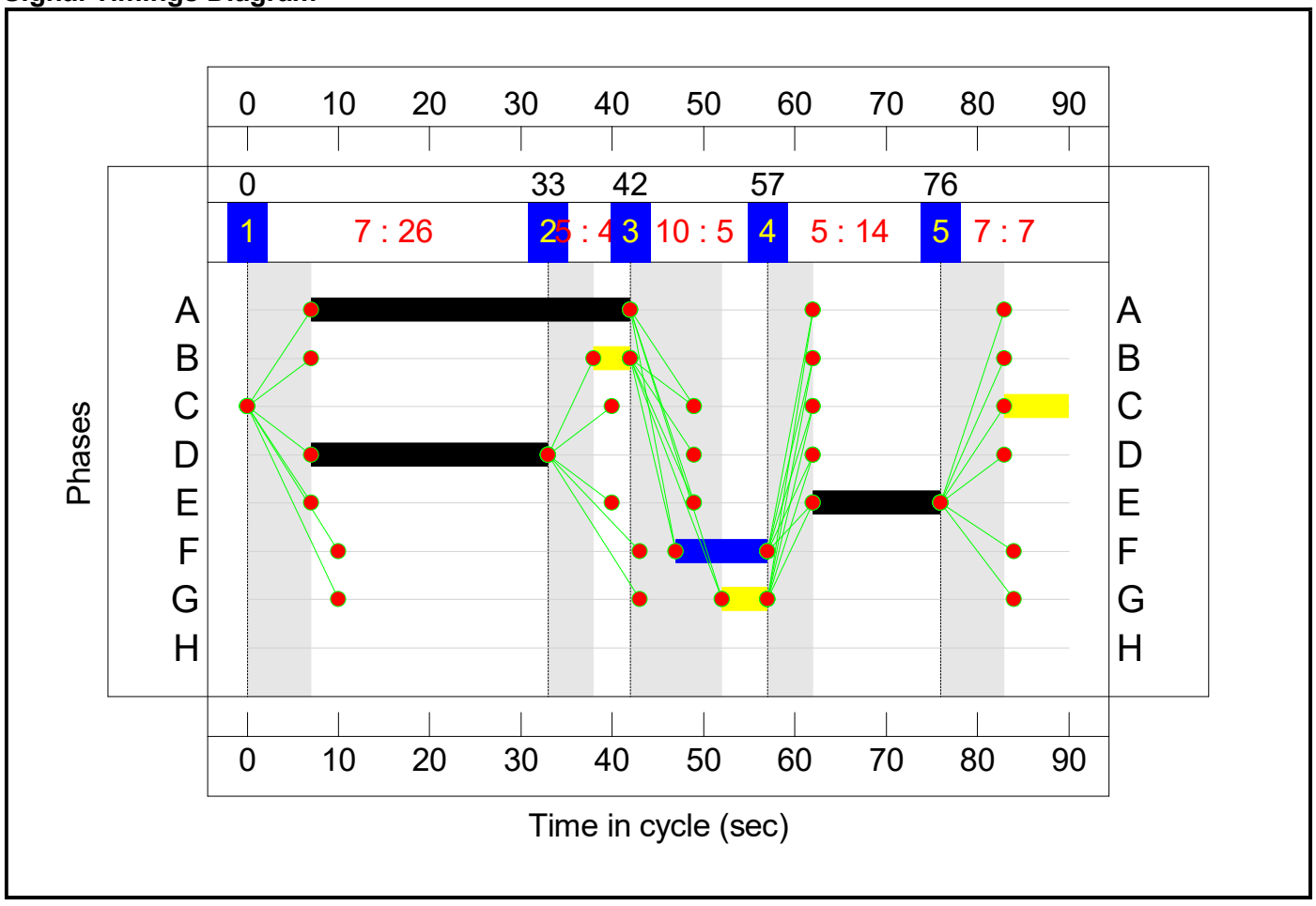
Stage Sequence Diagram



Stage Timings

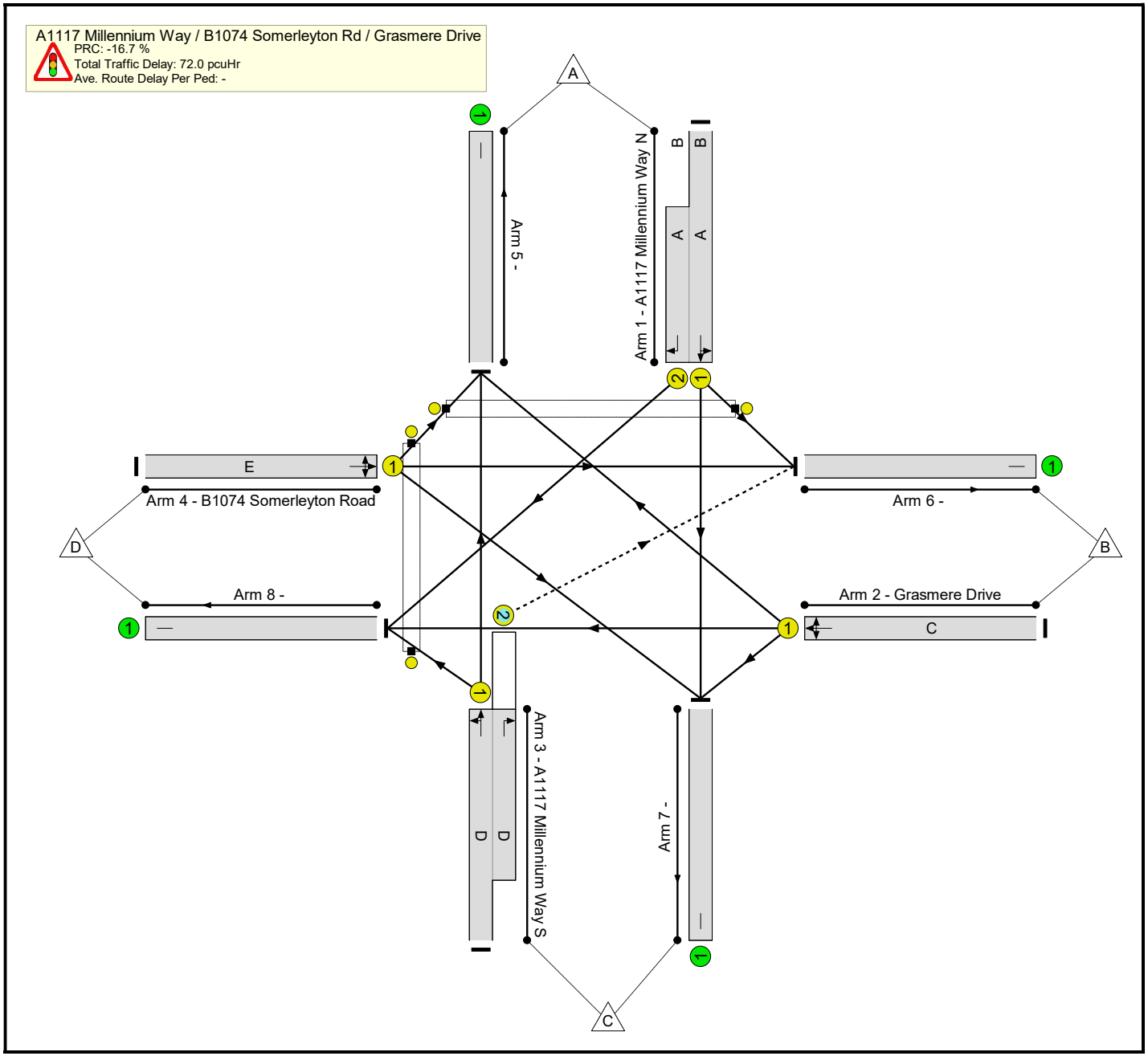
Stage	1	2	3	4	5
Duration	26	4	5	14	7
Change Point	0	33	42	57	76

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**105.1%**
A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	-	-	**N/A**	-	-		-	-	-	-	-	-	**105.1%**
1/1+1/2	A1117 Millennium Way N Left Ahead Right	U	N/A	N/A	A	B	1	35	4:4	822	1944:1801	756+27	105.1 : 105.1%
2/1	Grasmere Drive Right Left Ahead	U	N/A	N/A	C		1	7	-	39	2065	184	21.2%
3/1+3/2	A1117 Millennium Way S Ahead Right Left	U+O	N/A	N/A	D		1	26	-	587	1916:1935	570+0	103.1 : 0.0%
4/1	B1074 Somerleyton Road Left Ahead Right	U	N/A	N/A	E		1	14	-	337	2010	335	100.6%
5/1		U	N/A	N/A	-		-	-	-	661	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	72	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	900	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	152	Inf	Inf	0.0%
Ped Link: P1	Somerleyton Road	-	N/A	-	G		1	5	-	0	-	0	0.0%
Ped Link: P2	Millennium Way N	-	N/A	-	F		1	10	-	0	-	0	0.0%

Full Input Data And Results

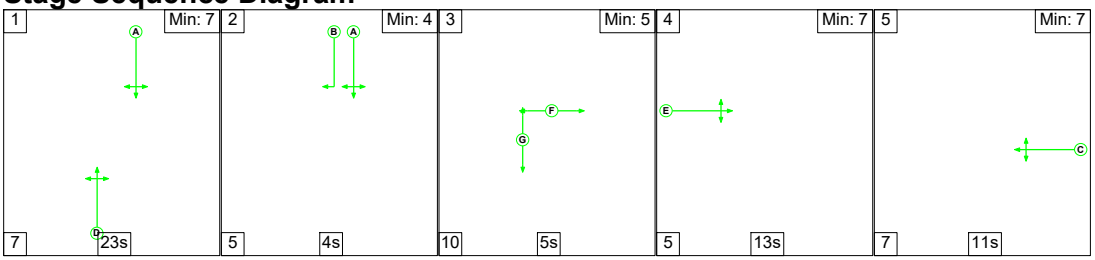
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**17.7**	**54.4**	**0.0**	**72.0**	**-**	**-**	**-**	**-**
A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	**-**	**-**	**0**	**0**	**0**	**17.7**	**54.4**	**0.0**	**72.0**	**-**	**-**	**-**	**-**
1/1+1/2	822	782	-	-	-	7.8	27.3	-	35.1	153.8	22.6	27.3	49.9
2/1	39	39	-	-	-	0.4	0.1	-	0.5	50.6	0.9	0.1	1.0
3/1+3/2	587	570	0	0	0	5.9	17.2	0.0	23.1	141.7	15.4	17.2	32.7
4/1	337	335	-	-	-	3.6	9.7	-	13.3	141.7	8.5	9.7	18.2
5/1	645	645	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	71	71	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	861	861	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	148	148	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): -16.7 Total Delay for Signalled Lanes (pcuHr): 72.04 Cycle Time (s): 90
PRC Over All Lanes (%): -16.7 Total Delay Over All Lanes(pcuHr): 72.04

Full Input Data And Results

Scenario 10: 'DS 2037 PM' (FG10: 'DS 2037 PM', Plan 1: 'Network Control Plan 1')

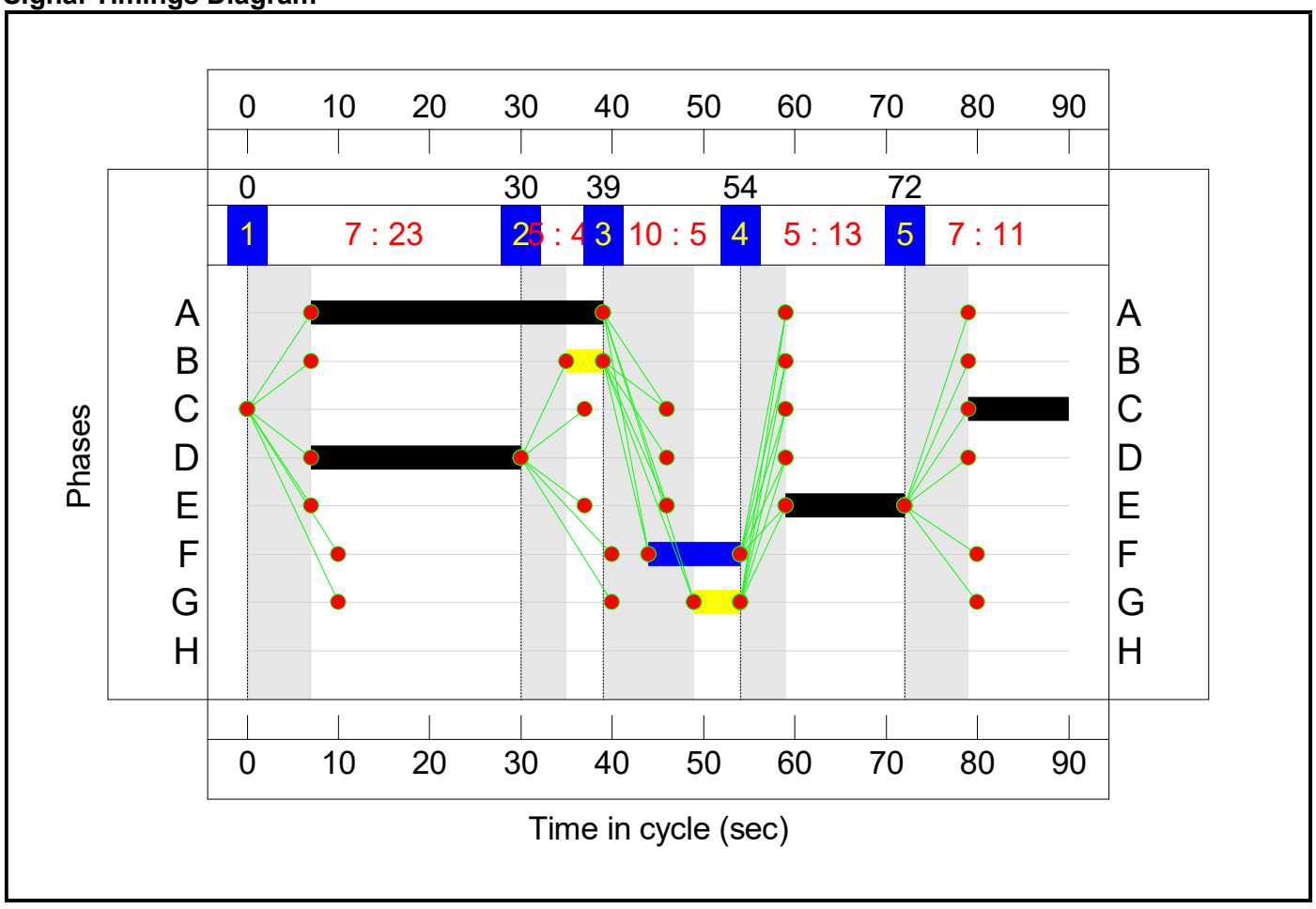
Stage Sequence Diagram



Stage Timings

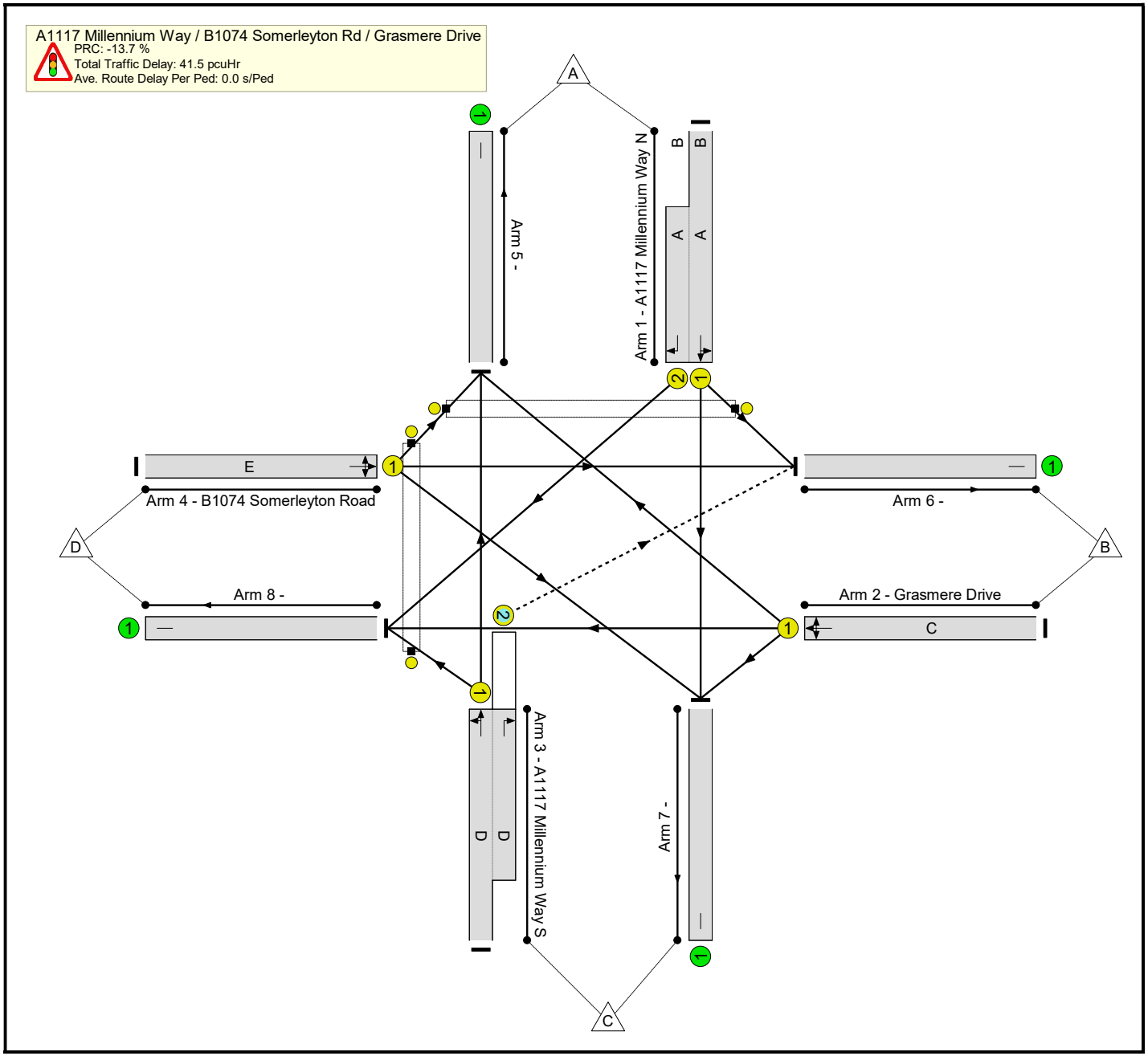
Stage	1	2	3	4	5
Duration	23	4	5	13	11
Change Point	0	30	39	54	72

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**102.3%**
A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	-	-	**N/A**	-	-		-	-	-	-	-	-	**102.3%**
1/1+1/2	A1117 Millennium Way N Left Ahead Right	U	N/A	N/A	A	B	1	32	4:4	573	1944:1801	667+88	75.9 : 75.9%
2/1	Grasmere Drive Right Left Ahead	U	N/A	N/A	C		1	11	-	261	2051	273	95.4%
3/1+3/2	A1117 Millennium Way S Ahead Right Left	U+O	N/A	N/A	D		1	23	-	496	1928:1935	506+0	98.0 : 0.0%
4/1	B1074 Somerleyton Road Left Ahead Right	U	N/A	N/A	E		1	13	-	317	1992	310	102.3%
5/1		U	N/A	N/A	-		-	-	-	707	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	22	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	591	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	327	Inf	Inf	0.0%
Ped Link: P1	Somerleyton Road	-	N/A	-	G		1	5	-	0	-	0	0.0%
Ped Link: P2	Millennium Way N	-	N/A	-	F		1	10	-	0	-	0	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	**-**	**-**	**0**	**0**	**0**	**14.7**	**26.8**	**0.0**	**41.5**	**-**	**-**	**-**	**-**
A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	**-**	**-**	**0**	**0**	**0**	**14.7**	**26.8**	**0.0**	**41.5**	**-**	**-**	**-**	**-**
1/1+1/2	573	573	-	-	-	3.8	1.5	-	5.3	33.5	11.1	1.5	12.6
2/1	261	261	-	-	-	2.8	5.5	-	8.3	115.2	6.5	5.5	12.0
3/1+3/2	496	496	0	0	0	4.5	8.9	0.0	13.4	97.1	12.3	8.9	21.2
4/1	317	310	-	-	-	3.6	10.9	-	14.4	163.9	8.1	10.9	19.0
5/1	702	702	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	22	22	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	589	589	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	327	327	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-

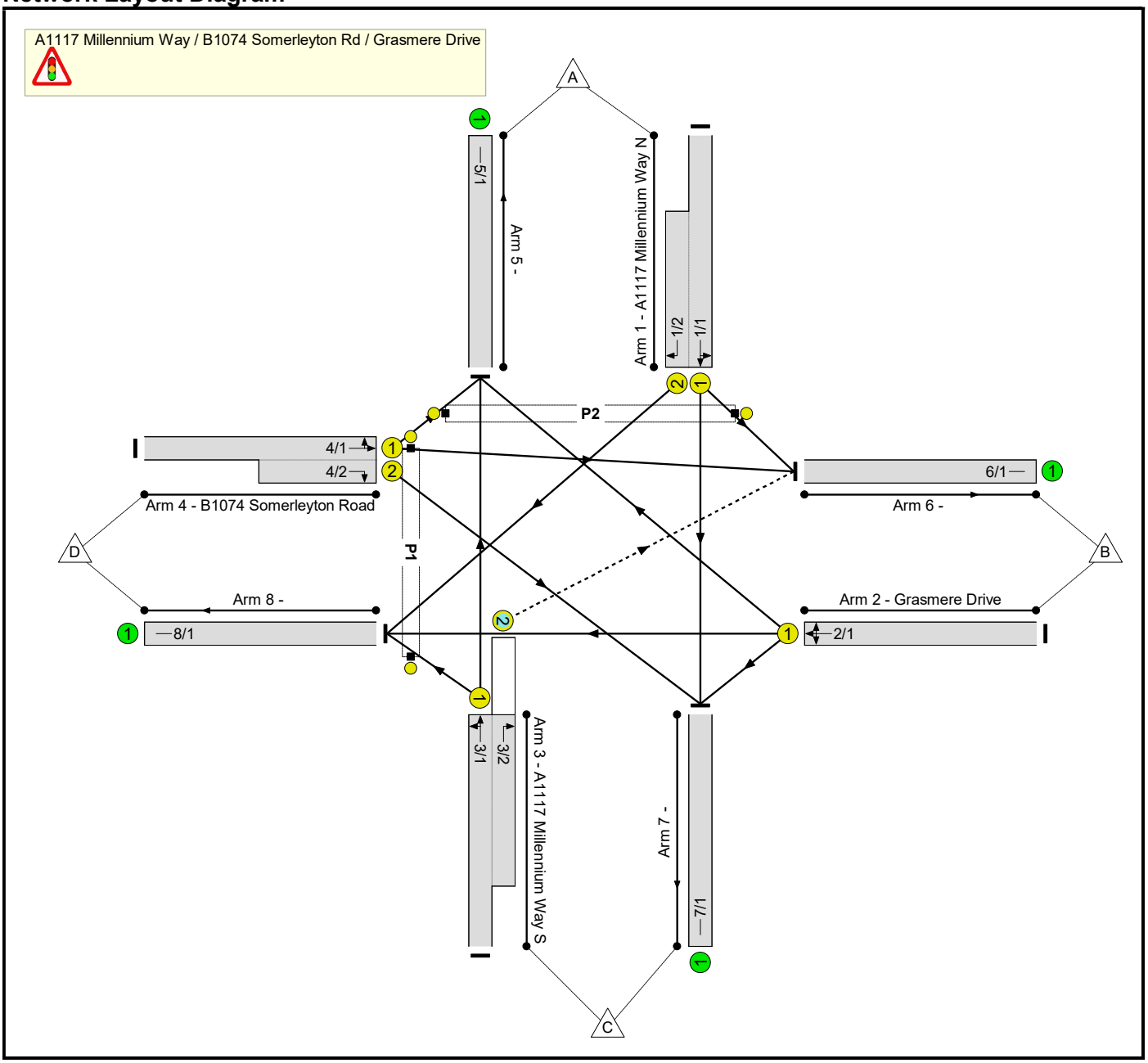
C1 PRC for Signalled Lanes (%): -13.7 Total Delay for Signalled Lanes (pcuHr): 41.50 Cycle Time (s): 90
PRC Over All Lanes (%): -13.7 Total Delay Over All Lanes(pcuHr): 41.50

Full Input Data And Results

User and Project Details

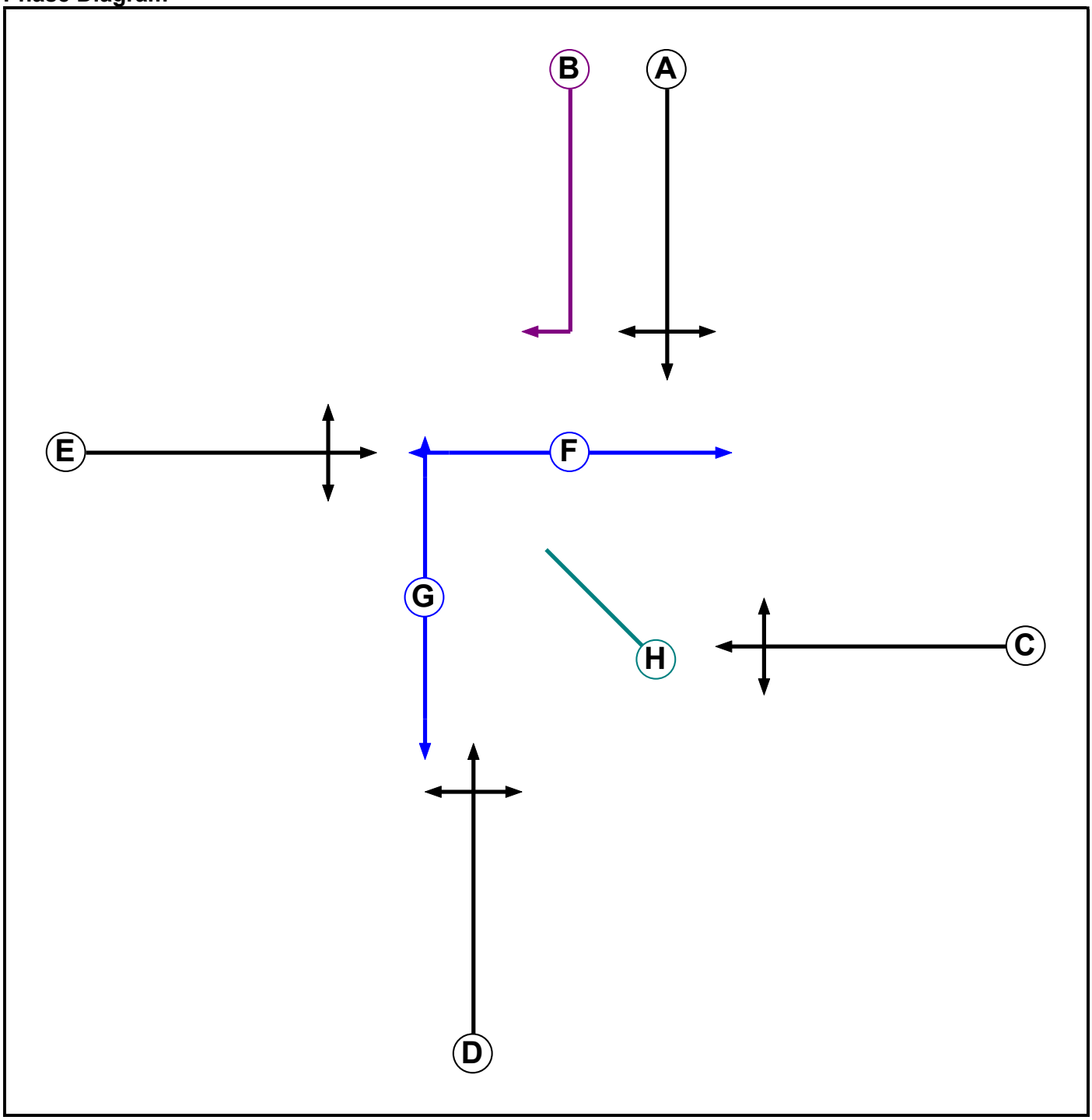
Project:	
Title:	
Location:	
Additional detail:	
File name:	21 Millennium Way-Somerleyton Rd Mitigation v3 2018-08-15.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Ind. Arrow	A	4	4
C	Traffic		7	7
D	Traffic		7	7
E	Traffic		7	7
F	Pedestrian		5	5
G	Pedestrian		5	5
H	Dummy		2	2

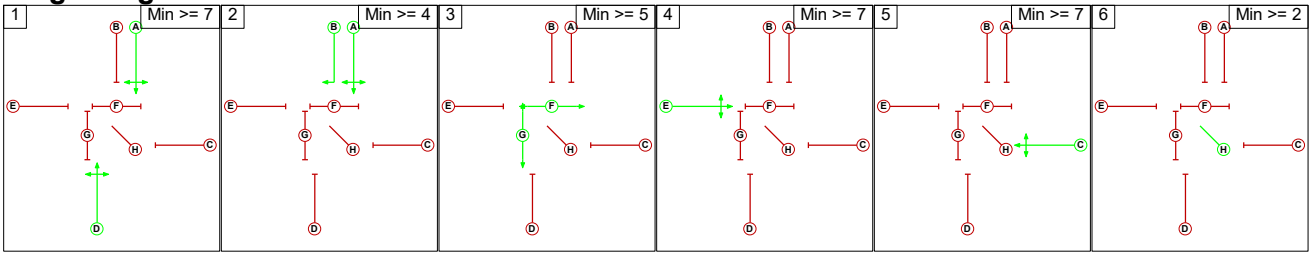
Phase Intergreens Matrix

		Starting Phase							
		A	B	C	D	E	F	G	H
Terminating Phase	A		-	7	-	7	5	10	3
	B	-		7	7	7	5	10	3
	C	7	7		7	7	10	10	3
	D	-	5	7		7	10	10	3
	E	7	7	7	7		8	8	3
	F	5	5	5	5	5		-	3
	G	5	5	5	5	5	-		3
	H	2	2	2	2	2	2	2	

Phases in Stage

Stage No.	Phases in Stage
1	A D
2	A B
3	F G
4	E
5	C
6	H

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Full Input Data And Results

Prohibited Stage Change

		To Stage					
		1	2	3	4	5	6
From Stage	1		5	10	7	7	3
	2	7		10	7	7	3
	3	5	5		5	5	3
	4	7	7	8		7	3
	5	7	7	10	7		3
	6	2	2	2	2	2	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive											
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)**
3/2 (A1117 Millennium Way S)	6/1 (Right)	1439	0	1/1	1.09	All	5.00	-	0.50	5	2.00

Full Input Data And Results

Lane Input Data

Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive												
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 (A1117 Millennium Way N)	U	A B	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 6 Left	21.90
											Arm 7 Ahead	Inf
1/2 (A1117 Millennium Way N)	U	A B	2	3	10.1	Geom	-	3.30	0.00	Y	Arm 8 Right	18.70
2/1 (Grasmere Drive)	U	C	2	3	60.0	Geom	-	4.50	0.00	Y	Arm 5 Right	22.70
											Arm 7 Left	22.60
											Arm 8 Ahead	Inf
3/1 (A1117 Millennium Way S)	U	D	2	3	60.0	Geom	-	3.20	0.00	Y	Arm 5 Ahead	Inf
											Arm 8 Left	22.00
3/2 (A1117 Millennium Way S)	O	D	2	3	11.1	Geom	-	3.20	0.00	Y	Arm 6 Right	18.70
4/1 (B1074 Somerleyton Road)	U	E	2	3	60.0	Geom	-	3.20	0.00	Y	Arm 5 Left	23.10
											Arm 6 Ahead	Inf
4/2 (B1074 Somerleyton Road)	U	E	2	3	7.6	Geom	-	3.20	0.00	Y	Arm 7 Right	22.70
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: 'Base 2016 AM'	08:00	09:00	01:00	
2: 'Base 2016 PM'	17:00	18:00	01:00	
3: 'DS 2022 AM'	08:00	09:00	01:00	
4: 'DS 2022 PM'	17:00	18:00	01:00	
5: 'DS 2037 AM'	08:00	09:00	01:00	
6: 'DS 2037 PM'	17:00	18:00	01:00	

Scenario 1: 'DS 2022 AM' (FG3: 'DS 2022 AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	3	715	27	745
	B	0	0	0	34	34
	C	412	0	0	71	483
	D	158	64	103	0	325
	Tot.	570	67	818	132	1587

Traffic Lane Flows

Lane	Scenario 1: DS 2022 AM
Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	
1/1 (with short)	745(In) 718(Out)
1/2 (short)	27
2/1	34
3/1 (with short)	483(In) 483(Out)
3/2 (short)	0
4/1 (with short)	325(In) 222(Out)
4/2 (short)	103
5/1	570
6/1	67
7/1	818
8/1	132

Full Input Data And Results

Lane Saturation Flows

Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive								
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 (A1117 Millennium Way N)	3.30	0.00	Y	Arm 6 Left	21.90	0.4 %	1944	1944
				Arm 7 Ahead	Inf	99.6 %		
1/2 (A1117 Millennium Way N)	3.30	0.00	Y	Arm 8 Right	18.70	100.0 %	1801	1801
2/1 (Grasmere Drive)	4.50	0.00	Y	Arm 5 Right	22.70	0.0 %	2065	2065
				Arm 7 Left	22.60	0.0 %		
				Arm 8 Ahead	Inf	100.0 %		
3/1 (A1117 Millennium Way S)	3.20	0.00	Y	Arm 5 Ahead	Inf	85.3 %	1916	1916
				Arm 8 Left	22.00	14.7 %		
3/2 (A1117 Millennium Way S)	3.20	0.00	Y	Arm 6 Right	18.70	0.0 %	1935	1935
4/1 (B1074 Somerleyton Road)	3.20	0.00	Y	Arm 5 Left	23.10	71.2 %	1850	1850
				Arm 6 Ahead	Inf	28.8 %		
4/2 (B1074 Somerleyton Road)	3.20	0.00	Y	Arm 7 Right	22.70	100.0 %	1815	1815
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: 'DS 2022 PM' (FG4: 'DS 2022 PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	1	494	65	560
	B	23	0	0	211	234
	C	450	0	0	38	488
	D	191	24	64	0	279
	Tot.	664	25	558	314	1561

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: DS 2022 PM
Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	
1/1 (with short)	560(In) 495(Out)
1/2 (short)	65
2/1	234
3/1 (with short)	488(In) 488(Out)
3/2 (short)	0
4/1 (with short)	279(In) 215(Out)
4/2 (short)	64
5/1	664
6/1	25
7/1	558
8/1	314

Lane Saturation Flows

Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive								
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 (A1117 Millennium Way N)	3.30	0.00	Y	Arm 6 Left	21.90	0.2 %	1945	1945
				Arm 7 Ahead	Inf	99.8 %		
1/2 (A1117 Millennium Way N)	3.30	0.00	Y	Arm 8 Right	18.70	100.0 %	1801	1801
2/1 (Grasmere Drive)	4.50	0.00	Y	Arm 5 Right	22.70	9.8 %	2052	2052
				Arm 7 Left	22.60	0.0 %		
				Arm 8 Ahead	Inf	90.2 %		
3/1 (A1117 Millennium Way S)	3.20	0.00	Y	Arm 5 Ahead	Inf	92.2 %	1925	1925
				Arm 8 Left	22.00	7.8 %		
3/2 (A1117 Millennium Way S)	3.20	0.00	Y	Arm 6 Right	18.70	0.0 %	1935	1935
4/1 (B1074 Somerleyton Road)	3.20	0.00	Y	Arm 5 Left	23.10	88.8 %	1829	1829
				Arm 6 Ahead	Inf	11.2 %		
4/2 (B1074 Somerleyton Road)	3.20	0.00	Y	Arm 7 Right	22.70	100.0 %	1815	1815
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: 'DS 2037 AM' (FG5: 'DS 2037 AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	5	789	28	822
	B	0	0	0	39	39
	C	502	0	0	85	587
	D	159	67	111	0	337
	Tot.	661	72	900	152	1785

Traffic Lane Flows

Lane	Scenario 3: DS 2037 AM
Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	
1/1 (with short)	822(In) 794(Out)
1/2 (short)	28
2/1	39
3/1 (with short)	587(In) 587(Out)
3/2 (short)	0
4/1 (with short)	337(In) 226(Out)
4/2 (short)	111
5/1	661
6/1	72
7/1	900
8/1	152

Full Input Data And Results

Lane Saturation Flows

Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive								
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 (A1117 Millennium Way N)	3.30	0.00	Y	Arm 6 Left	21.90	0.6 %	1944	1944
				Arm 7 Ahead	Inf	99.4 %		
1/2 (A1117 Millennium Way N)	3.30	0.00	Y	Arm 8 Right	18.70	100.0 %	1801	1801
2/1 (Grasmere Drive)	4.50	0.00	Y	Arm 5 Right	22.70	0.0 %	2065	2065
				Arm 7 Left	22.60	0.0 %		
				Arm 8 Ahead	Inf	100.0 %		
3/1 (A1117 Millennium Way S)	3.20	0.00	Y	Arm 5 Ahead	Inf	85.5 %	1916	1916
				Arm 8 Left	22.00	14.5 %		
3/2 (A1117 Millennium Way S)	3.20	0.00	Y	Arm 6 Right	18.70	0.0 %	1935	1935
4/1 (B1074 Somerleyton Road)	3.20	0.00	Y	Arm 5 Left	23.10	70.4 %	1850	1850
				Arm 6 Ahead	Inf	29.6 %		
4/2 (B1074 Somerleyton Road)	3.20	0.00	Y	Arm 7 Right	22.70	100.0 %	1815	1815
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: 'DS 2037 PM' (FG6: 'DS 2037 PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	4	502	67	573
	B	26	0	0	235	261
	C	471	0	0	25	496
	D	210	18	89	0	317
	Tot.	707	22	591	327	1647

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: DS 2037 PM
Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	
1/1 (with short)	573(In) 506(Out)
1/2 (short)	67
2/1	261
3/1 (with short)	496(In) 496(Out)
3/2 (short)	0
4/1 (with short)	317(In) 228(Out)
4/2 (short)	89
5/1	707
6/1	22
7/1	591
8/1	327

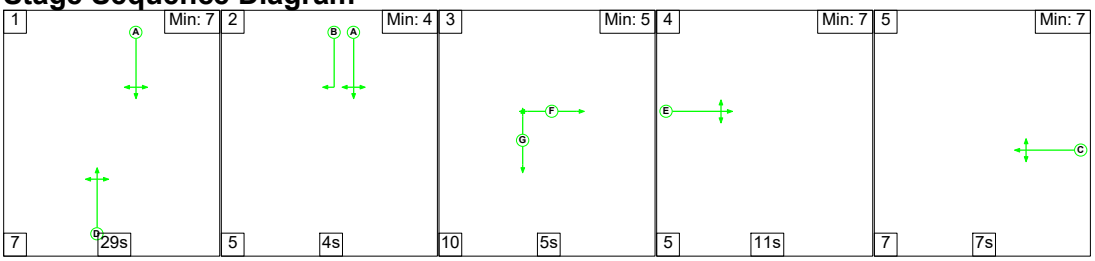
Lane Saturation Flows

Junction: A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive								
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 (A1117 Millennium Way N)	3.30	0.00	Y	Arm 6 Left	21.90	0.8 %	1944	1944
				Arm 7 Ahead	Inf	99.2 %		
1/2 (A1117 Millennium Way N)	3.30	0.00	Y	Arm 8 Right	18.70	100.0 %	1801	1801
2/1 (Grasmere Drive)	4.50	0.00	Y	Arm 5 Right	22.70	10.0 %	2051	2051
				Arm 7 Left	22.60	0.0 %		
				Arm 8 Ahead	Inf	90.0 %		
3/1 (A1117 Millennium Way S)	3.20	0.00	Y	Arm 5 Ahead	Inf	95.0 %	1928	1928
				Arm 8 Left	22.00	5.0 %		
3/2 (A1117 Millennium Way S)	3.20	0.00	Y	Arm 6 Right	18.70	0.0 %	1935	1935
4/1 (B1074 Somerleyton Road)	3.20	0.00	Y	Arm 5 Left	23.10	92.1 %	1826	1826
				Arm 6 Ahead	Inf	7.9 %		
4/2 (B1074 Somerleyton Road)	3.20	0.00	Y	Arm 7 Right	22.70	100.0 %	1815	1815
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 1: 'DS 2022 AM' (FG3: 'DS 2022 AM', Plan 1: 'Network Control Plan 1')

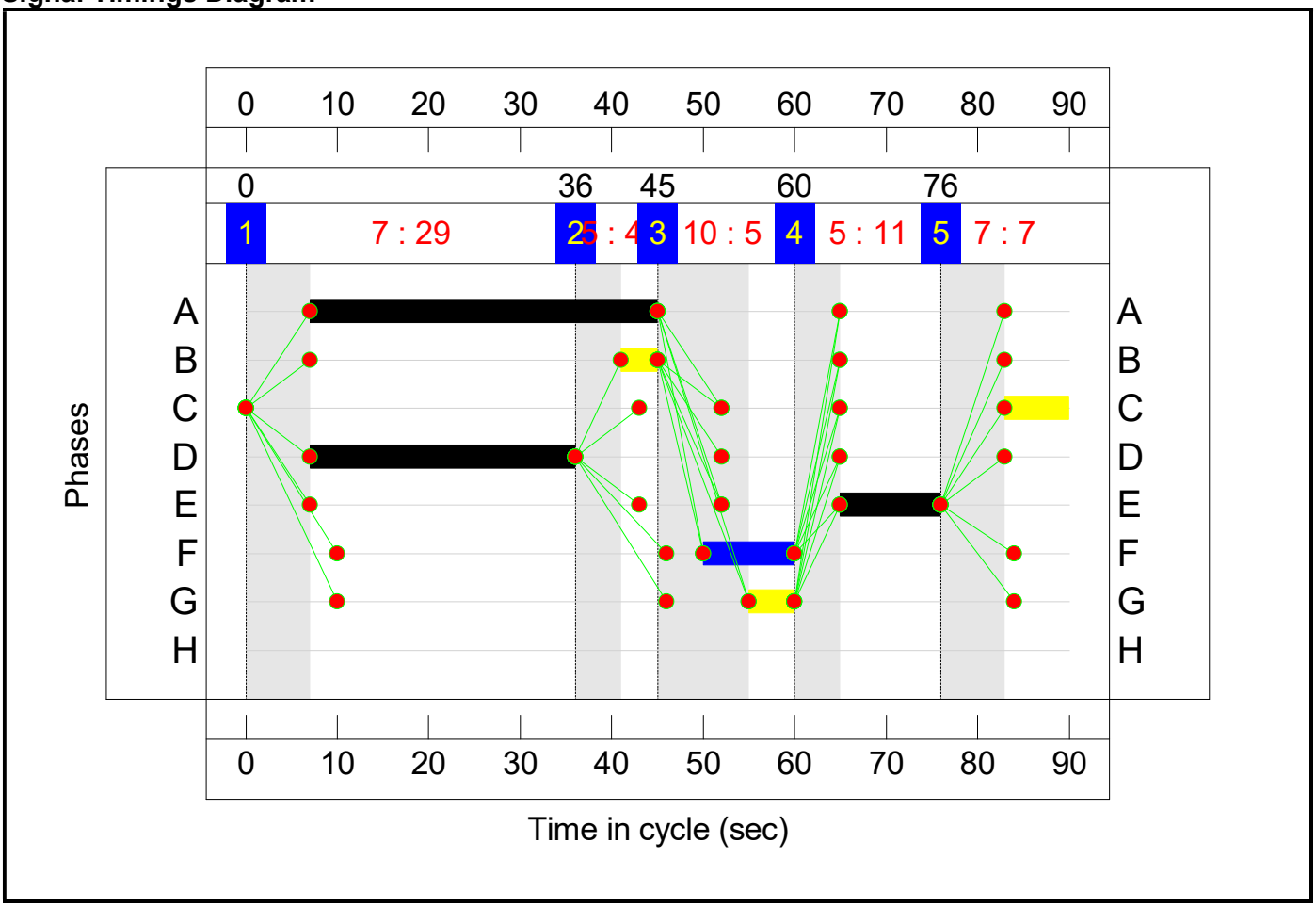
Stage Sequence Diagram



Stage Timings

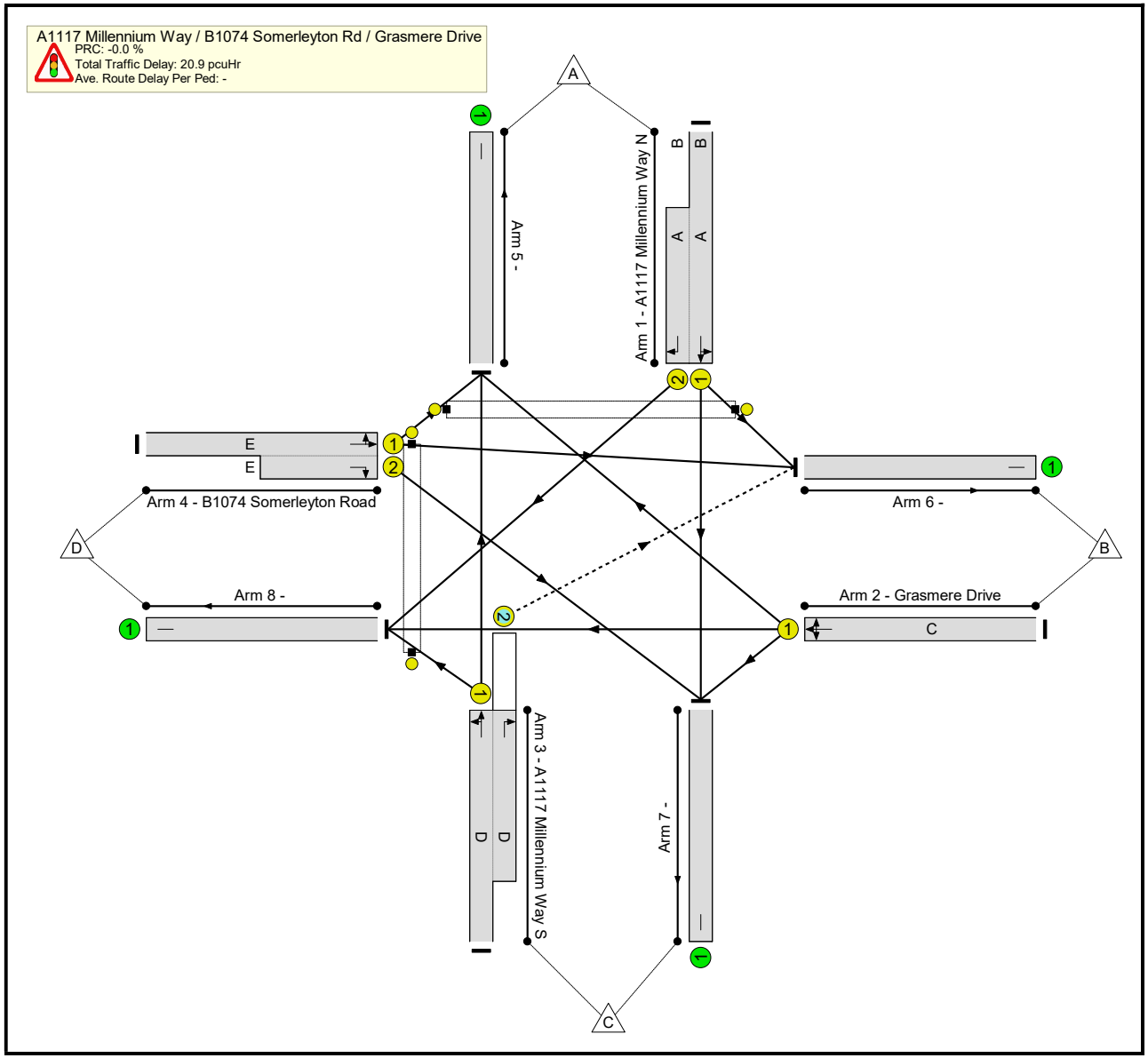
Stage	1	2	3	4	5
Duration	29	4	5	11	7
Change Point	0	36	45	60	76

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**90.0%**
A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	-	-	**N/A**	-	-		-	-	-	-	-	-	**90.0%**
1/1+1/2	A1117 Millennium Way N Left Ahead Right	U	N/A	N/A	A	B	1	38	4:4	745	1944:1801	817+31	87.9 : 87.9%
2/1	Grasmere Drive Right Left Ahead	U	N/A	N/A	C		1	7	-	34	2065	184	18.5%
3/1+3/2	A1117 Millennium Way S Ahead Right Left	U+O	N/A	N/A	D		1	29	-	483	1916:1935	633+0	76.2 : 0.0%
4/1+4/2	B1074 Somerleyton Road Left Ahead Right	U	N/A	N/A	E		1	11	-	325	1850:1815	247+114	90.0 : 90.0%
5/1		U	N/A	N/A	-		-	-	-	570	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	67	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	818	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	132	Inf	Inf	0.0%
Ped Link: P1	Somerleyton Road	-	N/A	-	G		1	5	-	0	-	0	0.0%
Ped Link: P2	Millennium Way N	-	N/A	-	F		1	10	-	0	-	0	0.0%

Full Input Data And Results

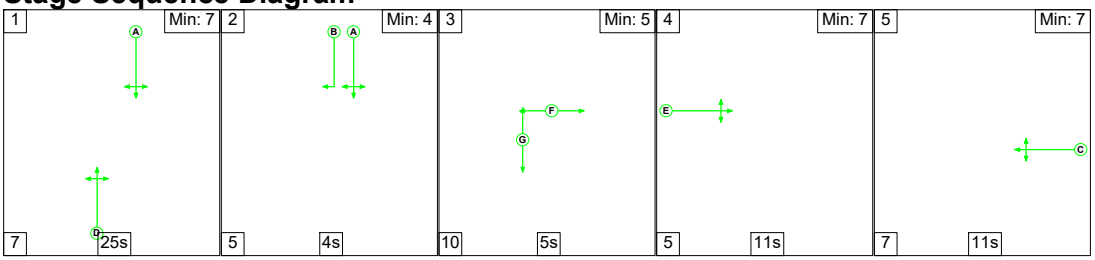
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**12.1**	**8.8**	**0.0**	**20.9**	**-**	**-**	**-**	**-**
A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	**-**	**-**	**0**	**0**	**0**	**12.1**	**8.8**	**0.0**	**20.9**	**-**	**-**	**-**	**-**
1/1+1/2	745	745	-	-	-	4.7	3.4	-	8.1	39.4	16.6	3.4	20.0
2/1	34	34	-	-	-	0.4	0.1	-	0.5	50.1	0.8	0.1	0.9
3/1+3/2	483	483	0	0	0	3.6	1.6	0.0	5.2	38.5	10.7	1.6	12.3
4/1+4/2	325	325	-	-	-	3.4	3.7	-	7.1	78.9	5.4	3.7	9.2
5/1	570	570	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	67	67	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	818	818	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	132	132	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): -0.0 Total Delay for Signalled Lanes (pcuHr): 20.90 Cycle Time (s): 90
PRC Over All Lanes (%): -0.0 Total Delay Over All Lanes(pcuHr): 20.90

Full Input Data And Results

Scenario 2: 'DS 2022 PM' (FG4: 'DS 2022 PM', Plan 1: 'Network Control Plan 1')

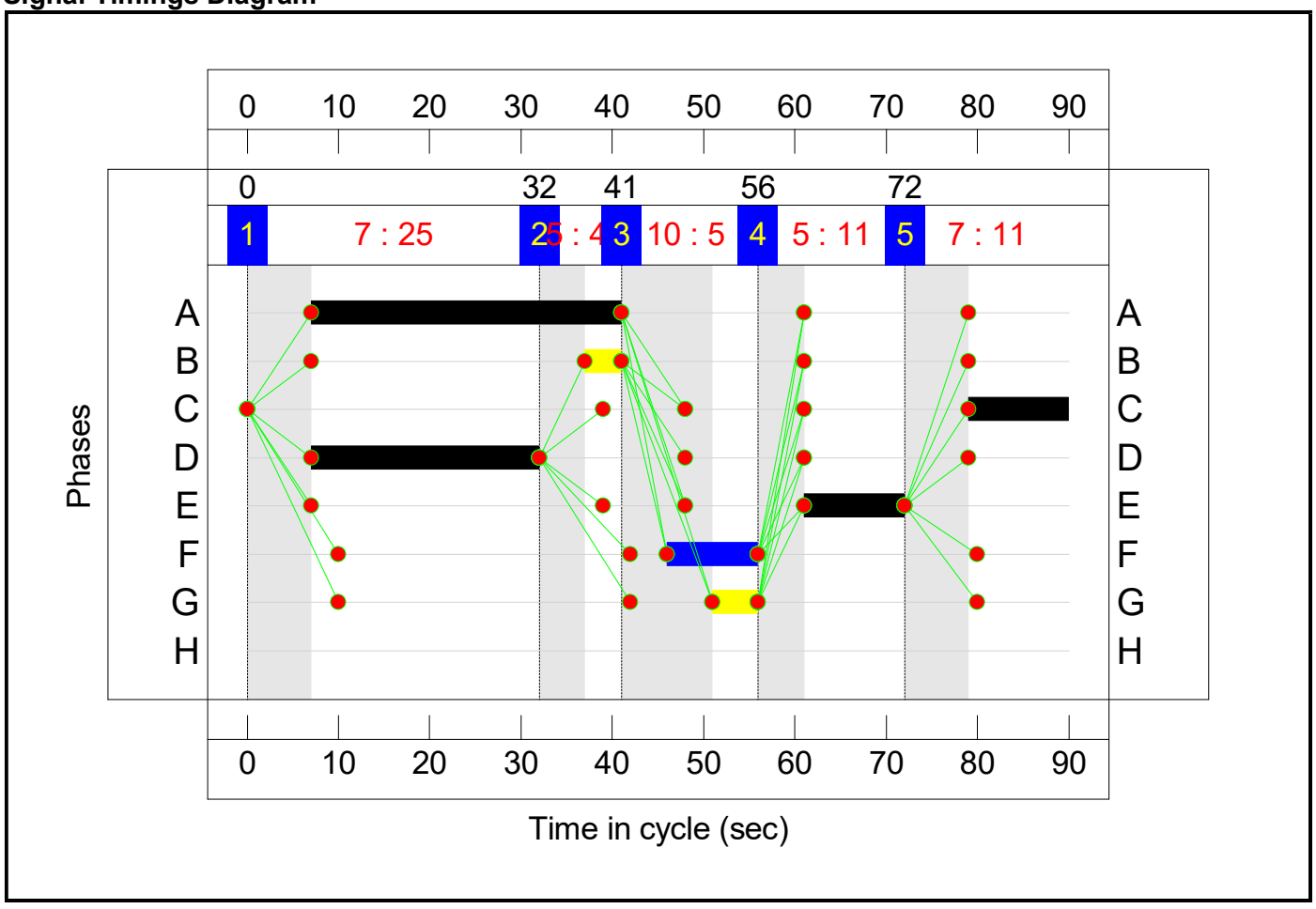
Stage Sequence Diagram



Stage Timings

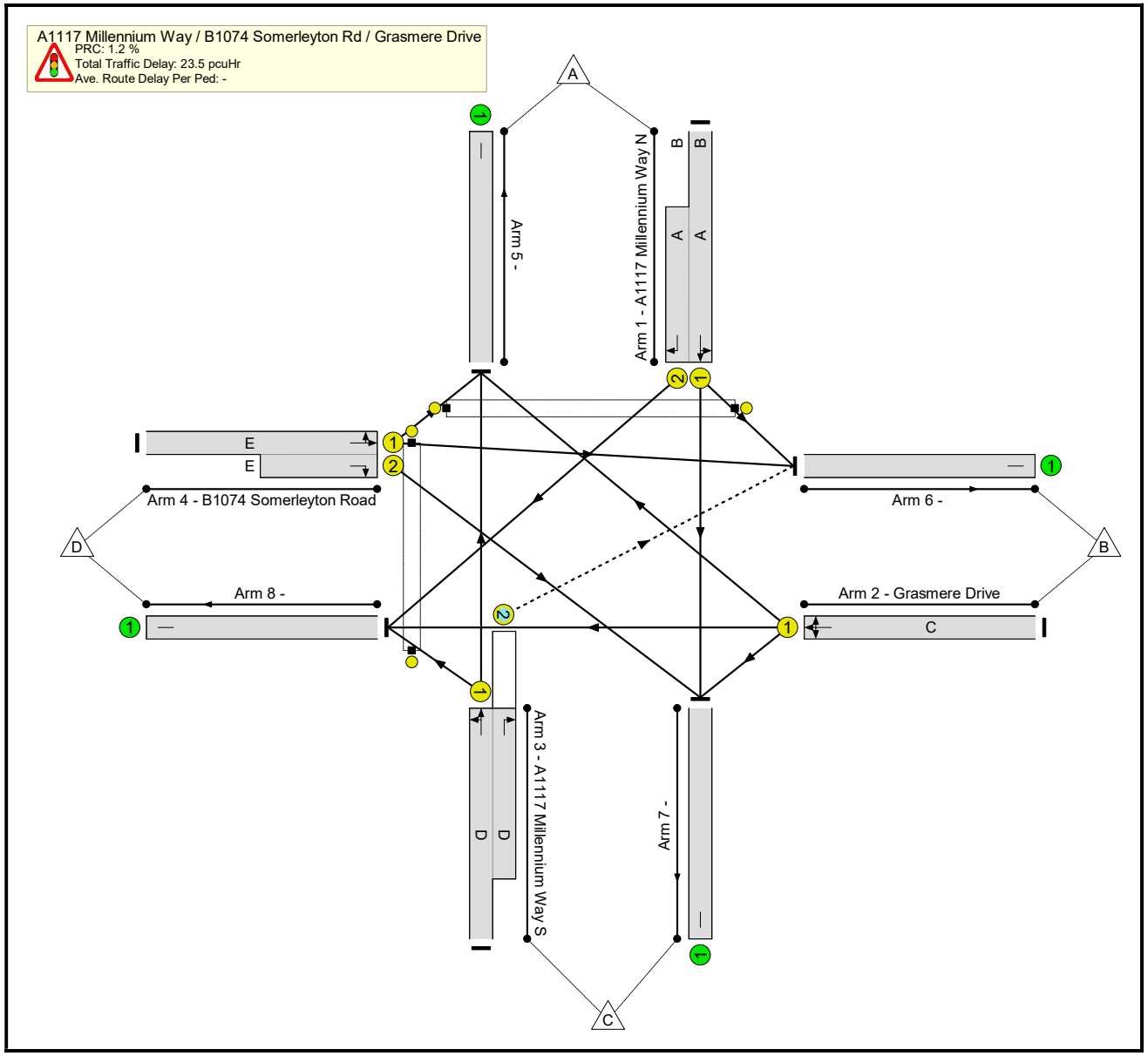
Stage	1	2	3	4	5
Duration	25	4	5	11	11
Change Point	0	32	41	56	72

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**88.9%**
A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	-	-	**N/A**	-	-		-	-	-	-	-	-	**88.9%**
1/1+1/2	A1117 Millennium Way N Left Ahead Right	U	N/A	N/A	A	B	1	34	4:4	560	1945:1801	705+93	70.2 : 70.2%
2/1	Grasmere Drive Right Left Ahead	U	N/A	N/A	C		1	11	-	234	2052	274	85.5%
3/1+3/2	A1117 Millennium Way S Ahead Right Left	U+O	N/A	N/A	D		1	25	-	488	1925:1935	549+0	88.9 : 0.0%
4/1+4/2	B1074 Somerleyton Road Left Ahead Right	U	N/A	N/A	E		1	11	-	279	1829:1815	244+73	88.2 : 88.2%
5/1		U	N/A	N/A	-		-	-	-	664	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	25	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	558	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	314	Inf	Inf	0.0%
Ped Link: P1	Somerleyton Road	-	N/A	-	G		1	5	-	0	-	0	0.0%
Ped Link: P2	Millennium Way N	-	N/A	-	F		1	10	-	0	-	0	0.0%

Full Input Data And Results

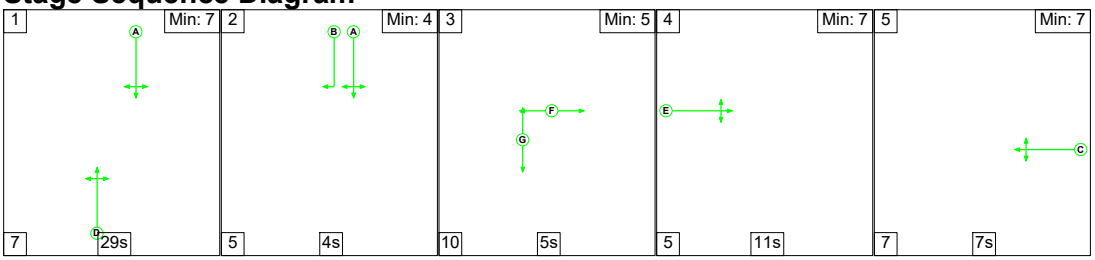
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**12.9**	**10.5**	**0.0**	**23.5**	**-**	**-**	**-**	**-**
A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	**-**	**-**	**0**	**0**	**0**	**12.9**	**10.5**	**0.0**	**23.5**	**-**	**-**	**-**	**-**
1/1+1/2	560	560	-	-	-	3.4	1.2	-	4.6	29.5	10.3	1.2	11.4
2/1	234	234	-	-	-	2.5	2.6	-	5.1	78.3	5.7	2.6	8.3
3/1+3/2	488	488	0	0	0	4.1	3.6	0.0	7.7	57.0	11.8	3.6	15.4
4/1+4/2	279	279	-	-	-	2.9	3.2	-	6.1	78.6	5.3	3.2	8.4
5/1	664	664	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	25	25	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	558	558	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	314	314	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 1.2 Total Delay for Signalled Lanes (pcuHr): 23.49 Cycle Time (s): 90
PRC Over All Lanes (%): 1.2 Total Delay Over All Lanes(pcuHr): 23.49

Full Input Data And Results

Scenario 3: 'DS 2037 AM' (FG5: 'DS 2037 AM', Plan 1: 'Network Control Plan 1')

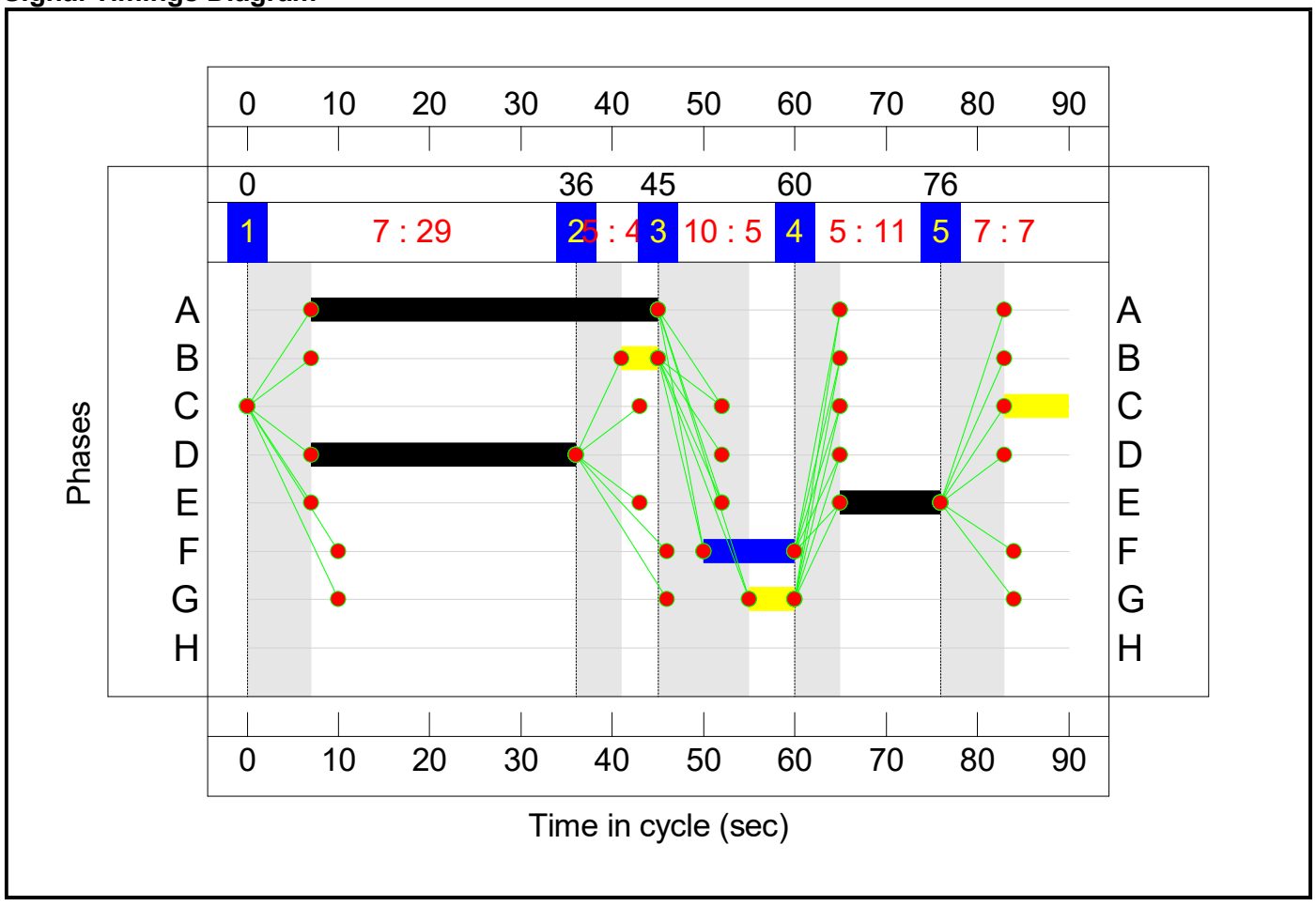
Stage Sequence Diagram



Stage Timings

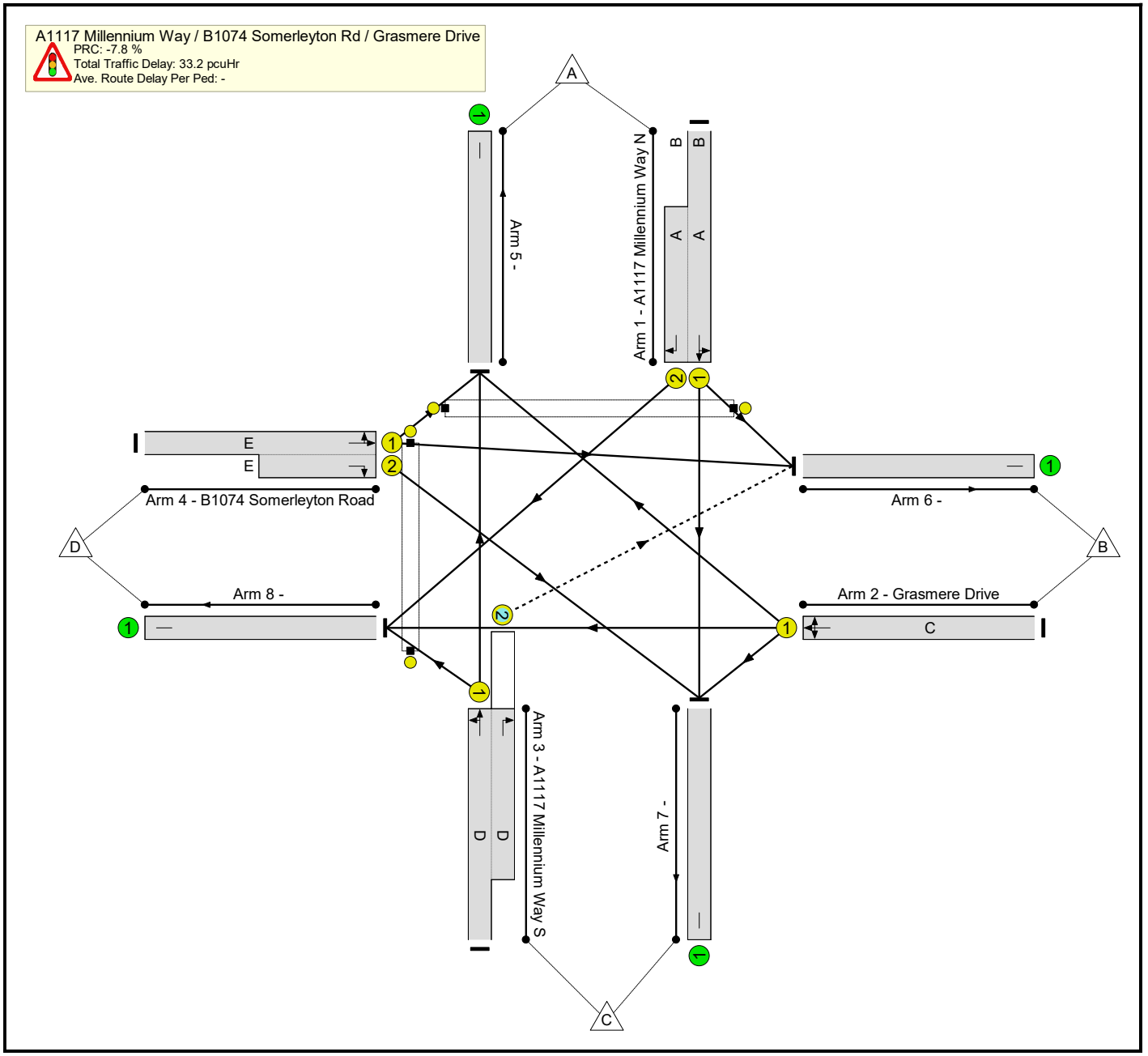
Stage	1	2	3	4	5
Duration	29	4	5	11	7
Change Point	0	36	45	60	76

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**97.0%**
A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	-	-	**N/A**	-	-		-	-	-	-	-	-	**97.0%**
1/1+1/2	A1117 Millennium Way N Left Ahead Right	U	N/A	N/A	A	B	1	38	4:4	822	1944:1801	818+29	97.0 : 97.0%
2/1	Grasmere Drive Right Left Ahead	U	N/A	N/A	C		1	7	-	39	2065	184	21.2%
3/1+3/2	A1117 Millennium Way S Ahead Right Left	U+O	N/A	N/A	D		1	29	-	587	1916:1935	633+0	92.7 : 0.0%
4/1+4/2	B1074 Somerleyton Road Left Ahead Right	U	N/A	N/A	E		1	11	-	337	1850:1815	247+121	91.6 : 91.6%
5/1		U	N/A	N/A	-		-	-	-	661	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	72	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	900	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	152	Inf	Inf	0.0%
Ped Link: P1	Somerleyton Road	-	N/A	-	G		1	5	-	0	-	0	0.0%
Ped Link: P2	Millennium Way N	-	N/A	-	F		1	10	-	0	-	0	0.0%

Full Input Data And Results

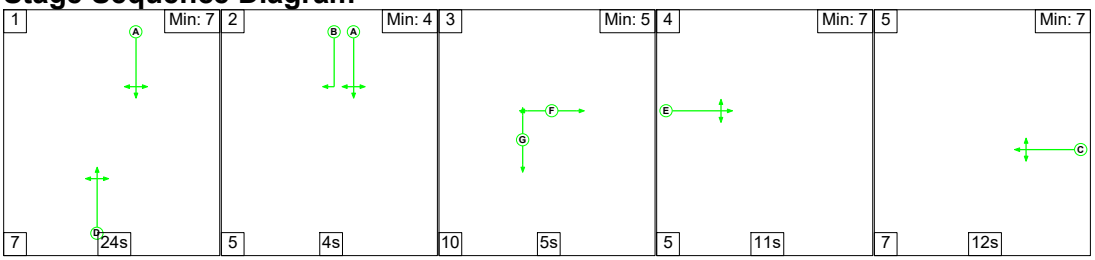
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**14.3**	**19.0**	**0.0**	**33.2**	**-**	**-**	**-**	**-**
A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	**-**	**-**	**0**	**0**	**0**	**14.3**	**19.0**	**0.0**	**33.2**	**-**	**-**	**-**	**-**
1/1+1/2	822	822	-	-	-	5.6	9.4	-	15.0	65.7	19.5	9.4	28.9
2/1	39	39	-	-	-	0.4	0.1	-	0.5	50.6	0.9	0.1	1.0
3/1+3/2	587	587	0	0	0	4.7	5.2	0.0	9.9	60.6	14.0	5.2	19.2
4/1+4/2	337	337	-	-	-	3.5	4.3	-	7.8	83.4	5.5	4.3	9.8
5/1	661	661	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	72	72	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	900	900	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	152	152	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): -7.8 Total Delay for Signalled Lanes (pcuHr): 33.24 Cycle Time (s): 90
PRC Over All Lanes (%): -7.8 Total Delay Over All Lanes(pcuHr): 33.24

Full Input Data And Results

Scenario 4: 'DS 2037 PM' (FG6: 'DS 2037 PM', Plan 1: 'Network Control Plan 1')

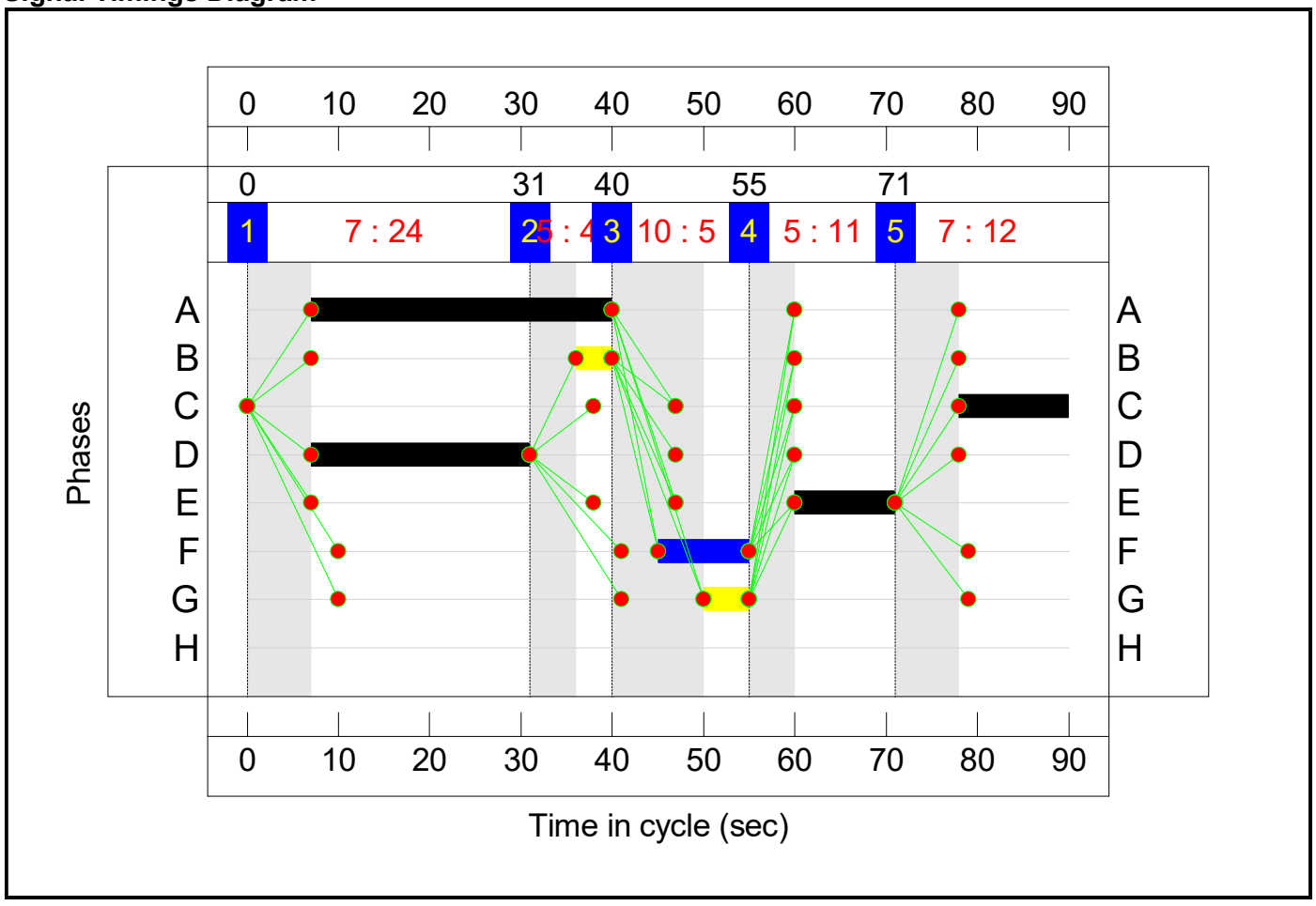
Stage Sequence Diagram



Stage Timings

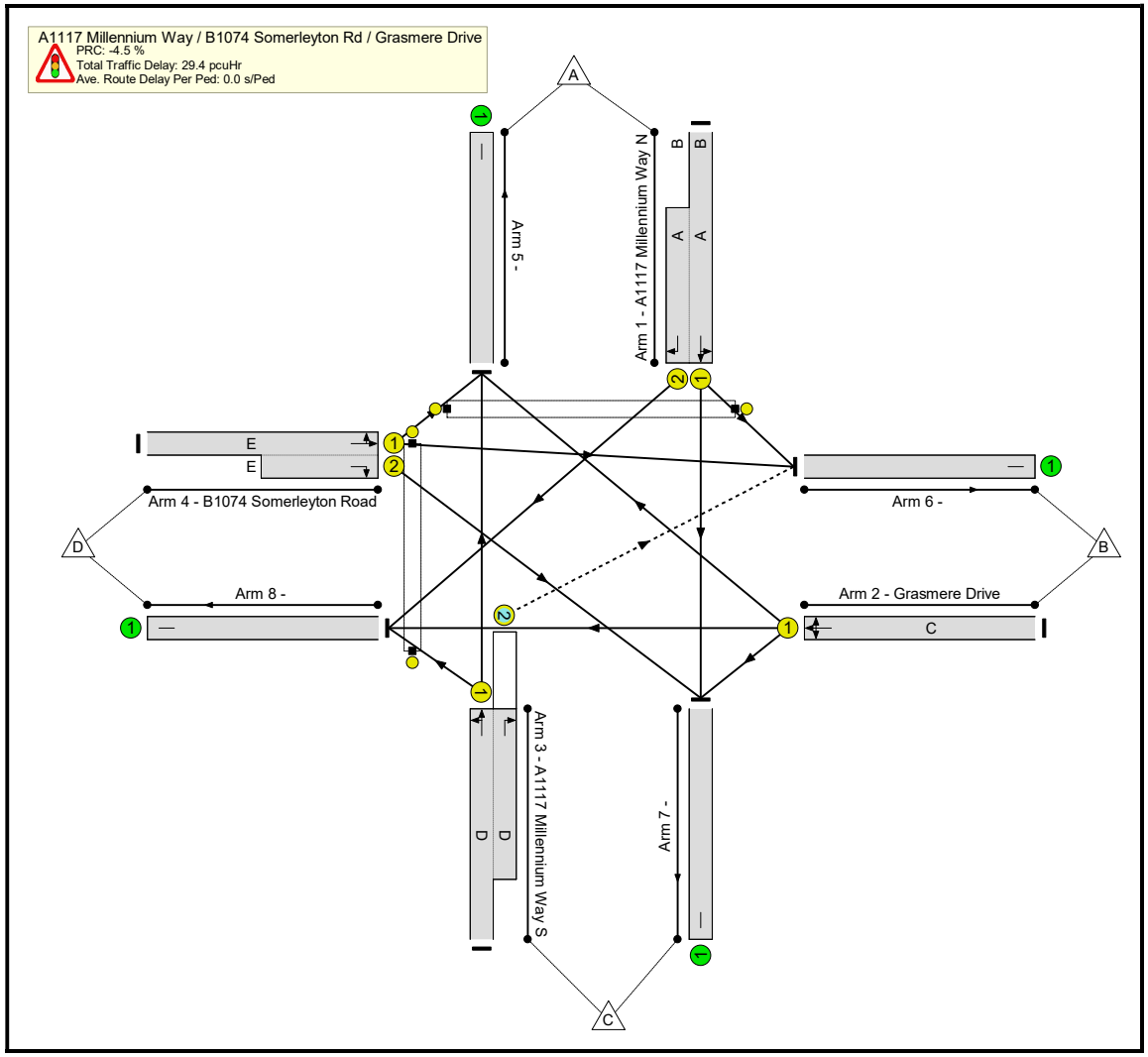
Stage	1	2	3	4	5
Duration	24	4	5	11	12
Change Point	0	31	40	55	71

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



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**	-	-		-	-	-	-	-	-	**94.0%**
A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	-	-	**N/A**	-	-		-	-	-	-	-	-	**94.0%**
1/1+1/2	A1117 Millennium Way N Left Ahead Right	U	N/A	N/A	A	B	1	33	4:4	573	1944:1801	686+91	73.8 : 73.8%
2/1	Grasmere Drive Right Left Ahead	U	N/A	N/A	C		1	12	-	261	2051	296	88.1%
3/1+3/2	A1117 Millennium Way S Ahead Right Left	U+O	N/A	N/A	D		1	24	-	496	1928:1935	528+0	94.0 : 0.0%
4/1+4/2	B1074 Somerleyton Road Left Ahead Right	U	N/A	N/A	E		1	11	-	317	1826:1815	243+95	93.6 : 93.6%
5/1		U	N/A	N/A	-		-	-	-	707	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	22	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	591	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	327	Inf	Inf	0.0%
Ped Link: P1	Somerleyton Road	-	N/A	-	G		1	5	-	0	-	0	0.0%
Ped Link: P2	Millennium Way N	-	N/A	-	F		1	10	-	0	-	0	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	**-**	**-**	**0**	**0**	**0**	**14.1**	**15.3**	**0.0**	**29.4**	**-**	**-**	**-**	**-**
A1117 Millennium Way / B1074 Somerleyton Rd / Grasmere Drive	**-**	**-**	**0**	**0**	**0**	**14.1**	**15.3**	**0.0**	**29.4**	**-**	**-**	**-**	**-**
1/1+1/2	573	573	-	-	-	3.7	1.4	-	5.0	31.7	10.9	1.4	12.3
2/1	261	261	-	-	-	2.7	3.1	-	5.9	81.1	6.4	3.1	9.5
3/1+3/2	496	496	0	0	0	4.4	5.8	0.0	10.1	73.4	12.2	5.8	18.0
4/1+4/2	317	317	-	-	-	3.3	5.0	-	8.3	94.8	5.6	5.0	10.7
5/1	707	707	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	22	22	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	591	591	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	327	327	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): -4.5 Total Delay for Signalled Lanes (pcuHr): 29.39 Cycle Time (s): 90

PRC Over All Lanes (%): -4.5 Total Delay Over All Lanes(pcuHr): 29.39

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.6.541 [19821,26/11/2015]

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: 22 Waveney Dr-Riverside Rd priority.arc8
Path: L:\106xxx\1069948 Lowestoft Third Crossing\09 Documents\06_Modelling_Junction Modelling Mar 2018\22 Waveney Drive-Riverside Road priority
Report generation date: 03/04/2018 14:20:15

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2022 DS							
Stream B-C	0.06	6.80	0.05	A	0.20	7.28	0.17	A
Stream B-A	0.04	12.24	0.04	B	0.29	13.86	0.22	B
Stream C-AB	0.20	7.90	0.17	A	0.03	5.60	0.03	A
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
	A1 - 2037 DS							
Stream B-C	0.08	7.75	0.07	A	0.27	8.10	0.22	A
Stream B-A	0.06	15.97	0.06	C	0.39	18.19	0.28	C
Stream C-AB	0.27	9.41	0.21	A	0.03	5.82	0.03	A
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.

"D1 - 2022 DS, AM " model duration: 08:00 - 09:30
"D2 - 2022 DS, PM" model duration: 17:00 - 18:30
"D3 - 2037 DS, AM" model duration: 08:00 - 09:30
"D4 - 2037 DS, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.6.541 at 03/04/2018 14:20:13

File summary

Title	Waveney Dr-Riverside Rd priority
Location	
Site Number	
Date	09/03/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	UKECC600
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) - 2022 DS, 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
2022 DS, AM	2022 DS	AM		ONE HOUR	08:00	09:30	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	8.02	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Waveney Dr West		Major
B	B	Riverside Road		Minor
C	C	Waveney Dr East		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	7.24		0.00	✓	3.50	216.00	✓	6.00

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	9.24	5.20	4.01	4.00	✓	2.00	150	77

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	596.983	0.103	0.260	0.164	0.371
1	B-C	780.001	0.113	0.286	-	-
1	C-B	797.956	0.292	0.292	-	-

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	✓	783.00	100.000
B	ONE HOUR	✓	37.00	100.000
C	ONE HOUR	✓	427.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	163.000	620.000
	B	10.000	0.000	27.000
	C	345.000	82.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.21	0.79
	B	0.27	0.00	0.73
	C	0.81	0.19	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-C	0.05	6.80	0.06	A
B-A	0.04	12.24	0.04	B
C-AB	0.17	7.90	0.20	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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	20.33	20.19	0.00	629.67	0.032	0.03	5.905	A
B-A	7.53	7.45	0.00	397.58	0.019	0.02	9.228	A
C-AB	61.73	61.30	0.00	625.54	0.099	0.11	6.376	A
C-A	259.73	259.73	0.00	-	-	-	-	-
A-B	122.71	122.71	0.00	-	-	-	-	-
A-C	466.77	466.77	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	24.27	24.24	0.00	600.20	0.040	0.04	6.250	A
B-A	8.99	8.96	0.00	358.75	0.025	0.03	10.292	B
C-AB	73.72	73.59	0.00	592.07	0.125	0.14	6.941	A
C-A	310.15	310.15	0.00	-	-	-	-	-
A-B	146.53	146.53	0.00	-	-	-	-	-
A-C	557.37	557.37	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	29.73	29.67	0.00	559.33	0.053	0.06	6.796	A
B-A	11.01	10.96	0.00	305.19	0.036	0.04	12.234	B
C-AB	90.28	90.06	0.00	545.81	0.165	0.20	7.895	A
C-A	379.85	379.85	0.00	-	-	-	-	-
A-B	179.47	179.47	0.00	-	-	-	-	-
A-C	682.63	682.63	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	29.73	29.73	0.00	559.27	0.053	0.06	6.797	A
B-A	11.01	11.01	0.00	305.13	0.036	0.04	12.239	B
C-AB	90.28	90.28	0.00	545.81	0.165	0.20	7.902	A
C-A	379.85	379.85	0.00	-	-	-	-	-
A-B	179.47	179.47	0.00	-	-	-	-	-
A-C	682.63	682.63	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	24.27	24.33	0.00	600.09	0.040	0.04	6.252	A
B-A	8.99	9.03	0.00	358.67	0.025	0.03	10.297	B
C-AB	73.72	73.93	0.00	592.07	0.125	0.14	6.952	A
C-A	310.15	310.15	0.00	-	-	-	-	-
A-B	146.53	146.53	0.00	-	-	-	-	-
A-C	557.37	557.37	0.00	-	-	-	-	-

Main results: (09:15-09:30)

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	20.33	20.36	0.00	629.53	0.032	0.03	5.911	A
B-A	7.53	7.55	0.00	397.44	0.019	0.02	9.235	A
C-AB	61.73	61.87	0.00	625.54	0.099	0.11	6.387	A
C-A	259.73	259.73	0.00	-	-	-	-	-
A-B	122.71	122.71	0.00	-	-	-	-	-
A-C	466.77	466.77	0.00	-	-	-	-	-

(Default Analysis Set) - 2022 DS, 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
2022 DS, PM	2022 DS	PM		ONE HOUR	17:00	18:30	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	9.72	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Waveney Dr West		Major
B	B	Riverside Road		Minor
C	C	Waveney Dr East		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	7.24		0.00	✓	3.50	216.00	✓	6.00

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	9.24	5.20	4.01	4.00	✓	2.00	150	77

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	612.706	0.106	0.267	0.168	0.381
1	B-C	761.318	0.110	0.279	-	-
1	C-B	797.956	0.292	0.292	-	-

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	✓	432.00	100.000
B	ONE HOUR	✓	158.00	100.000
C	ONE HOUR	✓	807.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	10.000	422.000
	B	68.000	0.000	90.000
	C	792.000	15.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.02	0.98
	B	0.43	0.00	0.57
	C	0.98	0.02	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-C	0.17	7.28	0.20	A
B-A	0.22	13.86	0.29	B
C-AB	0.03	5.60	0.03	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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	67.76	67.30	0.00	651.38	0.104	0.12	6.154	A
B-A	51.19	50.65	0.00	422.68	0.121	0.14	9.663	A
C-AB	11.29	11.23	0.00	702.83	0.016	0.02	5.205	A
C-A	596.26	596.26	0.00	-	-	-	-	-
A-B	7.53	7.53	0.00	-	-	-	-	-
A-C	317.70	317.70	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	80.91	80.78	0.00	627.93	0.129	0.15	6.577	A
B-A	61.13	60.93	0.00	385.77	0.158	0.19	11.075	B
C-AB	13.48	13.47	0.00	684.36	0.020	0.02	5.365	A
C-A	711.99	711.99	0.00	-	-	-	-	-
A-B	8.99	8.99	0.00	-	-	-	-	-
A-C	379.37	379.37	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	99.09	98.88	0.00	593.66	0.167	0.20	7.272	A
B-A	74.87	74.48	0.00	334.63	0.224	0.28	13.817	B
C-AB	16.52	16.49	0.00	658.84	0.025	0.03	5.604	A
C-A	872.01	872.01	0.00	-	-	-	-	-
A-B	11.01	11.01	0.00	-	-	-	-	-
A-C	464.63	464.63	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	99.09	99.09	0.00	593.40	0.167	0.20	7.282	A
B-A	74.87	74.86	0.00	334.66	0.224	0.29	13.856	B
C-AB	16.52	16.52	0.00	658.84	0.025	0.03	5.604	A
C-A	872.01	872.01	0.00	-	-	-	-	-
A-B	11.01	11.01	0.00	-	-	-	-	-
A-C	464.63	464.63	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	80.91	81.11	0.00	627.54	0.129	0.15	6.589	A
B-A	61.13	61.51	0.00	385.84	0.158	0.19	11.112	B
C-AB	13.48	13.51	0.00	684.36	0.020	0.02	5.367	A
C-A	711.99	711.99	0.00	-	-	-	-	-
A-B	8.99	8.99	0.00	-	-	-	-	-
A-C	379.37	379.37	0.00	-	-	-	-	-

Main results: (18:15-18:30)

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	67.76	67.89	0.00	650.93	0.104	0.12	6.175	A
B-A	51.19	51.40	0.00	422.75	0.121	0.14	9.701	A
C-AB	11.29	11.31	0.00	702.83	0.016	0.02	5.205	A
C-A	596.26	596.26	0.00	-	-	-	-	-
A-B	7.53	7.53	0.00	-	-	-	-	-
A-C	317.70	317.70	0.00	-	-	-	-	-

(Default Analysis Set) - 2037 DS, 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
2037 DS, AM	2037 DS	AM		ONE HOUR	08:00	09:30	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	9.63	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Waveney Dr West		Major
B	B	Riverside Road		Minor
C	C	Waveney Dr East		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	7.24		0.00	✓	3.50	216.00	✓	6.00

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	9.24	5.20	4.01	4.00	✓	2.00	150	77

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	598.194	0.103	0.261	0.164	0.372
1	B-C	778.561	0.113	0.285	-	-
1	C-B	797.956	0.292	0.292	-	-

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	✓	972.00	100.000
B	ONE HOUR	✓	46.00	100.000
C	ONE HOUR	✓	501.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	187.000	785.000
	B	13.000	0.000	33.000
	C	408.000	93.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.19	0.81
	B	0.28	0.00	0.72
	C	0.81	0.19	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-C	0.07	7.75	0.08	A
B-A	0.06	15.97	0.06	C
C-AB	0.21	9.41	0.27	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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	24.84	24.67	0.00	589.90	0.042	0.04	6.367	A
B-A	9.79	9.67	0.00	353.30	0.028	0.03	10.473	B
C-AB	70.02	69.48	0.00	583.92	0.120	0.14	6.990	A
C-A	307.16	307.16	0.00	-	-	-	-	-
A-B	140.78	140.78	0.00	-	-	-	-	-
A-C	590.99	590.99	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	29.67	29.62	0.00	552.74	0.054	0.06	6.881	A
B-A	11.69	11.64	0.00	305.61	0.038	0.04	12.245	B
C-AB	83.61	83.42	0.00	542.38	0.154	0.18	7.840	A
C-A	366.78	366.78	0.00	-	-	-	-	-
A-B	168.11	168.11	0.00	-	-	-	-	-
A-C	705.70	705.70	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	36.33	36.25	0.00	500.91	0.073	0.08	7.747	A
B-A	14.31	14.22	0.00	239.82	0.060	0.06	15.951	C
C-AB	102.40	102.07	0.00	484.96	0.211	0.26	9.393	A
C-A	449.21	449.21	0.00	-	-	-	-	-
A-B	205.89	205.89	0.00	-	-	-	-	-
A-C	864.30	864.30	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	36.33	36.33	0.00	500.80	0.073	0.08	7.750	A
B-A	14.31	14.31	0.00	239.72	0.060	0.06	15.970	C
C-AB	102.40	102.40	0.00	484.96	0.211	0.27	9.409	A
C-A	449.21	449.21	0.00	-	-	-	-	-
A-B	205.89	205.89	0.00	-	-	-	-	-
A-C	864.30	864.30	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	29.67	29.75	0.00	552.55	0.054	0.06	6.888	A
B-A	11.69	11.78	0.00	305.49	0.038	0.04	12.260	B
C-AB	83.61	83.93	0.00	542.38	0.154	0.18	7.858	A
C-A	366.78	366.78	0.00	-	-	-	-	-
A-B	168.11	168.11	0.00	-	-	-	-	-
A-C	705.70	705.70	0.00	-	-	-	-	-

Main results: (09:15-09:30)

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	24.84	24.90	0.00	589.70	0.042	0.04	6.376	A
B-A	9.79	9.83	0.00	353.12	0.028	0.03	10.487	B
C-AB	70.02	70.20	0.00	583.92	0.120	0.14	7.009	A
C-A	307.16	307.16	0.00	-	-	-	-	-
A-B	140.78	140.78	0.00	-	-	-	-	-
A-C	590.99	590.99	0.00	-	-	-	-	-

(Default Analysis Set) - 2037 DS, 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
2037 DS, PM	2037 DS	PM		ONE HOUR	17:00	18:30	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	11.50	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Waveney Dr West		Major
B	B	Riverside Road		Minor
C	C	Waveney Dr East		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	7.24		0.00	✓	3.50	216.00	✓	6.00

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	9.24	5.20	4.01	4.00	✓	2.00	150	77

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	608.752	0.105	0.265	0.167	0.379
1	B-C	766.017	0.111	0.281	-	-
1	C-B	797.956	0.292	0.292	-	-

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	✓	499.00	100.000
B	ONE HOUR	✓	182.00	100.000
C	ONE HOUR	✓	1006.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	12.000	487.000
	B	71.000	0.000	111.000
	C	989.000	17.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.02	0.98
	B	0.39	0.00	0.61
	C	0.98	0.02	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-C	0.22	8.10	0.27	A
B-A	0.28	18.19	0.39	C
C-AB	0.03	5.82	0.03	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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	83.57	82.97	0.00	638.69	0.131	0.15	6.471	A
B-A	53.45	52.81	0.00	381.46	0.140	0.16	10.933	B
C-AB	12.80	12.72	0.00	688.07	0.019	0.02	5.330	A
C-A	744.57	744.57	0.00	-	-	-	-	-
A-B	9.03	9.03	0.00	-	-	-	-	-
A-C	366.64	366.64	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	99.79	99.61	0.00	610.54	0.163	0.19	7.044	A
B-A	63.83	63.55	0.00	337.27	0.189	0.23	13.139	B
C-AB	15.28	15.26	0.00	666.75	0.023	0.02	5.525	A
C-A	889.09	889.09	0.00	-	-	-	-	-
A-B	10.79	10.79	0.00	-	-	-	-	-
A-C	437.80	437.80	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	122.21	121.90	0.00	567.25	0.215	0.27	8.077	A
B-A	78.17	77.55	0.00	275.94	0.283	0.38	18.089	C
C-AB	18.72	18.69	0.00	637.26	0.029	0.03	5.819	A
C-A	1088.91	1088.91	0.00	-	-	-	-	-
A-B	13.21	13.21	0.00	-	-	-	-	-
A-C	536.20	536.20	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	122.21	122.21	0.00	566.72	0.216	0.27	8.098	A
B-A	78.17	78.15	0.00	275.97	0.283	0.39	18.190	C
C-AB	18.72	18.72	0.00	637.26	0.029	0.03	5.819	A
C-A	1088.91	1088.91	0.00	-	-	-	-	-
A-B	13.21	13.21	0.00	-	-	-	-	-
A-C	536.20	536.20	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	99.79	100.09	0.00	609.88	0.164	0.20	7.067	A
B-A	63.83	64.44	0.00	337.36	0.189	0.24	13.221	B
C-AB	15.28	15.31	0.00	666.75	0.023	0.02	5.525	A
C-A	889.09	889.09	0.00	-	-	-	-	-
A-B	10.79	10.79	0.00	-	-	-	-	-
A-C	437.80	437.80	0.00	-	-	-	-	-

Main results: (18:15-18:30)

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	83.57	83.75	0.00	638.08	0.131	0.15	6.495	A
B-A	53.45	53.74	0.00	381.54	0.140	0.17	10.993	B
C-AB	12.80	12.82	0.00	688.07	0.019	0.02	5.332	A
C-A	744.57	744.57	0.00	-	-	-	-	-
A-B	9.03	9.03	0.00	-	-	-	-	-
A-C	366.64	366.64	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.6.541 [19821,26/11/2015]

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: Kirkley Run - Notley Rd priority.arc8
Path: L:\106xxx\1069948 Lowestoft Third Crossing\09 Documents\06_Modelling_Junction Modelling Mar 2018
Report generation date: 08/06/2018 10:20:40

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2016 Base							
Stream B-AC	0.04	7.71	0.04	A	0.08	7.95	0.08	A
Stream C-AB	0.03	4.69	0.03	A	0.06	5.15	0.04	A
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
	A1 - 2022 DM							
Stream B-AC	0.03	7.77	0.03	A	0.09	8.27	0.09	A
Stream C-AB	0.04	4.71	0.03	A	0.06	5.05	0.04	A
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
	A1 - 2022 DS							
Stream B-AC	0.16	8.81	0.14	A	0.25	10.98	0.20	B
Stream C-AB	0.05	4.58	0.04	A	0.09	5.39	0.06	A
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
	A1 - 2037 DM							
Stream B-AC	0.04	8.10	0.04	A	0.09	8.27	0.09	A
Stream C-AB	0.05	4.65	0.04	A	0.06	5.05	0.04	A
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
	A1 - 2037 DS							
Stream B-AC	0.19	9.40	0.16	A	0.31	11.87	0.24	B
Stream C-AB	0.06	4.50	0.04	A	0.10	5.29	0.06	A
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.

"D1 - 2016 Base, AM " model duration: 08:00 - 09:30
"D2 - 2016 Base, PM" model duration: 17:00 - 18:30
"D3 - 2022 DM, AM" model duration: 08:00 - 09:30
"D4 - 2022 DM, PM" model duration: 17:00 - 18:30
"D5 - 2022 DS, AM" model duration: 08:00 - 09:30
"D6 - 2022 DS, PM" model duration: 17:00 - 18:30
"D7 - 2037 DM, AM" model duration: 08:00 - 09:30
"D8 - 2037 DM, PM" model duration: 17:00 - 18:30
"D9 - 2037 DS, AM" model duration: 08:00 - 09:30
"D10 - 2037 DS, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.6.541 at 08/06/2018 10:20:35

File summary

Title	Kirjley Run - NotleyRd priority
Location	
Site Number	
Date	08/06/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	UKOXF600
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) - 2016 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
2016 Base, AM	2016 Base	AM		ONE HOUR	08:00	09:30	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	6.18	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Kirkley Run (N)		Major
B	B	Notley Rd		Minor
C	C	Kirkley Run (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.94		0.00		2.20	151.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.35								✓		37	20

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	516.886	0.086	0.218	0.137	0.311
1	B-C	658.832	0.092	0.234	-	-
1	C-B	661.409	0.235	0.235	-	-

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	✓	148.00	100.000
B	ONE HOUR	✓	19.00	100.000
C	ONE HOUR	✓	317.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	14.000	134.000
	B	12.000	0.000	7.000
	C	304.000	13.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.09	0.91
	B	0.63	0.00	0.37
	C	0.96	0.04	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	0.04	7.71	0.04	A
C-AB	0.03	4.69	0.03	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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	14.30	14.19	0.00	511.48	0.028	0.03	7.237	A
C-AB	13.57	13.49	0.00	781.27	0.017	0.02	4.688	A
C-A	225.09	225.09	0.00	-	-	-	-	-
A-B	10.54	10.54	0.00	-	-	-	-	-
A-C	100.88	100.88	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	17.08	17.05	0.00	501.59	0.034	0.03	7.429	A
C-AB	17.21	17.19	0.00	804.33	0.021	0.03	4.573	A
C-A	267.77	267.77	0.00	-	-	-	-	-
A-B	12.59	12.59	0.00	-	-	-	-	-
A-C	120.46	120.46	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	20.92	20.88	0.00	487.84	0.043	0.04	7.709	A
C-AB	22.81	22.77	0.00	835.83	0.027	0.03	4.427	A
C-A	326.22	326.22	0.00	-	-	-	-	-
A-B	15.41	15.41	0.00	-	-	-	-	-
A-C	147.54	147.54	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	20.92	20.92	0.00	487.83	0.043	0.04	7.710	A
C-AB	22.82	22.82	0.00	835.84	0.027	0.03	4.427	A
C-A	326.21	326.21	0.00	-	-	-	-	-
A-B	15.41	15.41	0.00	-	-	-	-	-
A-C	147.54	147.54	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	17.08	17.12	0.00	501.58	0.034	0.04	7.430	A
C-AB	17.22	17.26	0.00	804.35	0.021	0.03	4.573	A
C-A	267.75	267.75	0.00	-	-	-	-	-
A-B	12.59	12.59	0.00	-	-	-	-	-
A-C	120.46	120.46	0.00	-	-	-	-	-

Main results: (09:15-09:30)

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	14.30	14.33	0.00	511.46	0.028	0.03	7.243	A
C-AB	13.59	13.62	0.00	781.29	0.017	0.02	4.689	A
C-A	225.06	225.06	0.00	-	-	-	-	-
A-B	10.54	10.54	0.00	-	-	-	-	-
A-C	100.88	100.88	0.00	-	-	-	-	-

(Default Analysis Set) - 2016 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
2016 Base, PM	2016 Base	PM		ONE HOUR	17:00	18:30	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	6.69	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Kirkley Run (N)		Major
B	B	Notley Rd		Minor
C	C	Kirkley Run (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.94		0.00		2.20	151.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.35								✓		37	20

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	516.886	0.086	0.218	0.137	0.311
1	B-C	658.832	0.092	0.234	-	-
1	C-B	661.409	0.235	0.235	-	-

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	✓	313.00	100.000
B	ONE HOUR	✓	34.00	100.000
C	ONE HOUR	✓	248.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	10.000	303.000
	B	14.000	0.000	20.000
	C	228.000	20.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.03	0.97
	B	0.41	0.00	0.59
	C	0.92	0.08	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	0.08	7.95	0.08	A
C-AB	0.04	5.15	0.06	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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	25.60	25.39	0.00	523.02	0.049	0.05	7.230	A
C-AB	19.57	19.43	0.00	719.03	0.027	0.03	5.146	A
C-A	167.14	167.14	0.00	-	-	-	-	-
A-B	7.53	7.53	0.00	-	-	-	-	-
A-C	228.11	228.11	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	30.57	30.52	0.00	509.40	0.060	0.06	7.517	A
C-AB	24.63	24.58	0.00	731.00	0.034	0.05	5.095	A
C-A	198.32	198.32	0.00	-	-	-	-	-
A-B	8.99	8.99	0.00	-	-	-	-	-
A-C	272.39	272.39	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	37.43	37.36	0.00	490.46	0.076	0.08	7.944	A
C-AB	32.38	32.31	0.00	747.79	0.043	0.06	5.031	A
C-A	240.67	240.67	0.00	-	-	-	-	-
A-B	11.01	11.01	0.00	-	-	-	-	-
A-C	333.61	333.61	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	37.43	37.43	0.00	490.45	0.076	0.08	7.946	A
C-AB	32.40	32.40	0.00	747.81	0.043	0.06	5.032	A
C-A	240.66	240.66	0.00	-	-	-	-	-
A-B	11.01	11.01	0.00	-	-	-	-	-
A-C	333.61	333.61	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	30.57	30.64	0.00	509.39	0.060	0.06	7.519	A
C-AB	24.65	24.72	0.00	731.03	0.034	0.05	5.097	A
C-A	198.30	198.30	0.00	-	-	-	-	-
A-B	8.99	8.99	0.00	-	-	-	-	-
A-C	272.39	272.39	0.00	-	-	-	-	-

Main results: (18:15-18:30)

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	25.60	25.65	0.00	522.99	0.049	0.05	7.241	A
C-AB	19.61	19.65	0.00	719.06	0.027	0.04	5.147	A
C-A	167.10	167.10	0.00	-	-	-	-	-
A-B	7.53	7.53	0.00	-	-	-	-	-
A-C	228.11	228.11	0.00	-	-	-	-	-

(Default Analysis Set) - 2022 DM, 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
2022 DM, AM	2022 DM	AM		ONE HOUR	08:00	09:30	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	5.77	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Kirkley Run (N)		Major
B	B	Notley Rd		Minor
C	C	Kirkley Run (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.94		0.00		2.20	151.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.35								✓		37	20

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	516.886	0.086	0.218	0.137	0.311
1	B-C	658.832	0.092	0.234	-	-
1	C-B	661.409	0.235	0.235	-	-

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	✓	166.00	100.000
B	ONE HOUR	✓	12.00	100.000
C	ONE HOUR	✓	324.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	15.000	151.000
	B	8.000	0.000	4.000
	C	309.000	15.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.09	0.91
	B	0.67	0.00	0.33
	C	0.95	0.05	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	0.03	7.77	0.03	A
C-AB	0.03	4.71	0.04	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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	9.03	8.96	0.00	502.29	0.018	0.02	7.297	A
C-AB	15.75	15.66	0.00	780.83	0.020	0.02	4.705	A
C-A	228.17	228.17	0.00	-	-	-	-	-
A-B	11.29	11.29	0.00	-	-	-	-	-
A-C	113.68	113.68	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	10.79	10.77	0.00	491.49	0.022	0.02	7.488	A
C-AB	20.01	19.98	0.00	803.87	0.025	0.03	4.592	A
C-A	271.26	271.26	0.00	-	-	-	-	-
A-B	13.48	13.48	0.00	-	-	-	-	-
A-C	135.75	135.75	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	13.21	13.19	0.00	476.49	0.028	0.03	7.770	A
C-AB	26.57	26.53	0.00	835.34	0.032	0.04	4.450	A
C-A	330.16	330.16	0.00	-	-	-	-	-
A-B	16.52	16.52	0.00	-	-	-	-	-
A-C	166.25	166.25	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	13.21	13.21	0.00	476.48	0.028	0.03	7.770	A
C-AB	26.58	26.58	0.00	835.36	0.032	0.04	4.451	A
C-A	330.15	330.15	0.00	-	-	-	-	-
A-B	16.52	16.52	0.00	-	-	-	-	-
A-C	166.25	166.25	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	10.79	10.81	0.00	491.48	0.022	0.02	7.488	A
C-AB	20.03	20.07	0.00	803.89	0.025	0.03	4.594	A
C-A	271.24	271.24	0.00	-	-	-	-	-
A-B	13.48	13.48	0.00	-	-	-	-	-
A-C	135.75	135.75	0.00	-	-	-	-	-

Main results: (09:15-09:30)

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	9.03	9.05	0.00	502.26	0.018	0.02	7.301	A
C-AB	15.79	15.81	0.00	780.85	0.020	0.02	4.707	A
C-A	228.14	228.14	0.00	-	-	-	-	-
A-B	11.29	11.29	0.00	-	-	-	-	-
A-C	113.68	113.68	0.00	-	-	-	-	-

(Default Analysis Set) - 2022 DM, 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
2022 DM, PM	2022 DM	PM		ONE HOUR	17:00	18:30	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	6.93	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Kirkley Run (N)		Major
B	B	Notley Rd		Minor
C	C	Kirkley Run (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.94		0.00		2.20	151.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.35								✓		37	20

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	516.886	0.086	0.218	0.137	0.311
1	B-C	658.832	0.092	0.234	-	-
1	C-B	661.409	0.235	0.235	-	-

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	✓	343.00	100.000
B	ONE HOUR	✓	37.00	100.000
C	ONE HOUR	✓	281.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	11.000	332.000
	B	16.000	0.000	21.000
	C	263.000	18.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.03	0.97
	B	0.43	0.00	0.57
	C	0.94	0.06	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	0.09	8.27	0.09	A
C-AB	0.04	5.05	0.06	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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	27.86	27.63	0.00	512.47	0.054	0.06	7.421	A
C-AB	18.31	18.18	0.00	731.31	0.025	0.03	5.048	A
C-A	193.24	193.24	0.00	-	-	-	-	-
A-B	8.28	8.28	0.00	-	-	-	-	-
A-C	249.95	249.95	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	33.26	33.21	0.00	497.34	0.067	0.07	7.755	A
C-AB	23.22	23.18	0.00	745.75	0.031	0.04	4.982	A
C-A	229.40	229.40	0.00	-	-	-	-	-
A-B	9.89	9.89	0.00	-	-	-	-	-
A-C	298.46	298.46	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	40.74	40.65	0.00	476.25	0.086	0.09	8.261	A
C-AB	30.83	30.76	0.00	765.95	0.040	0.06	4.896	A
C-A	278.56	278.56	0.00	-	-	-	-	-
A-B	12.11	12.11	0.00	-	-	-	-	-
A-C	365.54	365.54	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	40.74	40.74	0.00	476.24	0.086	0.09	8.265	A
C-AB	30.84	30.84	0.00	765.97	0.040	0.06	4.897	A
C-A	278.54	278.54	0.00	-	-	-	-	-
A-B	12.11	12.11	0.00	-	-	-	-	-
A-C	365.54	365.54	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	33.26	33.35	0.00	497.32	0.067	0.07	7.760	A
C-AB	23.24	23.30	0.00	745.78	0.031	0.04	4.983	A
C-A	229.37	229.37	0.00	-	-	-	-	-
A-B	9.89	9.89	0.00	-	-	-	-	-
A-C	298.46	298.46	0.00	-	-	-	-	-

Main results: (18:15-18:30)

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	27.86	27.91	0.00	512.45	0.054	0.06	7.432	A
C-AB	18.35	18.39	0.00	731.34	0.025	0.03	5.051	A
C-A	193.20	193.20	0.00	-	-	-	-	-
A-B	8.28	8.28	0.00	-	-	-	-	-
A-C	249.95	249.95	0.00	-	-	-	-	-

(Default Analysis Set) - 2022 DS, 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
2022 DS, AM	2022 DS	AM		ONE HOUR	08:00	09:30	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	7.51	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Kirkley Run (N)		Major
B	B	Notley Rd		Minor
C	C	Kirkley Run (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.94		0.00		2.20	151.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.35								✓		37	20

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	516.886	0.086	0.218	0.137	0.311
1	B-C	658.832	0.092	0.234	-	-
1	C-B	661.409	0.235	0.235	-	-

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	✓	193.00	100.000
B	ONE HOUR	✓	59.00	100.000
C	ONE HOUR	✓	384.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	28.000	165.000
	B	36.000	0.000	23.000
	C	368.000	16.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.15	0.85
	B	0.61	0.00	0.39
	C	0.96	0.04	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	8.81	0.16	A
C-AB	0.04	4.58	0.05	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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	44.42	44.03	0.00	502.98	0.088	0.10	7.838	A
C-AB	17.82	17.71	0.00	804.18	0.022	0.03	4.577	A
C-A	271.28	271.28	0.00	-	-	-	-	-
A-B	21.08	21.08	0.00	-	-	-	-	-
A-C	124.22	124.22	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	53.04	52.94	0.00	490.79	0.108	0.12	8.220	A
C-AB	22.85	22.82	0.00	831.45	0.027	0.03	4.451	A
C-A	322.36	322.36	0.00	-	-	-	-	-
A-B	25.17	25.17	0.00	-	-	-	-	-
A-C	148.33	148.33	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	64.96	64.81	0.00	473.78	0.137	0.16	8.800	A
C-AB	30.71	30.66	0.00	868.47	0.035	0.05	4.296	A
C-A	392.08	392.08	0.00	-	-	-	-	-
A-B	30.83	30.83	0.00	-	-	-	-	-
A-C	181.67	181.67	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	64.96	64.96	0.00	473.77	0.137	0.16	8.805	A
C-AB	30.73	30.73	0.00	868.49	0.035	0.05	4.298	A
C-A	392.06	392.06	0.00	-	-	-	-	-
A-B	30.83	30.83	0.00	-	-	-	-	-
A-C	181.67	181.67	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	53.04	53.18	0.00	490.77	0.108	0.12	8.230	A
C-AB	22.87	22.92	0.00	831.48	0.028	0.04	4.452	A
C-A	322.34	322.34	0.00	-	-	-	-	-
A-B	25.17	25.17	0.00	-	-	-	-	-
A-C	148.33	148.33	0.00	-	-	-	-	-

Main results: (09:15-09:30)

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	44.42	44.52	0.00	502.96	0.088	0.10	7.854	A
C-AB	17.86	17.89	0.00	804.21	0.022	0.03	4.578	A
C-A	271.23	271.23	0.00	-	-	-	-	-
A-B	21.08	21.08	0.00	-	-	-	-	-
A-C	124.22	124.22	0.00	-	-	-	-	-

(Default Analysis Set) - 2022 DS, 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
2022 DS, PM	2022 DS	PM		ONE HOUR	17:00	18:30	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	Kirkley Run (N)		Major
B	B	Notley Rd		Minor
C	C	Kirkley Run (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.94		0.00		2.20	151.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.35								✓		37	20

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	516.886	0.086	0.218	0.137	0.311
1	B-C	658.832	0.092	0.234	-	-
1	C-B	661.409	0.235	0.235	-	-

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	✓	455.00	100.000
B	ONE HOUR	✓	76.00	100.000
C	ONE HOUR	✓	242.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	47.000	408.000
	B	54.000	0.000	22.000
	C	218.000	24.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.10	0.90
	B	0.71	0.00	0.29
	C	0.90	0.10	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	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	0.20	10.98	0.25	B
C-AB	0.06	5.39	0.09	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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	57.22	56.65	0.00	456.11	0.125	0.14	9.000	A
C-AB	23.46	23.28	0.00	691.34	0.034	0.05	5.387	A
C-A	158.73	158.73	0.00	-	-	-	-	-
A-B	35.38	35.38	0.00	-	-	-	-	-
A-C	307.16	307.16	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	68.32	68.16	0.00	437.41	0.156	0.18	9.745	A
C-AB	29.60	29.54	0.00	698.46	0.042	0.06	5.381	A
C-A	187.95	187.95	0.00	-	-	-	-	-
A-B	42.25	42.25	0.00	-	-	-	-	-
A-C	366.78	366.78	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	83.68	83.40	0.00	411.48	0.203	0.25	10.964	B
C-AB	39.11	39.01	0.00	708.82	0.055	0.09	5.377	A
C-A	227.33	227.33	0.00	-	-	-	-	-
A-B	51.75	51.75	0.00	-	-	-	-	-
A-C	449.22	449.22	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	83.68	83.67	0.00	411.46	0.203	0.25	10.982	B
C-AB	39.14	39.14	0.00	708.85	0.055	0.09	5.376	A
C-A	227.31	227.31	0.00	-	-	-	-	-
A-B	51.75	51.75	0.00	-	-	-	-	-
A-C	449.22	449.22	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	68.32	68.59	0.00	437.38	0.156	0.19	9.768	A
C-AB	29.64	29.74	0.00	698.50	0.042	0.06	5.386	A
C-A	187.91	187.91	0.00	-	-	-	-	-
A-B	42.25	42.25	0.00	-	-	-	-	-
A-C	366.78	366.78	0.00	-	-	-	-	-

Main results: (18:15-18:30)

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	57.22	57.39	0.00	456.05	0.125	0.15	9.035	A
C-AB	23.51	23.57	0.00	691.38	0.034	0.05	5.391	A
C-A	158.68	158.68	0.00	-	-	-	-	-
A-B	35.38	35.38	0.00	-	-	-	-	-
A-C	307.16	307.16	0.00	-	-	-	-	-

(Default Analysis Set) - 2037 DM, 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
2037 DM, AM	2037 DM	AM		ONE HOUR	08:00	09:30	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	5.88	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Kirkley Run (N)		Major
B	B	Notley Rd		Minor
C	C	Kirkley Run (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.94		0.00		2.20	151.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.35								✓		37	20

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	516.886	0.086	0.218	0.137	0.311
1	B-C	658.832	0.092	0.234	-	-
1	C-B	661.409	0.235	0.235	-	-

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	✓	208.00	100.000
B	ONE HOUR	✓	15.00	100.000
C	ONE HOUR	✓	367.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	20.000	188.000
	B	10.000	0.000	5.000
	C	350.000	17.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.10	0.90
	B	0.67	0.00	0.33
	C	0.95	0.05	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	0.04	8.10	0.04	A
C-AB	0.04	4.65	0.05	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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	11.29	11.20	0.00	491.84	0.023	0.02	7.490	A
C-AB	18.64	18.52	0.00	793.56	0.023	0.03	4.645	A
C-A	257.66	257.66	0.00	-	-	-	-	-
A-B	15.06	15.06	0.00	-	-	-	-	-
A-C	141.54	141.54	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	13.48	13.46	0.00	478.95	0.028	0.03	7.733	A
C-AB	23.86	23.82	0.00	819.01	0.029	0.04	4.527	A
C-A	306.07	306.07	0.00	-	-	-	-	-
A-B	17.98	17.98	0.00	-	-	-	-	-
A-C	169.01	169.01	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	16.52	16.48	0.00	461.02	0.036	0.04	8.098	A
C-AB	31.99	31.93	0.00	853.68	0.037	0.05	4.380	A
C-A	372.08	372.08	0.00	-	-	-	-	-
A-B	22.02	22.02	0.00	-	-	-	-	-
A-C	206.99	206.99	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	16.52	16.51	0.00	461.01	0.036	0.04	8.098	A
C-AB	32.01	32.01	0.00	853.70	0.037	0.05	4.383	A
C-A	372.07	372.07	0.00	-	-	-	-	-
A-B	22.02	22.02	0.00	-	-	-	-	-
A-C	206.99	206.99	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	13.48	13.52	0.00	478.94	0.028	0.03	7.736	A
C-AB	23.88	23.93	0.00	819.04	0.029	0.04	4.527	A
C-A	306.05	306.05	0.00	-	-	-	-	-
A-B	17.98	17.98	0.00	-	-	-	-	-
A-C	169.01	169.01	0.00	-	-	-	-	-

Main results: (09:15-09:30)

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	11.29	11.31	0.00	491.81	0.023	0.02	7.491	A
C-AB	18.68	18.72	0.00	793.60	0.024	0.03	4.647	A
C-A	257.61	257.61	0.00	-	-	-	-	-
A-B	15.06	15.06	0.00	-	-	-	-	-
A-C	141.54	141.54	0.00	-	-	-	-	-

(Default Analysis Set) - 2037 DM, 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
2037 DM, PM	2037 DM	PM		ONE HOUR	17:00	18:30	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	6.93	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Kirkley Run (N)		Major
B	B	Notley Rd		Minor
C	C	Kirkley Run (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.94		0.00		2.20	151.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.35								✓		37	20

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	516.886	0.086	0.218	0.137	0.311
1	B-C	658.832	0.092	0.234	-	-
1	C-B	661.409	0.235	0.235	-	-

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	✓	343.00	100.000
B	ONE HOUR	✓	37.00	100.000
C	ONE HOUR	✓	281.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	11.000	332.000
	B	16.000	0.000	21.000
	C	263.000	18.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.03	0.97
	B	0.43	0.00	0.57
	C	0.94	0.06	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	0.09	8.27	0.09	A
C-AB	0.04	5.05	0.06	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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	27.86	27.63	0.00	512.47	0.054	0.06	7.421	A
C-AB	18.31	18.18	0.00	731.31	0.025	0.03	5.048	A
C-A	193.24	193.24	0.00	-	-	-	-	-
A-B	8.28	8.28	0.00	-	-	-	-	-
A-C	249.95	249.95	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	33.26	33.21	0.00	497.34	0.067	0.07	7.755	A
C-AB	23.22	23.18	0.00	745.75	0.031	0.04	4.982	A
C-A	229.40	229.40	0.00	-	-	-	-	-
A-B	9.89	9.89	0.00	-	-	-	-	-
A-C	298.46	298.46	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	40.74	40.65	0.00	476.25	0.086	0.09	8.261	A
C-AB	30.83	30.76	0.00	765.95	0.040	0.06	4.896	A
C-A	278.56	278.56	0.00	-	-	-	-	-
A-B	12.11	12.11	0.00	-	-	-	-	-
A-C	365.54	365.54	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	40.74	40.74	0.00	476.24	0.086	0.09	8.265	A
C-AB	30.84	30.84	0.00	765.97	0.040	0.06	4.897	A
C-A	278.54	278.54	0.00	-	-	-	-	-
A-B	12.11	12.11	0.00	-	-	-	-	-
A-C	365.54	365.54	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	33.26	33.35	0.00	497.32	0.067	0.07	7.760	A
C-AB	23.24	23.30	0.00	745.78	0.031	0.04	4.983	A
C-A	229.37	229.37	0.00	-	-	-	-	-
A-B	9.89	9.89	0.00	-	-	-	-	-
A-C	298.46	298.46	0.00	-	-	-	-	-

Main results: (18:15-18:30)

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	27.86	27.91	0.00	512.45	0.054	0.06	7.432	A
C-AB	18.35	18.39	0.00	731.34	0.025	0.03	5.051	A
C-A	193.20	193.20	0.00	-	-	-	-	-
A-B	8.28	8.28	0.00	-	-	-	-	-
A-C	249.95	249.95	0.00	-	-	-	-	-

(Default Analysis Set) - 2037 DS, 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
2037 DS, AM	2037 DS	AM		ONE HOUR	08:00	09:30	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	7.81	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Kirkley Run (N)		Major
B	B	Notley Rd		Minor
C	C	Kirkley Run (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.94		0.00		2.20	151.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.35								✓		37	20

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	516.886	0.086	0.218	0.137	0.311
1	B-C	658.832	0.092	0.234	-	-
1	C-B	661.409	0.235	0.235	-	-

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	✓	241.00	100.000
B	ONE HOUR	✓	65.00	100.000
C	ONE HOUR	✓	439.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	34.000	207.000
	B	40.000	0.000	25.000
	C	421.000	18.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.14	0.86
	B	0.62	0.00	0.38
	C	0.96	0.04	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	0.16	9.40	0.19	A
C-AB	0.04	4.50	0.06	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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	48.94	48.50	0.00	489.88	0.100	0.11	8.147	A
C-AB	21.16	21.03	0.00	821.48	0.026	0.03	4.497	A
C-A	309.35	309.35	0.00	-	-	-	-	-
A-B	25.60	25.60	0.00	-	-	-	-	-
A-C	155.84	155.84	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	58.43	58.32	0.00	475.17	0.123	0.14	8.634	A
C-AB	27.38	27.34	0.00	851.88	0.032	0.04	4.365	A
C-A	367.27	367.27	0.00	-	-	-	-	-
A-B	30.57	30.57	0.00	-	-	-	-	-
A-C	186.09	186.09	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	71.57	71.38	0.00	454.62	0.157	0.18	9.388	A
C-AB	37.23	37.16	0.00	892.94	0.042	0.06	4.206	A
C-A	446.12	446.12	0.00	-	-	-	-	-
A-B	37.43	37.43	0.00	-	-	-	-	-
A-C	227.91	227.91	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	71.57	71.56	0.00	454.61	0.157	0.19	9.398	A
C-AB	37.25	37.25	0.00	892.96	0.042	0.06	4.208	A
C-A	446.10	446.10	0.00	-	-	-	-	-
A-B	37.43	37.43	0.00	-	-	-	-	-
A-C	227.91	227.91	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	58.43	58.61	0.00	475.15	0.123	0.14	8.646	A
C-AB	27.41	27.48	0.00	851.92	0.032	0.04	4.367	A
C-A	367.24	367.24	0.00	-	-	-	-	-
A-B	30.57	30.57	0.00	-	-	-	-	-
A-C	186.09	186.09	0.00	-	-	-	-	-

Main results: (09:15-09:30)

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	48.94	49.05	0.00	489.85	0.100	0.11	8.170	A
C-AB	21.21	21.25	0.00	821.52	0.026	0.03	4.498	A
C-A	309.29	309.29	0.00	-	-	-	-	-
A-B	25.60	25.60	0.00	-	-	-	-	-
A-C	155.84	155.84	0.00	-	-	-	-	-

(Default Analysis Set) - 2037 DS, 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
2037 DS, PM	2037 DS	PM		ONE HOUR	17:00	18:30	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	9.83	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Kirkley Run (N)		Major
B	B	Notley Rd		Minor
C	C	Kirkley Run (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.94		0.00		2.20	151.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.35								✓		37	20

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	516.886	0.086	0.218	0.137	0.311
1	B-C	658.832	0.092	0.234	-	-
1	C-B	661.409	0.235	0.235	-	-

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	✓	86.00	100.000
C	ONE HOUR	✓	287.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	53.000	436.000
	B	61.000	0.000	25.000
	C	261.000	26.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.11	0.89
	B	0.71	0.00	0.29
	C	0.91	0.09	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	0.24	11.87	0.31	B
C-AB	0.06	5.29	0.10	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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	64.75	64.08	0.00	446.99	0.145	0.17	9.386	A
C-AB	26.71	26.50	0.00	707.33	0.038	0.05	5.286	A
C-A	189.36	189.36	0.00	-	-	-	-	-
A-B	39.90	39.90	0.00	-	-	-	-	-
A-C	328.24	328.24	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	77.31	77.11	0.00	426.42	0.181	0.22	10.299	B
C-AB	34.04	33.96	0.00	717.77	0.047	0.07	5.266	A
C-A	223.97	223.97	0.00	-	-	-	-	-
A-B	47.65	47.65	0.00	-	-	-	-	-
A-C	391.96	391.96	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	94.69	94.33	0.00	397.86	0.238	0.31	11.845	B
C-AB	45.57	45.44	0.00	732.74	0.062	0.10	5.240	A
C-A	270.42	270.42	0.00	-	-	-	-	-
A-B	58.35	58.35	0.00	-	-	-	-	-
A-C	480.04	480.04	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	94.69	94.68	0.00	397.84	0.238	0.31	11.874	B
C-AB	45.61	45.60	0.00	732.78	0.062	0.10	5.240	A
C-A	270.39	270.39	0.00	-	-	-	-	-
A-B	58.35	58.35	0.00	-	-	-	-	-
A-C	480.04	480.04	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	77.31	77.65	0.00	426.38	0.181	0.22	10.333	B
C-AB	34.08	34.21	0.00	717.83	0.047	0.07	5.269	A
C-A	223.92	223.92	0.00	-	-	-	-	-
A-B	47.65	47.65	0.00	-	-	-	-	-
A-C	391.96	391.96	0.00	-	-	-	-	-

Main results: (18:15-18:30)

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	64.75	64.96	0.00	446.92	0.145	0.17	9.429	A
C-AB	26.78	26.85	0.00	707.39	0.038	0.05	5.292	A
C-A	189.29	189.29	0.00	-	-	-	-	-
A-B	39.90	39.90	0.00	-	-	-	-	-
A-C	328.24	328.24	0.00	-	-	-	-	-